



# **Section 53B review of Auckland Airport's pricing decision and expected performance for PSE3: submission on the draft report**

**29 May 2018**

## Executive summary

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1. The Commerce Commission (“**Commission**”) is currently conducting a review of Auckland Airport’s pricing decisions and our expected performance for the five-year period from July 2017 to June 2022 (“**PSE3**”), and has released its draft report as part of that review.
2. The draft report considers a number of areas of Auckland Airport’s recent pricing decision and projected performance, focusing mainly on profitability, pricing efficiency, and Auckland Airport’s forecast investment plan.
3. In the majority of the areas reviewed, the Commission has made positive draft findings. In particular:
  - a. The Commission has recognised that Auckland Airport is investing heavily in new infrastructure in response to growth, that planned and actual investment is generally occurring at an appropriate time, that Auckland Airport engages well with its customers on investment, and that a high level of rigour has been applied by Auckland Airport to costing the forecast capex plan. We welcome the Commission’s findings that there is no evidence of planned under-investment, over-investment, bias in capex forecasting, or a strategy to gain from delaying projects at Auckland Airport.
  - b. The Commission has also acknowledged that, although the actual investment delivered may differ from that forecast, Auckland Airport’s decision not to include a capex wash-up for PSE3 was reasonable and consistent with efficient pricing. We welcome this finding. The complexity and scale of the airport development is unprecedented in New Zealand aviation and provides a once in a lifetime opportunity to create the airport of the future. It is inevitable through the PSE3 that new information will come to light which needs to be tested against the baseline plan and may require changes to the baseline plan. This happened in PSE2 when Auckland Airport brought forward capital expenditure because of much stronger aeronautical demand growth than forecast, ultimately investing 80% (or \$232 million) more than the \$290 million forecast when PSE2 aeronautical prices were set. The government’s newly revised transport plans for Auckland are a key example of this. As through PSE2 we will continue to consult transparently with airlines as new material information comes to hand and explain through information disclosure any changes to the base case aeronautical capital plan over the period.
  - c. The draft report notes that Auckland Airport has continued to seek improvements to the efficiency of its prices in PSE3 – including introducing differential charges for domestic passengers on trunk and regional routes, differentiated charges for check-in services, and parking charges. Although the Commission considers that Auckland Airport could have given greater consideration to whether peak charges are appropriate, it does not consider that this raises any significant efficiency concerns for PSE3. We are pleased that the changes we made to our pricing structure have been recognised as contributing to improved efficiency, and we respond briefly to the Commission’s comments on peak pricing in Appendix A.
  - d. The Commission has no significant concerns about any of Auckland Airport’s forecasts, including forecast asset values, demand, opex, and capital expenditure.
  - e. The draft report does not express concerns about the introduction of the runway land charge, and the Commission considers the charge can be consistent with efficient pricing. Although the Commission notes has some concerns about the impact of Auckland Airport’s target return on the compounding value of the second runway land (with up to an \$8 million impact on this circa \$1 billion investment), this is linked to its views that this target return has not yet been sufficiently justified,

and the Commission is clear that no other aspects of the Runway Land Charge raise concerns about excess profits.

4. We are pleased the Commission has made positive findings in a number of areas, and that it has recognised Auckland Airport's robust approach to price setting and capital investment planning for PSE3. We think these findings show that Auckland Airport took a careful, considered and reasonable approach to price-setting for PSE3.
5. We believe this careful, considered and reasonable approach extends to our decision on target returns. In summary, as we explain in this submission:
  - a. When we set prices for PSE2, we sought to anticipate the way that our pricing decision would be assessed, and to target a fair and reasonable return that balanced our airport-specific circumstances and risks with feedback from our substantial customers and guidance from the regulator. Our target return for PSE2 was subsequently assessed by the Commission as within a reasonable range.
  - b. We followed the same approach for PSE3. During our price setting process, we carefully reflected on the available regulatory guidance (in particular from the Commission's IM review process), feedback from our customers, and our own unique circumstances, and sought to strike the right balance – one which would be consistent with the long-term interest of consumers. We sought to anticipate the evidential requirements of the regulator, and to make our approach to setting our target return clear to interested parties.
  - c. The IM review process had signalled to us that the Commission wanted to move towards a more flexible profitability assessment that placed less emphasis on specific WACC percentiles in favour of understanding the airport-specific reasons and supporting context behind pricing decisions. We were encouraged by this approach during the IM review and at the time we set prices, as we considered this was a better way to approach profitability assessments in accordance with the purpose and spirit of information disclosure regulation.
  - d. We appreciate that implementing this high-level guidance in practice is more challenging than setting out principles in the abstract. However, our view is that the draft report for Auckland Airport sets out a profitability assessment framework that actually creates a different assessment approach from that established under the IM review and that we understood at the time we set prices. As we explain in this submission, an element of judgement (informed by evidence) will always be required by airports when setting prices, and by the regulator when assessing the reasonableness of those decisions – and we think that recognition of this key factor is missing from the draft assessment approach.
  - e. We encourage the Commission to reconsider the way it has chosen to implement the assessment approach signalled through the IM review. We think there is a better approach – one which is guided by the long-term interest of consumers – and which is more consistent with the Commission's past regulatory practice, its signals through the IM review, and the nature and purpose of information disclosure regulation.
  - f. When that contextual approach is applied, we think there is strong justification for Auckland Airport to target a return above the Commission's mid-point sector wide WACC estimate for PSE3. In particular, we consider that our overall effective return for PSE3 of 7.06% is fair and reasonable given that:
    - i. We are facing an unprecedented, mammoth increase in capital expenditure in PSE3 relative to our historic baseline. From 1 July 2019 onwards, Auckland Airport is planning to spend more on aeronautical infrastructure each year than we will earn in aeronautical revenue. In the last year of this pricing period, Auckland Airport's planned capital expenditure will be over

130% of our forecast revenue for that year. On average over the next five years, we are forecasting to spend the equivalent of \$15 per passenger per year on building the necessary infrastructure to deliver long-term value for passengers and airlines. This investment will substantially increase the size of our aeronautical asset base over the next five years (and commit us to significant future fixed costs relating to that investment - in particular depreciation and interest), and will enable us to deliver a number of key projects that will provide significant benefits for consumers into the long term – but the plan carries considerable risks and costs for Auckland Airport.<sup>1</sup>

- ii. We consider that a target return which better reflects a fair risk-adjusted return on equity for Auckland Airport (supported by empirical evidence about Auckland Airport's systematic risk) – is a fair and reasonable response to the unprecedented circumstances we face over at this point in our investment cycle, and will help to support the investment pathway and deliver long-term benefits for consumers.
- iii. Our target return of 6.99% for aeronautical pricing assets is the best estimate of the rate of return that we require to help deliver this forecast investment programme over PSE3, informed by our airport-specific risks for this pricing period, the size and characteristics of our capital plan, and the broader circumstances that we were aware of at the time of our pricing decision. This target return is below our Auckland Airport-specific WACC estimate for PSE3, reflecting the countervailing influence of the Commission's industry-wide airport-sector WACC estimate used for information disclosure monitoring purposes and airline feedback advocating for that WACC estimate to be used as Auckland Airport's target return for PSE3.
- iv. The effective return on other regulated activities is a product of revenues set primarily by negotiation with specific customers following a disciplined process that mirrors the process used to set lease rentals in competitive markets. There will be periods in which effective forecast returns for these activities will be lower than the target return for aeronautical pricing activities (as was the case in PSE2), and periods where the effective forecast return is higher than the target return for aeronautical pricing activities (as in PSE3).

We understand that as a general principle, the Commission considers that the impact of the information disclosure regime is greatest at the time airports make their pricing decisions – and thus airports should primarily be judged based on their forecasts and targeted intentions at the time they set prices. However, this isn't the case for other regulated activities, where the periodic nature of lease negotiations means that investment planning and revenue forecasting for these activities does not necessarily align with the five-yearly pricing cycle for aeronautical pricing activities. For this specific category of activities, we encourage the Commission to take an assessment approach that looks across a longer time period (given that returns will fluctuate over time depending on market reference points), and which places greater emphasis on actual returns disclosed over time compared to forecasts disclosed at the time of the aeroprising price setting event.

- g. The Commission has conceptually agreed that Auckland Airport's forecast increase in capital expenditure is likely to increase our operating leverage, and that this increase in operating leverage may increase Auckland Airport's exposure to systematic risk. The Commission accepts that this could justify an uplift to its asset beta (derived from a comparator sample average) and therefore could justify

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<sup>1</sup> See, for example, the discussion at paragraph 69 below.

a target return above its mid-point WACC of 6.41%.<sup>2</sup> Although the Commission has accepted this, it has expressed some concerns about the evidence put forward by Auckland Airport, and has asked for further information and evidence to explain and support the approach that Auckland Airport has taken. In this submission, we explain that:

- i. At the time of pricing, we never doubted that it was appropriate and relevant for us to consider an observable estimate of Auckland Airport's systematic risk to determine our own airport-specific WACC estimate (from which we stepped down to a materially lower target return for the purpose of setting prices). Auckland Airport's asset beta is a directly relevant and reliable evidential source – both when we were setting our prices, and when the regulator is assessing the reasonableness of that pricing decision. This empirical data point provides a clear and justifiable reason for Auckland Airport's target return to depart from the Commission's mid-point regulatory WACC estimate, does not lead to a significant risk of estimation error in the way the Commission has considered, and its use as a key reference point for Auckland Airport does not create regulatory precedent issues.
- ii. At the time we set prices, we considered that information about the change in Auckland Airport's forecast operating leverage due to the substantial capital investment programme provided additional support for the use of Auckland Airport specific asset beta estimates to inform our target return. We believed that forecast changes in operating leverage provided a strong conceptual basis for Auckland Airport to target a return that differed from the Commission's mid-point regulatory WACC.
- iii. Although we didn't describe the issue in exactly this way at the time we set prices (given the available data on our airport-specific asset beta), we also think that the operating leverage put forward by Auckland Airport in our pricing decision and price setting disclosure provides a strong conceptual basis to support an adjustment to the comparator sample average. As the Commission has stated:<sup>3</sup>

*In the context of the current review, we consider that if the capital expenditure forecast is credible, the investment is in the long-term benefit of consumers, and is material enough to significantly impact operating leverage, then an asset beta adjustment should be considered.*

- iv. These criteria are met for Auckland Airport. As we explain in this submission – supported by evidence responding the Commission's specific requests, the projected changes in operating leverage for Auckland Airport for PSE3 are material, and overseas regulators have allowed comparable relative adjustments to asset beta for comparable relative differences in operating leverage.
6. In summary, we think there was strong justification for Auckland Airport to target a return above the Commission's mid-point WACC estimate for PSE3 when we set prices, and we think there are strong grounds for the Commission to find that our approach was fair, reasonable, and consistent with the long-term interest of consumers.
  7. We would be happy to discuss any of this submission with the Commission ahead of the final report.

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<sup>2</sup> Commerce Commission, *Review of Auckland International Airport's pricing decisions and expected performance (July 2017 – June 2022): Draft Report*, 26 April 2018 at [X19], [68].

<sup>3</sup> Commerce Commission, *Draft Report – Review of Auckland International Airport's pricing decisions and expected performance (July 2017 – June 2022)*, 26 April 2018 at [A116].



## Structure of this submission

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8. In this submission, we have focussed on explaining our reservations with the Commission's profitability assessment approach, and on providing further explanation of Auckland Airport's target return on aeronautical pricing activities as well as the forecast revenue (and effective return) for other regulated activities. We have also provided responses to some specific comments from the Commission on points of detail in Appendix A.
9. The submission is structured as follows:
  - a. In Section 1, we summarise our concerns with the profitability assessment framework in the draft report, and set out some questions that we consider are highly relevant to an assessment of airport pricing.
  - b. In Section 2, we explain that a contextual assessment of Auckland Airport's pricing decision is consistent with a finding that the target return for aeronautical pricing activities for PSE3 is fair, reasonable and justifiable. This section should be read in conjunction with Appendix B, which contains the target returns extract from Auckland Airport's final pricing decision reasons paper (issued to airlines in June 2017). We have attached this extract to provide additional transparency to interested parties about the rationale for Auckland Airport's pricing approach, by making it clear exactly how we explained our decision to our airline customers at the time of pricing.
  - c. In Section 3, we focus on the Commission's evidential concerns relating to Auckland Airport's systematic risk. In that section, we explain why empirical estimates of Auckland Airport's asset beta are a directly relevant and reliable evidential source that both directly informs the appropriate asset beta for Auckland Airport for price-setting, as well as (separately) informing any exercise to quantify the appropriate adjustment from the Commission's comparator sample average. We go on to provide further evidence on the impact of operating leverage for Auckland Airport relative to the comparator sample average, and to provide further support for the size of the difference between Auckland Airport's target return for PSE3 and the Commission's mid-point WACC estimate. This section should be read in conjunction with the following appendices:
    - i. Appendix C, which provides a summary of Auckland Airport's responses to the Commission's logic chain for an implicit asset beta adjustment.
    - ii. Appendix D contains a paper from First Economics, which provides evidence about the relevance and reliability of Auckland Airport's beta estimates – both to the price-setting exercise by Auckland Airport, and to the subsequent exercise when the Commission is assessing the reasonableness of that decision. This paper also considers relevant regulatory precedent in the United Kingdom, including the airport sector.
    - iii. Appendix E contains a further paper from NERA Economic Consulting, responding to the Commission's specific evidential queries on operating leverage. As requested, this paper provides further comparisons of Auckland Airport's forecast operating leverage relative to the comparator companies used to derive the Commission's notional industry-wide average asset beta estimate, along with greater discussion of the regulatory precedent which supports the reasonableness of Auckland Airport's approach (including the size of the "implied adjustment" to the Commission's comparator sample average).
    - iv. Appendices F and G contain feedback from First NZ Capital and Westpac respectively on the effects of operating leverage on equity and debt, in

response to the Commission's request for information about rating agency and equity analyst views. We also note that NERA has discussed views from rating agencies and equity analysts in its paper.

- d. In Section 4, we return to the contextual assessment of Auckland Airport's pricing approach for aeronautical activities – explaining that we consider our approach is consistent with the long-term benefit of consumers, and that our conduct shows we seek to earn an appropriate economic return over time. We explain that, after all factors are considered, Auckland Airport's target return for PSE3 is within an acceptable range and consistent with the purpose of Part 4.
- e. In Section 5, we explain our approach to setting prices and forecasting revenue for other regulated activities, and provide further information for the Commission and interested parties about why the returns on these activities may differ from the target return on aeronautical pricing activities for any given five-year pricing period. As part of that discussion, we encourage the Commission to take a longer-term approach to assessing returns for these assets, given the nature and lifecycle of the activities involved.
- f. In Section 6, we set out two potential technical issues we have identified with the Commission's modelling in the draft report.

## Section 1: Approach to assessing Auckland Airport's target return for aeronautical pricing activities

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10. The Commission's draft conclusion is that Auckland Airport's profits may be too high over PSE3 and that the evidence provided by Auckland Airport is not yet sufficient to demonstrate that the target return is in the long-term interest of consumers. It quantifies the potential excess profits as \$47 million over the five year period, or the equivalent of passengers paying an additional 61 cents per flight. This represents the difference between Auckland Airport's target return and the Commission's mid-point sector-wide WACC estimate.
11. However, the draft report is clear that not all of this \$47 million figure may be excess profits. Importantly, the Commission has agreed that the size of Auckland Airport's investment programme could conceptually provide a justification for targeting returns above its mid-point WACC estimate, and has asked for further evidence to explain why Auckland Airport's target return for PSE3 is reasonable and justifiable.
12. In this section, we explain that:
  - a. At the end of the IM review, we felt we had a relatively good understanding of how the Commission would approach its profitability assessment exercise for PSE3, and how this would be an evolution to the approach that was applied during the section 56G reviews. To us, the IM review process had signalled the Commission's desire for a more flexible profitability assessment that placed less emphasis on specific sector-wide WACC percentiles in favour of understanding the airport-specific reasons and supporting context behind pricing decisions. We considered this was a better way to approach profitability assessments in accordance with the purpose and spirit of information disclosure regulation.
  - b. The challenge, and the leap of faith for all parties, was that there was relatively little guidance on precisely how airport target returns would be assessed, when a departure from the Commission's mid-point WACC estimate would be considered acceptable, or what evidential threshold would be required to support an airport's approach. Auckland Airport knew that we had to carefully justify our approach by reference to airport-specific factors, but there were a lot of unknowns at the time we set prices.
  - c. On this basis, we sought to be transparent about our approach to setting the target return for PSE3, consistent with our interpretation of the Commission's statements in the IM review and the new disclosure requirements. We also sought to explain to our airline customers where we considered empirical airport-specific evidence supported our approach, and to identify and discuss the less-quantifiable other factors that we considered relevant.
  - d. We appreciate that it is difficult to provide guidance about how a profitability assessment exercise will work in the abstract. Faced with undertaking the first profitability assessment exercise after the IM review, the Commission was understandably required to think about exactly how it would review our pricing decision, and to develop a tangible framework that sought to implement the high level guidance that it had provided in the past.
  - e. However, we think that some features of the assessment framework in the draft report are inconsistent with the flexible and contextual profitability assessment that was signalled through the IM review. In practice, the draft report actually creates a different assessment approach that we thought the Commission was trying to avoid.
  - f. In our view, the key task for the Commission is to exercise judgement on the reasonableness of pricing decisions made by airports in light of the specific context



and the airport's conduct – guided by an overall focus on the long-term impact to consumers. Our interpretation is that these types of questions (which we set out in more detail below) have been overshadowed in the draft report by the detail of particular sector-wide WACC parameter estimates – which we did not predict would be the Commission's primary focus, and which we do not think is consistent with past acknowledgements by the Commission that empirical evidence will only go so far. An element of judgement will always be required by airports when setting prices, and by the regulator when assessing the reasonableness of those decisions.

- g. When we set prices we sought to exercise reasonable judgement about an appropriate target return for PSE3, informed by robust airport-specific evidence and careful consideration of the regulatory framework. In our view, a contextual analysis of this information and evidence – as signalled by the Commission and contemplated by Professor Yarrow – is not consistent with a finding of excess profits for Auckland Airport.
13. We then go on to address the Commission's specific concerns by providing substantial evidence relating to Auckland Airport's asset beta and the impact of operating leverage on our target return for aeronautical pricing activities for PSE3 in Section 3.
14. We note that the following sections focus on Auckland Airport's target return of 6.99% on aeronautical pricing activities, and the rationale, evidence, and regulatory precedent supporting that return. We address the Commission's comments about the effective forecast return for other regulated activities separately, in Section 5.

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**At the end of the IM Review, we anticipated a more flexible profitability assessment that focused on understanding the airport-specific reasons and supporting context behind pricing decisions**

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15. In the section 56G review, the Commission's key focus was on whether airport prices would provide an acceptable economic return over time. The Commission evaluated airport prices against an "acceptable range" for airport profitability. This reflected that an individual airport's returns could be different to the Commission's best estimate of a normal return for the airport sector without meeting the criteria of "excessive profits" – provided that the Commission had no significant concerns with that airport's quality, efficiency and investment performance over time. The Commission's assessment approach was therefore clear that "additional returns" above the mid-point sector-wide WACC estimate could be consistent with long-term consumer interests and were therefore not necessarily contrary to the Part 4 purpose.<sup>4</sup>
16. The Commission was clear that it would not make automatic judgements that returns were excessive – even if they exceeded the Commission's "acceptable range". In this case, the Commission indicated that it would apply a degree of discretion and exercise its judgement in assessing whether, given the overall context and an assessment of its conduct, the airport was targeting excessive profits:<sup>5</sup>

*A return that is expected to substantially exceed [an acceptable] range will be problematic and most likely seen as targeting excessive profits. However, where the return is only marginally above the range, this will not lead to an automatic conclusion that the supplier is targeting excessive profits. In such circumstances the*

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<sup>4</sup> Commerce Commission, *Final report to the Ministers of Commerce and Transport on how effectively information disclosure regulation is promoting the purpose of Part 4 for Auckland Airport*, 31 July 2013 at [E35].

<sup>5</sup> Commerce Commission, *Final report to the Ministers of Commerce and Transport on how effectively information disclosure regulation is promoting the purpose of Part 4 for Auckland Airport*, 31 July 2013 at [2.10]. See also [E19], and footnote 129 (at [E2]) which notes: "Returns marginally above [an acceptable] range are not on their own necessarily indicative of the 'excessive profits' referred to in the Part 4 purpose statement (ie, in s 52A(1)(d)). It may be appropriate to assess whether excessive profits are expected to be earned after consideration of other factors...").

*Commission will have to exercise its judgement to take into account the context, and the airport's conduct in light of its reasonable expectations.*

17. At the end of the IM review process, we understood that future profitability assessment exercises would be an evolution on the section 56G review process. We understood that the 75<sup>th</sup> percentile of the Commission's WACC estimate would no longer be the default upper limit of an "acceptable range" for airport returns – because the Commission was uncomfortable that the 75<sup>th</sup> percentile estimate of its range would be treated as a default upper limit of acceptable profitability, and because it wanted to take a more nuanced approach that looked at airport-specific evidence on a case-by-case basis after each pricing decision.
18. We also understood that Auckland Airport would be required to explain the reasons for the target return we used to set our prices, and that we would need to explain why a target return that differed from the Commission's mid-point WACC estimate was consistent with the long-term interest of consumers in light of the particular circumstances that Auckland Airport would face over PSE3.
19. The Commission had also cited Professor Yarrow's view that what mattered was considering these contextual factors as opposed to rigidly comparing the targeted returns against the regulatory mid-point WACC,<sup>6</sup> agreed that care needs to be taken when using the WACC to assess profitability,<sup>7</sup> and noted that it was attempting to reduce the focus on specific WACC values.<sup>8</sup>
20. Given the inherent uncertainty in determining a "true" WACC and how this might differ for different airports or projects, we did not understand that the concept of an "acceptable range" for airport profitability had disappeared – just the 75<sup>th</sup> percentile as the default upper limit of any such range. The Commission had made a clear statement that the mid-point regulatory WACC estimate was not a bright line, and had decided to publish the standard error alongside its WACC estimate to provide information about the uncertainty associated with that estimate and to allow for particular WACC percentiles to be calculated as required to support profitability assessments.
21. In addition, the alternative options considered by the Commission suggested that the Commission might calculate specific percentile estimates to use as a benchmark for assessing airport profitability, which would not necessarily be the 50<sup>th</sup> percentile estimate. We note that:
  - a. The Commission considered whether to specify an additional WACC percentile estimate that would be an appropriate benchmark for airport profitability assessments. It decided not to publish this specific percentile – because it considered this would be inconsistent with its view that the appropriate percentile estimate was potentially different for different airports and potentially between different projects, and that it was likely to differ over time. However, the Commission clearly stated that, if it was minded to specify a WACC percentile in this way, it would not necessarily be the 50<sup>th</sup> percentile estimate:<sup>9</sup>

*One alternative option that was considered was to publish a specific WACC percentile point estimate in addition to the current WACC percentile range.*

*The specific point estimate would be the percentile that appropriately balances the relative costs to consumers of under- and over-investment, in light of the overall purpose of Part 4. [...]*

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<sup>6</sup> Commerce Commission, *Input Methodologies Review Decisions - Topic Paper 6: WACC percentile for airports*, 20 December 2016 at [47].

<sup>7</sup> Commerce Commission, *Input Methodologies Review Decisions - Topic Paper 6: WACC percentile for airports*, 20 December 2016 at [58].

<sup>8</sup> Commerce Commission, *Input Methodologies Review Decisions - Topic Paper 6: WACC percentile for airports*, 20 December 2016 at [58].

<sup>9</sup> Commerce Commission, *Input Methodologies Review Decisions - Topic Paper 6: WACC percentile for airports*, 20 December 2016 at [107] – [112].

