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Review of Christchurch International Airport's pricing decisions and expected performance (July 2017 – June 2022)

Final report – Summary and analysis under section 53B(2) of the Commerce Act 1986

Date: 1 November 2018

Executive Summary

X1 This report contains our analysis and conclusions on whether the pricing decisions and expected performance of Christchurch International Airport Limited (Christchurch Airport) are likely to promote the long-term benefit of consumers. It is intended to promote greater understanding of Christchurch Airport's performance.

X2 We are publishing this report under section 53B(2)(b) of the Commerce Act 1986 (Act)[1] which, among other things, requires us to publish a summary and analysis of information disclosed by Christchurch Airport about its price setting event.

X3 Christchurch Airport is one of three international airports subject to information disclosure regulation under Part 4 of the Act.

X4 Christchurch Airport has reset its prices for the period 1 July 2017 to 30 June 2022, after consulting with airlines. This is known as Christchurch Airport's third price setting event (PSE3).

X5 This review focusses on Christchurch Airport's expected profitability and pricing efficiency for the PSE3 period. This review helps promote greater understanding about the extent to which Christchurch Airport has incentives to invest appropriately, improve efficiency, and provide services at a quality that reflects consumer demands, as well as being limited in its ability to extract excessive profits.[2]

X6 This review follows our first review in 2013 of Christchurch Airport's expected performance and pricing decisions for the 2013-17 pricing period (PSE2).[3]

We are broadly satisfied Christchurch Airport is not targeting excessive profits

X7 In our view, Christchurch Airport is unlikely to be targeting excessive profits on the majority of its regulated services over the PSE3 period.

X8 Christchurch Airport expects to earn 6.65% on its regulated asset base (RAB) over the PSE3 period. This is a weighted average of its:

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1 References in this report to the "Commerce Act 1986", the "Act" and any provisions of the Act, are all references to the Commerce Act 1986 prior to the Commerce Amendment Act 2018 coming into force on 26 October 2018.

2 These are some of the outcomes sought under the Part 4 purpose (section 52A(1) of the Act) for suppliers of regulated goods or services. These outcomes are considered to promote the long-term benefit of consumers and to be consistent with outcomes produced in competitive markets.

3 This review also considered aspects of the airport's actual performance over the 2008-12 pricing period (PSE1) and was part of a wider review of the effectiveness of information disclosure regulation under section 56G of the Act, which was reported to the Ministers of Commerce and Transport. We also provided section 56G reports in relation to the regulated airport services provided by Wellington and Auckland International Airports. These section 56G reports can be found at: http://www.comcom.govt.nz/regulated-industries/airports/section-56g-reports/.

X8.1 Target return of 6.44% on the majority of its regulated services (about 85% of the RAB), which are subject to standard prices and are consulted on for the five-year PSE3 period. These are referred to as 'priced services' and include the use of airfield runways and taxiways, air-bridges and baggage handling services.

X8.2 Expected return of 7.87% on its remaining RAB (about 15%). These 'other regulated services' are priced through bilateral contractual arrangements that do not necessarily align with the five-year regulatory pricing period. They may include terminal lounges, and facilities and services for the operation of customs, immigration, quarantine checks, security and police services, refuelling of aircraft, and storage of freight.

X9 We note that Christchurch Airport's target return on its 'priced' and 'other regulated services' is below its own estimated weighted average cost of capital (WACC) of 6.82%.[4] This is different to Auckland Airport's approach over PSE3 of targeting a return on its priced services consistent with its own estimated WACC of 6.99%.[5] The WACC estimates made by Auckland Airport and Christchurch Airport are both above our own mid-point WACC estimate for airports of 6.41%. This is our starting point when assessing target returns for profitability analysis.[6]

X10 Our main focus is on the appropriateness of Christchurch Airport's target return (rather than its WACC estimate) as this is the key measure that affects profitability. We also consider Christchurch Airport's WACC estimate, but this is less of a focus compared to our review of Auckland Airport's expected profitability over PSE3.

Christchurch Airport's target return on its priced services is reasonable

X11 Having considered the reasons and evidence provided by Christchurch Airport, we are satisfied that Christchurch Airport's target return on its priced services of 6.44% is reasonable and consistent with promoting the long-term benefit of consumers. This is based on our view that Christchurch Airport has sufficiently justified its use of a slightly higher cost of debt estimate than we used to determine our mid-point WACC estimate of 6.41%.

X12 As noted in the Input Methodologies Review (IM Review) in 2016, a precise WACC for an airport is unobservable to both us and the airport itself.[7] However, we consider our mid-point WACC estimate of 6.41%, determined using the methodology

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4 Christchurch Airport has indicated the difference between its estimated WACC and target return is largely due to the impact of route incentive payments, which it describes as "bilateral arrangements with airlines that agree rebates (or similar) to encourage the establishment of new services or capacity". Christchurch Airport "Additional material on the reset of aeronautical prices for the period 1 July 2017 to 30 June 2022" (28 June 2018), paragraph 17.

5 Commerce Commission "Review of Auckland International Airport's pricing decisions and expected performance (July 2017 – June 2022) – Final report" (1 November 2018).

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

7 Commerce Commission "Input methodologies review decisions – Topic paper 6: WACC percentile for airports" (20 December 2016), paragraph 64.

set out in the IMs, to be the appropriate starting point when assessing target returns for profitability analysis.

X13 Christchurch Airport's debt premium estimate is based on its actual credit rating of BBB+ (compared to our benchmark of A-). In our view, using a higher debt premium estimate of 1.84% is reasonable in Christchurch Airport's specific circumstances, and appears to be consistent with prudent levels of debt financing.[8] The airport's debt premium estimate of 1.84% compares to our estimate (for a regulated airport business with a credit rating of A-) of 1.45%.[9]

X14 Overall, we consider that the expected returns on Christchurch Airport's remaining regulated services (which make up about 15% of total regulated services) are likely to be better assessed over a longer timeframe. We comment on this below.

Christchurch Airport has improved its transparency and consultation

X15 In our view, Christchurch Airport has improved its transparency and consultation process compared to PSE2. Compared to its PSE2 disclosures, Christchurch Airport has provided greater transparency about its forecast cost of capital, the return it has targeted through prices and the rationale for these.

X16 In particular, the airport has improved its pricing methodology to include a more transparent tilted annuity depreciation method. This has been welcomed by stakeholders and follows previous concerns raised by us and stakeholders about the implied depreciation method applied in PSE2, when the airport set prices based on a "levelised" (CPI-increasing) price path over a 20-year period.

X17 Airlines have commented favourably on this change, and appear to have a greater understanding of Christchurch Airport's expected return of its capital (depreciation) for PSE3 compared to PSE2.[10]

X18 We are broadly satisfied Christchurch Airport is not targeting excessive profits over PSE3, and this indicates an improvement in Christchurch Airport's expected profitability. In PSE2, we concluded that Christchurch Airport had not provided sufficient information to allow interested persons to assess its expected profitability performance and that its price setting disclosure did not fully or transparently reflect its pricing approach.[11] Christchurch Airport's target return is significantly lower than when it previously set prices.

