

Determining the cost of capital for the UCLL and UBA price reviews

Cross-Submission | Commerce Commission
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Introduction

- 1. Telecom welcomes the opportunity to provide a cross submission to the Commission dealing with issues raised by other parties in submissions on the consultation paper *Determining the cost of capital for the UCLL and UBA price reviews*, ("WACC Paper").
- Please see attached to this cross-submission a report prepared for us by
 PricewaterhouseCoopers dealing with a number of technical issues raised in submissions by
 other parties.

Estimating an efficient provider's WACC under TSLRIC modelling

- 3. A number of submitters suggested that in estimating parameters for WACC, the unique risks facing the telecommunications industry in New Zealand, and in particular the risks created by the transition to the UFB fibre network should be taken into account. While we agree that the estimate of WACC should be adjusted to minimise the impact of asymmetric risk where the adjustment can be substantiated, we think that the proposed approach to WACC is likely to deal with the other concerns raised by submitters. In regard to the cost of capital, it is important for present purposes to recall that the thought experiment involved in TSLRIC modeling is to estimate the WACC of an efficient provider of UCLL and UBA services and not necessarily that of Chorus in its threefold capacity of copper infrastructure provider, fibre infrastructure builder, and fibre infrastructure provider.
- 4. Enable Services Ltd for instance suggested at paragraphs 2.1 to 2.6 of their submission that the cost of capital determined for the UCLL & UBA FPPs using the approach suggested by the WACC IMs is likely to be inaccurate due to an underweighting of the impact of industry and technology risk factors in the telecommunications industry and in particular the "current transitory nature" of the industry in New Zealand. Elsewhere they refer to the impact of migration to fibre, demand shocks for copper, and asset stranding.¹
- 5. Telecom thinks that it is clear from the Commission's WACC paper that the intention is to ensure that the WACC parameters specific to the telecommunications industry will be estimated with reference to that industry. In broad terms, the long run issues referred to by Enable and faced by Chorus and other telecommunications infrastructure providers in New Zealand are unlikely to differ materially from those faced telecommunications infrastructure providers in other jurisdictions. To the extent that these are dealt with in the cost of capital faced by comparable companies, we would expect those to be reflected in the observed parameters used in the Commission's WACC estimation process. Accordingly, subject to the actual parameters proposed by the Commission's expert report, we continue to believe that the WACC IMs form an appropriate starting point.

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¹ Enable @ 2.1, 2.2 and 2.6

- 6. The construction of a FPP cost model consistent with the definition of TSLRIC contained in Schedule 1 of the Telecommunications Act would typically take into account the cost of meeting the total service demand over the economic life of the assets. Based on our understanding of TSLRIC modeling, we think that a well- engineered TSLRIC cost model should reflect the impact of forward looking views of New Zealand specific demand and economic life of the relevant assets. This would be reflected in appropriate depreciation profiles and tilted annuities as appropriate.
- 7. We deal with the issue of asymmetric risks and the selection of a WACC estimate elsewhere below. In addition, we note that the Commission is consulting separately on the possibility of amending its approach under the WACC IMs. Subject to the Commission's decision on this matter in relation to the telecommunications industry, we think that the concerns raised by Enable will all likely be dealt with in the WACC estimation process.