*However, it is not necessarily the case that the specific percentile chosen would be the 50th percentile. Any percentile would have to balance relative costs to consumers of under- and over-investment, which could result in a higher percentile than the mid-point.*

*We consider that determining a specific percentile in this way is not consistent with our view that the appropriate percentile is potentially different for each airport and potentially differs between particular projects. It is also unlikely to be consistent over time.*

*We consider that allowing flexibility in how a WACC applies to the assessment of airport profitability is a more appropriate approach. Evidenced explanations for adopting an estimate of the WACC above the mid-point estimate should be made on a case-by-case basis. We, therefore, consider that a focus on a specific percentile is not an appropriate solution for airports.*

- b. Similarly, the Commission considered publishing a wider range of estimates than just the mid-point – because this would provide flexibility, would help convey the view that a single WACC percentile may not be appropriate for all situations, and would give the Commission the ability to choose the most appropriate percentile estimate to use in a profitability assessment. Although it decided against this approach, this was again driven by its desire to take the focus away from numerical WACC comparisons:<sup>10</sup>

*We continue to agree that publishing a wider range of estimates provides flexibility and would help convey the view that a single WACC percentile may not be appropriate for all situations. It would give us the ability to choose the most appropriate percentile estimate to use in a profitability assessment.*

*However, we have continued to reject this approach, compared to our solution, because it maintains a focus on numerical percentile estimates. Consistent with Professor Yarrow's advice, we wish to de-emphasise the specific WACC percentiles and encourage airports to fully disclose the specific evidence and reasoning behind each divergence from the mid-point estimate. Instead, we wish to focus more on the reasoning for any difference with an airport's target return.*

- c. Ultimately, the Commission decided not to adopt either of these approaches – because it considered that it was more appropriate to allow flexibility in how its WACC estimate would apply to the assessment of airport profitability,<sup>11</sup> and because it wanted to reduce the focus of profitability assessments on numerical percentile estimates.<sup>12</sup> Instead, the Commission was clear that it wanted to focus more on the *reasoning* for any difference between its WACC estimate and an airport's target return.
- d. The Commission indicated that its approach would be sufficient to mitigate airport concerns about misinterpretation of the removal of the WACC range, noting:<sup>13</sup>

*We note the concerns airports have around the potential for interested parties to misinterpret our approach as moving to a "bright-line test" based on the mid-point estimate of the WACC.*

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<sup>10</sup> Commerce Commission, *Input Methodologies Review Decisions - Topic Paper 6: WACC percentile for airports*, 20 December 2016 at [116] – [117].

<sup>11</sup> Commerce Commission, *Input Methodologies Review Decisions - Topic Paper 6: WACC percentile for airports*, 20 December 2016 at [116].

<sup>12</sup> Commerce Commission, *Input Methodologies Review Decisions - Topic Paper 6: WACC percentile for airports*, 20 December 2016 at [117].

<sup>13</sup> Commerce Commission, *Input Methodologies Review Decisions - Topic Paper 6: WACC percentile for airports*, 20 December 2016 at [123] – [124].

*We agree with submissions that the mid-point estimate is not supposed to be a bright-line test. However, we consider that the concern about the potential for misinterpretation of our approach is overstated when compared to the disadvantages of calculating a large number of different percentile estimates. We consider that our reasoning is clear and our solution that allows specific percentile estimates to be calculated when required will become embedded over time.*

22. We were encouraged by the signals that profitability assessments going forward would focus on context and reasoning, rather than numerical comparisons to the Commission's sector-wide WACC estimate. For example, the extract below is taken from a summary of the IM Review final decision, provided to Auckland Airport's Board in December 2016, and shows our understanding at the time:

*Figure 1: Extract from Management summary to Auckland Airport Board, December 2016*

(b) **Approach to WACC and target returns:** The Commission has retained its draft decision not to publish a WACC range between the 25<sup>th</sup> and 75<sup>th</sup> percentile estimates. Instead, it will publish a mid-point WACC estimate (50<sup>th</sup> percentile) and standard error only, which it will use to monitor and analyse the target return sought by airports in their price-setting decisions (ie, the outcome of the IRR calculation). The 50<sup>th</sup> percentile of the Commission's WACC estimate will be its starting point for assessing airport profitability. We note that:

(i) The Commission has reinforced that it is committed to undertaking a contextual assessment of airport performance. A numerical comparison of an airport's target return and the mid-point of the Commission's WACC estimate will be only one aspect of that assessment, and the Commission is clear that there may be legitimate reasons for an airport to target a return above the Commission's mid-point WACC estimate. In this way, airports will be able to determine the target return that they believe is appropriate given their individual circumstances, and must provide supporting explanations and reasons for their decisions, which the Commission will then review and consider.

(ii) We will be required to publish our WACC estimate, the effective rate of return we have targeted, and evidence that provides an explanation for differences between our WACC and the Commission's WACC estimate and between our targeted return and our WACC. The Commission will expect airports to provide greater explanation, reasoning and evidence as any divergence from the mid-point increases. It expects that reasoning and evidence should be specific to the circumstances of the airport or specific project at the time of the estimate.

23. We were also encouraged by the comments of Professor Yarrow, the Commission's expert advisor, and his advice that:
- a. There is a clear, conceptual distinction and separation between the exercise of setting a WACC for information disclosure, and assessing information that has been disclosed about airport returns.<sup>14</sup>
- b. There is also a clear conceptual distinction between the allowable rate of return in a regulatory context (for airports, the "acceptable" or "appropriate" rate of return) and the cost of capital, including a solid theoretical justification for why an appropriate rate of return should be above the cost of capital.<sup>15</sup>
- c. For the purpose of assessing disclosed information and making judgements about airport performance, assessing whether airport returns are appropriate is not as

<sup>14</sup> Professor George Yarrow, *Responses to questions raised by the Commerce Commission concerning WACC estimates for information disclosure purposes in the airports sector*, February 2016 at 19, and 20 – 21.

<sup>15</sup> Professor George Yarrow, *Responses to questions raised by the Commerce Commission concerning WACC estimates for information disclosure purposes in the airports sector*, February 2016 at 11 – 12, and 20.

simple as comparing ex ante or ex post returns estimates to a WACC estimate (regardless of the percentile value of that estimate).<sup>16</sup>

- d. Where returns are different to any given WACC estimate, that does not mean those returns are excessive, and it would be arbitrary to conclude they were without analysis of the underlying reasons for any differences. **A broad contextual assessment is required, and the published WACC estimates should not have primacy in that assessment.**<sup>17</sup>

24. Finally, the Commission was clear that a key reason why there is a lower risk of under-investment in the airport sector compared to the energy sector is because airports are able to set prices that reflect their capital costs, and because airports have better knowledge about the returns their investors require than the regulator. It noted:<sup>18</sup>

*Where an airport knows the targeted rate of return it requires to undertake investment, it does not follow that quantifying the cost of mis-estimating the WACC is the most relevant evidence. Rather, evidence on why the targeted return needs to be higher than the Commission's mid-point estimate of WACC in the airport's specific circumstances and evidence on the long-term benefits to consumers from the specific investment being considered, is more relevant. We would then consider this evidence when forming any view about an airport's targeted returns.*

*[...] we consider [the risks of failing to attract investor and shareholder support to fund investments] are significantly lower than for a regulator setting direct price controls in the face of asymmetric information. Our expectations are that an airport will better know and have greater direct regular communication with its investors and shareholders. Further, the airport's estimate of WACC might be an under- or over-estimate of the true WACC, but the investment ought not to be deferred because the airport considers the WACC is too low.*

25. The Commission also stated that a logical airport would set prices to recover these costs – thus mitigating the risk that the target return is set too low and substantially lessening the risk of under-investment:<sup>19</sup>

*Airports, rather than us, determine both the estimate of WACC that is used to set prices for the pricing period (and each subsequent pricing period of the asset's life) and the estimate of WACC that determines whether and when each investment will proceed.*

*Logically, an airport would use the same approach to WACC for both purposes, thereby ensuring the prices charged for airport services reflect the returns required by the airport to cover all its costs, including its cost of capital, on its investment to provide those services. **As a result of using its own estimate of WACC to set its prices, it is not apparent why an airport would defer investment because the WACC (which it sets for itself) is too low.***

26. We therefore understood that the Commission considered it was reasonable and logical for us to set a target return that in part reflected our own Auckland-Airport-specific WACC estimate and the return required to undertake investment at Auckland Airport for PSE3 – provided that we explained why this return was required given our individual circumstances and the long-term benefits that would flow to consumers from the

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<sup>16</sup> Professor George Yarrow, *Responses to questions raised by the Commerce Commission concerning WACC estimates for information disclosure purposes in the airports sector*, February 2016 at 4, 6, 8, 20, and 22.

<sup>17</sup> Professor George Yarrow, *Responses to questions raised by the Commerce Commission concerning WACC estimates for information disclosure purposes in the airports sector*, February 2016 at 4, 6, 8, 20, and 22.

<sup>18</sup> Commerce Commission, *Input Methodologies Review Decisions - Topic Paper 6: WACC percentile for airports*, 20 December 2016 at [158] – [159].

<sup>19</sup> Commerce Commission, *Input Methodologies Review Decisions - Topic Paper 6: WACC percentile for airports*, 20 December 2016 at [62] – [63].

investment being considered. We anticipated that these themes would be key features in the subsequent profitability analysis during the section 53B review.

27. In summary, at the end of the IM review we felt we had a relatively good understanding of the principles that would guide the Commission's profitability assessment exercise for PSE3, and how this would be an evolution to the approach that was applied during the section 56G reviews. To us, the IM review process had signalled the Commission's desire for a more flexible profitability assessment that placed less emphasis on specific sector-wide WACC percentiles and estimates in favour of understanding the airport-specific reasons and supporting context behind pricing decisions. We considered this was a fair and reasonable way to approach profitability assessments in accordance with the purpose and spirit of information disclosure regulation.

### **At the time we set prices, we sought to explain and justify our airport-specific approach, consistent with our interpretation of the Commission's statements in the IM review and the new disclosure requirements**

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28. At the time we set prices, we knew that we would need to explain the rationale for our target return, and how this was different to the Commission's mid-point WACC estimate, including by reference to airport-specific evidence and the particular circumstances we would face over PSE3.
29. The challenge, and the leap of faith for all parties, was that there was relatively little guidance on precisely how airport target returns would be assessed, when a departure from the Commission's mid-point WACC estimate would be considered acceptable, or what evidential threshold would be required to support an airport's approach.
30. The Commission had made a conscious decision not to provide detailed guidance about when target returns above the mid-point would be acceptable. We agreed with this approach at the time. For example, in our submission on the Commission's emerging views paper, we noted that:<sup>20</sup>

*Like other areas of the IMs, attempts to identify and exhaustively list all relevant matters or options in advance risks harming our ability to respond appropriately to the real-world challenges faced by us and our customers, to develop reasonable pricing solutions in those circumstances, and to transparently explain our decisions to interested parties.*

*What matters to us is having comfort that the important conversations around an appropriate return for Auckland Airport will happen – and that those conversations will be sufficiently nuanced to reflect the sophistication and complexity of our pricing decisions, including incorporating a careful consideration of the reasons behind our forecast returns.*

*Importantly, we want to avoid a situation where any returns above the 50th percentile are automatically deemed to be excess returns for assessment purposes, and treated as prima facie evidence of excessive profits unless airports can conclusively prove otherwise. We would see this as a backwards step from the assessment approach in the section 56G review, contrary to the natural next step in the evolution of the ID regime, and inconsistent with Professor Yarrow's expert guidance to the Commission.*

31. Although we agreed with this approach, it did pose a challenge during price-setting – as we needed to try and predict how the Commission might actually assess our returns in practice.

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<sup>20</sup> Auckland Airport, *Response to Commerce Commission's Emerging Views on the WACC Percentile for Airports*, 16 March 2016 at [29] – [31].



32. The extract below shows guidance that Management provided about the likely profitability assessment approach to the Aeronautical Pricing sub-committee of Auckland Airport's Board during the pricing consultation process. It states that we anticipated the Commission would follow a similar framework to its section 56G report, and summarises the questions that we anticipated the Commission was likely to ask – based on the questions that it asked during the section 56G review, updated to include how we understood the IM review process would influence the profitability assessment.
33. This extract shows that, although Auckland Airport clearly understood we would be required to explain why our target return was above the mid-point estimate of the Commission's WACC estimate, we did not anticipate the questions would focus exclusively on whether adjustments to individual Commission parameters were appropriate. We anticipated a broader focus – one which asked whether, overall, the rationale and evidence put forward by Auckland Airport supported its target return for PSE3 and justified a return higher than the Commission's mid-point estimate. We also anticipated that our performance in other areas (particularly investment and efficiency) may be considered as part of the assessment, and that our conduct would be relevant.

Figure 2: Extract from Management Paper to Aeronautical Pricing Sub-committee, March 2017

We anticipate the Commission will follow a similar framework to the section 56G report for its chosen focus areas. The table below summarises the key questions we think the Commission will seek to answer.

Key question	Sub-questions the Commission is likely to consider in its summary and analysis
<b>Will Auckland Airport's prices provide an acceptable economic return over time?</b>	<ul style="list-style-type: none"> <li>• What return is Auckland Airport expected to earn based on the prices set for PSE3 and its forecast passenger volumes and aircraft movements?</li> <li>• How does Auckland Airport's expected return compare to the Commission's estimates of the cost of capital that would be expected for businesses with similar risk at the time prices were set?</li> <li>• If Auckland Airport's target return is above the mid-point estimate of the Commission's WACC estimate (updated for the current risk free rate), is Auckland Airport's proposed target return reasonable and appropriate having regard to the long-term interest of consumers? The following questions are likely to be considered: <ul style="list-style-type: none"> <li>○ Are any differences between Auckland Airport's WACC estimate and the Commission's airport sector WACC estimate appropriately explained and justified?</li> <li>○ Are any differences between Auckland Airport's WACC estimate and its target return appropriately explained and justified?</li> <li>○ Overall, does the rationale and evidence identified by Auckland Airport (including airport-specific circumstances) support its target return for PSE3 as appropriate? Do these reasons justify a target return that is higher than the Commission's mid-point WACC?</li> </ul> </li> <li>• Does Auckland Airport's performance in other areas (such as the efficiency of its operational expenditure and the efficiency of its investment plan) impact the appropriate target return and forecast profitability?</li> <li>• Does Auckland Airport's conduct demonstrate that it is seeking to earn an acceptable return over time? The following questions are likely to be considered: <ul style="list-style-type: none"> <li>○ Has Auckland Airport considered and responded to airline feedback when setting its target return?</li> <li>○ Is Auckland Airport's demand forecast reasonable?</li> <li>○ Is Auckland Airport's treatment of any revenues associated with assets held for future use reasonable, transparent and consistent with the purpose of Part 4?</li> </ul> </li> </ul>

34. Our pricing approach was consistent with this understanding. We developed an investment plan consistent with customer requirements and consumer interests, and then considered the return that was necessary to support that plan – heavily influenced by the regulatory framework, feedback from our airline customers, and consideration of the long-term benefits to consumers that would flow from our approach and forecast investment programme.
35. This involved developing our airport-specific WACC range, and using our judgement – informed and narrowed in scope by the available evidence – to select, ultimately, a lower target return in light of a range of data points and after consideration of our unique

circumstances over PSE3. Those data points included Auckland Airport's WACC range, as well as the Commission's regulatory mid-point WACC estimate and the distribution around that estimate.

36. Throughout the pricing consultation process, we sought to carefully explain this approach and our underlying reasoning to our airline customers. Our final pricing reasons paper (issued to airlines as part of the confidential pricing consultation) and our price setting disclosure focused on explaining our approach, the contextual factors that supported our use of an airport-specific target return to set prices, and the consumer benefits that we believed would flow from the investment programme.
37. Following price setting, we completed the Price Setting Disclosure, in accordance with the Commission's prescribed disclosure requirements. This required a comprehensive disclosure of the price setting activities, as well as the disclosure of other regulated activities which were the subject of varying lease review dates (and which we discuss further in Section 2).<sup>21</sup>
38. With the benefit of hindsight, we accept that Auckland Airport's price-setting disclosure could have more clearly articulated how we arrived at our target return, and how the investment plan and the specific benefits to consumers that would flow from that investment supported the target return. For aeronautical pricing activities in the price setting disclosure, the benefits of the specific investments being considered were discussed in relation to the capital forecast for PSE3. This differs to the pricing decision reasons paper, where this discussion was an integral part of explaining why the target return, comparable to the 65th percentile industry average WACC, was appropriate and consistent with long-term consumer interests.
39. It was not our intention to be vague about our approach in the price setting disclosure – rather, we understood that a broad contextual assessment was required, and the published WACC estimates should not have primacy in that assessment. We were grappling with how to explain our approach in a way that met the disclosure requirements and would be accessible and understandable by a lay person. Any confusion about our approach that was introduced was un-intentional, and the result of attempting to explain our approach as simply as possible. However, the reality remains that our final decision on the appropriate target return for aeronautical pricing activities was a judgement call informed by evidence – and it would not have been possible for us to set out a mechanical parameter-by-parameter explanation of how our target return differed to the Commission's WACC, nor mechanically quantifying the step down in target return from our assessed Auckland-Airport-specific midpoint WACC estimate.
40. This is because ultimately, mindful of the Commission's approach to setting a sector-wide midpoint WACC estimate based on its 26 airport company sample set and view on market parameters such as TAMRP and the risk-free rate, we settled on a target return for PSE3 that was well below our best parameter-based midpoint Auckland Airport WACC estimate. We believed the Commission would find this target reasonable as it was informed by airport-specific evidence, and it was within a range of WACC estimates that the Commission could reasonably arrive at applying its methodology, but adjusted for the Auckland-Airport-specific evidence that we presented.
41. As required by the disclosure rules, our price setting disclosure sought to explain differences between the Commission's WACC and Auckland Airport's WACC, and then differences between Auckland Airport's WACC and our target return. We sought to provide a clear explanation of how we had exercised our judgement, and the analysis that was relevant to that judgement – consistent with our understanding of the disclosure requirements at the time and how we understood the subsequent profitability analysis was likely to be conducted.

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<sup>21</sup> We note that when Auckland Airport set prices, we had not completed the modelling or auditing of forecasts for other regulated activities. This post-dated the 8 June 2017 price setting event. This increased the effective return across all activities to 7.06%, which was equivalent to the 67<sup>th</sup> percentile of the Commission's WACC estimate, as at April 2017.

42. Auckland Airport understands that transparency is vital to the information disclosure regime. We work hard to provide comprehensive annual disclosures and price-setting disclosures, and are disappointed that we have fallen short of the Commission's disclosure expectations. We wish to assure the Commission that this was not our intention, and that we will carefully take the new guidance provided by the Commission as part of this section 53B review into account when preparing subsequent disclosure statements.
43. For PSE3, and in the interests of promoting transparency about our approach, we have attached the full target return section from our pricing decision reasons paper to this submission, and will make this section and NERA's original report available as an additional attachment to our price setting disclosure (available on Auckland Airport's website). This should help interested parties understand more about how we considered the Commission's guidance, how we reflected on operating leverage, how our best parameter-based estimate of Auckland Airport's WACC for PSE3 was calculated, how we exercised our judgement (informed by evidence) to select a target return that was lower than that estimate, how cross-checks informed what we understood about the reasonableness of our approach, and how a key concern to us was the long-term benefit of consumers and the specific benefits that would flow from the investment programme.<sup>22</sup>
44. For interested parties who wish to understand Auckland Airport's best parameter-based estimation of its WACC for PSE3, we draw your attention to the NERA March 2017 Report at page 11. For interested parties who wish to understand how Auckland Airport weighed up the evidence and regulatory guidance when setting its target return, we draw your attention to the pricing decision extract at Appendix C. For interested parties who wish to understand how the forecast capital plan shaped our approach, and the relevant investment context (one which has seen unprecedented growth in tourism to which Auckland Airport has responded with a significant investment plan that has broad support from airlines, and has been investing over \$1m a day for some time), we draw your attention to sections 10.5.2 and 10.5.4 to 10.5.6 of the pricing decision extract. Although it is difficult to precisely quantify the long-term benefits this investment programme will bring, we sought to transparently describe these to our customers in our pricing decision (and at section 7.4 of our price setting disclosure – in the context of describing the capital plan).

**We think the framework in the draft report creates a different assessment approach – and one which we understood the Commission was trying to avoid**

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45. In the Draft Report, the Commission has set out a proposed framework for assessing an airport's target returns, and whether returns different to the Commission's mid-point sector-wide WACC estimate are justified. This framework is set out in a series of tables and bullet points focussed almost exclusively on whether an airport has appropriately justified departures from each individual parameter estimate that makes up the Commission's WACC estimate.
46. In particular, under this proposed framework the Commission's key question when assessing if an airport's overall target return is reasonable is whether individual WACC parameter adjustments are appropriate. It states:<sup>23</sup>
  - ***If each of the individual parameter adjustments are acceptable, and there are no other off-setting considerations, then we consider that airports have legitimate reasons to target returns above the mid-point.***

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<sup>22</sup> We note that this information was made available to airlines through the pricing consultation process, and that we provided a copy of the full pricing decision reasons paper to the Commission in June 2017.

<sup>23</sup> Commerce Commission, *Draft Report – Review of Auckland International Airport's pricing decisions and expected performance (July 2017 – June 2022)*, 26 April 2018 at [A16] and following boxes.

- *However, if there are some adjustments we consider not sufficiently justified (or there are other off-setting considerations), then the target return is unjustified.*

47. This is quite different to the analytical framework in the section 56G review and the signals provided through the IM Review process.
48. We appreciate that it is difficult to provide guidance about how a profitability assessment exercise will work in the abstract. Faced with undertaking the first profitability assessment exercise after the IM review, the Commission was understandably required to think about exactly how it would review our pricing decision, and to develop a tangible framework that sought to implement the high level guidance that it had provided in the past.
49. However, we think that various features of the assessment framework in the draft report are inconsistent with the flexible and contextual profitability assessment that was signalled through the IM review. In practice, the draft report actually creates a different assessment approach that we thought the Commission was trying to avoid.
50. As discussed above, at the end of the IM Review we understood that the removal of the published WACC range was designed to increase flexibility in how the WACC IM applied to profitability assessments, not reduce it. The Commission signalled that it wanted to reduce the focus on specific WACC percentile estimates and promote a contextual analysis of the reasons behind airport pricing decisions – not that it wanted to move away from the concept of an acceptable range of returns for an airport. The guidance indicated there would be an assessment of the contextual analysis of why the returns differed to any given WACC estimate, not that the discussion would revolve around a parameter-by-parameter analysis of every basis point difference from the Commission’s mid-point sector-wide WACC estimate.
51. We interpreted the renewed focus on the mid-point sector-wide WACC estimate as clear guidance that airports would need to explain, by reference to evidence, how and why their individual approaches differed from that estimate – not to imply that this was the right number for airport pricing in all circumstances. We did not envisage that returns above the mid-point estimate would be presumed to be excessive unless specific evidence was put forward to quantify every basis point of difference between the Commission’s mid-point estimate and Auckland Airport’s target return.<sup>24</sup>
52. Overall the Commission’s approach in the draft report is less predictable than Auckland Airport expected and it does not appear Auckland Airport is being judged on what it could have reasonably known about the Commission’s assessment framework at the time it set prices. Our main concerns with the proposed assessment framework in the Draft Report are that:
  - a. The distinction between WACC estimates and an appropriate rate of return – promoted by Professor Yarrow and recognised by the Commission through the IM review – appears to have been lost;
  - b. The concept of earning an appropriate economic return over time has been overshadowed by an assessment approach that concentrates almost solely on individual WACC parameters;
  - c. Rather than reducing the focus on rigid and numerical comparisons between the mid-point regulatory WACC estimate and an airport’s target return, the proposed assessment framework appears to increase the focus on these comparisons;

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<sup>24</sup> We accept the Commission has said that not all of the difference between Auckland Airport’s target return and its mid-point WACC estimate represents excessive profits. But the Commission’s headline conclusions, and its quantification of the potential excess profits, is based on the full difference from the mid-point. This strongly suggests that all of the additional returns will be treated as excessive unless Auckland Airport can justify every basis point difference between its target return and the Commission’s mid-point estimate.

