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Keston Ruxton Manager, IM Review Regulation Branch Commerce Commission Wellington

By email: regulation.branch@comcom.govt.nz

Dear Keston

IM Review:

1 Wellington International Airport Limited (*Wellington Airport*) appreciates the opportunity to respond to the Commerce Commission's (*Commission*) draft decision on the Input Methodologies Review (*draft IM Review*). WIAL supports and provided input to the submission made by the New Zealand Airports Association (*NZ Airports*).

Executive summary

Introduction

- 2 The draft IM Review proposes a number of positive improvements to the framework of Information Disclosure (*ID*) regulation, and the detail of the proposed ID and Input Methodologies (*IM*) requirements.
- 3 In particular, the focus on:
 - 3.1 flexibility to reflect pricing decisions transparently in the ID regulations;
 - 3.2 a move toward a more contextual assessment of airport performance as opposed to a narrow de facto price control focus; and
 - 3.3 the ability for airports to explain their performance and provide justification for their targets;

are positive developments. Wellington Airport supported this approach in its previous submission,¹ and the Commission is to be commended for the work it has done.

4 The implementation of this approach will now determine how successful the ID regulation is in advancing the long-term interests of consumers. The current changes proposed in the IM Review

¹ Wellington Airport, *IM Review: Professor Yarrow Report and Emerging Views on the Airport WACC Percentile*, 16 March 2016.



Wellington Airport Main Terminal PO Box 14175 Wellington 6241 New Zealand T 04 385 5100 F 04 385 5139 mail@wellingtonairport.co.nz wellingtonairport.co.nz have the potential to give interested persons a better information base from which to form opinions about airport performance.

- 5 We are conscious that our role in ensuring the success of the overall framework being put forward by the Commission is to act and engage responsibly, explaining our actions in a fair and transparent way. In turn, the Commission's role is to explain and assess airport performance through a full contextual analysis, and to engage with an open mind on the explanations provided by airports.
- 6 In this submission Wellington Airport focuses on how the Commission should present information to interested persons, and in particular, its role in ensuring that interested persons are appropriately informed.

Duty to make ID transparent and understood for interested persons

- 7 First, interested persons must be informed about how complete, and how certain, the available information is. Where there is imperfect information, uncertainty, complexity, and assumptions, it is important that this is made clear, as part of the statutory duty of fully informing interested persons.
- 8 This is an area where ID regulation differs from price control. In a price control context the regulator must grapple with imperfect information and uncertainty, but then set a definite price. In contrast, in an ID context the Commission must highlight to interested persons the limitations of the available information as part of its duty to fully inform, and take care not to project a misleading impression of certainty.

Contextual assessment of airport performance

- 9 Second, information must be framed for interested persons in a way that makes clear good airport performance has many facets, and makes clear that assessing an airport's performance requires forming a view on a balanced scorecard basis.
- 10 We are concerned that the assessment of airport performance has collapsed down to a comparison of an ex ante internal rate of return (*IRR*) estimate and a Capital Asset Pricing Model (*CAPM*) weighted average cost of capital (*WACC*) estimate. Other aspects of airport performance don't get airtime or profile. This is a very impoverished way to assess an airport's performance and will result in misjudgements over time, to the detriment of consumers.
- 11 In this submission we compare two hypothetical airports: Airport A earning low returns and Airport B earning high returns. We highlight that a narrow approach to assessing airport performance that frames the issue for stakeholders as a comparison of an estimate of WACC with an IRR calculation would rank airport A above airport B. Wellington Airport explains how this assessment may be fundamentally wrong.
- 12 In this submission we explain a more complete view of airport performance. New Zealanders with an interest in our performance are those travellers who pass through the airport, and the wider community that benefits from good air services. They assess an airport not just by its returns but also by how its prices stack up against other airports and the other parts of their travel, the level of comfort and service at the airport, whether the airport is working well with existing airlines and investing to improve airline competition and services (via new routes or new airlines), whether the airport is

investing to improve connectivity, and whether the airport is engaging with its city and region. This improved connectivity and airline competition will invariably reduce airfares for the benefit of passengers.

13 All aspects of airport performance must be weighed, and for them to be weighed the ID regulation and the Commission must keep them visible to interested persons, not just financial returns. If the ID regime presents to New Zealanders a ranking or assessment of airports based on a narrow focus of comparing an ex ante IRR estimate and a CAPM WACC estimate, but does not sufficiently highlight the other facets of performance, it will do interested persons a disservice and not meet the statutory objective of Part 4.

Comparing ex ante IRR estimate to a CAPM WACC estimate

- 14 Against that important context we make some observations about the Commission's proposals for comparing an IRR estimate and a CAPM WACC midpoint estimate. These include:
 - 14.1 we are uncertain whether the CAPM should continue to be used for regulatory purposes. Its theoretical flaws and poor performance in practice have arguably become too great for it to produce credible results. However, on the basis that the Commission continues to use the CAPM, to perform its statutory role it must fully inform interested persons of the level of uncertainty involved in interpreting the results of the CAPM, including the difficulty of interpreting any divergence from the estimated ex ante IRR;
 - 14.2 we agree with Professor Yarrow's advice that any comparison should be made in the context of a particular pricing decision and the circumstances of the airport at the time. For this reason the Commission should resist making abstract judgments now about the nature of arguments it might accept and keep an open mind on matters where issues have yet to be fully explored.
- 15 Interested persons should also be reminded that there can be plain disagreements on how to apply the model and approach its inputs. This was a point made by the High Court:

The estimation of WACC is, all accept, a complex task involving significant exercising of judgement and is open not only to the possibility of error, but also to there being a range of views.