X19 Previously in PSE2, the upper limit of our WACC range (the 75th percentile) effectively became the key benchmark when assessing airport profitability. Now

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8 If Christchurch Airport's debt premium were applied, this would shift the WACC estimate to 6.47%.

9 Commerce Commission "Input methodologies review decisions – Topic paper 4: Cost of capital issues" (20 December 2016), paragraph 729.

10 BARNZ "Review of Auckland and Christchurch Airport's third price setting events – Process & Issues paper" (28 November 2017), page 4.

11 Commerce Commission "Report to the Ministers of Commerce and Transport on how effectively information disclosure regulation is promoting the purpose of Part 4 for Christchurch Airport" (13 February 2014).

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.[12]

X20 We consider Christchurch Airport's responses to improve the transparency of its pricing approach between PSE2 and PSE3 suggest that the extent to which the information disclosure regime limits Christchurch Airport's ability to extract excessive profits, and influences its conduct, has increased from PSE2 to PSE3.

X21 Christchurch Airport also appears to have engaged constructively with its customers regarding the significant changes to its pricing structure. The simplicity of its per passenger prices helps provide transparency to airlines about their respective charges. Overall, Christchurch Airport's new charging structure does not raise significant efficiency concerns.

There remains transparency improvements Christchurch Airport can make

X22 Nonetheless, we consider that there remain improvements that Christchurch Airport can make to providing information that allows stakeholders to understand and assess its performance.

X23 We consider Christchurch Airport could have been more transparent about its intentions behind its charging structure, and the relevant impacts on different customer groups, in its PSE3 disclosure. Our understanding and views on Christchurch Airport's charging structure was shaped by material provided by the airport after consultation closed. This material is now publicly available but was not available to interested parties throughout our consultation process. Including this information in the PSE3 disclosure would have allowed us and other interested parties to better understand, and engage with, Christchurch Airport's performance and pricing efficiency.

X24 We also have concerns that there was limited information provided by Christchurch Airport on route incentive payments as part of its pricing consultation process with airlines.[13] This includes the extent of route incentives, their impact on forecast demand, and how they impact the overall target return. Airlines have advised that they were not made fully aware of these impacts during consultation with the airport.[14] We consider that consultation can help ensure that the route incentives (at an aggregate level) remain appropriate and in the long-term interests of consumers.

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12 Commerce Commission "Input methodologies review decisions – Topic paper 6: WACC percentile for airports" (20 December 2016), paragraphs 59 and 97.

13 Route incentive payments are "Bilateral arrangements with airlines that agree rebates (or similar) to encourage the establishment of new services or capacity". Christchurch Airport "Additional material on the reset of aeronautical prices for the period 1 July 2017 to 30 June 2022" (28 June 2018), paragraph 17.

14 BARNZ "Draft Report on Christchurch Airport's pricing decisions and expected performance: PSE3" (16 August 2018), paragraphs 13-14. Air New Zealand "Re: Review of Christchurch International Airport's pricing decisions and expected performance (July 2017 – June 2022)" (16 August 2018), paragraph 6.

X25 We acknowledge Christchurch Airport engaged constructively with us on these areas once we had requested further information. Nonetheless, we expect Christchurch Airport to provide greater transparency on these topics in future throughout its consultation and its pricing disclosure. We also expect to see more proactive provision of information to the extent that it can help stakeholders better understand Christchurch Airport's performance.

Reviewing returns on other regulated services over a longer timeframe

X26 Unlike Christchurch Airport's priced services, we do not consider that Christchurch Airport has sufficiently justified its expected return of 7.87% on its other regulated services.

X27 However, we consider that an airport's returns on other regulated services are likely to be better assessed over a longer timeframe. The bilaterally negotiated contracts that apply to these services have varying durations and start dates that are not necessarily well aligned with our mid-point WACC estimate, which is consistent with the five-year PSE3 pricing period. In addition, there are a wide range of factors—such as market conditions, rent reviews and break clauses—that can affect the prices under the contracts that apply to these services.

X28 Other regulated services are a smaller portion of regulated services, currently representing about 15% of Christchurch Airport's RAB.

X29 A review of the returns associated with other regulated assets across Auckland, Wellington, and Christchurch Airports could be included in an ex-post review of airport performance, which we expect to undertake after Wellington Airport has completed its first five-year pricing period in 2019. A review could consider both:

X29.1 The actual return by airports over a longer period of time and how it compares to measures of the mid-point WACC estimate over time and the reasons for any differences.

X29.2 The process for agreeing negotiated leases and rent reviews.

X30 In any review we undertake of services under bilaterally negotiated contracts we would account for the context of a particular airport. For example, any review we complete would be proportionate to the size of other regulated services and take into account concerns that have been raised by counterparties about customers' limited bargaining position when entering into these contracts.

No significant concerns with Christchurch Airport's forecasts

X31 Overall, we do not have any significant concerns with Christchurch Airport's forecasts underpinning its expected returns. This includes Christchurch Airport's forecast asset values, demand, operating expenditure, and capital expenditure. Accordingly, we have used Christchurch Airport's forecasts as a basis for assessing its expected profitability.

X32 We also considered whether Christchurch Airport has incentives to invest appropriately, efficiently and at a quality standard that reflects consumer demands.

X33 Christchurch Airport is forecasting to spend $82m in capital expenditure over PSE3, representing close to 16% of its total RAB in 2017.[15] This largely represents 'business as usual' expenditure and will result in a smaller RAB in real terms (as it is outweighed by depreciation).

X34 Our review of Christchurch Airport's historic expenditure compared to forecast capital spend over PSE3 does not provide evidence of planned under- or over-investment. Nor do we see evidence of a strategy to gain from delaying projects or setting forecasts that are more likely to overstate rather than understate actual expenditure.

Christchurch Airport has made significant changes to its pricing structure

X35 Over PSE3, Christchurch Airport is charging passenger aircraft based on the number of passengers (not seats) in a departing aircraft. This is irrespective of other factors that were applicable in PSE2, such as the aircraft's weight or point of origin or destination.

X36 By the end of PSE3, the international and domestic (non-regional) per passenger charge will be equivalent. Previously, international passengers tended to pay more than domestic passengers. In addition, eliminating weight-based charges means that smaller aircraft are worse off (attracting relatively higher charges) and larger aircraft are better off (attracting relatively lower charges).

X37 Overall, Christchurch Airport's new charging structure does not raise significant efficiency concerns. Per passenger charges are simple to understand, transparent and are likely to reduce airlines exposure to demand risk.

X38 Christchurch Airport appears to have set its per passenger charges with a view to:

X38.1 remove incentives on airline customers to alter fleet mix in ways that did not reflect the airport's forward-looking costs; and

X38.2 send price signals about the relative capacity constraints facing its regional and international terminals.

X39 This is likely to encourage changes in usage patterns across the different terminals, ie, move passengers from the more congested regional terminal to the less congested integrated terminal. Improved allocation of demand is likely to be efficient if it lowers future costs across the different terminals.

[15] Christchurch Airport "Specified Airport Services Information Disclosure Requirements Information Templates for Schedules 18–24" (1 July 2017 to 30 June 2022), schedule 18.

