

Telecommunications Act review: options paper

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Executive Summary

- Today's telecommunications regulatory access framework was designed for Chorus' copper network and copper access services. By 2020, though, many – perhaps most - New Zealanders will have switched to fibre or wireless broadband services. Our regulatory access framework needs to be updated ahead of that date so that it can respond to that shift in demand.
- 2. We support the Government reviewing the Telecommunications Act now so that market participants and end-users have early certainty of the rules that will apply from 2020, and we appreciate the consultation options Government has provided interested parties through this process.
- 3. We are broadly supportive of the conclusions and recommendations set out in the options paper. Our principal outstanding concerns relate to:
 - a. The applicability of the conventional utility-style regulatory model cited in the options paper as the preferred model for regulation of Chorus' fixed line access services;
 - b. The potential for confusion from the proposed twin objectives of revenue stability and price stability, which may well conflict with each other should demand for Chorus services reduce as a result of competition; and
 - c. The currency of the proposed speed profiles for the price-capped broadband anchor products.

The applicability of the Part 4 regulatory model to Chorus and the potential conflict between revenue stability and price stability objectives

- 4. The options paper suggests the regulatory approach used by the Commerce Commission today under Part 4 of the Commerce Act to regulate other utilities, including electricity lines businesses and gas pipeline operators, is the model it believes will be most appropriate for regulating Chorus from 2020.
- 5. This model sets a regulated asset base (**RAB**) at its outset and provides for a return on that RAB either by:
 - a. **Revenue cap**: Calculating the maximum allowable revenue that can be earned from the assets that make up that RAB, and leaving it to the regulated provider to determine how it achieves that maximum allowable revenue from the services it sells; or
 - b. **Price cap:** calculating service price caps using the RAB, with no revenue cap. Revenue is therefore a product of demand.
- 6. This form of regulation is explicitly designed for utility markets where there is little or no competition and little or no likelihood of a substantial increase in competition: a stable RAB recovered over stable or growing demand results in relatively stable revenues and prices.
- 7. Our concern is this fundamental assumption does not hold for telecommunications markets: we believe there is a very good likelihood that Chorus will face increased competition in the coming years.
- 8. If competition does emerge in such a way as to result in a material reduction in demand for the services provided by the regulated provider, there is a real prospect that this model will not result in predictable and sustainable outcomes. In fact, it will be impossible in this scenario to deliver *both* revenue stability and price stability: with a locked-in RAB valuation and a reduced number of

lines to recover it across, this form of regulation would suggest the only answer to this increased competition is higher regulated prices. The answer to increased competition should never be increased regulated prices.

- 9. The regulatory access framework in 2020 should be capable of responding to competition in a more sensible and acceptable way. In order to ensure it can do so, we propose:
 - a. Prefer price stability over revenue stability: The Act should clearly direct the Commission to promote outcomes and prices that are consistent with what would be expected in a competitive market and that avoid price shocks for end-users, and this objective should take precedence over revenue stability for the regulated provider where the two conflict. This choice is a policy choice that should rightly be made by Government, not the Commission;
 - b. **Include a competition test**: The Act should provide the Commission with the tools to remove regulation, or reduce the scope of the Chorus RAB, to reflect competition. If the Act does not permit this, it becomes almost inevitable that end-users in markets where Chorus does not face competition will subsidise end-users in markets where it does;
 - c. Avoid locking in 2020 valuations now: Given the uncertainty we face as to what our markets will look like in 2020, we believe it would be premature for the Act to predetermine the correct valuations, or valuation methodologies, for Chorus' assets now. We agree with Chorus that a sensible continuation of current price paths would be an acceptable outcome, but we cannot confidently say what valuation, or valuation methodology, will best achieve that outcome today. The Commerce Commission is New Zealand's independent telecommunications regulator and an expert in these matters. It is best placed to make these complex decisions over the coming years.

The proposed anchor product are yesterday's services not tomorrow's

- 10. The options paper proposes price-capped broadband anchor products that sit well below our expectations for the broadband speeds New Zealanders will expect in 2020. We want New Zealand to be aspirational about the broadband speeds we can deliver, and we want New Zealand to continue to make the absolute most of the copper and fibre networks we have invested in. 15Mbps and 100Mbps are not aspirational in any way, and threaten as anchor products to suppress the entire market's incentives to supply and demand much higher speeds.
- 11. We propose two technology-specific anchor products:
 - a. **A Copper broadband anchor product**: Today's UBA copper broadband service performs as fast as a customer's copper line will permit and we believe there would be wide industry support for simply continuing this model post-2020;
 - b. A dynamic fibre broadband anchor product: Chorus and the LFCs are preparing to launch 1Gbps/500Mbps fibre broadband services across their UFB footprints. We expect this service will represent the entry-level fibre speed profile by 2020 and so expect this to be the minimum speed profile for any fibre broadband anchor product. Of course, this may well prove to be a conservative prediction; already RSPs in Singapore today are offering 2Gbps, 3Gbps, and 10Gbps residential broadband services. We therefore propose that the Act gives the Commission the discretion to set the minimum performance specifications of this anchor product, as well as its price.
- 12. Given the importance of fibre to New Zealand's businesses we also propose that Chorus' Direct Fibre access service (**DFAS**) be included in the set of anchor products. This service is used by New Zealand businesses for their data connectivity and by mobile network operators for their cell

site backhaul. As businesses increasingly operate and compete in digital markets, and as 5G drives a substantial increase in the number of cell site locations, this service will become critical to New Zealand's economic growth. Commission oversight of it is necessary and sensible.

Introduction

- 1. Thank you for the opportunity to comment on the options paper (the paper).
- 2. We appreciate the Government's early consultation with industry on the regulatory access framework that will apply from 2020. We agree that providing early indications of the form of that model, and how and whether it will differ from today's framework will provide increased certainty and improve confidence for market participants.
- 3. The model proposed in the paper is based on the approach taken for other utility industries under Part 4 of the Commerce Act. In that sense, it is a model that the Commission and investors are familiar with. But the telecommunications sector is different to the sectors where this approach has been applied, and it will be important to recognise those differences in preparing the regulatory access framework to apply to our industry.
- 4. In this submission we:
 - a. Draw out these distinctions; and
 - b. Recommend guidance that the Government can provide that will give the Commission the direction and tools to address these differences while retaining the core utility regulatory model approach.

Background: utility style regulation in a dynamic market

- 5. Chorus has requested that it be regulated using a building block model (**BBM**) form of utility regulation on the basis that this form of regulation should be capable of providing certainty and predictability of the return it can expect on its investments in its fixed access network.
- 6. BBM regulation is common in reasonably static utility industries. The underlying premise of BBM regulation is that operators of regulated utilities that are not economic to replicate (sometimes referred to as enduring economic bottlenecks) will receive a fair return on efficiently invested capital, and consumers will have confidence that they are paying a fair price for the service.
- 7. In principle, we are open to any regulatory access framework that can provide both certainty for the regulated utility provider and fair prices for end-users. But the more we look at and consider the implications of the traditional BBM approach to Chorus' services the more concerns we identity about its applicability to the telecommunications sector.
- 8. Part 4 of the Commerce Act starts with the following description of the markets for which its (BBM) model of regulation will be appropriate:¹

This Part provides for the regulation of the price and quality of goods or services in markets where there is little or no competition and little or no likelihood of a substantial increase in competition. (Emphasis added)

- 9. Very simply, we consider there is a reasonable likelihood that Chorus will face a substantial increase in competition from other access networks in the coming years. If that competition eventuates, a standard BBM approach such as that taken for Part 4 industries will not generate predictable or sustainable outcomes for our sector.
- 10. Already today there is uneasy but limited competitive tension between LFC fibre and Chorus copper, and nascent competition from wireless broadband services. The degree to which these

¹ Commerce Act 1986, s52

innovative new services will compete with Chorus, and how Chorus will compete back, is presently unclear, as is the best regulatory response. Any regulatory access framework we plan today will therefore need to be capable of operating in scenarios where Chorus faces little or no competition, effective competition, or a mixture of the two. This implies:

- a. Whereas legislative guidance to the Commission on the Government's policy objectives will be important, it will not be sensible to lock down key valuation parameters today; and
- b. We cannot assume that a standard utility-style regulatory model will be appropriate, or lead to predictable regulatory outcomes in some (competitive) scenarios. This means the Commission will need additional regulatory tools to those afforded it under Part 4 of the Commerce Act.
- 11. We agree that regulatory certainty is an important policy goal. Regulated entities, and their customers, should have a clear understanding of the rules that will apply to them. But regulatory certainty should not be confused with certainty of outcome. Competition is, by its nature, uncertain. If Chorus does face effective competition in some parts of the market from LFCs and wireless broadband providers, then the return it can expect on its fixed access network investments will change in some way.
- 12. In that scenario, the utility-style BBM model used for Part 4 of the Commerce Act will not be appropriate, because it is not premised on competition and therefore guarantees a return on the regulated entity's asset base. If competition reduces demand it responds by increasing the regulated price a clearly unsustainable proposition. The Government's priority in this context should be ensuring the regulatory access framework protects consumers, particularly for those in areas who do not have competitive alternatives, from this uncertainty.

Recommended amendments to the proposed model

A fit for purpose set of anchor products

- 13. Given these uncertainties, the importance of price caps, and the specifications of the pricecapped products cannot be understated. If competition develops in a way that materially reduces demand for Chorus services, a revenue cap may not provide adequate protection to end-users against material price increases. That protection must therefore come from the price-capped anchor products.
- 14. The options paper sets out key anchor products the Commission will be expected to set price caps for – a voice input service, a 15/1Mbps "basic" broadband service and a 100/20Mbps entry level fibre broadband service (all technology neutral). At the workshop it was indicated that these were designed to replicate the current copper and fibre services.

The proposed anchor products are locked in the past

- 15. Our principal concern with the anchor products proposed is their currency: these are yesterday's products, not tomorrow's:
 - a. On the copper network, the regulated UBA service today gives customers a broadband service of as fast as their line can manage. For many copper customers, a 15/1Mbps service would deliver less than what they receive today. The idea of as 15/1Mbps fibre service is confusing to us and would be equally confusing to customers;

- b. The Government's rural broadband has set a target of 99 per cent of New Zealanders able to access broadband speeds up to 50Mbps by 2025²;
- c. Chorus reports that 90% of new fibre connections today are 100/20Mbps and experience tells us that retail customers will expect continuous improvements in their broadband speed;
- d. Chorus launched its Gigatown initiative three years ago and Gigabit services have been available in Dunedin since 2015³.
- e. The LFCs plan to the launch mass market 1Gbps services in October this year4;
- f. Vodafone is upgrading its cable network for increased speed, which we expect to be significantly higher than 100Mbps⁵; and
- g. We see significantly higher speeds offered on fibre networks overseas. In Singapore where the Government has undertaken a comparable fibre deployment policy to NZ the market is already offering a range of residential plans at 1Gbps and beyond. Set out below is a snapshot of residential plans taken from the Singapore regulators website.





- 16. Further, similar to our UFB initiative, many US communities are deploying Gigabit services as part of economic objectives to kick start economies.⁶
- 17. Gigabit services represent the promise of UFB: a materially better broadband experience than could be delivered over copper. In suggesting that 100Mbps services will in any way be a suitable "cap" for broadband speeds over UFB networks we risk the entire UFB initiative tripping over at the last hurdle.

² See https://www.beehive.govt.nz/release/ambitious-target-set-rural-broadband

³ See https://www.odt.co.nz/business/dunedin-tops-broadband-speed-rankings

⁴ See http://www.scoop.co.nz/stories/HL1608/S00092/more-gigacities-coming-as-fibrecos-ready-octoberlaunch.htm

⁵ See https://www.vodafone.co.nz/press-release/vodafones-22million-network-upgrade-paves-the-way-for-

wellington-and-christchurch-to-become-new-zealands-first-gigacities/

⁶ See <u>http://highspeedgeek.com/america-gigabit-internet/</u>

- 18. We understand that, as an anchor product only, the policy intention is for higher speed products to emerge commercially. This model may be appropriate where the "premium" commercial services truly are premium services. But if the anchor product is set too low, such that it does not reflect the service purchased by the bulk of the market, we risk allowing the bulk of UFB benefits to be captured as private benefits by a minority of consumers and provider shareholders rather than as public benefits as was assumed at the outset of the UFB initiative.
- 19. We expect that by 2020 the market will demand 1Gbps services as the entry-level fibre service, and that approximately 80% of fibre customers will purchase this entry-level fibre service. The 100/20Mbps product proposed in the paper will not be sufficient for the general user at 2020, let alone through to 2025.