Unforecast revaluations

16 We discuss one particular aspect of the Commission's proposed method for estimating the IRR, namely the carry forward treatment of unforecast revaluation gains and losses. We explain that the principled starting point for tracking unforecast revaluation gains and losses is from the start of the ID regime.

Implications for Wellington Airport

17 We then discuss the implications of these uncertainties for Wellington Airport, including how Wellington Airport currently expects to set its cost of capital for its next pricing period PSE4.

Structure of this submission

- 18 This submission is structured as follows:
 - 18.1 The role of ID and the role of the regulator;
 - 18.2 Assessing airport performance;
 - 18.3 Comparing an IRR estimate with a CAPM WACC estimate;
 - 18.4 Unforecast revaluation gains and losses (relevant to estimating an IRR);
 - 18.5 The importance of ex post assessment;
 - 18.6 Implications of the uncertainty in performance assessment; and
 - 18.7 Our potential approach to setting the cost of capital for PSE4.

The role of ID and the role of the regulator

- 19 The role of ID regulation, and the Commission when administering ID regulation, is to fully inform interested persons about airport performance in accordance with Part 4. This will put interested persons in a better position to make informed judgments. Wellington Airport supports this objective.
- 20 Importantly, to fulfil this statutory purpose the ID regulation must inform interested persons about the levels of certainty associated with the available information. This is an important part of the statutory purpose of ensuring that interested persons are fully informed. Assessing the performance of a business involves forming a judgment based on imperfect information. For the statutory purpose of ID regulation to be met, interested persons must be fully informed of the levels of certainty and uncertainty associated with the available information and any judgments made about the performance of an airport.
- 21 This is one area where ID regulation differs from price control regulation. In price control regulation, the regulator is aware that it is operating under conditions of uncertainty with imperfect information. However the regulator's role is to set a specific price and it does so.
- In ID regulation, the duty of the regulator is different. When operating under conditions of uncertainty with imperfect information the regulator must take care to ensure that it does not mislead interested persons by projecting a false sense of certainty. Rather, it must inform interested persons of the uncertainties.
- 23 This is an area where the Commission could now look to improve the ID regulation and, in particularly, its communications to interested persons.
- An important example is the use of the CAPM to set a regulatory WACC. A CAPM derived WACC for the New Zealand airport sector is unlikely to reflect the returns airports would target in a competitive market. Parameter error is inevitable given the distortions in the government bond market, and the small group of listed comparator airports. More generally, the assumptions underpinning the CAPM

have been discredited. As Robert Shillar notes in the lecture he gave on receipt of this 2013 Nobel Prize, the Efficient Market theory is an aspiration, not the reality². CAPM is based on strong assumptions that don't bear much resemblance to the capital markets available to regulated firms; and the model leaves out important factors such as market imperfections, timing flexibilities and firm resource constraints.³

- 25 Further, since the GFC the CAPM has done a particularly poor job at assessing the cost of equity. With the aftermath from the GFC of low government bond rates and a simmering global economic crisis, equity risk premiums have behaved differently than they have historically. Connolly and Dubofsky, for example, find that equity risk premiums have increased as United States bond rates decrease and have moved inversely with inflation, both behaviours which are at odds with the relationships found in the pre-2008 time period, suggesting a structural break in 2008.⁴
- 26 Professor Yarrow aptly summarised the situation in his expert advice to the Commerce Commission:⁵

In relation to WACC estimates, it can be noted that these themselves are derived from a series of propositions that contain significant, speculative elements. Among these are the validity of the CAPM model variant that is used in the process and the assumption that the WACC will remain the same over the relevant assessment period, neither of which has much substantive underpinning in empirical research on financial markets (the evidence leans toward conclusions that each of the propositions is unlikely to be true).

- 27 In a price control context the Commission has to set a regulated price; to do that requires estimating a WACC; and for that a model is needed. The Commission must select a model, and so it adopts the CAPM. While the available information is imperfect and the model is flawed, the regulatory task requires the Commission to specify a cost of capital and a price and so it does so.
- 28 However in an ID context the duty of the Commission is to fully inform interested persons of the quality of the information available, the reliability of any models used, and considerations for interpreting results in particular, the importance of contextual analysis. It must take particular care not to project a false sense of certainty otherwise it is misleading interested persons rather than informing them.
- 29 Similar considerations must be grappled with when assessing all facets of airport performance (discussed further below). Information on more qualitative aspects of airport performance – such as quality, traveller experience, innovation, facilitation of airline competition, improvement in connectivity – is harder to come by and more difficult to convey and make "real".