X40 In the specific case of Christchurch Airport, we conclude the evidence before us indicates that its change in price structure will not result in a greater likelihood of cross-subsidisation between servicing different types of aircraft. [16]

X41 In our view, Christchurch Airport's new charging structure could represent an improvement in efficiency compared to PSE2. However, this is difficult to assess and will be somewhat dependent on whether the airport seeks to maintain this charging arrangement over the long-term. Price stability and predictability are important for airlines' ability to plan and invest over the long-term where airlines are also undertaking risky investments, such as in new aircraft.

X42 Given that much of the airport's costs are fixed in nature and only moderately affected by the type of aircraft, we would expect airports' charging structures to remain relatively stable over the long-term. Where significant changes are proposed, we encourage airports to provide robust evidence regarding the efficiency benefits and to have regard to the benefits of price stability and predictability over the long-term.

X43 We accept that it is difficult to determine the relative price responsiveness of domestic and international passengers; there are a range of stakeholder views, and international evidence on this, which may not be entirely applicable in the New Zealand context. It therefore may be difficult to effectively differentiate prices according to consumers' demand responsiveness. Doing so works to minimise distortions to the efficient use of airport services.

X44 We do not have particular concerns with Christchurch Airport's decision to transition to per passenger prices that are uniform across international and domestic passengers.

X45 However, we consider Christchurch Airport could have been more transparent about its charging structure in its pricing disclosure.

Christchurch Airport is seeking to better distribute capacity among its existing facilities

X46 Submitters suggest that, overall Christchurch Airport is operating within capacity. Passenger numbers have been increasing over the last few years following the Canterbury earthquakes and subsequent aftershocks. In 2017, passenger numbers were 6.6m. This compares to 2013, where passenger numbers were 5.5m and 6.0m in 2010 (an 8.3% decline).[17]

X47 Christchurch Airport has planned investment and operational changes to better manage current and future demand. Christchurch Airport suggests that capacity

[16] We consider that Christchurch Airport's per-passenger charges are likely to cover the incremental costs, and not exceed standalone cost, of servicing different types of aircraft. Covering incremental costs is sufficient to ensure there is no cross-subsidy.

[17] Christchurch Airport "Specified Airport Services Annual Information Disclosure" 2013 and 2017.

could be better distributed between the regional terminal, which is at times over-capacity, and the international terminal, which is under-utilised.

X48 Christchurch Airport plans to spend $10.4m reconfiguring its integrated terminal, its single largest capital expenditure project in PSE3. The airport suggests this investment will make better use of the potential flexibility and efficiencies captured in its integrated terminal.

X49 If successful, this approach, which seeks to leverage off existing efficiencies, is preferable to incurring substantial capital expenditure in a specific area approaching capacity, while other facilities remain under-utilised.

X50 Christchurch Airport appears to have set prices with a view to encourage airlines to use spaces of the terminal that are under-utilised. This was done as part of a relatively significant overhaul of its charging structure, compared to PSE2.

X51 Airlines have raised concern about the lack of consultation and specificity provided about the terminal reconfiguration project. More meaningful consultation with airlines on this project may have allowed airlines to provide more constructive feedback on the project and alleviated concerns about the likely benefits of the project.

Chapter 1 **Introduction**

Purpose of this report

1. This report contains our analysis and conclusions about Christchurch International Airport Limited's (Christchurch Airport) pricing decisions and expected performance for the period 1 July 2017 to 30 June 2022.

2. Christchurch Airport is one of three international airports subject to information disclosure regulation under Part 4 of the Commerce Act 1986 (Act)[18].

3. We are publishing this report under section 53B(2)(b) of the Act, which requires us to publish a summary and analysis of information disclosed by Christchurch Airport, including information about its price setting event.[19]

4. The conclusions and analysis in this report take into account the submissions we received on this review, in response to our *Process and Issues paper* published on 20 October 2017, and our *Draft report on the Review of Christchurch International Airport's pricing decisions and expected performance (July 2017-June 2022)* (draft report) published on 26 April 2018.[20]

5. Where relevant, we have also considered submissions on our *Draft report on the Review of Auckland International Airport's pricing decisions and expected performance (July 2017-June 2022) (draft report)* published on 19 July 2018, due to the similar issues covered.

Structure of this chapter

6. This chapter discusses:

   6.1 the context for this report;

   6.2 the focus of our review, including consideration of stakeholder views;

   6.3 our approach to assessing expected performance in this review;

   6.4 the information we have used to assess expected performance; and

   6.5 the structure of the document.

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18 References in this report to the "Commerce Act 1986", the "Act" and any provisions of the Act, are all references to the Commerce Act 1986 prior to the Commerce Amendment Act 2018 coming into force on 26 October 2018.

19 Christchurch Airport is required to publicly disclose information about its price setting event in accordance with the *Airport Services Information Disclosure Determination 2010,* as amended, most recently on 21 December 2017.

20 Our draft report, the *Process and Issues paper*, and submissions received on these documents can be found at: http://www.comcom.govt.nz/regulated-industries/airports/airports-information-disclosure-summary-and-analysis/price-setting-event-3-pse3-for-auckland-and-christchurch/.

Context for this report

Christchurch Airport has reset its prices

7. In June 2017, Christchurch Airport reset its prices for the period 1 July 2017 to 30 June 2022 after consulting with airlines. Christchurch Airport refers to this as its third price setting event (PSE3).

8. Christchurch Airport provided its first pricing disclosure under information disclosure regulation in 2011.[21] It has been consulting with airlines on proposed price changes before this under the Airport Authorities Act 1966 (AAA) and continues to do so.

9. Under the AAA, airports can set prices as they see fit, but must consult with airlines prior to fixing or altering charges and within at least five years after fixing or altering charges.[22] This means that airports reset prices at least every five years.

10. In this document, we refer to Christchurch Airport's first and second price setting events as 'PSE1' and 'PSE2' (PSE1 relates to the pricing period 1 July 2007 to 30 June 2012 and PSE2 relates to the pricing period 1 July 2012 to 30 June 2017).[23]

Christchurch Airport has publicly disclosed information about its pricing decisions

11. In August 2017, Christchurch Airport publicly disclosed information about its pricing decisions over the PSE3 period.

12. After a price setting event, the three airports subject to information disclosure regulation—Auckland, Wellington and Christchurch International Airports[24]—must publicly disclose information relating to their forecast total revenue requirement for their regulated services.[25]

13. Although not the subject of this report, each regulated airport must also annually publish historical information relating to its financial position in relation to specified airport services and the quality of those services.[26]

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21 Christchurch Airport has been subject to information disclosure regulation under Part 4 of the Act since 2008. Transitional disclosures were made under both Part 4 of the Act and the Airport Authorities Act 1966 until we issued our first set of disclosure requirements, which Christchurch Airport disclosed against in 2011.

22 Specifically, section 4B of the AAA requires airports to consult with "substantial customers", the meaning of which is set out in section 2A of the AAA.

23 The implementation of Christchurch Airport's prices relating to the PSE2 period was delayed to December 2012 due to the Canterbury earthquakes. This means that PSE2 effectively lasted four and a half years rather than five years.