Proposed approach

- 20. We propose re-orienting the anchor products to what customers purchase, or are expected to purchase in 2020. This means:
 - a. **A technology neutral voice access product** that RSPs are able to use to deliver a retail voice service capable of supporting the Government TSO objectives;
 - b. A copper broadband anchor product that performs at the maximum performance the copper line will provide as the current UBA service does, with a starting price equal to the FPP UBA price; and
 - c. A fibre broadband anchor product with characteristics that reflect the service expectations of most New Zealand residential fibre broadband customers. This service should deliver a meaningful improvement for customers migrating from copper services and should enable New Zealanders to make the most of the UFB infrastructure that has been subsidised by the Government.

The minimum speeds expected of this product should be expected to grow over time. Our expectation today is that this product is likely to be a 1G/500Mbps product come 2020, and to be priced at the level of the 30/10 UFB service today. These expectations may, however, be conservative: we simply cannot know how New Zealanders will be using their broadband connections in 4, 5 or 10 years from now. The Commission should be tasked with dynamically determining the minimum performance specifications of this anchor product (which may mean periodic reviews to ensure the Anchor Product remains relevant as time progresses), as well as the price of it as part of the IMs process.

21. Given the importance of fibre to New Zealand's businesses we also propose that Chorus' DFAS be included in the set of anchor products. This service is used by New Zealand businesses for their data connectivity and by mobile network operators for their cell site backhaul. As businesses increasingly operate and compete in digital markets, and as 5G drives a substantial increase in the number of cell site locations, this service will become critical to New Zealand's economic growth. Commission oversight of it is necessary and sensible.

Reflecting emerging competition in utility style regulatory models

22. As discussed above, the principal difference between telecommunications markets and the markets currently regulated under Part 4 of the Commerce Act is that there is a much greater prospect of competition in telecommunications markets and therefore uncertain demand for Chorus services. Prices are particularly susceptible to demand movements in a BBM model as generally the largely fixed allowable revenue is divided by demand to reach regulated prices.

- 23. Chorus fixed line demand fell by 67,000 lines last year, and analysts are predicting Chorus core line numbers to fall by a further 75,000 lines in FY17⁷. It is not difficult to imagine a scenario where demand for Chorus regulated services falls materially by 2020:
 - a. Competing high capacity fixed networks are being deployed. 85,000 customers have already migrated to fibre on LFC networks and this number will continue to grow.
 Vodafone's cable network passes 200,000 homes and it has announced that it is upgrading its cable network during 2016 to offer 1Gbps services; and
 - b. Spark, 2 Degrees, Vodafone and other wireless broadband providers have incentives to continue to innovate and invest in providing wireless broadband in competition with Chorus, LFCs and each other. Spark has already announced that is targeting 50,000 wireless broadband customers this financial year.
- 24. This means that on the basis of market forces Chorus' revenue is expected to be uncertain. That's the normal outcome anyone would expect in a competitive market.
- 25. A traditional BBM model, though, based on a revenue cap cannot sensibly deal with this competition: it assumes a guaranteed Chorus revenue stream from regulated services and so would suggest the answer to increased competition to Chorus should be an increase in the regulated price for each remaining subscriber. This outcome is quite inconsistent with that which would be expected in competitive markets.
- 26. As an illustrative example, as set out below at Figure 2, the migration of customers to alternative LFCs (assuming 60% fibre uptake) and wireless broadband networks (conservative []SPKCI accesses) could see up to []SPKCI per annum less revenues from regulatory services than if competition did not exist. In which case, the regulatory framework could solve for Chorus' financial position as it would otherwise have been (a price increase of around []SPKCI per line) or was as at FY16 ([]SPKCI), or price stability (in which case Chorus value would fall by a similar amount).



Figure 2: Regulated service revenues impact of migration to LFCs and fixed wireless providers

27. Chorus will, of course, respond and adapt to this competition. It will develop new revenue streams, improve the performance of the copper network and drive the adoption of higher speeds

⁷ See Forsyth Barr report on CNU FY16 results, page 4.

and throughput on its fibre network. How those actions might affect, or be reflected in, a BBM model and in regulated prices is wholly uncertain. It will be important to ensure the Commission has:

- a. Clear Government policy direction as to whether its primary objective should be price stability for end-users or revenue stability for Chorus; and
- b. Sufficient tools and discretion to develop a BBM model that can appropriately and sensibly respond to the emergence (or not) of competition before, during or after the first regulatory period.
- 28. At this stage, the options paper suggests that the Commission should have twin objectives of revenue stability and pricing stability and set both a revenue cap and price caps. In any scenario where Chorus faces competition it is likely that the Commission will be unable to do both and this leaves it is the difficult contentious position of having competing objectives with no clear way of resolving the conflict.
- 29. In considering which of these objectives should take priority, we are guided by the outcomes one would expect in a competitive market. Where competition emerges, prices tend towards the long-run cost of the most efficient competitor, and end-users typically see stable or declining prices. We believe the Government should direct the Commission towards the same outcomes: promoting outcomes and prices that are consistent with what would be expected in a competitive market and that avoid price shocks for end-users.
- 30. Similarly, where competition does emerge, the Commission should also have appropriate regulatory tools to adjust regulation, or to de-regulate, to reflect that competition. A competition test, as applies to certain designated services in today's Act, will be appropriate, and should permit the Commission to de-regulate a service in some markets entirely, or to adjust the RAB footprint or revenue cap to exclude that service in some markets.

Proposed approach

- 31. We propose the Government should:
 - Apply a competition test to the anchor products and to the BBM allowing the Commission to de-regulate a service in some or all markets, and/or remove demand and assets from the RAB in markets where Chorus faces competition;
 - b. Direct the Commission to implement the BBM model in the way that best ensures price stability for end-users;
 - c. Direct the Commission to prefer a price cap approach rather than a hybrid revenue cap + price cap model; and
 - d. Be clear on its policy priorities in legislation so that the Commission can find a way to efficient and reasonable BBM prices.

The price stability objective

- 32. At this stage, the paper sets out unclear revenue and price stability objectives. It is unclear whether by this it means to preserve revenue or pricing levels over time, or to avoid revenue and price shocks but allow absolute price or revenue levels to evolve over time.
- 33. We don't think the Government can or should mandate the Commission to preserve prevailing revenues. This will be impossible to do and cannot have been the reasonable expectation of Chorus. LFCs are deploying to around 20% of the country and we expect the majority if not all

fixed line consumers to migrate to these networks in the long run. This migration from Chorus copper to UFB-subsidised non-Chorus fibre alone will result in structurally lower revenues for Chorus. The same will be true of any competition that develops from wireless broadband providers.

34. Accordingly, the legislation should instruct the Commission to consider price stability when developing its BBM though avoiding price volatility at the time BBM prices are first set and through subsequent regulatory periods. Price stability is important for Chorus, and for RSPs and consumers who are making investment and purchasing decisions based on regulated prices and is consistent with Chorus' earlier descriptions of its preferred BBM model:

The initial RAB could be valued based on an approach that establishes the initial valuation from today's prices [...]. This "line in the sand" valuation has regulatory precedent, mitigates price shocks, avoids significant complex regulatory debate and enables a smooth transition to a RAB model that can be rolled forward over time.⁸

35. There are a number of mechanisms such as glide paths and shifting costs between periods to provide this stability, the key element being that long term value would be held NPV neutral, but price change would occur smoothly and predictably. We do not support a revenue objective – but if this must remain it should be subordinate to price stability.

Engaging industry in the transition

- 36. We consider that more work could be done to flesh out the likely issues and optimal solutions for the transition from today's regulatory access framework to that which will apply from 2020.
- 37. In doing this, there are real opportunities for the industry to engage on practical matters relating to the transition, including:
 - a. The technical transition of services in to the new model. The new regulated products will need to be defined for the BBM model; and
 - b. Maintaining an option for the industry to cut through the complexity and propose an agreed approach.

Technical transition to the new model

- 38. The Government could usefully set out service transition arrangements as it did for electricity lines companies in the transition to their IMs regime.
- 39. In which case, the industry could advise on service definitions for anchor products, including the scope of service. We believe these could be based on the existing regulated and UFB services:
 - a. The UBA STD could provide the starting point for the basic copper service. The Commission is currently reviewing UBA service non-price terms to take into account performance considerations meaning we will have a fit for purpose, detailed service description and service levels that can be carried over into the new framework.
 - b. The baseband voice service descriptions could likewise form the basis of a Determination, subject to a Commission review prior to implementation;
 - c. The position is slightly different in respect of any fibre broadband anchor product, because UFB service descriptions and service levels are not currently subject to independent oversight in any meaningful way. We expect there will need to be changes

⁸ Chorus October 2015 submission, page 38.

to these, but that the existing service descriptions and terms could form the basis of a Determination, subject to a Commission review prior to implementation.

- 40. A Commission review will be necessary in each case in order to ensure consistency with a utility model regulatory approach. For example,
 - a. Reconciling the service demarcations which current occur at different points in the Chorus network will be important. Services are currently handed over at differing points in the network it may be preferable to review and align these in light of the Fixed Line Access Services definition of the RAB, ensuring that connectivity between current handovers and new BBM handovers are transparently provided for and align with RAB boundaries;
 - b. Some common service components i.e. handovers are split across different regulatory and commercial regimes. These must be clarified – consistent with the regulatory approach and technologies deployed – so that they cater for all regulated services and that Chorus cannot for example force customers to purchase both a regulated and a commercial handover at the same location where this is not necessary for technical reasons;
 - c. The regulated services are, in practice, made up of a number of different pricing and technical elements. The Commission needs to have the ability to identify all the components of the service and reflect these in the Determination. The service definitions need to include all the elements necessary to acquire the service. This clarity is needed in order to:
 - i. Ensure a price cap is effective and avoids, for example, drip pricing. If the service doesn't include all the elements of the service, the anchor product price cap will not be effective;
 - Support policy that prices be averaged on the network across areas which are regulated the additional component charges can result in significant de-averaging of prices. For example, we estimate we pay Chorus between \$30 and \$90 per month per voice line served off rural exchanges for access and transport charges alone. If the Government objective is to ensure price averaging across networks then the price needs to include all the elements of the service in the regulated areas; and
 - iii. Support clarity relating to the scope of the RAB.
- 41. This work could be co-ordinated through the TCF. The proposed service definitions should be put to the Commission, which in turn could amend prior to implementing as determined services.
- 42. The trigger for starting this work is an indication from Government that it would be useful, and policy guidance relating to the purpose of anchor products, i.e. whether the Government intends to split the current UBA service into two products. The Government may wish to consider providing that these revised definitions form the starting BBM model service definitions, consistent with the approach taken to electricity line companies.

The option for a commercial approach

- 43. Implementing a BBM model is complex developing the IMs and assigning costs to services.
- 44. This is not a simple task and would require the Commission to apply judgement relating to technically sensible service demarcations, RSP and Chorus incentives and investment, and

customer preferences and demand. All in a process where parties do not have the knowledge or might not have incentives to reveal their preferences.

- 45. Again we think the industry can play an important part the framework should include an option for an industry commercial consensus approach to be accepted by the Commission as an alternative to completing the regulatory process and making a Determination.
- 46. There is simply too much uncertainty relating to technology and market structure change in the next four years let alone the 8 years effect of any arrangements for the parties to confidently agree a way forward now but by 2020 this may well be feasible.
- 47. The most likely time for an agreed approach to emerge is between when the IMs are completed and prior to the Commission setting Determinations and prices. An industry proposed approach could be informed by the IMs. This would set out translation to prices and service quality and provide an opportunity to cut through much of the complexity of implementation.
- 48. If the industry can find a way through to this, the Commission should have the power to accept the proposal and not issue Determinations.