- d. The concept of an acceptable range for airport profitability appears to have disappeared – replaced by a requirement to precisely quantify every basis point difference from the mid-point WACC estimate;
  - e. The inherent imprecision of a WACC estimate – and Professor Yarrow’s caution about the limitations of any WACC estimate as a measure of reasonable profitability – has been lost;
  - f. Efforts to explain the inherent commercial judgement exercised in moving down our target return from our own Auckland-Airport-specific WACC estimate to a target return that we believed the Commission would find reasonable, as supported by reasonableness checks and an explanation of the consumer benefits to the lay person, has been interpreted as being “vague” about our approach;
  - g. We are struggling to see recognition of the Commission’s position that it is logical for an airport to target a return to cover all its capital costs, informed by information about the returns its investors require (for example 20 years of Bloomberg beta data for Auckland Airport), to support investment in the long-term interest of consumers; and
  - h. It is not clear how the wider context – including an airport’s conduct – is factored into the assessment approach.
53. The combined effect of the approach in the draft report means that, more than ever before, the mid-point WACC estimate appears to be given primacy in a profitability assessment in a way that treats it as a “target rate of return” or a “specific returns benchmark” that airports ought to achieve – seemingly moving in the opposite direction to the contextual assessment framework that we understood the Commission had signalled through the IM review (and which we agreed was the right way forward for information disclosure regulation.<sup>25</sup>

**The key task for the Commission is to exercise judgement on the reasonableness of pricing decisions made by airports in light of the specific context and the airport’s conduct – guided by an overall focus on the long-term impact to consumers**

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54. Across a number of regulatory decisions since the start of Part 4 regulation, the Commission has demonstrated that it is able to weigh a number of factors and exercise its judgement to decide whether particular decisions and outcomes are likely to be consistent with the long-term interest of consumers. For example:
- a. The Commission has previously recognised that drawing insights from empirical methods does not always provide a complete answer, and that empirical results must be balanced against other considerations. For example, when developing its cost of capital estimate for the electricity and gas sector, the Commission described its approach to weighing empirical evidence against other factors, and the need to exercise judgement to determine an approach that best meets the long-term interest of consumers. It stated:<sup>26</sup>

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<sup>25</sup> As far back as the merits review proceedings, the Commission has noted concerns that the WACC estimate would be treated as a target rate of return, but said that these concerns “ignored the way in which the information would be used”. (Commerce Commission submissions, 6 August 2012, Volume 2 at paragraph 89.) The Commission was clear that it would take into account a range of information when assessing airport performance, and would not take the WACC IM as establishing a “target rate of return” or a “specific returns benchmark” that airports ought to achieve. (Commerce Commission submissions, 6 August 2012, Volume 2 at paragraph 80). See also Commerce Commission, *Input Methodologies Review Decisions - Topic Paper 6: WACC percentile for airports*, 20 December 2016 at [58].

<sup>26</sup> Commerce Commission, *Input Methodologies (Electricity Distribution and Gas Pipeline Services) Reasons Paper*, 22 December 10 at [6.529].

*While the Commission uses empirical methods wherever possible, the Commission's approach is not mechanical. **Rather the Commission weighs the empirical results against other considerations, and exercises its judgement to best estimate the cost of capital and satisfy the Part 4 Purpose.***

- b. The Commission has also been clear that, while evidence or analysis can provide information about the nature of problems and provide general insights about the reasonableness of a given solution, it will often be unable to provide a definitive outcome.

For example, in its decision to select the 67<sup>th</sup> percentile of its WACC estimate to set prices for the energy sector, the Commission was clear that due to fundamental uncertainty it was not possible to determine the optimal WACC percentile for pricing based on empirical analysis alone. After a lengthy consultation period, the substantial evidence set gathered by the Commission and contributed to by interested parties could only suggest a relatively wide potential range for the pricing percentile of between the 60<sup>th</sup> and 75<sup>th</sup> percentiles. The Commission emphasised that there was a limit to the information that could be gleaned from empirical evidence, and that it was required to apply judgement, guided by information, in reaching its decision:<sup>27</sup>

*Although we now have substantially more information, judgement is still required when deciding the appropriate WACC percentile.*

*There are several key relationships which directly influence the 'optimal' WACC percentile, but which are subject to fundamental uncertainty. For example, it is extremely difficult to empirically estimate the link between the WACC allowed by the regulator, the level of investment by regulated suppliers, and how this affects quality of service.*

***Additional work will not resolve all of the uncertainty surrounding these key relationships. Although we now have significantly more information to assist us in making a decision, we must still exercise judgement when selecting the WACC percentile. However, the information we have gathered has helped narrow the scope of judgement required when selecting the WACC percentile.***

This view was supported by other experts in the same process. For example, Professor Vogelsang's statements (cited by the Commission in its final decision) show that empirical analysis will only provide some of the information necessary for a sound regulatory decision. For the rest, judgement is required:<sup>28</sup>

*Thus, while Oxera's analysis is likely to inform the regulator about the nature of the problem, it is only weakly suggestive of the outcome, which is for the NZCC to set an allowed WACC between the 60th and the 70th percentile of the WACC distribution. **In my view, the report's main insight is that only some of the relationships necessary for a sound decision can empirically be estimated and that for the remaining relationship the NZCC needs to use judgement.***

- c. Further, the Commission has previously demonstrated that it is possible and appropriate for it to examine a range of factors and use its judgement to look at the overall picture – making a decision about the reasonableness of an approach after considering the combined effect of a number of qualitative and quantitative factors (even where those factors in isolation may not be very strong).

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<sup>27</sup> Commerce Commission, *Amendment to the WACC percentile for price-quality regulation for electricity lines services and gas pipeline services: Reasons Paper*, 30 October 2014 at [X14] – [X16].

<sup>28</sup> Professor Ingo Vogelsang, *Review of Oxera's Report, Input methodologies – Review of the '75th percentile' approach*, 10 July 2014 at [2] – [5], cited in Commerce Commission, *Amendment to the WACC percentile for price-quality regulation for electricity lines services and gas pipeline services: Reasons Paper*, 30 October 2014 at [5.23].



For example, when reviewing its approach to estimating the asset beta for gas pipeline services, the Commission decided “on balance” to apply a 0.05 uplift to its comparator energy sector sample due to a range of factors that it believed supported this approach. This was despite the Commission’s acknowledgement that the comparator sample analysis provided either relatively weak or some limited support for an upwards adjustment,<sup>29</sup> overseas regulatory precedent did not provide clear support for a gas uplift relative to electricity lines services,<sup>30</sup> the Commission’s expert no longer supported using a higher asset beta for gas pipeline businesses,<sup>31</sup> and none of the factors supporting an upwards adjustment were considered very strong in isolation.<sup>32</sup> However, the Commission considered all relevant factors in combination, and concluded that a 0.05 adjustment was appropriate.

The importance of examining the combined effect of a number of choices was also noted when the Commission was making a decision on the cost of capital IM for the airport sector, where it stated that:<sup>33</sup>

*The estimation of a cost of capital is not a mechanical task. To determine the methodology for estimating the cost of capital, and to assure itself that the estimate is reasonable and meets the Part 4 Purpose and the purpose statement of information disclosure regulation, the Commission has had to exercise a degree of judgement over these matters. **The Commission has carefully considered the effect of a number of choices individually and in combination.***

55. In our view, these examples show that the Commission’s proposed assessment framework (and the way that framework has been applied in the Draft Report) is yet to include at least the following key elements which the Commission regularly applies in its other regulatory decisions:
  - a. Clear appreciation that empirical evidence will not provide a complete answer, and that judgement is inevitable. Empirical evidence can provide a guide to narrow the scope of that judgement, but it is unrealistic to expect it to provide a definitive answer – both when an airport is making its pricing decision, and when the Commission is subsequently assessing that decision.
  - b. An acknowledgement that market conditions and commercial reality matter, and are relevant to regulatory decisions – including when evaluating the appropriate rate of return for a regulated business in any given circumstances.
  - c. Recognition that making a decision about whether any given approach is reasonable requires a balanced look at the overall picture, examining all factors in combination and weighing empirical results alongside other considerations.
56. We consider these are consistent themes of the Commission’s past decision-making that should be applied across sectors and across time to support predictable and proportionate decisions.
57. We also note that a number of the above examples – showing these themes in action – are taken from sectors that are subject to price control. In our view, this provides further support for the Commission to broaden its assessment approach compared to that applied in the Draft Report. If judgement, discretion and balancing a range of quantitative

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<sup>29</sup> Commerce Commission, *Input Methodologies Review Decisions - Topic Paper 4: cost of capital issues*, 20 December 2016 at [389].

<sup>30</sup> Commerce Commission, *Input Methodologies Review Decisions - Topic Paper 4: cost of capital issues*, 20 December 2016 at [434].

<sup>31</sup> Commerce Commission, *Input Methodologies Review Decisions - Topic Paper 4: cost of capital issues*, 20 December 2016 at [443].

<sup>32</sup> Commerce Commission, *Input Methodologies Review Decisions - Topic Paper 4: cost of capital issues*, 20 December 2016 at [453].

<sup>33</sup> Commerce Commission, *Input Methodologies (Airports) Reasons Paper*, 22 December 2010 at [6.1.5].

and qualitative considerations is an inherent part of making regulatory decisions under price control, it is just as (if not more so) relevant when carrying out a profitability assessment for sectors subject to information disclosure – particularly when that assessment approach was intended to be a flexible and proportionate exercise.

58. We think a true contextual analysis would therefore reflect the principles set out above, along with the types of questions that the Commission asked during the section 56G review and the signals it provided through the IM Review (as discussed at Section 1 above). This would provide an approach for assessing airport profitability that would be more consistent with the Commission's stated intentions through the IM review, its past regulatory practice, and the nature and purpose of information disclosure regulation.
59. Drawing on this information, in our view an assessment approach that fully implements the Commission's intent for a flexible, contextual profitability assessment should include the following types of questions:
- What factors has the airport put forward in support of its target return? This may include factors relevant to WACC estimation (such as airport-specific WACC parameter and operating leverage estimates (refer to Section 3 below), or different WACC estimation models / methodologies), but could also include a range of factors relevant to the separate question of determining a reasonable rate of return, including:
    - factors supporting an uplift from an airport's WACC estimate to determine an appropriate rate of return;
    - airport-specific risks or challenges for the pricing period that are relevant to the rate of return;
    - information the airport has about the returns its investors require;
    - contextual information used to explain any downwards adjustment from an airport's own WACC estimate to its actual target return so as to land in a range expected by the airport to be acceptable to the Commission; and
    - broader economic and/or contextual factors.
  - What support is there for the relevance of these factors? This may include academic theory, regulatory precedent, data sources and/or empirical evidence, practical examples, and/or other reliable sources; and could include a combination of historic and forecast information, as well as comparisons to the industry sample if relevant.
  - Are any factors capable of being empirically estimated? If so, what empirical evidence is available and what does this tell us about the reasonableness of the airport's target return?
    - We note that empirical evidence is likely to exist on a continuum. For example, evidence could: (a) support the relevance of any given factor when assessing an acceptable return for an airport; (b) inform the range of acceptable returns for an airport; and/or (c) suggest a specific target return for an airport that is different to the Commission's mid-point WACC estimate. All types of empirical evidence are relevant – if empirical evidence does not fall into category (c), it can still provide support for an airport's pricing approach.
    - If a factor is not capable of being empirically estimated (either wholly or in part), what does the available information tell us about the weight that should be applied to that factor as part of the assessment of appropriate profitability? For example, is it a strong or weak factor in support of the airport's target return?
  - What is the likely long-term impact to consumers of the airport's pricing decision?

- What are the potential costs and benefits to consumers of the airport's approach?
  - What might be the consequences for consumers if the Commission considers the airport's approach is unreasonable?
  - What does the balance of consumer benefits and costs suggest about the reasonableness of the airport's target return?
- Does the airport's conduct demonstrate that it is seeking to earn an acceptable return over time?
    - Has the airport considered and responded to available regulatory guidance and relevant airline feedback when setting its target return?
    - Has the airport transparently explained its approach?
    - Are the airport's forecasts reasonable?
    - Has the airport appropriately drawn on information to narrow the scope of the judgements required?
    - How does the decision compare with past pricing decisions?
  - After examining all factors individually and in combination, weighing empirical results and data points alongside qualitative considerations, and reflecting on market conditions, commercial reality, and the airport's conduct in light of its reasonable expectations:
    - How reasonable were the judgements made by the airport when making its pricing decision?
    - Are the airport's return expectations within an acceptable range in light of its particular circumstances for the pricing period in question?
    - Overall, is the airport targeting an appropriate economic return over time?
60. To us, these types of questions appear more consistent with a true contextual assessment of airport profitability – and one which more clearly puts the long-term interests of consumers at the heart of that assessment exercise.
61. This type of approach – weighing empirical results and data points against other qualitative considerations, and exercising judgement to determine whether an airport's target return is consistent with the Part 4 purpose – also appears more consistent with the Commission's general approach to its regulatory decision-making, and more consistent with the nature and purpose of information disclosure regulation.

## Section 2: A contextual analysis of Auckland Airport's expected profitability for aeronautical pricing activities

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62. In this section, we step through the questions above for Auckland Airport. In our view, this shows that a contextual analysis of Auckland Airport's pricing decision is not consistent with a finding of excess profits.

### What factors has Auckland Airport put forward in support of its target return?

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63. Auckland Airport decided to adopt a company-specific target return for PSE3 pricing of 6.99%. We exercised our judgement to select this target return, informed by expert advice on Auckland Airport's cost of capital, the Commission's regulatory guidance, feedback from our customers, and our analysis and consideration of the unique challenges and circumstances that Auckland Airport will face over PSE3.
64. The heart of the issue we faced when setting prices was the necessary return to incentivise the investment programme for PSE3, which is set to deliver considerable benefits to consumers over the long-term. Our target return of 6.99% is the best estimate of the rate of return that we require to help deliver the forecast investment programme over PSE3, informed by Auckland Airport's efficient cost of funding, the risks we face over the pricing period, the size and characteristics of our capital plan, and the broader circumstances that we were aware of at the time of our pricing decision. This target return is below our best point estimate of an Auckland Airport-specific WACC estimate for PSE3, reflecting the countervailing influence of the Commission's industry-wide airport-sector WACC estimate used for information disclosure monitoring purposes and airline feedback advocating for that WACC estimate to be used as Auckland Airport's target return for PSE3, as well as recognition of the inherent uncertainty of estimating the true estimate with 100% confidence.
65. At the time we set prices, we believed it was entirely consistent with the Commission's regulatory framework for Auckland Airport to determine (and justify) an airport-specific target return. In particular, we firmly believed that our unprecedented investment cycle made it appropriate for us to target a return specific to Auckland Airport, and which differed from the Commission's notional WACC mid-point estimate. Although our target return was therefore informed by the Commission's view on the industry-wide cost of capital that it uses for monitoring purposes, we were also guided by measurable and verifiable Auckland Airport-specific factors.
66. When exercising our judgement about the required target return for PSE3, we also undertook cross-checks of the reasonableness of our target return using a mix of parameter inputs that we thought a regulator would take into account. These lead us to consider that our 6.99% target return was reasonable.
67. We note that the price path resulting from our Final Pricing Decision was not sufficient by itself to deliver our forecast investment programme over PSE3. Although our target return is an important part of the solution, a range of capital management levers have been developed and implemented by Auckland Airport to help make the forecast plan affordable to the company. In this context, and as we explain further in this section, we consider our target return is fair and reasonable, and represents an appropriate balance between the long-term interests of passengers, airlines and Auckland Airport in delivering quality infrastructure and providing quality services into the future.
68. As we explained to airline customers in our final pricing decision:
- a. Auckland Airport developed an investment plan where Auckland Airport and airlines representing approximately 80% of total airport passengers are aligned on

the need for investment, the scale of the investment programme, and the long-term benefits that this plan is intended to deliver for airlines and passengers.

- b. We have estimated an Auckland Airport-specific WACC of 7.8% taking into account the particular risks and challenges we face over this pricing period, including the impact of the capital plan and the current stage of the investment cycle on our cost of capital.
- c. We carefully considered and weighed a wide range of contextual factors when setting our target return. Although we consider there are significant airport-specific circumstances that would support a target return of 7.8% or higher, we ultimately decided to target a return that is lower than our estimate of the Auckland Airport-specific WACC for PSE3. The regulatory framework was a key factor in this decision, along with our consideration of feedback from our substantial customers throughout the pricing consultation period.
- d. The investment plan is forecast to result in material changes to Auckland Airport's operating leverage through the pricing period, which increases the risk to shareholders and debtholders. The investment programme through PSE3 is relatively fixed in nature and Auckland Airport will be vulnerable to changes in the demand environment, which has been at a cyclical high point.
- e. Ultimately, we considered that our target return of 6.99% promoted the long-term benefit of consumers. Compared to the Commission's mid-point industry-wide WACC, we believed that this level of return would provide consumers with a higher degree of confidence that Auckland Airport can deliver on an investment plan to:
  - i. Alleviate current capacity constraints across terminal and airfield infrastructure;
  - ii. Provide resilience across the airport system;
  - iii. Provide services at the quality demanded by our customers, including reducing bussing operations to a level that our customers are broadly comfortable with;
  - iv. Improve service quality across the airport system, reducing delays and associated costs;
  - v. Drive future efficiencies, including through the use of technology to provide increased throughput and improve the end-to-end customer journey;
  - vi. Enable efficient peak growth, valued by a clear majority of our airline customers and which they are telling us their passengers value);
  - vii. Address a key consistent theme of passenger surveys, by providing a pathway towards an integrated facility that will improve ease of connections between international and domestic jet operations; and
  - viii. Respond to broader network issues through an integrated approach to our roading network that responds to airline and passenger concerns.
- f. Auckland Airport was also conscious that, in a workably competitive market, not all risks are passed on to consumers. Although we set our target return at a level that we considered necessary to help fund the investment plan and to provide consumers with greater confidence that this plan will proceed, our target return did not place the burden of supporting that plan solely with consumers. That is, we believed it would provide interested parties with confidence that Auckland Airport is not targeting excessive prices. At the time we set prices, the target return of 6.99% left Auckland Airport with a material unsolved funding gap, particularly in

light of the circa \$1 billion of works under construction that will build up on Auckland Airport's balance sheet towards the end of PSE3. These works-in-progress will not be funded by aeronautical charges over PSE3 and the borrowing to fund this investment will affect the company's credit metrics and will likely require implementing any of a range of capital management levers available to Auckland Airport.

- g. We understood that all parties were aware that an element of judgement was required when selecting a target return, and that there is no single right answer. We considered that our target return of 6.99% struck the right balance of addressing the airport-specific challenges and risks we will face during our elevated investment cycle, providing a return that will incentivise and support the delivery of an investment plan that provides significant long-term benefits for consumers, and demonstrating that we were cognisant of the need to minimise the pricing impact for our airline customers and passengers.
69. The key factors supporting Auckland Airport's target return included a number of factors specific to the nature of the capital investment plan for PSE3. For example, and as set out in the extract from our pricing decision reasons paper (attached as Appendix B), we considered that:
- a. The unparalleled level of capital expenditure forecast for PSE3 will exacerbate the material risks that Auckland Airport already faces when investing in large, lumpy infrastructure. The size of the investment challenge over the next five years puts these risks front and centre, and reinforces the importance of setting a target return that better reflects a fair risk-adjusted return on equity for Auckland Airport given the airport-specific risks and circumstances that we face. In other words, given the size and nature of the capital investment planned for this pricing period, setting a target return informed by direct estimates of Auckland Airport's systematic risk is important for PSE3 to ensure that the capital plan is adequately supported.
  - b. Auckland Airport will also face large cash outflows during the construction process, which cannot be scaled back or reversed easily in case of a material decrease in demand, and can therefore be considered fixed. During its construction phase, Auckland Airport is therefore expected to have higher operational leverage than in the past and relative to comparators. This increase in operational leverage leads to an increase in systematic risk (beta) relative to Auckland Airport's historic baseline, as well as an increase relative to the companies used by the Commission in its sample airport comparators. This increase in systematic risk is specific to Auckland Airport and to this stage in our investment cycle.
  - c. The capital programme is demand-led and responds to changes in demand in the second half of PSE2 and forecast through PSE3. If the demand environment changes once projects are committed, we face material risk through PSE3. This is of considerable concern given that a number of projects in our forecast capital plan involve substantial risks over and above the usual risks involved in constructing lumpy infrastructure that cannot be delivered incrementally. In particular, we will be carrying approximately \$1 billion in capital works in progress towards the end of PSE3, over \$500 million of which will relate to the domestic terminal integration project. This makes Auckland Airport extremely vulnerable to changes in the domestic market, which is currently dominated by two carriers. For example, a partial exit of a carrier from the domestic or regional market once construction has started on the new domestic jet facility will lead to PSE3 losses and may mean that the required price point for domestic services in PSE4 is no longer sustainable to recover the investment cost as originally forecast.
  - d. Further, the construction environment in New Zealand is relatively constrained and Auckland Airport faces risk of construction cost escalation and procurement risks.



- e. In part, our capital plan has been developed to build towards future capital efficiencies. For example, the leading option for domestic integration allows for the possibility of further integration between domestic and international operations in the future, which we believe will provide efficient capital solutions over time for airlines and consumers. However, there will need to be material innovation in the future in order to continue to realise capital efficiency benefits and mitigate the need for further investment. We are reliant on a range of parties, including border and government agencies, to enable this innovation, and there is a real risk that it may not be achieved. We will play our role through systems and process innovation and seek to influence these parties but, ultimately, if the innovation we are seeking cannot be delivered, this will have consequences for passengers and airlines, and will require further investment.
  - f. After reflecting on the balance of factors, we considered it was appropriate to develop an Auckland Airport-specific midpoint WACC estimate that put greater emphasis on direct measures of Auckland Airport's systematic risk than the Commission's global sample set and is informed by analysis of the factors affecting Auckland Airport's risk profile at this stage of our capital cycle.
70. We also considered a number of additional factors were relevant when setting our target return – described at section 10.5.4 of our final pricing decision reasons paper. These included the then-unprecedented lows for global interest rates and government bond rates and the risk of dramatic increases in global interest rates over PSE3, financeability considerations, and the impact of loss of real options.
71. We note that one of the factors that Auckland Airport described as supporting a target return that was higher than the Commission's mid-point WACC was our forecast cost of debt over PSE3. We acknowledge that the Commission has critiqued part of our advisor's methodology used to forecast these debt costs in the draft report. Auckland Airport has considered the points raised by the Commission and acknowledges these points are valid. However, we note that our forecast cost of debt only increases a WACC by 2 basis points compared with the Commission's cost of debt estimate, whereas our target return of 6.99% over PSE3 for aeronautical pricing activities is over 80 basis points below our best estimate of the Auckland Airport-specific WACC (or 78 basis points adjusting for the difference in forecast cost of debt).

### What evidence is there in support of these factors?

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72. As we explained in our pricing decision (and endeavoured to explain in our price setting disclosure), and discuss further in Section 3 below:
- a. We consider the available evidence provides substantial support for setting a target return that is higher than the mid-point of the Commission's regulatory WACC estimate. This is because we face a number of airport-specific challenges, particularly at this stage in our investment cycle, and it is appropriate for us to reflect these challenges in an Auckland Airport-specific target return.
  - b. We carefully considered a range of factors when setting our target return. Although some of these factors cannot be precisely quantified, they are highly relevant and had a clear influence on our consideration of the appropriate return for Auckland Airport for PSE3.
  - c. As the Commission and the High Court have previously recognised, estimating WACC is a complex task involving the significant exercise of judgement, and is open to the possibility of error as well as there being a range of views. The same complexities, judgements, range of views and potential for error exist when setting a target return, particularly for a five-year pricing period. As a result (and as the Commission has previously acknowledged in the context of the electricity sector),

it is not possible to determine the optimal target return based on empirical analysis alone. Rather, we needed to apply judgement to select our target return for PSE3.

- d. In exercising this judgement, we had reference to a range of data points when considering the appropriate target return for Auckland Airport for PSE3, along with the factors set out in the above section.

**Are any factors capable of being empirically estimated? If so, what empirical evidence is available and what does this tell us about the reasonableness of the airport's target return?**

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73. Among the range of factors supporting Auckland Airport's target return, Auckland Airport's systematic risk is a key factor capable of empirical estimation. In our view, this evidence supports our target return of 6.99% for aeronautical pricing activities as fair and reasonable given the airport-specific risks we will face over PSE3.
74. We appreciate that the Commission has identified some areas where it is not yet persuaded about the strength of this empirical evidence, and has requested further evidence in specific areas.
75. We respond to the Commission's requests and evidential concerns in the following section. Following this analysis, we return to the contextual assessment of Auckland Airport's target return in Section 4.