Telecommunications differs substantively from the regulated energy sector

- 8. CallPlus, in paragraphs 14 to 17 of its submission, discusses the Commission's approach to determining the WACC in the context of the Telecommunications Service Obligation (TSO) as it was at the time. The Commission in that process rejected Telecom's submission that an adjustment should be made for asymmetric risk due to the impact of regulation, and went on to select the mid-point WACC in TSO determinations from 2003 to 2009. We believe the Commission should consider this precedent carefully for the reasons set out below.
- 9. We note that the High Court, in the merits appeal judgment, noted that the Commission had made its adjustment for asymmetric risk in setting the regulatory WACC too high or too low without clear evidence from submitters to substantiate the existence of asymmetric risks. The inference is that the Commission should consider evidence from submitters as to the existence of an asymmetric 'loss function', this issue is being addressed in the concurrent consultation. In addition Chorus raises the issue of asymmetric risks which a regulated company cannot mitigate, but does not provide any evidence on the quantum of those risks in terms of probability and impact. The Commission should only adjust the WACC estimate for such asymmetric risks where it is satisfied that the evidence provided shows that the regulatory WACC does not correctly compensate the regulated firm for these asymmetric systematic and non-systematic risks, which cannot otherwise be mitigated within the regulatory framework.
- 10. In paragraphs 18 to 42 of the CallPlus submission, a number of factors are set out which support the Commission's suggestion that there are a number of different considerations relevant to the selection of WACC for the UCLL and UBA services under the FPP process in comparison to the application of the WACC IMs to Part 4 services regulated under the Commerce Act. We agree with CallPlus that there are a number of sound reasons to consider that a different approach to WACC estimate selection is appropriate irrespective of "panindustry consistency". As summarised in paragraph 21 of CallPlus' submission and detailed in subsequent paragraphs, these include the differences in regulatory provisions, the nature of the markets, and the clearer distinction between sunk and new investment in

- telecommunications infrastructure, which can be delineated as copper versus fibre technologies.
- 11. In contrast, Vector suggest that the decision the Commission makes on the selection of a point for WACC in the estimated range should be consistent with the decision it makes on the same issue in the WACC IMs. In paragraphs 6-14 of their submission, Vector discusses the issues raised by the Commission in paragraphs 97-106 of the WACC Consultation. For the reasons noted above, including the comments made by CallPlus and as set out in paragraphs 19-25 of our response to the WACC Consultation, we are of the view that different outcomes may be warranted for different regulated activities.
- 12. Historically the Commission has applied a 75th percentile WACC estimate to certain activities regulated under part 4 of the Commerce Act and a mid-point WACC estimate to telecommunications activities regulated under part 2. These established practices provide strong signals to participants (service providers, customers and competitors) making long term investments in the respective industries. The Commission should only adjust its historical practice to selecting the WACC within a range for a regulatory instrument and industry where there is overwhelming evidence that its historical practice is no longer reasonable. Regulatory consistency across time for particular industries is just as important a consideration as rigid regulatory consistency across industries, which may in fact face differing circumstances. As noted in the attached submission from PwC, the Commission's current consultation on selecting a WACC within the range may provide an analytical framework for assessing 'loss functions' that could well differ by regulatory instrument and industry.
- 13. The Transpower submission adopts what we think is a more practical view to matters of consistency than Vector. We agree with Transpower that some level of consistency is "conducive to a stable and predictable regulatory environment", and that where there are areas of commonality the Commission should favour consistency unless there are good reasons to differ. In any given case, the rationale for any decision to align or diverge should be clear and objectively justifiable. We do not think that the Commission's approach to the selection of a WACC estimate in the context of the Part 4 services regulated under the Commerce Act must, as a matter of course, be consistent with the process followed in relation to the services regulated under the Telecommunications Act.
- 14. We continue to think that no final position can be reached in respect of the telecommunications sector on the adoption of any point in the WACC range, other than continuing the current practice of using a mid-point estimate, without considering evidence put forward to substantiate the presence of asymmetric risk and the nature of the 'loss function' for the particular service being regulated. If there is sound evidence provided to the Commission by any party as part of the consultation process, the Commission can consider the appropriate adjustment to be made to the WACC. In the absence of sound evidence, it is reasonable to assume that parties do not consider the issue material and accordingly the Commission should then continue to adopt the mid-point of the WACC range

consistent with its precedent for regulating telecommunications services under part 2 of the Commerce Act.