Response to the option paper questions

Chapter 3: Policy decisions on the framework

The role of input methodologies

1. Please comment on the set of matters that you recommend input methodologies should cover, with reference to the examples.

We agree that section 52T of the Commerce Act can be mirrored in the new regime. It provides a broad non-exhaustive base for the Commission to determine input methodologies appropriate to the form of regulation.

The question is whether the Commission will require specific guidance on some methodologies, to deal with unique telecommunications issues:

Cost allocation

There is emerging competition in the telecommunications sector. Chorus will be operating in BBM regulated, TSLRIC regulated and competitive markets. In determining input methodologies for cost allocation, the Commission should specifically consider the impact on competitive provision of services in order to limit the impact of regulation on competitive markets.

This could be achieved by adapting section 52T(3) so that any methodology relating to the allocation of common costs must not unduly impact the efficient prices derived in other regulated markets or in competitive markets. For example, in the same way that section 52T(3) requires input methodologies not to unduly deter investment in the provision of other services by the regulated supplier, an obligation for the input methodologies not to undermine or limit competitive markets could be added to the equivalent provision for the telecommunications sector.

Conversely, the methodology should also recognise that some competitive services derive a premium by virtue of being associated with or leveraging the regulated asset base, i.e. exchanges which have significant value only because they are at copper/fibre centres. While the allocation of costs should not deter the provision of these services, equally where these competitive services derive a premium, the Commission should be able to reflect this in the allocation of costs.

Pricing methodologies

For various reasons, pricing methodologies have not been determined under Part 4. Under a telecommunications price-quality regulatory regime with specified anchor products, it appears that pricing methodologies will have a much more prominent role. In terms of directing the Commission to set prices for anchor products, our current view is that this should be achieved by directing it to establish pricing methodologies for defined services.

Further, when dealing with matters such as providing policy and legislative guidance on copper and fibre service pricing relativities, it may be appropriate to target that direction at the setting of pricing methodologies for anchor products.

The role of information disclosure

2. Should information disclosure apply even if price-quality regulation is applied to Chorus and/or LFCs at 2020?

Yes. It should be modelled on the Part 4 information disclosure regime.

Information disclosure requirements provide an important complement to price-quality regulation and should be required in all their regulated markets. As the Options Paper observes, irrespective of whether or not price-quality regulation is applied, information disclosure plays an important role by ensuring that sufficient information is available to assess whether regulatory objectives are met.

It also ensures information is provided to the regulator that allows price-quality paths to be set.

Indeed, we understand this was the rationale for subjecting EDBs to both price control and information disclosure under Part 4 of the Commerce Act: it allows interested parties to measure the extent to which the price-quality paths and actual pricing methodologies of regulated entities are consistent with the purpose of regulation.

By allowing interested parties to better assess the extent to which price control is meeting the purpose of regulation, information disclosure regulation has an incentive effect on the pricing behaviour of the regulated entity in itself. As the Commission noted in its 2010 EDB reasons paper, information disclosure can have an effect that is consistent with, and complements, the outcomes promoted by price control by providing incentives that are consistent with those in workably competitive markets, including "incentives to improve relative and absolute performance both through the ability of interested parties to make comparisons and the public nature of the performance measures, similarly promoting incentives for improved efficiency (including efficient investment) and innovation."

3. Should the information disclosure requirements apply to Chorus' copper services? Should there be any differences in the information required for the copper network?

As above, our view is that if Chorus' fixed line services are regulated, then they should also be subject to information disclosure regulation. This is the key mechanism by which the Commission and others can determine whether the regulatory objectives are being achieved.

From a sound regulatory perspective, there is no reason why that should not extend equally to the copper network. It should be for the Commission to determine to what extent the information required for the copper network may differ from the fibre network.

Further, there should be fit for purpose performance/quality reporting for both the copper and fibre networks. In particular,

- High level reporting so that the Commission can assess the efficiency and outcomes of the IM based framework;
- More detailed reporting at the regulated service level. These will likely largely be agreed by the industry, the Commission should be permitted to approve or resolve issues that cannot be agreed.

Chapter 4: The role of the regulator

Telecommunications Commissioner role

4. Do you agree that the role of the Telecommunications Commissioner should be reviewed after 2020?

Chapter 5: Regulatory Asset Base (RAB)

Revenue cap and number of RABs

5. Do you agree that the number of RABs for price-quality regulation purposes should be set in legislation, or should it be a matter for the Commission?

Our view is that the focus for the legislation should be on establishing an appropriate definition of regulated services. The RAB is incidental to the scope of the regulated services and so, provided there is certainty on the scope and parameters of the regulated services then the RAB (whether a single RAB or multiple RABs) will flow from that.

If the regulated service definition covers both copper and fibre services, then that will imply a single RAB.

However, it is common practice under Part 4 for RABs to be divided into asset and service categories (particularly for airports). So, unless the legislative direction is very prescriptive, requiring a single RAB would not prevent the Commission from requiring information to be disclosed on copper and fibre asset values within that RAB - and using that information to set prices.

6. Do you support a single RAB for copper and fibre? Please explain how your preferred approach would meet our policy objectives.

We support a single RAB – and with a consistent application of the BBM model this likely to be the case. The regulated service definition covers both copper and fibre services.

As we understand it, the Government has a key policy objective to maintain relativity between copper and fibre prices, and to minimise price volatility. Particularly during the initial period of customer transition from the copper network to the fibre network, and from the current regulatory settings to the new regulatory framework.

In the absence of actively managing price relativity, the price for regulated services could diverge in initial years and during the transition from copper to fibre networks. For example, we've built an indicative BBM model based on Chorus reported information to test relationships and sensitivity to market and model settings. The model does not predict the "right" BBM price, but does indicate the range of prices produced by varying different assumptions. For example, as shown in Figure 3, the combined copper price is almost a third higher with 60% UFB uptake relative to 30% uptake. Similarly, assumed residual copper asset lives makes a significant impact on implied copper prices through time.



Figure 3: relative prices with 30% and 60% UFB uptake

Telecommunications Act review

Accordingly, we believe the simplest and most reliable way of deriving BBM prices that maintain averaging and relativity across copper and fibre based services is to permit the Commission to set a single RAB – i.e. ensure the service definitions are accurate and not intervene to require separate RABs - and provide guidance the setting of a price/quality path that maintains desired relativities.

The Government should provide guidance to the Commission. This is subject to caution as to the determination of the assets which should be included, and the values to be attributed to them (discussed below).

Guidance to the Commission

We agree with the Ministry that, as outlined in the options paper, it would be consistent with the Part 4 regime for the final determination on this issue to be made by the Commission.

There is a clear trade-off to be made between specifying in the legislation that a single RAB should be developed for each UFB provider, and for Chorus, on the one hand, and an approach which provides clear legislative direction of parliamentary intention on the one hand, while delegating the obligation to the Commission to make the best decision on the facts and circumstances over time within the scope of that intention. The first of these approaches provides absolute certainty at the cost of limiting the flexibility of the Commission in carrying out the parliamentary intent in future. The second approach slightly reduces that level of certainty as to implementation by the Commission.

The selection of the terms of this trade-off is crucial – we agree that the decision has significant policy implications for the design of and outcomes from the regulatory framework. It is clear that the telecommunications industry is subject to rapid change in technologies, and the range, deployment and delivery of telecommunication services. In the face of this rapid change, we think it is more important to ensure that legislation will provide a sound and long lasting framework for the industry to provide certainty for investment and innovation for all parties in the telecommunications supply chain to the end-user. To us, this suggests that the ability to make "running repairs" to the detailed implementation of the regulatory framework by the Commission through transparent consultative processes is likely to far outweigh the risks.

Further, even if the Government were to mandate a single RAB, the Commission has a number of considerations in determining the price/quality paths. For example, it should seek to promote efficient outcomes and avoid setting distortionary prices. A utility model seeks to recover the revenue requirement in the least distorting way, and this generally means cost reflect prices.

In other words, a single RAB is not a complete solution to provide copper and fibre pricing flexibility. Even with a requirement to develop a single RAB, there will likely still need to be a clear direction to the Commission that it is permitted to set prices that do not recover efficient costs. This is because the implication of price relativity is prices for copper and fibre services will not be cost-reflective during the transition period.

Accordingly, if the Government wishes to implement a policy objective of incentivising fibre uptake (or at least not deterring it), then it will need to include express guidance on the legislation. At this stage we are not sure what this guidance would look like, but the requirement to promote energy efficiency incentives under section 54Q of the Commerce Act could provide a useful model. That is, the Commission could be directed to promote incentives, and avoid disincentives, for investment in and uptake of fibre services. It may also be necessary to state that it can achieve this by making pricing adjustments.

If the Government instructs the Commission in this manner, we can't see the Commission maintaining price relativity any other way than implementing a single RAB and price/quality path in the absence of clear evidence to the contrary.

RAB valuation methodology

7. Do you agree that decisions on the RAB valuation methodology should be made by the Commission?

Yes. Our view is that determining the initial RAB will be one of the most important decisions to ensure consumers are protected from excessive prices. However, the purpose statement, and Part 4 merits review precedent, is unlikely to provide clear guidance to the Commission on how the initial RAB should be set.

The Commission and High Court have also been clear in their view that while the initial RAB is important in terms of limiting excess profits, it has very limited impact on incentives to invest. That is because the initial RAB concerns sunk investment, and the incentive to invest in new assets is provided by the roll forward methodology - ie regulated suppliers can be confident that investment will enter the RAB and they will earn a return on it.

Accordingly, as we discuss below, there is scope for legislative guidance to be provided on the initial RAB, without fear that it will distort investment incentives going forward.

8. If you think the Government should provide legislative guidance, what form of guidance do you recommend?

The setting of the initial RAB is the most important step in introducing a utility-style regulatory regime for telecommunications. As the options paper acknowledges

the initial RAB valuation is very important because it sets the overall value of regulated assets that the regulated supplier is able to recover under utility-style regulation. Unlike under the TSLRIC model, this valuation is not re-opened, so has even more importance when considered in the context of its longevity and impact.⁹

The options paper proposes that the Commission be left to determine the opening RAB, in the same way as the Commission undertook initial valuations for the application of Part 4 of the Commerce Act to the electricity distribution businesses. We agree - RAB valuation methodology should be left to the Commission.

However, in this case, the Commission should be guided by additional legislative principles. This is because:

- the purpose statement, and Part 4 merits review precedent, is unlikely to provide clear guidance to the Commission on how the initial RAB should be set. The Commission and High Court have also been clear in their view that while the initial RAB is important in terms of limiting excess profits, it has very limited impact on incentives to invest. The initial RAB concerns sunk investment, and the incentive to invest in new assets is provided by the roll forward methodology i.e. regulated suppliers can be confident that investment will enter the RAB and they will earn a return on it; and
- the Government has articulated a number of specific objectives for the regulatory regime, including certainty for investors and price stability for consumers. Under reasonable

⁹ Telecommunications Act Review: Options Paper, Section 5.2

scenarios, these objectives are likely to require trade-offs and additional guidance is required to permit the Commission to take the Government's preferred path.

Further, the Commission must have flexibility within a set of clear policy objectives to find prices that, while minimise distortions within the market and facilitating a consistent set of model parameters, ensure that the intended policy outcomes can be delivered. This is currently unlikely to be the case.

The Government should remove uncertainty relating to desired policy outcomes

The Government has indicated that revenue and pricing stability are important policy outcomes. Financial Capital Maintenance (**FCM**) is a utility style regulation objective, i.e. the regulated firm can reasonably expect to receive a return on and of the capital represented in its RAB. Investors in the regulated firm have a reasonable expectation of a return of their capital with a low risk of windfall losses (and gains), with respect to the regulated WACC. In short the valuation of the RAB determines the level of prices, (rather than the converse), and influences the risk reflected in the WACC of the regulated firm. On the face of it, fibre assets readily fit this model and the approach is likely to promote efficient ongoing investment.

