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Review of Auckland Airport's 2022-2027 Price Setting Event

Final report

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Contents

Glossary

Acronym/abbreviation	*Definition*
AAA	Airport Authorities Act 1966
AIAL	Auckland International Airport Limited
Air NZ	Air New Zealand
Airports IMs	Input methodologies for specified regulated airport services
the Act	Commerce Act 1986
ADT	Alternative Domestic Terminal
BARNZ	Board of Airline Representatives New Zealand Incorporated
CAPEX	Capital expenditure
CPI	Consumers price index
DJF	Domestic Jet Facility
DTB	Domestic Terminal Building
FTE	Full-time-equivalent
FY	Financial year
GAAP	Generally accepted accounting practice
IATA	International Air Transport Association
ID	Information disclosure
IM	Input methodology
IRR	Internal rate of return
OPEX	Operating expenditure
PSE	Price setting event
PSE3	Price setting event for the period 1 July 2017 to 30 June 2022
PSE4	Price setting event for the period 1 July 2022 to 30 June 2027
PSE5	Price setting event for the period 1 July 2027 to 30 June 2032
PQ	Price-quality
Qantas	Qantas group of companies, including Jetstar
RAB	Regulatory asset base
RBNZ	Reserve Bank of New Zealand
RLB	Rider Levett Bucknall
TAMRP	Tax-Adjusted Market Risk Premium
TIP	Terminal Integration Programme
WACC	Weighted-average cost of capital

Executive summary

X1 This report contains our review of Auckland International Airport's (**Auckland Airport**, or **the Airport**) pricing decisions for the period 1 July 2022 to 30 June 2027 (**PSE4**). In this report, we consider whether Auckland Airport's pricing decisions and expected performance are likely to promote the long-term benefit of consumers.

X2 Our key conclusions are:

X2.1 Auckland Airport's charges are in excess of what is reasonable for the PSE4 period; it is targeting a return above what we consider a reasonable range.[1] We estimate the total value of excess profits targeted by Auckland Airport to be between $150.2 million and $226.5 million.

X2.2 Forecast capital expenditure, while significant, is within a range we consider to be reasonable, based on the information we have. We have reviewed the process followed by Auckland Airport to set its capital expenditure plan, including the factors the Airport took into account (such as capacity and quality levels) and the evidence it considered (including the level of independent scrutiny and options considered). We did not find any issues that are inconsistent with the purpose of Part 4 of the Commerce Act.

X2.3 We think it unlikely that setting charges based on straight-line recovery of depreciation of investment in long-lived assets (which are not subject to inflation-indexation), such as new terminal infrastructure, best promotes the long-term benefit of consumers. A tilted annuity approach to the recovery of depreciation is likely to be more consistent with outcomes produced in a workably competitive market. This approach increases the value of depreciation recovered as the usage of the asset increases, yielding a flatter pricing profile than straight-line depreciation. Auckland Airport has signalled, it will consult with airlines on tilted annuity depreciation for the next price setting event (PSE5). While our view is that tilted annuity depreciation would likely produce outcomes that better promote the Part 4 purpose in PSE4, we are satisfied that consideration of tilted annuity depreciation in PSE5 would capture the majority of the costs of the integrated terminal assets.

[1] To the extent that we find the outcomes of the Airport's pricing decisions are consistent with the purpose of Part 4 of the Act, we will describe those decisions as being reasonable or appropriate.

Auckland Airport's targeted return is unreasonably high

X3 Auckland Airport's targeted rate of return (8.73%) is significantly higher than:

X3.1 our published mid-point (50th percentile) weighted-average cost of capital (**WACC**) estimate of 6.98%, which we use as a starting point for this assessment as it was determined using the 2016 Input methodologies for specified regulated airport services (**Airports IMs**);

X3.2 the value that was applied by Christchurch Airport in its last price setting event for the same period, and that we accepted (this value is 7.28% when calculated using 1 July 2022 for the values of risk-free rate and debt premium rather than the 1 April 2022 values used by Christchurch Airport); and

X3.3 our estimate of 7.82% which is based on the methods and parameters that we consider would have been used by investors, market analysts and companies to determine the WACC for specified airport services when Auckland Airport set its prices.

X4 Our conclusion is that Auckland Airport's estimate of WACC is significantly higher than a WACC that is consistent with the Part 4 purpose.

X5 While Auckland Airport has used inputs of the cost of capital consistent with the Airports IMs for credit rating, debt issuance costs and tax rates, it has varied the inputs for the risk-free rate, average debt premium, equity beta, leverage and tax-adjusted market risk premium (**TAMRP**).

X6 We have considered the justification provided by Auckland Airport for departing from the Airports IMs and conclude that while legitimate reasons are provided for using some different parameter values from our input methodology-based starting point estimate, these reasons are not consistently applied, and the magnitude of some of these adjustments is not justified.

X7 We consider it reasonable that Auckland Airport used 1 July 2022 as the date for setting the risk-free rate and average debt premium. This approach was agreed to by Air New Zealand (**Air NZ**) and the Board of Airline Representatives New Zealand Incorporated (**BARNZ**) in Auckland Airport's correspondence with substantial customers as part of the agreement to defer the price setting.

X8 We consider the magnitude of the asset beta and leverage adjustments to be excessive. The adjustment to the TAMRP is inconsistent with inflation expectations when Auckland Airport set its prices and is inconsistent with the rationale for adjusting the asset beta and leverage. All these adjustments contribute to our finding that the airport is targeting excessive returns.

X9 Auckland Airport submitted that the difference between the upper estimate of the WACC we included in our consultation paper and its WACC of 8.73% can be justified by applying a WACC above our mid-point estimate. However, we have not been persuaded by the evidence presented. In particular, Auckland Airport has not explained how a WACC uplift would provide a long-term benefit to consumers and did not provide this as a reason in its price setting process.

X10 Our final assessment is that Auckland Airport's estimate of the post-tax WACC of 8.73%, when used as a target return, is inconsistent with the Part 4 purpose because it is materially higher than the range of estimates of the WACC we consider appropriate for this assessment, which is from 7.28% to 7.82%. The lower value of 7.28% is consistent with the approach we accepted for Christchurch Airport, which is based on the 2016 Airports IMs, an updated risk-free rate and debt premium, and adjusted to reflect the TAMRP that we had published at the time of the pricing decision. The upper value of 7.82% is consistent with values of asset beta, leverage and TAMRP that reflect more recent economic events (ie, COVID-19).

We estimate that Auckland Airport is forecast to earn excess profits of between $150.2 million and $226.5 million over the PSE4 period

X11 Auckland Airport has used an estimate of its cost of capital as the target return on its priced services of 8.73%. As explained above, we consider that a value in the range from 7.28% to 7.82% would be a more reasonable WACC estimate for the purpose of setting prices for PSE4.

X12 We have estimated that Auckland Airport is forecast to earn excess profits over the PSE4 period of between $150.2 million and $226.5 million, in nominal terms, from the priced activities, as a result of targeting a higher than reasonable return.

X13 Aeronautical prices would be lower if a reasonable return was to be targeted by Auckland Airport for PSE4.

Conclusions on other matters affecting profitability

Operational expenditure

X14 Auckland Airport's operational expenditure forecasts appear reasonable. The Airport's per passenger operating expenditure forecasts are projected to be similar to pre-pandemic levels by the end of the price-setting period. Auckland Airport has used non-tradeable inflation rather than the consumers price index (**CPI**) as a cost driver. It considers the former likely better reflects its operating cost base, which we accept.

Depreciation

X15 Auckland Airport has used a straight-line depreciation method for all its assets including new investments. We think it unlikely that setting charges based on this approach best promotes the long-term benefit of consumers, when a significant upfront investment is likely to be used by a growing number of consumers over time. Specifically, in our view the tilted annuity approach to recovering depreciation of long-lived assets such as terminal infrastructure is likely to better promote the purpose of Part 4.

X16 This approach reflects the increasing utilisation of the asset meaning that consumers pay a consistent amount toward the cost of the asset over time. The effect is to defer some of the depreciation cost into the future, and thereby reduce price increases in the short term.

X17 We understand that Auckland Airport considered the tilted annuity method for recovering depreciation, which Christchurch Airport applied in setting prices to recover its investment in a new terminal.[2] However, Auckland Airport explained that it did not adopt this approach because it would likely reduce prices in PSE4 but then increase prices in PSE5 and beyond, the pricing periods in which the airlines were concerned the most about increased prices. Based on the information available and in the absence of regulatory asset base (**RAB**) indexation, we are not convinced by this conclusion. Using a straight-line method to recover depreciation means that in the short term, when there are fewer users, the price is higher for use of the same asset. This is exacerbated by Auckland Airport's choice not to index the asset base which means that in real terms users pay less over time toward depreciation (under a straight-line approach).

X18 Regarding accelerated depreciation of the Domestic Terminal Building (**DTB**), our view is that depreciation methodology that would best reflect the purpose of Part 4 is one that is aligned with the timing of the de-commissioning of the asset.

[2] Commerce Commission: *Review of Christchurch Airport's 2022-2027 Price Setting Event* (**PSE4**), pp 30-31.

Demand forecasts

X19 There has been extensive consideration, consultation and expert studies on demand from both Auckland Airport and its substantial customers. There was agreement with general demand as forecast by Auckland Airport. However, the expert studies relating to price elasticity of demand show different magnitudes for the potential impact on demand from the increase in Auckland Airport's charges. We do not consider that the potential impact of these differences is of sufficient significance to affect the operating expenditure forecast or the projection of long-term capacity needs. We find that the expert studies would have benefitted from a wider scope, including possibility of substituting between airlines and different times of travel, as well as international travel. Overall, we consider that Auckland Airport's demand forecast appears to be within a range we consider to be reasonable and is unlikely to result in excessive profits for the PSE4 period.

Revenue wash-up mechanism

X20 Auckland Airport has included a two-way revenue wash-up mechanism in PSE4, to protect both the Airport and airlines from significant revenue variance to PSE4 forecast. Our conclusion is that, in principle, this two-way revenue wash-up seems appropriate to address under- or over-recovery of revenue by the Airport in the event of a demand shock, like COVID-19. While some airlines did not agree on the threshold of the wash-up, there was agreement in principle over wash-ups generally and Auckland Airport lowered the threshold after considering airlines' feedback.

Corporate cost allocations

X21 Auckland Airport's cost allocation methodology is consistent with Part 2 of the Airports IMs. There has been only minimal change in Auckland Airport's allocation rules from the audited 2022 annual information disclosure (**ID**). Auckland Airport has also reported in its PSE4 disclosures that its allocation rules have not changed since 2006. We further note there was general agreement from substantial customers on the cost allocation rules applied, during the Airport's PSE consultation period.

Tax losses

X22 Auckland Airport did not include the value of tax losses incurred in the previous price setting event period (**PSE3**) into its target return for PSE4 which would have reduced its regulatory tax allowance and thereby overall expected return by approximately $20m. The Airports IMs contain treatment of taxation provisions but airports are not required to follow Airports IMs for their price setting events, although they are expected to justify departure from the Airports IMs. We find that the explanation and rationale disclosed in Auckland Airport's 2023 annual disclosure to be reasonable due to the effects of the pandemic on revenue. We would have liked to have seen this explanation within Auckland Airport's price setting disclosures as well to ensure transparent engagement with the Airport's substantial customers.

While significant, Auckland Airport's forecast capital expenditure is within the range of reasonable outcomes

X23 Auckland Airport is in the process of implementing an investment program that involves spending around $5 billion in PSE4, 62% of which relates to the new domestic terminal. For more details, see Table 4.1 in Chapter 4. Fifty-one percent of this investment is forecast to be commissioned in the latter part of PSE4 and to start being recovered through prices.

X24 Overall, we consider that Auckland Airport followed appropriate processes and applied rigour in costing the investment plan. Auckland Airport considered a wide range of options, including the alternative design provided by Air NZ, and had adequate regard to service quality. There is a range of investment outcomes that are consistent with the outcomes in a competitive market. This range reflects choices that the Airport makes based on its assessment of factors including the likely level of demand (passengers and freight), the mix of services it expects to be offered by airlines operating at the airport in future (including the mix of quality of services), and what will deliver the best commercial outcome for its shareholders. We are satisfied that Auckland Airport's decision is within this range of reasonable outcomes We have not identified aspects of the planned investment that produce outcomes inconsistent with the Part 4 purpose.[3] It has appropriately considered delivery risk mitigation.

Conclusions on costing and timing

X25 We consider that the process and rigour Auckland Airport applied to planning and costing the investment plan was reasonable. Auckland Airport engaged multiple third-party experts to assist with costing the investment plan and peer reviews. Auckland Airport appears to have appropriately considered the timing of its capital investment projects, with regard to needs for passenger capacity and contingent runway operation in the near future.

Conclusions on scope and service quality

X26 Based on the information received during this review, we consider that the scope of Auckland Airport's Domestic Jet Facility (**DJF**) design is within a range of reasonable options that could have been chosen. The Airport considered various options when considering the scope of its investment plan and has provided justification for its decision.

[3] We have not undertaken an engineering review of Auckland Airport's capital expenditure plan, as it is not our role to determine the specific investment choices that the Airport should make.

X27 The service levels that Auckland Airport is targeting for the design of the new domestic terminal do not appear to be excessive, in comparison to the International Air Transport Association (**IATA**) Optimum Level of Service standards or the average peer airports. However, the Airport's substantial customers would prefer a lower cost option.

Delivery risk mitigation

X28 Auckland Airport has introduced a capital expenditure wash-up mechanism that aims to reduce the risk of its customers paying for investment that is not delivered. We consider that the introduction of the one-way capex wash-up mechanism shows that Auckland Airport is cognisant of the risk of under-delivery. Without any such mechanism, the underinvestment risk primarily sits with airlines. Auckland Airport is better placed to manage the investment delivery risk. We consider the mechanism provides the right incentives.

Auckland Airport has made minimal changes to its pricing structure

X29 In the PSE3 review we concluded that in general, Auckland Airport's pricing structure did not raise efficiency concerns. Given that there are minimal changes to the pricing structure, we have not revisited this overall conclusion.

X30 In relation to the pricing structure changes that have been made, we consider that Auckland Airport has provided sufficient explanation for making the change to the 48-hour parking exemption for domestic freighters.

Auckland Airport appears to be innovating and implementing specific efficiency initiatives appropriately

X31 In response to submissions on our consultation paper, we have updated our approach to assessing innovation by Auckland Airport, taking a broader view, to include initiatives to improve efficiency more broadly. These efficiency initiatives include solutions that have previously not been used or widely used by airports in New Zealand. We agree with the airlines that the Airport has an opportunity to identify and implement efficiency initiatives with the terminal investment and have broadened our consideration to include these.

X32 Following the review of additional information provided by Auckland Airport in its submission on our consultation paper, and taking this broader view, our conclusion is that Auckland Airport appears to be innovating and implementing efficiency initiatives appropriately.

Submissions on the effectiveness of the ID regime

X33 Several submitters expressed concern about the effectiveness of the ID regime. Airlines called for reform and sought a section 56G inquiry into the form of regulation for Auckland Airport.[4]

X34 Submitters' concerns about effectiveness of the ID regime related to:

X34.1 **Retrospectivity** – our summary and analysis occurs after an investment decision has been made, so by the time we provide our conclusions, investment may already be underway, and contracts may have been let limiting the influence we can have on investment decisions.

X34.2 **Substance** – the ID regime does not currently require airports to obtain an independent review or verification of investment decisions, so it is hard for their customers and for us to ascertain whether the decisions are reasonable.

X34.3 **Time period** – we currently only look at pricing decisions in the context of a five-year period.

X34.4 **Potential lack of influence** – airports are not legally required to act in response to our summary and analysis.

X35 While we acknowledge submitters' views, possible change to the ID regime or to the regulatory approach more broadly is not the focus of this report. As submitters have noted, the current ID requirements are ex post and our summary and analysis process (ie, this report) means that the effectiveness of the regime cannot be fully determined until after the airport's response to our findings.

X36 In the past, airports have responded to the conclusions of our PSE reviews by reducing prices when we have concluded they are too high. In that respect, the regime has worked. Auckland Airport has stated that it will reduce prices if we conclude in this review that they are set too high. It has also indicated that it will revisit its approach to depreciation in the next pricing period.

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[4] Air New Zealand: *Review of Auckland Airport's 2022 – 2027 Price Setting Event 4 (PSE4) – Consultation paper: Air New Zealand (Air NZ) feedback* (3 September 2024) (**Air NZ submission on our consultation paper**), paragraph 5.28-5.33; Air New Zealand: *Review of Auckland Airport's 2022 – 2027 Price Setting Event 4 (PSE4) – Consultation paper: Air New Zealand (Air NZ) Cross Submission* (10 October 2024) (**Air NZ cross-submission on our consultation paper**), paragraph 5.19-5.24; Qantas Group: *Review of Auckland Airport's 2022-2027 price setting event* (3 September 2024) (**Qantas submission on our consultation paper**), page 23-24; BARNZ: *Re: Review of Auckland Airport's 2022-2027 Price Setting Event – Cross submission* (10 October 2024) (**BARNZ cross-submission on our consultation paper**), page 8.

X37 The key concern that has arisen with respect to this PSE relates to a major capex programme. As noted by submitters, this type of issue is less amenable to ex post regulation, than concerns about the level of prices, because it can be difficult or costly to alter an investment once it is underway.

X38 The merits of any changes to regulation would need to be assessed carefully, and target the issues identified. Options could include changes to: the current ID requirements; the type of regulation applying to all three regulated airports; Part 4 provisions relating to airports; and the wider regulatory regime for airports under the Airport Authorities Act 1966. The Commission has not reached any conclusions about the nature or timing of any next steps and many of the options would require broader engagement with policy makers.

Chapter 1 Introduction

Purpose of this report

1.1 This report contains our conclusions on the review of Auckland International Airport Limited's (**Auckland Airport** or **the Airport**) pricing decisions for the period 1 July 2022 to 30 June 2027. This is the fourth event of its kind for Auckland Airport and is referred to as Price Setting Event 4 (**PSE4**).

1.2 This report sets out our conclusions from the summary and analysis, which we must publish under section 53B(2)(b) of the Act, on information disclosed by Auckland Airport.[5] The purpose of our summary and analysis is to promote greater understanding of Auckland Airport's performance.

1.3 On 17 July 2024 we published a consultation paper with our draft conclusions on the PSE4 review.[6] We thank all parties that provided submissions and cross-submissions on our consultation paper.[7]

Structure of this report

1.4 This paper is structured as follows:

1.4.1 **Chapter 1** provides the context, focus and approach we have taken.

1.4.2 **Chapter 2** contains our analysis and conclusion on Auckland Airport's cost of capital.

1.4.3 **Chapter 3** contains our analysis and conclusion on Auckland Airport's expected profitability.

1.4.4 **Chapter 4** contains our analysis and conclusion on Auckland Airport's investment.

1.4.5 **Chapter 5** provides our analysis and conclusion on Auckland Airport's pricing structure.

1.4.6 **Chapter 6** provides our analysis and conclusion on Auckland Airport's innovation.

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5 Auckland Airport is required to publicly disclose information about its price setting event in accordance with the *Airport Services Information Disclosure Determination 2010*. A copy of the current consolidated determination (ie, including subsequent amendment determinations to 18 June 2019) for ease of reference can be accessed via our website. Commerce Commission: *Airport Services Information Disclosure Determination 2010* (consolidating all amendments as of 18 June 2019) (18 June 2019).

6 Commerce Commission: *Review of Auckland Airport's 2022-2027 Price Setting Event – Consultation Paper* (17 July 2024) (**Consultation paper**).

7 All submissions and cross-submissions received can be found on the Commission website here.

1.4.7 **Chapter 7** provides a discussion of the regulatory process, and considerations for the process going forward.

Context for this report

Airport ID regulation

1.5 Auckland Airport is one of three international airports subject to information disclosure (**ID**) regulation under the Commerce Act 1986 (**the Act**).[8] ID regulation is a specific form of regulation used under Part 4 of the Act to regulate certain markets where there is little or no competition (and little prospect of future competition). This form of regulation requires airports (and other regulated suppliers) to publicly disclose information in accordance with requirements we determine.

1.6 The purpose of ID regulation is to provide transparency on whether regulated businesses are performing in a way that is consistent with the purpose of Part 4 of the Act.[9] Through ID regulation, we analyse and report on information published by the airports (including their pricing decisions), but we do not cap their prices or revenues or enforce service quality standards. We consider the decisions and rationale used by airports in setting their revenues and target returns, in the context of the input methodologies (**IMs**) relevant to regulated airport services. When the purpose of ID regulation is achieved, it helps promote the purpose of Part 4 itself by incentivising regulated businesses to improve their performance.

1.7 ID regulation for airports covers specified airport services, such as airfield, aircraft, freight, and passenger terminal activities. Other services, such as retail facilities, car parking and access for taxis, are not regulated and are not part of this review. Within the regulated airport services, there are priced and non-priced activities. Priced activities include facilities and services for airfield landing and parking, passenger terminal (except VIP lounges) and check-in. Generally, priced activities are charged based on usage (eg, per passenger, per hour). Non-priced (ie, other regulated) activities include aircraft and freight facilities, VIP lounges and other dedicated services. Non-priced activities are charged through negotiated leases and licences.

Airport regulation outside of Part 4

1.8 In addition to the requirements of ID regulation, Auckland Airport must consult (and has consulted) with airlines concerning proposed prices under s4B of the Airport Authorities Act 1966 (**AAA**).[10]

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8 Alongside Wellington and Christchurch International Airports.

9 Commerce Act 1986, s 53A.

10 Airport Authorities Act 1966, s 4B.

1.9 Under the current AAA regime, airports may set prices they consider appropriate but must consult with airlines prior to fixing or altering charges and must do so at least once every five years.[11] Consultation on the price setting event also includes the inputs to the prices being set, such as cost of capital, expenditure programmes and demand forecasts.

1.10 Section 4C of the AAA requires specified airport companies to consult with 'substantial customers' on any capital expenditure plans that mean the airport will or will likely spend 20% of the value of its identified assets in capital expenditure over the following five years.[12]

1.11 The substantial customers that Auckland Airport has consulted with during PSE4 are Board of Airline Representatives New Zealand Incorporated (**BARNZ**), Qantas Group (**Qantas**), and Air New Zealand (**Air NZ**).

Auckland Airport has reset its prices

1.12 On 7 June 2023 Auckland Airport set the standard aeronautical charges for airfield activities and specified passenger terminal activities it would charge from 1 July 2022 to 30 June 2027. This price setting event follows the COVID-19 pandemic, which for the aviation industry had an unprecedented impact on demand and certainty. For financial year (**FY**) 2023 Auckland Airport froze aeronautical prices at FY2022 levels, to provide pricing relief and continue the PSE4 consultation. The decision to freeze prices resulted in Auckland Airport receiving more than $100 million lower aeronautical revenue in FY2023 than forecast if PSE4 prices were applied from that year. The deferred charges will be recovered over the remainder of the price setting period, to 2027. This arrangement (the recovery of deferred charges) was agreed to by the airlines.

1.13 The global pandemic had a significant adverse financial impact on the aviation industry, including both airports and airlines. Auckland Airport has stated it is not seeking to recover through PSE4 the more than $500 million revenue shortfalls suffered during the pandemic period.[13]

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11 The Civil Aviation Act 2023, which will replace the AAA, retains this consultation obligation.

12 Airport Authorities Act 1966, s 4C. The Civil Aviation Act 2023, which will replace the AAA retains this consultation obligation, however the threshold changes from 20% of the value of the Airport's identified assets, to a dollar amount linked to the Airport's annual passenger volumes;
'Substantial customer' is defined in the AAA as a person that paid the airport, in relation to identified airport activities in the airport's last accounting period, an amount that exceeded 5% of the revenue paid to that airport during that accounting period in relation to those activities.

13 Auckland International Airport Limited: *Price Setting Disclosure* (17 August 2023) (**Auckland Airport Price Setting Disclosure**), page 13.

1.14 Airlines have raised concerns about the forecast increases in aeronautical charges, and the impact on passenger demand. Auckland Airport considers it shares the interest of its substantial customers to minimise dampening of demand from price increases because passenger numbers are also a key driver of non-aeronautical revenue and shareholder value.

Changes to aeronautical pricing

1.15 Substantial customers of Auckland Airport have raised concerns that aeronautical prices will increase significantly during PSE4 and PSE5 (which is the next price setting event, for the period 1 July 2027 to 30 June 2032). This is a review of Auckland Airport's PSE4 decisions, and the focus is on PSE4. PSE5 pricing decisions have not yet been made. However, we acknowledge that some investment decisions made in PSE4 will affect prices in PSE5.

1.16 Auckland Airport states it has historically had the lowest domestic charges amongst New Zealand airports.[14] The domestic charges at the three regulated airports for FY2024, which for Auckland Airport covers the period 1 July 2023 to 30 June 2024, are listed below.

Table 1.1 Comparison of domestic charges

	FY24	
(FY23 $NZD)	**Domestic Jet**	**Regional**
Auckland	$9.92	$6.87
Wellington	$14.68	$10.81
Christchurch	$14.10	$9.67

1.17 Auckland Airport's international charge is also low in comparison with selected Australian international airports:

Table 1.2 Comparison of international charges

(FY23 $NZD)	FY24
Auckland	$31.73
Sydney International	$40.82
Melbourne	$34.77
Brisbane	$54.85

[14] Charges refer to revenue per passenger, which covers landing, parking, terminal and check-in services.

1.18 Following Auckland Airport's price setting decisions for PSE4, the aeronautical charges by FY2027 are: $13.97 (domestic jet), $9.67 (regional), and $41.68 (international). We note that while this is a substantial increase in charges from FY2023, the FY2027 domestic and regional prices remain comparable with, or are cheaper than, the FY2024 prices of other regulated New Zealand airports. The international charges by FY2027 also appear comparable with peer Australian international airports' FY2024 prices.

Table 1.3 Auckland Airport PSE4 price path

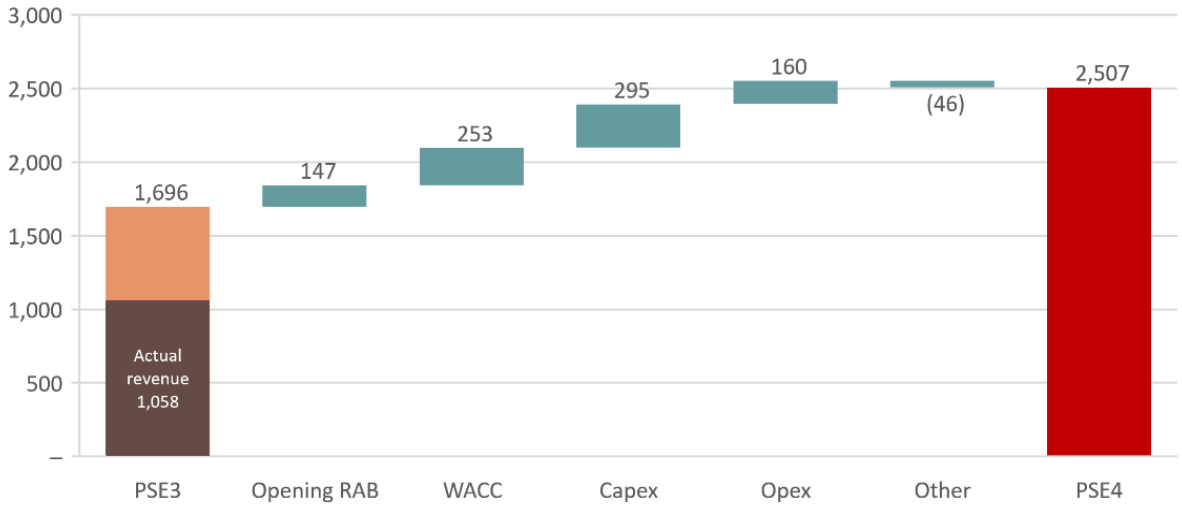
Auckland (FY23 $NZD)	FY23	FY24	FY25	FY26	FY27
Domestic Jet	$6.73	$9.92	$11.09	$12.43	$13.97
Regional	$4.43	$6.87	$7.68	$8.61	$9.67
International	$23.39	$31.73	$34.64	$37.96	$41.68
Year on year change (FY23 $NZD)	**FY23**	**FY24**	**FY25**	**FY26**	**FY27**
Domestic Jet		$3.19	$1.17	$1.34	$1.54
Regional		$2.44	$0.81	$0.93	$1.06
International		$8.34	$2.91	$3.32	$3.72
Year on year change (percentage)	**FY23**	**FY24**	**FY25**	**FY26**	**FY27**
Domestic Jet		47%	12%	12%	12%
Regional		55%	12%	12%	12%
International		36%	9%	10%	10%

1.19 We consider these pricing comparisons to be important context in our evaluation of whether Auckland Airport's pricing decisions for PSE4, including its significant investment programme, are consistent with the purpose of Part 4.

Contributors to the price increase in PSE4

1.20 The figure below shows the key reasons for the increase in forecast revenue from priced activities between PSE3 (the previous price setting event for the period 1 July 2017 to 30 June 2022) and PSE4 for Auckland Airport. The two most significant increases relate to the return (weighted-average cost of capital (**WACC**)) being targeted by Auckland Airport and PSE4 capital expenditure.[15]

Figure 1.1 Drivers of change in forecast revenue from priced activities ($m)



1.21 This is a high-level comparison in forecast between PSE3 and PSE4. The actual revenue and expenditure over PSE3 were significantly below forecast due to COVID-19 (shown by the darker segment of the first column in the figure).

Our approach to reviewing Auckland Airport's pricing decisions

Background

1.22 Our obligation under section 53B(2) of the Act is to promote greater understanding about the performance of each regulated airport, their relative performance, and changes in performance over time. The intent is to help interested persons assess whether the purpose of Part 4 is being met.

1.23 Our information disclosure framework for airports links the performance areas in the purpose of Part 4 to the required forecast information and assessment of it.[16] Given that price setting event disclosure contains predominantly forecast information, we consider this framework to be a useful guide for our review.

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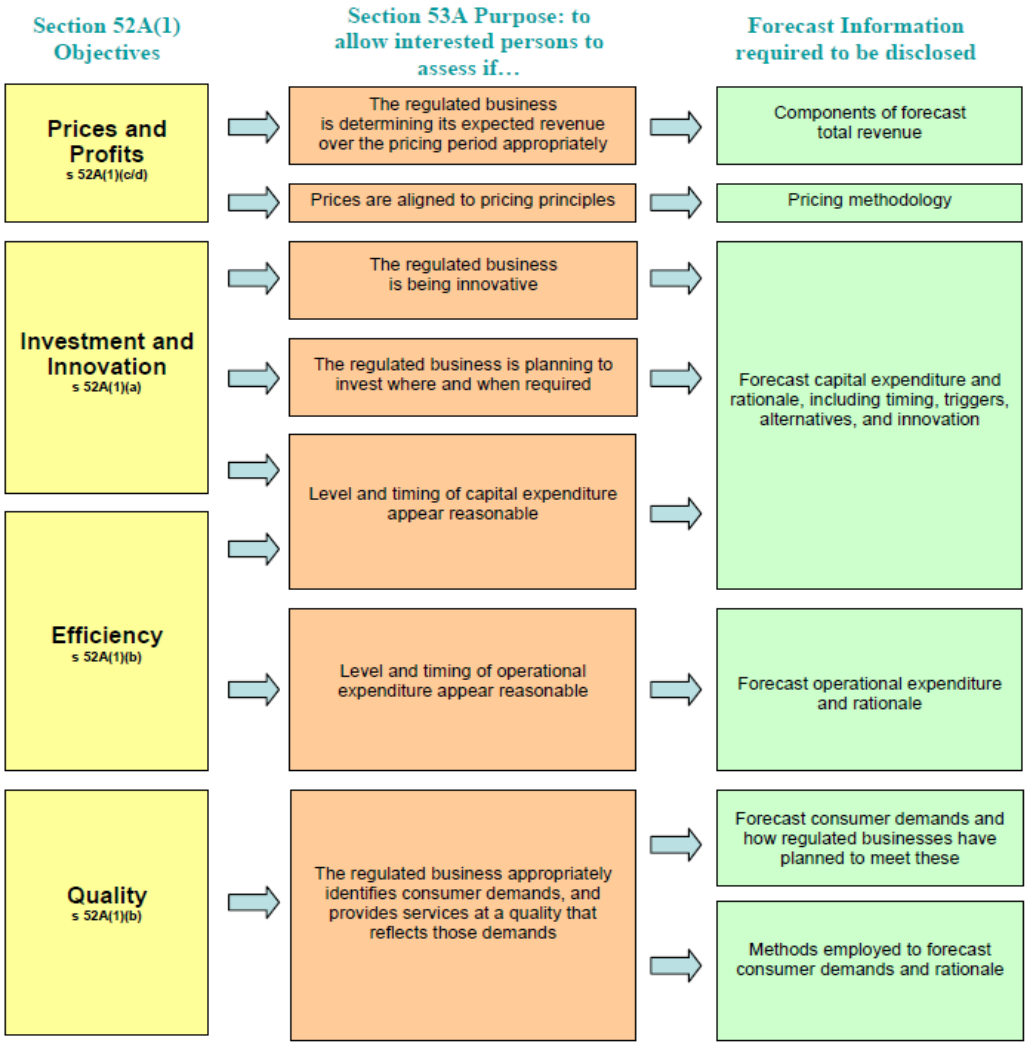
15 In the chart, the WACC column represents the increase in return on existing assets. The return on capital invested during PSE4 is included in the Capex column. 'Other' column covers the voluntary price reduction following our PSE3 review, disposals, and tax adjustments.

16 Commerce Commission: *Information Disclosure (Airport Services) Reasons Paper* (22 December 2010), page 131.

Figure 1.2 Disclosures informing ex ante assessments



1.24 We have flexibility under section 53B of the Act to determine which areas of performance we focus on and we are not required to consider all aspects of performance at one time. Price setting event disclosure generally contains forward-looking information and provides the most detail about expected profitability, prices and forecast expenditure, whereas historical information disclosure, which is not the subject of this review, tends to provide better insight into performance areas such as service quality, level of innovation, actual expenditure and return. Using the information in the PSE4 disclosure, we focussed on profitability, investment and any related quality considerations, and commented on efficiency, pricing and innovation aspects.

1.25 The purpose of our analysis is to assess whether the expected outcomes of Auckland Airport's pricing decisions are consistent with the purpose of Part 4 of the Act. This analysis does not determine the specific choices that Auckland Airport ought to have made in its pricing decisions, nor what we would have done in its place. In this sense, we are not required to identify alternative approaches unless we choose to do so. To the extent that we found the outcomes of the Airport's pricing decisions were consistent with the purpose of Part 4 of the Act, we have described those decisions as being reasonable or appropriate.

Key focus areas

1.26 In this review we have firstly considered whether the Airport has been limited in its ability to extract excessive profits, including:

1.26.1 the reasonableness of its cost of capital and target returns, as this is a key contributor to the Airports' ability to extract excessive profits;

1.26.2 the reasonableness of other inputs into its pricing model, such as demand forecasts, and the depreciation profile given the significant growth in the regulatory asset base (**RAB**) planned over the PSE4 period; and

1.26.3 the impact of any risk sharing arrangements, including consideration of the use or lack of any opening or closing carry-forward adjustments.[17]

1.27 We have also considered whether the Airport is investing in its assets appropriately and in a way that meets the quality that consumers demand.

1.28 Finally, we assessed how efficient the capital expenditure (**capex**) and operational expenditure (**opex**) estimates are for PSE4, and commented on pricing structure and innovation aspects.

[17] Auckland Airport's PSE4 disclosure includes carry-forwards relating mainly to historical adjustments seen in past price setting events, correction of errors, and omissions.

Chapter 2 Cost of Capital

Purpose of this chapter

2.1 This chapter contains our analysis and conclusion regarding whether Auckland Airport's reported estimate of its cost of capital of 8.73% is consistent with the Part 4 purpose.

Conclusion

2.2 Auckland Airport's targeted rate of return (8.73%) is significantly higher than:

2.2.1 our published mid-point (50th percentile) WACC estimate of 6.98%, which we use as a starting point for this assessment as it was determined using the 2016 IMs for specified regulated airport services (**Airports IMs**);

2.2.2 the value that was applied by Christchurch Airport in its last price setting event for the same period, and that we accepted (this value is 7.28% when calculated using 1 July 2022 for the values of risk-free rate and debt premium rather than the 1 April 2022 values used by Christchurch Airport); and

2.2.3 our estimate of 7.82% which is based on the methods and parameters that we consider would have been used by investors, market analysts and companies to determine the WACC for specified airport services when Auckland Airport set its prices.