² <u>https://www.nobelprize.org/nobel_prizes/economic-sciences/laureates/2013/shiller-lecture.pdf</u>

³ The existence of these forms of error is supported by the extensive evidence showing that the return that firms regard as commercially realistic is significantly in excess of the CAPM based estimate of WACC. See, for example: Jagannathan, Ravi, Matsa, David A., Meier, Iwan, and Tarhan, Vefa, 'Why Do Firms Use High Discount Rates? (June 29, 2015). Available at SSRN: http://ssrn.com/abstract=2412250 or http://dx.doi.org/10.2139/ssrn.2412250

⁴ Connolly, R. and D. Dubofsky, 2015, *Risk Perceptions, Inflation and Financial Asset Returns: A Tale of Two Connections*, Working Paper, SSRN #2527213.

⁵ Professor George Yarrow, Responses to questions raised by the Commerce Commission concerning WACC estimates for information disclosure purposes in the airports sector ("Yarrow Report"), 19 February 2016, p 5.

30 However the Part 4 purpose statement appropriately points to a balanced scorecard for airports. If the Commission and airports do not effectively convey both the available information and the level of certainty in relation to all limbs of airport performance, so that interested persons have a full and accurate account of the available information on airport performance, interested persons will be misled by the ID regulation.

Assessing airport performance

- 31 The papers released as part of the draft IM Review risk framing the assessment of airport performance as entirely about comparing an estimate of WACC with an IRR calculation. The two airport specific Topic papers were *Topic paper 5: Airports profitability assessment* (which discusses the calculation of an IRR) and *Topic paper 6: WACC percentile for airports*.
- 32 This framing is misleading and inadequate when assessing the overall performance of an airport. It is also misleading and inadequate when assessing the financial performance of an airport. As such, a narrow focus on comparing an estimate of WACC with an IRR calculation is likely to harm the long term interests of consumers.
- 33 The issue to be grappled with here is much more than simply acknowledging there are additional facets of performance, such as quality measures. The ID regulation already requires reporting of basic quality statistics for example. The publication of these narrow measures as part of detailed disclosures won't correct a misleading focus on comparing an estimate of WACC with an IRR calculation.
- 34 The point can be illustrated by hypothesising two airports:

Airport A: earns low returns. It has high prices but also has high costs due to inefficiency, and so low margins. It has low levels of innovation in its operations, and delivers a basic service. Airport A has no engagement with its city or region, and makes no attempt to improve airline competition or grow passenger numbers or routes.

Airport B: earns high returns. It charges lower prices than Airport A but is efficient and earns higher margins. It is innovative, brings new services to market, engages with its travellers about what they want from their airport, and engages with its city and region. Airport B invests in attracting new airlines and developing new routes, to the benefit of airline competition and passengers.

A narrow approach to assessing airport performance that frames the issue for interested persons as a comparison of an estimate of WACC with an IRR calculation would rank airport A above airport B.

35 Wellington Airport submits this is fundamentally wrong. Now that the detail of the ID regime for airports has been worked through, this is still one of the biggest problems to solve.

- 36 When reporting on and assessing airport performance, the Commission must:
 - 36.1 communicate that good airport performance is multi-faceted. It includes more than just robust profitability, it includes quality, innovation, efficiency and investment;
 - 36.2 assess performance in the same way providing a balanced scorecard (or sufficient information for interested persons to form their own view as to a balanced scorecard);
 - 36.3 give credit where it is due. For example, quality and innovation does not just happen, it is as much an achievement as more quantifiable aspects, such as efficiency. Nor can it be assumed that once achieved that the situation (e.g. high quality) will be sustained without continued focus and effort;
 - 36.4 provide the wider context as relevant, including the particular risks and challenges faced by the airport, its particular strategy, and the airports role in promoting airline competition and connectivity.
- 37 For these reasons, information on airport performance should include the full experience of passengers and airlines, including:
 - 37.1 the absolute level of prices and how they compare to other airports;
 - 37.2 the traveller experience at the airport (comfort, ease of use, facilities);
 - 37.3 the airport's quality rankings, including comparisons both nationally and internationally;
 - 37.4 examples of innovation introduced at the airport (whether customer facing or internal);
 - 37.5 examples of the airport's efficiencies (whether related to specific projects or the overall airport operation);
 - 37.6 the airport's significant investment projects;
 - 37.7 meeting the operational needs of existing airlines;
 - 37.8 facilitating and driving airline growth and competition, including new routes and new airlines;
 - 37.9 facilitating innovation and change by existing airlines;
 - 37.10 whether and how the activity of the airport is contributing to the connectedness and growth of the city and the region, including developing new routes and promoting airline competition.⁶
- 38 Airports have a role in assisting the Commission to pull this information together. We appreciate this is necessary to properly inform interested persons about the performance of an airport, and therefore

⁶ See for example: http://www.stuff.co.nz/business/82201545/Despite-rising-petrol-prices-air-faresare-tumbling-keeping-inflation-low

ensure the objective of ID regulation is met. We are committed to playing our part in producing good information on all facets of airport performance, and explaining the market context, the performance to date and expected performance, and the long term outcomes we are pursuing for all consumers.

39 Further, the Commission must avoid the pitfall of signalling to interested persons that good or average features of performance can be "banked" and effectively forgotten, and the focus is to be on one or two measures of performance only. This is a misleading way to communicate the performance of an airport. The assessment of airport performance must be communicated in a way that presents interested persons with a fair assessment of the airport's balanced scorecard. This is consistent with the purpose of Part 4, and the way that interested persons assess business performance in real world markets.