24 See section 56A of the Act.

25 Under section 53B(1)(a) of the Act, every supplier of goods or services subject to information disclosure regulation must publicly disclose information in accordance with the information disclosure requirements set out in the relevant section 52P determination. The relevant determination for airports is the *Airport Services Information Disclosure Determination 2010,* as amended, most recently on 21 December 2017.

26 *Airport Services Information Disclosure Determination 2010,* as amended, most recently on 21 December 2017, Clauses 2.3 and 2.4. For the information relating to the disclosure year 2018, the relevant reference is the *Airport Services Information Disclosure Amendments Determination [2016]* NZCC 29, clauses 2.3 and 2.4.

14. **Table 1.1** outlines the regulated services which are the subject of Christchurch Airport's PSE3 disclosure and this report.[27] These regulated services can be grouped into two categories.

    14.1 'Priced services' are those regulated services for which prices are set for the five-year pricing period, after consultation with "substantial customers".[28] Priced services represent the majority of Christchurch Airport's RAB (about 84.5% in 2017).[29]

    14.2 'Other regulated services'—representing about 15.5% of Christchurch Airport's RAB—are those regulated services which are priced through contractual arrangements with individual customers, rather than standardised terms. These contracts have a variety of lengths and start dates, which are not necessarily aligned with the five-year regulatory pricing period.[30]

Table 1.1 Regulated airport services

Priced services typically include	*Other regulated services typically include*
• airfield landing facilities and services, such as the provision and maintenance of airfields, runways and taxiways. • airfield parking facilities and services. • specified passenger terminal activities such as passenger seating areas, thoroughfares, and air-bridges.	• aircraft and freight activities—facilities and services that help maintain aircraft and the handling of freight transport by aircrafts. This could include facilities and services for the refuelling of aircraft, waste disposal, and the storing of freight. • other specified passenger terminal activities, which may include facilities and services for the operation of customs, immigration, quarantine checks, security and police services, terminal lounges, and collection facilities for duty free.

15. Christchurch Airport also offers services which are not regulated under Part 4 of the Act and are outside the scope of this report. Examples of these services may include: the space for retail outlets in the terminals (duty free stores, speciality stores, news and book stores, and food and beverage outlets), access for taxis and public transport, car parks and car rental tenancies and property leases.

We must publish a summary and analysis of Christchurch Airport's disclosed information

16. We are publishing this report under section 53B(2)(b) of the Act, which requires us to publish summary and analysis of the publicly disclosed information as soon as

27 These regulated services are defined in section 56(1) of the Act and in more detail in section 2 of the AAA.

28 See section 2A of the AAA.

29 'Priced services' form the 'pricing asset base' in the *Airport Services Information Disclosure Determination 2010,* as amended, most recently on 21 December 2017.

30 Under section 4B of the AAA, the airport is required to consult substantial customers in respect of charges on all regulated services within five years. This requirement encompasses 'other regulated services' priced under individual contractual arrangements. Nonetheless, the airport is not required to consult with a substantial customer who has consented in writing (and not withdrawn that consent) to not being consulted about a specific charge.

practicable. This is for the purpose of promoting greater understanding of Christchurch Airport's performance, its relative performance, and the changes in performance over time.

17. To promote greater understanding of Christchurch Airport's performance, this report contains our analysis and conclusions on Christchurch Airport's pricing decisions and expected performance over the PSE3 period. Where appropriate, we compare this forecast performance to Christchurch Airport's past performance, and compare Christchurch Airport's past performance to that of other airports.

Previous review of Christchurch Airport's performance and pricing decisions

18. In 2013, we reviewed Christchurch Airport's performance and pricing decisions for the 2013-17 pricing period (PSE2) and aspects of its actual performance over the 2008-12 pricing period (PSE1).[31] This was part of a wider review on the effectiveness of information disclosure regulation under section 56G of the Act.[32]

Focus of our review

19. We have focussed our review of Christchurch Airport's pricing decisions and expected performance for the PSE3 period on the following aspects of Christchurch Airport's performance:

    19.1 Expected profitability: is Christchurch Airport limited in its ability to extract excessive profits?

    19.2 Pricing efficiency: are the prices set by Christchurch Airport likely to promote efficiency?

20. We have assessed whether these aspects of Christchurch Airport's performance are likely to promote outcomes that are in the long-term benefit of consumers and are consistent with the outcomes sought in the purpose of Part 4 of the Act. Section 53A of the Act sets out that the purpose of information disclosure regulation is to ensure that sufficient information is readily available to interested persons to assess whether the purpose of Part 4 of the Act is being met.

21. The purpose of Part 4 as set out in section 52A(1) of the Act is to:

> *promote the long-term benefit of consumers in [regulated markets] by promoting outcomes that are consistent with outcomes produced in competitive markets such that*

[31] A forward-looking review of Christchurch Airport's pricing decisions for PSE1 was not carried out because information disclosure regulation came into effect on 1 January 2011 part way through the PSE1 period, which commenced on 1 July 2007.

[32] Commerce Commission "Report to the Ministers of Commerce and Transport on how effectively information disclosure regulation is promoting the purpose of Part 4 for Christchurch Airport" (13 February 2014). This one-off review was reported to the Ministers of Commerce and Transport. We also provided section 56G reports in relation to the regulated airport services provided by Wellington and Auckland Airports. These section 56G reports can be found at: http://www.comcom.govt.nz/regulated-industries/airports/section-56g-reports/

suppliers of regulated goods or services:

(a) have incentives to innovate and to invest, including in replacement, upgraded, and new assets; and

(b) have incentives to improve efficiency and provide services at a quality that reflects consumer demands; and

(c) share with consumers the benefits of efficiency gains in the supply of the regulated goods or services, including through lower prices; and

(d) are limited in their ability to extract excessive profits.

22. Our focus on expected profitability and pricing efficiency does not necessarily cover all outcomes reflected in the Part 4 purpose statement.

23. Investment efficiency is not a key focus of this review, unlike our review of Auckland Airport's pricing decisions and expected performance for PSE3. Unlike Auckland Airport, Christchurch Airport is not proposing significant capital expenditure investment in PSE3. Nonetheless, we have given due consideration to the reasonableness of Christchurch Airport's capital expenditure forecasts. We have considered the impact these forecasts are likely to have on expected profitability, as we have done for other forecasts, including operating expenditure and demand.

24. As with our review of Auckland Airport, we have not explicitly considered Christchurch Airport's incentives to innovate (section 52A(1)(a)) or its sharing of efficiency gains (section 52A(1)(c)). We have only undertaken limited analysis on efficiency improvements and service quality (section 52A(1)(b)). This reflects the nature of the forward-looking information provided in Christchurch Airport's PSE3 disclosure, which is the subject of this review.

25. As price setting event (PSE) disclosures contain forward-looking information, they provide the most detail about expected profitability, prices and forecast operating and capital expenditure. PSE disclosures do not provide much information about the appropriateness of airports' level of innovation and quality of services, or whether the operational expenditure and investment is efficient. The historical information disclosed annually by airports provides better insight into these areas of performance, but are not the subject of this review.

Stakeholders' views on the focus of this review

26. In response to our *Process and Issues paper* and draft report, stakeholders commented on the scope of our review of Christchurch and Auckland Airport's pricing decisions and expected performance over the PSE3 period.

