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2nd September 2016

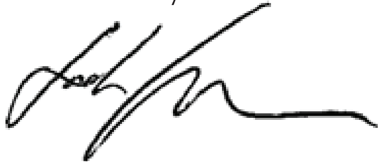
Telco Review team
Communications Policy
Ministry of Business, Innovation and Employment
PO Box 1473
Wellington

Dear Sir/Madam

Submission on Telecommunications Act Review: Options Paper

Please find attached NZ Funds' submission on the Telecommunications Act Review: Options Paper.

Yours faithfully



Josh Wilson, CFA
Portfolio Manager

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Submission on Telecommunications Act Review: Options Paper

September 2016

Introduction

NZ Funds manages the retirement savings of over 13,000 New Zealanders. On behalf of our clients, we are shareholders in telecommunications companies Chorus and Spark, and many other New Zealand companies that benefit from a high quality telecommunications network.

We read the Telecommunications Act Review: Options Paper with interest, and thank you for the opportunity to make a submission on it.

Summary of our views

Investors, like consumers, value certainty and predictability, and we are encouraged that the Government intends to pass this new legislation in 2017.

However, having been invested in Chorus throughout the 2012-2015 copper pricing fiasco, we are concerned that the proposed legislation may impart a large amount of discretion on the Commerce Commission regarding the final framework that Chorus will operate under beyond 2020.

Our concern stems from the contentious and lengthy nature of the copper pricing process, and the very broad range of plausible outcomes.

Reducing uncertainty over the transition to a new regime is critical in the context of rapid technological change. Without direction in the legislation on key matters, transition to the new regime risks creating more rather than less uncertainty, with associated negative impacts on investment. As shareholders in Chorus, we see limited grounds for them to commit further shareholder capital to network projects until they receive certainty around the returns these long-life investments will generate beyond 2020.

In our view, as outlined in this submission, we consider there are compelling reasons for either adopting the 'backstop' approach to regulation, or prescribing a 'line in the sand' approach to the determination of the initial regulatory asset base (RAB). These approaches provide the appropriate mix of certainty and flexibility which in our view are critical to ensuring the Government's broader objectives in the sector are achieved.

In relation to the 'backstop' proposal, this provides the Commission with the flexibility to respond to the environment in 2020, which cannot currently be predicted, and to consider at that time whether there is a case for taking further regulatory action. Experience of the airports regime also demonstrates that information disclosure and the threat of price control provide effective constraints on monopoly pricing.

In relation to the initial RAB, this is a one off decision which is inherently difficult, contentious and imprecise, particularly for assets part way through their regulatory lives. In addition, of any inputs, it carries the highest risk of price volatility. It was for these reasons the High Court endorsed a 'line in the sand' approach in *Wellington Airport v Commerce Commission*. [1]

By circumventing a more complex Commission process, these approaches offer certainty, stability and simplicity, with limited drawbacks. Certainty sooner would be a positive outcome for consumers by encouraging earlier investment in existing and new networks.

Given these options are available to the Government, we believe it should take the opportunity to embed more, rather than less, certainty in its forthcoming legislation. In our view, New Zealand cannot afford to get this wrong.

At the more detailed level, we disagree with the idea that UFB providers' RAB or WACC should be adjusted to reflect the financial support received during the UFB roll out. This support has already been accounted for in the UFB contracts and to discount it again would amount to retrospective legislation. The Government should provide guidance to the Commission in this regard.

1. *Wellington International Airport Ltd v Commerce Commission* [2013] NZHC 3289

Is price-quality regulation really necessary? The 'backstop' option is valid.

From our perspective, there are strong arguments for adopting the 'backstop' regulation option.

1. The price component is already well established.

- The interim fibre prices were set through a competitive tender. They incorporate a Government funding subsidy, and were also set deliberately low to encourage take-up during the early stages of the asset's life. Communal fibre build costs have turned out higher for Chorus than what was incorporated into the tender pricing. Therefore, Chorus and the LFCs would enter the new regulatory environment with eminently reasonable (and arguably good value) prices in place for their fibre services.
- Likewise, the Final Pricing Principle outcome provides a rational starting price point for Chorus' copper services.