2.3 Our conclusion is that Auckland Airport's estimate of its WACC is significantly higher than a WACC that is consistent with the Part 4 purpose.

2.4 While Auckland Airport has used inputs of the cost of capital consistent with the Airports IMs for credit rating, debt issuance costs and tax rates, it has varied the inputs for the risk-free rate, average debt premium, equity beta, leverage and tax-adjusted market risk premium (**TAMRP**).

2.5 We have considered the justification provided by Auckland Airport for departing from the Airports IMs and conclude that while legitimate reasons are provided for using some different parameter values from our IM-based estimate, these reasons are not consistently applied, and the magnitude of some of these adjustments is not justified.

2.6 We consider it reasonable that Auckland Airport used 1 July 2022 as the date for setting the risk-free rate and average debt premium. This approach was agreed to by Air NZ and BARNZ in Auckland Airport's correspondence with substantial customers as part of the agreement to defer the price setting.

2.7 We consider the magnitude of the asset beta and leverage adjustments to be excessive. The adjustment to the TAMRP is inconsistent with inflation expectations when Auckland Airport set its prices and is inconsistent with the rationale for adjusting the asset beta and leverage.

2.8 Our view is that Auckland Airport has implicitly assigned an unreasonably high probability to the likelihood of another COVID-19-type disruption occurring over the PSE4 period. As a result, its estimate of asset beta is unreasonably high.

2.9 We consider Auckland Airport's estimate of leverage is not reasonable for the same reason we consider its estimate of asset beta is not reasonable. Our conclusion is that the value of 14% is unreasonably low because it is likely to be inconsistent with the effect the COVID-19 pandemic had on the forward assessment by investors, market analysts and companies of leverage for the PSE4 period.

2.10 The TAMRP of 7.5% used by Auckland Airport was the most recent estimate published by the Commerce Commission when Auckland Airport made its pricing decision. However, Auckland Airport's TAMRP was inconsistent with other parameters in the WACC because it did not reflect the increase in inflationary expectations that was evident at that time. For this reason, we consider Auckland Airport's use of a 7.5% TAMRP is not reasonable in the context of its overall approach.

2.11 Auckland Airport submitted that the difference between the upper estimate of the WACC we included in our consultation paper and its WACC of 8.73% can be justified by applying a WACC above our mid-point estimate. However, we have not been persuaded by the evidence presented. In particular, Auckland Airport has not explained how a WACC uplift would provide a long-term benefit to consumers and did not provide this as a reason when it set its prices.

2.12 Our final assessment is that Auckland Airport's estimate of the post-tax WACC of 8.73%, when used as a target return, is inconsistent with the Part 4 purpose because it is materially higher than the range of estimates of the WACC we consider appropriate for this assessment, which is from 7.28% to 7.82%.The lower value of 7.28% is consistent with the approach we accepted for Christchurch Airport, which is based on the 2016 Airports IMs, an updated risk-free rate and debt premium, and adjusted to reflect the most recent TAMRP that we had published at the time of the pricing decision. The upper value of 7.82% is consistent with values of asset beta, leverage and TAMRP that reflect more recent economic events (ie, COVID-19).

Structure of this chapter

2.13 This chapter sets out:

2.13.1 our framework for assessing Auckland Airport's estimated cost of capital, taking into account the relevant context of the IM Review undertaken in 2016, our reviews undertaken in 2013 and 2014 in accordance with s 56G of the Act (s 56G reports),[18] our 2024 Review of Christchurch Airport's PSE4,[19] our 2022 Review of Wellington Airport's PSE4,[20] and our 2018 Review of Auckland Airport's PSE3;[21] and

2.13.2 our assessment of Auckland Airport's reported estimate of its cost of capital, focussing on the reasons and evidence it has provided for adopting a higher equity beta and TAMRP than our benchmark values, a lower leverage than our benchmark value, and a risk-free rate and an average debt premium that differ from the relevant rates that we had published for ID purposes prior to the price setting event.

Our framework for assessing Auckland Airport's estimated cost of capital

2.14 This section outlines our approach to assessing Auckland Airport's estimate of its cost of capital in this review.

2.15 We have developed a framework for assessing Auckland Airport's reported estimate of its cost of capital in this review, taking into account the relevant context of the s 56G reports, the changes made during the IM Review in 2016, and lessons from recent PSE reviews.

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[18] Section 56G of the Act, as was in effect at the time of the reviews, was a transitional provision requiring the Commission to report to the Ministers of Commerce and Transport on how effectively ID regulation was promoting the Part 4 purpose in respect of specified airport services. The report was to be made 'as soon as practicable' after any new price for airport services was set in or after 2012. We produced the final reports for Wellington, Auckland and Christchurch Airports in February 2013, July 2013 and February 2014 respectively. Section 56G has since been replaced by way of amendment in October 2018. The current s 56G relates to the Commission conducting an inquiry and making a recommendation to the Minister as to whether one of negotiate/arbitrate regulation, default/customised price-quality regulation or individual price-quality regulation should be imposed on the specified airport services in addition to ID, and, if so, how it should apply.

[19] Commerce Commission: *Review of Christchurch Airport's 2022-2027 Price Setting Event - Final Report* (25 January 2024).

[20] Commerce Commission: *Review of Wellington Airport's 2019-2024 Price Setting Event - Final Report* (28 September 2022).

[21] Commerce Commission: *Review of Auckland International Airport's pricing decisions and expected performance (July 2017 – June 2022) - Final report* (1 November 2018).

2.16 Our high-level framework for assessing Auckland Airport's reported estimate of its cost of capital, including the key factors we have considered, is set out below. This framework was also used in our most recent reviews of Christchurch Airport's and Wellington Airport's price setting events.[22]

Departure from mid-point: Is the airport's estimate of its WACC different to our mid-point WACC estimate?

- The mid-point WACC represents our starting point when assessing returns for profitability analysis, but we accept that there may be legitimate reasons for an airport to target returns that are different to our mid-point WACC estimate.[23]
- If the airport has departed from our mid-point WACC estimate, what are each of the parameter values used? Has the airport applied an uplift to its mid-point cost of capital (eg, due to asymmetric risks), and if so, what adjustment is made?

Legitimate reasons for departure in relation to each WACC parameter: For each WACC parameter (including any overall WACC uplift), what is the explanation for departing from our IM-based estimate?

- What evidence is provided to support the departure? (For example, is there support from academic articles or other regulatory decisions?). Note: the onus is on airports to provide evidence/sufficient reasoning on any relevant factors.[24]
- Has the airport considered consistency with its past pricing decisions (ie, has it applied the same logic consistently over time, or considered the trade-off between short-term fluctuations in parameter values vs predictability)?
- Are we satisfied that the evidence provides legitimate reasons for the departure from our benchmark value, in light of the Part 4 purpose (particularly the s52A(1)(d) requirement to limit the ability of airports to earn excessive profits)?[25]
- If we are not satisfied there are legitimate reasons, then the airport-specific adjustment to that parameter is unjustified.

22 Commerce Commission: *Christchurch Airport 2022-2027 Price Setting Event Review - Final Report* (25 January 2024), paragraph 32; Commerce Commission: *Review of Wellington Airport's 2019-2023 Price Setting Event - Final Report* (28 September 2022), paragraph A16.

23 Commerce Commission: *Input methodologies review decisions – Topic paper 6: WACC percentile for airports* (20 December 2016), paragraph 87.

24 Ibid, paragraph 99.

25 Ibid, paragraphs 87 and 94.

Legitimate reasons for the *size* of departure in relation to each WACC parameter: Is the quantum of the adjustment to each parameter (including any overall WACC uplift) justified?

- What evidence is provided to support the quantum? (For example, quantitative analysis demonstrating firm-specific difference from our benchmark value, evidence from academic articles, or other regulatory decisions?). Note: the onus is on airports to provide evidence/sufficient reasoning on any relevant factors.[26]
- Are there counter-arguments (or other off-setting considerations) which would reduce the size of the adjustment made by the airport? (For example, consider whether arguments made by the other regulated New Zealand airports would work in the opposite direction for the specific airport in question).
- Is the evidence/reasoning sufficient to support the value of the adjustment made to our benchmark value considering the Part 4 purpose (particularly the s 52A(1)(d) requirement to limit the ability of airports to earn excessive profits)?
- If the evidence/reasoning is not sufficient, then we consider the airport-specific adjustment to that parameter is unjustified.

Legitimate reasons for departure in relation to overall WACC: Is the airport's overall estimate of its WACC (combining each of the individual parameter values) reasonable?

- Are there any additional factors relevant to the airport's overall WACC (for example, off-setting considerations regarding other parameters)?
- 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 above our mid-point WACC estimate.
- However, if there are some adjustments we consider not sufficiently justified (or there are other off-setting considerations), then the airport's cost of capital is unjustified.

Our assessment of Auckland Airport's cost of capital

Is Auckland Airport's estimate of its WACC different to our mid-point WACC estimate?

2.17 When considering Auckland Airport's estimate of its cost of capital for this review, the key reference point is our published mid-point WACC estimate for airports.

[26] Commerce Commission: *Input methodologies review decisions – Topic paper 6: WACC percentile for airports* (20 December 2016), paragraph 99.

2.18 The parameter values used by Auckland Airport for its estimate of the WACC are shown in Table 2.1 below, alongside our mid-point estimate. Our mid-point estimate of the WACC for this analysis is the WACC as at 1 July 2022 for suppliers of specified airport services with a June year-end, which was published on 2 August 2022.[27]

2.19 For this assessment, as reflected in Table 2.1, we have used 3.60% for the risk-free rate and 1.17% as the debt premium. This uses 1 July 2022 as the estimation date.

2.20 There were differing views among the submitters about the values of the risk-free rate and average debt premium. Had we accepted the BARNZ and Air NZ arguments for estimating as at 1 April 2022, we would have used a risk-free rate of 2.67% and a debt premium of 1.24%.

2.21 We discuss our reasons for using 1 July 2022 as the estimation date in the next section.

[27] *Cost of capital determination for disclosure year 2023 for information disclosure regulation - For Transpower, gas pipeline businesses and suppliers of specified airport services (with a June year-end)* [2022] NZCC 28.

Table 2.1 Parameters used to calculate Auckland Airport's WACC estimate and the starting point for our analysis

Parameter	Commission (starting point)	Auckland Airport
Risk-free rate (1 July 2022)	3.60%	3.60%
Average debt premium (1 July 2022)	1.17%	1.17%
Leverage	19%	14%
Asset beta	0.60	0.80
Equity beta	0.74	0.93
Tax adjusted market risk premium (TAMRP)	7.0%	7.5%
Average corporate tax rate	28%	28%
Average investor tax rate	28%	28%
Debt issuance costs	0.20%	0.20%
Cost of debt	4.97%	4.97%
Cost of equity	7.78%	9.57%
Standard error of midpoint WACC estimate	0.0146	NA
Mid-point vanilla WACC	7.24%	8.92%
Mid-point post-tax WACC	6.98%	8.73%

2.22 Auckland Airport estimates that its cost of capital is 8.73% (post-tax) as shown in the third column. In comparison our starting point estimate, which is from our published ID decision on 2 August 2022, is 6.98%.

2.23 In response to our consultation paper, NZ Airports Association submitted that the table above should be removed because it is not consistent with the lower bound (discussed below) that is used in our assessment and that it can be used out of context.[28]

2.24 In a cross-submission, TDB Advisory disagreed and noted:

> the Commission makes very clear the rationale and basis for updating the WACC from this starting point, and how it reaches its new preferred range of 7.28-7.51 percent.[29]

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28 NZ Airports Association: *Review of Auckland Airport's 2022-27 Price Setting Event, Submission on Consultation Paper* (3 September 2024) (**NZ Airports Association submission on our consultation paper**), paragraph 27.

29 TDB Advisory: *Cross-submission on Commerce Commission's Review of AIAL's PSE4* (September 2024) (**TDB Advisory cross-submission on our consultation paper**), paragraph 29.

2.25 We understand the concern that this table could be used out of context; however, we consider it important to apply a framework that uses as its basis the Airports IMs relevant at the time of our assessment, and then applies a systematic method for considering an airport's variations from values published using the Airports IMs.

For each WACC parameter (including any overall WACC uplift), what is the explanation for departing from our IM-based estimate?

2.26 When estimating its cost of capital, Auckland Airport has used inputs consistent with the 2016 Airports IMs for credit rating, debt issuance costs and tax rates. Auckland Airport has departed from the Airports IMs by using:

2.26.1 an equity beta of 0.93 rather than the 0.74 specified in the Airports IMs;

2.26.2 leverage of 14% rather than the 19% specified in the Airports IMs; and

2.26.3 a TAMRP of 7.5% rather than our benchmark of 7.0% specified in the Airports IMs.

2.27 As discussed above, there was also a dispute about the values of the risk-free rate and the debt premium used by Auckland Airport (despite these values being consistent with our 1 July 2022 WACC estimate), which we discuss first in this section.

2.28 In addition, Auckland Airport submitted in response to our consultation paper that its WACC estimate of 8.73% can be justified by applying an overall WACC uplift to our mid-point estimate. As Auckland Airport had used a mid-point WACC estimate in its pricing disclosure we do not consider this issue in this section. Instead, we assess Auckland Airport's argument for a WACC uplift from paragraph 2.144.

Our assessment of Auckland Airport's risk-free rate and average debt premium

2.29 After freezing its standard charges for financial year 2023, Auckland Airport, on 7 June 2023, set charges for the remainder of the PSE4 period.[30] These charges were disclosed on 17 August 2023.

2.30 According to Auckland Airport, the approach of freezing charges for a year and then recovering the "sub-target returns" in financial year 2023 over the remainder of the PSE4 period was agreed with "the vast majority of Auckland Airport's airline customers".[31]

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30 Auckland Airport Price Setting Disclosure, section 1, paragraph 2.

31 Ibid.

2.31 In its cross-submission on our process and issues paper,[32] Auckland Airport stated it had been clear in its consultation that it would use 1 July 2022 as the date for the calculation of the risk-free rate:

> A key term from this proposal was that Auckland Airport's target return for the full five-year PSE4 pricing period will be determined retrospectively, after a second round of consultation with Substantial Customers, as at 1 July 2022 (the commencement of PSE4) by applying the relevant input parameters as at that date (e.g. including the observable interpolated 5 year risk free rate).[33]

2.32 In its 17 March 2022 request to the Commission for an extension of time for complying with the ID requirements, Auckland Airport stated that the WACC would be set retrospectively based on parameters as at 1 July 2022.[34] Auckland Airport indicated in that letter that Air NZ and BARNZ supported the proposal to delay price setting and to use 1 July 2022 as the date for setting WACC parameters, and counter-signed the proposal in December 2021, while Qantas did not.

2.33 BARNZ in its submission on our process and issues paper indicated that it was appropriate to use an updated value of the risk-free rate, but did not specifically indicate it supported using the value as at 1 July 2022 rather than 1 April 2022:

> BARNZ agrees it is appropriate for AIAL to use the Commission's updated estimate of the risk-free rate, which is higher than the rate of 2.6% used in the 2016 IM review.[35]

2.34 Air NZ, in its submission on our process and issues paper, did not refer to its support for the use of 1 July 2022, but rather provided reasons for why 1 April 2022 should be used:

> For the purpose of PSE4, AIAL used an RFR inherent at the beginning of the PSE4 pricing period (the Commissions RFR estimate of 3.6% as at 1 July 2022). AIAL claims that this "represented the latest available information at the start of the PSE4 pricing period." Air NZ disagrees. The 3.6% estimate was published on 2 August 2022, more than a month after the beginning of the PSE4 period, and approximately two months after the airport's pricing decision would have expected to be made on previous precedent.[36]

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32 Commerce Commission: *Have your say on the review of Auckland Airport's 2022 – 2027 price setting event – Process and Issues paper* (30 November 2023) (**Process and issues paper**).

33 Auckland International Airport Limited: *Cross-Submission on responses to the Commerce Commission Process and Issues Paper for its review of Auckland Airport's 2022-2027 price setting event* (21 February 2024) (**Auckland Airport cross-submission on our process and issues paper**), section 5.2, page 26.

34 Letter from Auckland Airport to Commerce Commission (17 March 2022).

35 BARNZ: *Feedback on proposed review of Auckland Airport's 2022-2027 Price Setting Event* (31 January 2024) (**BARNZ submission on our process and issues paper**), paragraph 16.

36 Air New Zealand: *Review of Auckland Airport's 2022-2027 Price Setting Event 4 – Process and Issues paper: Air New Zealand feedback* (31 January 2024) (**Air NZ submission on our process and issues paper**), paragraph 21.

2.35 After reviewing Air NZ's submission, BARNZ in its cross-submission agreed with Air NZ:

> While BARNZ noted in our earlier submission that there was some basis for the risk free rate of 3.6% as used by AIAL, we agree with Air NZ's point that – using the logic that AIAL itself presents – the correct risk free rate (RFR) should be that prevailing at the start of the PSE 4 period – i.e., 2.67%.[37]

2.36 Qantas did not provide a submission on the timing of the risk-free rate.

2.37 Auckland Airport's situation is similar to the situation when Wellington Airport set prices retrospectively for its PSE4. Wellington Airport has a disclosure year of 1 April to 31 March, and its PSE4 period is 1 April 2019 to 31 March 2024. Wellington Airport agreed with its substantial customers to use the value of the risk-free rate calculated at 1 April 2019, which was the start of its PSE4.

2.38 Auckland Airport's retrospective use of 1 July 2022 is consistent with Wellington Airport's use of 1 April 2019, because both are at the start of their respective PSE4 periods (Auckland Airport's PSE4 commences on 1 July 2022).

2.39 Christchurch Airport is on the same PSE4 period as Auckland Airport and has used 1 April 2022 as the date for the risk-free rate. However, Christchurch Airport's situation is different to Auckland Airport's because Christchurch Airport did not defer its price setting, and therefore the 1 July 2022 estimate was not available when it set its prices.

2.40 We considered the submissions on our process and issues paper by Air NZ and BARNZ that Auckland Airport should base its WACC on the value of the risk-free rate that was available prior to the start of the price setting event. Our draft view was that there was no regulatory reason why companies subject to ID regulation, when setting prices retrospectively, should use a value from prior to the start of the price setting event rather than at the start of the price setting event. What is more important is that the parties understand the approach that will be applied so that they are not surprised by the outcome.

2.41 Our draft conclusion was that it was reasonable for Auckland Airport to use 1 July 2022 as the date for setting the risk-free rate and average debt premium. This approach is consistent with evidence that 1 July 2022 was agreed to by Air NZ and BARNZ in Auckland Airport's correspondence with substantial customers as part of the agreement to defer the price setting. It is also similar to the approach taken for Wellington Airport's PSE4 where prices were set retrospectively.

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[37] BARNZ: *Cross-submission to process and issues paper: PSE4 Price Review* (21 February 2024) (**BARNZ cross-submission on our process and issues paper**), paragraph 25.

2.42 We received a submission from Auckland Airport supporting 1 July 2022 as the appropriate date to use, but did not receive submissions from other parties on this matter.

2.43 Our final assessment is that it was reasonable for Auckland Airport to use 1 July 2022 as the date for setting the risk-free rate and average debt premium.

Our assessment of Auckland Airport's equity beta

2.44 The COVID-19 pandemic resulted in a spike in airport equity betas as future airport revenue became uncertain due to government restrictions and self-imposed limitations on air travel. Auckland Airport considered the estimate of equity beta in the Airports IMs was outdated and chose to recalculate this value for PSE4.

2.45 Auckland Airport's consultant, Competition Economists Group (**CEG**), used a similar comparator sample as for the 2016 Airports IMs and updated the calculation for the 10-year period to 30 June 2022. The resulting value of equity beta, 0.93 compares to the value of 0.74 in the Airports IMs (which was calculated using data for the 10 years to 31 March 2016).

2.46 Auckland Airport explained that it calculated the equity beta using the 10-year period to 30 June 2022 because it considered this was a fair way of accounting for macroeconomic events over time:

> In Dr Hird's opinion, continuing to replicate the Commission's traditional rolling 10-year data analysis period would provide an actuarially fair attribution to all macro-economic events across time. This is because all years will be equally represented in pricing decisions over the long-run.[38]
>
> Those economic shocks and associated periods of higher systematic risk are not hypothetical. They are indeed experienced by regulated airport companies through the course of time and must be captured in their target returns so as to deliver investors their required risk-adjusted return over the long term.[39]

[38] Auckland Airport Price Setting Disclosure, page 54.
[39] Ibid.

2.47 Auckland Airport noted CEG's view that the method used by the UK Civil Aviation Authority, which calculated the equity beta using a pre-COVID estimate plus a premium that reflected the likelihood of another pandemic-type event during the pricing period, would over-compensate airports because the adjustment would need to be applied to all future price setting events. In comparison, CEG stated that continuing to estimate the equity beta using the average of data over the past 10 years would result in a temporary increase of a lesser amount:

> He [Dr Hird] considered that a full account of the UK precedent in relation to COVID-19 if applied to Auckland Airport would result in a permanent increase in compensation for all future PSEs equivalent to an asset beta uplift of more than four times the increase in asset beta attributable to COVID-19 in the 2016 IM method adopted by Auckland Airport to establish the PSE4 Target Return. Moreover, he noted that Auckland Airport's method only results in a temporary lift from COVID-19.[40]

2.48 Auckland Airport also stated that making adjustments to the use of 10-year historical data would cause other problems:

> To get the right result over the long run, airports and the Commissions would need to be able to perfectly forecast the probability of such future economic shocks. Since perfect foresight isn't possible in this context, an approach that attempts to adjust measured asset beta results for economic shocks will deliver the wrong result over time.[41]
>
> More importantly perhaps, there is the potential for such a change to be perceived as an illustration of asymmetric regulatory risk. That is, where an ad hoc change is introduced in an attempt to dilute a period of realised high systematic risk, whereas a period of realised low systematic risk would be unlikely to elicit a similar response.[42]

2.49 When it calculated the updated equity beta estimate, Auckland Airport disregarded the 0.05 downward adjustment to the asset beta that had been applied in the 2016 Airports IMs. The downward adjustment was based on the conclusion that the average asset beta from the comparator sample was too high because it was affected by non-aeronautical activities, which had a higher asset beta than aeronautical activities.

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40 Auckland Airport Price Setting Disclosure, page 56.

41 Ibid, page 55.

42 Ibid.

2.50 Auckland Airport stated:

> Given both CEG's conceptual conclusions and empirical analysis, Dr Hird found no clear support for Auckland Airport adopting the Commission's 5 basis point downward adjustment to the overall global comparable company average asset beta result for the regulated aeronautical component. In fact, the empirical evidence suggests that there should instead be an upwards adjustment for the aeronautical component. However, Auckland Airport did not make any such upwards adjustment for our PSE4 WACC calculation and target return determination.[43]

2.51 In our consultation paper we stated that we understood why Auckland Airport had updated the equity beta estimate in the 2016 Airports IMs. The equity beta is normally a relatively stable estimate over time and the estimate made at the IM review would be expected to be applicable for the period of the Airports IMs. However, the COVID-19 pandemic has had a disruptive effect on airports which may have caused the equity beta estimate in the 2016 Airports IMs to be out of date. We therefore accepted, in the consultation paper, that Auckland Airport had legitimate reasons for departing from using the 2016 Airports IMs for its calculation of the equity beta.

2.52 However, in the consultation paper we were concerned that the equity beta used by Auckland Airport would not result in outcomes consistent with ensuring the objectives in s 52A(1)(a) to (d) are balanced and promoted appropriately. Auckland Airport calculated the equity beta using a conceptual approach that would provide airports with compensation, after-the-event, for the effect pandemics and other macroeconomic shocks have on airport equity betas. This is because Auckland Airport proposed that the equity beta continue to be calculated on a rolling 10-year basis so that returns going forward are adjusted for historical equity beta outcomes.

2.53 While the method Auckland Airport has used is the method we previously used to calculate equity beta, the purpose of the equity beta is not to provide compensation for historical events. Instead, the equity beta is a forward-looking estimate of the relative risk from holding an airport company in a diversified portfolio of investments compared to holding the market share index. The equity beta that should be applied to the WACC for PSE4 is the market's view of the equity beta over the PSE4 period, which we discuss further in the next section. We consider that such a calculation would help to ensure the objectives in s 52A(1)(a) to (d) are promoted.

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[43] Auckland Airport Price Setting Disclosure, page 56.

2.54 In comparison, Auckland Airport's calculation of the equity beta places considerable weight on the period of the COVID-19 pandemic when equity betas were the highest. In effect, Auckland Airport is assuming investors consider that the prospect of another COVID-19 type event will result in the average equity beta for PSE4 being equal to the average equity beta over the 10-years to 30 June 2022.

2.55 While no one can predict when a future pandemic-type event will occur, we considered in our consultation paper that it was unreasonable to assign this such a high weighting.

2.56 While our final decisions and reasons from the 2023 Part 4 IM review were not available at the time Auckland Airport set its prices (just prior to the release of our draft decision in June 2023), the data that the 2023 Airports IMs were based on, which was up to mid-2022, indicated equity betas had declined from their peaks and were reverting to near pre-pandemic levels. This data was also available to Auckland Airport when it made its pricing decision.

2.57 We also noted in our consultation paper that Christchurch Airport, which made its pricing decision for PSE4 in June 2022, used the equity beta in the 2016 Airports IMs.

2.58 Our draft conclusion was that Auckland Airport had misconstrued the purpose of the equity beta and had implicitly assigned an unreasonably high probability to the likelihood of another COVID-19-type disruption occurring over the PSE4 period. In doing so, our draft conclusion was that Auckland Airport had calculated an equity beta that was inconsistent with the objectives in s 52A(1)(a) to (d).

2.59 Our draft conclusion was that Auckland Airport's equity beta was unreasonably high.

2.60 In response to the consultation paper, we received submissions on Auckland Airport's equity beta from Air NZ, Auckland Airport (including its consultant CEG), BARNZ, Christchurch Airport and NZ Airports Association.

2.61 Auckland Airport provided further explanation about why it updated the equity beta:

> Auckland Airport has applied what we consider the most principled approach to give due regard to regulatory precedent, which was to update the input parameters based on data at the start of the PSE4 pricing period, without applying any adjustments due to the pandemic. We consider that this approach appropriately balances the need to maintain incentives to invest in the aeronautical infrastructure that Auckland Airport requires, while keeping profitability at an appropriate level. This would be consistent with the Commission's approach in the 2010 IM to not adjust airport asset beta for the impacts of the Global Financial Crisis.[44]

2.62 and

> This approach carries forward the previous IM methodology, but excludes any impacts of the pandemic. It should provide a conservative estimate of what a reasonable asset beta is, prior to any pandemic adjustments.[45]

2.63 NZ Airports Association considered the equity beta had to be updated irrespective of COVID-19:

> Accordingly, at the time that Auckland Airport set its prices, it was clear that the impact of COVID-19 supported the (already existing) need to update the 2016 IM. But it is incorrect to imply that the 2016 IM equity beta estimate should not have been updated if COVID-19 had not occurred. COVID-19 was therefore an additional and new element to consider as part of an updating exercise that was appropriate to undertake in any event.[46]

2.64 NZ Airports Association also submitted that Auckland Airport had not misconstrued the purpose of the equity beta as it considered Auckland Airport's estimate of equity beta used the same method that was used for the 2016 Airports Ims:

> Therefore, it is inappropriate to imply that Auckland Airport was opportunistically seeking ex-post compensation when it has been acknowledged that it was using the 2016 IM.[47]

2.65 BARNZ submitted that Auckland Airport's equity beta was "excessive and unjustified":

> The Commission is absolutely correct in its assessment that, to reach such a WACC, Auckland Airport has applied excessive and unjustified changes to some key WACC parameters – notably the asset and equity betas together with leverage.[48]

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44 Auckland International Airport Limited: *Submission on Commerce Commission Draft Report for its review of Auckland Airport's 2022-2027 price setting event* (3 September 2024) (**Auckland Airport submission on our consultation paper**), page 15.

45 Ibid, page 23.

46 NZ Airports Association submission on our consultation paper, paragraph 32.

47 NZ Airports Association submission on our consultation paper, paragraph 38.

48 BARNZ: *Re: Review of Auckland Airport's 2022-27 Price Setting Event – Consultation Paper (2 September 2024*) (**BARNZ submission on our consultation paper**), page 3.

2.66 However, BARNZ did not agree to the use of an updated equity beta:

> In other words, Auckland Airport should have been expected to base its estimates on the 2016 IMs.[49]

2.67 and

> Rather than considering the dual set of parameter estimates that have come available in the course of the current PSE4 review, we feel a more robust approach – one that can be applied consistently through time – would be to stay with the Commission's "standard expectation" that the then-prevailing IMs from 2016 be used.[50]

2.68 and

> BARNZ considers that Christchurch Airport provides an important comparator and precedent in this regard. With a PSE4 period that is the same as Auckland's, an estimation date (1 April 2022) just a little earlier, and as one of Auckland Airport's very few domestic peers, Christchurch chose to use the beta and leverage estimates from the 2016 IMs.[51]

2.69 Air NZ submitted that Auckland Airport's equity beta was "unwarranted":

> Air NZ agrees with the Commission's assessment that AIAL's adjustments are unwarranted and result in an excessive target return that is not in the interests of consumers. In particular, use of the equity beta of 0.93 relies heavily on data from the COVID-19 pandemic period, significantly overstating the impact of the pandemic on forward-looking estimates of the equity beta. As was evident from overseas regulators prior to AIAL making its decision, markets were settling and beta dropping as time progressed post the pandemic.[52]

2.70 In its cross-submission Air NZ stated that it was not aware Auckland Airport would calculate its own estimate of asset beta:

> Air NZ's understanding of this letter [relating to the timing of the risk-free rate] was that AIAL would use the prevailing WACC parameters from the 2016 IM determination and update the risk-free rate. There was no suggestion in this letter that AIAL was considering calculating its own estimates for asset beta and leverage, which Air NZ would not have supported.[53]

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49 BARNZ submission on our consultation paper, page 3.

50 Ibid, page 4.

51 Ibid.

52 Air New Zealand: *Review of Auckland Airport's 2022-27 Price Setting Event 4 (PSE4) – Consultation paper: Air New Zealand (Air NZ) feedback* (3 September 2024) (**Air NZ submission on our consultation paper**), paragraph 1.4.

53 Air New Zealand: *Review of Auckland Airport's 2022-2027 Price Setting Event (PSE4) – Consultation paper: Air New Zealand Cross Submission (10 October 2024*) (**Air NZ cross-submission on our consultation paper**), paragraph 1.8.

2.71 Christchurch Airport agreed with Auckland Airport updating its estimates:

> CIAL notes that the Commission did update its estimate of asset beta as part of the 2023 IM Review and believe that AIAL was justified in departing from the 2016 IMs to reflect more recent economic evidence.[54]

2.72 Airports Council International submitted in a cross-submission that the comparator sample we used for scenario 2 in the consultation paper is inappropriate:

> The Commerce Commission's comparator sample, which led to its 7.51% WACC estimate, involves a set of airport companies that differ significantly from Auckland Airport in terms of size and risk profile. Many of the companies included in the sample, such as Aéroports de Paris, AENA, and Fraport, are much larger international operators with diversified operations, and thus, possess a different financial and operational risk landscape compared to AIAL. This discrepancy is important to highlight because the WACC estimate based on this sample may not fully account for Auckland Airport's specific market characteristics, which include its smaller scale, regional focus, and different financial vulnerabilities.[55]

2.73 Having considered the submissions, our final assessment is that Auckland Airport was justified in updating its estimate of the equity beta because COVID-19 was likely to have caused investors and market analysts to revise their assessment of the relative risk of Auckland Airport relative to the broader NZ market. However, in revising the estimate of the equity beta by using the same method as was used in the 2016 Airports IMs, Auckland Airport implicitly weighted the likelihood of a COVID-19 type event recurring over the period of the PSE as a 1 in 10-year event. We consider that this weighting is unreasonably high. We respond to the specific points made in submissions about the equity beta in our consideration of the scenarios to use for the final assessment (see from paragraph 2.102).

Our assessment of Auckland Airport's leverage

2.74 For the same reason that Auckland Airport considered the estimate of equity beta in the Airports IMs was outdated, it also considered the estimate of leverage was outdated.

2.75 Auckland Airport's consultant calculated leverage using the same comparator sample and 10-year period that it used to calculate equity beta.

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54 Christchurch Airport: *Draft Report on Auckland International Airport Ltd's PSE4 Pricing Decisions* (3 September 2024) (**Christchurch Airport submission on our consultation paper**), paragraph 8.

55 Airports Council International: *ACI Asia-Pacific and Middle East Cross-submission on Consultation Paper to the Commerce Commission of New Zealand in relation to Review of Price Setting Event 4 – Auckland Airport* (**Airports Council International submission on our consultation paper**), paragraph 3.4.

2.76 As a result, Auckland Airport used 14% as the value of leverage in its WACC rather than the 19% specified in the Airports IMs. Auckland Airport did not provide any information about its choice of leverage other than it was obtained along with the calculation of the equity beta.

2.77 The value of 14% indicates average leverage for the companies in the comparator sample declined for the ten years to 30 June 2022 compared to the 10 years to 31 March 2016.

2.78 In our consultation paper we stated that we did not consider Auckland Airport's estimate of leverage was reasonable for the same reason we do not consider its estimate of equity beta was reasonable. That is, we were concerned that the calculation of leverage placed too much weight on data that was affected by COVID-19.

2.79 Our draft conclusion was that the value of 14% was unreasonable because in our view it was likely to be inconsistent with the market's forward assessment of leverage for the PSE4 period.

2.80 Qantas provided a submission in response to the consultation paper on the leverage used by Auckland Airport:

> AIAL has argued for a higher in-band WACC to reflect the uniquely high leverage expected by the airport during PSE4.
>
> An airport's WACC should have regard only to an objectively efficient gearing structure. More aggressive capital structures that airports may employ from time to time are a matter for its shareholders - not its customers. As stated in our cross submission we believe that the leverage assumption should be aligned to CIAL 2023 PSE4 decision of 23%.
>
> We note also that AIAL did not seek a custom leverage consideration during previous periods in which it had lower leverage than its peers.[56]

2.81 Our understanding is that Auckland Airport used a leverage of 14% because that is the value that was consistent with its revised estimate of equity beta. The leverage used to set prices was based on the comparator sample used for the 2016 Airports IMs, and was not specific to Auckland Airport's operations.

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[56] Qantas Group: *Cross Submission* (10 October 2024) (**Qantas cross-submission on our consultation paper**), page 1.

2.82 During the 2023 IM review, we observed that the leverage used in the 2016 Airports IMs, 19%, was affected by firms in the comparator sample that had negative leverage.[57] We removed these firms in the comparator sample for the 2023 Airports IMs because we considered that the resulting sample would be more suitable for identifying the effects of COVID-19.[58] Our view is that the market's assessment of the benchmark leverage for Auckland Airport, at the time it set its prices, would have been based on a comparator sample that excluded firms with negative leverage.[59] The resulting estimates of leverage from this comparator sample indicate that the 14% used by Auckland Airport was too low.

2.83 Our conclusion is that the leverage used by Auckland Airport to set its prices is too low and, when applied in its WACC to set prices, is inconsistent with the Part 4 purpose.

Our assessment of Auckland Airport's TAMRP

2.84 Auckland Airport indicated in its disclosure that it used 7.5% for the TAMRP because:

> This was considered to be the best approach given that it was the most recent estimate of a sector-agnostic parameter, and considered appropriate by our independent advisor, CEG.[60]

2.85 Auckland Airport was referring to our values of TAMRP that were estimated for the fibre IM decisions, published in November 2020, and for our amendment to the gas transmission services IMs, published in March 2022. These decisions were the latest estimates available from the Commission when Auckland Airport finalised its prices on 7 June 2023.

2.86 In our consultation paper, we noted that we reviewed our estimate of the TAMRP for our 2023 review of the Part 4 IMs. The estimate of 7.0%, published in the draft decision on 14 June 2023, was effectively unchanged from the previous estimate for specified airport services. This estimate was not available when Auckland Airport set its prices on 7 June 2023.