27. A number of submitters welcomed a future review of airports' historical performance, where innovation, service quality, and efficiency can be assessed.[33] Wellington Airport expressed concern that New Zealanders are not being provided with a full contextual assessment of airport performance in New Zealand, noting that this includes ensuring airport performance is assessed against all limbs of Part 4, without an undue focus on profitability.[34] Air New Zealand commented that "information disclosure is not a strong enough regulator of airport services to drive best outcomes for consumers in areas such as service quality and efficiency".[35]

28. The New Zealand Airports Association (NZ Airports) considered that our focus for this review "appropriately reflects the nature and content of the price setting disclosures"[36] while noting that assessing each limb of the Part 4 purpose statement is an ongoing task, and cannot reasonably be completed by a snapshot assessment of each price setting event disclosure.[37] This view was supported by both Auckland Airport and Christchurch Airport.[38]

29. The Board of Airline Representatives New Zealand Incorporated (BARNZ) argued that innovation, quality and efficiency are areas of performance that most directly affect consumers.[39] BARNZ considered that to provide a full view of airport performance over time, it is essential to review expenditure efficiency, quality of service and innovation as well as the areas of focus in this report.[40]

30. We note that prior to the release of our draft report, Air New Zealand, BARNZ and Qantas argued that this review should cover airports' annual ex-post information disclosures.[41] Air New Zealand remarked that it is not clear whether such a review will occur and BARNZ noted that such a review is "well overdue."[42]

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33 A4ANZ "Submission on draft report for review of Christchurch International Airport's pricing decisions and expected performance (July 2017 – June 2022)" (16 August 2018), page 3. Air New Zealand "Submission on draft report for review of Auckland International Airport's pricing decisions and expected performance (July 2017 – June 2022)" (29 May 2018), page 3. BARNZ "Response to Draft Report on Auckland Airport's PSE3 pricing decision" (29 May 2018), page 6. Qantas "Qantas Group's Response to Draft Report on Auckland Airport's PSE3 Pricing Decision" (29 May 2018), page 2. NZ Airports Association "Submission on draft report for review of Auckland International Airport's pricing decisions and expected performance (July 2017 – June 2022)" (29 May 2018), page 5.

34 Wellington Airport "Response to draft report on Christchurch International Airport's PSE3 pricing" (16 August 2018), page 1.

35 Air New Zealand "Submission on draft report for review of Auckland International Airports pricing decisions and expected performance (July 2017 – June 2022)" (29 May 2018), page 4.

36 NZ Airports Association "Cross submission on process and issues paper on the review of Auckland and Christchurch Airports third prices setting for airport services" (12 December 2017), paragraph 10a.

37 NZ Airports Association "Cross submission on process and issues paper on the review of Auckland and Christchurch Airports third prices setting for airport services" (12 December 2017), paragraph 11c.

38 Auckland Airport "Section 53B review of Auckland Airport's price setting event: Cross-submission on process issues" (12 December 2017), page 1. Christchurch Airport "CIAL Cross submission on process, timing and changes to proposed section 53B process" (12 December 2017), page 1.

39 BARNZ "Submission on process and issues paper on the review of Auckland and Christchurch Airports third prices setting for airport services" (30 November 2017), paragraph 19.

40 BARNZ "Response to Draft Report on Auckland Airport's PSE3 pricing decision" (29 May 2018), page 6.

41 Air New Zealand "Submission on process and issues paper on the review of Auckland and Christchurch Airports third prices setting for airport services" (30 November 2017), paragraph 5. BARNZ "Submission

31. BARNZ was also concerned that Christchurch Airport's capital expenditure plans were not within the proposed focus of our review. In BARNZ's view, it is important to review and scrutinise all capital expenditure by regulated airports to reduce scope for airports to undertake unnecessary expenditure. BARNZ noted that while Christchurch Airport's capital expenditure plan is much smaller than Auckland's, it is still material and includes controversial projects.[43]

Comment on our focus

32. The performance indicators of innovation, service quality, and efficiency are not the focus of this review, and are better assessed as part of a review of ex-post annual disclosures. Nonetheless, these performance indicators are considered in our analysis to the extent that Christchurch Airport's PSE3 disclosure provided relevant insight into these aspects of performance, especially in the context of analysing expected profitability and pricing efficiency.

33. We have given due consideration to the reasonableness of Christchurch Airport's capital expenditure forecasts and the impact these forecasts are likely to have on the airport's expected profitability over PSE3. In this context, we have also considered whether the forecast capital expenditure is likely to provide services at a quality which consumers want in the future.

34. We consider the review we have undertaken with respect to capital expenditure is appropriate and commensurate to the size and risks associated with Christchurch Airport's capital expenditure plans.

35. We have also considered how Christchurch Airport's change in pricing structure may contribute to improving the efficient use of its assets over the long-term and higher quality services in the future.

36. We have taken account of relevant historical information in Christchurch Airport's annual disclosures when comparing the airport's performance over time, such as its operating and capital expenditure and demand growth.

37. We consider it preferable to commence an ex-post analysis of airports' performance against a complete five-year pricing period for all three regulated airports (Auckland, Wellington and Christchurch). This provides more historic information to meaningfully understand relative performance, assess trends, and the changes in performance over time.

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on process and issues paper on the review of Auckland and Christchurch Airports third prices setting for airport services" (30 November 2017), paragraph 26. Qantas "Submission on process and issues paper on the review of Auckland and Christchurch Airports third prices setting for airport services" (30 November 2017), page 2.

42 Air New Zealand "Submission on process and issues paper on the review of Auckland and Christchurch Airports third prices setting for airport services" (30 November 2017), paragraph 6. BARNZ "Submission on process and issues paper on the review of Auckland and Christchurch Airports third prices setting for airport services" (30 November 2017), paragraph 4.

43 BARNZ "Review of Auckland and Christchurch Airport's third price setting events – Process & Issues paper" (28 November 2017), paragraph 16.

38. We have complete information relating to Auckland and Christchurch Airports' historical performance for the five-year pricing period over 2013-17 (PSE2). We expect to have this information in relation to Wellington Airport in mid-2019, once it completes its first five-year pricing period (since information disclosure regulation came into effect).[44] We consider it best to commence an ex-post analysis of airports' performance after this has occurred, so that our analysis covers all three regulated airports.[45]

39. We do not agree with Air New Zealand, who noted that our focus on particular aspects of performance for this review sets a precedent for subsequent reviews.[46] We will base the scope of future reviews on the relevant circumstances and relevant information disclosed at the time.

40. Furthermore, the Act does not require us to undertake analysis on all aspects of performance in relation to a particular information disclosure. As indicated, our summary and analysis, under section 53B(2)(b) of the Act, is undertaken to promote greater understanding about the performance of each airport, their relative performance, and changes in performance over time. We consider that our focus for this review on expected profitability and pricing efficiency, and our analysis on other areas of performance, including the reasonableness of capital expenditure, operating expenditure, and demand forecasts, contributes to this purpose.

Approach to assessing expected performance in this review

41. We have assessed whether Christchurch Airport's pricing decisions and expected performance over PSE3 is consistent with outcomes that are in the long-term benefit of consumers, as reflected in the purpose of Part 4 of the Act.