The situation is more complex for copper assets. Under utility-style regulation there is no clearly superior and economically efficient way to determine the value of sunk copper- based investments at the time of entry into the RAB. By their nature sunk assets do not result in costs to society, the implications of this being balanced against wider regulatory imperatives. There is also no clearly superior and economically efficient approach to determine the amount of the return on and of the capital employed in the assets to be transferred into the RAB which has been returned to the regulated firm in the past, or to estimate the amount of the remaining return on and of capital which might still need to be returned under a financial capital maintenance objective

The challenge for the initial RAB, particularly in relation to copper assets, is that regulation will be commencing a long time after the investment in existing assets. It is therefore difficult (if not impossible) to ensure that FCM is actually implemented. Accordingly, for setting the initial RAB in particular, FCM should be a guiding principle rather than a rule, and maintaining price stability can take greater priority (which is the position adopted by the Commission under Part 4 regulation).

Chorus has nevertheless asked that the Government maintain and guarantee its financial position as it expected at the time it entered in to the UFB arrangements. Chorus may mean that it is seeking a return on and of its actual investment, but if it is currently accruing monopoly rents then these would be built in to the RAB. Any regulatory model that does this is not sustainable.

In any case, we don't think the Government or Commission can adopt the Chorus model as it would result in valuations that bear no relationship to actual invested capital – the BBM regulatory model would not have legitimacy and is unlikely to be durable.

Options for setting the RAB

We believe that, given the uncertainty we face as to what the markets will look like in 2020, it would be premature to for the Act to pre-determine the correct valuations, or valuation methodologies, for Chorus' assets now. The Government should limit its guidance to setting out its policy objectives. Nonetheless, we acknowledge that a number of options are canvassed in the options paper.

The BBM premise is that the regulated firm will receive a return on and of efficient investment in the service, and consumers can be confident they are not over paying for the service. The purpose of setting the RAB is to estimate how much capital the regulated firm has in the business.

Therefore, the initial RAB value should be based on an assessment of investment that shareholders have yet to recover.

This means that – if the Government is minded to choose the valuation methodology now rather than leaving this to the Commission and in the absence of other policy considerations - it should prefer a DAC based valuation methodology for the relevant services/networks. The depreciated accounting value is an accounting estimate of capital employed. There is an existing and reliable valuation. Telecom undertook a full asset valuation in 1990 as part of the sale process, and has maintained an asset register consistent with accounting practices since then.

However, we accept that economic depreciation can depart from accounting depreciation over the life of long term assets such as the copper network. Albeit Chorus' market position since then and profitability suggests it's unlikely to have made a loss on the assets overall (suggesting economic depreciation has exceeded accounting depreciation) – it is more likely to have over-recovered from the accounting depreciation rate. Therefore, if the Government were to specify a valuation methodology, it should instruct the Commission to apply one based on the Chorus accounting records.

Such an approach would also be consistent with preserving incentives to invest. We do not see how an investor in Chorus could reasonably argue that it expects to receive a return on an asset value that is higher than the asset's book value. Further, our indicative Chorus BBM model indicates – ignoring the FWA related demand risk discussed earlier – and unadjusted DAC model can produce prices not inconsistent with prevailing 2020 prices (i.e. wholesale prices in the **[**]**SPKCI** range). The Commission has significant flexibility within the model to ensure price stability in the transition.

If a choice is to be made now, DAC for fibre and DCF for copper is the best approach

However, as set out above, we have real concerns that there will not be sufficient scope for the Commission to apply a "standard" utility style valuation method while still realising the objectives of both financial capital maintenance, and minimising price volatility.

If Government does decide on the RAB valuation methodology now rather than leaving this for the Commission, we think that the valuation methodology should be expressed in such a way as to permit the Commission to (a) employ different valuations for fibre and copper assets to reflect the legacy nature of those copper assets, and (b) use a DCF valuation for copper assets. This valuation methodology would allow the Commission to satisfy the financial capital maintenance objective based on the actual assets, and satisfy the price stability objective as well. With some modifications, this approach is more or less similar to the line in the sand approach proposed in Chorus' 2015 submissions.

In this case, it may be more appropriate to recognise a notional copper network asset which takes the place of a valuation of the copper contents of the RAB. This would minimise price volatility during the transition period, while recognising that the actual assets are likely to have a limited actual economic value and should not be brought into the RAB. In this case, the starting value of notional copper assets, could be based on the net present value of prices at commencement of the regime, and based on a limited time period to reflect the fact that the actual assets have a limited time before they become stranded. For example:

• These notional assets would be valued at the present value of the future cashflows, presumably based on some estimate of the average period to migration for UFB areas and some estimate of the average period to obsolescence for non-UFB areas. These notional assets will be depreciated presumably with reference to those periods.

- This approach reflects the remaining economic value of those assets with reference to regulated cashflows which, at least in theory, provide a return on and of the forward looking national cost of replacing the copper assets with the notional modern equivalent fibre asset.
- The resulting asset value attributed to the copper content of the RAB would by definition not be cost reflective, as it is not a return on and of the remaining portion of the value of the assets actually employed in delivery of the service.
- Accordingly the overall return from the RAB would contain a portion associated with the copper component which is not commensurate with the return on and of the relevant amount of actual capital prior to obsolescence.

Replacement cost valuations (ODV, TSLRIC) result in price instability

The Commission's approach under Part 4, which has been endorsed by the High Court, is to not allow new replacement cost revaluations for the initial RAB. A key reason is that the effect is to lock in valuations that will allow excess profits to be earned on an enduring basis. The valuations are also unpredictable, and therefore bring price instability.

Replacement cost copper valuations all imply a significant transfer from RSPs and consumers to Chorus. Figure 4 sets out for comparative purposes the price implications of applying TSLRIC values to Chorus assets, relative to the implied prices of a depreciated actual cost BBM. The copper cost would exceed []SPKCI per month and implies a significant transfer from consumers to Chorus.



Figure 4: Comparison of DAC with TSLRIC asset valuation

Further, the TSLRIC valuation – based on a hypothetical firm – would require significant adjustments through the model to make any sense. The BBM would likewise become artificial, as it can't reflect any of the cost reflective objectives of utility regulation.

It may be possible to bring a replacement cost model to land with prices that imply increasing prices over time, but these will all be very risky and would sit on an assumption that there is not upward pressure on prices through falling demand.

We don't believe these approaches will be sustainable.

Guidance to the Commission

In principle, the Government doesn't need to give the Commission guidance on the initial RAB beyond setting out the key policy objectives as above – financial capital maintenance versus minimising price volatility. We consider that the Commission is already experienced in the implementation of appropriate methodologies, and has appropriate precedents available to carry out an appropriate and transparent process in determining appropriate input methodologies for the valuation of RAB assts.

Nevertheless, it would be helpful for the legislation to expressly take the TSLRIC valuation off the table. Although we do not think the Commission could adopt that valuation under BBM, other parties may demand that it do so. This would be a distraction and waste valuable resources that are better directed on more viable options.

If the Government wanted to provide further guidance, then it should add a principle to the Act that the Commission must in the initial valuation seek to estimate the capital investment in the services yet to be recovered (eg through depreciation). This would narrow the range of valuation methodologies, making it clear that the valuation exercise is not an opportunistic exercise.

As this approach must be based on an assessment of actual investment made, it also the only methodology that will provide some incentives for Chorus to invest in the copper network through to 2020. All the other methodologies are based on derived asset values, and Chorus would rationally spend nothing on the copper network until the new model is in place.

Finally, if the Government wants to provide additional guidance to the Commission, and it wishes to do this to ensure price stability, it should do this by specifying that it should ensure that both objectives are balanced by applying a discounted cash flow approach to the copper network of the sort outlined above. This is the best alternative approach through which it can carry out an opening valuation for a copper network that provides the correct outcomes, and which reflects the residual and declining value of the copper network.

Other decisions for the Commission

9. Do you agree with our proposed approach to enable the Commission to determine the scope and treatment of assets in the RAB?

We agree that the Commission should determine the assets to be included in the RAB. However, we think it is important to maintain a clear distinction between:

- The scope of the regulated service. This is determined by the legislative definition (discussed below); and
- The assets to be included in the RAB. The RAB is a regulatory tool to estimate the efficient capital costs of providing the regulated service. It is therefore determined by the Commission, guided by the legislative definition of the regulated service.

It follows that for this policy and legislative stage of the reform process, the primary focus should be on ensuring the legislative definition of the regulated service is appropriate

10. Please comment on any matters Government should take into account when developing a definition of "fixed line access services".

The definition of "fixed line access services" will be important – as it needs to be able to guide the Commission in setting the bounds of the RAB.

To provide an example of how the boundaries need be clearly set, it is possible that Chorus or the LFCs could seek to include FWA or the cable network in the RAB, on the basis that these assets form part of and/or are used to provide the fixed line access services. This is analogous to electricity lines companies including batteries in their RAB. The legislative definition will therefore need to clearly specify that FWA is not part of the regulated service.

Cost allocation is likely to be more difficult for telecommunications compared to Part 4 regulated sectors because there are more shared costs:

- Within the RAB between anchor and regulated commercial services;
- Between the BBM regulated services and other regulated services such as backhaul. These services are regulated under different rules (backhaul); and
- Between regulated services and competitive Chorus services.

This is another reason why the legislative definition of the regulated service needs to be clear and precise.

The fixed lines access services will only obtain clarity as the access services are defined. We think they could be based on the UBA and UFB services. However, as set out in the body of our submission, we propose that the industry advise the Commission on proposed service definitions.

In terms of considerations for the Government in developing the fixed line access services definition, if for the Commission:

- It needs to take account of all the ancillary boundary issues with fixed lines services;
- Needs to be clear that all the components of the service are captured;
- There is already averaging and the average will need to include all the components if it is expected to be effective;
- Need to be consistent with the competition test that puts competitive services and demand outside the regulated service (discussed below).

11. Do you think Chorus' assets in LFC areas should be excluded from its RAB?

The governing principle should be that services subject to competition should not be regulated. If there is workable competitive constraint from LFCs, there are likely to be good reasons to omit Chorus' assets from LFC areas.

However, there are likely a number of options for implementing this in the regulatory model. One approach would be to exclude such assets, however, for example, shared assets may continue to be used by services that remain subject to price control. The effect would be that the scope of the regulated service remains the same, but the cost base is reduced, which would be difficult to manage. In this situation, one outcome could be that:

- For all areas including LFC areas Chorus will be subject to information disclosure regulation (consistent with the proposal for LFCs to be subject to information disclosure only). There will be a RAB for information disclosure purposes that covers all areas;
- For non-LFC areas, it will also be subject to price-quality control. There will be a subset RAB (that excludes the LFC and any other non-regulated areas) used for price control purposes.

Accordingly, the Commission should consider the implementation of a competition test as part of the IM process.

12. Do you agree the Commission should decide on the treatment of UFB financial support? Do you support the Government providing guidance? If so, please comment on the guidance or approach you recommend.

In principle, we would say that the underlying premise of a BBM model is to provide a return on the actual firm's investment – not on Government funding. That said, we continue to believe the Commission is best placed to make detailed RAB decisions so we do not support the Government providing guidance on this issue.

13. Please comment on our proposed approach to provide guidance to the Commission that it should implement its functions in a way that does not create incentives on Chorus to keep end-users on copper services in areas where there is a choice of UFB services available.

We think the guidance should be kept to a minimum. Given the complexity of the issue, it is not clear to us how this guidance will be directed, and how it can be formulated in a way that assists rather than encourage further debate and contention when the Commission comes to set IMs and price-quality paths.

The difficulty is that such guidance can conflict with other policy instruments. For example, a model that prices new UFB supported services at a premium would deter UFB take up. The key thing the Government can do to promote migration to fibre is to ensure its settings are consistently supporting policy.

14. Do you agree the Commission should decide on the treatment of UFB initial losses?

Chorus has always been compensated at the full replacement costs. We consider there should be no initial losses for Chorus and it is transitioning the copper network to a fibre network (for which it has always been compensated for). If the Government wanted to remove a point for argument, then it should prohibit the Commission from considering Chorus initial losses.

For LFCs the UFB commercial model saw the Crown funding the UFB roll out (taking the demand risk) with LFCs making a contribution as customers are connected. Under this model it's unclear whether there would be material initial losses (setting aside the LFCs may have negotiated away from this model). This should be left to the Commission to assess.