Comparing ex ante IRR estimate and a CAPM WACC estimate

- 40 In our view the approach outlined above is the assessment of airport performance that appropriately informs interested persons, consistent with the purpose of ID regulation.
- 41 However, the practical reality for now is that the IM Review is focused on the comparison of an IRR estimate and a CAPM WACC estimate. In this section we comment on how to make that comparison.
- 42 In previous submissions Wellington Airport has agreed with the change proposed by Professor Yarrow.⁷ This includes in particular:
 - 42.1 moving away from de facto price control at specific percentiles of the Commission's CAPM WACC range; and
 - 42.2 putting the onus on a contextual assessment of the performance of the airport, taking into account the full range of factors relevant to airport performance.
- 43 This approach has the potential to facilitate a more informative assessment of airport performance, as discussed above. It will be important that, as advised by Professor Yarrow, the full range of factors relevant to airport performance is considered. Grappling with the issue of imperfect available information in a way that informs interested persons, rather than misleads with a false sense of certainty, will also be important.
- 44 However there is a risk that the Commission's description of how it might proceed after this IM Review:
 - 44.1 presents the CAPM WACC midpoint as the expected measure of appropriate projected returns;
 - 44.2 does not make it clear that interested persons should expect that the estimated ex ante IRR may exceed the estimated CAPM WACC mid-point; and

See Wellington Airport, *IM Review: Professor Yarrow report and emerging views on the airport WACC percentile introduction*, 16 March 2016.

- 44.3 when it comes to a contextual assessment of the performance of the airport, prematurely narrows the range of considerations the Commission is signalling it will weigh.
- 45 We expand on these concerns below.

Presenting the CAPM WACC mid-point

- 46 Wellington Airport and NZ Airports have submitted earlier in the IM Review on the risk of the mid-point of the Commission's CAPM WACC range attaining a significance in the perceptions of interested persons that misleads rather than informs.⁸ The fact that the Commission is the author will contribute to this effect, as will the suggestion of proportionate scrutiny of departures from the mid-point of the Commission's CAPM WACC range.
- 47 For ID regulation to fully inform interested persons, the Commission must inform interested persons of the uncertainty of the CAPM WACC midpoint estimate.
- 48 These issues were highlighted above when discussing the role ID regulation. They are more fundamental than publishing statistical standard deviation measures, which derive from the estimation of inputs required by the CAPM.
- 49 For ID regulation, including the commentary from the Commission, to properly inform interested persons and so advance the long term interests of consumers, interested persons must be informed about the fundamental uncertainties and imprecision of the CAPM model, and the use of its estimates, particularly following the GFC.
- 50 As noted above, Professor Yarrow has advised:⁹

In relation to WACC estimates, it can be noted that these themselves are derived from a series of propositions that contain significant, speculative elements. Among these are the validity of the CAPM model variant that is used in the process and the assumption that the WACC will remain the same over the relevant assessment period, neither of which has much substantive underpinning in empirical research on financial markets (the evidence leans toward conclusions that each of the propositions is unlikely to be true).

51 Interested persons should also be reminded that there also can be plain disagreements on how to apply the model and approach its inputs. This was a point made by the High Court (*Wellington Airport & Others v Commerce Commission* [2013] NZHC 3289, paragraph 1491):

The estimation of WACC is, all accept, a complex task involving significant exercising of judgement and is open not only to the possibility of error, but also to there being a range of views.

⁸ Wellington Airport, *IM Review: Professor Yarrow report and emerging views on the airport WACC percentile introduction,* 16 March 2016; NZ Airports Association, *Submission on Commerce Commission Emerging Views on the WACC Percentile for Airports,* 16 March 2016.

⁹ Yarrow Report, p 5.

- 52 Any debate over the CAPM parameters whether it be the use of airport specific CAPM parameters, or different methodologies or different data sets for estimating parameters must be presented in this light. These are debates about approaches to parameters in relation to which there are genuine disagreements and imperfect information for inputting into a model that has fundamental uncertainties.
- 53 To repeat the point made above, this is where ID regulation differs from price control. It would be misleading for the Commission to grapple with this uncertainty and imperfect information and then project a misleading sense of certainty to interested persons. The uncertainty in the information value of the CAPM WACC must inform everything the Commission says about the comparison of the ex ante IRR estimate and CAPM WACC estimate.

Estimated ex ante IRR may exceed the CAPM WACC

- 54 This does not mean that nothing can be said about what to expect when comparing the Commission's estimated CAPM WACC and estimated IRR.
- As Professor Yarrow set out, wanting to "be helpful to the Commission":¹⁰
 - 55.1 Regulatory economic theory draws a distinction between an allowed rate of return (for assessing revenue and prices) and the weighted average cost of capital (which is the cost of one input, capital). Professor Yarrow correctly observed that the economically efficient allowed rate of return would typically be higher than the WACC.¹¹ The Commission needs to make clear to interested persons that its starting point, for an assessment of a rate of return, should typically be above its estimate of WACC, before it considers the context of a particular pricing decision.
 - 55.2 The NPV of an investment programme as a whole (that is, a forward looking view of the business activities of a firm) would be positive; that is, the anticipated profitability of a firm will tend to be above the cost of capital. Again, this is before considering the context of a particular pricing decision.
- 56 This is consistent with the way efficient companies operate in competitive markets. Target returns reflect both a base line minimum return reflecting the reasonable requirements/aspirations of debt and equity providers and a margin to reflect forward looking estimation of risks, which will include a mixture of environmental/market risks and project specific factors. Companies do not determine target returns based on a CAPM WACC. They consider shareholder expectations and set return targets that reflect market, regulatory and other external risks, as well as project specific risks. This will include allowances for execution risk, including in respect of costs, timing, and revenue volatility.