42. We outline the broad approach to this assessment below. There are some differences in the specific approaches taken to assessing each performance area. We outline these specific approaches in the relevant sections throughout this report.

Input methodologies provide a benchmark for assessing expected performance

43. Our Input Methodologies (IMs) for regulated airport services provide a benchmark for assessing whether the Part 4 purpose is being promoted, notably in regards to profitability.

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44 We do not have complete information relating to airports' historical performance over the PSE1 period (FY2008-FY2012), which commenced prior to the introduction of information disclosure regulation in 2011. In addition, Wellington Airport brought forward its third price setting event. As a result, Wellington Airport has not completed a full five-year pricing period since information disclosure regulation began.

45 Prior to undertaking this ex-post analysis, we also intend to amend backward looking information disclosure requirements so that historical information can be more effectively compared to forecasts. This is to align with the recent amendments to the forward looking information that airports must disclose.

46 Our view was shared by the NZ Airports Association. See NZ Airports Association "Cross submission on process and issues paper on the review of Auckland and Christchurch Airports third prices setting for airport services" (12 December 2017), paragraph 17.

44. IMs represent our best assessment of how certain parameters—cost allocation, asset valuation, the treatment of taxation, and the cost of capital—should be specified to promote the setting of revenue targets that are consistent with the Part 4 purpose.

45. IMs are intended to promote certainty about the rules and processes applying to information disclosure regulation. Airports are not required to apply the IMs in setting their prices or in determining their cost of capital.[47] With the exception of our estimated cost of capital, airports must disclose information consistent with the IMs.[48] Nonetheless, the IM for the cost of capital is applied by us in order to monitor and analyse information disclosed by the airports.[49] The onus is on airports to provide sufficient reasoning as to why their targeted returns may be above the mid-point WACC estimate, which we publish in advance. Any reasoning needs to consider the long-term benefits of consumers. We discuss our framework for applying this in **Attachment A**.

We consider reasons for departure from our Input Methodologies

46. Our IMs provide an appropriate benchmark for assessing expected performance. However, they do not necessarily provide the only legitimate benchmark for assessing expected performance against the purpose of Part 4 of the Act.

47. If the airport's forecasts are not fully aligned with our IMs, we do not assume the Part 4 purpose is not being promoted. We consider the extent to which the airport's approach is different to our IMs, reasons for such differences, and the impact this has on expected performance. We then determine whether we are satisfied that the evidence provides legitimate reasons for the difference from our IMs, in light of the Part 4 purpose. Ultimately, we consider whether a difference from our IMs is promoting the long-term benefit of consumers.

48. In this review, we consider the appropriateness of Christchurch Airport targeting returns above our mid-point WACC estimate.

We consider what we might expect to find in a workably competitive market where Input Methodologies are not available

49. Our analysis considers whether the airport's conduct and decisions are consistent with those in a workably competitive market. This includes decisions regarding the sharing and managing of risk between itself and its customers and decisions about the relative prices charged to different customers (ie, the pricing structure).

50. This is most relevant to our analysis of Christchurch Airport's pricing efficiency, where IMs are less prescriptive and less relevant than they are in relation to our analysis of the airport's profitability. Instead, information disclosed on price setting methodologies, as part of the information disclosure requirements, is particularly

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47 Section 53F(1)(b) of the Act.

48 Clause 2.2, *Airport Services Information Disclosure Determination 2010,* as amended, most recently on 21 December 2017

49 Section 53F(2)(a) of the Act.

important for helping interested parties understand and form a view on the efficiency of prices.

51. To assess this, we have been largely reliant on submissions received from interested parties about the airport's conduct throughout its consultation process and the level of agreement among stakeholders regarding the outcomes of that process.

We take into account relevant context, analysis and decisions we have made

52. Our approach to assessing Christchurch Airport's pricing decisions and expected performance over PSE3 is consistent with the framework we have applied in our report reviewing Auckland Airport's pricing decisions and expected performance over PSE3.[50]

53. We have sought consistency with the framework we applied in our review of Christchurch Airport's PSE2 disclosure, except where there is a good reason for departure (for example, to reflect changes to our IMs following our 2016 review).

54. We have also considered how the airport's forecast performance over the PSE3 period compares to its historical performance, and reasons for over- and under-performance in the past.

We previously reviewed Christchurch Airport's PSE2 disclosure

55. Our review of Christchurch Airport's PSE2 disclosure was undertaken as part of a wider review on the effectiveness of information disclosure regulation.[51] This one-off review was required under section 56G of the Act and differs to this report, carried out under section 53B of the Act, and seeks to provide a better understanding about particular areas of Christchurch Airport's expected performance.

56. In our section 56G report on Christchurch Airport, we stated that our overall impression was that information disclosure regulation has had little influence over Christchurch Airport's behaviour. In that report, we concluded that:[52]

    56.1 information disclosure was effective in promoting incentives to innovate and to provide services at a quality that reflects consumer demand;

    56.2 information disclosure had not been effective in limiting expected excessive profits over the 20-year pricing period on which Christchurch Airport's prices for PSE2 were based;[53]

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50 Commerce Commission "Review of Auckland International Airport's pricing decisions and expected performance (July 2017 – June 2022)" (1 November 2018).

51 This one-off review was reported to the Ministers of Commerce and Transport. We provided section 56G reports in relation to the regulated airport services provided by Wellington and Christchurch Airports as well. These section 56G reports can be found at: http://www.comcom.govt.nz/regulated-industries/airports/section-56g-reports/.

52 Commerce Commission "Report to the Ministers of Commerce and Transport on how effectively information disclosure regulation is promoting the purpose of Part 4 for Christchurch Airport" (13 February 2014), paragraphs X2 – X9.

56.3 Christchurch Airport had not provided sufficient information to allow interested persons to assess its expected profitability performance and its price setting disclosure did not fully or transparently reflect its pricing approach;

56.4 information disclosure had not been as effective in promoting pricing efficiency as we would have expected; and

56.5 we were unable to conclude whether information disclosure had been effective in other areas (operating expenditure efficiency, efficient investment and the sharing of efficiency gains), given the limited time series data available.

Information we have used to assess expected performance in this review

57. We have prepared this report after considering all submissions and cross submissions received on our *Process and Issues paper* and our draft report.

58. We have relied on the following information as part of our review:

58.1 information disclosed by Christchurch Airport under Part 4 of the Act, including its PSE3 disclosure and historical information to the extent relevant;[54]

58.2 material provided by stakeholders as part of the consultation process for this review (on our *Process and Issues paper* and our draft report); [55]

58.3 information we requested from Christchurch Airport to clarify aspects of its PSE3 disclosure and submissions on our consultation process, following the close of consultation;[56] and

58.4 information made available by Christchurch Airport that is not required to be disclosed under Part 4 of the Act (for example, we relied on Christchurch Airport's pricing model to assess its profitability).