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57 Commerce Commission: *Input methodologies review decisions – Topic paper 4: cost of capital issues* (20 December 2016), Table 34, page 246. This table shows the companies in the comparator sample had leverage values set to a minimum value of zero.

58 See paragraphs 4.132 to 4.138 of Commerce Commission: *Cost of capital topic paper, Part 4 Input Methodologies Review 2023 – Final Decision* (13 December 2023).

59 When we considered this matter in the 2023 IM review, we said "In the past we have included firms with negative leverage, but set their leverage to zero when determining the average leverage of the sample. The problem with doing that is it creates an inconsistency between the observed equity betas and calculated asset betas of the sample (that is, the asset beta is less than would otherwise be calculated using a negative leverage value). This problem would be avoided if they are excluded." See paragraph 4.137 of Commerce Commission: *Cost of capital topic paper, Part 4 Input Methodologies Review 2023 – Final Decision* (13 December 2023).

60 Auckland Airport Price Setting Disclosure, page 57.

2.87 We accepted the use of 7.5% by Christchurch Airport for its PSE4 on the basis that it was our most recent estimate when it made its pricing decision in mid-2022.

2.88 However, we noted in the consultation paper that Auckland Airport postponed its decision for a year and has adopted an approach that uses market data as at 1 July 2022, but information and methods that were developed or available after 1 July 2022. We noted that it is unclear why Auckland Airport chose to recalculate the equity beta and leverage in 2023 but not the TAMRP.

2.89 For the purpose of our draft assessment, we considered Auckland Airport would have been consistent in its approach to calculating the WACC parameters if it had recalculated the TAMRP, just as it recalculated the values of equity beta and leverage.[61]

2.90 Our draft conclusion was that Auckland Airport was inconsistent by not updating the TAMRP when it chose to update other WACC parameters. For this reason, we considered in the consultation paper that Auckland Airport's use of a 7.5% TAMRP was not reasonable.

2.91 In response to the consultation paper, we received submissions on Auckland Airport's TAMRP from Auckland Airport, BARNZ and NZ Airports.

2.92 Auckland Airport explained in its submission why it had adopted the latest published estimate of TAMRP and had not estimated an updated value:

> The above demonstrates that it was reasonable to adopt a TAMRP of 7.5% for the PSE4 pricing decision, specifically:
>
> unlike the old airport asset beta, post-pandemic estimate of the TAMRP of 7.5% had been recently validated by the Commission;
>
> in March 2022 the Commission had used a 7.5% TAMRP, just three months before the start of PSE4 pricing period; and
>
> on 22 May 2022 the Commission indicated that it was considering not re-estimating the TAMRP in the 2023 IM Review and may maintain it at 7.5%, just six weeks before the start of the PSE4 pricing period.
>
> It would clearly have been accepted by the Commission if Auckland Airport had set prices in June 2022 (ie if there was no price freeze).[62]

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61 For example, if Auckland Airport had recalculated TAMRP prior to setting its prices in June 2023, using the same method as Dr Lally in his 10 April 2023 report and using data up to 1 July 2022, the value would have been 7.0%. However, we acknowledge that this analysis by Dr Lally was undertaken a short time before prices were set for PSE4.

62 Auckland Airport submission on our consultation paper, page 28.

2.93 Auckland Airport's submission implicitly indicates that it relies on the Commission's latest published estimate of the TAMRP rather than the likely judgment of market analysts and investors at the time of the price setting event.

2.94 BARNZ submitted that Auckland Airport's TAMRP was inconsistent with other parameters:

> The Airport's rationale for adjusting WACC parameters has not been consistently applied, notably with respect to its choice of TAMRP.[63]

2.95 NZ Airports submitted that Auckland Airport was right to use the most recent estimate available when it set prices. Its view is that the relevant TAMRP estimate is one that is either available as at 1 July 2022 or made available at a later date but using data as at 1 July 2022:

> NZ Airports considers that it is appropriate for airports to use the most recent estimate of TAMRP published by the Commission at the time of setting prices. It was therefore appropriate for the Commission to accept that 7.5% was reasonable for Christchurch Airport to use when it set prices in mid-2022 (which is why 7.5% is included in Scenario 1).[64]
>
> Put another way – if there was no price freeze for the first year of Auckland Airport's PSE4 period, then the Commission would not be questioning whether 7.5% was the reasonable TAMRP for Auckland Airport to use for PSE4.[65]
>
> The Commission's logic appears to be that Auckland Airport should have used the same method as Dr Lally in his 10 April 2023 report, and used data up to 1 July 2022, which would have generated 7.0%. The report from Dr Lally is not in itself evidence of the correct TAMRP as it was not calculated as at 30 June 2022 (it used data into 2023). If the Commission has independently conducted the calculations and produced that result, then that could have been made clearer in the Consultation Paper.[66]

2.96 NZ Airports correctly point out that Dr Lally's estimate used data that was the latest available when his estimate was made, which included forward-looking estimates based on data from 2023.

2.97 Following submissions, we considered Dr Lally's estimates from 2019 and 2023 and the reasons for the downward revision to the median estimate of the TAMRP. The following table shows the values as at 2019 and 2023 for the various methods used to estimate the TAMRP.

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63 BARNZ submission on our consultation paper, page 3.
64 NZ Airports Association submission on our consultation paper, paragraph 42.
65 Ibid, paragraph 49.
66 Ibid, paragraph 45.

Table 2.2 Table 1 Estimates of TAMRP by Dr Lally in 2019 and 2023[67]

Parameter	2019 New Zealand	2019 Other markets	2023 New Zealand	2023 Other markets
Ibbotson estimate	0.074	0.073	0.074	0.075
Siegel estimate: version 1	0.060	0.066	0.060	0.065
Siegel estimate: version 2	0.094	0.083	0.077	0.067
DGM estimate	0.073	0.082	0.053	0.067
Surveys	0.064	0.066	0.071	0.071
Median	0.073	0.073	0.071	0.067

2.98 The most significant downward revisions to the estimates between 2019 and 2023 were to the estimates that use forward-looking information, which are the DGM and Siegel version 2 estimates. These estimates were considerably lower in 2023 than in 2019 and were affected by an increase in the inflation rate and risk-free rate.

2.99 The most significant upward revision to the estimates between 2019 and 2023 was to the survey information, which became the median estimate for New Zealand data in 2023.

2.100 The post COVID-19 increase in inflation was apparent when Auckland Airport chose to re-estimate the cost of capital, and Auckland Airport should have recognised the effect the increase in inflation would have on the TAMRP.[68]

2.101 Overall, we consider that Auckland Airport calculated a WACC that had re-estimated some values from the 2016 Airports IMs but did not re-estimate the TAMRP. As a result, it was internally inconsistent, and we do not consider that inconsistency is justified by the reasoning Auckland Airport has provided in its disclosures or submissions. Our assessment is that had Auckland Airport been consistent in its approach and estimated the TAMRP in 2022, the value would have been lower than the 7.5% estimate from 2019. Therefore, our conclusion is that Auckland Airport's use of a 7.5% TAMRP is unreasonably high.

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67 The 2019 data is from Table 4 of Dr Martin Lally: *Estimation of the TAMRP* (26 September 2019). The 2023 data is from Table 6 of Dr Martin Lally: *Estimation of the TAMRP* (10 April 2023). We have used the 5-year values.

68 For example, one source of the inflation forecast used by Dr Lally is Treasury's Budget and Economic Fiscal Update, and its forecast for CPI inflation in 2022, released on 19 May 2022, was 6.7%. See The Treasury: *Budget Economic and Fiscal Update* (19 May 2022), page 3.

Is the size of the adjustment to each parameter (including any overall WACC uplift) justified?

Scenarios used in the draft assessment

2.102 While we consider the equity beta, leverage and TAMRP combination used by Auckland Airport to be unreasonable, for the purpose of this assessment we need to identify values that are reasonable so that we can determine whether the values used by Auckland Airport are materially different.

2.103 The first scenario that we used in our consultation paper follows the approach adopted by Christchurch Airport, which chose not to revise the equity beta and leverage from the values in the 2016 Airports IMs and to use our latest published TAMRP. This is a reasonable option because it was the approach used by a peer airport in New Zealand and applied to the same price period. It is the option that is consistent with our standard expectation that the equity beta and leverage estimates that were made at an IM review would be applicable for the period of the Airports IMs. It is also the option that is consistent with the standard practice of using the latest published TAMRP available at the time as the TAMRP is an economy-wide parameter.

2.104 In the consultation paper, we also provided an alternative, which was to use the outcomes of the 2023 IM review. Even though these outcomes were not available to Auckland Airport when it set its prices, the outcomes are our best estimate of the methods that would be used by investors, market analysts and companies at the time prices were set to determine the WACC for airports in the context of the COVID-19 pandemic. As such these are the (benchmark) values that we consider reasonable if the asset beta, leverage (and TAMRP) were estimated at the relevant time.

2.105 The 2023 IM review considered the issues around the estimation of the equity beta and leverage in detail and involved multiple rounds of consultation before coming to a final decision. The 2023 Airports IMs were based on a comparator sample that differed from the 2016 sample because we considered the 2016 sample was not reliably capturing the effects that COVID-19 had on the airport equity beta and leverage. Our reasons for adopting a different estimation method in the 2023 Airports IMs compared to the 2016 Airports IMs are explained in detail in the cost of capital topic paper for the IM Review 2023 final decisions.[69]

[69] Commerce Commission: *Cost of capital topic paper, Part 4 Input Methodologies Review 2023 – Final Decision* (13 December 2023), Chapter 4, paragraphs from 4.58

2.106 We note that our 2023 cost of capital IMs are the subject of appeals brought by Auckland International Airport Ltd, Wellington International Airport Ltd and Christchurch International Airport Ltd (joint appeal), and New Zealand Airports Association Inc, and are also the subject of a judicial review application by Air New Zealand Ltd, Qantas Airways Ltd, and Board of Airline Representatives of New Zealand Inc. These are matters before the Court and no decisions have yet been released.

2.107 We have noted that Auckland Airport has disregarded the 0.05 downward adjustment to the asset beta that was used in the calculation of the equity beta for the 2016 Airports IMs. We do not consider this is inconsistent with the objectives in s 52A(1)(a) to (d) as we decided in the 2023 IM review to not continue to make this adjustment.

2.108 For the purpose of our draft assessment, we adopted two scenarios for equity beta and leverage that we considered were reasonable. Our starting point scenario used values from the 2016 Airports IMs, which are 0.60 for equity beta and 19% for leverage. An alternative scenario used values from the 2023 Airports IMs, which are 0.87 for equity beta and 23% for leverage. These values compare to Auckland Airport's 0.93 for equity beta and 14% for leverage.

2.109 Regarding the TAMRP, our draft assessment was that Auckland Airport should have recalculated the TAMRP, just as it recalculated equity beta and leverage, and as a result would have used a value of 7.0%. We considered that this is the value that would have been used by investors, market analysts and companies at the time Auckland Airport set its prices.

2.110 However, we also considered that Auckland Airport's approach of using the latest published value of the TAMRP that was available when it made its decision, which is 7.5%, would have been reasonable if it had also used this alongside the values of equity beta and leverage from the 2016 Airports IMs.

2.111 For the purpose of the consultation paper, we used TAMRP values of 7.0% and 7.5% in our scenarios of WACC values for comparison against Auckland Airport's WACC.

Submissions on our WACC scenarios

2.112 We received submissions from Air NZ, Airports Council International, Auckland Airport, BARNZ, NZ Airports and Qantas on the appropriateness of the scenarios we used in the consultation paper.

2.113 The following substantive matters were raised:

2.113.1 whether we should continue to use two scenarios for assessing Auckland Airport's WACC;

2.113.2 whether and how we should modify the scenarios we use in our assessment; and

2.113.3 whether and how we should account for the argument that the difference between our upper scenario and Auckland Airport's WACC of 8.73% can be justified by applying an uplift to the WACC mid-point.

2.114 Each of these matters is discussed in turn.

Should we use two scenarios?

2.115 Air NZ, BARNZ and Qantas considered the assessment should use scenario 1 (the 2016 IM values for equity beta and leverage and our latest published value of TAMRP when prices were set), while NZ Airports and Auckland Airport considered that both scenario 1 and scenario 2 (revised values of equity beta, leverage and TAMRP) should be used but modified.

2.116 Air NZ considers the first scenario used in the consultation paper should be the only one used for the assessment:

> Air NZ considers the Commission's first scenario – adopting the 2016 IM parameters – is the appropriate approach to take when assessing AIAL's target cost of capital for PSE4. It is consistent with the approaches taken by Wellington Airport when it set its final prices for PSE4 in March 2021, and Christchurch Airport when it set prices for PSE4 in June 2022. As the Commission notes, such an approach is also "consistent with our standard expectation that the equity beta and leverage estimates that were made at an IM review would be applicable for the period of the IMs."[70]

[70] Air NZ submission on our consultation paper, paragraph 1.3.

2.117 BARNZ submitted that it prefers scenario 1.

> BARNZ views both of the Commission's scenarios as analytically sound and far preferable to the Airport's proposal. Of the two options, however, we think there is a strong case for preferring Scenario 1, with a WACC of 7.28 percent. As the Commission notes, Scenario 1 is "the option that is consistent with our standard expectation that the equity beta and leverage estimates that were made at an IM review would be applicable for the period of the IMs" (para 2.69). In other words, Auckland Airport should have been expected to base its estimates on the 2016 IMs.
>
> An "accident of timing" may not be the most appropriate expression, but it was an unusual set of circumstances that led to estimates from the 2023 IM review becoming available during the Airport's PSE4 review. This unusual timing will not always occur, especially given the normal 7-year cycle of IM reviews and 5-year cycle of PSE reviews. Rather than considering the dual set of parameter estimates that have come available in the course of the current PSE4 review, we feel a more robust approach – one that can be applied consistently through time – would be to stay with the Commission's "standard expectation" that the then-prevailing IMs from 2016 be used.
>
> BARNZ considers that Christchurch Airport provides an important comparator and precedent in this regard. With a PSE4 period that is the same as Auckland's, an estimation date (1 April 2022) just a little earlier, and as one of Auckland Airport's very few domestic peers, Christchurch chose to use the beta and leverage estimates from the 2016 IMs. The Commission accepted Christchurch's approach and deemed the resulting WACC to be reasonable. For consistency and robustness, Auckland should follow the same approach – implying use of the parameters in Scenario 1 and the WACC of 7.28 percent.[71]

2.118 The International Air Transport Association (**IATA**) supported scenario 1:

> Between the two, the first scenario based on the selected estimation date of 1 July 2022 is sound and more closely aligned with the expectation that the 2016 IM will be used as the primary reference for inputs. This is also consistent with the approach applied in the price setting event for Christchurch Airport.[72]

2.119 Qantas submitted that it prefers scenario 1:

> In particular, we support:
>
> A post-tax WACC of 7.28%, as per the low range of the Commission's draft assessment[73]

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71 BARNZ submission on our consultation paper, page 3-4.

72 IATA: *Comments on the draft conclusions of the Review of Auckland Airport's 2022-2027 Price Setting Event* (3 September 2024) (**IATA submission on our consultation paper**), page 1-2.

73 Qantas Group: *Review of Auckland Airport's 2022-2027 price setting event* (3 September 2024) (**Qantas submission on our consultation paper**), page 2.

2.120 Auckland Airport submitted that scenario 1 is not appropriate, and summarises its concern as follows:

> The analysis shows that the first scenario is not forward looking, in that it does not reflect pandemic risk, and continues to apply a downwards adjustment related to aeronautical risk which has now been disproven through the international and domestic response to the Covid-19 pandemic.[74]

2.121 NZ Airports recognised scenario 1 as a lower bound:

> The Commission calculated two estimates of the WACC in order to determine whether Auckland Airport's WACC is materially different. Scenario 1 follows the approach adopted by Christchurch Airport of using the 2016 IM asset beta and leverage values, but with a higher TAMRP of 7.5%. NZ Airports agrees that on its face this is a reasonable lower bound option given Christchurch Airport is a peer airport in New Zealand, but it is still important to consider whether Auckland Airport's specific circumstances were different such that a different WACC was appropriate. We expect Auckland Airport's submission will provide further explanation.[75]

2.122 We have decided to continue to use scenarios that reflect the 2016 Airports IMs and also reflect our view of what market analysts, investors and companies would have used when Auckland Airport made its pricing decision. Continuing to use the 2016 Airports IMs is valid because these IMs were applicable at the time and were the basis of the method used by Christchurch Airport, which is a peer of Auckland Airport. Continuing to use estimates that we consider would have been used by market analysts when Auckland Airport set its prices is also valid because of the disruption to markets as a result of COVID-19 and the higher inflationary environment.

Should the scenarios be modified?

2.123 Regarding scenario 1, NZ Airports submitted that it should be increased by excluding the 0.05 downward adjustment:

> In setting its PSE4 prices, Auckland Airport did not include the 0.05 downward adjustment. The Commission has accepted this as being consistent with Part 4, given that the Commission discontinued the adjustment in the 2023 IM.[76]

2.124 NZ Airports also submitted that scenario 1 should incorporate a pandemic uplift:

> The usefulness of Scenario 1 as a measure of forward-looking risk must therefore be qualified by the fact that it does not include a forward-looking estimate of pandemic risk.[77]

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74 Auckland Airport submission on our consultation paper, page 9.
75 NZ Airports Association submission on our consultation paper, paragraph 52.
76 NZ Airports Association submission on our consultation paper, paragraph 55.
77 Ibid, paragraph 58.

2.125 We do not agree that we should modify scenario 1 to remove the 0.05 downward adjustment to the asset beta that was included in the calculation of the equity beta for the 2016 Airports IMs.

2.126 Scenario 1 reflects the 2016 Airports IMs, updated for a revised estimate of the TAMRP that was published prior to Auckland Airport setting its prices. The 2023 Airports IMs decision, which reconsidered the 0.05 downward adjustment to the asset beta, was not available when Auckland Airport set its prices. Scenario 1 was applied by Christchurch Airport and as such represents a commercially appropriate scenario that Auckland Airport could have applied when it set its prices.

2.127 As a consequence, we do not consider that scenario 1 should be modified to remove the 0.05 downward adjustment.

2.128 Regarding scenario 2, Auckland Airport submitted that it should be corrected for the coding errors in the calculation of the equity beta for the 2023 Airports IMs, use a TAMRP of 7.5% and use the equity beta CEG calculated based on the method used in the 2016 Airports Ims:

> We request that the Commission consider and respond to the evidence presented in this submission, and develop a more appropriate estimate of the mid-point WACC to assess the PSE4 pricing decision. We demonstrate below why we consider this estimate should be forward-looking to reflect pandemic risk, correct the coding errors embedded in the 2023 IM asset beta, maintain the 2016 IM sampling methodology (as changes in the 2023 IM are unrelated to the pandemic), and apply the TAMRP of 7.5% which the Commission considered to be reasonable at the start of the PSE4 pricing period. We submit that it is appropriate for the Commission to consider and assess each of these issues separately when considering the appropriate mid-point WACC.[78]

[78] Auckland Airport submission on our consultation paper, page 10.

2.129 NZ Airports submitted that scenario 2 should be amended in the same manner as proposed by Auckland Airport, although NZ Airports did not specifically state that we should use the TAMRP of 7.5% for scenario 2:

> In summary, NZ Airports submits that adjusting the 2023 IM in the following manner is the best way to ensure Auckland Airport is measured against a reasonable benchmark:
>
> (a) Use the large comparator sample set as per the 2016 IM. The Commission materially reduced the comparator sample in the 2023 IMs, after Auckland Airport set prices in reliance on the 2016 IM.
>
> (b) Address the coding errors that NZ Airports has raised.
>
> (c) Consider other reasons why it is reasonable for Auckland Airport's pricing WACC to be higher than the Commission's scenarios.[79]

2.130 Air NZ submitted in a cross-submission that matters for consideration at appeal should not be addressed in this review:

> The airports have appealed certain aspects of the 2023 Determination, with these appeals to be heard in 2025. These issues should not be litigated via this PSE4 review process. Pending the outcome of the appeals, which can only succeed if the Court is satisfied that the amended or substituted IM is materially better in meeting the purpose of Part 4, the 2023 IMs apply.[80]

2.131 Air NZ submitted in its cross-submission that Auckland Airport could have applied the 2016 Airports IMs and incorporated a method of adjusting the cost of capital in its prices pending any revision to the cost of capital:

> AIAL could have set prices for PSE4 based on the prevailing Input Methodologies and sought to have a re-opening provision so that it could update its target cost of capital once the Commission had reached its conclusions at the end of the 2023 IM review; or
>
> Alternatively, AIAL could have adopted a position similar to that which WIAL reached in its PSE5 decision regarding the airport appeals of the 2023 IM Determination, whereby it is able to introduce a carry-forward adjustment for PSE6, if appropriate.[81]

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79 NZ Airports Association submission on our consultation paper, paragraph 72.

80 Air NZ cross-submission on our consultation paper, paragraph 1.1.

81 Ibid, paragraph 1.5.

2.132 Air NZ also responded, in its cross-submission, to Auckland Airport's reasoning for updating the 2016 Airports IMs:

> We note that NZAA has argued that AIAL "sought to apply and update the 2016 WACC IMs in its price-setting decisions, rather than depart from them" (para.14). Air NZ agrees with TDB Advisory, which points out in its cross-submission that this statement is disingenuous because AIAL "has departed from them in every parameter and by a substantial margin".
>
> We also note that NZAA has argued that AIAL's approach "is consistent with the approach that all regulated airports adopt in their pricing decisions" (para. 14). Air NZ strongly disagrees with this statement, and notes that both Wellington and Christchurch airports essentially adhered to the prevailing WACC IM in effect at the time they set their prices for PSE4 and, in Wellington's case, PSE5.[82]

2.133 In a cross-submission, TDB Advisory in its capacity as consultant to BARNZ, considered it is appropriate to base a scenario on the updated comparator sample:

> In other words, whether in the context of PSE4 or the IM review more generally, if investors and others are considering the most appropriate return to be expected from airports in the post-pandemic world, they would surely want to base such estimates on the most useful set of comparators, along with the associated updates to numerical estimates of the asset beta and other key parameters.[83]
>
> The updated sample, along with its parameter estimates, represent part of the Commission's clearly articulated objective of coming up with its best estimate of how investors, market analysts and companies would assess the WACC for airports looking ahead. When faced with changing economic circumstance, including an unprecedented exogenous shock, the development and application of such updates become all the more important.[84]

2.134 TDB Advisory indicated in a cross-submission that it supports applying 7% as the TAMRP for the second scenario:

> But a TAMRP of 7.0 percent is part of the Commission's updated view on how investors and others should view airport returns going forward. It would be remiss of the Commission not to reflect such views in its assessment of PSE4.[85]

2.135 Regarding scenario 2, we agree that this scenario should be modified to address the coding errors in the 2023 Airports IMs. There were two coding errors.

2.136 The first error was made when we calculated the pre-COVID asset beta. The pre-COVID asset beta should have been 0.65 rather than 0.63.

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82 Air NZ cross-submission on our consultation paper, paragraph 1.10-1.11.
83 TDB Advisory cross-submission on our consultation paper, paragraph 12.
84 Ibid, paragraph 9.
85 Ibid, paragraph 13.

2.137 The second error was made when we used the econometric method of ordinary least squares in estimating the pandemic adjustment to the asset beta for Auckland Airport rather than weighted least squares. We have not quantified this correction because our estimate of the pandemic adjustment is not mechanistic, as it relies on an assessment of all of the available data. The relevant data includes the Auckland Airport pandemic adjustment, the comparator sample pandemic adjustment, the comparator sample asset beta for the year to 30 September 2022, the comparator sample asset beta for the last three five-year periods and the post-pandemic asset beta for Auckland Airport compared to the pre-pandemic asset beta.[86]

2.138 As the asset beta in the 2023 Airports IMs is under challenge in the appeals and in a judicial review application, the final estimate of the asset beta has not yet been decided.

2.139 For the purpose of this assessment, we consider it likely that the revised asset beta will be at least 0.69 and less than 0.74, for the following reasons:

2.139.1 The value of 0.69 reflects an increase in the asset beta value by 0.02, in recognition of the first coding error. As the pre-COVID estimate is the base value that is adjusted by our consideration of the effects of COVID-19, we consider that the higher base value would flow-through to a higher estimate of the asset beta, which increases it from 0.67 to 0.69.

2.139.2 The value of 0.74 is the average asset beta for the last two five-year periods. We consider the value of 0.74 (or higher) assumes a COVID-19 type pandemic will occur once in 10 years, which we consider unlikely.

2.140 For the purposes of this assessment (ahead of the outcome of the appeal and judicial review application), we have used a value of 0.715, which represents the mid-point of the 0.69 – 0.74 range.

2.141 The effect of using 0.715 as the asset beta is that the equity beta for scenario 2, which is 0.93, is the same as the value Auckland Airport used when it set its prices.[87]

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86 These were the factors that were considered at paragraphs 4.187 to 4.211 of Commerce Commission: *Cost of capital topic paper, Part 4 Input Methodologies Review 2023 – Final Decision* (13 December 2023)

87 Note that the equity beta is calculated from the combination of asset beta and leverage, and there tends to be an inverse relationship between asset beta and leverage for firms in the airport sample. More specifically, by excluding firms with negative leverage, we produced a comparator sample with a lower mean asset beta and higher mean leverage than Auckland Airport's comparator sample. Even though Auckland Airport has used the average asset beta for the last ten years, the resulting equity beta is the same as our corrected calculation of the (mid-point) equity beta given the differences in asset beta and leverage between Auckland Airport's comparator sample and the comparator sample we used in the 2023 Airports IMs.

2.142 Regarding Auckland Airport's submission that we should use the same method for establishing the comparator sample that we used for the 2016 Airports IMs, we do not agree. We consider the comparator sample that we used for the 2023 Airports IMs better reflects the forward-looking assessment of the systemic risks facing airports by investors, market analysts and companies at the time Auckland Airport set its prices. However, we acknowledge that the comparator sample is being challenged in the IM appeals.

2.143 Regarding the TAMRP, as discussed above, we consider that an estimate made using data up to 1 July 2022 would have been lower than the 7.5% estimate made in 2019. For the purpose of this assessment, we consider we should not modify the values of TAMRP used in scenario 2 for the consultation paper. We therefore have used a TAMRP of 7.0% for scenario 2.

Our assessment of Auckland Airport's argument for a WACC uplift

2.144 Auckland Airport, and its advisor CEG, considered the WACC assessment should account for an uplift to the mid-point WACC:

> In the event that, after having considered this evidence, there remains a gap between the Commission's mid-point WACC and the PSE4 target return, we request the Commission consider other reasons that could explain the difference. We provide evidence why compensation for asymmetric risk, Auckland Airport's operating leverage, the heightened post-pandemic inflationary environment and the observed Auckland Airport asset beta, are all reasons why a target return above the mid-point WACC estimate should be considered reasonable.[88]

2.145 Auckland Airport, in its cross-submission, stated that we have previously accepted using a WACC above the mid-point:

> As the Commission has stated many times, an airport can target a return above the industry wide mid-point estimate provided the adjustment is fully justified as reflecting airport specific circumstance. In such a case, the return above the mid-point would not represent excess profits.
>
> In both PSE2 and PSE3 the Commission considered that Auckland Airport was justified in targeting a return above the mid-point and that the Airport's behaviour was consistent with the purpose of part 4.
>
> Auckland Airport acknowledged in PSE3 that while the Commission was comfortable with a return above the mid-point, there was some uncertainty as to the amount that was reasonable. In response, Auckland Airport reduced its prices.[89]

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88 Auckland Airport submission on our consultation paper, page 10.

89 Auckland International Airport Limited: *Review of Auckland Airport's 2022 – 2027 Price Setting Event 4 (PSE4)* (10 October 2024) (**Auckland Airport cross-submission on our consultation paper**), page 104-105.

2.146 The context for this issue is that previously, in our s 56G reports, we considered a range from the mid-point WACC estimate to the 75th percentile WACC estimate when assessing airport profitability.

2.147 However, in the 2016 IM Review, we amended our approach, choosing to use the mid-point WACC to resolve two issues within the framework:[90]

2.147.1 the upper limit of our WACC range had become the de facto benchmark when assessing airport profitability; and

2.147.2 there was limited and weak rationale for using the 75th percentile as the upper limit of the WACC percentile range.

2.148 We concluded in the 2016 IM review that the risk of our published mid-point WACC estimate constraining investment, to the long term detriment of consumers, was lower for airports than for companies regulated under price-quality (**PQ**) regulation.[91] The reason for this is that under ID regulation the WACC determined by the airport is used for price setting and investment decision making, whereas under PQ regulation it is our WACC that is used for price-setting.[92] We considered it unlikely that an airport would deliberately apply a WACC that constrained its investment.

2.149 We also concluded in the 2016 IM review that the publication of the mid-point and standard error would provide for any percentile to be calculated, which would provide greater flexibility in an assessment of the acceptability of airport returns.[93]

2.150 Auckland Airport stated in its disclosure that it had applied the mid-point WACC and therefore in our consultation paper we did not consider the merits of a variation to the mid-point WACC.[94]

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90 Commerce Commission: *Input methodologies review decisions – Topic paper 6: WACC percentile for airports* (20 December 2016), paragraph X4.

91 Ibid, paragraph 138.

92 Ibid, paragraph 133 to 137.

93 Ibid, page 3.

94 Auckland Airport Price Setting Disclosure, page 64, section 4.1.

2.151 However, Auckland Airport submitted in response to our consultation paper that it should be permitted to apply a target return above the mid-point WACC. Auckland Airport based its argument on the consideration of asymmetric risk, Auckland Airport's operating leverage, the heightened post-pandemic inflationary environment and the observed Auckland Airport asset beta. In addition, CEG submitted that even if the lower estimate of the cost of asymmetric risk were used to adjust Auckland Airport's WACC, the result is less than the 65th percentile that is applied to electricity businesses.[95]

2.152 As stakeholders had not been consulted on this matter during the price-setting process, the only opportunity they had to consider the issue was in their cross-submissions. Air NZ explained its concern as follows:

> AIAL, aided by CEG, goes to some lengths to explain why it considers a premium on the mid-point WACC is justified. Air NZ notes that at no time during the consultation did AIAL indicate that prices would be set to achieve a premium on its mid-point target WACC. Indeed, AIAL's PSE4 disclosure explicitly notes that the target return was based on its mid-point WACC estimate.
>
> If AIAL was intending to target a return above the mid-point WACC, Air NZ would have expected the airport to explicitly consult on the reasons for seeking a WACC premium and disclose this in Schedule 18 of its PSE4 disclosure. AIAL did neither. Consequently, Air NZ does not see any relevance in the arguments proffered by AIAL and CEG suggesting the airport may have been entitled to target a WACC premium.
>
> Moreover, Air NZ does not accept that any of the reasons put forward by AIAL or CEG justify a WACC premium at price setting.[96]

2.153 We also note that neither Christchurch Airport nor Wellington Airport sought an uplift to the mid-point WACC in their latest price setting events, even though those events were after the COVID-19 pandemic.

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95 Competition Economics Group: *Treatment of Systematic and Asymmetric risk in NZCC Consultation Paper* (September 2024) (**Competition Economics Group submission on our consultation paper**), paragraph 152.

96 Air NZ cross-submission on our consultation paper, paragraph 1.12-1.14.

2.154 Our review of Auckland Airport's PSE3 concluded that an appropriate target return may be above our mid-point WACC estimate:

> Overall, we consider there is some evidence indicating an appropriate target return for Auckland Airport may be above our mid-point WACC estimate. However, there is inconclusive evidence to persuade us that any difference is likely to be of a sufficiently meaningful magnitude to support Auckland Airport's targeted return.
>
> In particular, the reasoning and evidence provided by Auckland Airport has not persuaded us that the magnitude of their departure from our mid-point WACC estimate is justified and likely to promote the long-term benefit of consumers.
>
> Under the information disclosure regime, the onus is on airports to provide sufficient reasoning as to why their targeted returns for PSE3 may be different to the mid-point WACC estimate, which we publish in advance. Any reasoning needs to consider the long-term benefits of consumers.[97]

2.155 We also considered in the 2016 IM review that there were other factors that meant that our WACC would have a less significant effect on investment than for the other sectors we regulate under PQ regulation. We considered that customers would not want the WACC to compromise efficient investment, and that regulatory requirements such as maintaining safety may cause investment to be incurred even if the WACC was set too low.[98]

2.156 With this background in mind, we have considered each of Auckland Airport's (and CEG's) reasons for a WACC uplift in turn.

2.157 First, Auckland Airport submitted that asymmetric risk is a reason for applying a target return above the mid-point WACC. Auckland Airport, based on advice from CEG, submitted that because the operating cost component of its pricing model did not include an estimate of the expected cost of asymmetric risk, its target return of 8.73% was the most likely return but was above the actuarially expected return.[99] Auckland Airport also noted CEG's view that established regulatory practice allows for asymmetric risk to be added to the WACC.[100]

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97 Commerce Commission: *Review of Auckland International Airport's pricing decisions and expected performance (July 2017 – June 2022)* (1 November 2018), paragraph X20-X22.

98 Ibid, paragraph A44.

99 Auckland Airport submission on our consultation paper, page 32-33.

100 Ibid, page 33-34. Auckland Airport provides as an example the treatment of asymmetric risk for Chorus, in which 10 basis points was added to the WACC for the effect asymmetric risk and other factors may have on asset stranding.

2.158 Auckland Airport refers to CEG's advice that the UK Civil Aviation Authority provided Heathrow Airport compensation for low frequency high impact non-pandemic shocks and 'pandemic-like events', which were additional to the pandemic-risk adjustment to the asset beta. Auckland Airport provides CEG's estimate that the equivalent compensation to Auckland Airport's WACC would be 0.31 percentage points.[101]

2.159 In addition, CEG estimated that an adjustment should be made for the difference in the protection associated with the risk-sharing mechanisms that apply to Auckland Airport and Heathrow Airport. CEG estimates that this difference is the equivalent of a further 0.58 percentage point adjustment to Auckland Airport's WACC, to take the total adjustment to 0.89 percentage points.[102]

2.160 After considering further that if the form of compensation is through the WACC rather than a direct adjustment to the revenue requirement, CEG submitted that the minimum WACC increase to account for the pandemic component of asymmetric risk would need to be at least 0.49 percentage points and that a mid-point would be at least 0.62 percentage points.[103]

2.161 In a cross-submission, TDB Advisory commented on CEG's analysis and was concerned the WACC covers all airports, not only Auckland Airport, and that any adjustment for asymmetric risk would need to be specific to each airport. For example, TDB Advisory indicates that Auckland Airport may be more prone to volcanic risk compared to the earthquake risks facing Wellington and Christchurch Airports. For this reason, TDB Advisory considered that a general adjustment to the mid-point WACC would be "problematic and speculative."[104]

2.162 Air NZ considered Auckland Airport could seek some form of insurance cover if it considered it faced asymmetric risk:

> With respect to asymmetric pandemic risk, AIAL has downside protection in the form of the two-way revenue adjustment mechanism which compensates AIAL in the event of under-recovery of revenue resulting from a demand shock;
>
> If AIAL is genuinely concerned about asymmetric risk, it could consider seeking insurance cover to offlay various types of risk, including establishing a captive insurer as several New Zealand electricity distributions businesses have done. A captive [insurer] would ensure that any additional charges levied on customers with a view to insuring against asymmetric risk were ring-fenced by the business for this purpose, rather than distributed to shareholders, which would be likely to occur if AIAL was able to charge a WACC premium for this purpose;[105]

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101 Auckland Airport submission on our consultation paper, page 35.
102 Competition Economics Group submission on our consultation paper, paragraph 93.
103 Competition Economics Group submission on our consultation paper, paragraph 96-97 and Table 4.3.
104 TDB Advisory cross-submission on our consultation paper, paragraph 26.
105 Air NZ cross-submission on our consultation paper, paragraph 1.14.1-1.14.2

2.163 TDB Advisory was also concerned that any adjustment for asymmetric risk to the mid-point WACC would need to be ring-fenced for self-insurance purposes rather than distributed to shareholders, and did not have confidence that this would occur.[106]

2.164 We are not persuaded by Auckland Airport's or CEG's arguments for a WACC uplift due to asymmetric risk because they have not:

2.164.1 explained why Auckland Airport had not proposed to its substantial customers to include an allowance in its revenue requirement for asymmetric risk, in a way that is consistent with the allowance provided by the UK Civil Aviation Authority for Heathrow Airport;

2.164.2 explained why it had not applied a risk sharing mechanism that accounts for asymmetric risk in a manner similar to the risk sharing mechanism that applies to Heathrow Airport; and

2.164.3 more generally explained how a WACC uplift for asymmetric risk would be for the long-term benefit of consumers, such as by reducing the risk of under-investment.