¹⁰ Yarrow Report, pp 11 – 12.

¹¹ See also Sapere, The distinction between the allowed rate of return and cost of capital, 16 March 2016.

57 For example, Summers (1987)¹² finds that the average hurdle rate used by Fortune 500 firms in the mid-1980s was approximately double the maximum WACC possible for the average firm. Poterba and Summers (1995)¹³ report similar findings for Fortune 1000 firms: an average real hurdle rate of 12.2% versus a maximum possible WACC of 7%. The results reported in Arnold and Hatzopoulos (2000)¹⁴ for a 1997 UK survey suggest an average nominal hurdle rate of 14.6%. Jagannathan, Matsa, Meier and Tarhan (2014)¹⁵ report that in their 2003 study the hurdle rates used by their sample firms are on average twice the CAPM based WACC rates.

Interpreting any comparison of IRR and CAPM WACC

58 Professor Yarrow advised that the performance of an airport should be assessed in context, including the commercial context that the airport is operating in at the time it makes a pricing decision. He states:¹⁶

too much weight is being placed on one set of numbers, deriving from exercises to estimate the cost of capital, and too little weight is being placed on the contextual factors that can influence the interpretation of disclosed information. Put another way, there is an implicit assumption that the cost of capital to be published should be itself be based on judgments that, in effect, reflect views on how the information should be interpreted.

- 59 The Commission has agreed it will adopt a contextual assessment. We strongly support that change. We believe this can result in well informed interested persons, which is the objective of ID regulation. We are conscious airports will have to explain their performance and the market context in a transparent and fair way, and we are committed to doing that.
- 60 The papers released as part of the draft IM Review report nevertheless make a number of abstract arguments that potentially narrow any assessment – ahead of any pricing decisions by any of the airports. We believe this is premature and would rather discuss these issues when a particular pricing decision can be assessed in context. However given the approach taken in the draft IM Review papers we highlight now where arguments have been over-stated or pre-judged.

Link between ID and pricing decisions

61 We disagree with the statements in the draft IM Review papers that the nature of ID regulation means there is no strong or direct connection between ID regulation outcomes and the pricing decisions of airports.¹⁷

- ¹⁴ Arnold, G. and P. Hatzopoulos, 2000, "The Theory-Practice Gap in Capital Budgeting: Evidence from the United Kingdom, Journal of Business Accounting & Finance, 603-626.
- ¹⁵ Jagannathan, R., Matsa, D., Meier, I. and V. Tarhan, 2014, "Why do firms use high discount rates?", working paper (available from SSRN), March, 77pp.

¹² Summers, L., 1987, Investment incentives and the discounting of depreciation allowances, in The Effects of Taxation on Capital Accumulation, ed. Martin Feldstein, Chicago: University of Chicago Press.

¹³ Poterba, J. and L. Summers, 1995, A CEO survey of US companies' time horizons and hurdle rates, Sloan Management Review, 43-53.

¹⁶ Yarrow Report, p 20.

- 62 The best available evidence is our experience for PSE2, which demonstrates the exact opposite. Our re-pricing in 2014 was a direct result of criticisms by the Commission of our targeted returns. The experience of Christchurch International Airport, changing its disclosure methodology for alternative depreciation in response to criticisms by the Commission, is also relevant. Outcomes under ID regulation, and in particular the commentary from the Commission, should be expected to have a strong and direct influence on the pricing and investment decisions of airports. As a good corporate citizen Wellington Airport takes reputational risk very seriously.
- 63 This direct link between ID and pricing decisions means the Commission must be sure about any criticism before it makes it. Mistakes in any public assessment of airport performance, or misleading impressions gained by interested persons, will reflect directly onto price, and flow through to investment. As Professor Yarrow advised, if the Commission's conduct is:¹⁸

highly re-active to relatively small deviations between projected or out-turn returns and the Commission's WACC estimate, business conduct itself, including in relation to investment programmes, can obviously be expected to be more sensitive to the WACC estimate.

Link between pricing and investment decisions

- 64 When considering the possibility of a regulatory mistake that depresses price, the papers released as part of the draft IM Review attempt to make the case that investors would nevertheless commit to long-term infrastructure investments expecting to make on those investments less than the required rate of return (i.e. the return available on investments of equivalent risk).
- 65 One feature relied upon in the draft IM Review papers is the dual till.¹⁹ The Commission should be careful to not overstate the impact of the dual till and its potential to rescue any regulatory mistake that results in prices being pushed too low. As discussed in submissions already,²⁰ the effect is at best debatable. More fundamentally and viewed over the time frames considered by investors in aeronautical assets, there is no free lunch. Investors in aeronautical assets must expect an appropriate return on average over multiple pricing periods or investment and performance will suffer.
- 66 The claim that the consultation process required under the AAA will in some way compel investors to make investments for which they do not expect a proper return²¹ is incorrect. The argument made in Topic Paper 6 that the consequences of any regulatory understatement of allowed return will be corrected by airline customers agreeing to fund an efficient level of investment is not supported by Air New Zealand and BARNZ – who have made it clear they will not support returns above the mid-point

- ¹⁹ Topic Paper 6 at paragraph 122.1.
- ²⁰ See Wellington Airport, *IM Review: Professor Yarrow report and emerging views on the airport WACC percentile introduction*, 16 March 2016; NZ Airports Association, *Submission on Commerce Commission Emerging Views on the WACC Percentile for Airports*, 16 March 2016.
- ²¹ Topic Paper 6, at paragraph 122.2.