Estimating debt and equity parameters

- 15. In previous submissions and expert reports on cost of capital provided by Telecom to the Commission, we have set out the reason that there should be consistency between the leverage assumptions, the long term credit rating, and also between the selection of robust and comparable data points used to estimate leverage, debt risk premium, and the asset beta. As with other benchmarking processes, any data points, which are clear outliers on any comparability criterion, and for which no robust adjustment can be made to improve reliability without introducing material additional estimation error should be excluded.
- 16. Chorus asked Dr Tom Hird at CEG to provide a detailed report responding to the Commission on the specific parameters set out under the IMs which are likely to be specific to the telecommunications industry. We note that CEG has largely followed this approach where reliable data can be sourced. The CEG report provides some valuable sample material which in many cases represents a good starting point for the Commission's analysis.
- 17. We emphasise however, based on our review of the CEG Report, and on PricewaterhouseCoopers' advice that further work will be required to develop a robust comparable sample set for the various parameters. We note again that the Commission is seeking independent expert advice on industry specific estimates of the various parameters required to apply the simplified Brennan-Lally CAPM model, and that further consultation on these parameters will take place. We look forward to the opportunity to review and comment further on a more developed set of proposed parameters.
- 18. We think that some of the suggestions made by CEG to rely on Chorus' own cost of capital parameters do not provide useful assistance to the Commission. As PricewaterhouseCoopers note in paragraph 21 of their report, Chorus should only be considered in the estimation process to the extent that the relevant data properly meets comparability criteria.

Asset and equity beta

- 19. CEG put forward a comparator sample of 31 firms operating as fixed access telecommunications providers in four countries. PricewaterhouseCoopers provide a more detailed review of the CEG sample in paragraphs 23 to 32 of their report
- 20. We do consider this a reasonably sound estimate as a starting point but emphasise the need for further work in developing a comparable sample set in relation to this and other parameters.
- 21. CEG make the suggestion that the asset beta for a wireline only business, based, as it is on a sub-sample of only seven companies, is greater than that of an integrated telecommunications company. We find this analysis to be incomplete, particularly since CEG acknowledge that many of the businesses identified in the wider sample may not have risk

- profiles that are very comparable to a hypothetical UCLL and UBA provider in New Zealand. CEG provide no substantive analysis to suggest the reasons behind this, and to assist the Commission in deciding whether this may be correct. In the absence of a more detailed analysis, an assertion based on such a small subset of the data is not compelling. As PricewaterhouseCoopers suggest, a more robust approach to estimation could be undertaken by carrying out a beta decomposition analysis
- 22. It would be inappropriate to consider that Chorus should be the company with which comparison should be made. The thought experiment involved in carrying out in estimating a TSLRIC price (as that term is defined in the Telecommunications Act) is to derive the forward looking long run cost based prices a hypothetical efficient UCLL and UBA provider would require to make an economic return. This is the proper comparison to be made in determining the FPP price for the UCLL and UBA services, and accordingly to determine the appropriate WACC estimate to be used.
- 23. We agree with PricewaterhouseCoopers that no special weight should be given to Chorus data, although it may be relevant in a wider sample set. Similarly, we do not consider that the choice of asset beta for the BT Group should be taken as determinative on the grounds that it is the best comparator to Chorus. As PricewaterhouseCoopers make clear, the level of estimation error around a single company's beta means that the beta analysis should be based on the appropriate point in a sample of comparable firms.
- 24. CEG also suggest that Chorus' activities in building the UFB network as part of a contractual relationship with a Crown entity means that in considering its asset beta, the risks associated with construction companies should be considered. We agree with PricewaterhouseCoopers that this is not directly relevant to assessing the beta of a hypothetical firm providing UCLL and UBA services. There is no analysis supporting the dimensions of comparison which drive beta, and in the absence of a compelling analysis assertion is simply not enough. We think that a more fully developed comparable sample is a better basis on which to form a view.
- 25. The beta appropriate for an efficient provider of UCLL and UBA services may well include some level of construction activity as an adjunct to their primary activity but this would already be reflected in comparable company data. The efficient provider asset beta would very broadly be an analogue of the divisional beta corresponding to Chorus' role of copper infrastructure provider, rather than to Chorus as a whole. The divisional beta, if it could be estimated would differ from the beta, and hence the whole of entity WACC relevant to Chorus in its multiple capacity of copper infrastructure provider, fibre infrastructure builder in the context of UFB, and fibre infrastructure provider. We think that the construction and engineering beta estimates therefore should not be directly relevant to the Commission's estimation process (their only relevance could be as part of a beta decomposition analysis).
- 26. In contrast, we suggest that the Commission has a significant body of regulatory precedent in setting the WACC estimates in TSO determinations from 2003 to 2009. We think the Commission could well regard these decisions as reference points which it should acknowledge in considering the WACC estimation process in UCLL and UBA FPP decision