2.165 Our conclusion is that Auckland Airport has not provided sufficient evidence that asymmetric risk justifies the use of a WACC estimate above the mid-point.

2.166 The second reason Auckland Airport has provided for having a WACC above the mid-point is that it has relatively high operating leverage, which refers to the situation where fixed costs are high relative to variable costs. The argument is that firms with a high operating leverage have greater variability in their profits and consequently an asset beta that is higher than the average of the comparator sample.

2.167 Auckland Airport was advised by CEG that:

2.167.1 its operating leverage for the period 2008-2019, which was prior to COVID-19, was not significantly different to the mean of the comparator sample;[107]

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106 TDB Advisory cross-submission on our consultation paper, paragraph 24.

107 Competition Economics Group submission on our consultation paper, paragraph 132.

2.167.2 its operating leverage for the forecast PSE4 period is estimated to be higher than the historical mean of the comparator sample for the 2008-19 period (although other analysis by CEG using regressions shows a less distinct difference in Auckland Airport's operating leverage for PSE4 compared to the 2008-19 average);[108]

2.167.3 we had previously stated, in our draft report for the Auckland Airport PSE3 review, that we agreed that conceptually significant capital expenditure was likely to increase its operating leverage and could justify a target return above the mid-point WACC;[109] and

2.167.4 there is regulatory precedent for an adjustment to the asset beta to account for operating leverage (specifically, by French energy regulator CRE, UK Competition and Markets Authority and UK energy regulator Ofgem).[110]

2.168 TDB Advisory submitted that its own analysis has found that the operating leverage effect is not large and that differences in operating leverage between Auckland Airport and the other airports in the comparator sample may not be systematic because of the variation in operating leverage over time:

> In other work, we find that the impact of capital expenditure on operating leverage and hence asset beta is not large (at least in the case of airports.)
>
> Even to the extent that there is some impact of capital spending on operating leverage, most airports – including those in the comparator set – probably engage in major development projects from time to time. This would imply that how Auckland compares with others in the comparator set regarding operating leverage is likely to change through time as development projects come and go. Hence, current differences in this regard need not be systematic and would not provide a sound basis for a WACC uplift.[111]

2.169 The issue of whether Auckland Airport has a higher asset beta than the comparator sample was addressed in our PSE3 final report.[112] The conclusion in that report was that we were not convinced that Auckland Airport's operating leverage during PSE3 was higher than the operating leverage of the average of the comparator sample; even if it was, there was little evidence that the magnitude of the adjustment to the asset beta sought by Auckland Airport was warranted.[113]

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108 Competition Economics Group submission on our consultation paper, figures 5.5 and 5.7.
109 Ibid, paragraph 144.
110 Ibid, paragraph 147.
111 TDB Advisory cross-submission on our consultation paper, paragraph 27.
112 Commerce Commission: *Review of Auckland International Airport's pricing decisions and expected performance (July 2017 – June 2022) Final report* (1 November 2018), page 112-144.
113 Ibid, paragraph A202.

2.170 We agree with CEG that there is a stronger case now than there was in our last PSE review for applying an asset beta to Auckland Airport that is higher than the average of the comparator sample, due to the effect capital expenditure can have on operating leverage. However, we have not been provided with sufficient evidence about the likely magnitude of the adjustment to the asset beta that would be required to address this issue. We note that TDB Advisory has calculated an indicative adjustment to the asset beta in the context of Wellington Airport's capital expenditure program, which was found to be "in the order of a 0.02 increase – i.e., very small in the general estimation error of beta".[114] Neither have we been provided with information about how the adjustment to the asset beta would be for the long-term benefit of consumers, such as by reducing the risk of under-investment.

2.171 Our conclusion is that Auckland Airport has not provided sufficient evidence that operating leverage justifies the use of a WACC estimate above the mid-point.

2.172 The third reason Auckland Airport has provided for applying a WACC above the mid-point is due to the heightened post-pandemic inflationary environment. CEG explains that as the WACC is set in nominal terms using expected inflation, if inflation turns out to be higher than expected it is not compensated because the RAB is not indexed by the actual inflation rate.[115] CEG considers the effect is asymmetrical because of the greater probability of a positive deviation from expected inflation than a negative deviation, based on analysis of deviations from the Reserve Bank of New Zealand (**RBNZ**) target over the last 25 years.[116]

2.173 TDB Advisory stated in its cross-submission that it was not persuaded by CEG's argument and that if Auckland Airport wanted to account for its perception of inflation risk then it could adjust its inflation forecasts.[117]

2.174 Air NZ submitted that Auckland Airport could implement RAB indexation to deal with this risk:

> If AIAL is genuinely concerned with inflation risk, it should embrace the RAB indexation mechanism, which is consistent with the Input Methodologies and utilised by other airports for this purpose.[118]

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114 TDB Advisory: *Review of Aspects of Wellington International Airport's Initial Pricing Proposal for PSE4*, Section 1.3, cited in TDB Advisory cross-submission on our consultation paper, paragraph 27 (iii).

115 Competition Economics Group submission on our consultation paper, paragraph 57-58.

116 Ibid, paragraph 59-62.

117 TDB Advisory cross-submission on our consultation paper, paragraph 25.

118 Air NZ cross submission on our consultation paper, paragraph 1.14.3.

2.175 While we agree that Auckland Airport has exposure to inflation risk as a result of not indexing its RAB, this does not warrant an adjustment to the mid-point WACC because Auckland Airport can choose to manage this risk by indexing its RAB. Our conclusion is that Auckland Airport has not provided sufficient evidence that its inflation risk justifies the use of a WACC estimate above the mid-point.

2.176 The fourth reason Auckland Airport provided for applying a WACC above the mid-point is because the observed asset beta for Auckland Airport is higher than the mean of the comparator sample. Auckland Airport did not base this argument on advice in CEG's submission. Rather, it noted that in our PSE3 review we stated that having an asset beta above the mean of the comparator sample provided some weight to the argument for providing a WACC uplift.[119]

2.177 The difficulty of placing too much weight on Auckland Airport's asset beta is, as we stated in the 2023 IM review, there are likely to be many reasons why Auckland Airport's asset beta is higher than the mean of the comparator sample, including Auckland Airport's relative size on the New Zealand exchange.[120] We also noted in the review of Auckland Airport's PSE3 that an individual company's asset beta is likely to be subject to significant estimation error and that Auckland Airport's estimated asset beta is influenced by the expected returns on unregulated activities.[121] Further, the process of establishing a comparator sample will always result in firms with asset betas above or below the mean.

2.178 We therefore consider Auckland Airport has not provided sufficient evidence that its relatively high asset beta justifies the use of a WACC estimate above the mid-point.

2.179 The fifth reason for a WACC uplift, which was provided by CEG, was that even if the lower estimate of the cost of asymmetric risk were used to adjust Auckland Airport's WACC, the result is less than the 65th percentile that is applied to electricity businesses.

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119 Auckland Airport submission on our consultation paper, page 39.

120 Commerce Commission: *Cost of capital topic paper, Part 4 Input Methodologies Review 2023 – Final Decision* (13 December 2023), paragraph 4.180.

121 Commerce Commission: *Review of Auckland International Airport's pricing decisions and expected performance (July 2017 – June 2022) Final report* (1 November 2018), paragraph A62.

2.180 Auckland Airport made a related comparison to the energy sector in its submission on our process and issues paper:

> Given the small percentage that airport charges make-up of an airfare, and the cost to consumers paid through higher airfares when demand exceeds supply, it is reasonable to expect that the asymmetry of the cost of setting the WACC too low for airports would exceed that of the energy sector. The impacts of the pandemic demonstrate new information that was not available when the Commission last considered this issue as part of the 2016 IM Review. Accordingly, Auckland Airport considers the Commission should give due consideration to the asymmetry of the costs to consumers when assessing profitability and investment, in light of this new information.[122]

2.181 TDB Advisory did not agree with the comparison to the electricity sector:

> The Commission's rationale for allowing a WACC uplift for the electricity sector (i.e. recognizing the severe economic impact of electricity blackouts) does not have a reasonable analogy in the airport sector, and so this comparison is not useful.[123]

2.182 We calculate (based on our final WACC estimates shown in the next section) that Auckland Airport's WACC of 8.73% represents a WACC at the 70th percentile using our estimate for scenario 2, and the 83rd percentile using our estimate for scenario 1.

2.183 We consider that a WACC that is at or above the 70th percentile is a substantial departure from the mid-point and needs to be justified in accordance with the framework we have used for this assessment (and as we have applied in the 2023 IM review).[124]

2.184 When discussing the risk of under-investment, Auckland Airport referred to our 2016 IM report which indicated that the case for a WACC uplift was weaker for airports than for energy businesses, because an under-investment in airport capacity would build-up steadily over time, be visible to consumers, and be met by a response by airports before the cost to consumers became too large.[125] Auckland Airport submitted that this assessment understates the cost to consumers because it does not take into account the effect capacity constraints would have on airfares.[126] However, Auckland Airport did not quantify its argument or provide evidence to persuade us that a WACC uplift is as applicable to airports as it is for energy businesses and that it would be for the long-term benefit of consumers.

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122 Auckland International Airport Limited: *Submission on Commerce Commission Process and Issues Paper for its review of Auckland Airport's 2022 – 2027 price setting event* (31 January 2024) (**Auckland Airport submission on our process and issues paper**), page 10.

123 TDB Advisory cross-submission on our consultation paper, paragraph 27.

124 See the section from paragraph 6.2 of chapter 6 of Commerce Commission: *Cost of capital topic paper, Part 4 Input Methodologies Review 2023 – Final Decision* (13 December 2023).

125 Auckland Airport submission on our consultation paper, page 43.

126 Ibid.

2.185 Overall, in relation to Auckland Airport's argument for applying a WACC above the mid-point, our final assessment is that Auckland Airport has not provided sufficient evidence to justify a WACC uplift. In particular, the reasons provided by Auckland Airport and its consultant CEG:

2.185.1 were not included in the original price setting disclosure (which was based on the mid-point WACC), or in consultation with substantial customers, but were instead used to justify the difference between its target return and the WACC we included as an upper scenario in our consultation paper;

2.185.2 do not explain why Auckland Airport has not accounted for its concern about asymmetric risks in ways other than in the WACC, such as in its risk-sharing mechanism, regulatory accounts (by indexing the RAB), or directly as some form of insurance in its revenue requirement;

2.185.3 do not explain the magnitude of the effect Auckland Airport's relatively high operating leverage would have on the asset beta in comparison to the average asset beta of the comparator sample; and

2.185.4 do not substantiate how a WACC uplift would provide a long-term benefit to consumers, such as by reducing the risk of under-investment.

Is the Airport's overall estimate of its WACC (combining each of the individual parameter values) reasonable?

2.186 Auckland Airport's overall estimate of its post-tax WACC is 8.73%. In comparison, we have calculated two estimates of the WACC based on two scenarios. These estimates are shown in the following table, alongside the WACC that has been used by Auckland Airport.

Table 2.3 Parameters used to calculate Auckland Airport's WACC estimate and our WACC estimates

Parameter	Commission (Scenario 1)	Commission (Scenario 2)	Auckland Airport
Risk-free rate	3.60%	3.60%	3.60%
Average debt premium	1.17%	1.17%	1.17%
Leverage	19%	23%	14%
Asset beta	0.60	0.715	0.80
Equity beta	0.74	0.93	0.93
Tax adjusted market risk premium (TAMRP)	7.5%	7.0%	7.5%
Average corporate tax rate	28%	28%	28%
Average investor tax rate	28%	28%	28%
Debt issuance costs	0.20%	0.20%	0.20%
Cost of debt	4.97%	4.97%	4.97%
Cost of equity	8.15%	9.09%	9.57%
Standard error of midpoint WACC estimate	0.0152	0.0173	NA
Mid-point vanilla WACC	7.54%	8.14%	8.92%
Mid-point post-tax WACC	7.28%	7.82%	8.73%

2.187 The first scenario is consistent with the 2016 Airports IMs except that it uses a higher value for the TAMRP. The WACC parameters are the same as those used by Christchurch Airport but with a risk-free rate and debt premium as at 1 July 2022. This alternative estimate of the WACC is 7.28%, based on an equity beta of 0.74, leverage of 19% and a TAMRP of 7.5%. This alternative is higher than our starting point WACC of 6.98%, as presented in Table 2.1, because it is based on a TAMRP of 7.5% rather than 7.0%. This is consistent with the approach we accepted for Christchurch Airport.

2.188 The second scenario uses parameters that are consistent with the 2023 Airports IMs but accounts for the estimated impact of coding errors that affected the asset betas used for the 2023 IMs. The WACC for this scenario is 7.82%, based on an equity beta of 0.93, leverage of 23% and a TAMRP of 7.0%.

2.189 Our final assessment is that Auckland Airport's estimate of the post-tax WACC of 8.73%, when used as a target return, is inconsistent with the Part 4 purpose because it is materially higher than the range of estimates of the WACC we consider appropriate for this assessment, which is from 7.28% to 7.82%.

Chapter 3 Expected profitability

Purpose

3.1 This chapter focuses on whether Auckland Airport is limited in its ability to extract excessive profits under s 52A(1)(d) of the Act. This chapter summarises and draws conclusions from the following sources: the PSE4 disclosures and schedules published by Auckland Airport and the submissions and cross-submissions by stakeholders on our consultation paper and process and issues paper.

3.2 This chapter considers whether Auckland Airport's target return on its priced assets, and associated profit, has been sufficiently justified such that it is likely to be to the long-term benefit of consumers. This chapter also summarises and analyses key aspects of profitability: operational expenditure, depreciation, demand forecasts, and the two-way revenue wash-up. We have included two new issues: corporate cost allocation and treatment of tax losses, following the submissions received on our consultation paper.

3.3 Our profitability analysis model has been published alongside this report. This analysis uses the same methodology as our PSE3 review.[127]

Our conclusions

Expected returns

3.4 Auckland Airport set the target return on its priced services equal to its estimated WACC of 8.73%, with a return on its total regulated activities of 7.79%. This decision will result in additional cost to consumers over the PSE4 period. We estimate that the Airport is targeting excess profits of between $150.2 million and $226.5 million, in nominal terms, from the priced activities over the price setting period. This excess profit is between 5.99% and 9.04% of target revenue relating to priced services. These ranges are based on our estimate of two WACC scenarios of 7.28% and 7.82%, respectively, as discussed in Chapter 2.

Operational expenditure

3.5 Auckland Airport's operational expenditure forecasts appear reasonable. The Airport's per passenger operating expenditure forecasts are in line with pre-pandemic levels by the end of PSE4 period. Auckland Airport has used the non-tradeable inflation rather than the consumers price index (**CPI**) as a cost driver. It considers the former likely better reflects its operating cost base, which we accept.

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127 For a detailed methodology of our profitability assessment please refer to: Commerce Commission: *Review of Auckland International Airport's pricing decisions and expected performance (July 2017 – June 2022)* (1 November 2018), Attachment C.

Depreciation

3.6 Auckland Airport has used a straight-line depreciation method for setting prices on all its assets including new investments. We are not convinced that this approach best promotes the long-term benefit of consumers, when a significant upfront investment is likely to be used by a growing number of consumers over time. Specifically, in our view the tilted annuity approach to recovering depreciation of long-lived assets such as terminal infrastructure is likely to better promote the Part 4 purpose. We consider adopting such an approach in PSE5, if Auckland Airport decides to, would capture the majority of the cost of new integrated terminal assets.

3.7 The tilted annuity approach reflects the gradually increasing utilisation of the asset meaning that consumers pay a consistent amount toward the cost of the asset over time. The effect is to defer some of the depreciation cost into the future and thereby reduce price increases in the short term.

3.8 We understand that Auckland Airport considered the tilted annuity method for recovering depreciation, which Christchurch Airport applied to its investment in a new terminal. Auckland Airport did not adopt this approach for PSE4 and the rationale behind this decision noted in its reasons paper is that a tilted annuity method would likely reduce prices in PSE4 but then increase prices in PSE5 and beyond, the pricing periods in which the airlines were concerned the most about increased prices.[128]

3.9 Based on the information available, we are not satisfied that Auckland Airport's decision is consistent with the Part 4 purpose. Using a straight-line method to recover depreciation means that in the short term, when there are fewer users, the price is higher for use of the same asset. This is exacerbated by the unindexed value of the asset base which means that in real terms users pay less over time toward depreciation under a straight-line approach.

3.10 Auckland Airport has signalled it will consult with airlines on tilted annuity depreciation for PSE5. While our view is that tilted annuity depreciation would likely produce outcomes that better promote the Part 4 purpose in PSE4, we are satisfied that consideration of tilted annuity depreciation in PSE5 would capture the majority of the cost of new integrated terminal assets.

3.11 Regarding the separate issue of accelerated depreciation of the Domestic Terminal Building (**DTB**), our view is that it is reasonable for Auckland Airport to depreciate the remainder of the DTB reflecting the expected closure of the facility, and it is not material to the level of prices.

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128 Auckland International Airport Limited: *Price Setting Event 4 Reasons paper* (June 2023), page 46.

Demand forecasts

3.12 There has been extensive consideration, consultation and expert studies on demand from both Auckland Airport and substantial customers. There was agreement with general demand as forecast by Auckland Airport. We understand that expert studies relating to price elasticity of demand show different magnitudes for the potential impact on demand from the increase in Auckland Airport's charges. However, we do not consider that the potential impact of these differences is of sufficient significance in the operating expenditure forecast or the projection of long-term capacity needs. We find that the expert studies would have benefitted from a wider scope, including possibility of substituting between airlines and different times of travel, as well as international travel. Overall, we consider that Auckland Airport's overall demand forecast appears to be within a range we consider to be reasonable and is unlikely to result in excessive profits for the PSE4 period.

Revenue wash-up mechanism

3.13 Auckland Airport has included a two-way revenue wash-up mechanism in PSE4, to protect both the Airport and airlines from significant revenue variance to PSE4 forecast. Our conclusion is that, in principle, this two-way revenue wash-up seems appropriate to address under- or over-recovery of revenue by the Airport in the event of a demand shock, like COVID-19. While some airlines did not agree on the thresholds of the wash-up, there was agreement in principle over wash-ups generally and Auckland Airport lowered the threshold after considering airlines' feedback.

Corporate cost allocations

3.14 We observe that Auckland Airport's cost allocation methodology is consistent with Part 2 of the Airports IMs. There has been only minimal change in Auckland Airport's allocation rules from the audited 2022 annual ID and Auckland Airport has also reported in its PSE4 disclosures that its allocation rules have not changed since 2006. We further note there was general agreement from substantial customers during the Airport's PSE consultation period.

Tax losses

3.15 Our view is that it is reasonable for Auckland Airport to not include tax losses into its target return for PSE4. When setting prices Airports do not have an obligation to adhere to the IMs. We find that the explanation and rationale disclosed in Auckland Airport's 2023 annual disclosure to not be unreasonable due to the effects of the pandemic on revenue. We would have liked to have seen this explanation within Auckland Airport's price setting disclosures as well to ensure transparent engagement with the Airport's substantial customers.

Expected returns

Our approach to assessing Auckland Airport's expected returns

Is Auckland Airport targeting excessive profits?

3.16 In our approach to assessing Auckland Airport's expected profits, we have used our estimated range of cost of capital discussed in Chapter 2. This range, in the form of two scenarios is 7.28% to 7.82%, which is lower than Auckland Airport's cost of capital estimate of 8.73%.

3.17 Similar to our approach in PSE3, we have assessed Auckland Airport's expected revenue and expected returns using an Internal rate of return (**IRR**) calculation.[129] Using IRR we are able to assess Auckland Airport's expected revenue and expected returns across the assets used in supplying regulated airport services during the PSE4 period.

3.18 We then compared Auckland Airport's expected revenue and expected return under its estimated cost of capital to the return that would be expected had it used our own cost of capital scenarios. The comparative results are shown in Table 3.1 for returns on Auckland Airport's priced assets. The analysis in this section concentrates on Auckland Airport's priced services, as these are activities recovered through aeronautical charges. Non-priced services are recovered through leases from arms-lengths contracts with varying terms, compared to the usual price setting event period of five years.

Auckland Airport's expected returns on its priced asset base

3.19 Auckland Airport's target return, which is equal to its estimated WACC, on its priced services of 8.73% will result in additional costs to consumers over the PSE4 period. We have estimated in our profitability modelling, and shown in Table 3.1, that this is an excess of between $150.2 million and $226.5 million in aeronautical revenue, in nominal terms, over the PSE4 period. The range is based on our estimate of two WACC scenarios of 7.28% and 7.82% discussed in Chapter 2.

3.20 Auckland Airport's expected returns on its priced asset base are compared in Table 3.1 below, along with the associated expected revenue over PSE4.

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[129] For a detailed methodology of our profitability assessment please refer to: Commerce Commission: *Review of Auckland International Airport's pricing decisions and expected performance (July 2017 – June 2022)* (1 November 2018), Attachment C.

Table 3.1 Summary of Auckland Airport's expected returns and revenue on its priced assets

	Expected return (post-tax)	Revenue ($m)
AIAL's expected return on its priced RAB	8.73%	2,507
Scenario 1 of our WACC estimate	7.28%	2,280
Scenario 2 of our WACC estimate	7.82%	2,357
Difference between AIAL's expected return and our Scenario 1	**145** basis points	226.5
Difference between AIAL's expected return and our Scenario 2	**91** basis points	150.2

3.21 Our conclusion is that Auckland Airport is targeting a return that is higher than is reasonable. Auckland Airport's target return of 8.73% is higher than both our mid-point WACC ranges of 7.28% to 7.82%. As a result, the aeronautical revenue targeted by Auckland Airport is between $150.2 million and $226.5 million higher than it would be if the Airport was targeting a return in line with either of our two WACC scenarios. We consider a target return on the priced regulatory assets within the range between 7.28% and 7.82% is likely to produce outcomes consistent with the Part 4 purpose.

3.22 We concentrated on the return on priced activities in this paper as aeronautical charges are based on the recovery of priced assets. Auckland Airport's total RAB is made up of both priced and non-priced assets. Priced assets make up approximately 80% of the total RAB. Auckland Airport's expected return on total regulatory assets (7.79%) is lower than its expected return on its priced assets (8.73%), and is just below the higher-end range of a WACC estimates we consider reasonable. The return on non-priced assets must therefore be significantly lower than 8.73% over the PSE4 period.

3.23 We received a range of submissions on our consultation paper outlining differing views of whether our summary and analysis should assess total regulated returns, including returns on non-priced assets.[130] Auckland Airport and New Zealand Airports Association submitted that we should assess the 'full picture' of total return.[131] Air NZ agreed with our focus on priced assets only, and in its cross-submission further noted we should not consider the return over both priced and non-priced assets unless we take a wider analysis over multiple periods as laid out in our PSE3 report.[132] BARNZ submitted that it would welcome an assessment of Auckland Airport's other regulated (ie, non-priced) services.[133]

3.24 It is our view that it is not useful to compare returns on non-priced assets with our mid-point WACC. In this report we are concentrating on priced assets only. As described in our PSE3 report, we do not think that comparing Auckland Airport's expected return on its non-priced assets to our mid-point WACC estimate provides interested parties with useful information to assess whether Auckland Airport is extracting excess profits.[134]

Our conclusion

3.25 Auckland Airport's target return, which equals its estimated WACC, on its priced services of 8.73% will result in additional cost to consumers over the PSE4 period. We have estimated in our analysis that this would be an excess profit of between $150.2 million and $226.5 million, in nominal terms, from the priced activities over the price setting period. The range is based on our estimate of two WACC scenarios of 7.28% and 7.82% discussed in Chapter 2.

3.26 Other than the application of straight-line depreciation methodology, as outlined below, we do not have significant concerns with Auckland Airport's inputs underpinning its expected returns and consider the Airport's cash flow forecasts are generally suitable for the cash flow forecasts used in our IRR calculation. The remainder of this chapter summarises and analyses the following inputs, namely operational expenditure forecasts, depreciation and demand forecasts. Later in this chapter we summarise and analyse the revenue wash-up arrangement Auckland Airport proposed. We have also included two issues that were not included in the consultation paper: corporate cost allocations and tax losses.

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130 See paragraphs 1.5-1.7 of this report for a description of what our Airport ID regulation covers.

131 Auckland Airport submission on our consultation paper, page 47; NZ Airports Association submission on our consultation paper, page 16-17.

132 Air NZ submission on our consultation paper, page 8; Air NZ cross-submission on our consultation paper, page 9.

133 BARNZ: *Re: Review of Auckland Airport's 2022-2027 Price Setting Event – Cross submission* (10 October 2024) (**BARNZ cross-submission on our consultation paper**), page 4.

134 Commerce Commission: *Review of Auckland International Airport's pricing decisions and expected performance (July 2017 – June 2022) Final report* (1 November 2018), paragraph 134-162.

Operating expenditure forecasts

Does the level and timing of forecast operational expenditure appear reasonable?

3.27 This section considers whether Auckland Airport's opex forecasts for the PSE4 period are reasonable, based on information available at the time prices were set. Table 3.2 below sets out Auckland Airport's opex forecasts over PSE4 period.[135]

Table 3.2 Auckland Airport's forecast PSE4 operating expenditure

Opex forecasts ($m)	FY23	FY24	FY25	FY26	FY27	Total
Priced services	116	145	155	158	170	746
Non-priced services	14	17	18	19	20	87
Total regulated services	**130**	**162**	**173**	**177**	**190**	**832**

3.28 Auckland Airport's operating expenditure forecasts influence the prices it charges customers and influence our assessment of the Airport's ability to earn excessive profits.

3.29 Where airports can spend less than what is forecasted, they can earn returns that are greater than their target returns. Airports have incentives to operate efficiently. If airports forecast their operating expenditure over and above expected actual costs, they can earn excessive profits, other things being equal.

How Auckland Airport has forecasted operating expenditure

3.30 For PSE4, Auckland Airport initially used forecast FY23 operating expenditure as the baseline. Projected changes from cost drivers were then applied to the remaining years in PSE4. Cost drivers used were inflation, individual business unit forecasts and passenger volume forecasts. The PSE4 operating expenditure forecast was then aligned to the Airport Board's approved FY24 operating expenditure budget.[136]

Cost Drivers

3.31 We note that over PSE4, forecast operating expenditure per passenger reduces in both nominal and real terms, returning close to pre-COVID levels by the end of the pricing period.[137]

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135 From Auckland International Airport Limited PSE4 schedule 18 (total RAB) schedule 19 (priced assets).
136 Auckland Airport Price Setting Disclosure, page 45-46.
137 Auckland Airport Price Setting Disclosure, page 47.

3.32 Auckland Airport used non-tradeable forecast inflation and forecast staff headcount to inform the forecast of its operating expenditure over PSE4. Passenger demand was also a key cost driver, which has been considered in a separate section in this chapter (from paragraph 3.71).

3.33 Auckland Airport used non-tradeable inflation forecasts from the New Zealand Treasury in 2023 Budget to develop its opex forecasts. We note that non-tradeable inflation is a change from PSE3, where Auckland Airport used RBNZ CPI forecasts. As shown in Table 3.3 below, non-tradeable inflation is higher than the CPI over the majority of the PS4 period.[138] The Airports IMs do not require that airports use the CPI to forecast their operational expenses over a price setting event period.[139]

Table 3.3 Comparison of inflation measures

	FY23	FY24	FY25	FY26	FY27
Tradables	6.13	3.28	2.03	1.56	1.33
Non-tradables	6.04	3.31	2.98	2.81	2.73
Total CPI	6.20	3.30	2.60	2.30	2.10

3.34 Auckland Airport believes that compared to the CPI, non-tradeable inflation better aligns with its cost base, which is largely domestic service and labour costs.[140] In its PSE4 disclosure commentary, the Airport also noted that it did not use the Treasury's hourly earnings forecast (ie, wage inflation), even though about one-third of its operating expenditure is personnel costs. Had it used wage inflation, the operating expenditure forecast would have been higher, as the hourly earnings forecast is well above the non-tradeable inflation forecast over the PSE4 period.[141]

138 Stats NZ.

139 See also: Commerce Commission: *Airport Services Information Disclosure Determination 2010* (consolidating all amendments as of 18 June 2019) (18 June 2019).

140 Auckland Airport Price Setting Disclosure, page 46.

141 Ibid, page 46.

3.35 Auckland Airport has estimated a 22% overall increase in full-time-equivalent (**FTE**) aeronautical staff from 480 to 585 over the five year PSE4 period, from FY23 to FY27.[142] This growth in FTE is for increased infrastructure delivery and guest experience improvement.[143] Auckland Airport noted in its disclosures that airlines challenged whether the growth in FTEs was achievable, given the labour shortage.[144] The Airport stated that it considered feedback during the consultation process and considered the increases in FTEs were justified.[145]

Benchmarking Auckland Airport's operating expenditure

3.36 In our consultation paper we reported that Auckland Airport included information from Jacobs' Airport Performance Indicators 2022 which compare operating cost per passenger. Out of 50 airports, with the 50th ranking having the lowest operating cost per passenger, Auckland Airport ranked 43rd.[146]

3.37 However, we now note that Auckland Airport's performance ranking shows a relative increase in operating expenditure compared to other airports with Jacobs' Airport Performance Indicators 2023 ranking Auckland Airport 26th out of 50.[147]

3.38 In its submission on our process and issues paper, Auckland Airport reiterated the volatility that the COVID-19 pandemic introduced.

> In the initial pandemic response significant short-term cost savings were implemented to protect financial viability as borders were closed and revenue decreased significantly. As demand ramped up again so did the operational requirements, at a time when broader economic pressures including labour shortages and cost inflation all combined to create a volatile cost environment. Despite this volatility, the return of real operational expenditure per passenger to pre-pandemic levels over the forecast period reflects an efficient outlook for operations as economies of scale return with passenger numbers. [148]

142 Auckland Airport Price Setting Disclosure, page 46.
143 Ibid, page 47.
144 Ibid.
145 Ibid.
146 Ibid.
147 IATA submission on our consultation paper, page 6, and Qantas submission on our consultation paper, page 22.
148 Auckland Airport submission on our process and issues paper, page 37-38.

Submissions on process and issues paper on operating expenditure

3.39 Air NZ submitted that:

> This escalation in [operating] costs does not indicate an efficient or cost-effective approach over the course of PSE4.[149]

and

> AIAL's operating cost forecast for PSE4 indicates a significant increase in costs over the period, with FY27 costs almost 50% higher than FY23. Notwithstanding some need to ramp up operations as the recovery from COVID winds up, the fact that FY24 costs are forecast to be 128% of the FY19 costs, but only 90% of FY19 passenger volumes, is of major concern. Passenger volumes in FY27 are forecast to be only 7.8% higher than FY19 yet costs are forecast to be 36% higher than FY19.[150]

3.40 Auckland Airport responded in its cross-submission that it:

> considers the issues raised by Air New Zealand have sufficiently been addressed already during the PSE4 consultation, the PSE4 PSD, and the Auckland Airport submission to the Issues Paper.[151]

3.41 Qantas submitted that:

> AIAL's opex exceeds multiple Qantas benchmarks by about 200%.[152]

3.42 Auckland Airport responded in its cross-submission:

> Qantas provided no evidence in its submissions for this claim, and Auckland Airport considers it to be unfounded.[153]

Submissions on consultation paper on operating expenditure

3.43 Both IATA and Qantas noted that Auckland Airport had increased its relative operating expenditure per Jacobs Performance Indicators 2023 compared with the 2022 report where Auckland Airport's ranking moved from 43rd to 26th out of 50, with 50 being the lowest amount of operating expenditure.[154]

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149 Air NZ submission on our process and issues paper, page 15.

150 Air NZ submission on our process and issues paper, page 15.

151 Auckland Airport cross-submission on our process and issues paper, page 33.

152 Qantas Group: *Feedback on proposed review of AIAL's 2022-2027 price setting event* (31 January 2024) (**Qantas submission on our process and issues paper**), page 3.

153 Auckland Airport cross-submission on our process and issues paper, page 33.

154 IATA submission on our consultation paper, page 6; Qantas submission on our consultation paper, page 21.

3.44 Qantas further submitted its disagreement with our overall conclusion in our consultation paper, that operating expenditure appears reasonable, and requested we undertake a more detailed review of operating expenditure. We note that a large portion of Qantas' reasoning was confidential and has been redacted in the public version of the submission. We have been provided an unredacted copy, however our conclusion remains substantially the same, that forecast operating expenditure for PSE4 appears reasonable.[155]

3.45 In cross-submissions Auckland Airport responded that it acknowledges submissions from Qantas and IATA noting the Airport's ranking change from 46 to 23 in 2022 compared with 2023 (the higher the ranking the higher the operating expenditure) in the Jacobs Performance Indicator Assessment.[156]

3.46 Auckland Airport further submitted that as per its disclosure documentation, the operating cost per passenger is expected to return to pre-pandemic levels with a ranking of 36th by the end of PSE4.[157] The Airport stated that both the 2022 and 2023 assessments by Jacobs were undertaken "…during a highly volatile time for the aviation industry".[158]

Our conclusion

3.47 Our conclusion is that Auckland Airport's operational expenditure forecasts appear reasonable. While operational expenditure is forecast to increase over the PSE4 period as noted by airline submitters, the Airport's per passenger operating expenditure forecasts are in line with pre-pandemic levels by the end of the price-setting period. Auckland Airport has used the non-tradeable inflation rather than the CPI as a cost driver. It considers the former likely better reflects its operating cost base, which we accept.

Depreciation

Is Auckland Airport's approach to forecasting depreciation reasonable?

3.48 Airports recover depreciation on their regulatory assets (return of capital) from the revenue for regulated services, so forecast depreciation and its profile will have an impact on the prices and trend over time, given the longevity of infrastructure assets.

155 Qantas submission on our consultation paper, page 20-21.
156 Auckland Airport cross-submission on our consultation paper, page 125.
157 Auckland Airport cross-submission on our consultation paper, page 125-126.
158 Ibid.

3.49 The Airports IMs provide rules for the standard way depreciation is calculated in clause 3.4(1) and (2), where the value of the asset is multiplied by the reciprocal of remaining asset life.[159] This methodology is also known as the straight-line approach.

3.50 The application of a 'non-standard depreciation methodology' may be disclosed at the time of a price setting event in accordance with clause 3.4(5) of the Airports IMs. Where a non-standard method of depreciation is used, further disclosures are required.

3.51 The projected capital expenditure programme over the PSE4 period increases Auckland Airport's RAB from $1.7 billion to a projected $4.2 billion.[160] To forecast depreciation, the Airport uses the standard straight-line method, which means assets are assumed to depreciate evenly over their useful lives.

3.52 In our consultation paper we invited a submission from Auckland Airport further explaining why it preferred the straight-line approach, with any analysis and key assumptions supporting its decision.[161]

3.53 We asked this as we were not convinced that the Airport's use of straight-line depreciation is the best method for recovery of specific, significant assets with long lives such as terminal infrastructure. We raised that recovery of depreciation through a tilted annuity method has potential benefits to consumers over the longer-term life of these assets. It could be more allocatively efficient to match the recovery of depreciation with expected passenger growth and utilisation of the asset, and smooth aeronautical charges over a longer term.

Accelerated Depreciation for existing Domestic Terminal Building

3.54 In its PSE4 disclosures Auckland Airport adopted shorter asset lives for investment in the existing DTB, which is planned to be decommissioned when the integrated terminal building is operational in 2028/2029.[162] Our view is that the depreciation approach best promotes the purpose of Part 4 when it is aligned to the actual useful life of an asset.

3.55 In our consultation paper, we found that the use of accelerated depreciation on the existing DTB is in line with generally accepted accounting practice (**GAAP**) and reasonable, as it is consistent with the Airport's intention to de-commission the DTB when the new domestic terminal becomes operational.

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159 *Airports services input methodologies amendments determination 2016* [2016] NZCC 28, clause 3.4(1) and (2).

