# Terms of reference

**Expert advice on cost of capital topics**

1. The Commerce Commission has engaged Martin Lally to provide advice on the following cost of capital topics. We anticipate publishing this advice for stakeholder comment in early 2016.

## Topic 1a – Cost of debt

2. The Commerce Commission currently determines the cost of debt using a risk-free rate and debt premium estimated using a 'prevailing approach' calculated from yields over a single month.

3. Some submissions have suggested that we should consider moving to a longer-term trailing average approach instead.

4. The main reasons to change the approach have been given as:

   a) It would reduce the volatility of regulated returns across periods; and
   b) Limited availability of suitable financial instruments (eg, interest rate swaps) in New Zealand mean that suppliers find it difficult to cost effectively hedge the base interest rate risk on longer-term debt so that it is consistent with the regulatory period.

5. Given these issues, can you comment on the advantages and disadvantages of an alternative 'trailing-average' approach, compared to the current 'prevailing' approach, with a particular focus on:

   a) Any update to previous advice in this area to the Commission and advice to the QCA (Link), as a result of more recently available information.
   b) Any NZ specific factors which may lead to a different conclusion to that reached in Australia (For example, due to characteristics of NZ capital markets or the NZ regulatory framework).
   c) Whether the different types of regulation applied under Part 4 (ie, under an IPP, DPP, CPP or ID) affect the relative advantages and disadvantages of the different approaches.
   d) Identifying the key factors that need to be considered in implementing a trailing average approach compared to the existing regime. (Including a high-level assessment of a suitable implementation method)
   e) Whether there are there any changes to the current application of the 'prevailing approach' that may improve its effectiveness and resolve some of the concerns outlined by submissions.
   f) The suitability of introducing an indexing approach (with annual updating) in combination with either a trailing average or prevailing approach.
   g) Any further considerations of the effect on DPP/CPP incentives in the event of an overall change in the cost of debt that would supplement conclusions in the previously published report (Link).

h) Whether any revised approach to estimating the cost of debt would be suitable with the current use of a Term Credit Spread Differential (TCSD). The TCSD is used to compensate for the additional debt premium associated with holding longer-term debt prudently incurred by a supplier. If the current TCSD is no longer appropriate, what alternative approach (if any) is required?

i) Whether there might be any particular problems in moving back from a trailing average to a prevailing rate approach (ie whether the decision is easily reversed).

## Topic 1b – Cost of debt (implementation)

6. If a change to a trailing average approach is considered a valid option, what would be the most appropriate implementation method, including any transition from the current regime.

7. Further details on the scope of this topic will be mutually agreed prior to the work commencing.

## Topic 2a – Asset beta

8. The Commerce Commission currently estimates asset beta by using a comparator set of companies. Two separate sets of comparators are used, one for electricity and gas businesses and one for airports. From the asset beta derived from the comparators, we then make adjustments for certain factors as appropriate to the regulated service to which the asset beta is applied.

9. Using relevant empirical or theoretical evidence, or judgement, as required, please consider whether the following current adjustments are suitable, and if not, quantify any alternative adjustments that should be made.

10. The current adjustments made to asset beta are:

a) An upward adjustment of 0.1 for gas pipeline businesses (See EDB/GPB IMs Reasons paper, paras H8.167-H8.179, Link)

b) A downward adjustment of 0.05 for airport businesses (Airports IMs Reasons paper, paras E8.72-E8.97, Link)

c) No adjustment for differences in the form of control of regulated businesses (See EDB/GPB IMs Reasons paper, paras H8.85-H8.162, Link).

## Topic 2b – Black's simple discount rule

11. It has been proposed by MEUG that Black's Simple Discount Rule (BSDR) is a methodology which could be usefully used as a cross-check against the returns of suppliers regulated under Part 4. Some cross-submissions disagree.

12. Please evaluate the appropriateness of using BSDR rule as a cross-check on the regulated return of businesses.

a) Please consider whether different types of regulation applied under Part 4 (ie, under an IPP, DPP, CPP or ID) affect the relative advantages and disadvantages of applying BSDR as cross check.

b) What role if any can BSDR add to the consideration of the asset beta in Topic 2a?

## Topic 3 – RAB indexation and inflation risk

13. Inflation affects the price-path in a number of ways. In particular, revaluation gains (which are treated as income and netted off from a firm's allowable revenue) are based on forecast CPI. At the end of the regulatory period, RAB is updated with actual CPI. It has been suggested that this is inconsistent with the ex-ante expectation of all businesses to earn an appropriate rate of return on capital, such that the NPV=0 principle would apply. (See Link, para 6).

14. Advice is therefore required on the consistency of the current approach with the NPV=0 principle and whether the current approach appropriately shares inflation risk between consumers and suppliers.

15. In assessing this issue, the following aspects of the price-path will need to be considered:

    a) The return on capital is calculated using forecast WACC set at the same time as the forecast CPI and no adjustment is made for actual outturn WACC.
    b) Forecast opex and capex are inflated using price factor indices (LCI PPI, CGPI). IRIS allocates to businesses 1/3 of the difference between forecast and actual inflation (as well as changes in amounts of expenditure).
    c) The price path is indexed by outturn (lagged) CPI, and therefore forecast (lagged) CPI is used to deflate the initial starting price.