¹⁷ Commerce Commission, *Input methodologies review draft decisions Topic paper 6: WACC percentile for airports* (**"Topic Paper 6"**), 16 June 2016, at paragraph 117.

¹⁸ Yarrow Report, p 8.

of the Commission's CAPM WACC estimate (entrenching any regulatory error).²² Also, the Commission should note that airport initiatives to expand capacity elicit very different responses from different airlines. Not all airlines seek to respond to rising demand by increasing capacity, some prefer to raise fares.

Social costs of regulatory error

- 67 Related to these points, Topic Paper 6 released with the draft IM Review argues that the question of whether the consequences of regulatory error are asymmetric is less relevant in relation to airports.²³
- 68 As we explain above, to the extent that this claim rests on the argument that ID regulation does not impact on airport pricing, or that airport pricing can be divorced from investment decisions in aeronautical infrastructure, we believe those foundations are not made out. The Commission should expect that criticisms of airport returns that are made in error will depress investment in aeronautical infrastructure below the optimal level.
- 69 The argument in the draft IM Review papers also rests on a claim any under-investment is likely to result in delays rather than outages and that the cost of delays to consumers is lower than an outage. This claim is made without any supporting evidence and suggests a lack of understanding of the economic effects of under-investment in airport infrastructure. For example, rather than the cost to consumers being lower because a consumer makes alternative arrangements,²⁴ the need to make alternative arrangements typically increases the cost. A consumer who catches an earlier flight (perhaps the previous evening) or who decides to overnight because they cannot be confident a flight will depart or arrive on time incurs considerably more cost than simply the number of minutes the flight is delayed multiplied by an hourly rate.
- 70 The Commission should recognise how under-investment impacts different people differently. If a passenger is willing to pay premium prices and can afford an airport lounge, they may be relatively oblivious to limited capacity, congestion and run down facilities. For more cost sensitive travellers the effect of under investment can be profound. It is incorrect to say low returns will not discourage investment, and if it does discourage investment will not have a real impact. Low returns will discourage investment and low investment will hurt some travellers.
- 71 The argument that the relationship between consumers and airport infrastructure is fundamentally different compared to other infrastructure sectors is a highly unlikely proposition and has not been shown. While each sector is likely to have differences, and the network effects of under-investment in airports is less visible and therefore more difficult to measure than an electricity outage, the Commission is wrong to underplay the asymmetry in the consequences of regulatory error in the aeronautical sector.

 ²² Air New Zealand "Emerging views on the airport WACC Percentile" (11 March 2016); BARNZ "Submission by BARNZ on problem definition paper for the input methodologies review" (21 August 2015), p 3.

²³ Topic Paper 6 at paragraph 127 to 134.

²⁴ As claimed in paragraph 132.2 of Topic paper 6.

Example: planned expansion of our International Terminal

- 72 An example showing the range of these issues is the planned expansion of our International Terminal. The precise scope and scale of this project is subject to ongoing assessment, design and consultation, however, if it proceeds, it will be a large multi-year project.
- 73 The reason that we are exploring this significant project is to alleviate the current capacity constraints and congestion being experienced, and to meet near-medium term future demand. Wellington Airport has experienced high international passenger growth (almost 16% in 2016) and further growth is expected, including with commencement of the Singapore airline services to Canberra-Singapore in September 2016. Issues faced by us, our customers, airlines and border agencies include:
 - 73.1 Congestion in the terminal, impacting customer experience and delays in travel time;
 - 73.2 Delayed processing time by security, border and MPI agencies;
 - 73.3 Delayed baggage retrieval;
 - 73.4 Limited or outdated basic amenities, including toilets;
 - 73.5 Limited access for physically impaired (escalators, lifts).
- 74 In practical terms, the recent growth in international traffic is putting serious pressure on our capacity. Passengers are being delayed, in some instances up to an hour. When this happens at the end of an international flight it can be quite unpleasant for consumers. It is not the level of service we normally deliver or aspire to.
- 75 If the proposed investment proceeds, it will address the above issues. However, the investment has to be justified by reference to likely revenues from aeronautical charges. It will not significantly increase passenger numbers in the short to medium term. Rather it will facilitate forecast passenger growth and is not expected to have a significant impact on unregulated income streams.
- 76 It is appropriate for our investors to seek a fair return commensurate to the risk of this and other projects. As discussed above, when calculating a required return businesses take into account project size and project risk, including delivery of the project on time and on budget, and uncertainty in cost estimates and projected benefits.
- 77 The complexity of this project, the risks, limited capital, and the interplay with required returns means that it is not certain that this investment will occur as quickly as we and our customers, airlines and border agencies may like.
- 78 What is clear, however, is that if the project is delayed this comes at a cost to passengers because the operational issues remain unaddressed; and compound further with time. Further, in the longer term, capacity constraints may defer or prevent airline growth and competition delaying the route and choice benefits for passengers.