160 Refer to Chapter 4 for summary and analysis of Auckland Airport's proposed capital expenditure programme over PSE4.

161 Consultation paper, page 46.

162 Auckland Airport Price Setting Disclosure, page 42.

3.56 We understand the Airport and its substantial customers will continue to work together on the phasing of the capital programme. Our view is that it is reasonable for Auckland Airport to depreciate the remainder of the DTB reflecting the expected closure of the facility, and it is not material to the level of prices.

Tilted Annuity Depreciation

3.57 Tilted annuity depreciation acts as a price smoothing mechanism, like RAB indexation, but goes further by recovering a lower amount of depreciation at the beginning of the life of an asset, and a higher amount of depreciation towards the end of the asset's life rather than the asset depreciating evenly over its life span. This is based on the expectation that the utilisation of the asset (in this case passenger numbers) would grow over time. The implication is that passengers pay a more constant rate for use of the asset over time. Recovery of straight-line depreciation means that users in early years pay relatively more to use the asset. Where the real value of the asset is declining over time (ie, the asset value is not inflation-indexed) this inter-period inequity is exacerbated.

3.58 We acknowledge the response of Auckland Airport in its submissions and cross-submissions on our consultation paper request. [163] However, we are of the opinion that Auckland Airport provided a relatively limited quantitative analysis of its approach, and we understand that it will undertake a more fulsome analysis of different options to efficiently recover its investment cost over the expected life of assets commissioned in PSE5, when setting prices.

3.59 Auckland Airport submitted that straight-line depreciation is consistent with the guidance in the Airports IMs, and that guidance around the application of specific alternative depreciation profiles in the IMs should be made clearer.[164] Auckland Airport also submitted that alternative depreciation methods were considered during the consultation process with the airlines, but were not adopted.

3.60 While the straight-line approach is set out as the 'standard' or 'default' approach in the Airports IMs, that does not mean it is the most appropriate depreciation methodology in all circumstances. Our view is that the tilted annuity depreciation would produce outcomes that better promote the Part 4 purpose. The current IMs provide for the application, with extra disclosure requirements, of non-standard approaches to depreciation for price setting events. Future ID requirements and IMs may provide specific guidance on applying depreciation methods that better promote the Part 4 purpose.

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163 Auckland Airport submission on our consultation paper, page 49 to 50.

164 Ibid, page 48 to 49.

3.61 Christchurch Airport has applied the tilted annuity method for recovering depreciation of its new terminal assets since its PSE3.[165] This method was agreed on by parties to Christchurch Airport's consultation process. Christchurch Airport's PSE3 disclosures provide a good example of how a non-standard depreciation methodology could be adopted for the long-term benefit of consumers.[166]

3.62 We understand that Auckland Airport considered the tilted annuity depreciation method during its consultation process but ultimately decided not to adopt it. The Airport's reason for not adopting the method was that it would likely reduce prices in PSE4 but then increase prices in PSE5 and beyond, the pricing periods in which the airlines were concerned the most about increased prices.[167]

3.63 Auckland Airport noted that airlines were largely supportive of maintaining straight line depreciation for PSE4, with some interest in alternative depreciation in PSE5. Auckland Airport "concluded that airlines were aligned with Auckland Airport's position to maintain straight-line depreciation for assets commissioned in PSE4. Accordingly, a straight-line depreciation approach was carried through into the final pricing decision."[168]

3.64 In response to our consultation paper airlines were largely supportive of investigating a tilted annuity depreciation approach. BARNZ agreed with our "…questioning of the depreciation method pursued by Auckland Airport." BARNZ was also in support of our view that tilted annuity depreciation would more equitably and efficiently spread investment costs over current and future airport consumers, and more accurately reflect the time pattern of usage.[169] IATA supported the use of tilted annuity depreciation to better spread the cost over time and according to its usage.[170]

3.65 Air NZ supported our conclusions that a straight-line depreciation approach does not best promote the long-term benefit of consumers, and that the tilted annuity approach to recovering depreciation of long-lived assets such as terminal infrastructure is likely to better promote the Part 4 purpose. Air NZ further submitted that a tilted annuity approach as adopted by Christchurch Airport has worked well.[171]

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165 Commerce Commission: *Review of Christchurch International Airport's pricing decisions and expected performance (July 2017 - June 2022) Final report* (1 November 2018), page 67.

166 Christchurch International Airport Limited: *Disclosure relating to the reset of aeronautical prices for the period 1 July 2017 to 30 June 2022* (14 August 2017).

167 Auckland Airport submission on our consultation paper, page 49.

168 Ibid.

169 BARNZ submission on our consultation paper, page 4.

170 IATA submission on our consultation paper, page 7.

171 Air NZ submission on our consultation paper, page 16-17.

3.66 Qantas "…concur[s] with the Commission and Christchurch Airport that an annuity depreciation model is more appropriate than a straight-line model." In its submission on our consultation paper, Qantas provided a set of illustrative scenarios that show the application of tilted annuity to Auckland Airport's building block model. Qantas acknowledged that as this method is complex it had to make several assumptions on the inputs into its illustrative model.[172]

3.67 In its cross-submission on our consultation paper, Auckland Airport provided a non-exhaustive list of potential unforeseen impacts when adopting alternative depreciation methods, which included pricing, repairs and maintenance, funding implications, increased risk through delays in cash-flows and impacts of using a combination of depreciation approaches and impacts on price for service.[173] Auckland Airport has stated it will consult with airlines on issues such as tilted depreciation and price smoothing as part of PSE5 consultation.[174] We are satisfied that consideration of tilted annuity deprecation in PSE5 would capture the majority of the value of integrated terminal assets.

3.68 In a workably competitive market, we do not see 'saw tooth' pricing that would reflect recovery of straight-line depreciation of major new assets, given that competing firms will have a range of assets with different ages. Businesses operating in competitive markets have to deal with the issues that Auckland Airport raises in the ordinary course of their businesses, so the issues that Auckland Airport has raised are not insurmountable.

Our conclusion

3.69 Our view is that the tilted annuity depreciation approach would likely better promote the Part 4 purpose. In the particular circumstances that Auckland Airport faces with this investment, we are not convinced that the standard straight-line approach promotes the long-term benefit of consumers. However, Auckland Airport has signalled that it will consult with airlines on tilted annuity depreciation for PSE5. Our conclusion is that while a tilted annuity deprecation methodology would likely produce outcomes that better promote the purpose of Part 4 in PSE4, we are satisfied that consideration of tilted annuity deprecation in PSE5 would capture the majority of the cost of integrated terminal assets.

3.70 Regarding the accelerated depreciation of the DTB per Auckland Airport's PSE4 disclosures, our view is that it is reasonable for Auckland Airport to depreciate the remainder of the DTB reflecting the expected closure of the facility, and it is not material to the level of prices.

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172 Qantas submission on our consultation paper, page 16.

173 Auckland Airport cross-submission on our consultation paper, page 123.

174 Ibid.

Demand forecasts

To what extent does the demand forecast provided by Auckland Airport in its PSE4 disclosure reasonably reflect expectations for future demand and why?

3.71 This section considers whether Auckland Airport's demand forecasts for the PSE4 period are reasonable, based on the information available at the time prices were set. Aeronautical prices are set by estimating a volume forecast for each charged service. Demand forecasts are therefore a key driver of the revenue the Airport will earn during the pricing period and influence our assessment of whether the Airport is limited in its ability to extract excessive profits. They also inform the level and timing of investment in infrastructure, which we discuss in Chapter 4.

Incentives in forecasting demand

3.72 Airports have some incentive to be conservative in their passenger demand forecasts to set higher prices, given a certain revenue forecast. A higher actual demand will then provide airports with extra revenue. In the current price setting event however, airlines consider Auckland Airport's demand forecast to be too high because it underestimated the potential reduction in demand caused by the increase in airport charges.

3.73 The different views on the potential impact of the price increase on passenger forecasts appear to relate to Auckland Airport's planned capital investment. The airlines argue that the investment in such capacity may not be necessary, whereas the Airport insists capacity expansion is required. Both Auckland Airport and the airlines have engaged experts to advise on the potential adverse impact of the price increase on future demand. The parties hold different views.

Regulatory requirements

3.74 Airports are required to report on demand forecasts as part of ID regulation. Demand forecasts are a key input into the calculation of operating and capital expenditure forecasts and thereby total revenue requirement over the price setting event period. Airports are required to disclose the following:[175]

3.74.1 Annual and busy hour forecasts of international and domestic passenger arrivals and departures;

3.74.2 International transit and transfer passengers (as applicable); and

[175] Commerce Commission: *Airport Services Information Disclosure Determination 2010* (consolidating all amendments as of 18 June 2019) (18 June 2019), clause 2.5(1)(a)(iii) & Schedule 20.

3.74.3 Aircraft runway movements by busy hour, busy day and financial year, expressed in total certified take-off weight (**MCTOW**) and number of aircraft.

3.75 Airports are also required to provide an additional five years of forecast passenger, aircraft numbers and MCTOW demand.

How Auckland Airport has forecast demand

3.76 In PSE4 Auckland Airport took a two-step process in forecasting demand:[176]

3.76.1 Auckland Airport engaged an independent aviation forecasting specialist, DKMA, to create an unconstrained forecast.

3.76.2 Then, the Airport produced its own constrained forecast by overlaying adjustments for:

3.76.2.1 transit passengers;

3.76.2.2 unbillable passengers, including those less than two years of age; and

3.76.2.3 the impact on demand from higher airport charges – the price elasticity of demand.

Unconstrained forecast

3.77 During the COVID-19 pandemic Auckland Airport initially forecasted its post-pandemic demand recovery at a high level, in consensus with airlines. Auckland Airport then commissioned DKMA to undertake a forecast of passenger and air traffic demand. The Airport consulted with its substantial customers and provided feedback to DKMA. DKMA's view is that long-term aviation demand is driven by economic, demographic and tourism growth.[177]

3.78 On average, DKMA has projected New Zealand's GDP to grow on average 1.8% per annum through to 2048. Population wise, New Zealand is expected to grow by 0.7% per annum nationally and 0.9% per annum in the Auckland area. DKMA forecast that the tourism will recover to pre-pandemic levels by 2026 and then grow at 3.5% per annum over the period 2026 to 2028.[178]

176 Auckland Airport Price Setting Disclosure, page 86-90.
177 Ibid, page 86.
178 Ibid, page 87.

Constrained forecast

3.79 Auckland Airport adjusted DKMA's unconstrained forecast by aligning with its own latest forecast for the 2023 financial year and the 2024 budgets. Non-billable passengers, defined as passengers under two years old, airline positioning crew and departing transit passengers,[179] were also removed from the forecast.[180] Substantial customers were consulted throughout the process of forecasting unconstrained demand as well as constrained demand.[181]

3.80 After excluding non-billable passengers, Auckland Airport further adjusted the demand forecast, informed by the advice from an aviation industry economics expert, InterVISTAS, on the impact that the higher charges could have on demand for travel through the airport.[182]

3.81 InterVISTAS considered how future demand would be impacted based on Auckland Airport's forecast aeronautical charges in PSE4 and how airlines may pass them on through airfares. When charging their passengers, airlines can choose to pass on the full 100% of aeronautical charges (or 'pass-through costs' from the perspective of airlines) or less. InterVISTAS prepared an analysis using both 60% and 100% pass-through aeronautical charges. In applying InterVISTAS' analysis to its demand forecast, Auckland Airport used the midpoint of 80% pass-through aeronautical costs.[183]

3.82 Auckland Airport noted that the airlines disagreed with this assumption on the pass-through percentage of 80% and that they considered pass-through costs should not be less than 100% of airport charge increases.[184] However, Auckland Airport stated that it considered the feedback by substantial customers, including an alternative elasticity study, but ultimately concluded that:

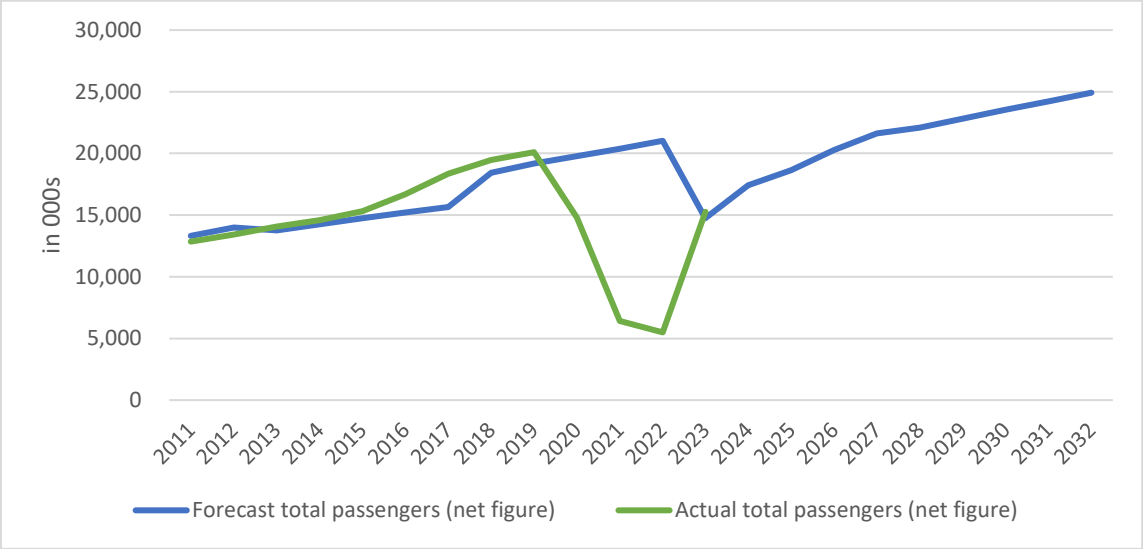
> …key assumptions of the study were inconsistent with real world revenue management practices of airlines (which spread airport costs across different fare brackets proportionately) and that the InterVISTAS study provided a more robust estimate of potential price elasticity of demand impacts.[185]

179 Transit passengers are charged on arrival only.
180 Auckland Airport Price Setting Disclosure, page 83.
181 Ibid, page 90.
182 Ibid, page 89.
183 Ibid.
184 Auckland International Airport Limited: *Price Setting Event 4 Reasons paper* (June 2023), page 25.
185 Auckland Airport Price Setting Disclosure, page 90.

Forecast and actual passenger numbers

3.83 Using Auckland Airport's ID and PSE4 data, we have charted its forecast and actual passenger numbers in Figure 3.1 below.[186]

Figure 3.1 Total passengers (excluding international transit passengers)



3.84 As shown in Figure 3.1, actual passenger numbers increased over the period 2011 to 2019, slightly above forecast passenger numbers until 2020 when there was a significant decrease due to COVID-19. The passenger numbers are forecast to recover to the pre-COVID level by around 2026/2027.

Submissions on the process and issues paper on demand

3.85 The airlines and airports disagreed on the expected impact of Auckland Airport's capital expenditure on future demand. They agreed that the proposed capital expenditure will result in higher prices, and that higher prices will result in reduced demand for air travel, but they disagreed on the magnitude of the impact.

3.86 Submissions from Auckland Airport's customers on our process and issues paper also focussed on the price elasticity of demand. Air NZ stated that Auckland Airport's demand forecast:

> materially overstates expectations for future demand, particularly increases occur once the IDT is commissioned and enters the RAB in PSE5, quadrupling the current RAB by DY2032. These increases will disproportionately impact New Zealand's domestic air traffic network.[187]

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186 Actual figures obtained from the dataset of Airport ID data as at December 2023 on our website: https://comcom.govt.nz/regulated-industries/airports/regulated-airports-performance and forecast figures are from Auckland Airport PSE4 price setting schedules, s20a.

187 Air NZ submission on our process and issues paper, page 11.

3.87 Qantas' submission stated that it "has serious concerns about the passenger forecast", that it is "not convinced that there is any immediate need for the capacity based on the [demand] forecast" [188] and:

> while they accept that growth is a possibility, AIAL was trending towards negative growth prior to the COVID 19 pandemic and recovered more slowly than other ports. Given the costs of sunk investment, it would have been prudent to wait before investment.[189]

3.88 Qantas further submitted that:

> the constraints of price-elasticity have not been properly considered by AIAL. The implication of the capital plan will have a material impact on NZ aviation through:
>
> - Reducing demand,
> - Reducing capacity,
> - Possibly reducing the level of competition on routes, days of the week, with a compounding reduction in capacity; and
> - Cyclical impacts on other airports BBMs [Building Block Models] at their PSEs and on AIAL's at the next PSE.[190]

3.89 Auckland Airport responded in its cross-submission on our process and issues paper that it disagreed with Qantas' submission as pre-pandemic traffic was growing strongly and "the decline in regional volumes in 2019 was largely due to Jetstar's exit from the regional market."[191]

3.90 Auckland Airport remarked on the differing incentives of airports and airlines in its cross-submission on our process and issues paper:

> Airlines have strong commercial incentives to keep airport charges as low as possible, because minimising airport charges reduces operational cost for airlines. Airlines may prefer to have lower operational costs, with lower service quality. However, lower service quality can impact on all airport users, not just airlines. That is why the airport is the party accountable for delivering the right service that consumers demand – quite rightly it is the airport's social licence at stake if a poor service is provided.[192]

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188 Qantas submission on our process and issues paper, page 5.
189 Ibid.
190 Ibid.
191 Auckland Airport cross-submission on our process and issues paper, page 29.
192 Ibid, page 7.

3.91 Auckland Airport further submitted that "The commercial incentives for airlines to delay or oppose investment is strong."[193] Auckland Airport cited a 2019 study from the Australian Productivity Commission into the Economic Regulation of Airports on this point, which notes that "…airfares could be higher if, for example, anticompetitive behaviour successfully delayed necessary airport investment, and this resulted in congestion."[194]

3.92 Airlines suggested that the forecast demand dampening provided by InterVISTAS was too low and the impact of aeronautical charges on demand should be higher.[195] Auckland Airport submitted that for this to be adopted, then aeronautical charges would be higher, resulting in increased profits overall.[196] In its cross-submission Air NZ responded to this point that:

> AIAL's statement also avoids the fact that higher prices caused by AIAL targeting excess profitability is the key contributor to the demand impacts, therefore the argument becomes somewhat circular.[197]

3.93 In its disclosures as well as its submission on our process and issues paper, Auckland Airport stated that it "carefully considered" findings of the separate study into demand impact, but ultimately found that the "InterVISTAS study was highly robust, and that the study provided by the airlines overstates the likely reduction in demand from airport charges."[198]

Submissions on consultation paper on demand

3.94 We note that submitters appeared comfortable with the unconstrained baseline demand produced by Auckland Airport. However, while submitters agree that Auckland Airport's proposed capex will result in higher prices, and that the higher prices will result in a decrease in demand, they disagree on the magnitude of the decrease in demand.

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193 Auckland Airport cross-submission on our process and issues paper, page 8.

194 Ibid.

195 Auckland Airport submission on our process and issues paper, page 30.

196 Ibid.

197 Air New Zealand: *Air NZ Cross Submission on the Review of Auckland Airport's 2022 – 2027 Price Setting Event4 (PSE4) – Process and issues paper* (21 February 2024) (**Air NZ cross-submission on our process and issues paper**), page 10.

198 Auckland Airport submission on our process and issues paper, page 30.

3.95 BARNZ, in conjunction with Air NZ and Qantas, engaged BISOE to estimate the impact of Auckland Airport's proposed capex on the demand for domestic travel. BISOE used baseline demand and prices set by Auckland Airport as inputs to investigate the impact of those prices on demand. We have been provided the unredacted BISOE study in confidence, and the public version of the study is available on our website.[199]

3.96 Submissions, as excerpted below, concentrate on the impact of a reduction in demand on Auckland Airport's capital expenditure plans. In the view of the airline submitters, the results of the BISOE study were of a sufficiently significant decrease in demand that Auckland Airport's capital investment is unjustified. We address concerns about Auckland Airport's investment in Chapter 4 of this report.

3.97 In our consultation paper conclusion, we found that Auckland Airport's overall demand forecast appears reasonable and is unlikely to result in excessive profits for the PSE4 period. We noted that Auckland Airport had forecasted higher passenger demand than what the airlines consider to be reasonable, and this higher demand forecast means that the price is lower per customer. We also found that the potential impact of the differences in the expert studies was not of sufficient significance in the operating expenditure forecast or the projection of long-term capacity needs.

3.98 BARNZ disagreed with the conclusion in our consultation paper, that the demand forecast appears reasonable and that higher forecast demand will generate a lower price point for consumers:

> That is true, if it occurs in a vacuum. In reality, lower demand arising from rising prices will bring us to a place where forecasts used for price setting in PSE5 may be lower than those which were forecast for PSE4. Capex committed to by AIAL in PSE4 will be commissioned in PSE5, and will unavoidably be brought to bear on prices in PSE5 – where there are likely to be fewer passengers remaining in the market to pay. This will cause prices for consumers to be higher again – both because the existing forecast has not accounted for demand destruction, and also because of the capex itself – which is so very high it causes prices to rise.[200]

3.99 IATA considered that there were flaws in the demand analysis provided by Auckland Airport:[201]

> Concerning the demand analysis, the airline community has highlighted several noticeable flaws of the approach employed by Auckland Airport, leading to the conclusion that Auckland Airport has underestimated the impact of its pricing trajectory on demand, which will become increasingly evident going into PSE5.[202]

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199 BISOE: *Flight Price Elasticity Study: Domestic Markets* (14 March 2023) – redacted version; BISOE: *Flight Price Elasticity Study: Domestic Markets* (21 May 2024) – redacted version.

200 BARNZ submission on our consultation paper, page 6.

201 IATA submission on our consultation paper, page 8.

202 Ibid.

3.100 Air NZ "considers the differences between the expert studies' impact on demand to be significant".[203] Air New Zealand also disagrees with our draft conclusion that Auckland Airport's demand forecast appears reasonable, and that Auckland Airport is "overstating" its demand forecast in order to justify the increases to capital expenditure in PSE4 and beyond:[204]

> Air NZ considers that the impact on demand over PSE4 and PSE5 of AIAL's capital plan is of significant concern. Air NZ submits that AIAL is incentivised to over-state demand across PSE4 and PSE5 ahead of the commencement of construction on the DP, knowing that it has the option to re-assess for PSE5 once construction is well underway and the project is irrevocable. Readjusting to a lower demand profile at PSE5 price setting will result in further price rises based on a capital plan which has not adequately accounted for the demand impact of the price rises required to fund it.[205]

3.101 Qantas submitted that demand growth "exceeds requirements for realistic demand projections" and "…price elasticity analysis undertaken by BISOE for BARNZ demonstrates that the pricing impacts of AIAL's proposed capital plan will likely further dampen demand forecasts."[206] Qantas further submitted that "…left unchecked AIAL's pricing proposal will have a significant impact on consumers and the economy."[207]

3.102 Auckland Airport responded in its cross-submission on our consultation paper. Auckland Airport has engaged InterVISTAS to respond to points from the BISOE paper and submitted that "Auckland Airport and InterVISTAS remain comfortable that the literature driven approach has produced a reliable estimate of elasticity."[208]

3.103 Auckland Airport argues that Qantas' claims about the Airport's investment having detrimental economic impact on NZ's economy have no basis. In response to these claims, Auckland Airport commissioned EY to undertake a study of the economic contribution of the Airport.[209] Auckland Airport reports that EY found "Qantas is assuming that the cost of the new infrastructure is passed on to the existing passenger base, without the benefits of the investment i.e. no corresponding increase in capacity, competition or passenger numbers."[210]

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203 Air NZ submission on our consultation paper, page 18.
204 Ibid.
205 Ibid, page 18-19.
206 Qantas submission on our consultation paper, page 4.
207 Ibid, page 23.
208 Auckland Airport cross-submission on our consultation paper, page 109. See also InterVISTAS' response to BISOE, published on our website here.
209 Auckland Airport cross-submission on our consultation paper, page 118.
210 Ibid, page 119.

3.104 Auckland Airport strongly disagreed with Air NZ's claim that Auckland Airport's capital plan is of "significant concern" and that the Airport has a "strong incentive to overstate demand projections in PSE4":

> …the airport is incentivised to increase demand, not reduce it. Auckland Airport only receives return on investment as the airport facilities are used, therefore over investing to the extent that demand is materially reduced is likely to reduce the airport's revenue. Auckland Airport generates commercial revenue from non-regulated activities that are linked to passenger volumes. A reduction in passenger numbers would reduce the value of these businesses, and clearly would not be in Auckland Airport's best interests.[211]

Expert studies

3.105 As noted in the submissions above, Auckland Airport and BARNZ engaged different experts to study the impact on demand from increases to aeronautical charges resulting from Auckland Airport's increases to investment from PSE4 onwards. Auckland Airport engaged InterVISTAS and BARNZ engaged BISOE. Both InterVISTAS and BARNZ provided a series of studies to their respective clients and were able to respond to each others' studies also.

3.106 InterVISTAS and BISOE reported on the impacts on demand from the increase to aeronautical charges. The two experts used differing methodologies and came to different overall results. We have received unredacted copies of both sets of studies, as there is commercially sensitive information in both. We have published redacted versions of BISOE's reports alongside submissions on our website.[212] InterVISTAS' response to BISOE can also be found on our website.[213]

3.107 While both studies provide some insight into the impact of Auckland Airport's capex proposal on demand, our opinion is that the difference between these studies is not large enough to have resulted in Auckland Airport making materially different capital expenditure decisions. Our view is that had Auckland Airport relied on the results of the study commissioned from BISOE rather than its own, it is unlikely that it would have made materially different capital expenditure decisions.

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211 Auckland Airport cross-submission on our consultation paper, page 133-134.

212 BISOE: *Flight Price Elasticity Study: Domestic Markets* (14 March 2023) – redacted version; BISOE: *Flight Price Elasticity Study: Domestic Markets* (21 May 2024) – redacted version.

213 InterVISTAS: *Response to BIS Oxford Economics Note* (9 October 2024), published on our website here.

Our conclusions

3.108 Our conclusions on the reasonableness of demand forecasts are as follows:

3.108.1 There has been extensive consideration, consultation and expert studies on demand from both Auckland Airports and airlines. We note that there was agreement with general demand as forecast by Auckland Airport. Auckland Airport has taken into consideration views of the airlines and expert reports provided by them as well as obtaining its own in response to airline concerns.

3.108.2 We understand that expert studies relating to price elasticity of demand show different magnitudes for the potential impact on demand from the increase in Auckland Airport's charges. However, we do not consider that the potential impact of these differences is of sufficient significance in the operating expenditure forecast or the projection of long-term capacity needs.

3.108.3 Auckland Airport has forecasted higher passenger demand than what the airlines consider is reasonable. This is opposite to the general demand forecast incentives of airports and airlines. For PSE4, higher passenger demand forecast means that the price per passenger is lower than otherwise, which benefits consumers. When facing constraints, capacity expansion by investing in infrastructure enables airline competition, which also benefits consumers. Our conclusion is that Auckland Airport's overall demand forecast appears to be within a range we consider to be reasonable and is unlikely to result in excessive profits for the PSE4 period.

Revenue wash-up

Is the two-way revenue wash-up reasonable?

3.109 Auckland Airport's PSE4 disclosure includes carry-forwards relating to historical adjustments seen in past PSEs, correction of errors and omissions. In addition, Auckland Airport has introduced two new ex post wash-up mechanisms to share risks with its customers: a two-way revenue wash-up, and a capex wash-up. [214] The latter is discussed in Chapter 4.

[214] Auckland Airport submission on our process and issues paper, page 31-33.

Allocation of risk

3.110 In the context of Part 4 regulation, consistent with how risks tend to be allocated in workably competitive markets, our view is that risks should be allocated to suppliers or consumers depending on which are best placed to manage them.[215] If suppliers are not compensated for risks that are outside their control, then this might have a detrimental effect on incentives to invest.[216]

3.111 Auckland Airport has included two new risk sharing measures in the form of wash-ups over the PSE4 period:

3.111.1 A **two-way revenue wash-up** which aims to partially compensate Auckland Airport or airlines for material differences between actual and forecast aeronautical demand (measured by revenue) over the PSE4 period.

3.111.2 A one-way **capex wash-up** which aims to compensate airlines if the Airport under-delivers on the forecast commissioned asset. Further detail and analysis are provided in Chapter 4 of this paper.

Two-way revenue wash-up

3.112 In its disclosures, Auckland Airport stated that this wash-up is intended to partially share with airlines demand risks in the event of a significant shock.[217] The mechanism is described as follows.

3.113 A revenue wash-up is triggered if the PSE4 aeronautical revenue falls short of (or exceeds) the price setting forecast by more than 15%, and at the same time, the PSE4 IRR for priced activities falls short of (or exceeds) target return by more than 0.75% after tax. Any wash-up will only occur to the extent that it coincides with a 0.75% or more reduction (or increase) in actual PSE4 post-tax IRR versus the target return. If triggered, the wash-up would recover (or refund) the lesser of the revenue shortfall (or surplus) over and above the 15% threshold, and the priced IRR shortfall (or surplus) over and above the 0.75% threshold. This would be implemented as a positive or negative carry-forward adjustment to the opening pricing asset base value to increase or reduce the revenue requirement for the next pricing period (PSE5).[218]

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215 Commerce Commission: *Input methodologies review decisions: Framework for the IM review* (20 December 2016), page 42.

216 Ibid, page 42.

217 Auckland Airport Price Setting Disclosure, page 67.

218 Commerce Commission: *Process and Issues paper* (30 November 2023), page 13.

3.114 The overall effect of this wash-up mechanism is for the Airport and airlines to share the risk and cost of significant different-to-forecast demand outcomes (both upside and downside) in the form of revenue.

Submissions on process and issues paper on revenue wash-up

3.115 In their joint submission, Freightways and NZ Post noted that they are unable to provide feedback on the impact of any risk sharing arrangements, including consideration of the use or lack of any opening or closing carry-forward adjustments:

> as management have not been provided access to the building block model used to develop pricing by AIAL. We find this disappointing as in all our recent airport charging discussions with Palmerston North and Christchurch their building block models were shared openly, and this assisted with the parties understanding and reaching a resolution around the aeronautical charge.[219]

3.116 BARNZ submitted that following:

> the asymmetric risk wash-up attempts to compensate the airport company for risk taken. BARNZ considers that compensation for risk exists in the calculation of the airport's target WACC – according to the Commission's Input Methodology. If the WACC methodology generates a return which already compensates for risk taken, BARNZ asks whether the asymmetric risk wash-up twice-compensates AIAL?[220]

3.117 Air NZ submitted that it had:

> concerns about asymmetric risk are valid in the context of a business which has the ability to set its own prices when it deems appropriate. In the non-price-regulated world, no business can be guaranteed of achieving a full return on its investment in the event of a material asymmetric event. An event such as COVID-19 does not impact airports in isolation – all parts of the economy were severely impacted.[221]

3.118 Air NZ further submitted that it:

> considers the revenue wash-up is extremely favourable to AIAL. The airport has the potential to earn more than $400m incremental to forecast revenues over the PSE4 period before the wash-up would potentially be triggered. (noting that there would also need to be a 0.75% uplift to IRR to trigger the mechanism). This $400m incremental revenue is retained by the airport and does not form part of any carry forward adjustment into the next pricing period. Even at a 5% threshold, the increased revenue for the airport would be ~$140m.[222]

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219 Freightways & NZ Post: *Auckland Airport's 2022-2027 price setting event* (22 January 2024) (**Freightways & NZ Post submission on our process and issues paper**), page 3.

220 BARNZ submission on our process and issues paper, page 6.

221 Air NZ submission on our process and issues paper, page 11.

222 Air NZ submission on our process and issues paper, page 12.

3.119 Auckland Airport responded to this point in its cross-submission that Air NZ:

> focuses on only one side of what is a symmetrically designed wash-up mechanism, which is not favourable to Auckland Airport but rather is fair and balanced. It ignores the fundamental design of this wash-up, in that it equally exposes Auckland Airport to the same upside and downside risk, not just upside which Air New Zealand has focused on in its submission. Air New Zealand has not justified its claims that the wash-up mechanism is favourable to Auckland Airport.[223]

3.120 In its response to BARNZ and Qantas, Auckland Airport noted in its cross-submission that:

> it has already addressed issues raised by BARNZ that Auckland Airport is being twice compensated in our previous submission and PSE4 PSD, while the comments from Qantas focus on the investment plan, rather than the wash-up mechanism itself.[224]

Submissions on consultation paper on revenue wash-up

3.121 IATA queried how the revenue wash up is compatible with the risks the Airport is intended to bear as part of the WACC.[225]

3.122 Auckland Airport responded to IATA in its cross-submission with the following:

> AIAL is seeking to manage asymmetric risks which are not captured through the measurement of the asset beta. This therefore does not impact the effectiveness of the asset beta as a sector wide measure, nor does it preclude other airports from taking the same approach.[226]

3.123 Air NZ reiterated its position stated in its submission on our process and issues paper, that the revenue wash up is extremely favourable to Auckland Airport because it does not acknowledge the fact that if the Airport is falling short of its targets by that much, then its airline customers would also be facing significant financial losses; and the 15% threshold before there is any return of revenue is significantly too high in the context of Auckland Airport.[227]

3.124 Auckland Airport stated that Air NZ's submission implies that "...airports should carry asymmetric risk without appropriate compensation, with limited risk to airlines." Auckland Airport further responded that the threshold is two-way, noting that the Airport would have to face $380m of lost revenue over the period before the threshold is triggered. Auckland Airport also contended that a market shock that triggers the threshold is more likely to result in under earning rather than over earning.[228]

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223 Auckland Airport cross-submission on our process and issues paper, page 32-33.
224 Ibid, page 33.
225 IATA submission on our consultation paper, page 2.
226 Auckland Airport cross-submission on our consultation paper, page 129.
227 Air NZ submission on our consultation paper, page 21.
228 Auckland Airport cross-submission on our consultation paper, page 129-130.

Our conclusion

3.125 Auckland Airport indicated in its submissions that this wash-up is to cover demand shocks due to significant events, like COVID-19.[229] It does not appear to be intended for normal operations and revenue fluctuation of the Airport. Auckland Airport notes in the disclosure that it incurred 32% revenue losses during PSE3 because of COVID-19. If this wash-up mechanism was in place then, 17% of the 32% revenue losses against the PSE3 revenue forecast would be recovered in PSE4.[230] Auckland Airport is not seeking to recover in PSE4 over $500 million revenue shortfall against PSE3 forecast.

3.126 Wellington Airport introduced a demand wash-up due to COVID-induced uncertainty, as part of its PSE4 decisions in April 2021. In our review of Wellington Airport's PSE4, we noted COVID-19 pandemic was a Type I asymmetric risk that arises through infrequent events that could produce large losses. In workably competitive markets, it is often unfeasible for firms to recover the cost of catastrophic events after the event. We considered regulated providers such as airports should be exposed to at least some of the costs of such risk materialising, to mitigate the risk of under-preparation for this type of risks. This encourages them to spend efficiently ahead of time to prepare for such a possibility and not fully rely on retrospective relief.[231]

3.127 Our conclusion is that in principle, a wash-up seems an appropriate mechanism for the Airport and airlines to share the risk and cost of significant revenue variance to forecast, and address under- or over-recovery of revenue by the Airport in the event of a demand shock, like COVID-19. The presence of this risk sharing mechanism does not affect our estimate in Chapter 2, of a reasonable WACC for Auckland Airport over PSE4. This is because WACC is an industry-wide measure and unaffected by how Auckland Airport decides to share risks with airlines. While some airlines did not agree on the thresholds of the two-way revenue wash-up, there was agreement in principle over wash-ups generally and Auckland Airport lowered the IRR threshold from 1% to 0.75% after considering airlines' feedback. We consider that more transparency from Auckland Airport around inputs and analysis could aid its customers' understanding of the effect of the revenue wash-up mechanism.

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229 Auckland Airport submission on our process and issues paper, page 31.

230 Auckland Airport Price Setting Disclosure, page 67.

231 Commerce Commission: *Review of Wellington Airport's 2019-2024 Price Setting Event Final Report* (28 September 2022), paragraph 126-127.

Corporate Allocations

Is Auckland Airport's approach to corporate allocations reasonable?