## Section 3: Evidence on Auckland Airport's systematic risk, operating leverage and asset beta

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76. In the context of the profitability assessment approach set out in the Draft Report, we believe the available evidence supports Auckland Airport's target return as fair and reasonable, and a legitimate departure from the Commission's mid-point regulatory WACC estimate.
77. The draft report appears to suggest that the only legitimate rationale for Auckland Airport's target return to depart from the Commission's mid-point is if an "implied adjustment" to the comparator sample average beta can be supported due to projected increases in operating leverage for PSE3.
78. Our position is different. In response, we note that:
- a. Our first key point is that the empirically estimated asset beta for Auckland Airport is a better representation of the riskiness of Auckland Airport than the average of the comparator sample. It is a directly relevant and reliable evidential source about Auckland Airport's systematic risk – one which demonstrates that we are already different to the comparator sample average – and it was wholly appropriate for us to use this information to inform our pricing decision.
  - b. In this context, the "implied beta" of 0.68 embedded in Auckland Airport's target return (as it has been characterised by the Commission) is a cautious assessment of Auckland Airport's asset beta for PSE3. More recent data would suggest that a figure nearer 0.81 (the upper bound of NERA's asset beta estimation for Auckland Airport, based on the most recent five-year sampling period, and using weekly, 4-weekly and daily data) could be justified.
  - c. At the same time, Auckland Airport is facing a substantial increase in operating leverage over PSE3 as our unprecedented capital expenditure programme will drive a massive increase in fixed cash flows and increase our exposure to risk. The historic estimates of Auckland Airport's systematic risk are based on observable historic market data, and will therefore not fully reflect this expected increase in operating leverage and corresponding increase in systematic risk over PSE3 that will result from our substantial investment plan.
  - d. When we set prices, Auckland Airport did not seek to separately quantify a sector-wide asset beta "uplift" to account for this expected increase in operating leverage (either to our own historic asset beta estimates, or to the comparator sample average). Rather, we considered that the forecast increase in operating leverage provided more support for the use of recent and direct measures of Auckland Airport's systematic risk to inform our target return rather than reference to the Commission's global sample set – and provided clear support for setting a target return informed by the factors affecting Auckland Airport's risk profile at this stage of our capital cycle.
  - e. In light of the clear signals that airport-specific evidence would be important to profitability assessments, it was also reasonable for Auckland Airport to anticipate that this information would be taken into account when the Commission was assessing the reasonableness of Auckland Airport's pricing approach. We do not agree with the Commission's decision to put this estimate to one side and to require Auckland Airport to justify an "implied adjustment" to the comparator sample average asset beta.
  - f. Further, the evidential threshold the Commission has set Auckland Airport to quantify an "implied adjustment" to the average of its comparator sample is not realistic (as the information the Commission has requested would require, among other things, creating and verifying 5-year aeronautical segment financial

forecasts for the majority of the Commission's 26 airport company sample set, when this data is not publicly available), and goes beyond the evidential standard the Commission uses when making its own price-setting decisions.

- g. If Auckland Airport is unable to precisely quantify the "implied adjustment" to the average asset beta from the Commission's comparator sample, that does not mean that a higher target return than the mid-point regulatory WACC is unjustified. Instead, reasonable judgement informed by airport-specific evidence is required to determine whether the "implied adjustment" and/or the overall target return is within an appropriate range.
79. In any event, although we didn't quantify the issue in this way at the time we set prices (given the available data on our airport-specific beta), we think the available evidence provides clear support for the implied 0.08 uplift to the average asset beta estimate from the Commission's comparator sample – and for a finding by the Commission that Auckland Airport's target return is fair and justifiable. As we explain below:
- a. We have carefully considered the Commission's request for further evidence, particularly its request for an empirical comparison of a robust estimate of Auckland Airport's forecast operating leverage over PSE3 against comparable estimates of the degree of operating leverage for other companies in the comparator sample, and its interest in whether other regulatory agencies have made asset beta adjustments due to operating leverage of a similar magnitude to that of Auckland Airport. These points are addressed by NERA in a further paper, attached to this submission as Appendix E. As explained by NERA:
    - i. Regulators and ratings agencies recognise the link between capex and systematic risk, with variation in cash flows a key issue for regulated airports (independent of volatility in profits). There are a number of examples where regulators have awarded absolute and / or relative asset beta uplifts of comparable size to the difference between the asset beta implicit in Auckland Airport's target rate of return and the Commission's disaggregated value for the comparator sample.
    - ii. For its draft report, the Commission relies on the measure of "degree of operating leverage" provided by Bloomberg (EBIT growth/revenue growth) to draw insights about the likely change in Auckland Airport's operating leverage over PSE3. However, there are flaws with this measure which means that it does not provide a reliable indicator of operating leverage for Auckland Airport - especially because it does not capture the cashflow impact of capex that is driving the change in Auckland Airport's risk.<sup>34</sup>
    - iii. Focusing (appropriately) on cashflow based measures of operating leverage that are affected by capital expenditure suggests that Auckland Airport's current and particularly forecast operating leverage is higher than the comparator sample, and that the forecast increase in Auckland Airport's operating leverage is material.
    - iv. Whether the operating leverage of firms in the comparator sample is expected to increase or not is irrelevant to the current exercise – the question at hand is whether Auckland Airport's *forward looking* beta is higher than the *historical* beta of the comparator sample on which the Commission's sector-wide midpoint WACC reference asset beta value is built. If the operating leverage of the comparator sample increases, then so will the average beta of the comparator sample.

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<sup>34</sup> Nor, from an accounting profit perspective, does it capture the depreciation expense impact of approximately half of the forecast PSE3 capex, which will still be held in works under construction at the end of PSE3 and not yet depreciating.

- v. While Auckland Airport can in theory reset prices during a 5 year pricing period, in practice this option is costly to exercise due to the resource intensive and time consuming nature of the required consultation process and subsequent regulatory review processes. The reset process appears to be far less onerous for some of the Commission's sample set, however, which regularly reset prices on an annual basis.
  - vi. An asset beta higher than the simple average of the comparator sample is supported by regulatory precedent, which shows that overseas regulators have allowed uplifts for high operating leverage that are larger than the implied uplift of 0.08 (13%) for Auckland Airport relative to the comparator sample average asset beta. NERA provides evidence to show that beta uplifts of up to 18% (UK CMA) and 26% (BNetzA in Germany) have been applied by regulators in Europe to account for higher operational leverage relative to comparator samples.
- b. In our view, whether considered through the lens of Auckland Airport's own beta estimates – particularly the more recent sampling periods (such as NERA's 5-year period, which generates an asset beta estimate for Auckland Airport of 0.81 or the Commission's data series for the two most recent 5-year periods, which generates an asset beta estimate for Auckland Airport of 0.71) – or by reference to the conceptual logic, evidence and regulatory precedent on operating leverage, the evidence supports both a higher asset beta for Auckland Airport than the Commission's unadjusted 0.65 sample average, as well as the implied 0.08 upwards asset beta adjustment from the Commission's adjusted comparator group average of 0.60.
  - c. When the available evidence is considered, an adjustment of 0.08 to the comparator sample average represents a conservative assessment of Auckland Airport's asset beta for PSE3, anchored to observable estimates of Auckland Airport's beta and representing a modest departure from the comparator average. The size of that departure is consistent with adjustments that have been made by overseas regulators to account for increased operating leverage (and may be on the conservative end of the scale of uplifts that have been applied). It is also relatively close to the size of adjustments that the Commission has made to asset beta estimates to account for systematic risk differences in the past, where it has applied its judgement (rather than seeking to quantify a precise adjustment) to make adjustments to its comparator sample averages for the gas and airports sectors.

80. We explain these points in more detail below.

### **Using a direct, observable estimate of Auckland Airport's actual systematic risk (i.e. actual beta) is appropriate**

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- 81. As the Commission has previously explained, beta is a measure of exposure to systematic risk, or the extent to which the returns on a company fluctuate relative to the equity returns in the stock market as a whole.<sup>35</sup> In the IM review, the Commission noted that:<sup>36</sup>

<sup>35</sup> Commerce Commission, *Input Methodologies Review Decisions - Topic Paper 4: cost of capital issues*, 20 December 2016 at [270].

<sup>36</sup> Commerce Commission, *Input Methodologies Review Decisions - Topic Paper 4: cost of capital issues*, 20 December 2016 at [272] – [273].

*Beta is not directly observable so we estimate it empirically. We use historic estimates of average betas because beta is expected to be relatively stable over time and historic betas are indicative of future betas.*

*For firms with traded stocks, the beta for the firm can be estimated directly from the historical returns on those stocks, relative to the market's return.*

82. The Commission has previously recognised that, as the cost of capital is intended to be forward-looking, forward-looking asset betas are required. However, the Commission has acknowledged that there is no reliable way to forecast betas, so it assumes that historic beta estimates are indicative of future betas. In the Commission's words, historic estimates of average betas are used because beta is expected to be relatively stable over time.<sup>37</sup>
83. In the Draft Report, the Commission accepted that Auckland Airport's actual beta is a "useful reference point", but then quickly dismissed the estimate – giving it no further weight in its analysis and instead claiming that Auckland Airport should have proposed an adjustment (supported by evidence) to its comparator sample-based average asset beta estimate of 0.60. The Commission:
- a. Stated that asset betas are "noisy" and there is a significant risk of estimation error when focussing on the observed beta for an individual company; and
  - b. Cited views from submitters during the Chorus UCLL/UBA pricing process, which also discussed the prospect of estimation error and suggested that regulators "rarely rely on a single firm to estimate beta".
84. The Draft Report therefore asks Auckland Airport to use airport-specific evidence about Auckland Airport's systematic risk to support an adjustment to the Commission's comparator sample average – but suggests that direct estimates of Auckland Airport's systematic risk (which show that Auckland Airport is already empirically different to the average asset beta of the comparator sample, and by how much) are not relevant to that exercise.
85. We are struggling to understand how the observed asset beta for Auckland Airport is not a relevant piece of evidence when assessing the reasonableness of Auckland Airport's approach, given the clear direction during the IM Review that airport-specific evidence would be considered highly relevant by the Commission, and the Commission's acceptance in the Draft Report that the observed asset beta for Auckland Airport is a useful reference point.
86. Our key concerns are as follows:
- a. We disagree with an assessment approach that focuses entirely on an analysis of Auckland Airport relative to the comparator sample average (particularly one that dismisses the empirical evidence on the observed beta for Auckland Airport relative to the sample). We note that:
    - i. Although a WACC IM has been developed and published for the industry, the Commission has acknowledged throughout the IM process that the systematic risk of companies may differ, with an associated impact on the return requirement.<sup>38</sup>
    - ii. At the time we set prices, Auckland Airport understood that the focus was on explaining why our approach to target return reflected our airport-specific circumstances – and supporting this with airport-specific evidence. We considered that our direct asset beta estimates were good airport-specific

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<sup>37</sup> Commerce Commission, *Input Methodologies Review Decisions - Topic Paper 4: cost of capital issues*, 20 December 2016 at [272].

<sup>38</sup> E.g. Commerce Commission, *Input Methodologies (Airports) Reasons Paper*, 22 December 2010 at [E8.9].

empirical evidence about our systematic risk and the impact of that on a reasonable return for Auckland Airport.

- iii. There were no signals in the IM review that we needed to do this type of analysis of Auckland Airport relative to the Commission's comparator sample to support our pricing approach when direct evidence about our systematic risk was available. However, part of our decision-making process involved carefully reading back through the s56G review materials to make sure we understood any relevant guidance the Commission had given in the past about how it would assess any airport-specific evidence. In its final report for Auckland Airport, the Commission noted in passing that "it is not clear that Auckland Airport's pricing structure is significantly different from the sample of 25 comparator airports used to estimate the asset beta in the cost of capital IM".<sup>39</sup>
  - iv. On this basis, we made a genuine effort to look at the comparator sample as one part of our discussion of Auckland Airport's systematic risk. However, we did not anticipate that we would be required to go to the lengths asked of us in the Draft Report to provide evidence about an adjustment to the comparator sample when data directly relevant to Auckland Airport was available, and the Commission had signalled an appreciation that a logical airport would set prices to cover its capital costs.
- b. We do not agree that our asset beta estimate is unreliable and should be discarded – either by Auckland Airport when setting prices, or by the regulator when assessing the reasonableness of that pricing decision. Auckland Airport's asset beta is the most directly relevant piece of information about investors' perceptions of the riskiness of Auckland Airport. It is relevant to both our price-setting task and to the Commission's profitability assessment exercise.

On this point, we attach an expert report from First Economics – contributed to by a former member of the UK Civil Aviation Authority Board responsible for setting price caps for the UK's designated airports, and a current member of the UK Competition & Markets Authority's expert Cost of Capital Panel. As noted in that report:

- i. Auckland Airport has been listed since 1998, giving a long-run of empirical data. Auckland Airport's share price can be assumed to reflect investors' collective best estimate of the discounted value of future equity returns from the airport's operations, and movements in Auckland Airport's share price are likely to be due to investors' reaction to new information about factors that will impact on future airport earnings, including through their perceived impact on traffic volumes, revenues and costs.
- ii. Auckland Airport's beta estimate stands out from the Commission's comparator sample as the only data point that can be said to be an observation of the "true" Auckland Airport beta. It would therefore seem natural and obvious that the Auckland Airport beta should have a different, unique status in any exercise to estimate Auckland Airport's cost of capital or assess the reasonableness of its rate of return.
- iii. Although beta estimation is not a precise science, and there is a need for some degree of judgement when interpreting the evidence, it is unnecessarily defeatist to say that the magnitude of the standard error around any single point estimate of beta renders it impossible to use a single company as the anchor for a CAPM cost of equity calculation.

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<sup>39</sup> Commerce Commission, *Final report to the Ministers of Commerce and Transport on how effectively information disclosure regulation is promoting the purpose of Part 4 for Auckland Airport*, 31 July 2013 at [F72].

- iv. There are steps that can be taken to minimise any estimation error, including sensible selection of beta statistics, averaging of betas calculated using different sampling frequencies and over different time periods, and considering the value of beta over longer horizons.
- v. There is a trade-off to be made between the smaller estimation error that can typically be obtained by using bigger sample sizes and the likelihood of obtaining more direct insights into the riskiness of Auckland Airport from its beta estimates. Any imprecision in the observed Auckland Airport beta (which can be reduced by the steps stated above) has to be compared to the error that can come from attempting to draw insights about Auckland Airport's systematic risk from unlike comparator evidence.
- vi. Given the range of differences between airport companies, there can be no presumption that all airports have the same exposure to systematic risk or have the same "true" beta – particularly when the Commission's sample of 26 airports is a global sample comprising companies that operate in 14 different countries and 4 different continents.
- vii. In effect, the Commission's assessment approach is saying that the Auckland Airport beta contains information of equal usefulness to the beta of any other listed airport company, wherever it is located in the world. In First Economics' view, this is a disproportionately low weight to place on the only direct observation of the Auckland beta.

On this basis, we think it is entirely reasonable for Auckland Airport to draw on market based estimates of its own systematic risk to inform our decision about our company-specific WACC and to inform our judgement about the appropriate target return necessary to support investment in light of the particular risks and challenges at Auckland Airport at this stage in our investment cycle. As noted by First Economics:<sup>40</sup>

*But for AIA there is extant and current stock market evidence on the riskiness of its airport business, and the really quite marked differences between airport businesses (reflected in beta divergence) make a global average a distinct second best when there is such direct evidence available.*

In this way, making a decision about the appropriate target return for Auckland Airport informed by airport-specific data about our systematic risk is comparable to the use of our company-specific cost of debt, reflecting our actual debt portfolio, to inform our target return – which the Commission accepts is reasonable in principle.<sup>41</sup>

- c. We also consider the Commission can be confident that a decision to give Auckland Airport's beta estimates weight in this profitability analysis does not create a concerning precedent for its regulatory decisions more broadly. Airports are subject to information disclosure regulation only, and are able to set their own prices which are then monitored by the regulator. The Commission's task is then to evaluate the airport-specific evidence relied on by each airport, and to form a judgement on whether the overall target return is justified and consistent with the long-term interest of consumers. This is a completely different exercise to that which applies when the regulator is setting prices directly for a regulated business.
- d. In any event, we note that there is strong regulator support for the use of individual beta estimates to guide regulatory decision-making, including in the airport sector. We note that:

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<sup>40</sup> See Appendix D at page 13.

<sup>41</sup> Commerce Commission, *Review of Auckland International Airport's pricing decisions and expected performance (July 2017 – June 2022): Draft Report*, 26 April 2018 at [A130].



- i. As explained in the attached paper from First Economics, the UK regulatory approach is to use the most direct evidence for estimation of the beta wherever available, and not to delve too far, or at all, into international comparator evidence. This applies most clearly where there are current stock market observations of the specific company in question.<sup>42</sup> We note in particular that the UK Competition Commission in 2007 expressly declined to move away from BAA's single company historic data to a sample set of comparable companies for the purpose of calculating price controls for Heathrow and Gatwick Airports. Even in its most recent review (concluded in 2014), that regulator still referenced the historical BAA asset beta data from seven years prior, rather than a sample of alternative comparable airport asset beta data.
- ii. First Economics has advised that regulators have sought to deal with the problem of "noise" in individual asset beta estimates by assembling a history of evidence comprising different beta statistics calculated over differing time periods, and making an overall judgement as to where beta(s) appear to sit based on that evidence. This is what Auckland Airport has done. Our pricing decision was informed by a range of asset beta statistics, sampled using daily, weekly and monthly data, averaged over a range of time periods between 5 and 20 years, to give an estimate of Auckland Airport's beta of 0.73-0.81 (as estimated by NERA). As the cross-check included in our pricing decision showed, we also took into account the range of beta estimates.
- iii. As noted by First Economics, it is not suggesting as a matter of principle that comparator evidence should always be of secondary importance, and it specifically notes the same arguments would not necessarily apply in the cast of other regulated sectors. As stated in the attached paper:<sup>43</sup>

*[T]here is an argument that revenue cap regulation for network utilities has created a class of companies across several countries that have certainty of revenue over broadly similar time horizons and face similar cost risks. It is not wholly unreasonable to imagine that investors might perceive these companies to be a class of very similar investments – a line of thinking that points towards the kind of large sample comparator analysis that the Commission has applied in its estimation of electricity and gas network betas.*

This argument provides further support that the Commission's concerns about regulatory precedent are overstated – in addition to the distinguishing features of the information disclosure regulatory regime.

87. As shown below, the available data on Auckland Airport's asset beta estimate demonstrates that Auckland Airport's systematic risk is already different to the comparator sample, even before expected increases in operating leverage over PSE3 are factored in.
88. When calculating the average asset beta of its comparator sample set, the Commission gave greater weight to weekly and 4-weekly data over the two most recent five-year periods (2006-2011 and 2011-2016). This meant that the Commission used the following data points to generate its average asset beta estimate (unadjusted) of 0.65.

	2006-2011	2011-2016
<b>Weekly asset beta</b>	0.62	0.62
<b>Four-weekly asset beta</b>	0.69	0.66
<b>Average asset beta – comparator sample</b>	0.65	

<sup>42</sup> John Earwaker and Dr Harry Bush CB, *Auckland Airport's Estimate of Beta*, May 2018 at page 13.

<sup>43</sup> John Earwaker and Dr Harry Bush CB, *Auckland Airport's Estimate of Beta*, May 2018, footnote 4 at 7.

89. The following tables show the comparator sample average excluding Auckland Airport, and compare these to the empirical estimates for Auckland Airport's beta over the same time period - again, using the Commission's asset beta data from the IM review process.

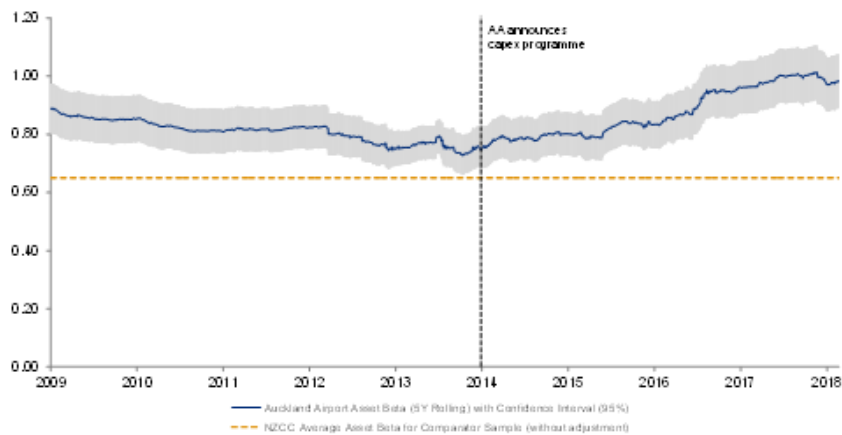
	2006-2011	2011-2016
<b>Weekly asset beta</b>	0.61	0.61
<b>Four-weekly asset beta</b>	0.69	0.66
<b>Average asset beta – comparator sample excluding Auckland Airport</b>	0.64	

	2006-2011	2011-2016
<b>Weekly asset beta</b>	0.74	0.73
<b>Four-weekly asset beta</b>	0.68	0.69
<b>Average asset beta – Auckland Airport</b>	0.71	

90. This demonstrates that, using data derived from the Commission's comparator sample set, the average systematic risk of Auckland Airport is already higher than the unadjusted 0.65 average asset beta of the Commission's comparator sample set - by approximately 6 basis points (0.06) if Auckland Airport is included in the comparator sample, and 7 basis points (0.07) if Auckland Airport is excluded from the comparator sample average.
91. We consider it is reasonable to assume this difference applies to the riskiness of Auckland Airport's aeronautical activities relative to the comparator sample average both before and after any downwards adjustments are made by the Commission to reach a beta estimate for regulated activities only.<sup>44</sup> In other words, we consider that the same differential between Auckland Airport's riskiness and the average of the comparator sample (6-7 basis points) is appropriate when considering the regulated activities of Auckland Airport today (ie before the impact of the future significant increases in operating leverage driven by the aeronautical capex plan).
92. Returning to the Chorus example cited by the Commission, although the Commission did not base its asset beta estimate for Chorus' UCLL and UBA services on the observed asset beta for Chorus, it did use this estimate as a cross-check on its estimate of beta. When assessing whether the use of its comparator sample average of 0.43 was reasonable to set prices for Chorus, the Commission noted that it was within the range of asset beta estimates observed for Chorus (0.35-0.52). This is not the case for Auckland Airport – where the range of average asset beta estimates observed for Auckland Airport using both the Commission's own data and preferred averaging methods (0.68 – 0.74) and NERA's data and preferred averaging methods (0.73 – 0.81) are both higher than the unadjusted average of the Commission's comparator sample (0.65).
93. As further explained by NERA:
- a. Auckland Airport's asset beta has increased by about 0.20 points after the first announcement of the increasing investment program in 2014, with the steepest uplift coinciding with Auckland Airport's consultation with airlines regarding the PSE3 aeronautical infrastructure investment programme and heightened investor relations disclosures of the expected increasing future capex profile – as shown in the following chart from NERA's report:

<sup>44</sup> For completeness, we also note that our expert advisor could not find any justification for the Commission's 0.05 downwards asset beta adjustment based on the data set referred to by the Commission: see e.g. Auckland Uniservices Ltd *IM review draft decisions cross-submission: Topic paper 4 (Cost of capital)*, 25 August 2016.