From a principled perspective, if an approach was adopted that allowed UFB providers to recover losses incurred before regulation commenced (which we do not support), then it would follow that the approach for copper services would ensure that all past excess profits are accounted for when the initial RAB and prices are set. Such an approach is unlikely to be consistent with the price stability objective.

Assessing the efficiency and prudency of capital expenditure

15. Do you agree with our proposed approach to the treatment of networks rolled out under the Government's UFB and RBI programmes?

We agree that the Commission should have a role in assessing the efficiency and prudency of capital investment (and operational expenditure). This is normal under BBM regulation, and does not need to be legislated for.

The new regulatory regime should be forward-looking, so as a general principle it should not seek to revisit the efficiency and prudency of investment committed to prior to the commencement of regulation.

However, such an approach should not prevent the Commission from forming a view on the operational and technical execution of the roll out within those parameters, i.e. to assess the efficiency of the build/operations. Chorus is only 57% through the roll out, and the Government has indicated that it will be placed under a utility model. There is still plenty of opportunity for inefficient build decisions and implementation.

Accordingly, the Government policy guidance should be targeted and limited to the Government policy decisions regarding investment and roll out requirements.

16. Do you agree with our proposed approach to the treatment of non-standard installations? What threshold do you propose for charging end-users for non-standard installations?

We agree that an economic policy statement could be used to provide guidance on the approach to be taken for non-standard installations.

We do not believe there should be a presumption that connection costs be added to the asset base. The costs should be added to the RAB where it provides efficient pricing signals, to minimise market distortions or other specific policy objective.

If the Government were to provide specific guidance to the Commission, this should be to clarify that:

 The efficient costs can be added to the RAB where replacing an existing fixed line connection to an existing premises in UFB and UFB2 fibred areas. Consumers connecting post 2020 would likely feel aggrieved if not able to take advantage of currently "free" UFB connections;

However, where the connection has been replaced to permit retiring of the copper network, the Government should ensure that the Commission also considers and takes account of cost savings. It would promote inefficient behaviour if Chorus were to be able to recover the costs of retiring the copper network from customers, while permitted to keep ongoing operational savings;

- The current approach should apply to future fibre initiatives, new premises and to business customers, i.e. generally all the costs to connect the premises are met by the premises owner/developer and should not form part of the RAB;
- Under all cases, any non-standard Chorus installs through to 2020 should not be included in the RAB. While Chorus has administered a fund to provide for non-standard installs, we understand this was an agreed remedy for failure to comply with its contractual commitments. We also note that Chorus is exploring options with CFH to extend Chorus' current non-standard installation arrangements beyond 2016.¹⁰

17. Do you agree there should be a pre-approval mechanism available to regulated suppliers for future major capital expenditure based on the Transpower model?

Yes.

18. Does the proposal to require the Commission to have regard to economic policy statements provide sufficient certainty to support any future government broadband infrastructure initiatives?

¹⁰ Page 16 Fibre Connections Capex, Chorus FY16 Full Year Results Presentation https://www.chorus.co.nz/file/74526/FY16-Full-year-results.pdf

Requiring the Commission to "have regard to" economic policy statements of the government does not, in our view, "guarantee" sufficient support for future government policy initiatives. The Commission is an independent regulator and section 26 of the Commerce Act explicitly preserves that independence by not requiring adherence, but rather only to have "regard to".

It is also difficult for an economic regulator, subject to a purpose statement that requires economic efficiency, to nevertheless make decisions to implement social policy objectives. It is possible, therefore, to foresee a situation where a government policy initiative that did not have the force of legislation was "regarded" but not "given effect to" by the Commission.

Ultimately, our view is that this is unlikely to be significant issue in relation to government broadband infrastructure initiatives, as any material future broadband initiative will most likely require specific legislation to be effective.

Chapter 6: Price-quality regulation

Form of price-quality regulation

19. What is your preferred option for the form of price-quality regulation - price caps, a revenue cap, or our preferred option - and why?

20. How could your preferred option be implemented to manage the risks identified above?

In Spark's view, the choice of the best option for price-quality regulation should be set by the Commission, with the clear specification, not merely of the guiding policy objectives, but of their respective priority so that the Commission has clear legislative direction as to how to make the necessary trade-offs and can best implement the Government's policy in setting the legislative regime.

Balancing express legislative direction with flexibility over time

The key point is that the selection of the preferred option for price-quality regulation depends not merely on the objectives, principles and any other criteria specified in legislation, but on a detailed appreciation of the specific circumstances and their evolution over time. In addition, the level of detail and information required, and the technical capability required to make the appropriate assessments and judgments over time mean that the Commission is best able to adjust key elements of the mechanisms of price quality regulation to meet changing circumstances, in order to ensure that the regulatory objectives continue to be met over time.

The options paper specifies that a key objective of the regime is to manage the risks arising from uncertain demand forecasting during the transition period from copper to fibre and to ensure some level of revenue certainty for the UFB provider during this period. Another key objective is to manage price stability for consumers, to minimise the price shock risk that might arise as a consequence of the use of the revenue cap approach.

Incentives and objectives under price cap price-quality regulation

If the paramount objective is to ensure price stability for consumers, then a pure price cap is more likely to achieve the desired outcome. Revenue caps are about revenue certainty, and this is not capable of being adequately provided in a world where UFB providers are likely to face some measure of competition from current 4G fixed wireless access services, or other technologies which cannot currently be clearly foreseen. Similarly, Chorus will face some level of competition in LFC areas, particularly during the transitional period from copper to fibre.

Notwithstanding the complexities of demand forecasting that arise under a price cap approach, this would be preferable to a revenue cap or the hybrid approach as suggested. This is because

price caps and revenue caps have quite different sets of implications for risk allocation in the telecommunications supply chain to the end-user, for the allocation of incentives along that supply chain, and for providing effective regulation, and encouraging healthy competition which incentivise cost efficiencies, service level innovations, and investment and innovation. If the overarching objective is to maximise economic efficiency, and to provide the best approximation of competitive market outcomes in a market where there is some level of competition, we think price caps generally are more likely to provide stronger incentives for all market participants in the current industry structure. The price cap provides stronger incentives for the regulated firms to increase demand, to lower its internal cost structure, and to price most efficiently than the revenue cap approach. We think it is clear that this incentive structure is most likely to produce outcomes in the best interests of end users in the longer run.

Incentives and objectives under revenue cap or hybrid model price-quality regulation

We do acknowledge that during the copper fibre transition in particular there is most likely to be demand volatility. During this period there is a possible case for the use of the hybrid approach using a revenue cap, associated with a wash-up mechanism, and a price cap in place for some anchor products, if the approach to managing the mechanism and assessing effectiveness is sufficiently flexible to deal with changing conditions over time.

If a revenue cap approach is to be used, we note that the concern around demand forecasting shifts from the need for the regulator to make forecasts of demand and managing variability of those forecasts under a price cap. As with all regulatory intervention however, with respect to demand, the choice of price-quality regulation represents a trade-off between two poles:

- The potential difficulty in correctly estimating the volatility of demand under a price cap approach on one hand; and
- The strong incentives under a revenue cap approach for the regulated firm to overestimate demand to increase revenue and to justify additional allowances for the approval of capital expenditure on the other.

The revenue cap model, as noted has a set of differing incentives to the price cap, and we note the proposal for the use of anchor product pricing as a tool which might potentially modify some of those incentives. In contrast to price cap approaches, the revenue cap model provides certainty for the regulated firm about the recovery of costs. This aspect of the price quality choice interfaces with the valuation issues discussed above. While on the one hand this improves the incentives for efficient investment, the pure revenue cap approach of itself provides no incentives for the regulated firm to reduce costs, increase output, or to maintain or improve service or product quality since this tends to mean higher costs and lower prices.

The use of anchor pricing as proposed in the hybrid approach is directed at managing price shock risk for end-users with the strongest impact on what are today regarded as basic services. We do not think that this aspect of the hybrid model materially changes the incentives which are faced by regulated firms under revenue cap regulation. We address the question of anchor products more fully below.

Managing incentives and objectives flexibly under price-quality regulation

In short, if the Government is to prescribe the use of a revenue cap or the proposed hybrid approach, and whether for the transition period, or otherwise, Spark believes that there is a vital need to ensure there are sufficiently strong protections for both those customers consuming basic services and all other customers. We think that appropriate provisions would be required outside a specified revenue cap/hybrid approach in any case as a legislative directive to the Commission

on its implementation of the revenue cap or hybrid approach. As noted above, the revenue cap and the hybrid approach will allocate most demand risk to end-users. These customers would be subject to significant volatility in prices as they bear the brunt of volume and cost uncertainty.

We are concerned that if the legislation over-specifies the approach to price-quality regulation, whether for the initial period or subsequently, the risk is that the Commission will not have the clear mandate to use, or possibly even access to, the appropriate tools in order to respond to changes in the telecommunications market during the lifetime of the legislated regime.

Our preferred approach is to allow the regulator to determine the specific form of the price-quality regulation, but for the Government to clearly specify the hierarchy of its policy objectives, and the principles and criteria which should be applied to the effective assessment of the most appropriate specific form over time. As noted, this process requires significant and detailed technical input. We believe that the Commission's experience in applying Part 4 of the Commerce Act across those regulated industries make it best placed to do this, if accompanied by clear legislative guidance. The proposed approach that identifies objectives potentially leaves the Commission in a difficult position seeking to apply competing objectives.

21. If you prefer a price cap approach, how should the demand forecasting risk be managed?

As noted above, we think that demand forecasting risk arises under both the price cap, and the revenue cap/hybrid approach. On the one hand under price cap mechanisms, there is some forecasting risk based on the potential difficulty in correctly estimating the volatility of demand. We think that with a single RAB, under a price stability oriented valuation approach, and for Chorus, it is the fact that we face primarily changes in the overall demand.

Accordingly we believe that there is likely to be limited volatility and relatively little demand forecasting risk through the migration period. The practicalities of our industry are that volume change is incremental. We therefore see the demand forecasting risks as manageable. This is an issue we think the Commission is appropriately experienced and equipped to manage. For example, it might be appropriate for them to reduce volatility risk by gathering and assessing actual demand and making interim demand forecast adjustments during a regulatory period accompanied by appropriate wash-up mechanisms.

On the other hand, we have noted that there are strong incentives under a revenue cap approach for the regulated firm to over-estimate demand to increase revenue and to justify additional allowances for the approval of capital expenditure on the other. Here again, we think the Commission is best equipped to manage the risks by developing appropriate mechanisms, including possibly the use of interim demand forecast adjustments as outlined above.

22. Is there any way to make sure that the UFB provider is not wholly insulated from competition under a revenue cap model? For example, could an asymmetric wash up be applied?

- 23. Are there any risks or benefits of Option 3 that we have not identified? Will this option have the incentive effects we are seeking? How could these be addressed?
- 24. Do you agree the impact of competition 'at the fringes' should be managed? If so do you agree with our proposal for an 'asymmetrical wash up'?

The asymmetric wash-up approach is intended to ensure that if the regulated firm does not meet its revenue cap then there would be no wash-up and that the next regulatory period's maximum allowable revenue for the firm in the next period would not be increased by the shortfall in the previous period. In the situation where the regulated firm exceeds its maximum allowable revenue, there would be a wash-up, and the next regulatory period's maximum allowable revenue

would be reduced by that amount. We think that this is an appropriate way to reduce the exposure of a limited class of end-users to demand risk under the hybrid approach of a revenue cap with price capped anchor products.

The key assumption in this approach is that the regulatory framework, as proposed excludes the prospect that any competition for copper/fibre fixed line access using a competing network or a bypass technology such as fixed wireless access or cable will be unlikely to constrain the pricing of fixed line access providers. Accordingly, the expectation would be that there would be low probability of significant over- or under-recovery or of a series of rolling over-or under-recoveries.

The anchor product pricing approach, if maintained and extended in accordance with the approach described in the Options Paper, will cover the majority of the product revenues delivered by Chorus. The asymmetric approach does appear to mean that if competition for fixed line access does result in a constraint on the pricing of UFB providers to a material extent, demand risk would not be transferred to the end-user under the hybrid approach with an asymmetric wash-up but would be transferred to regulated firm. This is likely to create incentives for the regulated firms, faced with competitive pressures to continue to invest and innovate in unregulated services, and over time to lobby for successful products to become part of the price capped majority services. Finally, we think this process should, where relevant, work in parallel with the approach of ensuring that major capital investment must be approved by the Commission.