3.128 Auckland Airport operates as a dual-till entity where the aeronautical side of the business is subject to economic regulation and the commercial side is not. Under this dual till structure, shared corporate costs are allocated between the regulated and non-regulated sides of the business.[232]

3.129 In submissions on our consultation paper, Air NZ raised concerns about the proportion of corporate costs that are allocated to Auckland Airport's regulated business.[233] Air NZ estimated that 81% of 'not directly attributable' corporate overhead cost is allocated to the regulated side of the business. Air NZ's view was that corporate allocation should be based on the value of Auckland Airport's non-aeronautical side of the business, which Air NZ estimated comprises ~70% of the Airport's total enterprise value, with the regulated side of the business comprising ~30%.[234]

What the Input Methodologies state

3.130 Part 2 of the Airports IMs provides the rules for information disclosure for cost allocation for both asset values and operating costs. The focus here is corporate cost allocations which fall under operating costs. The cost allocation methodology has differing rules for costs that are directly attributable to regulated activity costs, and costs that are not directly attributable to a regulated activity:[235]

3.130.1 Under clause 2.1(1) any operating costs that are directly attribute must be allocated to the regulated activity to which they are directly attributable. Where a directly attributable operating cost is defined as:

> ..[a cost], wholly and solely incurred by the airport in or in relation to its undertaking of a regulated activity.[236]

3.130.2 Under clause 2.1(2) any operating costs that are not allocated with subclause 2.1(1) must be allocated to regulated activities in accordance with the accounting-based allocation approach.

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232 *Airports services input methodologies amendments determination 2016* [2016] NZCC 28 (20 December 2016), Part 2.

233 Air NZ submission on our consultation paper, page 12-15.

234 Ibid.

235 *Airports services input methodologies amendments determination 2016* [2016] NZCC 28 (20 December 2016), Part 2.

236 *Airports services input methodologies amendments determination 2016* [2016] NZCC 28 (20 December 2016), clause 1.4 (page 10).

3.130.3 Clause 2.2 provides the methodology for the accounting-based allocation approach in order to allocate operating costs that are not directly attributable:

3.130.3.1 Under clause 2.2(3) where an airport uses a proxy cost allocator for costs that are not directly attributable, the airport must explain why a causal relationship cannot be established, or it is impractical to use a causal relationship. Under clause 2.2(5) the airport must explain the rationale for the proxy cost allocator.

Auckland Airport's approach to corporate cost allocations

Disclosures

3.131 On page 49 of its PSE4 disclosures, Auckland Airport has stated that it has "…based its cost allocation methodology on the prescribed approach for information disclosures…" and further that "…this methodology has been transparently disclosed and broadly accepted since 2006."[237]

3.132 Auckland Airport has provided its operating expenditure allocation percentages in Table 17 of its PSE4 disclosures.[238] Within its PSE4 disclosures, Auckland Airport also provided a table of the indirect cost allocation rules from its 2022 annual ID disclosures directly below.[239] When comparing these two tables there are only minor differences in the allocation percentages for the regulated and non-regulated parts of the business between the 2022 regulatory year and the PSE4 operating expenditure allocation percentages.

Submissions

3.133 Auckland Airport, in its cross-submission, responded that its current allocation rules are consistent with past practice and airlines did not raise concerns during the PSE4 consultation process. Auckland Airport's direct and indirect allocation rules are as follows:[240]

3.133.1 "Direct non-aeronautical costs are not charged to airlines through airport charges. These costs are funded by Auckland Airport shareholders."

3.133.2 Indirect costs are based on the allocation rules that Auckland Airport has developed to use for ID reporting. These rules are independently audited on a yearly basis and the approach used in PSE3 continues to be used for PSE4.

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237 Auckland Airport Price Setting Disclosure, page 49.
238 Ibid, page 50.
239 Ibid.
240 Auckland Airport submission on our consultation paper, page 126.

3.134 Auckland Airport operates as a landlord to other businesses such as commercial parking, property leasing and provision of retail tenancies on the commercial side of its enterprise. These commercial activities require relatively low corporate operational expenditure compared to the revenue they generate, when compared to the operational expenditure required on the aeronautical side.[241] Auckland Airport further submitted that "…using revenue or a measure of enterprise value of these activities, as suggested by Air New Zealand, would be expected to over-allocate costs to non-regulated activities."[242]

Our conclusion

3.135 We observe that Auckland Airport's cost allocation methodology is consistent with Part 2 of the Airports IMs. There has been only minimal change in Auckland Airport's allocation rules from the audited 2022 annual ID disclosures. Auckland Airport has reported in its PSE4 disclosure that these allocation rules have not changed since 2006.[243] We further note there was general agreement from the Airport's substantial customers during the PSE consultation period.

3.136 We also find it reasonable that a lower proportion of operating costs are allocated to the unregulated side of the business due to the nature of the commercial activities there, where less operational inputs including time and effort are required to keep the businesses running in comparison to the aeronautical side of the business. We may consider the allocation rules in more detail at our next review.

Tax losses

Is it reasonable that Auckland Airport did not include tax losses incurred in PSE3 when setting prices for PSE4?

3.137 In submissions Air NZ stated that Auckland Airport did not appear to have taken tax losses into account when setting target revenues and pricing for PSE4. Air NZ believes our analysis should have considered Auckland Airport's PSE4 opening tax loss balance of $72.8m. If tax losses were considered in Auckland Airport's price setting, Air NZ estimates Auckland Airport's excess profits would have been lower by approx. $20.4m ($72.8m multiplied by the corporate tax rate of 28%).[244]

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241 Auckland Airport cross-submission on our process and issues paper, page 34.

242 Ibid, page 127.

243 Auckland Airport Price Setting Disclosure, page 49.

244 Air NZ submission on our process and issues paper, page 7; Air NZ submission on our consultation paper, page 10-12.

What the Input Methodologies state

3.138 As we have noted in our s56G report into Auckland Airport, airports' adherence to the IMs can be used to assess whether the purpose of Part 4 is being met.[245] Airports are not required to follow IMs for their price setting events, although they are expected to justify departure from the IMs.

3.139 The regulatory tax allowance is one of the components or 'building blocks' that airports calculate to set target revenue and pricing for their price setting events. The Airports IMs contain treatment of taxation provisions.[246]

3.140 The rules around regulatory tax losses are set out in clause 4.1(3)(d) of the 2016 Airports IMs which state tax losses must be ignored when determining regulatory tax allowance, *except* for the effect of tax losses for specified airport services:

> (d) the effect of any-
>
> (i) tax losses (other than those produced from the **supply** of **specified airport services**); and
>
> (ii) subvention payment,
>
> made by an **airpor**t must be ignored.[247]

Auckland Airport's approach

Disclosures

3.141 We note that Auckland Airport did not disclose its departure from the Airports IMs in its PSE4 disclosure commentary. In its annual disclosures for 2021 and 2022 Auckland Airport disclosed tax losses of $40.8m and $32.0m respectively, totalling $72.8m. The associated tax effect of $20.4m was not brought forward into its price setting for PSE4, but as noted above, Auckland Airport does not have a requirement to follow the IMs for price setting. Auckland Airport's reason for this departure was disclosed in its 2023 annual disclosures.

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245 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, Section 56G of the Commerce Act 1986* (31 July 2013), paragraph 2.46.

246 *Airports services input methodologies amendments determination 2016* [2016] NZCC 28 (20 December 2016), Part 4.

247 Ibid, clause 4.1(3)(d).

3.142 In commentary to its 2023 annual disclosures, the first annual disclosure of the PSE4 price setting period, Auckland Airport provided further information on why tax losses were not used in setting prices for PSE4:

> "…to carry tax losses forward from PSE3 would result in forecast PSE4 cash returns being well below our target return, as the full benefit of historic COVID-related tax losses would be transferred directly to airlines, effectively resulting in Auckland Airport 'paying twice' for COVID-19 losses."[248]

Submissions

3.143 In response to Air NZ's submission about tax losses, Auckland Airport first noted that this point had not been raised by its substantial customers during its PSE4 consultation. Auckland Airport then described why it did not use its regulatory tax losses from PSE3 in setting its forecast pricing for PSE4. The explanation is essentially the same as described in its 2023 disclosures, that the tax losses arose from the impacts of the COVID-19 pandemic, whereby a reduction in overall revenue during the PSE3 period reduced the tax payable for Auckland Airport in PSE4.[249]

3.144 During the 2023 IM Review, Auckland Airport provided a submission on its disagreement with the 2016 IM settings. However, as our final IM decision to the Airport's IM submission was not available before PSE4, Auckland Airport did not include the use of tax losses in forecasting prices and it considered this "…approach was consistent to the treatment of the revenue shortfall in PSE3 of more than $500 million, both were not carried forward into PSE4."[250]

Our conclusion

3.145 Our view is that it is reasonable for Auckland Airport to not include tax losses into its target return for PSE4. When setting prices Airports do not have an obligation to adhere to the Airports IMs. We find the explanation and rationale disclosed in Auckland Airport's 2023 annual disclosure to not be unreasonable due to the effects of the pandemic on revenue. We would have liked to have seen this explanation within Auckland Airport's price setting disclosures as well to ensure transparent engagement with substantial customers.

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248 Auckland International Airport Limited: *Annual Information Disclosure – Regulatory Performance Summary for the year ended 30 June 2023*, page 6.

249 Auckland Airport submission on our process and issues paper, page 34.

250 Auckland Airport submission on our process and issues paper, page 34.

Chapter 4 Investment

Purpose

4.1 This chapter contains our analysis and conclusions on the extent to which Auckland Airport's capital expenditure forecasts raise any significant concerns about whether the Airport is likely to invest appropriately, efficiently and at a quality that reflects consumer demands.

4.2 This analysis is relevant to the extent to which Auckland Airport has incentives to invest, including in replacement, upgraded, and new assets; and has incentives to improve efficiency and provide services at a quality that reflects consumer demands (in accordance with sections 52A(1)(a) and (b) of the Act).

4.3 The timing and value of Auckland Airport's capital expenditure profile affects its expected profitability. Therefore, some of the analysis and conclusions in this chapter directly affect our assessment of the extent to which Auckland Airport's target returns are likely to promote the long-term benefit of consumers.

Table 4.1 Auckland Airport's summary of forecast capital expenditure

Projects ($m)	PSE4	PSE5	10-year total
Terminal Integration Programme (incl. Enabling &airport resilience, Domestic Processor and Transport Hub)	3,134	764	3,898
Aeronautical Programme	509	229	738
Renewals – airfield pavement and ground lighting	285	299	584
Renewals - other	389	172	561
Cargo Precinct	262	23	285
Roading Programme	164	0	164
Domestic Terminal Building Upgrades	148	0	148
Contingent Runway	88	49	137
Utilities Programme	57	25	82
Total Capital Expenditure	**5,036**	**1,561**	**6,597**

4.4 As part of its PSE4 decisions, Auckland Airport has planned for approximately $6.6 billion in capital expenditure. The projects will be delivered over both PSE4 and PSE5 periods, with the majority of spend planned in PSE4. Auckland Airport has disclosed that its capital expenditure plan has begun as it involves significant milestones that need to be met for Auckland Airport to remain operational throughout the planned works.

4.5 Unlike PSE3, the PSE4 submissions on our process and issues paper highlighted disagreements in how the investment plan, in particular the Terminal Integration Programme (**TIP**), was viewed between Auckland Airport and its substantial customers. The TIP is estimated to cost approximately $3.9 billion, the largest programme in the $6.6 billion investment plan.

Conclusions

4.6 Our conclusions are:

4.6.1 We consider that Auckland Airport followed appropriate processes and applied rigour in costing the investment plan. Auckland Airport considered a wide range of options, including the alternative design by Air NZ, and had adequate regard to service quality. There is a range of investment outcomes that are consistent with the outcomes in a competitive market. This range reflects choices that the Airport makes based on its assessment of factors including the likely level of demand (passengers and freight), the mix of services it expects to be offered by airlines operating in the airport in future (including the mix of quality of services), and what will deliver the best commercial outcome for its shareholders. We are satisfied that Auckland Airport's decision is within this range of reasonable outcomes. We have not identified aspects of the planned investment that produce outcomes inconsistent with the Part 4 purpose.[251]

4.6.2 Auckland Airport has appropriately introduced a one-way capital expenditure wash-up mechanism to mitigate the risk of under delivery.

4.7 PSE reviews are not designed to solve issues arising from the capital expenditure consultation process, especially about long-standing, complex, and large capital expenditure plans. Chapter 7 elaborates on the effectiveness of the regime.

Our approach to assessing Auckland Airport's capital expenditure forecasts

4.8 We assess whether we have any significant concerns that Auckland Airport's capital expenditure forecasts for the PSE4 period do not provide for investment that is appropriate, efficient, and at a quality that reflects consumer demands.

4.9 Our analysis focuses on the Terminal Integration Programme because its cost and timing is the key concern of the Airport's substantial customers. We consider factors such as future capacity requirement, targeted levels of service (**LoS**) and project scope, which are important in determining the cost and timing.

[251] We have not undertaken an engineering review of Auckland Airport's capital expenditure plan, as it is not our role to determine the specific investment choices that the Airport should make.

4.10 We therefore assess:

4.10.1 the needs identification, options considered and the scope of the new domestic terminal;

4.10.2 whether the Airport is expected to provide services at a quality that reflects consumer demand;

4.10.3 whether the investment has been costed appropriately;

4.10.4 whether planned investment is expected to occur at an appropriate time;

4.10.5 whether there are concerns that there is evidence of planned under or over-investment; and

4.10.6 whether Auckland Airport has established mechanisms to mitigate risks related to the under-delivery of the programme of this size.

Information used to assess Auckland Airport's capital expenditure forecasts

4.11 Our analysis of Auckland Airport's capital expenditure plan relies on:

4.11.1 the regulatory disclosures provided by Auckland Airport as part of this pricing event;

4.11.2 submissions and cross-submissions received on our process and issues paper and consultation paper;

4.11.3 further confidential information received from Auckland Airport (reasons paper for PSE4, board paper excerpt from 16 March 2023); and

4.11.4 high-level analysis of Auckland Airport's actual capital expenditure against its forecasts over the PSE3 period and commentary in the Airport's annual disclosures.[252]

Capital expenditure plan

4.12 Auckland Airport has forecasted its PSE4 capital expenditure. Table 4.1 shows the cash flow view.[253]

[252] We note that PSE3 included the years that were most impacted by the COVID-19 pandemic and are unusual in that respect.

[253] Auckland Airport Price Setting Disclosure, Schedule 18.

Table 4.2 Capital expenditure cash flow by category for PSE4

Capital expenditure by category ($m)	FY23	FY24	FY25	FY26	FY27	5-year total
Capacity growth	363	750	1,124	1,043	1,083	4,362
Asset replacement and renewal	130	152	143	134	115	674
Total	**492**	**902**	**1,267**	**1,177**	**1,197**	**5,036**

4.13 This represents a significant increase compared to the forecast capital expenditure from PSE3 in both growth and renewal categories. In PSE3, a total of $2.3 billion was forecasted to be invested, whereas the actual investment was about $895.4 million. This is a less useful comparison, as it involved COVID-related pauses to planned investment (including a new domestic terminal). PSE4 introduced a capital expenditure wash-up mechanism discussed later in this paper to mitigate the risk of under-delivery. PSE3 did not include such a mechanism.

4.14 A significant portion of the capital expenditure plan is the TIP, which consists of three key projects including the Enabling and Airport Resilience works, the Domestic Processor and the Transport Hub.

Table 4.3 Terminal Integration Programme

Projects ($m)	PSE4	PSE5	10-year total
Terminal Integration - Enabling & Airport Resilience	1,513	129	1,641
Terminal Integration - Domestic Processor	1,497	596	2,093
Terminal Integration - Transport Hub	124	39	163
Total	**3,134**	**764**	**3,898**

4.15 Following a lengthy period of planning and consultation with airlines, Auckland Airport has decided on building the Domestic Processor to address capacity and service quality issues with the existing domestic terminal and to meet future capacity needs. More context about the Domestic Processor and the alternative options considered are discussed later in this chapter.

4.16 The Domestic Processor is forecast to cost about $2.1 billion in total through to 2030, with a cost of about $1.5 billion during PSE4 (2022-2027). The Domestic Processor makes up a majority of the Terminal Integration Programme and was a point of contention during and after the PSE4 consultation Auckland Airport undertook with its substantial customers. It is a focus of this summary and analysis.

Capital expenditure consultation process

4.17 Section 4C of the Airport Authorities Act 1966 requires specified airport companies to consult with substantial customers on any capital expenditure plans that mean the Airport will or will likely spend 20% of the value of its identified assets in capital expenditure over the following five years.[254] Auckland Airport consulted with Air NZ, Qantas and BARNZ on a confidential basis.[255]

4.18 The submissions and cross-submissions received during this review elaborated on the extent of the disagreement between Auckland Airport and its substantial customers arising from the consultation on the planned capital expenditure. In our consultation paper, we noted parts of the consultation history but did not opine on the consultation process' reasonableness as this is outside the scope of a PSE review. We discuss the Airport's capital expenditure consultation process (in the context of the effectiveness of the regulatory process) in Chapter 7 of this report.

History of the capital expenditure consultation process

History of the Terminal Integration Programme

4.19 At the heart of the capital investment plan is the TIP, which aims to integrate most domestic and international passengers through one terminal. This programme is the result of consultation dating back to 2012, during which it was named differently in the iterative process. In 2014, Auckland Airport released its Master Plan which noted the physical constraints of Auckland Airport and considered four main options to meet future capacity:

4.19.1 Domestic terminal north/international terminal south.

4.19.2 Domestic terminal south/international terminal north.

4.19.3 Domestic terminal south and then relocated north, a flip.

4.19.4 Split domestic terminal either side of the international.

4.20 The domestic terminal south, and international terminal north was the option most favoured at the time. Key stakeholders and substantial customers were consulted with on the overall Master Plan with feedback being requested from November 2013 to February 2014. This included submissions on the terminal concepts including an early integrated terminal concept.[256]

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254 Airport Authorities Act 1966, s 4C.

255 We understand some information was compartmentalised within the same consultation due to commercial sensitivities.

256 Auckland Airport Price Setting Disclosure, page 30.

4.21 In 2017, the Terminal Development Plan (**TDP**) expanded on the 2014 Master Plan and more fully considered integrating the domestic and international terminals.

4.22 From 2018 to 2020 further consultation took place as there was broad support for the TDP. Following the decisions about the staging and form of the terminal, the development of the Domestic Jet Facility (**DJF**) was launched as part of PSE3.

4.23 The DJF project was announced in February 2020, with the delivery Alliance team confirmed and works scheduled to start in August 2020. However, it was soon terminated due to the global pandemic in March 2020, with the support of airlines at that time.

2021 Paheko Consultation

4.24 In 2021, Auckland Airport considered if there was a rapid and cost-effective way to migrate domestic jets into the international terminal due to the closure of international borders. The Airport consulted with substantial customers about how this might occur. Two options were considered, 'Integrated West' and 'Integrated East', with the East option being consistent with the DJF concept. Integrated East was preferred by airlines which took advantage of the low traffic environment to deliver a more integrated facility at stage 1 of the build, rather than revisiting it through a second stage like the DJF plan.

4.25 Following this consultation, the Integrated East solution was approved by Auckland Airport's board, and was supported by Air NZ and BARNZ. A public announcement was made in August 2021.[257] Consultation continued following this announcement to refine the design.

Recent consultation

4.26 Between June 2021 and May 2023, ahead of its final pricing decision on 7 June 2023, Auckland Airport consulted with substantial customers on investment at least 6 times:

4.26.1 Consultation Paper 1: Draft Capital Plan – 6 July 2022-30 August 2022.

4.26.2 Consultation Paper 2: Information Paper – 20 September 2022-4 November 2022.

4.26.3 Draft Capital Plan Review and airline workshops – 17/18 November 2022.

4.26.4 Consultation Paper 3: Draft Pricing Proposal – 8 February 2023-21 February 2023 and 21 March 2023.

[257] Auckland International Airport Limited: Media Release: *Auckland Airport resets precinct-wide infrastructure plan* (9 August 2021).

4.26.5 Airline meetings and engagement – March-May 2023.

4.26.6 Further consultation and engagement with airlines – May 2023.

Changes made by Auckland Airport following consultation feedback

4.27 In July 2022, Auckland Airport released its Draft Capital Plan, which set out the 10-year aeronautical capital investment plan, its key projects and an indicative forecast on the impact to aeronautical prices.

4.28 In November 2022, Auckland Airport decided that a review of the Draft Capital Plan was appropriate given the feedback received, and adjusted the timeframes for the PSE4 consultation accordingly.

4.29 The November 2022 review explored opportunities to reduce cost and assess the scope and timing of key parts of the project. The savings opportunities were presented to substantial customers. Feedback was provided by substantial customers following the November consultation, which Auckland Airport considered ahead of releasing the Revised Capital Plan in February 2023.

4.30 In February 2023, the Revised Capital Plan adopted savings identified during the previous consultation. The net impact of the changes reduced the value of commissioned priced investment over PSE4 by around $430 million, however the overall cost over the 10-year investment programme increased as the savings had been more than offset by growing construction costs escalation and other adjustments to the forecast.

4.31 In March 2023, Auckland Airport re-affirmed the TIP, as decided in May 2021 (Paheko consultation), as it considered it to be the best decision for the long-term interests of passengers and the New Zealand economy.

Confidentiality of Auckland Airport's consultation process

4.32 Auckland Airport's consultation process was confidential, and certain information was subject to non-disclosure agreements amongst the parties. After the publication of our consultation paper, we heard from some stakeholders that the non-disclosure agreements hampered their ability to share information with us during this PSE review consultation process.

4.33 Considering this, and the ongoing disagreement between Auckland Airport and its substantial customers on the Airport's investment, we made a request that the Airport waive some of the terms of the non-disclosure agreements to assist us as the regulator in conducting this review. In response, the Airport offered a waiver from some of the terms of the non-disclosure agreements to its substantial customers, although it does not believe the non-disclosure agreements prevent the parties from sharing information with regulators. We note that the non-disclosure agreements have been in place for some time and previously they have not hindered the PSE review process to our knowledge.

Submissions and cross-submissions

4.34 In the submissions and cross-submissions from Auckland Airport and its substantial customers, the adequacy of Auckland Airport's consultation process was discussed at length. Auckland Airport remains of the view that is has consulted extensively with its substantial customers over an extended period, and that it has made various changes to the overall capital expenditure plan because of the consultation.

4.35 Airlines are generally of the view that the consultation process began well, and there was support for the overall capital expenditure plan in earlier iterations. However, support for the current plan was withdrawn (at different points for different customers), largely due to an increase in overall costs, as could have been expected in a commercial process.

4.36 We discuss the Airport's consultation process further (in the context of the effectiveness of the regulatory process) in Chapter 7.

Does Auckland Airport plan to invest in its assets appropriately?

4.37 This section uses the information we have available to consider the capital investment decisions and the rationale behind the decisions Auckland Airport has made.

Background

4.38 Auckland Airports notes that the existing DTB is 57 years old and beyond its design life. While the DTB has had refurbishments over the years, the Airport expects to face significant capacity constraints in the future if the DTB continues to provide terminal services for domestic flights. The capacity constraints are observed in baggage, airside dwelling, security screening, land transport and airfield.

4.39 While substantial customers disagree with the Airport (and amongst themselves potentially) on the size, the cost and timing of a new integrated domestic terminal, there is general consensus that investment of some kind is required for Auckland Airport to address issues associated with DTB assets nearing the end of life.

4.40 Auckland Airport is a single runway operation. The Airport states that the runway that is currently in use requires significant renewals, with pavement renewed and operable by the end of the decade, approximately five years from now. This requires the runway to be completely closed for months. With the main runway unusable during this time, a contingent runway (Alpha) and a taxiway (Bravo) will be required. The existing DTB footprint encroaches on taxiway Bravo, constraining capacity for take-off and landing, while the contingent runway Alpha is in operation.

Needs identification

4.41 In its PSE4 disclosure Auckland Airport outlined its process for determining the need for capital investment in accordance with clause 2.5(1)(m)(i) of the Airport Services ID Determination.[258] The PSE4 disclosure notes that Auckland Airport is responsible for the long-term master planning and airport system resilience, and it must consider the short, medium and long-term implications of any airport infrastructure decisions.

4.42 Auckland Airport noted: [259]

> Aviation is an industry that has historically been subject to material and ongoing changes in demand, supply and operational dynamics. This has recently been demonstrated by the significant impacts due to the COVID-19 pandemic, resulting in significant short-term volatility in demand.

4.43 In determining the need for investment, Auckland Airport followed its development principles outlined in its disclosure, and the design objectives outlined in the 2014 Master Plan.[260]

4.44 Auckland Airport in its capital expenditure plan seeks to:[261]

4.44.1 ensure the long-term operational, safety and commercial aviation requirements of the airport continue to be met. This includes the delivery of additional capacity that will enable economic growth and that is informed by long-term thinking;

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258 Commerce Commission: *Airport Services Information Disclosure Determination 2010* (consolidating all amendments as of 18 June 2019) (18 June 2019).

259 Auckland Airport Price Setting Disclosure, page 29.

260 Ibid.

261 Ibid.

4.44.2 deliver an overall airport system with the capacity and ability to adapt to changing environmental, social, technological and economic conditions and pressures;

4.44.3 meet the needs of modern airport users, including airlines and passengers;

4.44.4 provide a high-quality connection for passengers transferring between domestic and international services;

4.44.5 provide access to and from the airport for the maximum range of transport modes, including facilitating public transport access and protecting for future connectivity (including rail) in a clear, efficient and effective manner;

4.44.6 design and deliver infrastructure in a manner that enables Auckland Airport's role as an international, national and regional gateway for airlines, commuters, tourists, visitors and workers; and

4.44.7 reflect the distinctive character of Auckland Airport, including promoting and enhancing New Zealand's unique culture and heritage.

4.45 Auckland Airport stated that the need for a new integrated domestic terminal is driven by a number of factors:[262]

4.45.1 The DTB is beyond its design life and increasingly uneconomic to maintain.

4.45.2 The DTB was consistently operating over capacity resulting in poor user experience pre-COVID and is forecast to do so again from 2024 onwards, as passenger numbers recover and grow post-COVID.

4.45.3 The position of the DTB provides poor connection experience for transferring passengers.

4.45.4 The DTB encroaches on Taxiway Bravo, causing inefficient contingent runway operations (eg, delays in landing and take-off) when the main runway pavement is replaced by the end of this decade.

4.45.5 The location of the DTB is planned to be developed into airfield for long-term growth according to the Airport's Master Plan.

[262] Auckland International Airport Limited: *Price Setting Disclosure* – *Appendix A* (17 August 2023), page 7-14.

4.46 We consider that when identifying the needs for investing in a new domestic terminal, Auckland Airport had adequate regard to the current service quality issues, asset maintenance, and capacity requirements in the long run. We note the majority of Auckland Airport's substantial customers appear to agree that there is a need for investment of some kind to meet some of the needs identified, but they have different views on the type, size and timing of the solutions.

Options considered

4.47 We outlined earlier the history of the consultation process, referring to various options that were considered since 2012, to address the infrastructure needs of Auckland Airport and the re-development of the current domestic terminal. This section outlines the options that were considered in the most recent iteration of the consultation leading up to the Airport's decisions on the investment and pricing for PSE4.

Customer feedback

4.48 Auckland Airport identified the main points of feedback from its substantial customers were:[263]

4.48.1 a lower cost alternative development pathway should be pursued;

4.48.2 domestic operations should remain in the DTB for longer;

4.48.3 given the cost there will be significant impacts on passenger demand; and

4.48.4 the costs have changed significantly since the Paheko consultation.

How Auckland Airport considered alternative options

4.49 Auckland Airport elaborated on how it considered different options during the consultation and decision-making process. We set out below Auckland Airport's explanation on why it decided on its final plan.

4.50 Auckland Airport stated that the proposed plan is the best option to deliver capacity, resilience, and future growth capacity. It said that many projects in the TIP address resilience which would need to be completed regardless and including them in the TIP is the most efficient way of delivering this infrastructure.[264]

[263] Auckland International Airport Limited: *Extract of Board Paper* (16 March 2023), page 18.
[264] Auckland Airport Price Setting Disclosure, page 34.

4.51 Auckland Airport is of the view that no viable alternatives that meet all necessary requirements and that would be materially lower in cost have been proposed by customers or identified by Auckland Airport.

Alternative design

4.52 Auckland Airport stated acceptable alternative designs would not deliver materially reduced cost. In particular, it said alternative designs were unlikely to reduce terminal floorplate, the main driver of cost.

4.53 Auckland Airport considered other options:

4.53.1 Operating the Integrated Terminal without a pier – this option would require a bus lounge or a form of canopy to a new domestic apron. The Airport considered this would be a step-down in service quality without providing a substantial uplift in capacity.

4.53.2 Construction of a single-level walk-out pier – the potential cost savings of this approach were considered marginal by the Airport in comparison to the poor passenger experience it would provide. Auckland Airport did not consider the pier would handle off-schedule arrivals and departures well.

Alternative locations

4.54 Auckland Airport reconsidered alternative locations at the end of 2022, similar to the considerations throughout the overall consultation process that began in 2012.

4.55 Auckland Airport reconsidered previous work on potential lower cost alternative locations for the domestic terminal including a northern precinct for domestic use that is not integrated. The Airport stated that a domestic terminal to the north would not be materially lower in cost for the following reasons:

4.55.1 Terminal studies confirm that floor area requirements remain between 6,000 and 7,000 m^2 per million annual passengers. A non-integrated north terminal would not be materially different in cost as the size would need to remain the same. The cost is largely influenced by the size of the build.

4.55.2 Costs would be added to add infrastructure to service a northern terminal. These added costs would more than offset any savings.

4.55.3 A terminal in the northern precinct would mean duplicate infrastructure (eg, passenger pick-up and drop-off, baggage systems, and security screening areas) would need to be built, resulting in additional cost.

4.56 In addition, Auckland Airport stated that having a domestic terminal to the north would create inefficiency in the long run, as flight paths make it more efficient for the emphasis of domestic operations to be on the southern runway.

Delaying Terminal Integration and operating the existing Domestic Terminal for longer

4.57 Auckland Airport considered that delaying terminal integration, and remaining in the DTB for longer, would result in undesirable outcomes. In particular, the Airport explained that it would:

4.57.1 add cost through construction cost escalation;

4.57.2 constrain domestic capacity;

4.57.3 reduce climate change resilience;

4.57.4 reduce the efficiency of contingent runway operations;

4.57.5 impact customer experience; and

4.57.6 not avoid the need for new domestic terminal capacity in an alternative location.

Using the International Terminal as overflow

4.58 Auckland Airport considered using the international terminal as overflow originally in 2021. This option, named 'Integrated West' at the time, identified the risk that when international demand recovered, additional capacity would need to be made to meet demand displaced by domestic operations in the international terminal.

4.59 Auckland Airport stated the rapid post-COVID recovery of international services means that the International Terminal is back to operating at near 2019 levels of demand, and even if harmonised screening and dwell space is achieved, the use would be limited due to a lack of stand capacity at the terminal, especially in peak hours.

4.60 Auckland Airport decided that the Integrated Terminal Programme remains the best option for replacing the existing domestic terminal to build resilience in the airport system and deliver the required capacity and user experience. The ability to build an efficient contingent runway to address the issue of closing the main runway for renewal by 2028/2029 was another factor in this decision.

Submissions and cross-submissions on investment options

Submissions from Auckland Airport

4.61 Auckland Airport supported our draft conclusion on its consideration of investment options. It noted:

> As the Commission has noted, since 2012 Auckland Airport has consulted with Substantial Customers on 21 terminal design options. The final design for the Domestic Jet Terminal ("DJT") and broader capital plan is the best option to deliver capacity, resilience and future growth, and has been developed based on airline feedback received throughout consultation. [265]

4.62 Auckland Airport remains of the view that it adequately considered all alternative options that were put forward by substantial customers and found that the only viable and most appropriate option was its DJF (previously called the Domestic Processor).

Submissions from other submitters

4.63 Generally, substantial customers submitted that Auckland Airport has not in good faith considered what are appropriate and reasonable alternative options to the DJF that may cost significantly less than the current expenditure plan.

4.64 IATA submitted that the alternative options raised by Air NZ and Qantas suggest that alternative options may show that forecast demand can be met more cost-effectively than what is proposed.[266] IATA continued that there needs to be a better understanding of the detailed business case for the integration of international and domestic at the (starting) cost of 1.7 billion.[267]

4.65 Qantas continued to submit that independent consultants confirm that the existing domestic terminal can be maintained and used for domestic operations while the contingent runway is in operation, contrary to the Airport's position.[268] Qantas supported a more phased approach to terminal integration beyond 2029/2029.

4.66 Air NZ continued to support the Arup design concept. It submitted that the design revealed that there were options to deliver increases in both domestic jet and regional operations with lower levels of capital investment.[269]

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265 Auckland Airport submission on our consultation paper, page 56.
266 IATA submission on our consultation paper, page 3-4.
267 Ibid, page 6.
268 Qantas submission on our consultation paper, page 6.
269 Air NZ cross-submission on our consultation paper, page 14.

Conclusion on investment options

4.67 We remain of the view that it appears Auckland Airport has considered reasonably practicable dimensions (eg, design/scope, location, timing) when identifying the options. We note that the options considered by Auckland Airport cover those indicated by the airlines as their preferred approach, including a smaller scope and delaying and staying in DTB for longer. We refer to these two approaches next when we consider the scope, service levels and timing.

4.68 Discussions about the staging of the build are ongoing. We understand that the Airport and its substantial customers continue to engage in phasing discussions.

Scope of investment

4.69 In submissions and cross-submissions on our process and issues paper and consultation paper, substantial customers remain of the view that the scope and cost of the capital investment plan is too large.

Scope of investment and other options proposed by stakeholders

4.70 On capital expenditure, Qantas submitted that it has significant concerns including:

- A terminal footprint around twice what is required;
- Construction costs around 40 per cent higher than what is efficient;
- Unnecessary non-terminal work;
- The role of PSE4 expenditure in driving future expenditure;
- The quantum of existing expenditure;
- The risk that the passage of time and the construction of preliminary stages will restrict the ability to change direction. [270]

4.71 In its submission, Qantas did not refer to any alternative proposal it might have.

4.72 Air NZ, in its submission on our process and issues paper, stated "AIAL is proposing a significantly larger and even less achievable capital investment plan than in PSE3. AIAL's PSE4 and PSE5 capital programme totals $5.7 - $6.7 billion (for priced assets), which will quadruple its RAB by 2032, while delivering very little additional capacity."[271]

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270 Qantas submission on our process and issues paper, page 1 (non-capital expenditure points have been omitted from reference).

271 Air NZ submission on our process and issues paper, page 2.

4.73 Air NZ appointed consultant Arup to design an Alternative Domestic Terminal (**ADT**) and requested Auckland Airport to consider it. Air NZ states it would cost about $1 billion less than Auckland Airport's current plan and would retain the use of the existing domestic terminal in the medium term. It provided the conclusions to Arup's work as:

- The IDT is 25-50% oversized compared to areas generated by Arup's Programme of Requirements (PoR) modelling and when considering the New Zealand domestic context…

- An alternative terminal design is possible that would meet Air NZ's requirements, in the same location as AIAL's IDT. This would remove nearly $1bn from the total cost of the terminal, involve a simpler and right-sized pier, solve the operational constraints identified, and leverage the capacity freed up in the existing Domestic Terminal Building to reduce the need for immediate significant further capex contributing to further price shocks. [272]

4.74 Auckland Airport responded in its cross-submission on our process and issues paper that the proposal is a "theoretical design which fails to consider the realities of an operating airport..." and "...limited consideration has been given to the operational model".*[273]*

4.75 In its submission on our process and issues paper BARNZ submitted that the extremely expensive capital plan did not actually deliver improvements to the airport's capacity as the international check in space remains much the same as do the number of international gates.[274]

4.76 Auckland Airport further responded to these submissions about the scope of its capital investment plan and about whether there were any viable alternatives. It reiterated that the disclosure outlined the 21 different designs that had been considered over more than 10 years of consultation.[275] Regarding the plan by Arup put forward by Air NZ, Auckland Airport stated it was only after a decade of consultation had come to an end and a decision to re-affirm its commitment to the TIP in March 2023, that seven months later Air NZ provided an alternative proposal (Arup) and Auckland Airport found this proposal incomplete, not materially lower in cost, and did not provide a better solution.[276]

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272 Air NZ submission on our process and issues paper, paragraph 53.
273 Auckland Airport cross-submission on our process and issues paper, page 5.
274 BARNZ submission on our process and issues paper, page 2.
275 Auckland Airport cross-submission on our process and issues paper, page 20.
276 Ibid.