**Figure 3.3**  
**Auckland Airport Daily 5-Year Rolling Asset Beta and Confidence Level**



*Source: NERA illustration of Bloomberg data for Auckland Airport*

*Note: The labels on the x-axis refer to 31 March of each year, which is also used as reference day by the Commerce Commission. The underlying data are daily returns and net debt/equity from Bloomberg from 1 April 2009 to 21 May 2018.*

- b. NERA advises that this increase is significant in a statistical sense on the 95% confidence level. That is, the upper bound of the confidence interval of Auckland Airport's beta from March 2014 (i.e. following the masterplan capex increase announcement) is still clearly below the lower bound of the confidence interval as of March 2018. This implies that the increase in Auckland Airport's beta since 2014 is substantial and statistically significant, even accounting for the uncertainty in estimating the beta from observed stock data.
- c. Auckland Airport's beta (estimated over a five-year period using daily stock returns) is significantly above the Commission's non-adjusted average beta of 0.65 in a statistical sense. In other words, NERA is statistically confident that Auckland Airport's actual asset beta is greater than 0.65 over the long term. Given the statistically significant increase in recent years, NERA advises that interested parties can be even more confident that this is the case in the years since Auckland Airport's substantial future aeronautical capex programme has been disclosed to the market. In NERA's expert view, this implies that investors consider Auckland Airport to face significantly higher systematic risk than the average of the Commission's airport comparator sample.
94. In summary, we consider that the empirically estimated asset beta for Auckland Airport is a better representation of the riskiness of Auckland Airport today than the average of the comparator sample. It is a directly relevant and reliable evidential source about Auckland Airport's systematic risk – one which demonstrates that we are already different to the comparator sample average – and it was wholly appropriate for us to use this information to inform our pricing decision. It follows that this information is also good airport-specific information that is highly relevant when the Commission is assessing the reasonableness of Auckland Airport's pricing decision under an information disclosure regulatory framework.
95. In this context, the "implied beta" of 0.68 embedded in Auckland Airport's target return (as it has been characterised by the Commission) is a cautious assessment of Auckland Airport's asset beta for PSE3. More recent data would suggest that a figure nearer 0.81 (the upper bound of NERA's asset beta estimation for Auckland Airport, based on the most recent five-year sampling period, and using weekly, 4-weekly and daily data) could be justified.
96. At the same time, Auckland Airport is facing a substantial increase in operating leverage over PSE3 as our unprecedented capital expenditure programme will drive a massive

increase in fixed cash flows and increase our exposure to risk. The historic estimates of Auckland Airport's systematic risk are based on observable historic market data, and will therefore not fully reflect this expected increase in operating leverage and corresponding increase in systematic risk over PSE3 that will result from our substantial investment plan.

97. When we set prices, Auckland Airport did not seek to separately quantify an "uplift" to account for this expected increase in operating leverage (either to our own historic asset beta estimates, or to the comparator sample average). Rather, we considered that the forecast increase in operating leverage provided more support for the use of recent and direct measures of Auckland Airport's systematic risk to inform our target return rather than reference to the Commission's global sample set – and provided clear support for setting a target return informed by the factors affecting Auckland Airport's risk profile at this stage of our capital cycle.
98. In light of the clear signals that airport-specific evidence would be important to profitability assessments, it was also reasonable for Auckland Airport to anticipate that this information would be taken into account when the Commission was assessing the reasonableness of Auckland Airport's pricing approach. We do not agree with the Commission's decision to put this estimate to one side and to require Auckland Airport to justify an "implied adjustment" to the comparator sample average asset beta.

### **The evidential threshold for an "asset beta adjustment" does not appear proportionate**

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99. As discussed above, the Draft Report appears to rule out Auckland Airport's beta as relevant evidence when assessing the reasonableness of our target return for PSE3, instead challenging Auckland Airport to quantify an adjustment to the comparator sample average.
100. Auckland Airport has sought to respond to the Commission's call for further evidence, including a more robust quantification of the expected increase in operating leverage and a more robust comparison of Auckland Airport's operating leverage to the comparator sample (discussed below and in the attached NERA paper).
101. However, we encourage the Commission to acknowledge that it may not be possible to precisely quantify an adjustment to the comparator sample average asset beta from this approach - some inherent judgement will remain. We note that:
  - a. Asking Auckland Airport to quantify the appropriate magnitude of an adjustment to the comparator sample in this way seems out of step with the Commission's past acknowledgement that it is likely to be extremely difficult to meaningfully compare the comparator sample countries against New Zealand airports in a way that supports precise adjustments to the comparator sample average. For example, when developing the original IMs, the Commission stated that:<sup>45</sup>

*The Commission considers it is not feasible to: (a) adequately assess the structure of the regulatory regime that each of these airports is subject to; and (b) meaningfully compare those regimes against the one that applies to New Zealand Airports with sufficient precision to robustly inform the magnitude of an adjustment for differences in regulatory regimes.*
  - b. However, if Auckland Airport is unable to precisely quantify the "implied adjustment" to the average asset beta from the Commission's comparator sample, that does not mean that a higher target return than the mid-point regulatory WACC is unjustified. Instead, given that the logic for a higher target return is conceptually

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<sup>45</sup> Commerce Commission, *Input Methodologies (Airports) Reasons Paper*, 22 December 2010 at [E8.92].

sound (as noted by the Commission<sup>46</sup>), we believe that reasonable judgement informed by evidence is required to determine whether the adjustment and/or the overall target return is within an appropriate range.

- c. This is consistent with international regulatory practice on operating leverage, as set out in NERA's attached report. As explained by NERA, some regulators have attempted to measure differences in operating leverage, but others have used varying qualitative assessments to determine whether there is likely to be a significant difference in operating leverage that supports a beta uplift or a higher target return. Further, although a number of regulators have applied a higher beta to account for systematic risk differences generated or contributed to by operating leverage, there does not appear to be a standard methodology for calculating the size of an appropriate uplift or adjustment.
- d. This also appears consistent with the Commission's approach when making adjustments to its comparator sample averages to account for potential systematic risk differences. For example, estimating an asset beta for gas pipeline businesses, the Commission decided "on balance" to apply a 0.05 uplift to its comparator energy sector sample due to a range of factors. After considering all relevant factors in combination, it concluded that a 0.05 adjustment was appropriate to reflect the greater exposure to systematic risk faced by gas pipelines.<sup>47</sup> The Commission did not seek to quantify the magnitude of that adjustment by reference to evidence or explain how it had calculated the size of the uplift, instead using its judgement to decide that an uplift of 0.05 was appropriate, and that its previous adjustment of 0.1 was too high. The Commission also considered advice from its expert advisor that any uplift should be rounded to the nearest 0.1, but ultimately decided against this approach.
- e. In our view, the concept of proportionality is also relevant to the evidential threshold. This is because regulatory asset beta estimates typically exist within a range, recognising the challenges with estimating beta from a comparator sample. For example, in the recent Chorus example cited by the Commission, the Commission's expert advisor (Oxera) recommended a range for Chorus' asset beta of 0.30-0.50. The Commission also looked at average asset beta estimates using daily, weekly and monthly data across a five-year time period and a two-year time period, which produced a range of average asset beta estimates from 0.36-0.49.<sup>48</sup> Ultimately, the Commission exercised its judgement to select an asset beta point estimate of 0.43 for the purpose of setting Chorus' prices.

When considering the average of the Commission's comparator sample, and the evidential requirements before an "adjustment" to that average will be justified, it is important to reflect on the standard error associated with that average. Using the Commission's selected standard error for its asset beta estimate (after it exercised judgement to choose a standard error of 0.16 because it considered the estimate derived from the sample using the typical formula for calculating standard error was too large) gives an asset beta range of 0.44-0.76 around the mid-point estimate of 0.60 for 1 standard error. The implied asset beta estimate in Auckland Airport's target return (0.68) is well within this range – indeed, the "adjustment" of 8 basis points is within half a standard error of the adjusted comparator sample average. This is considerably below the upper bound of any typical confidence interval around the comparator sample average (e.g. 95%).

We also note that, in the Chorus process, the Commission considered that its chosen asset beta estimate of 0.43 "remained close" to estimates of beta from

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<sup>46</sup> See e.g. Commerce Commission, *Review of Auckland International Airport's pricing decisions and expected performance (July 2017 – June 2022): Draft Report*, 26 April 2018 at [X19], [68].

<sup>47</sup> Commerce Commission, *Input Methodologies Review Decisions - Topic Paper 4: cost of capital issues*, 20 December 2016 at [452] – [455].

<sup>48</sup> Commerce Commission, *Cost of capital for the UCLL and UBA pricing reviews – Final decision*, 15 December 2015 at Table 3, [165].

two-year sampling periods. These beta estimates were 0.48 and 0.49 respectively – indicating that the Commission considered beta estimates that differed by up to 6 basis points to be “close” to each other (a relative difference of 12.5% from the reference value of 0.43).<sup>49</sup> This decision indicates that asset beta differences in the order of 6 basis points have previously been considered to be “close”, in the context of a standard error for the asset beta that is broadly similar to the standard error for the asset beta from the Commission’s comparator sample.<sup>50</sup>

We think it is important for the evidential threshold (and an assessment of Auckland Airport’s conduct and decision-making) to reflect these considerations. All parties appear to acknowledge that asset beta estimates have an element of judgement to their estimation. The question is – what degree of evidence is required to support that judgement given what is a relatively small deviation from the comparator sample average in light of the standard error and uncertainty associated with that average? As we state elsewhere, we think that reasonable judgement, informed by evidence, is sufficient.

- f. We also consider that dismissing the relevance of Auckland Airport’s asset beta to the assessment exercise effectively compounds the evidential threshold – and asks us to attempt to quantify the magnitude of an adjustment to account for our systematic risk without relying on direct information about our systematic risk. For the reasons set out above, we maintain that our market asset beta estimate is relevant to assessing Auckland Airport’s pricing decision – including in any exercise to understand the reasonable magnitude of an adjustment to the comparator sample average.
  - g. Finally, we believe it is neither plausible nor relevant to assess whether the operating leverage of the firms in the comparator sample is expected to increase or not over PSE3. This would require Auckland Airport to obtain detailed forecasts of planned investment, commissioned assets, operating expenditures and revenues for the next five years for 25 overseas airports from a range of countries from predominantly non-English speaking nations, subject to a range of regulatory regimes, pricing approaches and price path timeframes, and presumably under a range of disclosure obligations – none of which are likely to involve presenting the same information that Auckland Airport is required to publically disclose under the New Zealand regulatory regime. Even Sydney Airport (a relatively easy company in the comparator sample to obtain information about) is not required to report on its price setting methodologies or forecasts. It is extremely difficult to imagine how Auckland Airport would be able to obtain this information for companies operating in Mexico, China, Serbia and India (for example).
  - h. More importantly, as NERA sets out in its paper, whether the operating leverage of firms in the comparator sample is expected to increase or not is irrelevant to the current exercise – the question at hand is whether Auckland Airport’s forward looking beta is higher than the historical beta of the comparator sample on which the reference value is built. If the operating leverage of the comparator sample increases, then so will the average beta of the comparator sample.
102. We think the Commission can take comfort that an assessment approach that recognises the scope for reasonable judgement and a proportional approach does not mean that airports will always be able to justify setting their target returns on the basis of an asset beta that differs from the Commission’s comparator sample set – or that adjustments will automatically be considered appropriate by the Commission if they are within a certain number of standard errors from the Commission’s asset beta estimate. The *logic*

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<sup>49</sup> Commerce Commission, *Cost of capital for the UCLL and UBA pricing reviews – Final decision*, 15 December 2015 at [166.1].

<sup>50</sup> The Commission did not quantify a standard error as part of the final decision, but the further draft decision estimated a standard error for the asset beta of 0.15 based on the refined comparator sample – almost the same as the standard error for the airport sector asset beta of 0.16.

supporting an asset beta adjustment<sup>51</sup> – if that logic exists – must be clearly set out by each airport for each pricing period, and airports are fully aware that the Commission will robustly test that logic when assessing airport pricing decisions.

### Operating leverage provides a further strong conceptual justification for Auckland Airport's target return

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103. At the time we set prices, we considered that information about the future change in Auckland Airport's forecast operating leverage due to the substantial capital investment programme provided additional support for the use of Auckland Airport specific asset beta estimates to inform our target return. We believed that forecast changes in operating leverage provided a strong conceptual basis for Auckland Airport to target a return that differed from the Commission's mid-point regulatory WACC.
104. Although we didn't describe the issue in exactly this way at the time we set prices (given the available data on our airport-specific asset beta), we think that the operating leverage put forward by Auckland Airport in our pricing decision and price setting disclosure provides a strong conceptual basis to support an adjustment to the comparator sample average. As the Commission has stated:<sup>52</sup>

*In the context of the current review, we consider that if the capital expenditure forecast is credible, the investment is in the long-term benefit of consumers, and is material enough to significantly impact operating leverage, then an asset beta adjustment should be considered.*

105. These criteria are met for Auckland Airport.
106. First, the capital expenditure forecast for Auckland Airport for PSE3 is credible. As noted in the draft report, stakeholders have commented favourably on Auckland Airport's approach to consultation and engagement on capital planning, and the Commission has no significant concerns regarding the forecast cost and timing of Auckland Airport's capital expenditure. The Commission considers that Auckland Airport's capex cost estimates do not appear to have been costed inappropriately, and that the use of independent costing and peer reviews indicates that a high level of rigour has been applied in the costing of the forecast capex plan.<sup>53</sup>
107. Second, the investment is in the long-term benefit of consumers. As the Commission has noted in the draft report, the outcomes from Auckland Airport's consultation on capital expenditure are generally acceptable to stakeholders, and Auckland Airport has considered the level of service quality demanded by consumers when establishing our capital investment plan, and the investment programme is expected to address a number of quality concerns in the longer term.<sup>54</sup> As we explained in our price setting disclosure (see Section 7.4 in particular), the consumer benefits that will be delivered by the investment plan are substantial. The investment that will be delivered over the next five years are intended to provide better and faster passenger journeys to the airport, better and faster passenger journeys through the airport terminals, and a very good quality of service to our passengers and airlines. The capital plan is designed to alleviate congestion in current pinch points, cater for existing services and provide for efficient future growth (including efficient peak growth). This will support faster and more intuitive passenger processing, improved airfield efficiency, and will also support greater on time performance for aircraft.

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<sup>51</sup> Or a higher target return, informed by a higher expected systematic risk (in the language of the broader contextual assessment).

<sup>52</sup> Commerce Commission, *Review of Auckland International Airport's pricing decisions and expected performance (July 2017 – June 2022): Draft Report*, 26 April 2018 at [A116].

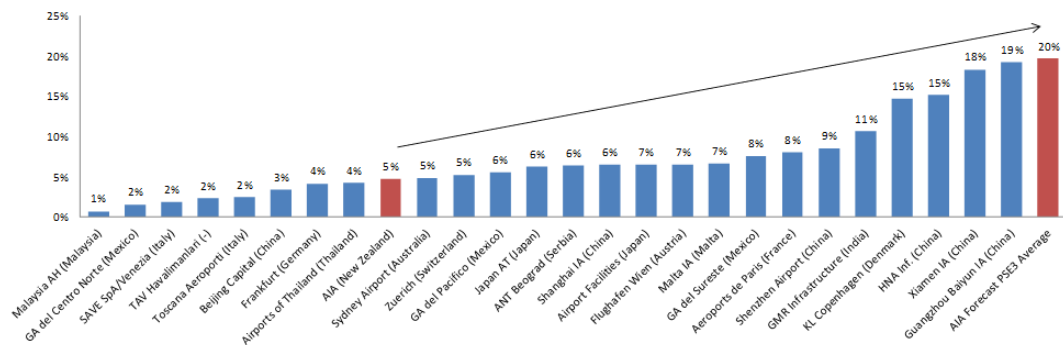
<sup>53</sup> See e.g. Commerce Commission, *Review of Auckland International Airport's pricing decisions and expected performance (July 2017 – June 2022): Draft Report*, 26 April 2018 at [X35] – [X36], [139] – [146].

<sup>54</sup> Commerce Commission, *Review of Auckland International Airport's pricing decisions and expected performance (July 2017 – June 2022): Draft Report*, 26 April 2018 at [146], [164].

108. Finally, the investment programme is material enough to significantly impact Auckland Airport’s operating leverage. As explained in more detail in NERA’s report (attached as Appendix E):

- a. For its draft report, the Commission relies on the measure of “degree of operating leverage” provided by Bloomberg (EBIT growth/revenue growth) to draw insights about the likely change in Auckland Airport’s operating leverage over PSE3. However, there are flaws with this measure which means that it does not provide a reliable indicator of operating leverage for Auckland Airport - especially because it does not capture the cashflow impact of capex that is driving the change in Auckland Airport’s risk.
- b. NERA explains that both regulators and rating agencies alike have used operating leverage measures that capture capex and the fixity of *cash flows* more generally to recommend uplifts to the cost of capital. NERA notes that operating leverage measures have been employed by regulators to identify heightened risks as a result of particularly high fixed capital/cash commitments, leading to lower resilience in case of revenue shortfalls. In NERA’s expert opinion, the effect is best described by an estimate of free cash flow (FCF) relative to total revenue. Where FCF is not readily available, capex-based measures are the more effective choice for proxying fixed costs when a company’s ability to absorb adverse revenue shocks is due to large capital expenditures (rather than due to high fixed opex commitments). NERA also notes that no regulator has relied on the Bloomberg operating leverage measure cited by the Commission in the draft report, providing further support for the use of cashflow based measures to obtain reliable inferences of operating leverage.
- c. NERA has used various capex-based measures as measures of the level of operating leverage. In light of regulatory precedent, its most recent report uses the two measures of operating leverage that are best capable of appropriately approximating the impact of capex on operating leverage, namely Capex to RAB (used by Ofgem), and FCF to revenues (a variant on the measures used by the CMA and the CRE). These measures (shown below) demonstrate that Auckland Airport is facing a material increase in operating leverage in PSE3 relative to its historic baseline, and that its operating leverage in PSE3 is greater than the average of the Commission’s comparator sample.

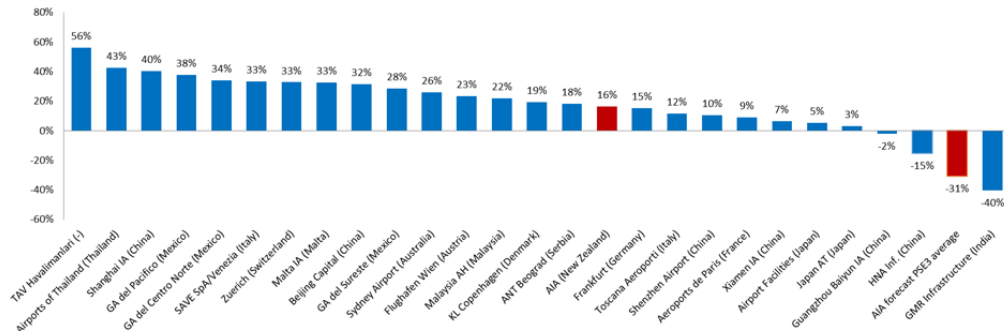
**Figure 2.4: Capex/RAB (higher value means higher OL)**



Source: NERA analysis of Bloomberg data<sup>55</sup>



**Figure 2.5: FCF/Revenue (lower value means higher OL)**



Source: Auckland Airport and NERA analysis of Bloomberg data.

- d. As explained by NERA, it is not necessary to calculate expected ratios for the comparators for the next five years, as the relevant task is to assess whether historic comparator data on beta is capable of appropriately predicting the Auckland Airport asset beta during PSE3. In order to do this, the relevant comparison is between historic comparator data on operating leverage to expected Auckland Airport data on operating leverage for PSE3.
- e. The projected changes in operating leverage on these two measures are at least of similar magnitude as the changes calculated by overseas regulators and considered to be significant enough to support similar relative uplifts to asset beta estimates - indicating that the expected changes in operating leverage for Auckland Airport are indeed material.

**The “implied adjustment” of 0.08 is within a reasonable range for an uplift to the comparator sample average**

- 109. What is more difficult is precisely quantifying the extent of the asset beta adjustment that is appropriate to account for an expected future increase in operating leverage and corresponding increase in systematic risk – particularly given the Commission’s past acknowledgments that:
  - a. there is no reliable way to forecast asset betas, so historic data must be used;<sup>55</sup>
  - b. precisely quantifying the size of an appropriate adjustment to the comparator sample average on the basis of differences between companies in the comparator sample set is likely to be extremely difficult;<sup>56</sup>
  - c. judgement is an inherent part of estimating asset beta and when making decisions about the appropriate size of adjustments to a comparator sample average;<sup>57</sup>
  - d. more generally, WACC estimation and the selection of a target rate of return also require inherent judgement, and there will be limitations to the ability of empirical evidence to provide a precise answer.<sup>58</sup>
- 110. As noted above, reasonable judgement informed by evidence is required to determine whether the “implied adjustment” to asset beta and/or the size of the difference between

<sup>55</sup> Commerce Commission, *Cost of capital for the UCLL and UBA pricing reviews – Final decision*, 15 December 2015 at [138].

<sup>56</sup> Commerce Commission, *Input Methodologies (Airports) Reasons Paper*, 22 December 2010 at [E8.92].

<sup>57</sup> As seen in the Commission’s adjustments to estimate the asset beta for the gas sector, discussed elsewhere in this submission.

<sup>58</sup> Commerce Commission, *Amendment to the WACC percentile for price-quality regulation for electricity lines services and gas pipeline services: Reasons Paper*, 30 October 2014 at [X14] – [X16].

the overall target return and the mid-point regulatory WACC is within an appropriate range.

111. In our view, whether considered through the lens of Auckland Airport's own beta estimates – particularly the more recent sampling periods (such as NERA's 5-year period, which generates an asset beta estimate for Auckland Airport of 0.81 or the Commission's data series for the two most recent 5-year periods, which generates an asset beta estimate for Auckland Airport of 0.71) – or by reference to the conceptual logic, evidence and regulatory precedent on operating leverage, the evidence supports a higher asset beta for Auckland Airport than the Commission's unadjusted 0.65 sample average.
112. When the available evidence is considered, an adjustment of 0.08 to the comparator sample average represents a conservative assessment of Auckland Airport's asset beta for PSE3, anchored to observable estimates of Auckland Airport's beta and representing a modest departure from the comparator average. In addition, the Commission can take comfort that the size of this implied adjustment is within a reasonable range given that:
- a. The size of the implied adjustment is consistent with adjustments that have been made by overseas regulators to account for increased operating leverage (and may be on the conservative end of the scale of uplifts that have been applied). As noted by NERA, other regulators (e.g. Ofgem and the Competition and Markets Authority in the UK) have looked at the impact of operating leverage on the asset beta and have allowed comparable relative adjustments to the asset beta for comparable relative differences in operating leverage. The implied adjustment of 0.08 is equivalent to a 13% uplift to the comparator sample average, which is within the bounds of similar adjustments applied by a number of international regulators – shown in the following table:

**Table 2.1: Recent regulatory precedent allowing OL uplifts**

Regulator	Measure of OL	Difference in OL reported (% points)	Absolute Beta Uplift	Relative Beta Uplift
CC (UK) – Water	OCF/Revenue <sup>17</sup>	9	0.05-0.07	18%
CMA (UK) – Water	OCF/Revenue	6	0.02	13%
CRE (France) – Energy	Opex/RAB, Totex/RAB & Revenue/RAB	Varying (qualitative assessment)	0.03	9%
Ofgem (UK) – Energy	Capex/RAB	13	0.09	26%
BNetzA (GER) – Energy	Not explicit	(qualitative assessment)	0.08	26%

Note: OCF = Operating Cashflow

Source: BNetzA (2011) *Beschluss BK4-11-304*, pp. 9 & 15; Ofgem (2012) *RIIO-GD1: Final Proposals - Finance and uncertainty supporting document*; Ofgem (2012) *RIIO-T1: Final Proposals for SP Transmission Ltd and Scottish Hydro Electric Transmission Ltd*; Ofgem (2012) *RIIO-T1: Final Proposals for National Grid Electricity Transmission and National Grid Gas*; CMA (2015) *Bristol Water plc A reference under section 12(3)(a) of the Water Industry Act 1991*; Frontier Economics: *Audit des demandes de RTE sur le cadre de rémunération - Un rapport mandaté par la Commission de Régulation de l'Énergie* (2016).

- b. An implied 0.08 adjustment to the comparator sample average (a relative uplift of 13%) is also relatively close to the magnitude of recent adjustments made by the Commission to account for systematic risk differences from the comparator sample average – where the Commission has applied its judgement (rather than seeking to quantify a precise adjustment). In particular:
- i. As we have noted above, the Commission considered all relevant factors in combination, and concluded that a 0.05 adjustment was appropriate to reflect the greater exposure to systematic risk faced by gas pipelines (a

relative upwards adjustment of 14%).<sup>59</sup> The Commission did not seek to quantify the magnitude of that adjustment by reference to evidence or explain how it had calculated the size of the uplift, instead using its judgement to decide that an uplift of 0.05 was appropriate, and that its previous adjustment of 0.1 was too high.