Contextual assessment required

- 79 These issues reinforce the value of a contextual assessment of any airport pricing decision, and the importance of the Commission keeping an open mind until assessing pricing decisions in context.
- 80 Most issues in regulatory debates are, to a greater or lesser extent, a question of degree. In a price control context the Commission is nevertheless required to resolve these issues in a binary fashion. That is not required here. Issues can and should be left to be worked through in the context of a particular pricing decision, as Professor Yarrow recommends.
- 81 For these reasons we suggest that the Commission's commentary on these and other issues in its final IM Review papers be less definitive where not supported by the evidence base, and signal to interested persons these are issues will continue to be worked through in the context of a particular pricing decision.

Making an ex ante IRR estimate - unforecast revaluation gains and losses

- 82 The NZ Airports submission sets out its comments in relation to the proposed method for estimating the IRR. Wellington Airport provided input to and supports the points raised by NZ Airports.
- 83 In this section we discuss one particular aspect of the Commission's proposed method for estimating the IRR, namely the treatment of unforecast revaluation gains and losses.
- 84 Wellington Airport reiterates its long standing view that all the risks and rewards of property ownership should lie with the airport, including unforecast revaluation gains and losses. However, we provide comment below on the draft decision on the basis that the Commission is committed to the view (for the purposes of ID) that these should instead be passed onto the consumer.

Proposed treatment of unforecast revaluation gains and losses

- 85 The *Topic 5: Airports profitability assessment* paper focuses on a forward-looking profitability assessment for airports. A key component of estimating a forward looking profitability indicator is the opening investment value or capital to be recovered. The Commission considers that the opening investment value should comprise:²⁵
 - 85.1 The IM-compliant closing RAB value from the ex-post disclosure of the year preceding the start of the current price setting period; and
 - 85.2 Any adjustments reflecting decisions made in previous price setting periods that have an impact on charges for the current pricing period.
- 86 The Commission refers to decisions made in previous pricing setting periods that impact on charges for the current pricing period as the "ex post effects of risk allocation".²⁶ The Commission considers it important to reflect these effects in the opening investment value to achieve consistency between the

²⁵ Topic Paper 5, paragraph 156.

²⁶ Topic Paper 5, footnote 54.

opening investment value and the forecast cash-flows that are used in a forward looking IRR calculation. $^{\rm 27}$

- 87 The Commission presents 3 scenarios to show that including unforecast revaluation gains and losses, in real terms, in the carry forward adjustment to the opening investment value of the current pricing period preserves expected NPV=0 (in real terms).
- Scenario 2 describes the scenario in which an airport forecasts asset revaluations using CPIindexation, and revalued its land in the previous pricing period using a periodic MVAU valuation.²⁸ In this scenario, the adjustment to the opening investment value would be for "the amount calculated as the difference of actual land valuations based on the periodic MVAU valuation and revaluations based on actual CPI."²⁹

Financial Capital Maintenance requires carry forward

89 As noted above, the Commission explains that its proposal is intended to preserve NPV=0, or Financial Capital Maintenance (*FCM*). FCM is one of the three key economic principles that inform the Commission's framework for the IM Review.³⁰ The Commission explains FCM as:³¹

The FCM principle is that regulated suppliers should have the expectation ex-ante of earning their risk-adjusted cost of capital (ie, a 'normal return'), which provides them with the opportunity to maintain their financial capital in real terms over time frames longer than a single regulatory period.

90 The Commission explains that FCM is used in ID regulation because it is consistent with the Part 4 statutory purpose:³²

We have also applied FCM when setting ID requirements. The rationale for this application is that disclosures which are consistent with the concept of FCM enable interested persons to assess the extent to which regulated supplier's profitability levels are consistent with outcomes produced in a workably competitive market – meaning 'normal returns'. In the past, FCM has been applied to guide a number of specific decisions documented in the reasons papers for ID.

91 We agree with the Commission that if ID is to empower interested parties to determine whether FCM is being achieved under the Part 4 regime the carry forward would need to adjust the opening investment value for the net effect of the differences between previous revaluations (actual MVAU revaluations and revaluations on actual CPI). ³³

- ²⁹ Topic Paper 5, paragraph 359.
- ³⁰ Framework for the IM Review, paragraph 122.
- ³¹ Framework for the IM Review, paragraph 124.
- ³² Framework for the IM Review, paragraph 128.
- ³³ The detail of the calculations for these past 'real' unforecast gains and losses would need to recognise that prior to the current proposals, airports forecast revaluation gains on the best

²⁷ Topic Paper 5, paragraph 154.

²⁸ Topic Paper 5, paragraph 354.

- 92 If the difference between the CPI revaluation and the periodic MVAU valuation from one or more pricing events is excluded from the adjustment to the opening investment value, then an interested party could not be confident that any resulting profitability assessment provides sufficient information to assess whether suppliers are limited in their ability to extract excessive profits.
- 93 For instance, if the next forecast revaluation of land turns out to underestimate the real gain in land values by say \$5 million, and previous valuations had over predicted real increases in land values of the same amount at \$5 million, an informed observer might reasonably conclude that there was no evidence of excessive returns due to land valuations. However, if only the next revaluation/out-turn comparison is carried forward, a very different (and wrong) conclusion might be reached as to whether the disclosure regime (which has operated for multiple periods) is achieving the purpose of Part 4. Introducing the carry forward only for future revaluations would therefore introduce a risk of 'false positives'.