4.77 Auckland Airport elaborated that:

> The key features of the Arup design provides for a new pier for domestic jet operations to be constructed in broadly the same location as the Domestic Processor Pier A1. However, this design does not integrate domestic and international operations, maintaining a separate baggage system and check-in, with integration not occurring until 2043 at the earliest. The option relies on continued jet operations out of the western end of the DTB which does not align with the Auckland Master Plan by retaining the DTB at high operational levels until at least 2043 and proposing a terminal operation with 4-front-doors.[277]

4.78 At a high level, the key differences between the Air NZ's ADT plan and Auckland Airport's Domestic Processor are as follows:[278]

4.78.1 The levels of service - Air NZ's proposal targets lower levels of service within the range of IATA service standards than Auckland Airport's, which offers mid-range service levels within the same IATA standards. Auckland Airport's levels reflect the mid-point of the level of service range four years after opening day.

4.78.2 The level of integration between the new domestic and international terminals - Air NZ's proposal is an adjacent design with less integration.

4.78.3 Estimated cost – Air NZ claims, and Auckland Airport disagrees, that the alternative proposal would cost approximately $1 billion less, given lower levels of service assumptions and less integration. Air NZ notes that its design removes the immediate benefits but also complexity and cost of a fully integrated solution. Air NZ considers that the alternative proposal allows for integration to occur at a future time and minimises pricing shocks.

4.79 Auckland Airport engaged with the viability of the Arup design based on the information Air NZ provided at the time. This is reflected by its willingness to receive and consider the alternative that Air NZ presented after the capital investment plan consultation had closed. Auckland Airport then presented its feedback on the Arup design back to Air NZ.

Auckland Airport's December 2023 response to Air NZ proposal

4.80 Auckland Airport stated that the Arup design was incomplete, did not meet the requirements to be a fully functional terminal, would result in poor user experience, lacked an operational model, and offered a low level of integration.[279]

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277 Auckland Airport cross-submission on our process and issues paper, page 22.

278 Auckland Airport: *Analysis of Feasibility Study – AKL Domestic Terminal Options* (19 December 2023), page 13; Air NZ/Arup: *Affordable Domestic Terminal Pathway* (April 2024), page 15.

279 Auckland Airport cross-submission on our process and issues paper, page 22.

4.81 On the cost of the alternative plan, Auckland Airport stated the following costs were understated and the initial analysis reduces the cost gap between the two solutions by 90%, from $1 billion to $100 million:[280]

4.81.1 construction cost escalation - $92 million;

4.81.2 financing costs (capitalised interest) - $62 million;

4.81.3 two years of delay costs - $92 million (a conservative estimate);

4.81.4 functions missing that are required to operate a terminal - $246 million;

4.81.5 additional international baggage facilities were not included which are being delivered through the Domestic Processor project - $196 million (a conservative estimate); and

4.81.6 costs to close out existing commitments to the TIP - $30 million.

Consideration on the scope for the new domestic terminal

4.82 Submitters argued that the costs of the planned investment are too high, and not necessary to meet the future needs of the airport. Some submitters further argued that the large expenditure plan only serves to inflate the return gained by Auckland Airport rather than it being in the best interest of consumers.

4.83 On the scope of the proposed Domestic Processor, Auckland Airport's disclosure explains:

4.83.1 The cost of the terminal largely lies with its floor size, which needs to be between 6000-7000m^2 per million passengers according to studies commissioned by Auckland Airport.

4.83.2 An improvement in capacity is needed as the current domestic terminal is over capacity.

4.83.3 Compared to the current domestic terminal which only has 10 Code C stands, and 6 that can facilitate A321 operations, the Domestic Processor will double the A321 capacity to 12, as well as the ability to fly Code E aircraft in peak times if airlines desire.

[280] Auckland Airport cross-submission on our process and issues paper, page 21-22.

4.84 The current DTB has a capacity of 1,250 domestic passengers per hour, whereas the new domestic terminal is planned to handle 1,800 departing domestic jet passengers at peak hour. The busy hour passenger numbers in Schedule 20a of the PSE4 disclosure shows the outbound domestic passenger is forecast to be 1,236 in 2023, increasing to 1,802 by 2032. The size and scope of the planned new domestic terminal are in alignment with the forecast busy hour passenger numbers.

4.85 We recognise airlines have a different view on the dampening effect on demand that higher airport charges would have. However, there is consensus that the existing DTB is facing increasing capacity constraint. The peak forecasts suggest that a slower increase in utilisation does not negate the need to invest in greater capacity for growth.

Submissions and cross-submissions on scope of investment

Airline submissions

Air New Zealand

4.86 Air NZ retains the view that the Arup design concept, albeit in an earlier design stage than the DJF, has always been a valid and viable alternative.[281]

4.87 Air NZ continued to submit that Auckland Airport could have sought this solution if it had been willing to meaningfully consult with airlines from 2022, or earlier if agreement was reached on levels of service at an early stage, as recommended by IATA.[282]

4.88 Air NZ refuted the claim that the current DTB and the Arup proposal are nearly the same size, as claimed by Auckland Airport. Air NZ elaborated that because only a portion of the current DTB is used for domestic travel and 25,000m^2, the Arup design being 35,000m^2 and solely for domestic travel provides a significant increase in usable space.[283]

281 Air NZ cross-submission on our consultation paper, page 15-16.
282 Ibid.
283 Ibid, page 16.

4.89 Air NZ considered that Auckland Airport was wrong in suggesting that the real cost of the DJF and the Arup designs are similar, and maintains that the Arup design is significantly cheaper, particularly that the $2.03 billion cost provided by Air NZ/Arup is its best estimate for providing full domestic and regional capacity needs out to 2043. The Auckland Airport plan proposes to spend more to meet only domestic capacity needs out to 2033. Air NZ elaborated that when comparing the costs, Auckland Airport has added together both comparable and incomparable costs to reach the figure of $2.03 billion.[284] DKMA prepared forecasts for Auckland Airport which indicated a need for 15 Code C domestic jet stands by 2033, the costs of accommodating this capacity for each design was referred to as 'comparable costs'. Air NZ stated that when comparing the costs of Auckland Airport's and Air NZ's plans, Auckland Airport has included the incomparable costs such as regional growth, domestic jet growth post 2033 and a new ATC tower for the Arup design but not for the Airport's and therefore the comparison is not like for like.[285]

Auckland Airport's submissions

4.90 On the alternative design by Arup, Auckland Airport retains the view that the design was incomplete, does not meet the requirements of a fully functional terminal, would result in poor user experience, and offers a low level of integration.

4.91 Auckland Airport provided further comments in its cross-submission on the Arup design. It submitted that if costed appropriately, the actual costs of the Arup design and the DJF are similar, with an estimated cost gap of 100 million, while the DJF offers a higher service quality and a greater ability to expand in the future.[286]

Our conclusions on scope of investment

4.92 Auckland Airport and its substantial customers have similar views about unconstrained future demand levels, but different opinions about the dampening impact of prices. Parties agree that some investment is required to meet future demand, however the best design to meet this demand is where opinions diverge. While Auckland Airport considers that the in-progress DJF design is the best and only realistic option to meet future demand, substantial customers submit the associated costs are too high and Auckland Airport has ignored other promising options.

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284 Air NZ cross-submission on our consultation paper, page 16.

285 Ibid, page 17.

286 Auckland Airport cross-submission on our consultation paper, page 22.

4.93 Before deciding on its investment plan, Auckland Airport considered a wide range of options, including the alternative terminal design provided by Air NZ, and had adequate regard to service quality. There is a range of investment outcomes that are consistent with the outcomes in a competitive market. This range reflects choices that the Airport makes based on its assessment of factors including the likely level of demand (passengers and freight), the mix of services it expects to be offered by airlines operating at the airport in future (including the mix of quality of services), and what will deliver the best commercial outcome for its shareholders. We are satisfied that Auckland Airport's decision is within this range of reasonable outcomes.

Will Auckland Airport be able to provide service quality in line with consumer demand?

4.94 Airports may have some incentive to under-forecast the demand used to derive its prices, in order to earn higher profits. The reasonableness of Auckland Airport's demand forecasts as they relate to profitability is assessed in Chapter 3 of this paper.

4.95 This section considers how Auckland Airport has considered demand and service quality when planning its capital expenditure programme.

Capacity needs

4.96 Auckland Airport states that the ageing domestic terminal was operating significantly over capacity during 2019 and is expected to be over capacity again in 2024.[287] The current domestic capacity of the domestic terminal is 1,250 domestic passengers per hour. During 2019, there were 12 days where that capacity was exceeded. Auckland Airport expects that if no further capacity investment is made, by 2026 the number of days over capacity would increase to 58 days per year, and by 2033 it would be near continuous at 296 days per year.[288]

4.97 Capacity would be further strained during the period where the main runway would need to be renewed if an efficient contingent runway is not in place by then.

4.98 Auckland Airport engaged DKMA to assist in preparing demand forecasts for the PSE4 period including considering the impact of the pandemic.[289]

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287 Auckland Airport Price Setting Disclosure – *Appendix A*, page A-18.

288 Auckland International Airport Limited: *Extract of Board Paper* (16 March 2023), page 32.

289 Auckland Airport Price Setting Disclosure, page 84.

4.99 Submitters are concerned that the increase in aeronautical prices may influence demand. Air NZ stated:

> AIAL's price increases over PSE4 and PSE5 will have significant demand impacts. This will be felt most acutely by customers using Air NZ's domestic and regional services… … This reduction in volume is significantly higher than AIAL's forecasts and will ultimately lead, at the next pricing reset, to much higher prices than are currently being signalled by AIAL for PSE5. AIAL's high case capex scenario will lead to an even more significant suppression of demand and even higher prices from PSE5 onwards.[290]

4.100 Auckland Airport stated that aeronautical charges make up a small fraction of an airfare (less than 5%), and that decisions on any PSE5 prices have not been made and would only occur after further consultation with its substantial customers.[291] Investment in the infrastructure to provide increases in service quality and capacity would also promote competition. The Airport elaborated that Air NZ increased airfares by an average of $70 or 56% post pandemic when airport charges did not materially increase.[292]

4.101 We consider that Auckland Airport recognised the current capacity issues of the DTB and had regard to the potential size of the passenger base that it would need to serve in the future.

4.102 Airlines broadly agreed that there are capacity issues with the existing DTB as well. We consider that in general, additional capacity enables new airlines to enter markets and promotes competition, which benefits consumers. As was the case in PSE3, route incentive payments remain in place to promote new routes through the airport. It is also relevant as to how soon the new domestic terminal with the increased capacity would be required, as passenger numbers are projected to grow over time. We discuss the timing of the investment later in this chapter.

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290 Air NZ submission on our process and issues paper, page 4.

291 Auckland Airport cross-submission on our process and issues paper, page 4.

292 Ibid.

Service level

4.103 In its submission on our process and issues paper IATA stated that Auckland Airport's sole use of the Airport Council International (**ACI**) Airport Service Quality (**ASQ**) survey alone is not a sufficient measure of service level due to the subjectiveness of the responses, and a more objective measure would be more appropriate.[293] IATA stated that "Leading airports and regulators globally utilize the IATA Level of Service as best practice guidance to inform capacity and demand studies…to identify the "Optimum" level of service".[294]

4.104 Auckland Airport considered the IATA Optimum level of service when planning the Domestic Processor. In May 2022, a benchmark summary for planned level of service by Auckland Airport showed:[295]

Table 4.4 Service level benchmarks

Function	Domestic Processor	Average Peer Airports	IATA Optimum
Check-in wait time (mins)	3	6	2-5
Security wait time (mins)	2	2	5-10
Airside dwell (m2/pax)	2.3	1.7	1.8-2.2
Gate lounges (m2/pax)	1.1	1.2	1.5-1.7
Reclaim (belt length/pax)	0.3	0.3	0.3-0.5
Plant (% of total area)	23%	15-20%	N/A

4.105 The benchmarking found that except for airside dwell, check-in and plant space, all other design provisions for the Domestic Processor were in line with or at a lower standard than IATA guidelines and comparable to peer airports.

293 International Air Transport Association: *IATA Feedback on Proposed Review of Auckland Airport's 2022-2027 Price Setting Event* (31 January 2024) (**IATA submission on our process and issues paper**), page 4.

294 Ibid.

295 Auckland International Airport Limited: *Extract of Board Paper* (16 March 2023), page 20.

4.106 Auckland Airport considered proposals to reduce dwell space via floorplate reductions as part of the review of the Draft Capital Plan, through value engineering. Plant and check-in space have also been reduced through subsequent design phases.[296] The Plantroom structure changes reduced the estimated build cost by around $20 million.[297] Air NZ and Arup claimed that the airside dwell space was too high at 2.3m^2/pax (compared to the IATA optimum range of 1.8-2.2m^2/pax). Auckland Airport noted that this dwell space was not reduced during value engineering as it needed to compensate for the smaller gate lounges which fall below the lower end of the IATA optimum level of service and peer airports (1.1m^2/pax compared to 1.5-1.7m^2/pax).[298]

Submissions and cross-submissions on levels of service assumptions for investment design

Airline submissions

Air New Zealand

4.107 Air NZ submitted that Auckland Airport has applied a high-end LoS to the domestic processor, which would be more appropriate for a large international terminal.

4.108 Air NZ engaged Arup to utilise the LoS model to determine an 'efficient' size for the domestic processor and found that an appropriately sized facility would require at a baseline 35,000m2, rising to 47,000m2 for a higher level LoS typically seen in international airports. Arup has estimated that the actual size of the domestic processor is larger, and above the efficient minimum size Air NZ believe is an appropriate baseline for domestic services.[299]

4.109 Air NZ considers that Auckland Airport has fallen short of the best practice guidance of IATA with regards to LoS consultation. It submitted that Auckland Airport did not consult with airlines on the appropriate range of levels of service in advance of the design process.[300] Air NZ considers that issues on the appropriate LoS could have been remedied at an early stage if Auckland Airport consulted with airlines in a manner consistent with IATA guidelines. Air NZ considers that the final result is a terminal that is significantly larger than what is required for domestic requirements[301]

296 Auckland International Airport Limited: *Extract of Board Paper* (16 March 2023), page 19-20.
297 Auckland Airport: *Response to Commerce Commission request for information* (24 April 2024), page 6.
298 Ibid, page 5.
299 Air NZ submission on our consultation paper, page 34.
300 Ibid, page 31.
301 Ibid, page 34.

4.110 Air NZ raised an issue regarding the gate lounge provision, which Auckland Airport has stated is 1.1m^2, being lower than the IATA range of 1.2-1.55m^2 per passenger. Air NZ, through consultant Arup, submitted that the estimate of 1.1m^2 was incorrect, and that Auckland Airport has not measured the gate lounges correctly. Air NZ argue that when measured correctly, the actual gate lounge provision comes to 1.8m^2. Arup further stated that the new domestic pier includes a considerable amount of additional seating and dwelling spaces adjacent to the gates which were not included in Auckland Airport's gate lounge assessment. When these are included, it brings the provision to 2.75m2 – suggesting that the lounge space provision is 83-129% higher than IATA guidance.[302]

Qantas

4.111 Qantas also submitted on its concerns with the capital expenditure consultation process and consider that Auckland Airport has not met the IATA standards for consultation and agreement on LoS standards before development.[303]

4.112 Qantas submitted that Auckland Airport has built above industry standards, with the design footprint being nearly twice the size as is necessary. The Qantas Group compared the plans with a new development at Perth Airport costing $3 billion, including a new 3,000m runway, 11,500m in taxi lanes and an integrated terminal.[304]

IATA

4.113 In its submission, IATA clarified some aspects of the LoS guidelines. The LoS objectives are to ensure there is sufficient capacity, cost-effective facilities and appropriate service levels to meet demand. It covers space, queuing, baggage delivery and seating elements.[305]

4.114 On the difference in views between Auckland Airport and its substantial customers, IATA clarified that the Airport Development Reference Manual LoS provides for a range within the 'Optimum' parameter to reflect different levels of service for customer types and regional variations.[306]

302 Air NZ submission on our consultation paper, page 34.
303 Qantas submission on our consultation paper, page 10.
304 Qantas submission on our consultation paper, page 7.
305 IATA submission on our consultation paper, page 4.
306 IATA submission on our consultation paper, page 5.

4.115 IATA submitted that it is critical to establish appropriate LoS values in consultation with airlines and other customers from an early stage in the planning process. IATA considers that there is little evidence Auckland Airport has consulted meaningfully and sufficiently with major airlines customers which is concerning given the emphasis placed on the LoS.[307]

Auckland Airport's submissions on LoS

4.116 Auckland Airport remains of the view that it has appropriately considered the LoS guidelines when designing the DJF.

4.117 Responding to the Arup benchmarking study, Auckland Airport submitted:[308]

- The existing DTB at AIAL, and terminals in Christchurch and Wellington are the smallest in the world when benchmarked against terminals globally;
- The DJT is in line with global comparators in the 2033 design year, reducing out in the 2043 design year;
- The Arup alternative Adjacent Domestic Terminal on a per passenger basis would be smaller than global comparators and on a per passenger basis would be a similar size to the existing Domestic Terminal Building. It is well recognised by all users of the Domestic Terminal Building that it is at capacity and is not delivering a good customer experience.

4.118 Auckland Airport continued to submit that it is normal for a new terminal to start higher on the LoS range and decrease over time.[309]

4.119 Auckland Airport responded to the claims by Air NZ that it has incorrectly measured the gate lounge provision. Auckland Airport stated that the LoS were measured by two independent experts being Airbiz and Mott MacDonald, who found that the gate lounge provision was 1.1m^2 when correctly applying the IATA guidelines.[310]

4.120 In response to Air NZ submitting that the headhouse is oversized by 110%, Auckland Airport stated that elements of a functional terminal were ignored in the Arup proposal that the current design is being compared to such as:

4.120.1 back-of-house tenancies;

4.120.2 front of house circulation;

4.120.3 plant, MEP and building services;

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307 IATA submission on our consultation paper, page 5.
308 Auckland Airport submission on our consultation paper, page 57.
309 Auckland Airport submission on our consultation paper, page 59.
310 Auckland Airport cross-submission on our consultation paper, page 61.

4.120.4 commercial areas including retail, F&B outlets and airline lounges; and

4.120.5 amenities.

4.121 Auckland Airport continued that: the "IATA LoS guidelines do not exist for the functions that Air New Zealand claims are oversized under the IATA LoS guidelines. The claims made by Air New Zealand are completely unfounded and should be disregarded."[311]

Our conclusions on investment Levels of Service

4.122 The service levels that Auckland Airport is targeting for the design of the new domestic terminal do not appear to be excessive, in comparison to the IATA Optimum LoS standards, although the Airport's substantial customers would prefer a lower cost option. We note that LoS guidelines only apply to some functional areas of an airport, and capital cost is also driven by areas not covered by LoS guidelines, such as plant, building services and amenities.

4.123 Auckland Airport has likely considered IATA LoS requirements appropriately when planning its capital expenditure. If Auckland Airport was able to agree with its substantial customers on appropriate LoS levels before the capital expenditure consultation was completed, it may have resolved many of the issues being submitted on LoS. However, we acknowledge the importance of considering the final cost associated with a desired level of service and that this may alter views.

4.124 We have seen various comparisons to other peer airports put forward by Auckland Airport and its substantial customers, and rebuttals to each other's examples. We consider that benchmarking in this way is a useful exercise, however we note that each build has its own set of unique circumstances. We consider that various LoS options would have been reasonable, and the levels chosen by Auckland Airport appear to be within a reasonable range. In the New Zealand regulatory regime, investment choices, including LoS, are made by the airport following consultation.

Are Auckland Airport's plans costed appropriately?

4.125 The PSE4 disclosure does not contain detailed information on how projects are costed. Auckland Airport provided some clarification in its submission on our process and issues paper.

4.126 Auckland Airport has commissioned external cost estimators in preparing its expenditure forecasts.[312]

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311 Auckland Airport cross-submission on our consultation paper, page 29.

312 Auckland Airport submission on our process and issues paper, page 37.

4.127 There are varying levels of cost certainty based on how near completion each project is. Projects that are near completion have the highest level of cost certainty. Auckland Airport has assessed the overall cost certainty of its capital expenditure plan as 'P50', meaning the likelihood of the final cost either exceeding or being less than forecast is 50/50, or evenly balanced.

4.128 The costing process determined the real/current day costs of delivering projects, nominal project costs were prepared by construction cost escalation forecasts. Cost manager Rider Levett Bucknall (**RLB**) derived a construction cost escalation forecast for types of building activity relevant to Auckland Airport's projects, which were used in forecasts of the capital plan.[313]

Cost increase drivers

4.129 Compared to the pre-COVID version of the new domestic terminal, project costs have increased significantly. The increases tend to be for a wide range of factors. This section aims to highlight the main drivers for the cost increases, and how Auckland Airport responded to the escalation.

4.130 Auckland Airport states that the main drivers of cost increase are scope and market feedback on cost, methodology and programme, and increases to construction costs. A comparison of proposals since terminal integration was proposed is below:[314]

Table 4.5 Cost escalation of domestic terminal plans

Estimate Date	Project Reference	Cost Estimate (including Capitalised Interest escalation $m)	Scope notes
Pre-COVID, 2019	Domestic Jet Hub, Separable Portion 1 and Separable Portion 1x	$1,203	3x reclaim carousels; Early Bag Store and Power Centre 11 works excluded[315]
Post-COVID, 2020	Paheko East	$1,540	Feasibility design; 2x reclaim carousels, Early Bag Store and Power Centre 11 infill included

313 Auckland Airport submission on our process and issues paper, page 37.

314 With permission from Auckland Airport, the table is reproduced from Auckland International Airport Limited: *Extract of Board Paper* (16 March 2023), page 27. Auckland Airport also provided additional clarification on the scope notes. The estimates represent the total cost for the Domestic Processor, including both the regulated and unregulated elements.

315 We understand this reflects a concept design.

Estimate Date	Project Reference	Cost Estimate (including Capitalised Interest escalation $m)	Scope notes
February 2022	Domestic Processor Feasibility Design	$1,860	As Feasibility design with adjustment to base rates from Early Contractor Involvement environment[316]
July 2022[317]	Domestic Processor Concept Design	$2,210	As Feasibility design with floor area changes (add level 3 plant, level 1 departures, level 2 lounges and Baggage Handling System); further changes to costs and Preliminary & General from Early Contractor Involvement; adjustments to professional fees
October 2022[318]	Domestic Processor Preliminary Design	$2,380	As Feasibility design with floor area changes – omit small section of level 3 plant [redacted], add increased non-passenger screening [redacted] and reclaim hall [redacted]; further changes to Baggage Handling System integrator costs [redacted]; Preliminary & General [redacted] Capitalised Interest / escalation relative to Gross Floor Area increase and schedule push out [redacted]; adjustments to professional fees, contingencies and third party costs [redacted].

4.131 The Domestic Processor is estimated to cost $2.1 billion for the regulated elements in the PSE4 disclosure. It is not uncommon for the cost estimate of complex infrastructure assets to change, as the design is developed and refined through stages. This is because the more detailed the design becomes, the more complete the costing can be.

4.132 We note that given the level of concerns raised by airlines on the scale and cost of the proposed investment, Auckland Airport held workshops with airlines to consider opportunities to reduce cost, assess certainty of the timing and scope of key projects, and consider scope optimisation, value engineering opportunities and trade-offs. However, some customers consider this had little impact.

316 We understand this means early construction contractor feedback on costs.
317 We understand the cost estimate report was underway in July but was finalised in August.
318 We understand the cost estimate for the preliminary design was under review in October but was confirmed in November.

4.133 Auckland Airport stated that Air NZ and BARNZ both supported the previous 'Paheko East' iteration of the capital expenditure for the priced activities in 2021 which cost, over the 10-year period of PSE4 and PSE5, only 5.4% less than the current proposal considering the increases to construction costs.[319] The Airport elaborated that the Paheko plan had support from Air NZ and BARNZ.

4.134 Auckland Airport considers that an increase of $293 million for the project over 10 years is a regrettable but modest increase considering the large and complex nature of the capital investment plan.[320]

Benchmarking

4.135 Auckland Airport benchmarked the cost estimate for the new domestic terminal against overseas airports on a cost-per-gate basis. [321] The proposed terminal appears to be broadly in line with projects in developed countries. A recent comparable development from Manchester Airport had a project cost estimate of $1.9 billion NZD, or $177 million per gate, whereas the proposed Domestic Processor's real cost per gate sits at around $145 million ($180 million in nominal terms). A project due to be delivered around the same time as the Domestic Processor from JFK Terminal 6 costs $681 million per gate, or $6.8 billion to provide ten gates.

Submissions and cross-submissions on benchmarking

Airlines

4.136 Air NZ submitted that Auckland Airport's comparison to the JFK Terminal 6 is inappropriate, being one of the most expensive terminal construction projects in the world. Likewise, Manchester Airport Terminal 2 is an international-capable processor including higher spatial requirements for immigration, enhanced baggage systems, greater dwell times and overall requirements.[322]

4.137 Air NZ further submitted that the cost benchmarks provided by Qantas of Perth, Melbourne, Gold Coast, Newcastle and Sydney provide a reliable comparator because flights within the immediate region (New Zealand, cross-Tasman and the pacific islands) represent most of the flight movements at Auckland Airport.[323]

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319 Auckland Airport cross-submission on our process and issues paper, page 19.
320 Ibid.
321 Auckland International Airport Limited: *Extract of Board Paper* (16 March 2023), page 16-17.
322 Air NZ submission on our consultation paper, page 39-40.
323 Air NZ cross-submission on our consultation paper, page 14.

Auckland Airport

4.138 Auckland Airport cross-submitted in agreement with Air NZ that every airport development is different, and that context is important. It continued that the usefulness of the JFK comparison is that both projects are planned for delivery at about the same time. Given JFK is materially more expensive than the DJF, it gives a reference point that the cost of the DJF is not unreasonable.[324] Auckland Airport continued that the Manchester example was useful as the projects have a similar number of gates, but Manchester was delivered sooner and avoided the majority of pandemic-induced construction cost escalation, but will serve both domestic and international passengers.[325]

4.139 Auckland Airport concluded that the comparison of Perth Terminal 2, a low-cost carrier with no aerobridges, using construction costs from over ten years ago in a market cheaper than Auckland, is not a valid comparison.[326]

Our conclusions on capital costing

4.140 In our review of Auckland Airport's PSE3, we concluded that the Airport's capital cost estimates did not appear to have been costed inappropriately.[327] We noted that the Airport had its Terminal Development Plan (its single largest capital project in the PSE3 period) independently costed and then independently peer reviewed, which indicated that the Airport has applied a high level of rigour in the costing of its forecast capital expenditure plan. In PSE4, Auckland Airport has taken a similar approach when costing the capital expenditure plan.

4.141 For PSE4, we have requested and received additional clarification about independent verification of capital expenditure undertaken to date by Auckland Airport. The Airport showed that independent reviews on either the whole capital plan, or specific aspects of the plan, was sought on twelve occasions. The most recent review of the entire capital plan occurred before COVID-19 in 2019 by McKinsey and Company. Since then, Auckland Airport sought advice on eleven occasions to update the 2019 estimate. Areas of review were informed by issues raised by substantial customers during consultation and Auckland Airport sought external advice in response.[328]

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[324] Auckland Airport cross-submission on our consultation paper, page 88-89.
[325] Ibid, page 89.
[326] Ibid.
[327] Commerce Commission: *Review of Auckland International Airport's Pricing Decisions and Expected Performance (July 2017 – June 2022)* (1 November 2018), paragraph 183.
[328] Auckland Airport: *Response to Commerce Commission request for information* (24 April 2024), page 1.

4.142 RLB is the cost estimator for the Domestic Processor Project, and Beca is the estimator for the Terminal Integration Enabling Projects. Each estimator has been responsible for reviewing the other's work.[329]

4.143 We have information on how the capital expenditure forecast was costed and the level of rigour applied to the forecast. We have benchmarking information from Auckland Airport, and considered submissions and cross-submissions on cost benchmarking. We received further information from Auckland Airport following our inquiries discussed above. Considering the information available to us, the process and rigour Auckland Airport applied when costing the capital expenditure plan was reasonable.

Investment timing

4.144 Some submitters on our process and issues paper and consultation paper stated a preference to delay the investment in the new domestic terminal and to stay in the current DTB for longer with some upgrade to address the current service quality issues. Auckland Airport considered this option, and its response is set out in paragraph 4.57 above.

Contingent runway operation

4.145 Other than the consideration of when the forecast demand would trigger the need for capacity, the timing of the required contingent runway operation also affects the sequencing of a number of interdependent projects in our view.

4.146 The centre sections of the main runway are due to be renewed by the end of this decade. As a single runway operation, Auckland Airport must appropriately manage the disruptions that this renewal work will create.

4.146.1 A contingent runway (Alpha) needs to be set up to maintain landing and take-off operations during the period when the main runway is closed for periods in the order of months.

4.146.2 A taxiway (Bravo) is required to support the contingent runway operation.

4.146.3 The DTB footprint encroaches on the taxiway (Bravo), limiting the capacity of aircraft movements, when the contingent runway (Alpha) is in operation.

4.146.4 Changing the operation of the DTB would enable an efficient operation of the contingent runway (Alpha), through a re-aligned taxiway (Bravo).

[329] Auckland Airport: *Response to Commerce Commission request for information* (2 May 2024).

4.146.5 A new domestic terminal would need to start to be built now, in time for transitioning domestic jet operation from DTB to the new domestic terminal. This will make space for the taxiway (Bravo) realignment and support an efficient operation of the contingent runway (Alpha). This allows Auckland Airport to maintain operations when the main runway is closed for pavement renewals.

Cost of delay

4.147 Auckland Airport notes that delaying the TIP would likely come at additional cost due to the cost escalation through passage of time. Inflation in the construction sector means costs generally rise over time. Even when inflation trends down, the cost still goes up albeit at a slower pace.

4.148 Auckland Airport modelled scenarios where the TIP is delayed by five years, assuming projects well underway would continue and future allowance are made for the sunk costs associated with some of the design and enabling costs to date. At an annual escalation between 2% to 5% from 2030 onwards, the Airport estimated that the delay would cost an additional $424 million to $685 million for the overall programme, and $353 million to $569 million for the priced capex component of the programme.[330]

4.149 Delaying projects can have benefits, if for example, more information and technological advancement could become available in the future, which could inform the investment decisions. As the project cost is escalated through inflation over time, so is the associated revenue in the form of airport charges in this case. Until the investment for growth is made, there is an opportunity cost associated with the capacity constraint, which is present at the DTB currently.

Submissions and cross-submissions

Airline submissions

Air New Zealand

4.150 Air NZ cross-submitted on specific points about investment timing. Regarding the need to enable the contingent runway:

> The three domestic jet stands on the west side of the DTB are not impacted by Contingent Runway and could still be used, while the remainder of the DTB could still be used by Regional turboprop services with Contingent Runway. The DTB does not need to be prematurely demolished as proposed. [331]

4.151 Air NZ considers that the contingent runway works can be independent of the DJT and options relating to this have not been fully considered.

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330 Auckland International Airport Limited: *Extract of Board paper* (16 March 2023), page 29.

331 Air NZ cross-submission on our consultation paper, Appendix 1, page 40.

4.152 Regarding the costs of delay, Air NZ cross-submitted that:

> Proceeding with a more expensive option will still result in higher spend than pausing temporarily and developing a cheaper terminal proposition in line with the airline community's requirements, including continued use of the existing DTB. There is no reason to believe that a smaller and less complex option could not enable earlier delivery of stand capacity than is currently forecast for the DJT. [332]

IATA

4.153 The IATA submitted that:

> The key here is to balance capacity and demand with the appropriate design period in the future. A suitable phasing strategy is required based on demand triggers to avoid excessive capital investment and the associated costs until traffic materializes. While traffic forecasts are almost always wrong, agreeing on the path with airline users is important. [333]

Auckland Airport submissions

4.154 Auckland Airport agreed with our draft conclusion that there appears to be operational and financial reasons for proceeding with the DJT now, including the contingent runway and realignment of taxiway Bravo. Auckland Airport agreed that the financial costs of delaying construction would likely result in even greater construction costs.[334]

4.155 Auckland Airport cross-submitted that it is continuing consultation with airlines on staging the build and that discussions are ongoing.[335]

Our conclusions on investment timing

4.156 There appear to be operational and financial reasons for Auckland Airport to proceed with the TIP now. The enablement of an efficient contingent runway operation would not only benefit the main runway pavement renewals, but also improve the resilience of the runway operations in general. If the investment is deferred because the cost to build and associated increases in airport charges are considered too high, postponing the same investment into the future is unlikely to address this concern.

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332 Air NZ cross-submission on our consultation paper, Appendix 1, page 40.
333 IATA submission on our consultation paper, page 6.
334 Auckland Airport submission on our consultation paper, page 67-68.
335 Auckland Airport cross-submission on our consultation paper, page 8.

Investment delivery

4.157 The submissions on our process and issues paper highlight a tension between Auckland Airport and its substantial customers regarding the levels of capital delivery. Substantial customers suggest that the Airport has underinvested historically,[336] and is only now, with construction costs high, spending in a 'catch up' manner to increase its margins.[337] Auckland Airport claims that historically, substantial customers oppose investment, and then once investment occurs, criticise the Airport of underinvesting.[338]

4.158 To consider the claims made by both Auckland Airport and its substantial customers, we reviewed historical actual capital expenditure, to see what Auckland Airport has spent over PSE2 and PSE3 periods.

Table 4.6 Actual capital investment delivery PSE2-PSE3

(Figures in $m)	PSE2 (2013-2017)	PSE3 pre-COVID (2018-2019)	PSE3 COVID (2020-2022)
Forecast total	290	762	1,584
Actual total	522	332	563
Difference	232	-430	-1021
Cumulative difference	232	-198	-1,219

Analysis of actual investment

4.159 In our PSE3 review, we found that overall Auckland Airport had not had issues with under-delivery of capital expenditure in PSE2. Relative to its PSE2 forecast, the Airport spent $232.1 million more on capital expenditure, due to passenger growth and changes to project plans. During PSE3, COVID-19 disrupted major investment plans and substantial customers agreed to pausing plans. The pause included the development of the DJF, a previous version of the new domestic terminal. The project was announced in February 2020 and was scheduled to start in August 2020, but was terminated in March 2020 due to COVID-19.

336 BARNZ submission on our process and issues paper, page 2.
337 BARNZ submission on our process and issues paper, page 7.
338 Auckland Airport submission on our process and issues paper, page 5.

4.160 It appears that in the years pre-dating COVID-19 in PSE3 (2018-2019), there was a significant underspend in capital expenditure. This lack of delivery was due to extensive consultation with substantial customers on the design of interrelated projects, including the new domestic terminal. We note that during the COVID-19 period in PSE3, although Auckland Airport paused major growth driven projects, it continued to undertake and bring forward asset renewals, taking advantage of the low traffic environment when the border was closed.

4.161 As at 30 June 2024 Auckland Airport has spent $1.083 billion for the PSE4 period to date against its PSE4 to date forecast of $1.395 billion.[339] Key capital projects included the east and west terminal enabling, inner terminal road, remote stands and the ground floor of the Transport Hub.

4.162 When viewing PSE2, PSE3 and the beginning of PSE4, Auckland Airport has largely delivered on its investment goals, except for the beginning of PSE3 which followed a period of over-spend relative to its forecast, delivering additional capacity demanded by market growth. The significant under-investment over the COVID-affected period in PSE3 ought to be treated as an outlier and not reflective of regular practice. Overall, we do not have significant concerns over planned over- and under-investment historically; under-delivery risk in PSE4 is also mitigated by the one-way capex delivery wash-up introduced by Auckland Airport.

Capex delivery wash-up

4.163 Auckland Airport has introduced two wash-up mechanisms for PSE4. One of them is a one-way capital expenditure wash-up mechanism that would favour airlines if triggered. The wash-up would be triggered if the total assets commissioned fall short of forecast by 7.5% or more and there is an actual post-tax priced IRR that exceeds target return by 0.75% or more. If triggered, the value carried forward to PSE5 opening RAB would be equal to the lesser of the economic value of the capex shortfall over and above the 7.5% threshold, and the IRR surplus over and above the 0.75% threshold.