2. The quality component that regulation would aim to uphold is also already present.

- Chorus (and the LFCs) are doing an excellent job implementing UFB, a once in a generation infrastructure build. As of June 2016, one million households and businesses were able to connect to UFB, 25% more than the planned number at this stage of 800,000[2]. UFB uptake is 23.9%, well ahead of initial projections.
- New Zealand's UFB roll out also appears to be ahead of the Australian NBN equivalent in terms of cost per premise and connection speeds enjoyed by consumers[3].
- Chorus' previous investment in FTTN has provided New Zealand consumers with a high performing copper network, with 98% ADSL and 80% VDSL coverage[4].
- New Zealand's broadband penetration and average connection speeds are above both the OECD average and Australia[5].

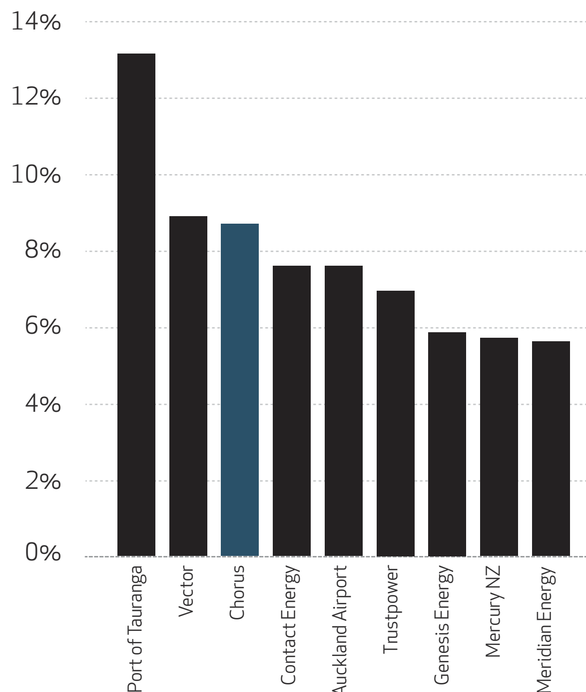
3. As noted in the Options Paper, fixed line services are far less of a natural monopoly than, for example, electricity distribution. Fixed wireless access is increasingly becoming a viable alternative to fixed line broadband. Spark management are ambitious and confident in their plans for this service to attract a significant number of users away from fixed line services (they are targeting 50,000 subscribers by the end of the current financial year). This competition will limit the ability of fixed network owners to charge monopoly prices

4. As investors we place considerable focus on a company's Return on Capital Employed (ROCE) as a measure of business performance. Capital intensive companies, like utilities, typically earn a relatively low and stable ROCE. A high ROCE would be indicative of excess profits, and potentially monopoly pricing. Conversely, if ROCE is too low rational investors will not allocate further capital to the business and asset quality may fall.

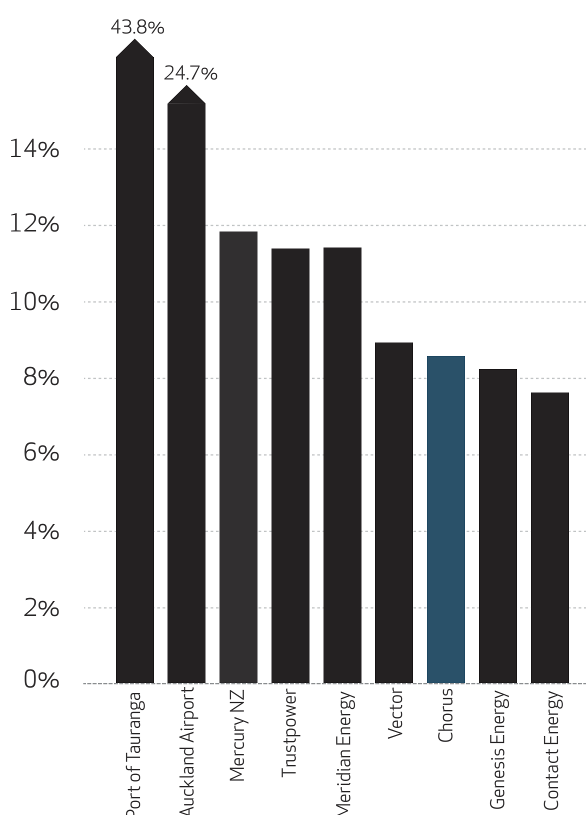
Chorus does not exhibit excess profitability. Its pre-tax ROCE of 8.6%[6] is an intuitively reasonable figure, and is well within the range of other listed New Zealand utility and infrastructure companies. In particular, Chorus' ROCE is slightly below Vector's, its closest peer in our opinion.

Furthermore, Auckland Airport, Port of Tauranga and most electricity gentailers have substantial asset revaluations on their balance sheets, an accounting convention that creates a circularity to ROCE and heavily distorts it downwards. The graph above shows ROCE for the same companies with the asset revaluation reserve removed from capital employed. On this basis Chorus' ROCE looks particularly modest.