The start date must be 2010

- 94 Introducing the forward looking profitability measure, and hence the need for an opening investment value, will require the carry forward adjustment to be calculated for all real revaluation gains or losses since the commencement of ID ie from the initial RAB value as at 2010.
- 95 Without the carry forward adjustment to the opening investment value accounting for the net effect of the real differences between all previous revaluations (MVAU and CPI revaluations), it would not be feasible to assess whether financial capital maintenance is being achieved under the Part 4 regime since it began in 2010.
- 96 A start date of 2010 is the only approach that:
 - 96.1 Enables interested persons to assess FCM under Part 4 and assess performance of the airport against the statutory purpose of ID regulation;
 - 96.2 Would allow interested persons to compare airports;
 - 96.3 Is internally consistent with the rest of the Commission's methodology, including its framework for the IM Review, its key economic principles, and its approach to the Part 4 purpose statement;
 - 96.4 Is consistent with previous decisions made by the Commission when setting ID regulation, including:
 - (a) setting of the Market Value Alternative Use (*MVAU*) approach to land valuation commencing from the start of ID; and
 - (b) treating all actual revaluations as income since the start of ID.

available information, rather than on the basis of the CPI as will now be required by the Commission for ID purposes.

Importance of ex post assessment of performance

- 97 The estimation of an airport's ex ante IRR is one insight into an airport's performance. As discussed above it is an estimate that rests on choices and judgments. It is also a forecast.
- 98 As emphasised by Professor Yarrow, to fully inform interested persons about all the information needed to assess airport performance, proper emphasis should also be placed on out-turn results. Information on how an airport has been performing, and any trends in past and recent performance, are directly relevant to the task of fully informing interested persons about the overall performance of an airport.
- 99 As Professor Yarrow states:³⁴

The application of great care is therefore required when using the WACC as an indicator of reasonable price levels under an information disclosure regime, particularly when the assessment is made on an ex ante basis. The forecasting information disclosed by businesses is generally focused on a 'central' forecast and, in practice, it can be exceedingly difficult to incorporate regulatory risk into such a forecast in any very explicit way.

- 100 For these reasons, it is an ongoing source of frustration to Wellington Airport that the Commission has not presented to interested persons an assessment of airport performance that gives material weight to actual results. A number of submissions to this effect were made to the Commission prior to the advice of Professor Yarrow, in the IM development process and the section 56G reviews.
- 101 Now that Professor Yarrow's advice has been received, it is disappointing to see this feature of airport performance again over-looked in the Commission's draft IM Review papers. It is clear to Wellington Airport that fully informing interested persons about airport performance has to include actual performance. If the Commission has a different view it would assist the consultation process to understand its reasoning.
- 102 There are numerous reasons why actual results will vary to forecast. In addition to forecast error and execution risk, actual results will vary due to all the components of pricing, namely traffic numbers (due to airline, route, aircraft and passenger mix and timing), operating costs (due to change in operations, operational efficiencies and timing), capital expenditure (due to change in requirements and timing), revaluation forecast variances and taxation.
- 103 Wellington Airport submits the information on actual performance is also materially relevant to the statutory purpose of ID regulation of fully informing interested persons about the performance of airports. As such, it should be included whenever the Commission is engaging interested persons on the performance of airports.

The implications of these uncertainties

104 Wellington Airport continues to think that Information Disclosure regulation, and transparency as to all facets of airport performance, is important and valuable to consumers and investors.

³⁴ Yarrow Report, p 6.

- 105 However we do think that all interested persons need to grapple seriously with:
 - 105.1 how to meaningfully present uncertain information;
 - 105.2 how to present a picture of airport performance that lines up with the long term interests of consumers;
 - 105.3 how to draw conclusions from comparing an ex ante IRR forecast for a five year pricing period with a CAPM WACC estimate;
 - 105.4 ensure that future pricing and performance assessments are not prejudged, but interested persons remain open to contextual information when it is presented in due course.

Potential PSE4 pricing approach

- 106 Wellington Airport's next pricing consultation is for the period commencing 1 April 2019 (PSE4). Recognising the above uncertainties and complexities, our current intention is to consider a more commercial and contextual approach to our PSE4 pricing period, including assessing the returns required by debt and equity investors in Wellington Airport.
- 107 For the reasons discussed in this submission, we may not use the CAPM WACC model. Our cost of debt and leverage can be directly estimated. And our cost of equity may be better estimated by using the method used in practice to set expectations for the company namely a commercial judgment having regard to such factors as the market, regulatory and environmental risks, as well as potential volatility of cash flows, the pipeline of expected and alternative projects and investments, and project and execution risk. We will also consider all of the components of value provided to our customers from our investment, innovation, efficiency, service and the ability to facilitate and drive airline growth.
- 108 If you have any questions about this submission or any other aspect of the IM Review please do not hesitate to contact me at <u>martin@wlg.aero</u>.

Martin Harrington Chief Financial Officer