- ii. The Commission also considered that an adjustment of 0.05 (an 8% downwards adjustment) was appropriate when making a downwards adjustment to the raw average of its comparator sample average for estimating an airport sector-wide asset beta. This was a judgement call made by the Commission after considering a range of sources, and departed from the view of its expert advisor (which considered that an adjustment of no more than 0.03 was warranted).
  - c. Using data derived from the Commission's comparator sample set, the average systematic risk of Auckland Airport is already higher than the unadjusted 0.65 average of the Commission's comparator sample set - by approximately 6 basis points (0.06) if Auckland Airport is included in the comparator sample (0.07), and 7 basis points if Auckland Airport is excluded from the comparator sample average.
  - d. The Commission has previously considered asset beta estimates that were 3 basis points apart to be "generally very close to each other". As noted above, the Commission has previously considered asset beta estimates that differed by up to 6 basis points (in that case, a relative difference of 12.5%) to be "close" to each other, and beta estimates that were 3 basis points apart to be "very close" – in the context of a standard error for the asset beta that is broadly similar to the standard error for the asset beta from the Commission's comparator sample.<sup>60</sup> This suggests that an implied adjustment of 8 basis points to a comparator sample average (a relative adjustment of 13%) is not beyond the realms of reasonableness (especially given the standard error associated with that average has been set at 16 basis points).
113. We understand that the Commission is wary about the potential precedent impact of any decision that a target return above its mid-point estimate is acceptable. It may be concerned that acknowledging any of the above points – particularly the uncertainty associated with the asset beta estimate – could be used by airports to automatically set prices going forward at a certain number of basis points above the comparator sample average. In other words, we fully understand that the Commission wants to avoid inadvertently creating a new "default" limit of an acceptable range.
114. We think this concern is overstated. The Commission has plenty of scope in its final decision to make it clear that airports cannot automatically adopt a notional asset beta for pricing purposes that differs from the comparator sample average by a standard error / given number of basis points. We consider the Commission is capable of explaining where its reasoning and conclusions about acceptable profitability are specific to particular airports and/or particular pricing periods, and can issue clear guidance to the airports to avoid its approach being misinterpreted as general support for airports to use a higher asset beta than the comparator sample without sufficient justification. As such, all airports (including Auckland Airport) will be fully aware that they are expected to justify their target returns at each price setting event by reference to reasons and evidence specific to their own circumstances at that time.

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<sup>59</sup> Commerce Commission, *Input Methodologies Review Decisions – Topic Paper 4: cost of capital issues*, 20 December 2016 at [452] – [455].

<sup>60</sup> Commerce Commission, *Cost of capital for the UCLL and UBA pricing reviews – Further draft decision*, 2 July 2015 at [177] and footnote 85.

## Comments on further specific evidence requested by the Commission

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115. The Commission has specifically asked Auckland Airport to provide views from independent parties (eg ratings agencies and sharemarket analysts) about whether they adjust their WACC estimates or financial risk profile assessments for target companies in analogous situations to Auckland Airport over PSE3 (i.e. facing unprecedented investment programmes relative to past history).
116. NERA has considered views of rating agencies and equity analysts in its further report. As explained by NERA (see sections 2.2.2 and 2.2.3 of NERA's report):
- a. Rating agencies consider capital investment programmes and the deterioration of "operating leverage" ratios as risk factors when assessing the creditworthiness of issuers.
  - b. Sector analyst reports, among others by Deutsche Bank, Royal Bank of Canada and Credit Suisse, consistently consider increased capital expenditures as a risk factor when assessing the equity valuation of airports.
117. In addition to NERA's work, Auckland Airport has spoken with bankers, share market analysts and Standard & Poor's. While banks' and rating agencies' are exclusively focussed on credit risk (relating to the serviceability of current and future borrowings rather than the residual profits that flow to equity investors), their attached feedback (refer to Appendices F and G), helps inform the question of whether moving into a period of steeply rising operational leverage is likely to raise the cost of debt (and hence WACC). The answer is clearly yes.
118. In response to our query, First NZ Capital's equity analyst presented the following important observations:
- a. FNZC's forecast gearing level (Debt / Enterprise Value) for Auckland Airport rises materially from 20.3% to 28.2% over PSE3. This compares with the Commission's fixed leverage assumption of 19% for its sector wide midpoint WACC assumption. Taking FNZC's average forecast leverage of 25.9% over PSE3 and inputting it into the Commission's sector wide midpoint WACC calculation without adjusting anything else (including its 0.60 asset beta assumption), would alone raise the Commission's midpoint WACC estimate 8 basis points from 6.41% to 6.49%. This adjustment would similarly raise Auckland Airport's assessed Auckland-Airport-specific WACC estimate. This Auckland-Airport-specific WACC estimate was already circa 80 basis points higher than the 6.99% actually targeted for priced aeronautical activities over PSE3. Given that the Commission adjusts down its 26 sample set average asset beta by 8 basis points from the raw average of 0.65 to 0.60 because of its assumption that the regulated airport operations are less risky than the 2<sup>nd</sup> till businesses, it would logically follow that borrowings would be weighted more heavily to that segment. Therefore FNZC's average PSE3 leverage estimate of 25.9% likely understates the regulated leverage (albeit Auckland Airport manages borrowings on a company-wide portfolio basis rather than quarantining into regulated and unregulated pools).
  - b. Similarly, FNZC's report goes on to say that *"With capex and the build in net debt materially skewed to RAB projects and therefore RAB cost of capital, we point out that the impact of a higher leverage ratio on AIA's regulated WACC specifically would be more significant than what we observe at a Group level in figure 3"*.
  - c. FNZC also observes that it's forecast measure of operating leverage *"(Revenue – Variable costs) / EBIT) increases from 1.76x in FY18 to 2.13x by the end of the PSE3 period in FY22. The primary driver of this outcome is the high level of forecast regulated project capex that, once commissioned and transferred to the*

*RAB, leads to a significant increase in depreciation expense relative to contribution margin. We note that forecast operating leverage does not capture the impact of depreciation expense related to \$877mn of capex project investment (the difference between total RAB capex and commissioned RAB capex in figure 2) that is yet to transfer to the RAB as at PSE3 close.”*

119. The latter observation is very important. As set out in detail in our PSE3 Price Setting Disclosure, approximately half of Auckland Airport’s aeronautical capex over PSE3 is not commissioned and therefore does not generate any depreciation during PSE3. Therefore the Commission’s draft report’s preferred measure of operating leverage, ie delta EBIT divided by delta revenue, entirely misses these additional fixed costs that are already committed to during PSE3, but don’t show up in EBIT until PSE4.
120. Finally FNZC’s report focusses on another reason that we hadn’t previously explained in our submissions why Auckland Airport’s systematic risk is likely to be materially higher than the Commission’s sample set of mainly continental global airport companies, ie our high proportion of “long haul” passenger movements. The analysis presented shows that demand growth for long haul travel is far more sensitive to jet fuel price movements than short haul travel. Given that Auckland Airport has a significantly higher proportion of long haul traffic than most of the Commission’s sample set, jet fuel prices are volatile and steeply rising, and general economic performance is also negatively impacted by rising fuel prices, this is another reason why Auckland Airport’s asset beta would be higher than the Commission’s global sample set. This appears to be supported by the Commission’s own data set which show’s Auckland Airport’s asset beta from Bloomberg data to be materially higher than its 26 company average.
121. With regard to banking, Westpac said that *“Although we cannot comment specifically as how we adjust our internal credit models for situations such as this due to confidentiality reasons, we can say that there are a number of factors that impact the assessment of credit risk and the cost of debt and, all other things being equal, a business with higher operating leverage than previous, will be viewed as carrying more financial risk. A business carrying more financial risk will face increases in its cost of debt to compensate for taking that additional risk.”*
122. S&P advised that *“In terms of financial impact, the rating takes into account the next 3-5 years’ timeframe and the focus is on cash flow leverage i.e. FFO to total debt. This captures the EBITDA impact and how much costs is adequately covered. We generally look through a short phase of dip in financial metrics during peak capex phase, but sustained pressure can alter our view. Such sustained pressure can arise in capital intensive industries because once committed it may be difficult to restrain project spending and in the case of airports, there could be traffic risk.”*
123. S&P’s latest credit rating report on Auckland Airport (dated 19 April 2018) also states that *“Over the past several years, AIAL’s financial performance has remained strong due to robust passenger growth. The company has also in recent years kept capital expenditure at a manageable level, and funded it primarily with cash flow. As a result, AIAL’s key financial ratio of funds from operations (FFO) has been quite strong, at 16.5% for fiscal 2017”.....” we expect AIAL’s debt levels to increase by about NZ\$500 million annually on average for the foreseeable future, to reach about NZ\$3 billion by the end of the decade. This increase in leverage is likely to outpace earnings growth, resulting in AIAL’s FFO to debt trending down toward 12% over the medium term.”*

**Following the Commission's logic chain, an implied asset beta increase of 0.08 is appropriate for Auckland Airport for PSE3**

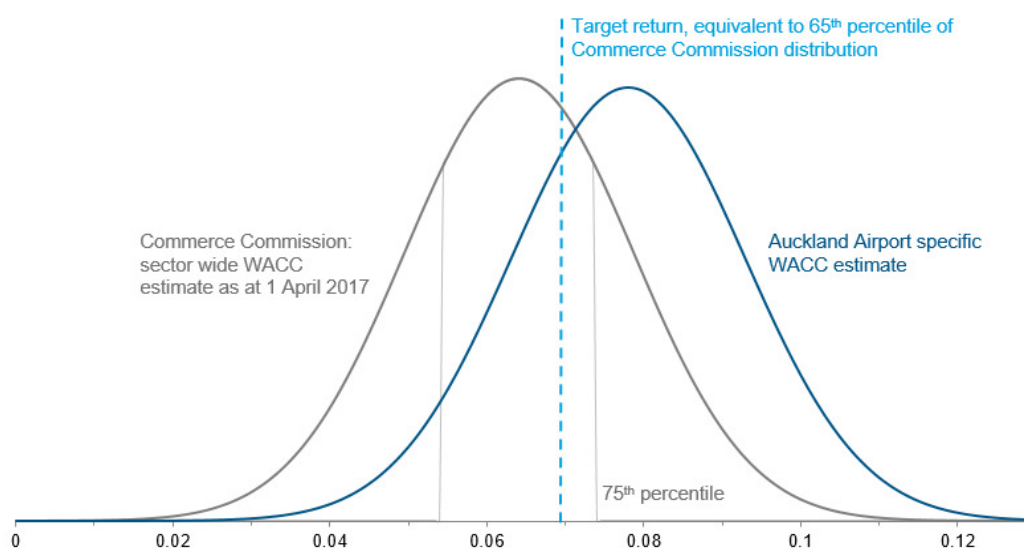
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124. As stated throughout this submission, for Auckland Airport and for PSE3:
- a. there is a strong conceptual basis to support a target return that differs to the Commission's mid-point WACC estimate (whether that difference is characterised as a legitimate parameter adjustment to the comparator sample average asset beta, or characterised more generally as a justifiable overall difference between the WACC IM and a reasonable rate of return for Auckland Airport for PSE3); and
  - b. although an element of judgement is required to determine the appropriate size of the difference between an acceptable rate of return for Auckland Airport and the Commission's mid-point WACC estimate, there is sufficient evidence to demonstrate that Auckland Airport's target return is well within an acceptable range (again, whether this is characterised as evidence supporting an implicit asset beta adjustment, or more generally).
125. For ease of reference, we attach a table at Appendix C which presents the information and evidence above following the framework in the Commission's initial assessment of Auckland Airport's implicit asset beta adjustment (set out at Table 2 of the Draft Report). As discussed above and in that appendix, we consider there is sufficient evidence to justify an implied asset beta increase of 0.08.

## Section 4: Stepping back to the overall contextual assessment of Auckland Airport's target return

126. In Sections 2 and 3, we have described the range of factors that informed Auckland Airport's target return for aeronautical pricing activities, and provided supporting detail about the empirical evidence that informed Auckland Airport's judgement and which we consider is relevant when assessing the reasonableness of our pricing decision.
127. For completeness we consider that, in any analysis of empirical factors based on WACC parameters or overall WACC estimates, it is relevant to acknowledge that there is inherent uncertainty in the parameter values used to develop the WACC estimates that inform the exercise of judgement by airports and the regulator. As shown in the following diagram, the Commission's mid-point estimate, the best mid-point estimate of Auckland Airport's WACC, and our 6.99% target return for aeronautical pricing activities in PSE3 represent points in a distribution. We consider that this uncertainty is highly relevant – it provides important information and context for interested parties about the relative size of any departures from the Commission's mid-point estimate given the standard error associated with that estimate.

*Chart 1 - Uncertainty distributions of Commission's sector-wide WACC estimate (grey) and Auckland Airport's WACC estimate (blue)*



128. In the remainder of this section, we return to the questions we believe are highly relevant to an assessment of Auckland Airport's profitability under the framework set out in the IM review. In particular, as we explain below:
- We consider the balance of consumer benefits and costs supports Auckland Airport's pricing approach as fair, reasonable and consistent with the long-term benefit of consumers;
  - Auckland Airport's conduct demonstrates that we are seeking to earn an appropriate economic return over time; and
  - After examining all factors individually and in combination, Auckland Airport is targeting an appropriate economic return for PSE3.

**What is the likely long-term impact to consumers of the airport's pricing decision? What does the balance of consumer benefits and costs suggest about the reasonableness of the airport's target return?**

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129. At the time we set prices, it was not clear to us precisely how the Commission would assess whether our target return was in the long-term interest of consumers. However, broadly speaking we anticipated that it would consider whether the target return provides customers with confidence that Auckland Airport has achieved an appropriate balance between:
- a. Encouraging efficient investment in infrastructure that will improve the quality and efficiency of service; and
  - b. Earning a normal economic return over time.
130. Having considered all relevant factors, we consider that a target return of 6.99% for aeronautical pricing activities (and 7.06% for all regulated activities) demonstrably achieves an appropriate balance.
131. In our view, our target return is consistent with encouraging efficient investment in infrastructure that will improve the quality and efficiency of service. We note that:
- a. When we set prices, we did not seek to quantify the cost to consumers of setting prices at the Commission's mid-point estimate relative to the cost of setting prices at our target return. This is because the Commission had indicated that attempting to quantify the risk of under-investment at the mid-point WACC estimate would not necessarily be the most relevant evidence when an airport knows the targeted rate of return that it requires to undertake investment.<sup>61</sup>
  - b. Rather, the Commission stated that evidence on why the targeted return needs to be higher than the Commission's mid-point estimate of WACC in the airport's specific circumstances, and evidence on the long-term benefits to consumers from the specific investment being considered was more relevant. The Commission stated that it would then consider this evidence when forming any view about an airport's targeted returns.<sup>62</sup>
  - c. When we set prices, we considered that the most appropriate way to deliver long-term benefits to consumers was to focus on developing a capital plan that meets the needs of existing users and addresses the capacity required to provide for forecast growth, and then to set an appropriate target return that helps to support that plan. We consider that a target return of 6.99% helps achieve this objective while representing a balanced approach that seeks to mitigate the price impact on airlines and passengers and which acknowledges that Auckland Airport will also carry material risk in PSE3.
  - d. From 1 July 2019 onwards, Auckland Airport is planning to spend more on aeronautical infrastructure each year than we will earn in aeronautical revenue. In the last year of this pricing period, Auckland Airport's planned capital expenditure will be over 130% of our forecast revenue for that year. This investment will substantially increase the size of our aeronautical asset base over the next five years, and will enable us to deliver a number of key projects that will provide significant benefits for airlines and passengers – but the plan carries considerable risks and costs for Auckland Airport. We consider that a target return which better

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<sup>61</sup> Commerce Commission, *Input Methodologies Review Decisions - Topic Paper 6: WACC percentile for airports*, 20 December 2016 at [158].

<sup>62</sup> Commerce Commission, *Input Methodologies Review Decisions - Topic Paper 6: WACC percentile for airports*, 20 December 2016 at [158].



reflects a fair risk-adjusted return on equity for Auckland Airport – informed by empirical evidence about Auckland Airport’s systematic risk – is a fair and reasonable response to the unprecedented circumstances we face over at this point in our investment cycle, and will help to support the investment pathway and deliver long-term benefits for consumers.

- e. On average over the next five years, we are forecasting to spend the equivalent of \$15 per passenger per year on building the necessary infrastructure to deliver long-term value for passengers and airlines. As discussed more fully in our pricing decision (see sections 10.5.2 and 10.5.6 of the attached target returns extract at Appendix C), this investment plan will deliver substantial long-term benefits for consumers.
  - f. Auckland Airport approaches our company-wide funding at a portfolio level, a fact that may not be fully appreciated by our customers. At that portfolio level, at the time we set prices our forecast corporate cash flows with a target return of 6.99% for the aeronautical business left Auckland Airport with a material unsolved funding gap that has required us to explore a range of capital management levers over PSE3 to support the proposed aeronautical investment plan. Some of these options have already been actioned.
  - g. This funding gap would increase considerably if we were to target a return even further below our Auckland Airport-specific WACC estimate – e.g, if we were to target a return equal to the Commission’s 50th percentile WACC estimate. We consider the additional uncertainty that this would place on our ability to fund the required aeronautical infrastructure investment over the next ten years would inevitably lead to cost / service level trade-offs that our customers do not prefer, and potentially to capital investment delays resulting from the more difficult funding challenges this would create for Auckland Airport.
  - h. Although we will face very real funding challenges to support the investment plan, at the time we set prices we did not consider it would be appropriate to set a lower return that may constrain efficient investment that our customers value and which is in the long-term interest of consumers. Instead, we focused on determining a target return that would appropriately support the investment plan, and which would provide consumers with a higher degree of confidence that we could deliver no that plan.
132. We understand from the Commission’s draft report that it does not consider there is a risk of under-investment at Auckland Airport for PSE3, and that it believes there would be no risk to the investment plan if Auckland Airport were to target a return equal to the Commission’s mid-point WACC estimate. The primary factor cited by the Commission in its draft report for this belief is the presence of the dual till.
133. We disagree, and consider that it is highly relevant for the Commission to assess the actual risk of under-investment for PSE3 for Auckland Airport.
134. Auckland Airport continues to believe that the Commission’s view on the lack of under-investment risk in the airport is unduly simplistic. As set out to the Commission as part of the IM review, we note that:
- a. There are valuable lessons from the Australian context. For example, Brisbane Airport is also subject to a light-handed monitoring regime, operates a dual till, and is able to consult with a small number of customers. However, over the course of a number of years, congestion built and delay resulted in costs to airlines, passengers and the local economy.
  - b. A campaign fronted by the Courier Mail in 2013 made it clear that public and media perception was that the airport company had under-invested for a period of time, and that “persistent flight delays” were linked to the need to introduce “desperately

needed new infrastructure”.<sup>63</sup> The perception was that “despite talking about the need for a parallel runway to cope with demand and including it in successive masterplans, [Brisbane Airport] failed to set a start date for 15 years and did not develop a clear funding model.” For example, media reported that:

- i. Airlines spent 7550 hours in holding patterns into Brisbane in 2012 – 20.6 hours every day. Based on an estimate of fuel for passenger jets costing at least \$10,000 an hour, delays at Brisbane Airport were estimated to cost airlines over \$75 million in 2012.<sup>64</sup>
  - ii. More than 2.5 million passengers were affected by flight delays at Brisbane Airport over the same time frame.<sup>65</sup> We are not aware of any attempts to calculate the cost to passengers of the delays, although the media cited anecdotal passenger feedback from regular travellers that flights were typically delayed by up to 40 minutes, and sometimes up to an hour.<sup>66</sup>
  - iii. Brisbane Airport noted that there were a number of contributors to the delays, including demand growth.<sup>67</sup> However, the public and media perception was that the increase in delays was not fully explained by the rise in aircraft numbers,<sup>68</sup> and that any substantial improvement was not likely to occur until the introduction of a new parallel runway in 2020.<sup>69</sup>
- c. The situation was clearly very complex, with complicated operational, planning, future development and funding issues at play. We also understand that mitigating steps have led to a substantial improvement in on-time performance at Brisbane Airport, due to a number of industry-wide steps and other short-term strategies to manage demand while its new runway is under construction (although airlines have continued to note that there are issues with runway availability and delays).<sup>70</sup>
- d. However, the point remains that the most efficient long-term strategy is to ensure that infrastructure investment is appropriately incentivised, in order to mitigate the risks of under-investment for airlines, passengers, and the local and national economy. And, of particular relevance to the question of asymmetric social costs, the Australian regulator is unconvinced that investment is taking place at the required pace for its monitored airports. For example, in its 2013-2014 monitoring report, the ACCC noted that:<sup>71</sup>

The ACCC outlined aeronautical congestion issues in its 2012-13 airport monitoring report which showed a long term trend of worsening performance. Data presented in this year's report shows a slight improvement, which is promising. However, the ACCC remains concerned that current investment does not appear to have added sufficient capacity to help avoid congestion or accommodate forecast growth

<sup>63</sup> See eg <http://www.couriermail.com.au/news/queensland/brisbane-airport-board-holds-key-to-delays/story-e6freoof-1226612835791>

<sup>64</sup> <http://www.dailytelegraph.com.au/brisbane-airport-delays-cost-airlines-75-million-last-year/story-e6freuy9-1226626210964>

<sup>65</sup> <http://www.theaustralian.com.au/archive/travel-2015-pre-life/airline-passenger-take-mid-flight-bets-as-brisbane-airport-delays-become-commonplace/story-e6frg8ro-1226589627678>

<sup>66</sup> <http://www.theaustralian.com.au/archive/travel-2015-pre-life/airline-passenger-take-mid-flight-bets-as-brisbane-airport-delays-become-commonplace/story-e6frg8ro-1226589627678>; [http://www.couriermail.com.au/subscribe/news/1/index.html?sourceCode=CMWEB\\_WRE150\\_a&mode=breached&dest=http://www.couriermail.com.au/news/queensland/january-figures-show-departure-times-at-brisbane-airport-getting-worse/story-e6freoof-1226583458963&memtype=anonymous](http://www.couriermail.com.au/subscribe/news/1/index.html?sourceCode=CMWEB_WRE150_a&mode=breached&dest=http://www.couriermail.com.au/news/queensland/january-figures-show-departure-times-at-brisbane-airport-getting-worse/story-e6freoof-1226583458963&memtype=anonymous)

<sup>67</sup> <http://www.dailytelegraph.com.au/brisbane-airport-delays-cost-airlines-75-million-last-year/story-e6freuy9-1226626210964>

<sup>68</sup> <http://www.dailytelegraph.com.au/brisbane-airport-delays-cost-airlines-75-million-last-year/story-e6freuy9-1226626210964>

<sup>69</sup> <http://www.couriermail.com.au/news/queensland/brisbane-airport-records-worst-delays-on-record-last-month-despite-assurances-the-situation-had-improved/story-e6freoof-1226605812704>

<sup>70</sup> See eg Australian Competition & Consumer Commission *Airport Monitoring Report 2013-2014*, April 2015, at page 23-25.

<sup>71</sup> See eg Australian Competition & Consumer Commission *Airport Monitoring Report 2013-2014*, April 2015, at page xiv.

- e. It went on to note that:<sup>72</sup>

The ACCC discussed aeronautical congestion in its 2011-12 and 2012-13 airport monitoring reports. In particular, the ACCC identified that despite continued investments, it is not clear that the nature, size and timing of investments have added sufficient capacity to avoid congestion or accommodate forecast growth. Increased passenger growth and aircraft movements over time have begun to place pressure on existing aeronautical assets at a number of monitored airports.

[...]

In the long term, the most efficient way of alleviating aeronautical congestion is through timely investment to expand capacity. Although most of the monitored airports have plans in place to address aeronautical congestion issues through capacity expansions, it appears that some of these investments have not occurred in a timely manner. For example, Brisbane Airport undertook an extended process in committing to the construction of its new runway, while Perth Airport was delayed in investing in new facilities to address passenger growth and ongoing quality of service issues.