We have not limited our consideration of information in this review but have had regard to the information available at the time of the price setting event

59. In response to our *Process and Issues paper*, NZ Airports asked that this review focus on the information available at the time of the price setting event. It stated that the review should not provide a forum for consulting participants to raise new concerns or put forward new evidence or arguments that were not put to the airports during

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53 We assessed Christchurch Airport's price setting conduct over the 20-year period because Christchurch Airport explained that its PSE2 charges represented the beginning of the recovery of the costs over the 20-year economic lifetime of its integrated terminal project.

54 See http://www.christchurchairport.co.nz/en/about-us/corporate-information/regulatory-disclosures/.

55 See http://www.comcom.govt.nz/regulated-industries/airports/airports-information-disclosure-summary-and-analysis/price-setting-event-3-pse3-for-auckland-and-christchurch/.

56 See http://www.comcom.govt.nz/regulated-industries/airports/airports-information-disclosure-summary-and-analysis/price-setting-event-3-pse3-for-auckland-and-christchurch/.

the consultation process.[57] This view was supported by Auckland Airport.[58] Christchurch Airport did not provide a view.

60. BARNZ submitted that the Commission should consider all relevant information provided to it as part of the review consultation process. BARNZ considered that limiting our review to information available at the time prices were set would reduce our ability to review the decisions and create substantial procedural and practical difficulties.[59]

61. We agree with BARNZ that we can consider all relevant information provided to us as part of the review consultation process. We have flexibility in how we carry out our analysis, provided we are doing so for the purpose of promoting greater understanding of Christchurch Airport's performance, as per section 53B(2)(b) of the Act. We have not limited our review to consider only information that was available at the time that prices were set.

62. Nevertheless, when assessing the reasonableness of decisions made by Christchurch Airport during their price setting event, we have given consideration to the information that was available to them at that time. NZ Airports responded that it is comfortable with this approach.[60]

Structure of this report

63. **Chapter 2** contains our analysis and conclusions on the appropriateness of Christchurch Airport targeting returns above our mid-point WACC estimate.

64. **Chapter 3** contains our analysis and conclusions on the extent to which Christchurch Airport's pricing methodology is likely to result in prices which raise efficiency concerns.

65. Attachments support our analysis.

    65.1 **Attachment A** contains our assessment of Christchurch Airport's cost of capital. This supports our analysis and conclusions in **Chapter 2.**

    65.2 **Attachment B** contains our assessment of forecasts affecting Christchurch Airport's returns, including its asset values, forecast demand, forecast operating expenditure, and forecast capital expenditure. This supports our analysis and conclusions in **Chapter 2.** This attachment also considers:

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57 NZ Airports Association "Submission on process and issues paper on the review of Auckland and Christchurch Airports third prices setting for airport services" (30 November 2017), paragraph 5.

58 Auckland Airport "Submission on process and issues paper on the review of Auckland and Christchurch Airports third prices setting for airport services" (30 November 2017), page 5.

59 BARNZ "Cross-submission on the Review of Auckland and Christchurch Airport's third price setting events – Process & Issues paper – process, timing and scope" (12 December 2017), paragraph 17.

60 NZ Airports "Submission on draft report for review of Auckland International Airport's pricing decisions and expected performance (July 2017 - June 2022)" (29 May 2018) paragraph 21.

65.2.1 whether Christchurch Airport has incentives to improve its operating efficiency and provide services at a quality that reflects consumer demands; and

65.2.2 whether Christchurch Airport has incentives to invest appropriately, efficiently and at a quality standard that reflects consumer demands.

65.3 **Attachment C** describes our methodology for assessing of Christchurch Airport's expected profitability, discussed in **Chapter 2.**

65.4 **Attachment D** discusses how effective recent amendments to the IM and ID Determinations have been in improving the transparency of Christchurch Airport's expected profitability.

Chapter 2 Expected profitability: is Christchurch Airport limited in its ability to extract excessive profits?

Purpose

66. This chapter contains our analysis and conclusions on the appropriateness of Christchurch Airport targeting returns above our mid-point WACC estimate. Our key consideration is the extent to which these target returns are likely to promote the long-term benefit of consumers.

67. This analysis is relevant to the extent to which Christchurch Airport is limited in its ability to extract excessive profits (section 52A(1)(d) of the Act).

68. Our analysis and conclusions on forecasts underpinning Christchurch Airport's expected returns and profitability are discussed in **Attachment A** (Cost of capital) and **Attachment B** (Forecasts affecting target returns)**.** These forecasts include asset values, demand forecasts, operating expenditure forecasts, and capital expenditure forecasts.

Conclusions

We are broadly satisfied that Christchurch Airport is not targeting excessive profits

69. In our view, Christchurch Airport is unlikely to be targeting excessive profits on the majority of its regulated services.

70. Christchurch Airport expects to earn 6.65% on its total RAB over the PSE3 period. This is a weighted average of its:

    70.1 target return of 6.44% on the majority of its regulated services (about 85% of the RAB), which apply standard prices and are consulted on over the five-year PSE3 period. These are referred to as 'priced services' and include the use of airfield runways and taxiways, air-bridges and baggage handling services.

    70.2 expected return of 7.87% on its remaining RAB (about 15%). These 'other regulated services' may include terminal lounges, and facilities and services for the operation of customs, immigration, quarantine checks, security and police services, refuelling of aircraft, and storage of freight. These services are subject to individual negotiated contracts of variable length and start dates.

71. We note that Christchurch Airport's target return on its 'priced' and 'other regulated' services is below its own estimated WACC of 6.82%. This is different to Auckland Airport's approach over PSE3 of targeting a return on its priced services consistent with its own estimated WACC of 6.99%.[61]

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

72. As a result, our main focus is on the appropriateness of Christchurch Airport's target return (rather than its WACC estimate) as this is the key measure that affects profitability.

73. In this chapter, we discuss our views on the expected return for priced services and other regulated services separately. We discuss our views on the airport's WACC in detail in **Attachment A**.

Christchurch Airport's target return on its priced services is reasonable

74. Overall, we consider Christchurch Airport's target return of 6.44% on its priced services over PSE3 is reasonable.

75. Having considered the reasons and evidence provided by Christchurch Airport, we are satisfied that Christchurch Airport's target return of 6.44% on its priced services is reasonable and consistent with promoting the long-term benefit of consumers.

76. As noted in the IM Review, a precise WACC for an airport is unobservable to both us and the airport itself.[62] However, we consider our mid-point WACC estimate of 6.41%, determined using the methodology set out in the IMs, is an appropriate starting point when assessing the returns for profitability analysis. [63]

77. This is based on our view that Christchurch Airport has sufficiently justified its use of a slightly higher cost of debt estimate than we used to determine our mid-point WACC estimate of 6.41%.

78. Christchurch Airport's debt premium estimate is based on its actual credit rating of BBB+ (compared to our benchmark of A-). In our view, using a debt premium estimate of 1.84% is reasonable in Christchurch Airport's specific circumstances, and appears to be consistent with prudent levels of debt financing.[64] The airport's debt premium estimate of 1.84% compares to our estimate (for a regulated airport business with a credit rating of A-) of 1.45%.

79. We note that Christchurch Airport is targeting a return below its own estimated WACC of 6.82%. The airport states that this difference is largely due to route incentive payments. Christchurch Airport explains how these payments are "Bilateral arrangements with airlines that agree rebates (or similar) to encourage the establishment of new services or capacity".[65]

80. The inclusion of route incentive payments when disclosing a target return, but not as a cost in the pricing model has caused confusion to airlines and limited the ability for stakeholders to scrutinise the overall impact of these incentive payments.

