Telecom Corporation of New Zealand Limited

Submission on Commerce Commission's technical consultation paper:

Determining the cost of capital for the UCLL and UBA price reviews, 7 March 2014

Submission

28 March 2014

pwc

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Introduction

Scope of Report

1. The purpose of this report is to provide our submission comments in response to the Commerce Commission's (the Commission's) Technical Consultation Paper entitled "Determining the cost of capital for the UCLL and UBA price reviews", dated 7 March 2014 (the Paper). We have also had regard to the Commission's Paper "Invitation to have your say on whether the Commerce Commission should review or amend the cost of capital input methodologies", dated 20 February 2014 (the Invitation Paper).

2. This report has been prepared by PricewaterhouseCoopers (PwC) on behalf of Telecom Corporation of New Zealand Limited (Telecom).

3. The focus of this report is on the Commission's proposed approach to estimating the cost of capital for the UCLL and UBA price reviews. It is not intended to provide a full and comprehensive analysis of all matters pertaining to the estimation of the regulatory cost of capital or to provide specific parameter estimates.

4. Our position and reasoning on the various issues that arise in deriving a regulatory cost of capital is already well documented in various reports we have previously provided to clients and in submissions we have made to the Commission.

Background Knowledge

5. Cost of capital theory is a specialist technical subject. It is not the purpose of this report to provide a detailed discussion on the theory underpinning the Weighted Average Cost of Capital (WACC) and its components. In presenting our comments, we have assumed that readers of this report have a basic understanding of the theory underpinning WACC and how WACC and its components are derived.

6. Furthermore, we have assumed readers are familiar with the contents of the various reports and papers released by the Commission on the cost of capital for regulated industries and our submissions on the same.

Disclaimers

7. Our report has been prepared to assist Telecom in its submission to the Commission in relation to the regulatory cost of capital that might apply to setting the prices for services that affect Telecom.

8. We accept no responsibility to any other party other than Telecom to whom our report is addressed and, except that the report can be submitted for consideration by the Commission, unless specifically stated to the contrary by us in writing, it should not be copied to any third party without our prior, written permission. We accept no responsibility for any reliance that may be placed on our report should it be used for any purpose other than stated above.

9. We reserve the right, but will be under no obligation, to revise or amend our report and the opinions contained therein if any additional information, which was in existence on the date of this report but was not brought to our attention in preparing our report, subsequently comes to light.

10. The primary contacts for this submission are: Murray Coppersmith, Partner, PricewaterhouseCoopers, murray.coppersmith@nz.pwc.com; John Redmayne, Director, PricewaterhouseCoopers, john.redmayne@nz.pwc.com.

Proposed Approach

Overall Approach

11. The Commission's existing Cost of Capital Input Methodologies (WACC IMs or IMs) provide the overall framework under which it estimates regulatory WACCs for affected industries. A WACC IM has not previously been consulted on and developed for activities subject to regulation in the telecommunications industry.

12. We concur that the existing WACC IMs provide a logical framework for assessing the regulatory WACC for the UCLL and UBA price reviews. However, we make the following comments:

- The Commission should always remain open to considering other methodological frameworks when developing regulatory WACC estimates for newly regulated activities. For example, the particular nature of a market or the rate of technological change may make other approaches more suited to a particular activity or industry

- The existing WACC IMs are not without controversy, with some aspects in particular open to review. A formal review process is mandated to occur at least every seven years. We note that the Commission has itself noted issues around matters such as the selection of a regulatory WACC from the 75th percentile of its assessed range and the estimation of the Term Credit Spread Differential (TCSD) adjustment.[1]

Brennan-Lally CAPM

13. While the Commission and many practitioners use the CAPM, and in particular in the New Zealand market, the simplified Brennan-Lally CAPM (SBLCAPM), studies have tended to show that the CAPM (i.e. beta) does a poor job in explaining realised returns. In particular, the CAPM tends to underestimate the returns for low beta firms. The specification of the SBLCAPM exacerbates this 'low beta' problem because of the interaction of its tax terms. While the SBLCAPM may be 'more correct' than the classical CAPM specification for New Zealand domestic investors in a theoretical sense, it is likely less appropriate for very low beta firms, which are the types of firm for which a regulatory WACC is generally being assessed.