- f. The ACCC also referred to its earlier comments from 2011-2012, where it noted that underinvestment leading to sustained aeronautical congestion could have significant negative impacts beyond the airport precinct.<sup>73</sup>
- g. In our view, the Brisbane example, including the ACCC's comments, demonstrates that the risk of under-investment and its associated negative consequences can be very material, including where (as is the case in Australia and New Zealand), airports are subject to light-handed monitoring, operate a dual till, and consult with their airline customers.
135. As we have explained previously, we therefore disagree that the factors cited by the Commission – including the dual till in particular – automatically provide mitigation for the risks and potential social costs of underinvestment. We continue to believe that the ability for individual airports to set a target return above the Commission's mid-point WACC – depending on that airport's particular circumstances at that particular time – is an important safeguard against the risks and costs of under-investment in the airport sector.
136. On the dual till in particular, we note that:
- a. We think the dual till is the right regulatory regime. We think that it creates better investment incentives than a single till regime for both the aeronautical and non-aeronautical business, and that it is more consistent with promoting aeronautical investment in the long-term interest of consumers than a single till approach. But that doesn't mean it is a catch-all insurance regime that will protect consumers against the risk of under-investment in the regulated business in every situation. The experience in Australia discussed above proves that isn't the case.
- b. Nor does it impact our investment decisions in the way the Commission assumes. For PSE3:
- i. The capital plan is aeronautically led, and responds to priorities identified by our aeronautical customers through an extensive consultation process. When developing this plan, we were guided by aeronautical requirements and the necessary development timeline to ensure Auckland Airport can provide quality services to customers in light of recent and forecast growth. At no stage did Auckland Airport seek to quantify the proportion of the aeronautical capital plan that was linked to non-aeronautical benefits – our focus was on getting the right plan and supporting that plan with an

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<sup>72</sup> See eg Australian Competition & Consumer Commission *Airport Monitoring Report 2013-2014*, April 2015, at page 23-24.

<sup>73</sup> Australian Competition & Consumer Commission *Airport Monitoring Report 2012-2013*, April 2014, Chapter 2 "Emerging congestion at airports", Box 2.2.1.

appropriate return that reflected the risks and challenges associated with the forecast investment programme.

- ii. The Commission has assumed that nearly all of Auckland Airport's investment plan for PSE3 will deliver non-aeronautical benefits. That's not the case. The Commission has assumed that nearly all of Auckland Airport's investment plan for PSE3 will deliver non-aeronautical benefits. That's not the case. Throughout the price setting disclosure and in our pricing decision reasons paper we described how the culmination of reduced resilience caused by significant growth internationally and domestically (including the new regional competitor) and the need to replace the domestic terminal are key drivers of the proposed unprecedented capital investment.
- iii. It is also important to recognise that Auckland Airport has a choice in how it caters for capacity growth. Theoretically, if the dual till was driving our investment incentives in the way the Commission assumes, Auckland Airport should prefer the quickest and least costly method to deliver additional capacity – even where this is not the quality that our customers prefer. For example, in practice our airline customers have a strong preference for contact stands to deliver additional capacity, rather than remote stands – and we have listened. However, the risk to us is very different between the two options – contact stands take substantially longer to construct, are more challenging, take longer to deliver the same additional capacity, and will hit the RAB later (and therefore be factored into airport charges more slowly – leaving Auckland Airport exposed to risk for longer). Where our customers urge us to invest in additional capacity in a way that adds to the capital burden and substantially increases construction timeframes relative to other available options, this has an impact on our risk profile. If returns were scaled back to the Commission's mid-point, that may distort our incentives – introducing incentives for us to invest in the least costly and least risky ways to cater for capacity growth, rather than investing in the way that our customers prefer.
- iv. If the Commission maintains its view that the theoretical benefits offered by the dual till are relevant to assessing the appropriateness of Auckland Airport's target return, it must also consider the costs to that business that are driven by the investment plan. The capital plan for PSE3 will involve considerable disruption to and displacement of unregulated activities – the extent of which we didn't fully understand at the time we set prices (given the focus was on consulting with airlines on their aeronautical requirements). As the focus has shifted from high-level planning into development and delivery, it has become increasingly clear that retail facilities, car parks and commercial property leases must either make way for new aeronautical developments, or will be stranded as the aeronautical development plan moves passengers away from existing facilities (e.g. non-aeronautical facilities associated with the existing domestic terminal). In both scenarios, these unregulated activities must be duplicated / reconstructed elsewhere at considerable cost for no incremental volume benefit, with their remaining economic lives written off. This cost – driven by aeronautical requirements – will be absorbed by the unregulated business and will have a significant financial impact.

To illustrate, the picture below provides a snapshot of the enabling works that will be required over PSE3 to make way for development in and around the main terminal precinct. This snapshot is subject to change, but provides an illustration of the extent of displacement that will occur.

Chart 2 – Enabling works for the Terminal Development Plan



Note: Existing activities at a distance from the terminal on this map are projected to be displaced by new terminal access / exit roads or anticipated freight developments.

Taking two projects as examples, the following table provides a summary of the key activities that will be displaced as enabling works and construction begin:

MPI Arrivals	Domestic Jet
Car rentals	Carparks
Carparks	Valet areas
Pre-chartered taxi areas	Taxi staging
Landside retail areas	Leased cargo container storage areas
Existing roads	Baggage storage and staging areas
Utilities	The core waste system
MPI dog areas	Livestock areas
Baggage tracing units	Fuel mains
Lease areas for border agencies	The main security access area (Checkpoint Charlie)
Passenger access routes	Access roads to the terminal for passengers and cargo routes
	Stormwater systems
	Available airside stands

137. The Commission’s regulatory decisions generally show an element of conservatism when considering the risks and costs associated with under-investment. Recognition of the risks and costs of under-investment has led the Commission to take a pragmatic approach, and to acknowledge that it can be appropriate to err on the side of caution. We think the unprecedented size of Auckland Airport’s capital plan justifies an element of conservatism when considering the potential for under-investment and in assessing whether Auckland Airport’s target return is consistent with the long-term benefit of consumers.

138. Put another way (and as we have noted elsewhere), the Commission has accepted that a logical airport would ensure the prices charged for airport services reflect the returns required by the airport to cover all its costs, including its cost of capital, on its investment to provide those airport services – thus mitigating against the risk of under-investment that would be detrimental to consumers. Yet the Commission seems to be saying that Auckland Airport should price at a lower return than it has targeted, lower than the Commission’s estimate of the sector-wide cost of capital, adjusted for Auckland Airport-specific factors, and that consumers should still have confidence that Auckland Airport will invest to the same extent at that lower level of return.
139. When setting prices, we don’t think it would have been appropriate for Auckland Airport to set aside the information we had about the returns that investors require given our systematic risk to support a circa \$2 billion investment plan through a period where the aeronautical business will be cash-negative in the order of hundreds of millions of dollars and where the non-aeronautical business will have to absorb the substantial financial cost of disruption and displacement driven by the aeronautical development plan, on the high-level assumption that in the long-term theoretically incremental benefits to the unregulated business will flow from the capacity growth elements of the plan. We think it would have been extremely difficult for us to credibly explain to investors why they should support an investment plan of this size and scale at a generic return based on a sample of comparator airports that ignores Auckland Airport-specific information and makes no adjustments to account for the huge increase in investment and in Auckland Airport’s risk profile over PSE3, simply because there is also a non-aeronautical side to Auckland Airport’s business.
140. On this basis, when assessing the reasonableness of our pricing decision, the potential for under-investment matters. We are not saying that a “generic uplift to guard against under-investment” is necessary in all cases and for all time – we are saying that we have set a target return we believe is necessary to support the particular investment programme planned at Auckland Airport for PSE3 and to support the long-term benefits to consumers that are embedded in that programme. In our view, this informs the analysis of our pricing decision and provides vitally important context when considering if the costs to consumers of the “additional returns” above the Commission’s mid-point sector-wide WACC estimate are outweighed or otherwise considered to be reasonable because of the substantial benefits that will be delivered by the investment programme supported by those returns.
141. The context of Auckland Airport’s price setting event makes clear that our customers perceive a risk of underinvestment at Auckland Airport. Whilst it may not be the nature of a major outage like in energy, it is still very clear on balance customers do want the planned investment programme to go ahead and they do care about service quality and peak congestion costs. Auckland Airport targeted a return necessary to incentivise that investment plan, and provided qualitative explanations of how we considered the proposed investment programme to be in the long term interests of consumers.<sup>74</sup>
142. We also consider our target return is consistent with a normal economic return over time. Although judgement is required to set a target return, and it is impossible to determine the “right” or “optimal” numerical value, we sought to provide confidence to customers that we are targeting a normal economic return by:
- a. Carefully cross-checking the target return, informed by the regulatory framework and a range of airport-specific empirical evidence;

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<sup>74</sup>As we explained in our final pricing decision, given the broad support for the investment plan from the majority of our airline customers, Auckland Airport did not seek to precisely quantify the benefits to consumers and convert them into financial metrics for airlines and passengers. As the Commission has indicated in the past, this process is not straightforward and can be extremely time consuming and expensive. In addition, a number of the benefits to consumers from the investment plan involve increased resilience and quality of service, which is difficult to translate into numerical terms. For the same reasons, Auckland Airport did not seek to precisely quantify the potential costs to consumers if we did not proceed with this investment plan.

- b. Targeting a return that is materially lower than our best estimate, informed by expert evidence, of Auckland Airport's WACC; and
- c. Not seeking to recover all of our investment funding costs through aeronautical prices. Although we have a robust balance sheet, given the size and nature of the capital plan set out in this Reasons Paper, we will need to consider our capital funding options through the course of PSE3.

### Does Auckland Airport's conduct demonstrate that we are seeking an acceptable return over time?

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143. In the section 56G review, a major theme of the Commission's analysis was whether Auckland Airport's conduct indicated that we seek to earn a reasonable economic return over time.<sup>75</sup> We think the available evidence demonstrates that Auckland Airport was genuinely trying to do the right thing for PSE3. In particular:
- a. Following the Commission's guidance, we sought to explain why the factors supporting our target return were specific to Auckland Airport and to this stage in our investment cycle. We did not rely on generic arguments concerning other airports or other time periods.
  - b. Our pricing decision and pricing disclosure sought to explain why we considered our target return was consistent with the long-term interest of consumers, including by explaining the benefits that would flow to consumers from the investment being considered.
  - c. Auckland Airport targeted a lower return than our Auckland Airport-specific cost of capital estimate in response to the regulatory framework and airline submissions.
  - d. We undertook a cross-check that referenced the regulator's views on market-wide parameters such as TAMRP and the risk-free rate, and which referenced a range of asset beta information that we considered a regulator might reasonably take into account. For each of the asset beta reference points in this cross-check, we included the regulator's 0.05 downwards adjustment, even though based on expert advice we do not believe such an adjustment is warranted.
  - e. Auckland Airport's effective return for PSE3 is substantially lower than for PSE2. For example, the target return for aeronautical pricing activities (6.99% for PSE3 (65<sup>th</sup> percentile of the Commission's WACC estimate) compares to 8.475% for PSE2 (88<sup>th</sup> percentile)). The effective return for total regulated activities (7.06% for PSE3 (67<sup>th</sup> percentile of the Commission's WACC estimate) compares to 8.0% for PSE2 (75<sup>th</sup> percentile)). Given that Auckland Airport's returns for PSE2 were assessed to be within a reasonable range, the lowering of our target return for PSE3 relative to the Commission's sector wide midpoint WACC estimate demonstrates a clear response to the changes made by the Commission and the guidance from the IM review.
  - f. As acknowledged in its submission on the Commission's process and issues paper for this review, BARNZ accepts that information disclosure is limiting excess profits (although in its view not enough), that Auckland Airport reduced its target return in response to submissions and provided a substantial amount of justification for its target,<sup>76</sup> that Auckland Airport's target return is a lower percentile-equivalent of the Commission's WACC estimate than in PSE2, which BARNZ assumes is due to recent changes to the WACC IM, and that the target

<sup>75</sup> See e.g. Commerce Commission, *Final report to the Ministers of Commerce and Transport on how effectively information disclosure regulation is promoting the purpose of Part 4 for Auckland Airport*, 31 July 2013 at [E19], [E33].

<sup>76</sup> BARNZ *Assessment of AIAL's PSE3 Pricing Decision against Part 4 Criteria*, 28 November 2017 at page 12.

return is below our mid-point Auckland Airport-specific WACC estimate.<sup>77</sup> This acknowledgement from BARNZ provides further strong support that our conduct is heavily influenced by the regulatory regime. Together, BARNZ's comments show that Auckland Airport is genuinely constrained by the regulatory framework and airline feedback, and has provided significant justification about our approach – including why we consider our target return is reasonable and consistent with the long-term interest of consumers.

- g. More broadly:
- i. We used the Commission's revised ID templates to share profitability information with airlines throughout the pricing consultation process – in an effort to be as transparent as possible about our target returns and revenues.
  - ii. Auckland Airport's pricing decision is consistent with a clear commitment to robust forecasting of key aeropricing elements – including demand and operating expenditure. This is supported by the fact that the Commission has no significant concerns about any of Auckland Airport's forecasts and has made no adjustments to our forecast cashflows published in our price setting disclosure.
  - iii. We undertook an enormous exercise to restate our regulatory asset values in a way that would give the greatest transparency going forward – by restating individual asset values rather than attempting to use an alternative proxy approach. This will give the Commission and interested parties comfort that Auckland Airport's asset valuations will provide an accurate reflection of returns over time, and will not disguise excess profits.
  - iv. Auckland Airport used the carry-forward mechanism to disclose a downwards adjustment to asset values reflecting the impact of the moratorium between 2006 and 2010 – i.e. before the start of the information disclosure regime. Arguably this goes beyond what Auckland Airport was required to do – as the Commission has previously been clear that there is no need to treat revaluations prior to the start of the information disclosure regime as income.<sup>78</sup> We are not suggesting that this should change the Commission's numerical assessment. However, this does demonstrate that Auckland Airport is not seeking to “game” the regulatory system in any way. Rather, the evidence is clear that we endeavour to act consistently with our commitments, and to demonstrate to the regulator, our airline customers, and other interested parties that Auckland Airport intends to follow the spirit of the Part 4 regulatory regime.

144. In our view, this conduct is not consistent with an intention to target excess returns.

**After examining all factors individually and in combination, is Auckland Airport targeting an appropriate economic return over time?**

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145. When all the above factors are considered, we believe that Auckland Airport's target return for PSE3 is fair, reasonable and justifiable. We consider that Auckland Airport has appropriately applied its judgement, informed by robust empirical evidence, and that our approach has been heavily informed by the regulatory framework, feedback from our substantial customers, and consideration of the long-term benefits to consumers.

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<sup>77</sup> BARNZ Assessment of AIAL's PSE3 Pricing Decision against Part 4 Criteria, 28 November 2017 at page 12.

<sup>78</sup> Commerce Commission, Report to the Ministers of Commerce and Transport on how effectively information disclosure regulation is promoting the purpose of Part 4 for Christchurch Airport, 13 February 2014 at [F92].



146. In our view, the “additional returns” above the Commission’s sector-wide mid-point estimate (a short-term cost to consumers for PSE3) are consistent with the long-term benefit of consumers - particularly when weighed against the empirical evidence of Auckland Airport’s forecast risk over PSE3, and when balanced against an unprecedented investment programme that will deliver benefits for consumers both over PSE3 and well into the future.
147. Put another way – in the language of the section 56G review, taking into account the relevant context and Auckland Airport’s conduct in light of its reasonable expectations, these “additional revenues” above the Commission’s sector-wide mid-point WACC estimate are within an acceptable range for Auckland Airport for PSE3, and do not represent excess profits.

## Section 5: Returns on “other regulated assets / activities”

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148. The Commission’s draft report considers that Auckland Airport has not provided sufficient information to explain the returns we expect to receive on “other regulated assets”.
149. The Commission accepts that these returns may differ to Auckland Airport’s target returns on aeronautical pricing services due to differences in the way prices are set. However, it considers that Auckland Airport has not explained why this difference in expected returns, or the level of this difference (7.9% for other regulated activities compared to 6.99% for aeronautical pricing activities), is appropriate.
150. As noted previously, Auckland Airport has maintained a consistent approach to setting revenues for other regulated activities – primarily based on negotiations linked to market evidence. However, we appreciate that less information has been provided to date about exactly how prices are set for these activities, and why this leads to differences in the effective return compared to the target return for aeronautical pricing activities. This has been a natural product of the fact that:
- a. the rolling nature of individual lease expiries, renewals and rent reviews means that Auckland Airport’s planning and revenue forecasting for this part of the regulated business does not crystallise as part of a once-every-five-years pricing event in the same way as for common use aeronautical pricing activities;
  - b. the majority of our price-setting disclosures therefore focus on explaining the process and methodologies used to set standard aeronautical charges (approximately 92% of the forecast revenue);
  - c. other regulated activities have not been a major focus for airline customers, who have preferred to focus on assessing returns for aeronautical pricing activities (and encouraged the Commission to do the same<sup>79</sup>); and
  - d. the process to set prices for the leases and licenses that make up other regulated revenues follow generally accepted commercial leasing practice, which is consistent over time and well understood by the particular customers who have leases or licenses that make up this category of activities – thus requiring less explanation than the significantly more complex building blocks methodology used to set prices for aeroprising activities.
151. Returns on these activities has received little attention under the information disclosure regime so far. As the regime continues to evolve, we appreciate that the Commission may be more interested in understanding how prices are set for this category of regulated activities, and in considering the best way to assess the effective return on these activities over time.
152. In this section we:
- a. provide more detail about the process for setting prices for other regulated activities;

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<sup>79</sup> For example, BARNZ has recently (as part of the IM review) stated that: “it is the return on the pricing assets which is most relevant to assessing whether an airport is targeting the extraction of excessive profits”: BARNZ, *Cross submission by BARNZ responding to airport submissions on the Commerce Commission proposed changes to the input methodology and information disclosure determinations in relation to the airport topic*, 18 August 2016 at 7. Cited in Commerce Commission, *Input Methodologies Review Decisions – Topic Paper 5: Airports profitability assessment*, 20 December 2016 at [640.1].

- b. explain why the lifecycle of returns on other regulated activities will differ from aeronautical pricing activities, and provide some information about how this has occurred over the period since information disclosure regulation came into force;
  - c. discuss why the expected return for other regulated activities differs from the target return for aeronautical pricing activities, and from the Commission's mid-point WACC estimate; and
  - d. explain the limitations of forecasting returns for other regulated activities at the time of a price-setting event.
153. In summary, for aeronautical pricing activities, the Commission considers that the impact of the information disclosure regime is greatest at the time airports make their pricing decisions – and thus airports should primarily be judged based on their forecasts and targeted intentions at the time they set prices. However, this isn't the case for other regulated activities, where the periodic nature of lease or license negotiations means that investment planning and revenue forecasting for these activities does not necessarily align with the five-yearly pricing cycle for aeronautical pricing activities.
154. For this specific category of activities, we therefore encourage the Commission to take an assessment approach that looks across a longer time period (given that returns will fluctuate over time depending on market reference points), and which places greater emphasis on actual returns disclosed over time compared to forecasts disclosed at the time of the aeroprising price setting event.

### **A market review process is undertaken by Auckland Airport to set prices for other regulated activities – mirroring the process used to set lease rentals in competitive markets**

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155. Unlike the core regulated aeronautical services (i.e. common use airfield and terminal assets), each asset that forms part of other regulated activities is typically used exclusively by one customer. It is therefore not possible to set a standard unitised charge for other regulated services in the same way that we do for airfield services (MCTOW-based charge), or passenger terminal services (per passenger pricing).
156. For this reason, the “other regulated activities” segment predominantly involves leases or licenses that grant an individual customer exclusive possession of space or buildings. Lease rental prices are generally negotiated by agreement, typically with reference to market evidence and commensurate with the level of service or exclusivity of possession required by the customer.
157. Auckland Airport takes exactly the same approach to revenue setting for all leased activities – both those that fall within other regulated activities, and those that sit within the non-regulated part of the business. This approach is well understood by the market and by our leasing customers.
158. Typically, Auckland Airport's leases include clear provisions that determine the rent payable (at the start of the lease, and at any subsequent rent reviews) by reference to market evidence. To provide a little more context, the rent review process typically involves the following steps:
- a. the review dates are highlighted to the respective manager with 3 months' notice;
  - b. a valuer is engaged typically from a panel of valuers;

- c. the valuer inspects the premises and based on market evidence from both airport and off-airport (comparable properties in other locations) provides a valuation report that complies with the applicable valuation standards;
  - d. the report is reviewed to ensure that the lease fundamentals are correct e.g. review period and dates, areas etc;
  - e. once the report is finalised, a rental certificated from the valuer is also obtained; and
  - f. the lessor notice of market rental is then prepared and, if required, the rental certificate is attached.
159. Leases typically involve dispute resolution provisions that provide leasing customers with the ability to contest the payable rent. If the lessee disputes the proposed market rental, then the parties will negotiate. This can involve each party putting forward a valuation prepared by their respective valuers, and a commercial decision as to agree or “split” the differences. About 70% of Auckland Airport’s lease negotiations are resolved by parties making a commercial decision to agree or “split” the difference in this way. Some leases also allow the valuers to make a final binding decision – if the parties have agreed to this under the terms of the lease.
160. If no agreement can be reached, then the parties may request that the matter go to arbitration. Leases typically provide a mechanism for the appointment of an arbitrator. This is a last resort option (typically only taken in approximately 3% of Auckland Airport’s lease negotiations) but might be pursued to enable the decision and negotiation to be obtained via an independent third party. Again, the leasing customer retains the right to invoke this process to determine the payable rental.
161. This process is consistent with the conventional market practice for setting lease rentals, and is generally accepted via lease clauses across the New Zealand commercial property market. In addition, the approach taken by Auckland Airport to setting rentals for other regulated activities:
- a. is well-understood by tenants;
  - b. is underpinned by market-based evidence prepared by professional valuation advisers that must comply with professional standards;
  - c. provides a well-established dispute resolution service that applies where rents cannot be agreed; and
  - d. enables consideration of the specific circumstances particular to each lease renewal (e.g. what investment may be required by Auckland Airport, duration of the lease, renewal options, review provisions, desired proximity to the airport, economic and property market conditions at the time the lease terms are established and at the time rents are reviewed).
162. In short, the leasing and rental review process for our other regulated activities is highly disciplined. It is based on the same negotiation, evidence-based rental and dispute resolution protections that are available to customers leasing properties in competitive markets. In our view, this is an appropriate pricing mechanism where a single customer seeks exclusive use or possession of particular regulated assets.

## The lifecycle of returns on other regulated activities will differ from aeronautical pricing activities

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163. The effective return for other regulated activities at any given point in time is a combination of the market-determined and negotiated revenues for a group of leases and licenses that were entered into at various times, and have rolling expiry, renewal and rent review dates.
164. This means that there is no defined pricing cycle for other regulated activities in the same way as the five-year pricing cycle for common use airfield and terminal activities, and the effective returns on this segment of other regulated activities will not necessarily align with building block concepts like a five-year estimation of WACC and target return.
165. The relationship between the effective returns on other regulated activities and the target return for priced aeronautical will therefore fluctuate over time depending on a range of factors – including how the regulatory WACC and target return moves over time relative to market-based lease rates. In some periods (as in PSE2), the effective returns on other regulated activities at the time of a price setting disclosure may be considerably lower than the targeted return for priced activities – and in other periods the effective returns may be above the target return.
166. At first glance, customers' views on the relative merits of a market-based approach compared to a building block approach for these activities may be coloured based on where returns are in the cycle – pointing to the building block based return in cycles where the market produces higher revenues than a building blocks model, and preferring market-based approaches in cycles where the market revenues are lower than the building blocks implied return.
167. For example, BARNZ claims that the effective return on other regulated activities for PSE3 “seems particularly excessive”. However, in the past – at a time when effective returns on this category of assets were relatively low – BARNZ noted that market evidence-based rental provisions provide a competitive market-like discipline on pricing, which can lead to returns substantially below a building block return:<sup>80</sup>

**Often airports target a significantly higher level of return on their pricing assets than they are able to achieve through leased areas, as leases often contain a term linking rental rates to market evidence. In the past BARNZ has been provided with information indicating that in some instances the return earned from market based leased rates can be nearly 50% less than the level of return produced by the building block methodology.** This raises questions over whether the level of profitability being targeted by the airports on the assets priced under the Airport Authorities Act price setting power is not excessive, given it is so far above that produced in workably competitive markets.