Pre-tax ROCE



Pre-tax ROCE excluding asset revaluation reserve



Source: Bloomberg, Company data

2. MBIE Quarterly Broadband Deployment Update June 2016
3. Chorus Investor Presentation May 2015
4. Chorus Investor Fact Sheet May 2015
5. OECD, Akamai State of the Internet Q1 2016
6. See Appendix for details on ROCE calculation

5. A thorough information disclosure regime and the 'backstop' threat of price-quality regulation would prevent Chorus from increasing prices or decreasing quality to the extent it began earning monopoly profits. Experience of the information disclosure regime applying to airports is that it has been effective in achieving its objectives including by providing information to understand whether there is a case for further regulation. This regime has also been effective in constraining prices. While there was some concern around pricing by Wellington Airport, this was identified and addressed through the information disclosure process without requiring further regulation.

Chorus' customers are relatively concentrated, and the three major RSPs (Spark, Vodafone and Vocus) are all larger companies than Chorus. This will operate as an additional constraint, particularly given two are vertically integrated mobile and fixed network operators.

6. Without rigid price-quality regulation in place, Chorus and the LFCs will be free to innovate and make efficient network investments as appropriate, and in a timely manner. Price stability and regulatory certainty will be achieved well before 2020, and a substantial investment of time and effort in the regulatory process avoided. Until stability and certainty is provided, ongoing network investment and enhancement will instead be discouraged. Consumers may therefore see broadband progress and investment stagnate until Commission processes are concluded. We agree with the view in the Options Paper that parties will have strong incentives to agree prices that best meet the Government's goal of minimising price volatility.

7. We believe there are considerable risks in deciding now that price-quality regulation should apply to Chorus in 2020. In a rapidly changing market, it is not possible to predict changes in technology and demand four years in advance, and the associated impacts on competition. Making a decision to regulate now will constrain the Commission's ability to address the state of the market at the time. The Options Paper also identifies these risks, including the risk that prices will not be set at an efficient level at a time of technological change.

8. Adopting a 'backstop' approach is also consistent with the regulatory best practice principles listed in the Options Paper, including 'clear necessity', where regulation should only be imposed where it is clearly justified.

9. On the other hand, the reasons listed in the Options Paper for not adopting the 'backstop' approach are, in our view, insufficiently persuasive given the clear benefits the approach and the risks associated with prematurely implementing price-quality regulation. We address each of the potential risks noted in the Options Paper as follows:

STATED RISK	RESPONSE
Chorus may generate excessive profits without a revenue cap in place.	As set out above, there is nothing to suggest excess profits are being earned at present, and information disclosure and the threat of price-quality regulation would provide effective constraints to this occurring in the future.
Commercial interests may not give sufficient weight to end-user interests and that parties may have little incentive to consider the absolute level of prices given non-discrimination means all RSPs face the same input prices.	• Throughout the copper pricing process, RSP's were very strong advocates for lower input prices, despite the same non-discrimination. There is no reason this wouldn't be the same with fibre going forward. Ultimately, input prices are a cost to these businesses (and pass through of costs is not transparent). • Higher fixed line input prices would give integrated telcos (Spark, Vodafone, 2 Degrees) greater incentives to invest in and sell Fixed Wireless and/or Mobile broadband access. There is countervailing competition present. • Prices aside, commercial offers unconstrained by specific product definitions could give more rather than less weight to end-user interests, as we have seen with Chorus' current commercial offers under the UFB framework (the Accelerate 100/20 Mbps commercial offer is the most popular fibre product by far). • Again, any pricing issues would be revealed through the information disclosure framework which together with the threat of regulation acts as a strong constraint on pricing that leads to excess profits.
The treatment of copper services is more difficult under this option.	We consider there is a strong case for allowing Chorus to make commercial offers for copper in addition to fibre given the constraints provided by information disclosure and the threat of competition. If this is not considered sufficient, the proposed CPI-1% adjustment in the Options Paper provides a simple adjustment mechanism. Either way, the treatment of copper can be effectively managed under the 'backstop' approach.

10. Finally, the 'backstop' approach would align Chorus with the proposed option for the LFCs. In our view, without compelling reason, it would be inequitable to treat the LFCs differently on the basis of ownership (city councils) and potential competition from copper, both of which may only be temporary features and where copper pricing can be appropriately constrained and addressed (as set out above). Such differentiation carries a high risk of unintended consequences in the context of a changing market, without any clear evidenced benefit.