The hybrid approach has been structured to try and reduce the adverse incentives under the demand cap by structuring the anchor product pricing and asymmetric wash-up proposals to ensure that there is some exposure to competitive pressure for the regulated firm which should, all other things being equal, incentivise efficient investment by the regulated firm. We think this is likely to be effective as long as the assumptions around the level of bypass competition hold true, and as long as the selection of anchor products is carried out consistent with the policy objectives.

Anchor products

25. Should the following services (as defined above) be anchor products from 2020? Why or why not?

- a. voice-only service;
- b. 'entry-level broadband'; and
- c. 'basic broadband'.

Proposed anchor products are not forward looking

As set out in the body of our submission, while we support the concept of anchor products, we don't support the specific anchor products which are proposed. The proposed broadband services are already out of date for the New Zealand market, let alone likely demand when applied at 2020.

At the bottom end, the entry level broadband service create an artificial distinction that is not currently a feature of the market and will be difficult for RSPs to support. Consumers are currently able to access the best possible performance from the copper line and this should be the case going forward.

At the same time, the proposed basic broadband product reflects today's dominant 100Mbps UFB variant. We believe that, looking overseas and the direction of the NZ market, that most

customers will demand a 1Gbps service by 2020. We are already talking to Chorus and LFCs with a view to launching a mass market 1Gbps service.

Proposed differentiation will be difficult to manage and potentially undermine other policy objectives

Further, proposed differentiation will be difficult to manage and potentially undermine other policy objectives:

- The 15/1Mbps service is creating an artificial break that the market is moving away from -Chorus notes in its FY16 results that the RSP market is now offering the fastest service. To then insert the 15/1 break in to the market will be very difficult to communicate to consumers and, with wholesale copper prices already set by reference to the costs to deploy a modern fibre network, will not be seen as intuitively fair.
- The Government policy has been to maintain relativity between copper and fibre prices in part to encourage the take up of fibre services. In practice, wholesale copper and fibre access prices are comparable and this has flowed through to retail prices. Spark connects most UFB customers to a service priced \$5 less than that based on Chorus' UBA service. There has been high uptake of fibre services (for this stage of the roll out) and - with 90% of new customers selecting 100/20 plans or higher - end users will be seeing a significant service improvement.
- Significant differentiation may undermine UFB benefits as a substantive group of customers will not receive the performance benefits of the UFB initiative. UFB benefits are premised on the widespread availability and uptake of higher performing fibre services (rather than capped at a low level). The approach puts this at risk as the degree to which consumers migrate to higher performing services – and achieve UFB benefits will depend on Chorus commercial pricing policy.
- Finally, setting the anchor product at the bottom end of the market means that it is unlikely to provide as good a constraint as an anchor based on where the bulk of demand lies. There are also unlikely to be material migration benefits to the technology neutral approach as copper prices are set equivalent to fibre access prices current copper prices being set on the basis of a network operators fibre costs. Consumers will not face significant price increases from migrating to a fibre access and will potentially see significant performance improvement.

The differentiation is not necessary for the copper to fibre network migration and, if anything, will likely make it more difficult to move customers off copper. Our experience has been that there needs to be real value for consumers in a migration for it to be acceptable. In any case, in the NZ environment – where copper prices have been set by reference to the expected cost to deploy a national fibre network and Government policy is to maintain price relativity – there is not a low price point that needs to be preserved for migrating copper customers.

Proposed anchor products

We propose that – if the Government wishes to implement the hybrid model – that the framework provide for a voice only access service as proposed, a copper broadband service that offers to maximum performance the line is able to support, and a general fibre broadband access capable of meeting most customers' needs. This latter product should grow over time to ensure it remains fit for purpose. The Commission should determine the basic broadband service – with Government policy guidance that it is intended to evolve over time to reflect customer needs and anchor commercial services.

The Government should also add a backhaul anchor product. There are potentially significant competition implications of failing to cap the backhaul service used by operators to, in part, provide a competing service to Chorus.

We further believe there is a role for the industry to propose to the Commission the service definitions of proposed anchor products. It will not be possible to simply codify the existing regulated services as Determined services as these will depend on the anchor products and approach to IMs, i.e. service demarcations will need to better align with the BBM asset base and 1Gbps services will require supporting high capacity handovers.

Pricing of anchor products

26. How should anchor product prices be determined?

- 27. Do you have any comments on the following principles?
 - a. end-users should not face sharp price increases;
 - b. prices in the initial regulatory period should be set with regard to 2019 prices; and
 - c. anchor product prices should be broadly reflective of the quality of the particular anchor product.

28. Are there any other matters that need to be addressed regarding the pricing of technology neutral anchor products?

In principle, we agree with the proposed approach to determining and maintaining anchor product prices. We think it is important that the correct initial anchor product set is selected and is appropriately reflective of the majority preference of end-users on the commencement of the new regulatory regime, and that the anchor prices, are set consistent with the objective of minimising price volatility. It is also critical to the success of the anchor pricing mechanism that the Commission has the power to update and extend that set as it sees fit within the scope of the legislation. We discuss below some elements which must be correctly specified if the proposed anchor product regime is to function properly.

The way in which anchor product prices should be determined is a function of the preferred effect that the anchor product regime is intended to have. One key reason for the anchor product pricing proposal is to maintain in effect a status quo option for end-users, to ensure during the transition period that consumers are insulated from price shocks during the transitional period. The second typical reason is that the selection of an anchor product or suite of anchor products reflect the then current and forward looking majority preference of end-users, and accordingly creates incentives for efficient investment, and pricing flexibility.

The Ministry has proposed a set of three initial anchor products and proposed that the Commission should have the power to introduce a fourth if necessary. The three anchor products as currently defined, are said to represent 87% of Chorus' fixed line connections as at 31 December 2015. The Ministry acknowledges that this mix will likely change by the commencement of the proposed legislation. We take it from these comments that the initial policy setting places the relevance of the "status quo" option above the "investment incentives" option set out above.

We have noted elsewhere that the revenue cap model produces some incentives to reduce output. It appears to us that the secondary use of the anchor pricing approach is intended to some degree to weaken the force of those incentives by encouraging efficient investment. Appropriately structured anchor product pricing should encourage efficient investment since there is an incentive to align expected revenues and the related investment and innovation choices with end-user willingness to pay with a commensurate benefit for the regulated firm by providing incentives to select more accurately from the range of investment options available to them by learning from market uptake.

The attributes of the anchor product(s) which are most valued by users in terms of willingness to pay, will act as a price anchor in respect of the range of un-regulated products whose attribute sets are adjacent to those of the anchor products. The anchoring effect will be weaker the more removed that the attribute set of a non-anchor product is from the anchor product.

This anchor product pricing approach should have two outcomes. First, it preserves the current set of options and preferences for end-users at the time of transition into the new regulatory regime. In addition, it should also provide incentives to innovate upward from the anchor product set. If consumers do not value the attributes of new product offerings sufficiently, they will remain on the anchor product.

The Ministry notes that their preference for the hybrid approach is based on the assumption that the right mix of anchor products will be selected and updated over time. The intent is to enable the Commission "in later periods" to review the specifications of the anchor products to ensure that they keep pace with end-user expectations. We agree that this is critical to achieving the principal objectives set out above.

29. Do you think there would be any negative outcomes from the requirement to provide anchor products on a geographically averaged basis? Do you think the Commerce Act provisions would be a sufficient alternative in the absence of this requirement?

We support averaging within the regulatory pricing model. However, we do not support an averaging requirement that cuts across competitive areas. The Government can rely on generation competition law in these competitive (non regulated) areas.

For example, an averaging requirement that limited Chorus' ability to compete in LFC areas would likely remove a competitive tension between Chorus' copper and the LFCs' fibre.

The best means for minimising incentives to distort competition is to apply a competition test, removing competitive areas from the regulatory model. Averaging should then apply to the areas which remain regulated.

Layer 1 anchor product

30. Should the following services be anchor products from 2020? Why or why not?

- a. layer 1 fibre service; and
- b. any other services.
- 31. What test should the Commission be required to apply to determine whether to introduce a layer 1 fibre anchor product?
- 32. Would there be any problems with a technology-specific layer 1 anchor product? Should the layer 1 anchor product include UCLL, and therefore be technology-neutral?
- 33. Should the layer 1 anchor product include both point-to-point and point-to-multipoint configurations? How do you recommend the Commission should calculate a cost-oriented price for the layer 1 anchor product?

34. Should the Commission have the power to require services based other forms of unbundling (such as wavelength unbundling) to be provided?

We support the provision of an unbundled layer 1 fibre service. LFCs and Chorus are obliged to offer an unbundled service and entered in to their existing UFB agreements on this understand. Layer 1 unbundling should remain subject to regulation.

It is too early to say what the best service construct for unbundling product is and the Act should provide that the Commission can act quickly if commercial offers are not sufficient.

Updating anchor products

- 35. How should the regulatory framework provide flexibility for the Commission to update anchor products over time? What criteria should be used for the selection of anchor product specifications?
- 36. Should there be a limit on when the Commission can review and update the anchor product set? What frequency of reviews do you recommend?

37. Should there be a limit on the number and type of anchor products, as proposed?

We support a price cap approach. If the Government heads down the anchor product path, the Commission should have the flexibility to review and change products to ensure they remain fit for purpose and achieve policy outcomes. This includes the number and type of anchor products as well as their individual specification.

This should be at the 2020 initial period and then, within the general principle, amended whenever necessary to ensure the services remain for purpose.

Consistency between Chorus and LFCs

- 38. Do you think that anchor products should be priced consistently across LFCs and Chorus?
- **39.** Please comment on any alternative ways to achieve consistency of pricing between Chorus and LFCs.

Our preference is for national pricing between LFCs and Chorus in regulated areas as this reduces RSP prices. However, we acknowledge there are already price differences and these are simply a product of a disaggregated wholesale market. Where price differences are not material, these can adjusted at the RSP level.

However, we're already seeing prices differ across Chorus and LFC networks and note the different prices proposed by the LFCs for their new 1Gbps services.

LFCs understand that RSPs want to offer nationally consistent services which acts as an incentive on them to align their prices.

Commercial services

- 40. Should commercial services offered by UFB providers be subject to any requirements?
- 41. Do you agree with our suggested requirements, including geographic averaging (noting the question earlier on this point in relation to anchor products) and the requirement that 12 months' notice must be given of any changes to price or material non-price terms for commercial services?

In addition to term, the Government could promote price stability through – for example – permitting the Commission to set maximum percentage change thresholds to smooth price changes.

Further, there needs to be the potential for the Commission to step in on non-price terms. While price may be moderated by the revenue cap, there is little protection for non-price terms.

Deeds of undertaking for open access

42. What is your view on our proposal to carve the initial layer 2 anchor products out from this obligation?

We do not support a blanket exemption for layer 2 products. If the implication of the proposed model is inconsistent with open access obligations, then the Commission should be asked to approve limited exemptions at the time and in the market context.

Retaining flexibility as the market matures: the Commission can recommend changes to the form of control

43. Do you agree the Commission should have the power to recommend changes to the form of price control (including moving to a price cap regime) if certain criteria are satisfied? If so what criteria would you propose?

As noted above, our view is that a price cap regime is the appropriate form of regulation for Chorus' fixed line business from 2020. In the event that the government is minded to continue pursuing a revenue cap form of regulation as the initial form of regulatory control, we agree that there must be scope for changes.

We would also caution against using the "materially better" threshold before the Commission was able to make a recommendation for a shift to a price cap model. That threshold has, in the context of Part 4 merits appeals, set the bar so high that we would be concerned that the Commission's power to recommend changes would be illusory. There must be a real risk that this would lead to regulatory outcomes that are prejudicial to consumers of fixed line services.

44. Should the Minister make the final decision, or should this matter be delegated entirely to the Commission?

Under Part 4, the Commission has determined the appropriate form of control (eg price path or revenue path) for each sector, and has also considered whether the approach should be changed, in accordance with the applicable purpose statements. We think the same approach should be followed under the new telecommunications framework.