4.164 The capex delivery wash-up will compensate airlines if Auckland Airport under-delivers on the expenditure forecast to a certain extent, and it drives the actual PSE4 return above what is targeted in the forecast.

4.165 On the capex wash-up BARNZ submitted on our process and issues paper:

> BARNZ was pleased to see AIAL propose this initiative. However, we consider the 15% trigger is too high. This wash-up would only apply if the airport failed to deliver some $400 million in capex. BARNZ considers this would be more appropriately set

[339] Auckland Airport: *Annual Information Disclosure - Regulatory Performance Summary for the year ended 30 June 2024* (28 November 2024), page 2.

> to 5%. Given airlines are required to pay prices regardless of whether capex is delivered, this seems a more reasonable position given the scale of the proposed investment. [340]

4.166 Auckland Airport responded in its cross-submission:

> The capex underspend threshold was reduced during consultation in response to airline feedback. It was originally proposed at 15%, the threshold cited by BARNZ in its submission, but was reduced to 7.5% in Auckland Airport's final decision, which is closer but still slightly higher than the 5% called for by BARNZ in its submission to the Issues Paper. [341]

4.167 Air NZ stated:

> Air NZ considers the threshold AIAL proposes before this is triggered is far too high. Air New Zealand estimates that, all other things being equal, AIAL would need to underspend PSE4 capex by ~20% / $530m before any adjustment would be required. This equates to excess revenues (return of and on capital) of ~ $160m before any adjustment is required.
>
> Air NZ believes that the adjustment mechanism, as proposed, incentivises AIAL to set capex forecasts which it would under any scenarios exceed and essentially guarantees that AIAL will earn, ex post, its target return on capital. This is not consistent with the concept of ex-ante regulation or financial capital maintenance.
>
> Air NZ believes that the capex wash-up should not include the IRR test, so that the adjustment would be paid out if AIAL underspend its forecast capex. This is consistent with the IRIS approach applied under DPP regulation. [342]

4.168 In response to Air NZ's second point above, Auckland Airport stated:

> Auckland Airport is not entirely sure what point Air New Zealand is attempting to make with this statement and struggles to follow some of the logic. It is unclear to Auckland Airport why the mechanism incentivises Auckland Airport to set capex forecasts that it is likely to exceed given the thresholds. But if it did, would this not mitigate the unfounded concerns raised by airlines in their submissions that Auckland Airport has incentives to underinvest. It is also not clear why a capex wash-up that is one way and can only benefit airlines, would guarantee Auckland Airport achieving its target return on capital. [343]

4.169 And in response to the third point, Auckland Airport stated:

> The IRR test is an important element of the capex wash-up, as the intent of Part 4 is to ensure that Auckland Airport is constrained in its ability to earn excess profits, and the IRR trigger is consistent with this outcome. If the capex wash-up without an IRR trigger applied in PSE3, as suggested by Air New Zealand, this would have resulted in a wash-up to the favour of airlines, despite airport returns being well below target. It would have penalised Auckland Airport for making reductions to the capex plan that were responsible and prudent at the time. Auckland Airport once

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340 BARNZ submission on our process and issues paper, page 7.
341 Auckland Airport cross-submission on our process and issues paper, page 32.
342 Air NZ submission on our process and issues paper, page 15.
343 Auckland Airport cross-submission on our process and issues paper, page 32.

again emphasises that the capex wash-up is one-way and can only benefit airlines.[344]

4.170 In our PSE3 review, we considered that Auckland Airport could consider introducing a carry-forward/wash-up mechanism to manage the delivery risk of the significant Terminal Development Programme (the previous iteration of the TIP). In our PSE4 review of Wellington Airport, we noted that risks should be allocated to suppliers or consumers depending on who is best placed to manage them, unless doing so would be inconsistent with the purpose of Part 4.[345] We did not have concerns over the demand, revenue and net revaluation gain wash-ups that Wellington Airport agreed with its customers.

Submissions and cross-submissions on capex delivery wash-up

Airline submissions

Qantas

4.171 Qantas submitted that the capex wash-up is unreasonable for the following reasons:

- AIAL is investing in capacity before completing consultation to determine whether that capacity is reasonably required;
- AIAL is asking airlines to guarantee its revenues against the consequences of the additional risk created by an over-investment that airlines have actively opposed; and
- AIAL commenced construction despite Qantas Group feedback that we needed to conclude a proper consultation. [346]

4.172 Qantas continued that even if the trigger for the wash-up was avoided, Auckland Airport would be able to recover the bulk of the permitted expenditure in the coming price periods at low risk given the capital plan is tail ended.[347]

Air New Zealand

4.173 Air NZ submitted that while it supports a capex wash-up mechanism in theory, it is concerned about the threshold for triggering the mechanism remains too high. Given that the scale of the overall expenditure plan is large, Auckland Airport would need to underspend on capex by more than $230 million before it would be triggered.[348]

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344 Ibid.

345 Commerce Commission, *Review of Wellington Airport's 2019-2024 Price Setting Event* (28 September 2022), paragraph X20.

346 Qantas submission on our consultation paper, page 14-15.

347 Qantas submission on our consultation paper, page 15.

348 Air New Zealand submission on our consultation paper, page 40.

NZ Airports Association submissions

4.174 The NZ Airports Association submitted that airlines had been inconsistent in their arguments on the trigger value. During consultation Auckland Airport reduced the trigger from 15% to 7.5%, while in submissions BARNZ stated the trigger was 15% and Air NZ submitted that it was around 20% of PSE4 capital expenditure as opposed to total asset base. The NZ Airports Association continued that it was pleased the Commission has not been swayed by the self-interest of airlines and recognised that Auckland Airport has acted appropriately to manage the risk of under delivery.[349]

Auckland Airport's submissions

4.175 Auckland Airport agreed with our draft conclusion that the capex wash-up mechanism appropriately allocates risk and provides the right incentives and was reached following consultation.

Conclusion on capex delivery wash-up mechanism

4.176 We remain of the view that the introduction of the one-way capex wash-up mechanism for PSE4 shows that Auckland Airport is cognisant of the risk of under-delivery. Without any mechanism, the underinvestment risk primarily sits with airlines. Auckland Airport is better placed to manage the investment delivery risk. We consider the mechanism provides the right incentives, and was reached following concession during consultation with substantial customers (with the 7.5% value previously set at 15%).

[349] NZ Airports Association submission on our consultation paper, page 7.

Chapter 5 Pricing Structure

Overview

5.1 This chapter contains our analysis and conclusions on the extent to which Auckland Airport's pricing method is likely to result in prices that raise efficiency concerns.

5.2 This analysis is relevant to the extent to which Auckland Airport has incentives to set prices that are likely to promote efficiency (s 52A(1)(b) of the Act).

5.3 Auckland Airport indicates in its disclosure that the pricing structure is largely unchanged from PSE3, and that the main change is to the wash-up mechanisms.[350]

5.4 In our report on PSE3, we concluded that Auckland Airport appeared to have set prices transparently in PSE3 and had regard to price stability and certainty for stakeholders. Our conclusion was as follows:

> Overall, we consider that Auckland Airport has continued to seek improvements to the efficiency of its prices. We note several positive steps, including the introduction of:
>
> differential charges for domestic passengers travelling on trunk and regional routes, further reducing the likelihood of cross-subsidisation between customer groups;
>
> parking charges for planes with time on the ground over six hours (with specified exemptions), in order to improve stand and apron efficiency; and
>
> differentiated charges for check-in services (to distinguish between traditional check-in counters, common-use bag drop facilities and dedicated kiosk/bag drop facilities), which have improved the ability for airlines to make price-quality trade-offs.[351]

5.5 This conclusion was based on an assessment of whether Auckland Airport's pricing method was likely to result in prices which raised efficiency concerns after considering the following pricing efficiency principles:[352]

5.5.1 prices should be subsidy free;

5.5.2 prices should have regard to consumers' demand responsiveness;

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350 Auckland Airport Price Setting Disclosure, page 65.

351 Commerce Commission: *Review of Auckland International Airport's pricing decisions and expected performance (July 2017 – June 2022)*, paragraph 322.

352 This is consistent with our approach in the section 56G review. For example, see 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– Section 56G of the Commerce Act 1986* (31 July 2013), paragraph D15.

5.5.3 where a good or service is scarce, the price should help ensure that the good or service is consumed by those that value it the most;

5.5.4 prices should enable consumers to make price-quality trade-offs or non-standard arrangements for services, where practical, to reflect the value they place on services; and

5.5.5 the development of prices should be transparent, and promote price stability and certainty for consumers, where demanded.

5.6 Given that Auckland Airport made minimal changes to its pricing structure from PSE3, and given our conclusions for PSE3, we limited our review of Auckland Airport's pricing structure for PSE4 to matters raised by stakeholders. We have not discussed the wash-up mechanisms in this chapter as we have covered this matter in Chapters 3 and 4.

5.7 A pricing issue of concern to stakeholders was the change to aircraft parking charges. Auckland Airport introduced aircraft parking charges in PSE3, and in PSE4 has changed the method for setting these charges. For PSE3, charges were set on a per hour basis, with an exemption for freighters of 48 hours before charges were incurred. For PSE4, the 48-hour exemption period for freighters has been reduced to 12 hours.

5.8 Stakeholders were also concerned about the relatively high increase in regional charges.

Conclusion

5.9 Given that there were minimal changes to the pricing structure, we have no reason to change our overall conclusion from the PSE3 review that in general, Auckland Airport's pricing method does not result in prices which raise efficiency concerns.

5.10 In relation to the pricing structure changes that have been made, we consider that Auckland Airport has provided sufficient explanation for making the change to the 48-hour parking exemption for domestic freighters.

Aircraft parking charges

5.11 Auckland Airport explained the reason for the change to aircraft parking charges as follows:

> One driver of current congestion challenges is parked domestic freighter aircraft which currently have an exemption from aircraft parking charges for the first 48 hours of time on ground. As was summarised in CP2, such freighters are only charged aircraft parking charges on an hourly pro-rata basis after that 48 [hour] period. The operation of this exemption is having the effect of undermining the purpose of the aircraft parking charges, being to support the efficient use of the airfield space for aircraft traffic given the scarcity of available space. Auckland Airport has also identified that in the absence of any reasonable justification for this exemption, its operation is disadvantaging airlines who are required to pay parking charges in excess of 6 hours of parking.[353]

Submissions on process and issues paper on aircraft parking charges

5.12 Freightways and NZ Post, who were not party to Auckland Airport's consultation process because they are not considered substantial customers within the definition in the AAA, submitted on our process and issues paper that it is not possible for them to avoid the parking charges that will be incurred because of the reduction in the exemption period:

> Accordingly, our aircraft are parked for up for between 13 to 16 hours per day and 67 hours during the weekend. It is not possible for FRW and NZP to operate flights outside of current hours because New Zealand businesses demand freight operations that allow them to manufacture or load out orders all day typically for pick up around 5pm which allows for delivery nationwide the next day (and to businesses by 9am). Our respective networks are based around this operating model and therefore there is no way for FRW and NZP to avoid the proposed parking charges.[354]

5.13 Freightways and NZ Post calculated that the change to the exemption period would cause their combined costs to increase by $1.17 million per annum (139% per annum) for the next three years.[355]

5.14 Additionally, Freightways and NZ Post submitted that there may be an error in the building block model because they have been advised by Auckland Airport that the total increase in parking revenue is $1 million for 2025, which is less than the increase that they are expecting ParcelAir to pay.[356] ParcelAir is their service provider, which is 50% owned by Freightways/NZ Post, and according to Auckland Airport accounts less than 5% of airfield parking revenue.[357]

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353 Auckland International Airport Limited: *Price Setting Event 4 Reasons Paper* (June 2023), page 62.
354 Freightways & NZ Post submission on our process and issues paper, page 2.
355 Ibid.
356 Ibid, page 3.
357 Auckland Airport: *Response to Commerce Commission request for information* (2 May 2024).

5.15 BARNZ criticised the process that led to the change to parking charges:

> Submissions from Freightways and New Zealand Post demonstrate the frustration felt by customers of the airport, and support BARNZ's submission that attention needs to be paid to those customers who are price takers for AIAL pricing but who are not consulted with as they are not members of BARNZ.[358]

Our analysis in the consultation paper on aircraft parking charges

5.16 We understand that Auckland Airport was concerned that the 48-hour parking exemption for freighters did not provide an incentive for freighters to more efficiently use the airfield space. Auckland Airport indicated that the freighter exemption "was having the effect of undermining the purpose of the aircraft parking charges, being to support the efficient use of the airfield space for aircraft traffic given the scarcity of available space".[359]

5.17 Our understanding of the main concern raised by Freightways/NZ Post is that the change to the parking exemption period will result in additional charges that cannot be avoided.

5.18 In relation to the concern raised by Freightways/NZ Post that there may be an error in the model, we have not found evidence of an error. Auckland Airport indicated that the removal of the aircraft parking exemption is expected to increase revenue by approximately $1.5 million per annum from the 2025 fiscal year.[360] This is more than the increased amount that Freightways/NZ Post are expecting to pay, and indicates the concern raised by Freightways/NZ Post that there may be an error in the model is not apparent.

5.19 Auckland Airport advised us that the additional revenue that this change is expected to recover has been offset against airfield landing charges, as parking and landing charges are within the same cost category (airfield assets).[361]

5.20 We sought clarification from Auckland Airport about the extent that higher parking charges being faced by ParcelAir will be offset by lower landing charges to ParcelAir. Auckland Airport responded that ParcelAir's landing charges would be lower by 1% because of the change to the exemption period.[362]

5.21 Our understanding of the change to the exemption period, therefore, is that it will result in a transfer of revenue recovery from freighters to Auckland Airport's customers who incur airfield landing charges. The change will not directly affect Auckland Airport's revenue.

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358 BARNZ cross-submission on our process and issues paper, paragraph 7.
359 Auckland International Airport Limited: *Price Setting Event 4 Reasons Paper* (June 2023), page 62.
360 Ibid.
361 Auckland Airport: *Response to Commerce Commission request for information* (22 April 2024).
362 Auckland Airport: *Response to Commerce Commission request for information* (2 May 2024).

5.22 In our consultation paper we said that we understood why Auckland Airport would want to make a change so that prices are charged consistently across customer groups, in this situation, it was not clear from the information provided how the change would lead to an improvement in the efficiency of Auckland Airport's prices. This is because Freightways/NZ Post had indicated that they were not able to change their operations, which means that the pricing change may not result in a more efficient use of the airfield space.

5.23 Overall, we agreed in the consultation paper that the change to the exemption period for freighters would provide a consistent signal to all users of the value of airfield parking. However, we did not consider that Auckland Airport had provided sufficient explanation for making this change. We welcomed more information from Auckland Airport on how it considered the change would lead to the more efficient use of the airfield parking space.

Submissions on consultation paper on aircraft parking charges

5.24 Auckland Airport responded to our consultation paper by providing information indicating the changes to aircraft parking exemptions were necessary given its forecast of capacity constraints for aircraft stands. Auckland Airport summarised its analysis as follows:

> Accordingly, if the behaviour of domestic freighter aircraft remains unchanged, with extensive time spent on the ground at Auckland Airport, these forecasts indicate that a shortfall in stand capacity could eventuate from next calendar year.
>
> Looking further forward, forecast growth in traffic indicates that additional stand capacity will be required to meet demand in 2028, a need that spans across all passenger and cargo segments. This is again based on the assumption that all hangars are full, some domestic jet stands are open for bussing operations and no long ground times occur. [363]

5.25 Auckland Airport provided further information on the availability of stands during the construction of the DJT and the schedule for the construction of new stands. In addition, Auckland Airport provided further information on the implications, should it not have stands available to service the requirements of international airlines.[364]

[363] Auckland Airport submission on our consultation paper, page 72.
[364] Ibid, page 72-75.

5.26 Auckland Airport also provided analysis that in its view indicated Freightways and NZ Post could change their operations in response to the change to the exemption period for freighters:

> The Commission's draft conclusion is based on the presumption that Freightways / NZ Post are not able to change their operations. However, Auckland Airport considers that there are changes that could be made by Freightways and NZ Post that own ParcelAir to how their aircraft are operated at Auckland Airport in response to the pricing signals that have been introduced.
>
> As set out below, we think there are options to make better use of existing hangar facilities, re-align the ground time of the domestic freighter network to match domestic freighter activity, and increase the utilisation of existing aircraft to reduce ground-time. We also consider that the existing commercial arrangements between ParcelAir and aircraft operator Airwork dampens the pricing signal Auckland Airport is seeking to achieve through its aircraft parking charges.[365]

5.27 We did not receive submissions on our consultation paper from Freightways or NZ Post. Neither did we receive any other submissions on aircraft parking charges.

Our conclusion on aircraft parking charges

5.28 We consider that Auckland Airport has provided sufficient information to justify the changes to aircraft parking charges. The change to the exemption period for freighters will provide a consistent signal to all users of the value of airfield parking and may result in the more efficient use of aircraft stands.

Other pricing structure matters

5.29 In relation to other pricing structure matters, Air NZ and BARNZ have requested we review the effect the price changes have on small airlines.

5.30 Specifically, Air NZ has requested that we consider whether customer groups are getting value from a given price increase. For example, Air NZ requested us to compare:

> [the] price increases for passengers transiting between international and domestic jet flights, to passengers transiting between domestic jet and regional flights.[366]

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365 Auckland Airport submission on our consultation paper, page 76.

366 Air NZ submission on our pricing and issues paper, paragraph 72.

5.31 BARNZ submitted that a concerning aspect of the pricing structure was the effect on small airlines:

> AIAL may have retained pricing structures, but the price rises applied across structures are not uniform. As well as the transit charges and parking changes noted by the Commission, AIAL has introduced a step change to regional aircraft. These changes disproportionally impact small airlines operating from Auckland Airport.[367]

5.32 The disclosure indicates that between 2023 and 2024 revenue per passenger for regional services increased by $2.67 (from $4.43 to $7.10, or 60%) whereas revenue per passenger for domestic jet services increased by $3.52 (from $6.73 to $10.25, or 52%) and revenue per passenger for international services increased by $9.38 (from $23.39 to $32.78, or 40%).[368]

5.33 Auckland Airport has explained the increase in domestic charges as follows:

> Domestic charges have been 40-50% lower than comparable airports in the Australia and New Zealand region for a number of years. The PSE4 increases will bring prices in-line with those at comparable airports.[369]

5.34 and

> For FY24, notwithstanding the step-up following the price freeze, domestic and regional charges will remain well below that of Christchurch and Wellington airports. In FY27 real domestic jet charges will be slightly lower than both Christchurch and Wellington airports' real FY24 charges, while real regional charges will be lower than Wellington, and consistent with those at Christchurch.[370]

5.35 Auckland Airport has not provided specific information on the reasons why the pricing effects on domestic and regional customers are different. However, the domestic and regional charges are the outworkings of the expenditure and demand assumptions in the building block model. There is no particular reason why increases should be uniform (the same percent change) as BARNZ suggests. Auckland Airport has noted that the new prices will result in greater alignment between the domestic and regional charges across New Zealand airports. Our conclusion in the consultation paper was that we had no basis for considering the regional charges were inefficient. We did not receive any further submissions on this matter and therefore maintain our conclusion from the consultation paper.

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367 BARNZ submission on our pricing and issues paper, paragraph 47.
368 Auckland Airport Price Setting Disclosure, page 14.
369 Ibid, page 13.
370 Ibid, page 15

Chapter 6 Innovation

Overview

6.1 As we originally noted in the s 56G reports, airports generally have incentives to maximise profits through improved performance, including innovation. We consider Auckland Airport's innovation practices as part of this report.

6.2 In our Auckland Airport PSE3 review, we stated that as PSE disclosures contained forward-looking information, they did not provide much information about the appropriateness of an airport's level of innovation. However, an airport can disclose some information about its innovation as part of a PSE disclosure. For example, Christchurch Airport's PSE4 disclosure contains some useful information about its approach to innovation and innovative examples. In future, we may consider adding information disclosure requirements for airports about their innovation practices.

Our conclusion

We consider that the level of innovation and implementation of specific efficiency initiatives at Auckland Airport appears to be appropriate

6.3 Auckland Airport lists innovation and continuing efficiencies as one principle underpinning its price setting decisions. In our consultation paper, we noted that Auckland Airport had not demonstrated significant innovative practices, and though Auckland Airport may be innovating appropriately, there was little evidence of this in its disclosures.

6.4 Auckland Airport provided additional information, including examples of how it is innovating, in its submission on our consultation paper. Following the review of this additional information, and taking a broader view of innovation, our conclusion is that Auckland Airport appears to be innovating and implementing specific efficiency initiatives appropriately.

Stakeholder views and analysis

6.5 In their submissions on our consultation paper, Auckland Airport and NZ Airports encouraged us to take a broader view of innovation.

6.6 In response to our description of innovation in the consultation paper,[371] Auckland Airport submitted that:

> While Auckland Airport agrees in principle with the statement, we consider innovation is broader than just "new to world" concepts and "blue sky thinking". Innovation also encompasses continuous improvement and looking for new ways to bring increased efficiency, reduced cost and improved service quality to the airport.
>
> The Commission identified in its Draft Report that innovation can lead to efficiency gains and a reduction in opex per passenger. Beyond this, Auckland Airport considers that innovation can improve service quality, increase capacity and reduce capex spend. The examples below showcase how this is happening at Auckland Airport.[372]

6.7 NZ Airports submitted that:

> The Consultation Paper seems to imply that innovation must result in reductions in opex and does not seem to consider any other outcome that might result from innovation. We suggest that innovation could also, or alternatively, result in increased capacity, improved service quality, reduced capex or other even less quantifiable results such as goodwill.[373]
>
> …Additionally, NZ Airports considers it is not always appropriate or necessary for airports to work independently on innovation. Many cost reductions and efficiencies can be achieved by effectively implementing international best practice.[374]

6.8 Auckland Airport and NZ Airports also requested that we provide clarity on how we will be assessing innovation.[375]

6.9 Air NZ and BARNZ agreed with our finding in the consultation paper, that there was little evidence that Auckland Airport is innovating properly in its disclosures.[376] Air NZ noted in its cross-submission that it agreed with our view of innovation set out in the consultation paper.[377] In response to Auckland Airport and NZ Airports' request for guidance on innovation, BARNZ said that this should not be necessary, and Air NZ said that this request reinforced its view that Auckland Airport is not demonstrating innovative practices.[378]

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371 Commerce Commission: *Review of Auckland Airport's 2022-2027 Price Setting Event – Consultation Paper (17 July 2024)*, paragraph 6.6.

372 Auckland Airport submission on our consultation paper, page 81.

373 NZ Airports Association submission on our consultation paper, paragraph 86.

374 Ibid, paragraph 90.

375 Auckland Airport submission on our consultation paper, page 81; NZ Airports Association submission on our consultation paper, paragraph 86.

376 Air NZ submission on our consultation paper, paragraph 4.1-4.9; BARNZ submission on our consultation paper, page 8.

377 Air NZ cross-submission on our consultation paper, paragraph 4.3.

378 BARNZ cross-submission on our consultation paper, page 4; Air NZ cross-submission on our consultation paper, paragraph 4.1.

6.10 While we acknowledge our view of innovation as described in the consultation paper and in our previous airport reviews, we agree with the points made by Auckland Airport and NZ Airports. Going forward, we consider that it is more appropriate for us to take a broader view of innovation, to include initiatives to improve efficiency more broadly. These efficiency initiatives include solutions that have previously not been used or widely used by airports in New Zealand. We want to see where airports are trialling new solutions. This is in line with our updated approach to incentivising and assessing innovation for regulated suppliers in the electricity industry (where the aim is to incentivise regulated suppliers to trial new solutions), as outlined during the 2023 IM Review.[379]

6.11 Our approach to reviewing innovation by Auckland Airport in this final report has taken this broader view and considers whether Auckland Airport is adopting international best practice in its regulated activities, trying new (improved) solutions, and is generally moving forward in the processes and technology it adopts in a timely manner.

6.12 IATA submitted that it would be useful for Auckland Airport's stakeholders to understand the Airport's overall technology and innovation roadmap:

> Concerning the planning and design of passenger and baggage processing, IATA is unaware if Auckland Airport has included or safeguarded for technology-based processing including biometrics and off-airport processing. How is the adoption of technology and innovation considered in the development of its capital program? A technology strategy should be clear and agreed with users as supporting the overlap customer experience strategy, integrated with, and consulted upon with users.[380]
>
> It is also prudent to recognize that innovation cannot be implemented without the necessary alignment and participation by others in the airport ecosystem. In most instances, investments are needed by users to facilitate these adoptions. Thus, achieving alignment and obtaining agreement/support for the overall strategy and roadmap is critical.[381]

6.13 In its cross-submission, Auckland Airport mentioned the Collaborative Operating Group, which it describes as a "forum for airline and inter-agency cooperation in order to improve processes, understand risk and mitigations and increase the quality of service provided" at the airport.[382]

6.14 Auckland Airport also disagreed with Air NZ's submission that the Collaborative Operating Group "rarely results in action by AIAL on suggested airport improvements or a willingness to consider innovative solutions to problems".[383]

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379 Commerce Commission: *Part 4 IM Review 2023 Final decision – Risks and Incentives topic paper, 13 December 2023*, Chapter 6.

380 IATA submission on our consultation paper, page 6.

381 Ibid, page 8-9.

382 Auckland Airport cross-submission on our consultation paper, page 137.

383 Air NZ submission on our consultation paper, paragraph 4.4.

6.15 We consider that when working effectively, the Collaborative Operating Group as a forum should help in achieving alignment with other users in the Airport ecosystem, which as IATA stated, is necessary for the successful and timely implementation of innovative solutions.[384] Auckland Airport and Air NZ appear to have opposing views on the effectiveness of this group as it is currently operating. We encourage the parties (including other stakeholders) to continue to engage and work together as needed to bring new innovations and efficiency initiatives to the airport.

6.16 We would also like to highlight IATA's recommendation that Auckland Airport prepare a technology strategy and innovation roadmap to aid other stakeholders' understanding of the Airport's plans so they can invest accordingly to facilitate these innovations.[385]

Innovation examples provided by Auckland Airport in its submission

6.17 In its submission Auckland Airport provided additional information on how it is innovating.[386]

6.18 Taking a broader view of innovation (as noted earlier in the chapter), we consider that where Auckland Airport is acting as a 'fast follower' and is taking the opportunity during the TIP to adopt new and modern technologies that are not already widely used in other international airports (particularly in Australasia), this would be considered innovative. In the paragraphs below, we have noted some examples provided which we consider demonstrate innovation by Auckland Airport.[387]

6.18.1 The Airport is in the process of implementing modern air conditioning technology (over a traditional heating, ventilation, and air conditioning (HVAC) system) which will replace natural gas boilers with a system that warms and cools air simultaneously and is expected to be more efficient and cost-effective than a traditional system. This technology is currently only used by a handful of other international airports, and more airports are in the process of upgrading to similar systems.

6.18.2 The Airport is developing a new stormwater system, including a new stormwater treatment pond developed for the New Zealand environment which is expected to be more efficient than a traditional pond.

384 IATA submission on our consultation paper, page 8-9.
385 IATA submission on our process and issues paper, page 8-9.
386 Auckland Airport submission on our consultation paper, Appendix A.
387 Ibid.

6.18.3 As part of the TIP, the Airport is replacing around 100 traditional check-in desks with self-service kiosks and automatic bag drops. The kiosks, which will service both domestic and international passengers, no matter which airline they are flying with, are expected to create additional capacity and efficiency within the check-in hall. Though common-use self-service kiosks have been used by some airports for many years, this technology is still not yet widely used, having been implemented in only a handful of international airports to date.

6.18.4 The Airport is also upgrading its baggage handling system to the individual carrier system, which is more reliable, flexible and energy efficient than a traditional baggage handling system. It is also faster, involves less equipment, and is more cost-effective to run than a traditional system. While the individual carrier system for baggage has been used in European airports for many years, it is not yet widely used outside of Europe.

6.19 Air NZ argued in its cross-submission that many of the examples provided by Auckland Airport were a 'business as usual' technology uplift associated with a new build and are common practice at other airports, and that it would be unusual if Auckland Airport did not implement more modern technology as part of the TIP.[388]

6.20 While we acknowledge Air NZ's view and we agree that it is expected that airports implement more modern technology as part of large infrastructure projects such as the TIP, this does not mean that none of the new technology, systems or processes adopted by Auckland Airport as part of the project could be considered innovative (particularly, taking a broader view of innovation as described in paragraph 6.11).

6.21 We have outlined above some initiatives that we think demonstrate that Auckland Airport is innovating. There were other examples provided by the Airport which we consider do not adequately demonstrate innovation, including concrete recycling which is widely used in large infrastructure construction projects in New Zealand, and hosting an event for the 'Girls in Infrastructure' program.

6.22 Overall, Auckland Airport appears to be innovating and implementing specific efficiency initiatives appropriately, particularly through modern technology it is implementing as part of the TIP which is expected to improve the airport's overall performance through increased efficiency and cost effectiveness compared to traditional systems.

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388 Air NZ cross-submission on our consultation paper, paragraph 4.8.

Chapter 7 The regulatory process

Submissions on the effectiveness of the ID regime

7.1 Several submitters expressed concern about the effectiveness of the ID regime. Airlines called for reform and sought a section 56G inquiry into the form of regulation for Auckland Airport.[389]

7.2 Submitters' concerns related to:

7.2.1 **Retrospectivity** – our summary and analysis occurs after an investment decision has been made, so by the time we provide our conclusions, investment may already be underway, and contracts may have been let limiting the influence we can have on investment decisions.

7.2.2 **Substance** – the ID regime does not currently require airports to obtain an independent review or verification of investment decisions, so it is hard for their customers and for us to ascertain whether the decisions are reasonable:

> BARNZ member airlines overwhelmingly understand the need to invest in New Zealand's major gateway. A regime which allowed for verification of capital plans would be ideal, particularly where those capital plans exceed prior period PSE commitments by a stated parameter.[390]

7.2.3 **Time period** – we currently only look at pricing decisions in the context of a five-year period:

> [Assessing only PSE4, and not PSE5] leads to an artificial assessment of whether the proposed expenditure and pricing are reasonable, because it only covers part of the period of the massive capital project.[391]
>
> The fact that the Commission's review process considers only five-year increments renders it incapable of effectively considering the efficiency of a generational capital programme of this nature that spans multiple pricing periods.[392]

7.2.4 **Potential lack of influence** – airports are not legally required to act in response to our summary and analysis:

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389 Air NZ submission on our consultation paper, paragraph 5.28-5.33; Air NZ cross-submission on our consultation paper, para 5.19-5.24; Qantas submission on our consultation paper, page 23-24; BARNZ submission on our consultation paper, page 9; BARNZ cross-submission on our consultation paper, page 8.

390 BARNZ submission on our consultation paper, page 8-9.

391 Airlines for Australia & New Zealand: *RE: Review of Auckland Airport's 2022-2027 Prices Setting Event* (3 September 2024) (**A4ANZ submission on our consultation paper**), page 2

392 Air NZ submission on our consultation paper, paragraph 5.21-5.25.

7.2.4.1 Air NZ submitted that the threat of stronger regulation (eg, negotiate/arbitrate regulation) is weak.[393]

The issue

7.3 In the past airports and airlines have generally reached agreement before capital investment plans are approved and progressed. This is not the case for Auckland Airport's major capex through PSE4. Despite a long and extensive consultation process,[394] Auckland Airport and its substantial customers failed to reach agreement on the appropriate levels of investment, particularly for the TIP.[395]

7.4 It appears that through much of the process, Auckland Airport and its substantial customers were in general agreement on the path for the Auckland Airport redevelopment, including the integration of the domestic and international terminals.

7.5 The COVID-19 pandemic caused significant disruption to air travel and delayed the project. During this period there was significant unforeseen escalation in construction costs, which affected the project cost. The Airport engaged the services of reputable experts to develop and cost its proposals. Support from Auckland Airport's substantial customers was withdrawn, when the cost estimate for the integrated terminal was updated post-COVID and the level of price increase was understood.

7.6 Subsequent to the end of consultation and Auckland Airport's final investment decision, Air New Zealand proposed an alternative design. The Airport appears to have considered but ultimately rejected this, because in the Airport's view it did not deliver the cost savings indicated and/or omitted (or did not consider) some operational requirements.

7.7 There are costs to developing additional options, ceasing capital works that are underway at the airport and further delay in finalising a design may have flow on impacts to customer experience and operational requirements at the airport. In the circumstances overall, it is not unreasonable for the Airport to have decided to proceed with its investment plans.

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393 Air NZ submission on our consultation paper, paragraph 5.21-5.25.

394 Auckland Airport's capital expenditure consultation process has been outlined in Chapter 4 (paragraph 4.17 - 4.33).

395 A significant proportion of submissions and cross-submissions on our consultation paper focused on the level of investment during PSE4 by Auckland Airport, and stakeholders' different views on the appropriate level of investment for the Terminal Integration Programme. Our analysis and conclusion on Auckland Airport's investment is detailed in Chapter 4 of this report.

Our views

7.8 While we acknowledge submitters' views, possible change to the ID regime or to the regulatory approach more broadly is not the focus of this report. As submitters have noted, the current ID requirements are ex post and our summary and analysis process (ie, this report) means that the effectiveness of the regime cannot be fully determined until after the Airport's response to our findings.

7.9 In the past, airports have responded to the conclusions of our PSE reviews by reducing prices when we have concluded they are too high. In that respect, the regime has worked. Auckland Airport has stated that it will reduce prices if we conclude in this review that they are set too high. It has also indicated that it will revisit its approach to depreciation in the next pricing period.

7.10 The key concern that has arisen with respect to this PSE relates to a major capex programme. As noted by submitters, this type of issue is less amenable to ex post regulation, than concerns about the level of prices, because it can be difficult or costly to alter an investment once it is underway.

7.11 Taking into account the particular circumstance giving rise to the ultimate disagreement between Auckland Airport and its substantial customers and from the evidence we saw of the consultation process, it is not clear to us that the current consultation requirements on airports in relation to major redevelopments are systemically deficient in delivering efficient levels of investment.

7.12 Different airlines have different demands in terms of the level of service that they wish to provide to their customers (for example, full service or budget). This is reflected in the level of services that they want from the airport operator. The consultation obligations are intended to surface some of these, though substantial customers do not represent all customers, and may not necessarily have interests that are aligned with end-users (ie, passengers). Consultation obligations intentionally leave the airport able to make a decision in its own commercial interests (with obligations to provide transparency after the event).

7.13 The ID requirements are not designed to resolve disputes about significant investments or target service levels. A comparison with Australia is not straightforward as major airports there are leased from the Federal Government. Lease conditions are integral to the regulatory framework, including the requirement that significant investments, such as a new runway or terminal, are approved by the relevant Minister.

7.14 The Commission has not reached any conclusions about the nature or timing of any next steps and many of the options would require broader engagement with policy makers. The relative merits of any changes to regulation would need to be assessed carefully, but options could include changes to:

7.14.1 the current ID requirements. This would be relatively low cost, but there are limited options for change within the existing framework that are likely to have a significant effect on outcomes. For example, under the AAA (and CAA) airports must reconsider prices at least once every five years, limiting our ability to extend the timeframe for analysis. We may be able to address some of the substance concerns by adding disclosure obligations, for example relating to the service levels that underpin designs, but the relative costs and benefits would require further consideration and consultation.

7.14.2 the type of regulation applying to all three regulated airports. If an inquiry found that it would be beneficial, negotiate-arbitrate or a form of price-quality regulation could be imposed. Either of these would impose significant regulatory costs on all three airports and ultimately their customers. This would be a very significant undertaking and the potential change may be disproportionate to the specific nature of the issue that has arisen.

7.14.3 Part 4 provisions relating to airports. It remains our view that for price-setting purposes the current regime appears cost effective. However, a targeted review focused on the issue identified around significant capex decisions could add value. For example, enabling greater structure to and assurance of the capex decision-making process specifically, or potentially streamlining the inquiry process for moving to a different form of regulation potentially for a narrower range of services could be considered.

7.14.4 the wider regulatory regime for airports under the AAA (shortly to be replaced by the CAA). An extensive review of the wider regulatory framework for airports was completed relatively recently. However, this could be considered as an alternative vehicle for adding structure and assurance to major capex decision-making processes.