14. The SBLCAPM, in the absence of allowing for non-zero debt betas or such other adjustments, also gives rise to the so called 'leverage anomaly', which was noted in a recent High Court judgment as being a matter that the Commission might want to review.[2]

15. While use of the SBLCAPM for the current UCLL and UBA price reviews may be administratively convenient for the Commission, the use of other CAPM specifications (such as the classical specification) - even as a cross-check, but given some weighting - and /or the use of non-zero debt betas should be considered when the WACC IMs are next reviewed.

16. The overall CAPM framework is itself open to question, for example much of the research on securities pricing calls into question the distributional assumptions underlying the CAPM.

Other Methodological Issues

17. A key methodological issue that we do not consider has been satisfactorily resolved in the WACC IMs is the treatment of the assumed notional term of debt for the provider of the regulated services. This issue is discussed further in the section below on the TCSD.

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[1] At footnote 31 of the Invitation Paper the Commission notes that a source of data that it mandated for use in TCSD calculations is no longer available.

[2] Paragraph 1646, [2013] NZHC 3289.

Parameter Estimation

Generic Parameters

18. In accordance with our instructions, we do not express any opinion in this submission on specific parameter values. We restrict our comments to matters of process and approach.

19. If the WACC IM framework is being applied, then we agree that it is reasonable to allow for generic or pan-industry WACC parameters, as identified by the Commission, being:

    - Approach to assessing the risk-free rate (with the actual estimate reflecting the particular circumstances)
    - Tax-adjusted market risk premium (TAMRP)
    - Debt issuance costs.

20. Furthermore, if the WACC IM framework is being applied, then it is also reasonable to allow for generic or pan-industry WACC parameters in respect of:

    - Tax rates (investor and corporate)
    - Standard error of the WACC estimate.

21. However, adoption of the WACC IM framework should not cause the Commission to be locked into specific values for these generic parameters if there has been a material change in the expected values of any of these parameters since the time the WACC IMs were finalised. When making a new regulatory WACC determination, particularly in the case of a newly regulated activity, the Commission should be open to revising these parameters, if necessary.

Industry Specific Parameters

22. If the WACC IM framework is being applied, then we agree that it is reasonable to allow for industry specific WACC parameters, as identified by the Commission, being:

    - Asset beta
    - Leverage
    - Long term credit rating (debt margin).

23. From a technical perspective, there should be consistency between the assumptions regarding leverage and the long term credit rating. Furthermore, it is preferable that there is some consistency between the sample of comparable firms used to analyse these parameters and the sample used to estimate the asset beta.

24. Beta estimates should be analysed and, if necessary adjusted, for the effects of 'thin trading' (or be discarded).

25. Due to the high level of estimation error around a single company's beta, the beta analysis should always be based on a group of comparable firms, rather than relying on direct observations of the regulated firm's own beta. This is even more important if that firm's historical share price has been materially affected by firm-specific issues.

26. Where there are insufficient or no comparable listed firms in New Zealand, it will be necessary to consider evidence from comparable 'pure play' firms listed overseas. If there are insufficient of these firms, then it may be necessary to consider the betas for multi-divisional firms (which may require de-composition analysis) and / or firms in other industries that are assessed as having similar (beta relevant) risk characteristics. The analysis should be as objective as possible using accepted

econometric tools. It is undesirable for a final asset beta assessment to be materially based on subjective judgment by the regulator.

27. We note that some adjustment to the beta estimate may be required to allow for the expected systematic risk consequences of specific regulatory assumptions made under the UCLL and UBA price reviews. For example, any systematic risk effects of assumptions around how the costs of technological change and asset stranding are to be borne.