Provided the Commission is exercising the function against clear, well designed criteria (and, as above, we do not think the "materially better" criterion is appropriate), we are open to the decision being delegated to the Commission. The Commission will be able to take into account all relevant issues when exercising that function, which puts it in the best position to make the decision.

The Commission should be setting price caps within the utility model. These should be subject only to the Commission view that this best meets the purpose statement objectives.

Setting price and non-price terms

45. Do you agree that regulated terms should be set by Commission determination?

46. If so, do you agree that mirroring the approach to section 52P determinations in the Commerce Act is appropriate?

The regulated terms should be set by Commission determination.

Chapter 7: Implementing price-quality regulation

Options for implementing price-quality regulation: Chorus

47. Do you support implementing price regulation for Chorus at 2020, or as a backstop?

We support implementing price regulation for Chorus at 2020. We consider it is the appropriate and proportionate form of regulation relative to the risks of adverse effects arising from the exercise of market power by Chorus.

In considering the spectrum of regulatory responses available to protect against the risks of adverse effects of market power by Chorus, it is clear to us that Chorus' monopoly position merits a regulatory response that is closest to the full regulation end of the spectrum.

In some circumstances, the economic context, and corresponding risks of adverse effects arising from the exercise of market power, can mean that a lower level form of regulatory control can be appropriate (eg information disclosure). As the Options paper notes, Chorus operates the entire nationwide copper network and by 2020 will operate around two thirds of the UFB network nationally. In that context, the backstop option discussed in the Options paper will not provide sufficient protection against the risk of exercise of market power by Chorus.

48. What benefits would a backstop approach have over a 2020 model of the type described in this paper?

As set out above, in the circumstances where Chorus operates the entire nationwide copper network and will operate around two thirds of the national UFB network, we do not see any benefits in pursuing a backstop approach.

An information disclosure only form of regulation is only an appropriate regulatory response where the regulated entity is subject to some degree of competitive pressure. Professor George Yarrow has advised the Commerce Commission:

Broadly speaking, information disclosure regimes are an intermediate level of response to the relevant risks which lies between (a) the application of competition law and (b) more interventionist forms of policy, including regulatory determination of key variables such as prices/revenues and service quality. Their adoption therefore usually reflects assessments that **the risks of AEEMP**¹¹ **lie in some intermediate range**. (emphasis added)

Similarly, during the development of Part 4 of the Commerce Act, the Ministry of Economic Development (MED) noted that Information Disclosure was a light-handed form of regulation, and that it is "generally less intrusive" for regulated businesses. The MED further noted that because "information disclosure on its own has no direct consequences and is subject to considerable time lags, it may not be very effective at constraining any significant abuses of market power."¹² Where there is a more substantial risk of AEEMP, a more substantial form of regulation is required.

¹¹ Adverse effects arising from the exercise of market power

¹² Ministry of Economic Development Review of the Regulatory Control Provisions under the Commerce Act, at 123.

In our view, Chorus does not meet the criteria that would make information disclosure regulation an appropriate regulatory response. Given the risks to consumers of too low a level of regulatory control, we do not see any benefits capable of outweighing those risks

Nevertheless, we think there is scope for the regime to include the possibility of commercially agreed prices/services. The place this could happen is between the IMs and price-quality path being determined. It is at this point that, if the industry were to propose something, that the Commission should have the power to accept the offer rather than to determine specific services. The Commission should have the power – if it accepts the offer – to not set a determination. This would be only for a brief period or until, say the publication of the first draft of the determination. The benefits of such an approach would be that:

- The IMs would guide the negotiations on the commercially agreed prices/services; and
- The IMs would also apply to information disclosure regulation (so would not be redundant in the event the Commission was not required to set a price-quality path).

49. How could a backstop approach ensure that the interests of end-users are taken into account?

There is vigorous competition between RSPs and end-users benefit from that competition. However, that competitive rivalry will not be sufficient to protect end-users from the risk of adverse effects of the exercise of market power by Chorus.

While under the backstop model, the intervention test would be intended to discipline Chorus from extracting excessive profits, end-users are likely to be very limited in their ability to trigger this mechanism to protect their interests. Moreover, the intervention test considered at 7.4 of the Options paper (i.e. a report being prepared by the Commission and provided to the Minister) will not offer an immediate mechanism to protect the interests of end-users. That is not a criticism of the Commission's ability to take such action - rather, it is inherent in a model which relies on the threat of increased regulatory intervention to ensure outcomes in the interests of end-users (which was recognised by the MED in the design of Part 4).

For those reasons, we have concerns about the ability of the backstop approach to protect the interests of end-users (and indeed, the interests of all consumers of Chorus' copper and fibre access services).

50. Under a backstop approach, how do you suggest copper services be treated? Please comment on the preferred option of 'freezing' the copper price.

We agree that, if a backstop option is implemented (which we do not support), then a statutory price freeze will be required, in place of ongoing TSLRIC reviews.

However, in our view, requiring a price freeze simply demonstrates that a backstop option is inappropriate. It would also be a departure from the Part 4 approach, where information disclosure is either:

- A standalone regulatory mechanism, designed to provide incentives to meet the purpose of regulation; or
- A complement to price-quality control regulation.

That is, if information disclosure only (eg a backstop option) is insufficient to provide incentives to meet the purpose of regulation, then price-quality control (and not a statutory price freeze) is the correct regulatory response.

51. Under this option, how do you propose managing the risk of copper prices becoming out of date over time? Is a CPI-1% adjustment appropriate?

A CPI-1% adjustment would compensate Chorus for inflation, while encouraging efficiency and innovation. But it would not incorporate other important features of RAB roll forward under Part 4 that provide incentives to invest.

Further, such an approach would essentially amount to the legislation imposing a very rough and ready price path. In our view, the better approach is to allow the Commission to establish an appropriate price path in accordance with robustly tested input methodologies. This is important for the credibility and stability of the new regime.

Options for implementing price-quality regulation: LFCs

- 52. Is there a case to implement a backstop model, with information disclosure, for LFCs?
 - a. To what extent do you think LFCs will be subject to competitive pressure from 2020?
 - b. Do you expect that they will need to be subject to price-quality regulation at some point? When might this occur?
 - c. Are there any other risks or benefits to a lighter touch approach for LFCs?

Applying the criteria for selecting appropriate forms of regulatory control discussed above in our response to questions 47 and 48, in contrast to Chorus, a backstop model with information disclosure would appear appropriate for LFCs. As the Options paper observes, LFCs face a different competitive landscape, level of market power and corporate structure to Chorus. That, in our view, is likely to see them satisfy Professor Yarrow's criteria for information disclosure regulation - namely that the risks of AEEMP lie in the intermediate range.

Information disclosure regulation under Part 4 of the Commerce Act shows that for the continued appropriateness of information disclosure regulation to be assessed, careful consideration needs to be given to the nature and extent of information required to be disclosed. In our view, that means:

- A statutory purpose similar to that in s53A of the Commerce Act, making clear that objective of information disclosure regulation is to ensure interested parties can assess whether the LFCs are meeting the purpose of regulation; and
- The information disclosure requirements will need to be designed in a way that allows information to be disclosed on a consistent basis across LFCs, and which meaningfully reflects the approaches LFCs have adopted in setting prices. That approach is consistent with the Commission's approach in developing the information disclosure regime. In that context, the Commission affirmed the importance of ensuring that the pricing methods used by regulated entities were transparent, in order to ensure that there is pressure on regulated entities to set prices in a way that avoids the earning of excessive profits:

Apart from assisting interested persons to assess whether the purpose of Part 4 is being met – by helping to reflect the extent to which the regulatory framework principles are being promoted – information disclosure regulation, by its very nature, influences the performance of regulated suppliers. In this respect, information disclosure regulation not only contributes to its specific purpose in s 53A, but it can also directly promote the s 52A purpose by improving the distribution of existing information between regulated suppliers and interested persons.

We do not think it is necessary to try to anticipate if and when LFCs will need to be subject to price-quality regulation. The key is for the legislation to include a mechanism to allow that form of regulation to be imposed if the circumstances warrant it, i.e. the intervention test discussed below.

Intervention test

53. Please comment on the proposed intervention test based on the purpose statement.

a. What are the risks and benefits?

b. Would another type of test be more appropriate, such as that in section 52G of the Commerce Act? Why?

We set out some initial comments on the proposed intervention test in response to question 49 above. In addition to those comments, we would add:

- We prefer a bespoke intervention test for UFB providers. That is more likely to provide a clear set of criteria that the Commission can form a sufficiently certain view on in any report to the Minister.
- The fast moving nature of telecommunications sector needs to be reflected in any assessment of an intervention test. If the intervention test is not sufficiently swift, there is a risk that irreparable harm may be suffered by end-users. This counts against the full inquiry process that requires section 52G to be applied. LFCs will already be subject to regulation, so satisfy the core criteria for being regulated. The relevant question will be the extent and form of regulation, which can be decided in a more streamlined way.
- Related to our response to question 49, we would be concerned that an intervention test is unlikely to be responsive to end-user concerns - ie it will not provide a mechanism that allows end-users to have their concerns addressed. In the case of Chorus, that is likely to require intensive monitoring by the Commission (or some other body) to protect endusers' interests, which calls into question the efficacy of ID regulation which involves such intensive monitoring.
- It is sensible to require the Commission to review the effectiveness of the backstop option for LFCs, and whether there are grounds to consider price-quality control, every five years.

Legislative vehicle - Telecommunications Act

54. Do you have any comments on our proposal to establish the fixed line regulatory settings within the Telecommunications Act?

We agree with the Options paper's view that telecommunications is a more diverse industry than those regulated under Part 4 of the Commerce Act. Even if a utility-style form of regulation, consistent with that provided under Part 4 is implemented for fixed line services, there will inevitably be the need for further telecommunications specific provisions. Therefore, we agree with the proposal in the Options paper to establish fixed line regulatory settings within a new part of the Telecommunications Act.

Purpose statement

55. Do you agree that it is most appropriate to set out a new purpose statement separately to the existing one, in a new Part to the Telecommunications Act?

We agree with this proposal.

56. Do you agree with our proposal to largely replicate section 52A? Will this achieve the outcomes we have outlined?

a. Do you agree with the terminology, including the use of "end-users"?

In our view, consistent with the approach taken in section 52A the relevant group of stakeholders needs to be defined more broadly than "end-users". The reference to "consumers" in section 52A covers both direct and end users of regulated services. By way of illustration, in the application of section 52A to regulated airports, the purpose statement applies to both airlines (direct users) and passengers (end users).

We see that as an important feature of the regulatory objective - to protect against the risks of the exercise of market power. Just like under Part 4, in the telecommunications sector both direct-users of fixed line services (i.e. RSPs) and end-users (the RSPs' own residential and business customers) are at risk of the adverse effects of the exercise of market power by the regulated suppliers. If the former are not factored into the regulatory settings, then there is a risk that end-users will be deprived of the full benefits of the vigorous competition that exists between RSPs.

The purpose statement should in our view refer to "consumers" rather than end-users, recognising that both the immediate downstream customer (the RSP) and the end-users buying services from these RSPs are consumers.

b. Do you think a single purpose statement derived from section 52A will be adequate to deal with access issues associated with unbundling?

In our view access issues are separate from price / quality regulation. As such, we would prefer for the purpose statement to focus on regulatory forms of control, and not conflate that with access issues.

The optimal approach would be to have a separate provision dealing with any access issues associated with unbundling. This should proceed from the basis of a competition law test, i.e. seeking to replicate the access situation that would exist in a workably competitive market.

c. Are any other definitions needed?

As noted directly above, we would encourage the Ministry to consider a competition based test to a standalone access regulation provision.

Adding and removing suppliers

57. Do you agree with our proposed process and test for introducing a new supplier to the regime (or removing a supplier from the regime)? Please provide additional comments on any other aspects you think should be considered.