If the Government decides price-quality regulation is required for Chorus, a 'line in the sand' approach to RAB valuation is more desirable than ODRC or DAC, and the Government should be prescriptive on this matter.

The initial RAB, more than any other input, carries a high risk of price shocks and accordingly the uncertainty around the initial RAB has the greatest impact on our investment decisions. As explained below, there are compelling reasons why a 'line in the sand' approach should be directed in advance. Without this early direction the regulatory framework will provide little certainty about where prices will eventually be set.

The Options Paper notes that, while determination of the RAB by the Commission is consistent with Part 4 of the Commerce Act, there is a special case for the Government determining issues, given its interest in minimising price volatility under the new regulatory framework.

We consider that there is a strong case for the Government specifying the RAB valuation methodology and do not agree with the suggestion in the Options Paper that this would risk "hard-wiring" an approach in legislation that might not be appropriate.

This would be a one-off decision at the beginning of the regulatory regime, so would not impact on the Commission's ongoing ability to implement the regime as the expert regulator, for example in setting the roll forward of the RAB. The Court in Wellington Airport v Commerce Commission noted that it is the roll forward rather than the initial RAB that provides the relevant incentives for ongoing future investment.

With regard to which methodology should be specified, as discussed in points 1, 2 and 4 in the previous section, we believe the current price-quality mix is reasonable, and there is no prima facie reason for the Commission running a full bottom up RAB valuation process to determine pricing post 2020.

The disadvantages of these approaches (ODRC or DAC), relative to a pragmatic 'line in the sand' approach, are clear to us:

1. The inherent unpredictability of the final result, and the uncertainty during the process (time to complete, potential for dramatic changes in outcome from draft to final decision, potential for price shocks, likely appeal process). This is based on our experience of the tortuous Commission-lead copper pricing process.

As investors, we cannot emphasize enough how damaging and disruptive this process was. In our view it could have significantly set back network investment and the associated benefits to consumers and the economy.

An analogous situation was Air New Zealand coming very close to bankruptcy in 2001. Government intervention was required to stabilise a vital service provider to the country.

2. We note Spark's submission cautions on the time and complexity associated with a change in the regulatory framework, estimating it could take 3-5 years to bed down. We believe running an ODRC or DAC process greatly increases the risk that there is no finalised framework in place when the current regulatory regime ends in 2020. This risks further damaging the credibility of our country in the eyes of overseas investors.

3. Likely delays to incremental investment during this extended period of uncertainty, as we saw during the copper process when Chorus deferred all discretionary investment.

One of the Government's key policy objectives is to encourage network investment for the benefit of end users. For example it has a vision of 99% of New Zealanders being able to access broadband at peak speeds of at least 50 Mbps by 2025. We understand the Government is currently taking expressions of interest to participate in extensions to the UFB and RBI projects.

As significant shareholders in Chorus , we have been clear in meetings with management and directors of the company that we see limited grounds for them to commit further shareholder capital to these projects, until they receive more certainty around the returns these long-life investments will generate beyond 2020.

4. The High Court decision in *Wellington Airport v Commerce Commission* further supports adoptions of a 'line in the sand' approach. In particular:

a. In relation to the historic cost approach, the Court referred to the "impossibility of the task" in relation to assets part way through their lives (including because of the difficulty in applying the NPV=0 principle to these assets).[7]

b. In relation to a new ODRC approach, the Court accepted the Commission's position that ODV methodologies (and ODRC) are inherently inaccurate and imprecise. While it might be possible to develop a methodology, "that valuation could be considered inaccurate when compared to a valuation of the same network using a different specification of the ODV methodology".[8]

c. The Court endorsed the principle of continuity between the old and new regimes[9].

d. The Court considered that requiring the determination of new valuations would not provide greater certainty, but rather would provide less certainty than adopting the 'line in the sand' approach.

e. One of the Commission's experts emphasised the importance of avoiding price shocks at the beginning of a regime, noting that "…if one is at the start of a new regime, which is hopefully a new beginning and a new partnership, it seems difficult to think that would work well if it starts with a mugging of one side by the other. So I would say that there is a fairly narrow range actually of possible valuations that will give you a mugging free start". [10]

We recommend that a 'line in the sand' approach is adopted where the initial RAB is back-solved from current prices. While it might not be feasible to prescribe the precise methodology in legislation, clear direction can be readily given that the Commission adopt a 'line in the sand' approach when developing its initial RAB. The detail of the methodology can then be appropriately developed by the Commission. This approach would be a combination of Options 1 and 3 as set out in section 5.2 of the Options Paper, albeit the directions to the Commission would unequivocally require a 'line in the sand' methodology.

