

## **Further work on the cost of capital input methodologies**

**Process update and invitation to provide evidence on the WACC percentile**

**Date:** 31 March 2014

## Purpose of this paper

1. We have today issued a ‘notice of intention’ to do further work on the cost of capital input methodologies (IMs) that apply to electricity lines services, gas pipeline services and specified airport services regulated under Part 4 of the Commerce Act.
2. This paper provides an update on our process for conducting further work on the cost of capital IMs. Specifically, this paper:
  - 2.1 invites submissions (by **1 May 2014**) providing evidence regarding the appropriate weighted average cost of capital (WACC) percentile that should be used under the cost of capital IMs; and
  - 2.2 sets out key process steps and timelines to complete the further work on the WACC percentile before the price-quality path resets for electricity lines services later this year.

## We have issued a notice of intention to amend the WACC percentile used in the cost of capital IMs

3. We have issued a notice of intention to do further work on the cost of capital IMs for electricity distribution businesses (EDBs), gas pipeline businesses (GPBs), Transpower, and specified airport services. The decision to publish a notice of intention follows our previous consultation on this issue.<sup>1</sup>
4. The aim of this process is to address the High Court’s concerns regarding our use of the 75<sup>th</sup> percentile (rather than the mid-point) WACC estimate when setting regulated price-quality paths. The Court questioned whether empirical evidence and theoretical results justify our use of the 75th percentile.<sup>2</sup>
5. Using the 75<sup>th</sup> percentile makes a material difference to the WACC, and therefore, the allowed revenues for suppliers subject to price-quality path regulation. The Major Electricity Users’ Group (MEUG) estimates the additional charges to electricity and gas consumers from using the 75<sup>th</sup> percentile WACC (rather than the mid-point) as approximately \$155m per year.<sup>3</sup>
6. In light of the Court’s concerns, the materiality of the issue, and the potential for the current uncertainty to undermine the incentives the 75<sup>th</sup> percentile is intended to generate, we think it is important to resolve the uncertainty regarding the WACC percentile to be applied under the cost of capital IMs now.

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<sup>1</sup> Commerce Commission “Invitation to have your say on whether the Commerce Commission should review or amend the cost of capital input methodologies” (20 February 2014).

<sup>2</sup> *Wellington International Airport Ltd & Ors v Commerce Commission* [2013] NZHC [11 December 2013], paragraphs 1448-1487.

<sup>3</sup> *Affidavit of Ralph Victor Matthes in support of MEUG’s application for leave to Appeal to Court of Appeal* (13 February 2014), p.4, paragraphs 10-11.

**In our view, the positive investment incentives provided by using the 75<sup>th</sup> percentile have been weakened**

7. Following the Court’s judgment, there is uncertainty regarding the appropriate WACC percentile to be applied under the cost of capital IMs. The Court expressed scepticism about using a WACC substantially higher than the mid-point.<sup>4</sup>
8. We consider that this uncertainty is likely to have reduced any positive investment incentives associated with using the 75<sup>th</sup> percentile WACC estimate. Uncertainty regarding the WACC percentile to be applied in the future is likely to weaken the business case for new investment by regulated suppliers, who regularly make long-lived investments which last for many regulatory control periods.
9. If the Court’s concerns regarding the WACC percentile are not addressed prior to the next price-quality path resets for EDBs and Transpower, the 75<sup>th</sup> percentile will continue to apply in the next regulatory period (from 1 April 2015 to 31 March 2020). In this situation:
  - 9.1 the prices faced by consumers would continue to reflect the 75<sup>th</sup> percentile WACC for the next five years; but
  - 9.2 due to uncertainty about the WACC percentile that will apply in future regulatory periods, any positive investment incentives for regulated suppliers resulting from using the 75th percentile are likely to be diminished.
10. Our strong preference is to complete the further work on the WACC percentile before the end of November, so that any changes to the cost of capital IMs can apply to the next regulatory period for EDBs and Transpower.
11. However, we retain the ability to bring forward the wider review of the cost of capital IMs (instead of considering an amendment to the WACC percentile only) if:<sup>5</sup>
  - 11.1 it becomes clear that the WACC percentile cannot be satisfactorily addressed separately to other aspects of the IMs; or
  - 11.2 the complexity of the analysis required means that the further work on the WACC percentile cannot be satisfactorily completed before the end of November 2014.