168. When assessing the returns on this category of activities, we therefore think it is appropriate to take a long-term approach which recognises the market for other regulated activities is relatively well-functioning, acknowledges that market-based reference points will fluctuate relative to a regulatory WACC and target return, and therefore “looks through” periods of higher and lower returns on other regulated activities relative to aeronautical pricing activities. In other words, there will be periods in which effective returns are both higher and lower than the target return for aeronautical pricing activities and/or the Commission's mid-point WACC estimate.

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<sup>80</sup> BARNZ, *Submission on Airport Input Methodology Review Draft Decision*, 4 August 2016 at 11.

## Why might the expected return for other regulated activities differ from the target return for aeronautical pricing activities, and differ from the Commission's mid-point WACC estimate?

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169. We appreciate that the Commission is interested in further detail about why it is appropriate for the effective return on other regulated activities to differ from the target return on aeronautical pricing activities over time.
170. First, it is difficult to conceive of how Auckland Airport might set prices for each individual lease in a way that targets a particular return on the combined "other regulated activities portfolio" over PSE3 and other aeronautical pricing periods equal to that targeted for the aeronautical pricing activities. We note that:
- a. The input methodologies are most relevant to assessing the price setting process for airport charges relating to the pricing asset base – which uses a building blocks approach. Although the information disclosure framework is a relevant consideration for leased activities, we seek to act consistently with the spirit of the Part 4 regime by ensuring that leases reflect customer demands and that there is a genuine discipline on price-setting via negotiated leases and well-understood market reference provisions. This is because there are several areas where the input methodologies are less directly applicable to the other regulated activities:
    - i. WACC – a regulated or business WACC is not used to set property rentals in competitive markets. Valuers use market return measures that are widely recognised in the property sector. Furthermore WACC Determinations under the IM assume 5 year pricing periods will not be the case for many property leases. Different WACC's would need to be established to reflect the lease contract periods.
    - ii. Land valuation – the IM requires regulated land to be valued as a contiguous land holding. Valuers consider the characteristics of the discrete assets to be considered in each property lease and establish their valuation based on these characteristics (ie smaller land holdings).
    - iii. Cost allocation – allocating common costs in granular detail to individual leases would be onerous and common costs (overheads) are not usually specifically addressed in property market leases. It is implicit that property owners will recover a share of these from the rental returns.
  - b. For the leased properties within other regulated activities, rents are reviewed periodically according to the provisions of the individual lease – which specify differing lengths of time between each rent review ranging between 12 months and 5 years. This means market-based rent reviews are taking place on a rolling basis throughout each aeronautical pricing period.
  - c. However, although rent reviews are occurring periodically, there is no power for Auckland Airport, the appointed valuers, or the dispute resolution mechanisms under the terms of these leases to change the valuation methodology to take into account or reference the corresponding target return on aeronautical pricing assets or the regulatory WACC estimate at that particular point in time. The reference points for determining lease rentals remain as specified in the lease – consistent with generally accepted commercial practice and sitting alongside the associated customer safeguards and dispute resolution provisions.
  - d. Market returns will change over time with current market expectations considered at each lease renewal. The aggregation of each individual lease outcome will therefore not be reasonably comparable to a specific WACC determination at any

point in time – including at the time when charges are set for common use aeronautical activities.

171. Finally, we do not interpret the Commission's draft report as suggesting Auckland Airport should introduce a building-block method to determine the rental for each lease that falls within other regulated activities. However, for the avoidance of doubt, we think it is important to recognise that a building-block model would not be a feasible or better option for price-setting for other regulated activities:
- a. The service Auckland Airport supplies in relation to other regulated activities is typically a tenancy. Forty four leases/licenses in this category account for over 80% of the other regulated revenues. The terms of renewals for the leases are predominantly market-based, linked to CPI, or fixed within 0.5% of CPI. The frequency of rent reviews varies from month to month (for assets which are about to be displaced by construction) to 60 months, with 36 months being the most common rent review period.
  - b. In the s56G review, the Commission acknowledged that the use of lease agreements and licenses for consumers with specific asset requirements was an appropriate part of Auckland Airport's pricing methodology, and enabled consumers to make price-quality trade-offs.<sup>81</sup>
  - c. We are not confident that our customers would want to move to a building-blocks based approach:
    - i. We have received no requests from leasing customers for rentals to be determined on this basis and, as the Commission has noted, no concerns have been raised about consumers' lack of bargaining power in respect of services associated with other regulated assets.<sup>82</sup>
    - ii. The competitive property market approach provides a range of well-understood processes and disciplines that our leasing customers seek, including tenure and benchmarking relative to competitive property markets. In contrast, only Air New Zealand and Qantas Group would have any familiarity with the building blocks approach – scores of other tenants would not have this experience. Similarly, valuation advisers would typically not be experienced in building block approaches, and the building block methodology would not necessarily lend itself well to the dispute resolution service given the types of economic questions that can arise.
    - iii. Our understanding is that leasing customers value the tenure that they are able to negotiate and choose to pay for under a leasing model. In particular, long ground leases create a legal interest in the land, virtually akin to a freehold interest. There is a huge value associated with this for the leaseholder.
    - iv. Sometimes, the permitted use of land subject to leases allows a range of activities – some which are captured by the definition of regulated activities, and others which are not. Auckland Airport does not generally seek to carve out the proportion of revenues that are not strictly captured by the definition of regulated activities where a leaseholder uses land for multiple purposes. If we were to move to a strict building blocks model to calculate lease rentals (assuming that was even possible), Auckland Airport may seek to better align the scope of permitted activities to the definition of regulated activities – and be incentivised against a more flexible approach to land usage for

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<sup>81</sup> Commerce Commission, *Final report to the Ministers of Commerce and Transport on how effectively information disclosure regulation is promoting the purpose of Part 4 for Auckland Airport*, 31 July 2013 at [D30.1].

<sup>82</sup> Commerce Commission, *Review of Auckland International Airport's pricing decisions and expected performance (July 2017 – June 2022): Draft Report*, 26 April 2018 at [118].

administration or other discretionary activities that do not need to be located at the airport and arguably fall outside the scope of regulated activities.

- d. As noted above, market rents can be higher or lower than the target return for aeronautical pricing activities – depending on the market cycle. We are concerned that when the building block derived rent is above a market rent, a tenant is not going to want to pay more for a facility than they could do in the open market. Tenants would not accept a building blocks approach if it meant they would be paying above a fair market rate – creating asymmetric risks that tenants pay the building blocks rental when this is lower than the market rate, but refuse to pay or claim excessive pricing is occurring when the situation is reversed.
- e. There are also other features of the building blocks model that are not necessarily favourable to leasing customers over the long term. For example, in the next five to ten years Auckland Airport is expecting a reasonable amount of disruption to existing tenancies. If Auckland Airport was to set prices according to a building blocks model, the airport could seek to forecast the asset write-offs into the effective required cash return – pushing up the building blocks derived rent above market reference rates. With a market based reference point, any write-offs or disruption costs incurred by Auckland Airport must just be absorbed within the returns over time, rather than forecast as a cost to be recovered under a building blocks.
- f. If Auckland Airport wanted to move to a building-blocks model to determine individual lease rentals, this would require all leasing customers to agree to break their existing leases (which we consider to be unlikely for the reasons above), or would require Auckland Airport to progressively wait until existing leases which contain provisions that control how rentals are set expire – replacing these with new leases that link rental rates to five-yearly building-blocks reference points (again, requiring agreement from customers to this approach), or attempting to somehow set and enforce a standard charge for these properties outside of leased agreements.

The following chart shows the profile of lease expiry dates for other regulated activities at Auckland Airport, grouped by financial year.<sup>83,84</sup> As shown, it would take a considerable amount of time for Auckland Airport to unwind the market-based pricing approach for other regulated activities contained in today's existing leases.

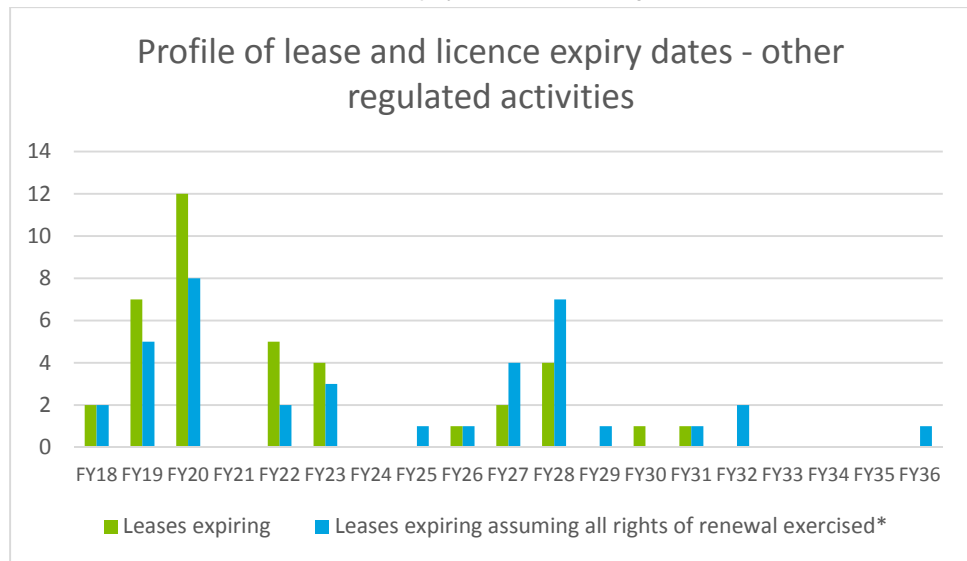
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<sup>83</sup> It is common for leases to contain rights of renewal that may be exercised by the customer to extend the lease past its initial expiry date – often multiple times. For this reason, the chart above shows both the number of leases technically expiring each financial year, alongside the number of leases that will expire each year assuming that all rights of renewal are exercised by each leasing customer.<sup>83</sup> For example, there are technically 12 leases expiring at various dates throughout FY20 – but only 8 of these leases have their final expiry dates in that year. The remaining 4 leases contain rights of renewal that can be exercised by the customer – extending the lease on the same terms (including the market-based determination of the payable rental).

<sup>84</sup> We note that lease expiry dates (and rent review dates) are spread throughout the financial year, corresponding to the relevant anniversary of the lease entry date – and are not aligned to a particular month of the year, nor day of each month.



Chart 3: Profile of lease and licence expiry dates – other regulated activities



\* There is one lease with a final expiry date of 2091 assuming all rights of renewal are exercised. This has been excluded from this chart for ease of presentation.

Note that this chart excludes a low value leases and a small number of leases that are currently on a month to month basis, leases currently expired or in the process of being renegotiated.

- g. In addition, it would be extremely onerous on airports to prepare building blocks for each tenancy, and to attempt to allocate common costs and assets at such a granular level. In any event, even if it were possible to align rental rates for each tenancy with a building block approach, this would still not enable comparison of returns on other regulated activities to a specific regulatory WACC and target return at a set point in time – as rolling rent reviews would still be undertaken progressively and would reflect specific tenant expectations.
  - h. Other regulated assets are identified based on their use (and whether that meets the definitions set out in the Airport Authorities Act) not their location. We foresee that any change to a building blocks approach could distort land use incentives and create disharmony and confusion between lessors that lease space captured by the definition of regulated services, and those that lease space where that is a non-regulated service or a combination of both types of services. By contrast the current model enables tenants providing services which are either regulated or non-regulated to benchmark the rates on offer versus market comparables and negotiate on this basis.
172. Finally, we note that there is one revenue stream in this segment which is a license rather than a lease. The Hydrant License permits the operator of the Joint User Hydrant Installation (JUHI) to use Auckland Airport's jet fuel hydrant system to deliver fuel from the JUHI's bulk storage terminal located near the airport into aircraft at the international apron. The current model has had some small refinements over time, but remains largely unchanged for multiple pricing periods - at least 15 years. This amortises invested capital over a shorter period than the standard economic life of the assets.
173. Auckland Airport met with BARNZ this week as part of the regular annual review process for the JUHI license. BARNZ did not raise any material concerns with the existing model. Nevertheless Auckland Airport is always open to considering alternate models if that is a priority for BARNZ. More broadly, Auckland Airport remains open to discussing principled changes to pricing practices for other regulated activities over time.

**Auckland Airport acknowledges the limitations of forecasting returns for other regulated activities at the time of a price-setting event, and continues to encourage the Commission to look at actual returns over the long term**

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174. As noted in the pricing disclosure, our PSE3 forecasts for other regulated activities were “bolted on” to the aeronautical pricing model which was the subject of our pricing consultation with airline customers.
175. At the time of the pricing disclosure, Auckland Airport was comfortable with the level of the difference between the effective return on other regulated activities and (a) the target return for aeroprising activities as well as (b) the Commission’s mid-point WACC estimate, because this effective return was a product of market conditions that fluctuate over time, and Auckland Airport knew it had taken a conservative approach to forecasting. This approach to forecasting may not reflect actual returns over the period, given the potential change that may occur to this part of the regulatory business over PSE3 – but we were confident that we would be able to explain any changes on an annual basis in our regular information disclosure statements.
176. Auckland Airport wishes to emphasise that consultation with airlines from mid-2016 to mid-2017 focussed on the pricing of common use aeronautical pricing activities, which account for 92% of forecast revenues for total regulated activities. Auckland Airport’s engagement with lease or license holders is not driven by the same timetable. Leases for other regulated activities are renewed for varying lease terms and at various times, which do not correspond to the five-year aeronautical pricing cycle.
177. It was and remains difficult for Auckland Airport to forecast revenues from other regulated activities given the rolling nature of lease renewals and rent reviews, as well as the fact that our planning for this part of the regulated business does not crystallise around the five-yearly aeronautical pricing cycle, and may therefore be at various degrees of certainty at the time we are required to disclose our five-year forecasts after each price-setting event. For this reason Auckland Airport elected to take a conservative approach by forecasting revenue growth as an extension of existing terms. In practice the negotiated outcomes will vary by contract and Auckland Airport is likely to need to write off assets during the period.
178. As illustrated in Chart 2, the long term aeronautical capital masterplan displaces a raft of aeronautical and non-aeronautical activities. Within other regulated revenues the potential displacement effects include the livestock facility, amenities buildings, and airside container facilities. In addition, there are also some discretionary moves available to cargo terminal operators who may elect to move out of the construction zone / heart of the processing area.
179. To illustrate the possible churn and tenant specific uncertainties in this area we provide a short case study in one area of the precinct - the cargo terminal operator facilities. We note that:
  - a. Cargo terminal operator facilities owned by Auckland Airport are between the domestic and international terminals, and are leased by cargo operators. Although these facilities have been in the right location historically and the proximity to the airfield has been valued by leasing customers, it has been apparent for many years that this location cannot endure in the long term.
  - b. Auckland Airport’s cargo strategy has been discussed with various stakeholders since 2016. Discussions have extended to alternative location options as well as consulting more generally around what a world class freight precinct could entail.

- c. At the time of aeronautical pricing, a preferred alternative site was still being assessed.
  - d. At least one of the current sites is subject to a long-term lease and Auckland Airport's planning assumption has been that this tenant would move when the tenant determines that the benefits of moving outweigh those of staying in an increasingly busy site under the existing lease.
  - e. As the development programme for the relocation of these facilities was quite uncertain, the price setting disclosure did not explicitly allow for material asset write-offs or the capital programme for developing the new cargo terminal location.
180. In our price-setting disclosure, we noted that ongoing discussion was underway regarding the optimal future location of cargo processing at Auckland Airport, which was then at a preliminary stage only. We explained that:<sup>85</sup>
- a. any decisions that were ultimately made would affect forecasts for other regulated activities – particularly investments, disposals and effective returns for aircraft and freight activities;
  - b. given the long-term land location was yet to be consulted on with Substantial Customers, it was difficult to estimate the degree of change that might occur to aircraft and freight services;
  - c. in the absence of more advanced investment planning, the forecast capital expenditure for other regulated activities for the price-setting disclosure was based on a continuation of current practices at a portfolio level (with the exception of investment identified through the aeronautical pricing consultation process that had an element related to other regulated activities); and
  - d. Auckland Airport's actual returns, including capital expenditure and commissioned assets for Other Regulated Activities would be accurately captured in time through annual disclosures.
181. As we work through the implementation details of the aeronautical plan and work with the affected tenants new information continues to come to hand, at a level of detail which could not have been advanced for the price setting disclosure. Since that time:
- a. Consultation has continued (and continues) with the affected leaseholders;
  - b. A preferred site for relocation of the cargo precinct has broadly been determined;
  - c. At least one key tenant has committed to moving as soon as possible – certainly within this pricing period; and
  - d. Our central planning forecast is now that between \$6m and \$6.5m of assets will be written off within the existing cargo precinct alone in PSE3. The incremental capital costs of reinstating these assets is estimated to be in the order of \$20m. The final number will be determined by the collective requirement for aircraft and freight facilities by tenants.
182. As noted earlier, it remains to be known if 100% of the affected tenants will elect to move to the new precinct within the pricing period. However, Auckland Airport is expecting a level of disruption and disposals that were not known at the time of the pricing disclosure, and could therefore not have been reflected in the five-year forecasts for other regulated activities disclosed at that time.

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<sup>85</sup> See Auckland Airport's price setting disclosure at page 23.

183. Ultimately, this case study example supports our view that, for this category of aeronautical activities, the five-yearly forecast disclosed at the time of pricing may not provide the same level of information about Auckland Airport's expected profitability as it does for aeronautical pricing activities (simply by virtue of the nature and lifecycle of these activities), rather than poor conduct on Auckland Airport's behalf. The actual five year IRR will depend on the actual level of disruption to other regulated activities and the individual price negotiations through the period.

### What does this mean for the current review?

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184. For aeronautical pricing activities, the Commission considers that the impact of the information disclosure regime is greatest at the time airports make their pricing decisions – and thus airports should primarily be judged based on their forecasts and targeted intentions at the time they set prices. However, this isn't the case for the other regulated activities, where the periodic nature of lease negotiations means that investment planning and revenue forecasting for these activities does not necessarily align with the five-yearly pricing cycle for aeronautical pricing activities.
185. Auckland Airport is not suggesting that returns on other regulated activities should not be monitored by the regulator over time. Rather, we are suggesting that the appropriate time period for assessing these returns may not necessarily align neatly with the five-yearly aeronautical pricing cycle.
186. For this specific category of activities, we therefore encourage the Commission to take an assessment approach that looks across a longer time period (given that returns will fluctuate over time depending on market reference points), and which places greater emphasis on actual returns disclosed over time compared to forecasts disclosed at the time of the aeroprising price setting event.
187. Interested parties can take comfort that returns on these activities are regularly disclosed and reported on in annual information disclosures, and therefore subject to regulatory supervision on an ongoing basis – with the Commission able to review and assess returns over time.
188. We think this is consistent with airline views that the main focus of the Commission's pricing reviews should be on aeronautical pricing activities – for example, BARNZ has recently (as part of the IM review) stated that: "it is the return on the pricing assets which is most relevant to assessing whether an airport is targeting the extraction of excessive profits".<sup>86</sup>

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<sup>86</sup> BARNZ, *Cross submission by BARNZ responding to airport submissions on the Commerce Commission proposed changes to the input methodology and information disclosure determinations in relation to the airport topic*, 18 August 2016 at 7. Cited in Commerce Commission, *Input Methodologies Review Decisions – Topic Paper 5: Airports profitability assessment*, 20 December 2016 at [640.1].

## Section 6: Modelling questions

189. Auckland Airport has two technical questions about the Commission’s analytical model.
190. First, the Commission has used an annual building block mechanism to determine its view of the “allowable revenue” at its mid-point WACC estimate. Compared to an IRR approach that looks across the five years of the pricing period, the practical effect of this modelling change is that the Commission calculates the required revenue at its mid-point WACC based on a five-year IRR of 6.37%, not 6.41%. This appears to make the dollar and NPV gap between Auckland Airport’s target revenues and the required revenues at the Commission’s mid-point WACC larger than it should be.
191. We note that:
- a. The new disclosure templates require airports to publish a five year target return (IRR). The template determines the return that is earned from forecast cash flows compared to an opening and closing asset base, including any carry forward adjustments.
  - b. The Commission appears to have applied a different approach in its profitability analysis model when calculating the revenue required to target its mid-point WACC estimate. Instead the Commission:
    - i. Calculates the revenue that is required to achieve a target return on the opening asset base for each year of the five year period; and then
    - ii. takes these revenue cash flows and includes them in the five year IRR approach.
  - c. The Commission’s approach produces different outcomes from Auckland Airport’s five year IRR approach as follows:
    - i. The intended overall target return for the five year IRR calculation at the Commission’s mid-point WACC estimate (6.41%) is not the same as the target return resulting from the Commission’s calculation of the required revenue for each year against annual asset bases, which are then included in the Commission’s five year IRR calculation. This is shown in the profitability assessment model for the draft report. The difference in the outcomes are:

Target Return / IM Determination IRR for Pricing Period	6.41%
Five Year Return Using Required Revenue from Annual Building Block Calculations	6.37%
PV Reduction in Commission’s “Allowable Revenue” at its mid-point WACC from Annual Building Block Approach	\$3.6 million
PV Reduction in Net Cash Flows from Annual Building Block Approach	\$2.6 million

- ii. Separately we note that the Commission’s annual building block return approach ignores the usual objective that airports have in price setting to minimise volatility in pricing. This may imply a different cashflow profile ought to exist that could lead to more price volatility than is desirable. This is illustrated follows:

\$000	2018	2019	2020	2021	2022
Auckland Airport required revenue	334,536	350,537	365,277	382,692	401,786
Commission required revenue	289,748	309,513	357,381	392,724	420,438

192. Second, the Commission has calculated the “per passenger impact” of Auckland Airport’s pricing decision by taking the total additional returns above its mid-point estimate and dividing this by forecast passenger numbers. We don’t think this provides the most accurate information for interested parties, as Auckland Airport’s charges for “other regulated activities” are not for aeronautical or common use assets that are used by all passengers. Rather, these are typically paid by leaseholders (e.g. cargo operators, hangar operators, airline VIP lounge providers), and do not flow through to ordinary passengers in the same way as standard aeronautical charges for aero pricing assets. This approach by the Commission is also inconsistent with the annual information disclosures (Schedule 17) where the charges for other regulated activities are excluded from average charges per passenger.
193. We think a more accurate quantification of the “per passenger impact” of Auckland Airport’s pricing decision would be to divide the “additional revenues” on the pricing asset base by forecast passenger numbers. Any “additional revenues” on the asset base for other regulated activities should be discussed as a whole number, rather than attempting to characterise these revenues as having an impact on each passenger.
194. Separation of the pricing and lease revenues produces the following outcomes in the Commission’s model:

	<b>Totals published by Commission</b>	<b>Pricing activities</b>	<b>Other regulated activities</b>
PV of revenue difference between Auckland Airport’s target return and the Commission’s sector-wide mid-point WACC estimate	\$64.8m	\$55.5m	\$9.3m
PV of net cash flow difference	\$47.5m	\$39.3m	\$8.2m
Impact of the “additional returns” above the Commission’s sector-wide mid-point WACC on passengers	\$0.61	\$0.52	N/A

195. Further, when considering the true per passenger impact of Auckland Airport’s pricing decision, we think the Commission needs to reflect both these modelling issues. The following table shows the combined impact of these two modelling changes – which suggests that the “additional revenues” above the Commission’s mid-point are approximately \$0.47 per passenger, rather than the \$0.61 per passenger cited in the draft report.

	<b>Totals published by Commission</b>	<b>Exclude other regulated activities as it is not accurate to characterise these charges as having a “per passenger” impact</b>	<b>Adjustment to reflect target return of 6.41% (not 6.37%) in required returns comparison calculations</b>	<b>Amended totals</b>
PV of revenue difference between Auckland Airport’s target return and the Commission’s sector-wide mid-point WACC estimate	\$64.8m	(\$11.4m)	(\$3.6m)	\$49.8m
PV of net cash flow difference	\$47.5m	(\$8.2m)	(\$2.6m)	\$36.7m
Impact of the “additional returns” above the Commission’s sector-wide mid-point WACC on passengers	\$0.61	(\$0.11)	(\$0.03)	\$0.47