28. In our view the decisions of other regulators do not constitute 'market evidence' and should be given only secondary consideration. Their main value is in informing on sample selection and econometric matters, rather than as a source of specific beta values. These decisions should have been based on those regulators' own assessments of market evidence and the Commission should look through to that market evidence and assess its relevance and timeliness for the New Zealand context.

29. We note that, in principle, the UCLL and UBA asset betas may be different, but acknowledge that as a practical matter it may be hard for the Commission to differentiate between them.

30. Just as the asset beta estimate should not be that observed for the regulated firm, neither should the leverage and credit rating assumptions. These assumptions should be derived from analysis of comparable firms in order to arrive at estimates of the notional position of a hypothetical provider of the regulated service.

31. We understand that the Commission is seeking independent expert advice on industry-specific WACC parameter estimates for the UCLL and UBA price reviews. It would be helpful to interested parties if this advice is released as soon as it is available, in order to allow sufficient time for meaningful analysis (i.e. release this advice prior to issuing the draft determination).

Selection of WACC within Range

Mid-point versus 75th Percentile

32. While the Commission has noted that it is consulting separately on whether or not to amend its selection of the WACC percentile under the WACC IMs, this issue will still need to be addressed in the context of the UCLL and UBA price reviews.

33. The existing WACC IMs are generally applied to regulated activities using a 'building blocks' or 'regulated rate of return' type framework. In these cases prices are regulated (or monitored) to enable a fair rate of return on investment, with a 75th percentile WACC selected in recognition of what are generally considered to be the asymmetric costs of setting the regulatory WACC too low versus too high. The intention of the regulator is to avoid the asymmetric consequences of regulated firms under-investing in their regulated activities.

34. By contrast the UCLL and UBA price reviews are based on a forward looking assessment of a 'market price' for services provided using what are largely sunk investments. While we have not analysed this issue in any depth, the rationale for selecting a regulatory WACC above the mid-point would appear to be less compelling in these circumstances.

Split or Tiered WACC

35. We note that, in the event the Commission enters into a formal consultation process on selection of a WACC percentile, it may also consider the matter of applying a split or tiered WACC. However, a split or tiered WACC does not form part of the current WACC IM framework. Accordingly, we do not see this as being relevant to the current UCLL and UBA price reviews.

Term Credit Spread Differential

Problems with TCSD

36. The approach in the WACC IMs is to set the assumed borrowing term to match the term of the regulatory period. The significance of this issue is that debt margins vary with the borrowing term and that the overall optimal debt term may not coincide with the term of the regulatory period. In partial recognition of this the WACC IMs include the TCSD adjustment, but this suffers from a number of difficulties, including:

- It only applies to firms with debt that meets certain criteria, hence two otherwise identical firms are, in effect, accorded different WACCs
- The calculation of the TCSD is partly based on a data source that now no longer exists
- The TCSD allowance is subject to an arbitrary cap
- The overall basis for calculating the TCSD is complicated and not well understood.[3]

37. The TCSD was considered in the recent High Court case on the IMs and the court suggested that its structure and efficacy be reviewed by the Commission. As the Paper notes the judgment also states :- *"…the material before us has not persuaded us of the need for a TCSD at all.[4]"* However, this statement from the court may simply reflect the scope of the material presented to the court, rather than that *"…the High Court's main concern was whether the TCSD is required at all…[5]"*, as opined by the Commission in the Paper.

Preferred Approach

38. We consider the underlying premise for the TCSD, that a prudent borrowing term may be longer than the regulatory period, to be valid. However, it is our view that, instead of using the TCSD, the regulatory WACC should instead allow for the debt margin to simply be based on a prudent borrowing term, not the term of the regulatory period. There would then need to be appropriate allowances for swap costs and adjustment of the amortisation of debt issuance costs. We consider that the approach adopted by the Commission on these issues in its TSO Determinations for 2006/2007 and 2007/2008 has been its most technically correct and reasonable approach so far.

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[3] Also noted in the recent High Court judgment at paragraph 1288 (b), [2013] NZHC 3289.

[4] Paragraph 112, the Paper.

[5] Paragraph 112, the Paper.