making. It could well be useful for the Commission to reconcile its current decision to them, although other aspects of the TSO modeling are less relevant.

Gearing

27. We note that CEG provide a range of leverage estimates based on their comparator sample. Our comments on the approach to parameter estimation set out in paragraphs 16 to 19 above would also apply to this analysis. Subject to these, we agree with PricewaterhouseCoopers that the CEG sample represents a suitable starting point in the analysis.

Credit rating, debt risk premium, TAMRP and risk free rate

- 28. The CEG report sets out an analysis of credit ratings for comparator firms. We largely agree that an appropriate credit rating for the hypothetical TSLRIC UCLL and UBA provider is likely to be between Standard and Poors BBB and BBB-. As PricewaterhouseCoopers point out in paragraphs 36 and 37 of their report, there are typically a larger sample of BBB bonds actively quoted in the New Zealand market and these could be used to add robustness to the analysis.
- 29. We think it is difficult to abstract from the credit rating to determine the debt risk premium for the UCLL and UBA provider. We broadly agree with the approach suggested by CEG to broaden the data sample to include bonds that do not have credit ratings, but whose issuer does, providing the bonds meet the current IM definition for a vanilla NZ\$ denominated bond. PricewaterhouseCoopers concur with CEG's view that the debt risk premium should ideally be based on a prudent borrowing term, but note that the New Zealand market does not typically provide sufficient data with outstanding maturities beyond seven to eight years to provide a robust estimate of the debt risk premium.
- 30. We do not however think it relevant or appropriate to broaden the sample to include bonds issued by New Zealand corporations in foreign currencies without a good deal of further inquiry. The two bonds proposed by CEG clearly appear outliers in CEG's Figure 1 on page 30 of their report.
- 31. We think that the Chorus GBP denominated bond is not relevant for assessing the DRP for the hypothetical UCLL and UBA provider for the reasons discussed in relation to the estimation of beta and measurement of gearing. We also think the Vector GBP bond, which prior to November 2013 was on negative ratings watch by Standard and Poors, is not a good comparator. CEG themselves note that the relatively higher yields associated with the only two such bonds, the Chorus and Vector GBP bonds, are in part the consequence of the regulatory risks faced by both these companies.
- 32. We agree with the CEG suggestion that the use of a current forward looking TAMRP estimate consistent with the selected risk free rate is to be preferred. As both CEG and PricewaterhouseCoopers suggest, the forward looking TAMRP analysis from the WACC IMs should be reviewed, updated, and considered in the light of more current market conditions.

We anticipate and recommend that this should form part of the Commission's consultation on WACC parameters based on the independent expert report referred to in paragraph 2 of the WACC consultation paper.

Application of a term credit spread differential

33. In paragraph 5 of the CEG document, significant discussion is made suggesting how the Commission should calculate the cost of debt. As noted above, PricewaterhouseCoopers generally concur that a prudent debt strategy should be used by the Commission. In relation to this, PricewaterhouseCoopers, as noted in earlier submissions suggest rather than adopting the approach used in the WACC IMs, that a better approach in estimating WACC for the UCLL and UBA FPPs would be to continue with the approach adopted in the 2006/2007 and 2007/2008 TSO Determinations. This approach was to take a prudent borrowing term and make allowances to match costs to the regulatory period. We suggest the Commission continue to apply this practice in the price review processes.