Our starting point is that the service is regulated, not the supplier. So the real issue is whether and how services can be added and removed. In particular:

• Although the services to be regulated can be conveniently identified by the current supplier, the legislation should make it clear that the service remains regulated if the supplier changes. For example, section 56A of the Commerce Act makes it clear that the regulated airports services continue to be regulated if the owner of those services

changes. In those circumstances, there is no need to have a mechanism for adding and removing suppliers;

- If a service is to be added, then the test should be modelled on section 56G of the Commerce Act. That is:
 - Little or no competition, and no likelihood of an increase in competition;
 - Scope for the exercise of market power; and
 - The benefits of regulating exceed the costs.

There are significant costs to end users of adding a service because they pick up all costs. The test for adding services should therefore have a high threshold, and be consistent with the generic test for regulating under Part 4.

• If a service is to be removed, then we agree that using section 55A(6) as the model is appropriate.

58. Do you agree that the new framework should only apply to fixed line services?

We agree that the new regulatory framework should be limited to fixed line services. As with Part 4 regulation, the new framework should only apply to a service for which there is limited competition, and no prospect of competition.

As discussed above, it will be important that the legislative definition of the regulated service does not allow wireless networks to be included as part of the regulated service. That is because wireless networks are subject to competition, which could be distorted if Chorus and LFCs can include wireless assets in their RAB.

Appeal rights

59. Do you agree with the proposed approach to merits review? If not, are there any characteristics of fixed line services which mean that Part 4 merits review processes are inappropriate, or any changes are needed?

Broadly speaking, we agree with the proposed approach to merits review. That is, both the IM determination and price-quality path determination should be subject to merits review.

We appreciate the need to align the merits review approach with that under Part 4. However, we are keen for the merits review under the new framework to effectively serve its purpose of promoting accountability and quality of decision-making by the regulator. Our impression of the Part 4 merits review experience is that there is a very high threshold before the court will consider changing an IM, which raises question as to whether it will be an effective accountability mechanism under the new telecommunications framework.

We therefore agree that any improvements to the Part 4 merits review process identified under the current evaluation process should be included in the new telecommunications framework.

In our view, there is an opportunity under the new telecommunications framework to address some issues that hinders merits review under Part 4. If the Part 4 approach was implemented as it stands, then it is likely that:

• IMs would be set first, and appeals would need to be filed within 20 days. The appeals would be subject to the "materially better" and no new evidence standards.

• The price-quality path determinations will follow some time later (i.e. after the timeframe for filing appeals on the IMs). They are not subject to the "materially better" threshold, or the no new evidence rule.

We understand that under Part 4, it was very difficult for the court to assess the merits of the IMs without knowing how they had been implemented under the relevant regulation, and without being able to question experts on the evidence provided during the consultation process. It therefore appears that, for the new telecommunications framework, there is an opportunity to consider:

- Consolidating the timing of the processes so that appeals on the IMs and price quality
 determinations can be brought at the same time after the price-quality determinations
 have been made. This could be beneficial, because interested parties may decide not to
 appeal an IM if they are comfortable with the price-quality determination. On the other
 hand, there is a strong incentive to appeal an IM if the final price path is not known;
- Consolidate the substantive process for example, it may not be necessary to have a different test for IMs ("materially better"), and it could be possible to allow the court to determine what new evidence, if any, it wishes to receive.

60. Do you agree that merits review should not be introduced for the existing regulatory framework in the Telecommunications Act?

We agree.

Backdating and claw-backs

61. Do you agree that mandatory claw-backs should be introduced for utility-style regulation of fixed line services under the Telecommunications Act?

It would be helpful for MBIE to more clearly distinguish between the backdating issues that arose under the FFP TSLRIC process, and claw-backs as included in Part 4 of the Commerce Act.

As identified by MBIE, the backdating issue under the FPP process was about whether the FPP price should be backdated to replace the IPP price, on the basis that the FPP was a review of the IPP price.

A key principle of Part 4 regulation is that it is forward looking. Key provisions under Part 4 that effectively prevent backdating are as follows:

- prices at the start of a regulatory period must be based on current and projected profitability (ie not past profitability);
- the prices must not seek to recover any excessive profits made during any earlier period.
- price paths may not be reopened during a regulatory period on the ground that an input methodology has changed.

There are some very narrow exceptions to the position, which is where the concept of claw-back under Part 4 comes in. Essentially, if an IM changes due to merits appeal, and would have resulted in a materially different price path had it applied at the time the price path was set then the price path must be reset and claw-back applied. Claw-back means either:

(a) Lowering prices on temporary basis to compensate for previous over-recovery; or

(b) Allowing supplier to recover previous shortfall.

and must be implemented in a way that minimises price shocks or hardship to the supplier.

There was also a one-off claw back when the regime was set up as part of the transition measures, and claw back is also available if a supplier switches from a default to customised price path. However, there shouldn't be a need for such provisions here, as there should be sufficient time to require the IMs to be set in advance of the first price path, and default-customised price path regulation will not apply.

Accordingly, we agree that consistent with the Part 4 approach, the only circumstances in which claw back should be available is if an IM or price path determination is changed by the court.

Chapter 8: Managing the transition

Managing the transition

62. In your view, do our proposals around smoothing the revenue cap and minimising price volatility for anchor products provide enough protection in reducing the risk of price and/or revenue shocks?

Strictly speaking, an explicit policy objective of minimising revenue and price volatility during the transition to the new framework should not be necessary. Experience under Part 4 suggests that the Commission seeks to avoid revenue and price shocks, as part of its promotion of the purpose statement.

However, as we have discussed above, the dual objectives of providing FCM and price stability could result in conflicting objectives for the Commission.

Accordingly, we agree that the Commission should have a price smoothing objective, avoiding price shocks. However, that does not mean there can be no price changes. It is inevitable that transitioning to a new regulatory approach, with a new purpose statement, will result in change. It therefore needs to be clear that:

- The policy direction does not apply to the setting of IMs. It applies to price setting;
- smoothing is to minimum extent necessary and NPV neutral.

As discussed above, we do not support a revenue cap. However if this proposal is implemented, then it should be subject to the smoothing policy - as should price caps if the Commission is allowed to determine that they are the most appropriate form of control. This could be implemented, for example, in a similar way to s53P which provides that the Commission may set alternative charges if, *in the Commission's opinion, this is necessary or desirable to minimise any undue financial hardship to the supplier or to minimise price shock to consumers.*

Avoiding price shocks needs to be extended to all services, not just anchor products.

Transitional arrangements

63. Do you agree that a transitional arrangement should be in place in case the new framework is not able to be implemented with enough notice before 2020?

We would be surprised if price-quality regulation was not able to be put in place prior to 2020. As the Options paper notes, the Commission's past experience in completing the Part 4 input methodologies indicates that this ought to be feasible.

To the extent there is then insufficient time to implement the new regulatory regime by 2020, our principled view is that implementation should be subject to a claw-back mechanism in order to effect the regime effective from 2020.

64. Do you agree with the proposed model of a temporary freeze? Are there any other risks or benefits of this approach?

Our preference, as above, is that the new regulatory regime is given effect to from 2020 by way of a claw-back mechanism. We see this as the optimal way to give effect to price-quality regulation where the regime is established but not able to be fully implemented for 2020.

If the Ministry is minded to pursue a temporary price freeze approach, our concern is that this would be subject to regulatory gaming. It will be important that this approach is subject to tight constraints as to duration and any variations or extensions be subject to Ministerial approval. It will be important that any such price freeze is not prolonged so as to become a de facto form of regulation (the prospect of which would only serve to heighten the risk of regulatory gaming).

Chapter 9: Mobile competition and infrastructure sharing

Mobile competition and infrastructure sharing

65. Please comment on any other measures you recommend to address mobile infrastructure sharing (outside of changes to Schedule 3, which are discussed in the next chapter).

Other issues for mobile regulation

66. Do you agree with our views on MVNOs and tools to manage competition in retail markets?

We support the conclusions in the paper, no new remedies are necessary

Chapter 10: The regulatory toolkit

Managing copper to fibre migration

67. Would a regulated code, applying to RSPs as well as UFB providers, be the best way to protect end-users in the transition from copper to UFB services?

68. If a regulated code is not your preference, what mechanism do you propose to ensure end users are protected in the transition?

The migration from copper to fibre is complex and best dealt with through commercial agreement between retail providers and Chorus which take in to account the needs of consumers. There are examples today of where Spark has worked with Chorus on the removal of its copper infrastructure in certain areas.

We accept there may be a need for an industry Codes to assist with these migrations (both for incremental migrations and the eventual withdrawal of copper in an area). We support the approach proposed by the TCF in its submission.

Recommending regulation and deregulation

69. Do you agree with the recommendations to make the Schedule 3 process more efficient?

70. Please comment on whether any other aspects of the Schedule 3 process could be removed or shortened further, or on any other ways to make the process more efficient and timely.

71. Do you recommend any further changes in order to mitigate any potential harm being done in the market while a Schedule 3 process is underway?

The paper has suggested allowing the Commission to set an interim price. A further option to consider would be to give the Commission power to apply claw-back, analogous to the power given to the Commission with respect to gas services under Part 4. That is, if there was evidence that suppliers had raised prices above inflation during the period that regulation of the service was being investigated and determined, then the Commission could apply claw-back when prices were set.

72. Should there be criteria specified for the Commission's decision whether to recommend a one- or two-stage pricing process for a potentially regulated service?

We do not have any further specific criteria at this point, and would be comfortable leaving the Commission to make this decision in accordance with sections 18 and 19.

Convergence: Broadcasting exemption and net neutrality

73. Do you agree that the current regulatory framework has sufficient safeguards in place to manage any net neutrality issues that may arise, in light of recent market developments?

The Act currently has an exemption for broadcasting infrastructure. This means things like terrestrial television transmission infrastructure and satellite broadcast infrastructure are outside the scope of the Act. We do not see a need for these types of infrastructure to be included in the Act as they are increasingly less relevant to consumers as content can now be accessed over a range of different types of access, including broadband networks.

What remains relevant however is the interplay between content and networks from a market power perspective. Market power in content can potentially be used to transfer dominance in to adjacent markets, and vice-versa. This question is at the heart of the Sky Vodafone merger proposal.

We do not however consider that there is a need for specific Network Neutrality legislation to address this theoretical problem as we agree with MBIE that the current regulatory framework has sufficient safeguards in place to manage any network neutrality issues that may arise in New Zealand. Strong retail competition (and the effects of structural separation) coupled with transparency requirements under the TCF's mandatory Product Disclosure Code mean that customers can easily compare policies. If a customer does not like the policy of a particular provider, they can change to a different retail provider. This in turn creates competitive pressure on retail providers to ensure their policies are reasonable.

Rather than specific network neutrality legislation we suggest that the Commerce Commission's remit is extended to cover economic issues associated with content markets. This would appropriately empowered the Commission to intervene if issues did emerge in future.

Customer service and quality for telecommunications services

- 74. Please comment on the proposal to amend the Consumer Complaints Code and Scheme TOR to make wholesalers primary respondents to a customer complaint.
- 75. Please comment on the alternative option of introducing a new consumer complaints resolution scheme.

We support the TCF's work in this area which aims to address the concerns raised in the paper about the current consumer complaints resolution scheme. We caution against the introduction of another scheme for consumers as this has the potential to be confusing (particularly with the introduction of a complaints process for the new Land Access Legislation) and unnecessarily costly for industry.

Industry, through the TCF should be given the chance to develop a consistent, easy to use industry solution which addresses the needs of consumers for a complaints resolution scheme before other options are considered.

Housekeeping in the Telecommunications Act

76. Are there any other areas of the Telecommunications Act that you consider need to be updated or removed to be fit for purpose?

We note that as part of a series of minor house-keeping changes to the Telecommunications Act, the Ministry proposes to update the defined term of Telecom (inn section 5) to Spark. While we support the Ministry's intention to update the Act, on this issue the fix is not as simple as changing the defined entity of Telecom to Spark. There are references to Telecom in the Telecommunications Act where the provisions are better targeted – for example - at the functions of or obligations on RSPs in general rather than Spark. For example, in s111A where Telecom alone is deemed to be a major supplier and subjected to disclosure requirements relating to interconnection arrangements.

At a principled level, this aspect of the Ministry's house-keeping changes therefore needs to consider first whether the provision referring to Telecom remains relevant, and if so, whether the reference ought to be to Spark, Chorus or RSPs generally.

END