**Submissions generally had opposing views on investment uncertainty**

12. We have considered the submissions received in response to our consultation paper when deciding to issue the notice of intention.<sup>6</sup>

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<sup>4</sup> *Wellington International Airport Ltd & Ors v Commerce Commission* [2013] NZHC [11 December 2013], paragraph 1486.

<sup>5</sup> In our view, it will not be possible to complete the wider review of the cost of capital IMs by the end of November 2014.

<sup>6</sup> The submissions we received are available at: <http://www.comcom.govt.nz/regulated-industries/input-methodologies-2/further-work-on-wacc/>

13. Most regulated suppliers argued that the positive investment incentives provided by using the 75th percentile WACC have not been significantly weakened by the Court's judgment, and we should not consider amending the cost of capital IMs now. For example, the Electricity Networks Association (ENA) submitted that "...the investment incentives relating to the use of the 75<sup>th</sup> percentile WACC would not be diminished by retaining the timing of the WACC IM review at the legislated seven year timeframe".<sup>7</sup>
14. Maui Development Limited (Maui), on the other hand, submitted that the positive investment incentives provided by using the 75th percentile have been weakened, and that the cost of capital IMs should be reviewed early (although, it argued that the percentile should not be treated as an isolated issue).<sup>8</sup> Maui stated:<sup>9</sup>
- Investments in infrastructure tend to have long payback periods. Any business case for making such an investment tends to be very sensitive to the assumed long-term return. The prospect of a significant reduction in that return can significantly weaken the business case for new investment.
- Any potential investment that would become uneconomical with a reduced WACC is unlikely to proceed. Regulated firms are unlikely to take a hope-for-the-best approach. Under the current state of uncertainty we agree that the intended incentive from the 75th percentile uplift is probably not being realised.
15. Consumers and consumer groups generally argued that there is uncertainty regarding the WACC percentile, which should be resolved before the next regulatory period. For example, MEUG submitted that "...the intended investment incentive to overcome perceived asymmetric social costs has been negated by uncertainty since the High Court decision".<sup>10</sup>
16. After reviewing submissions, we are still of the view that material uncertainty will remain until the concerns raised by the High Court regarding the 75<sup>th</sup> percentile are addressed. We agree with Maui that the current uncertainty is likely to weaken any positive investment incentives intended by using the 75<sup>th</sup> percentile WACC.

**Our aim is to provide greater certainty regarding the WACC percentile**

17. The notice of intention we have issued covers further work on the:
- 17.1 appropriate WACC percentile for default/customised price-quality path regulation, individual price-quality path regulation, and information disclosure regulation; and

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<sup>7</sup> ENA "Submission on 'Invitation to have your say on whether the Commerce Commission should review or amend the cost of capital input methodologies'" (13 March 2014), p. 7, paragraph 19.

<sup>8</sup> Maui "Submission on the 'Invitation to have your say on whether the Commerce Commission should review or amend the cost of capital input methodologies'" (13 March 2014), p 1-2.

<sup>9</sup> Maui "Submission on the 'Invitation to have your say on whether the Commerce Commission should review or amend the cost of capital input methodologies'" (13 March 2014), p 1.

<sup>10</sup> MEUG "Views on whether to review or amend the cost of capital input methodologies" (13 March 2014), p. 5, paragraph 26.

- 17.2 date by which we are required to determine the WACC for the next price-quality path resets for EDBs and Transpower.<sup>11</sup>
18. The fact that we have issued a notice of intention to do further work on the cost of capital IMs does not necessarily mean that we will change the WACC percentile. During the process we will gather further evidence (and conduct additional analysis) to form our view on the appropriate percentile. As a result of this process, the WACC percentile could increase, decrease, or remain at the 75<sup>th</sup> percentile.
19. Regardless of the outcome of the process, our aim is to reduce the current uncertainty regarding the WACC percentile used under Part 4 regulation.
20. Several submissions argued that the appropriate percentile should not be considered in isolation of other aspects of the WACC. For example, Vector submitted:<sup>12</sup>
- ...a proper consideration of the appropriate percentile raises significant issues in relation to other aspects of the WACC IM and would require a volume of analysis not much short of a full review of the WACC IM.
21. The submissions we have received to date have not convinced us that the appropriate percentile cannot be considered separately from a full review of the cost of capital IMs. The cost of capital range, which resulted in us using the 75<sup>th</sup> percentile estimate for price-quality paths, was determined only after we had estimated each of the individual WACC parameters.<sup>13</sup>
22. We currently intend to address other issues regarding the cost of capital IMs, including the additional concerns raised by the High Court in its merits appeals judgment, in the wider review of the IMs to be completed no later than seven years after the IMs were published.<sup>14</sup>