7. *Wellington International Airport Ltd v Commerce Commission* [2013] NZHC 3289 at [584]
8. Ibid at [764]
9. Ibid at [654], [656] and [666]
10. Ibid at [805] citing Professor Yarrow

Treatment of UFB financial support

We disagree with the idea that Chorus and the LFC's RAB or WACC should be adjusted to reflect the initial Government funding provided for UFB. This amounts to retrospective legislation.

We understand that the UFB contracts were struck incorporating the Government funding element, with no indication this would then be discounted again, in determining what Chorus and the LFCs could earn from the assets beyond 2020.

Therefore the fact the Chorus will not be paying a dividend on its Crown Fibre equity until 2035 has already been accounted for in the present value of the contract agreed in 2011, and is irrelevant in determining its future WACC. It should be treated as standard equity funding.

If UFB financial support were to be taken into account, we would argue for also including the offsetting deficit in copper service revenues that Chorus will face relative to copper pricing at the time the UFB deals were struck. By 2020 this figure will measure in the hundreds of millions of dollars, including a decision not to backdate FPP prices that went against precedent.

As noted in the Government's 2013 Review of the Telecommunications Act, Section 18 (2A) of the Act laid out the Government's policy intentions in 2011 to maintain fibre and copper pricing at broadly comparable levels. Cash flows from copper services were implicitly being relied upon to fund Chorus's considerable investment in fibre networks. As noted by the Government, the 2011 reforms did not deliver their policy intent, resulting in an implicit funding shortfall. Clearer direction is therefore required to avoid history repeating.

Appendix – ROCE calculation

Return on capital employed is a useful accounting ratio for comparing relative profitability between companies, after taking into account the amount of capital used. It can also be used to test the adequacy of return on investment. Because ROCE uses operating earnings (pre interest and tax) as an input, it allows a clearer comparison of underlying profitability, undistorted by differences in capital structure, cost of debt capital and tax efficiency.

We define ROCE as:

$$\text{ROCE} = \frac{\text{Earning before Interest and Tax (EBIT)}}{\text{Capital Employed}}$$

For EBIT, we have used the average analyst forecast for the current financial year, collated by the Bloomberg financial data service. We used forecast rather than reported because for Chorus this includes a full year of the higher FPP copper prices (Chorus reported FY16 EBIT was 12% lower). Our modelling suggests Chorus' ROCE will gently decline through to 2020 as fibre investment continues.

There are several alternative methods for calculating capital employed. For simplicity and transparency we have used Bloomberg's definition:

Capital Employed = Net Fixed Assets + Current Assets - Current Liabilities

We have also calculated an adjusted ROCE that adjusts for the dilutive effect on ROCE from the upwards revaluation of assets carried out by some companies in the group. The revaluation is purely an accounting adjustment, based on expected future cash flows, discounted at the company's cost of capital. By definition a revaluation will decrease a company's ROCE towards its cost of capital. The asset revaluation reserve is the total amount by which a company's fixed assets have been re-valued over time to reflect fair value. Removing this amount from Capital Employed is a simple way of estimating what each company's ROCE would be based on the original book value of the assets.

$$\text{Adjusted ROCE} = \frac{\text{Earning before Interest and Tax (EBIT)}}{\text{Capital Employed - Asset Revaluation Reserve}}$$

The figures for each company are shown in the table below.

COMPANY	FORECAST FY 17 EBIT ($M)	CAPITAL EMPLOYED ($M)	ROCE	ASSET REVALUATION RESERVE ($M)	ADJUSTED CAPITAL EMPLOYED ($M)	ADJUSTED ROCE
Auckland Airport	404	5,368	7.5%	3,731	1,637	24.7%
Chorus	305	3,536	8.6%	-	3,536	8.6%
Contact Energy	335	4,439	7.5%	-	4,439	7.5%
Genesis Energy	186	3,241	5.7%	973	2,269	8.2%
Mercury NZ	309	5,443	5.7%	2,821	2,622	11.8%
Meridian Energy	426	7,664	5.6%	3,941	3,723	11.5%
Port of Tauranga	124	948	13.0%	666	283	43.8%
Trustpower	230	3,357	6.8%	1,357	2,000	11.5%
Vector	328	3,701	8.9%	-	3,701	8.9%

Source: Bloomberg, Company data