### **We invite submissions providing further evidence on the appropriate WACC percentile**

23. In response to our previous consultation paper, some submitters indicated that they had not had sufficient time to produce evidence regarding the appropriate WACC percentile to be used in the cost of capital IMs.
24. Therefore, we are now providing an opportunity for interested parties to submit any further evidence or expert reports. Specifically, we invite submissions providing:
- 24.1 empirical or analytical evidence regarding the appropriate WACC percentile. For example, the Court referred to the possibility of using a 'loss function'

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<sup>11</sup> See paragraph 29 below.

<sup>12</sup> Vector "Submission to Commerce Commission on whether the Commission should review or amend the cost of capital input methodologies" (13 March 2014), p. 22, paragraph 65.

<sup>13</sup> However, as noted in paragraph 11 above, we retain the ability to bring forward the wider review of the cost of capital IMs if it becomes clear that the WACC percentile cannot be satisfactorily addressed separately to other aspects of the IMs.

<sup>14</sup> Under s 52Y(1).

approach, which would estimate the relative social harm done by over-estimating and under-estimating the WACC, to determine the appropriate percentile;<sup>15</sup> and

- 24.2 any additional considerations (supported by evidence) that differ between sectors, which might affect the appropriate WACC percentile. Possible examples may include *ex ante* approval of investment, and the obligation to supply (which applies to some regulated suppliers).<sup>16</sup>
25. When providing any further submissions, you are also welcome to respond to points raised in submissions on our previous round of consultation.
26. Submissions are due by **5.00pm on Thursday, 1 May 2014**. Please address responses to: Brett Woods (Senior Analyst, Regulation Branch), c/o [regulation.branch@comcom.govt.nz](mailto:regulation.branch@comcom.govt.nz).

### Key steps and timeline for further work on the cost of capital IMs

27. As indicated above, we are aiming to complete the further work on the cost of capital IMs by the end of November, so that any changes will apply to the resets of the default price-quality path (DPP) for EDBs and the individual price-quality path (IPP) for Transpower.
28. Table 1 below shows a timeline of how we intend to proceed with further work on the cost of capital IMs.

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<sup>15</sup> *Wellington International Airport Ltd & Ors v Commerce Commission* [2013] NZHC [11 December 2013], paragraphs 1438-1439, 1464-1467. The Court referred to comments made by Professor Tony van Zijl at the Cost of Capital Workshop noting that among the loss functions that one could postulate was a simple linear one where “the cost of being too low is three times the cost of being too high, which is equivalent to the 75th percentile” (see paragraph 1465 of the Court’s judgment).

<sup>16</sup> Frontier Economics (on behalf of Transpower) referred to the Transpower Capital Expenditure IM (which requires *ex ante* approval of major capex projects by the Commission) as reducing the likelihood of over-investment. Frontier Economics “Evidence in support of setting allowed rates of return above the midpoint of the WACC range” (March 2014), p. 17-18, section 3.2.2.

**Table 1: Process steps and indicative dates for further work on the cost of capital IMs**

<b>Process step</b>	<b>Indicative date</b>
Notice of intention to do further work on the cost of capital IMs published	31 March 2014
Submissions providing further evidence or expert reports due	1 May 2014
Draft decision on any amendments to the cost of capital IMs published	June/July 2014
Submissions on draft decision due	Early August 2014
Cross-submissions on draft decision due	Late August 2014
Final amendment to the date the WACC determinations must be published	September 2014
Final decision on any amendments to the cost of capital IMs published	November 2014

29. The timeline in Table 1 above is based on the working assumption that we will amend the date by which we are required to determine the WACC for the next price-quality path resets for EDBs and Transpower. The cost of capital IMs for EDBs and Transpower currently require us to determine the WACC estimates used in the next DPP and IPP resets by 1 October 2014.<sup>17</sup>

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<sup>17</sup> The IMs require us to determine the WACC no later than 6 months before the start of the relevant regulatory period (ie, 6 months before 1 April 2015).