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62 Commerce Commission "Input methodologies review decisions – Topic paper 6: WACC percentile for airports" (20 December 2016), paragraph 64.

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

64 If Christchurch Airport's debt premium estimate of 1.84% were applied, this would shift the WACC estimate to 6.47%

65 Christchurch Airport "Additional material on the reset of aeronautical prices for the period 1 July 2017 to 30 June 2022" (28 June 2018), paragraph 17.

81. We expect Christchurch Airport to provide greater transparency on the impact of these route incentive payments in future, including consulting with airlines on price and demand forecast impacts and being transparent about how they affect the overall target return.

Reviewing returns on other regulated services over a longer timeframe

82. Unlike Christchurch Airport's priced services, we do not consider that Christchurch Airport has sufficiently justified its expected return of 7.87% on its other regulated services.

83. However, we consider that an airport's returns on other regulated services are likely to be better assessed over a longer timeframe. The negotiated contracts that apply to these services have varying durations and start dates that are not necessarily well aligned with the five-year PSE3 pricing period.

84. Other regulated services represent a relatively small proportion of Christchurch Airport's RAB—currently, about 15%.

85. We consider that an airport's returns on other regulated services are likely to be better assessed over a longer timeframe. In addition, there are a wide range of factors—such as market conditions, rent reviews and break clauses—that can affect the prices under the contracts that apply to these services.

86. Any review of services under bilaterally negotiated contracts should account for the context of a particular airport. For example, any review would be proportionate to the size of other regulated services and take into account concerns that have been raised by counterparties about customers' limited bargaining position when entering into these contracts.

Our approach to assessing Christchurch Airport's expected returns

87. In considering whether we expect Christchurch Airport to earn excessive profits, we have used our mid-point WACC estimate provided for in our IMs as our starting point. Against this, we have considered the appropriateness of the airport's target returns. The onus is on airports to provide sufficient reasoning as to why their targeted returns may be above the mid-point WACC estimate, which we publish in advance. Any reasoning needs to consider the long term benefit of consumers.

88. As part of this:

    88.1 We have estimated Christchurch Airport's expected returns over PSE3 using an internal rate of return (IRR) calculation. The IRR allows us to assess the airport's expected returns across the remaining lifetime of the assets used in supplying regulated airport services during the PSE3 period.

    88.2 We have calculated the return we expect Christchurch Airport to earn over the PSE3 period, based on: the prices it has set, its forecast passenger volumes and aircraft movements, and its forecast costs.

88.3 We carefully reviewed the reasons why Christchurch Airport used different parameters or approaches from those set out in the ID requirements. With the exception of Christchurch Airport's higher target return, Christchurch Airport's parameters were consistent with our IMs.

88.4 We have compared Christchurch Airport's expected return to our estimate of the WACC that would be expected for airport businesses with similar risk at the time prices were set. This is our mid-point WACC estimate of 6.41%.[66]

89. **Attachment C** outlines our methodology for this profitability assessment in more detail.

We assess Christchurch Airport's expected returns against our mid-point WACC estimate

90. Our approach of comparing Christchurch Airport's expected returns to our mid-point WACC estimate is consistent with our 2016 input methodology (IM) review.

91. In the IM Review, we changed our approach to disclosing WACC, due to two main problems with the previous framework:[67]

91.1 the upper limit of our WACC range had become the de facto benchmark when assessing airport profitability;[68] and

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

92. Given airports are not subject to price-quality path regulation and are not required to apply our mid-point WACC estimate, it is not necessary to specify a particular WACC percentile estimate. Airports are still required to provide evidence that provides an explanation for differences between their targeted returns and our mid-point WACC estimate, and their target return and their WACC estimate.[69] They may also use the standard error to report the equivalent percentile. In contrast, we have specified the 67th percentile WACC estimate for setting price-quality paths for electricity lines and gas pipeline businesses.

93. We noted that this approach:[70]

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66 This can be found at: Commerce Commission "Cost of capital determination for information disclosure year 2018 for electricity distribution services and specified airport services (March year-end disclosure year)" (28 April 2017).

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

68 The previous WACC range comprised of the 25th to 75th WACC percentile estimates.

69 *Airport Services Information Disclosure Determination 2010,* as amended, most recently on 21 December 2017, clause 2.5(1)(i). Note the different language in the information disclosure requirements: 'post-tax WACC at price setting event' is our mid-point estimate; 'forecast cost of capital' is an airport's own estimate of WACC; and 'forecast post-tax IRR' is equivalent to an airport's target return over the pricing period.

70 Commerce Commission "Input methodologies review decisions – Topic paper 6: WACC percentile for airports" (20 December 2016), page 3.

93.1 enables flexibility in assessing the acceptability of airport returns, and will reduce the focus of any assessment on the upper limit of the range; and

93.2 will provide flexibility to enable any assessment to take into account different contextual factors affecting an airport's required return expectations, or the expectations of a particular project.

94. As explained above, Christchurch Airport has different values for its cost of capital estimate and its targeted return. This is in contrast to Auckland Airport, which has targeted a return on its priced services, consistent with its WACC estimate.

95. Within this framework, we accept there may be legitimate reasons for an airport to target a different return to our mid-point WACC estimate and we require airports to provide evidence to explain such differences.[71]

We assess Christchurch Airport's forecasts affecting its expected returns

96. We have considered the appropriateness of Christchurch Airport's forecasts underpinning its expected returns. This includes Christchurch Airport's forecast asset values, demand, operating expenditure, and capital expenditure. We summarise our views on these forecasts in this chapter. **Attachment B** discusses our analysis and conclusions on these forecasts in more depth.

97. Overall, we do not have any significant concerns with Christchurch Airport's forecasts underpinning its expected returns and consider Christchurch Airport's forecast cash flows are suitable for the cash flows used in our IRR calculation. Accordingly, we have used Christchurch Airport's forecasts as a basis for assessing its expected profitability.

Christchurch Airport's expected returns on its regulated asset base

98. Consistent with information disclosed by Christchurch Airport, our own analysis indicates that Christchurch Airport's expected return on its RAB is 6.65% for PSE3 and beyond (ie, from 1 July 2017 over the remaining life of the assets). This expected return is greater than our mid-point WACC estimate of 6.41%.

99. For comparison we have also provided a revised WACC estimate for Christchurch Airport of 6.47% over the PSE3 period that reflects its higher cost of debt estimate. We discuss this in more detail in **Attachment A**.

100. Christchurch Airport's expected returns are compared in **Table 2.1** below, along with the associated expected revenues.

[71] *Airport Services Information Disclosure Determination 2010,* as amended, most recently on 21 December 2017, clause 2.5(1)(i).

Table 2.1 Summary of Christchurch Airport's expected returns and revenue

	Key return	Expected Revenue	WACC percentile
Christchurch Airport's target return on its total RAB	**6.65%**	**$421.6m**	**57th**
This comprises of:			
Christchurch Airport's target return on its priced services (about 85% of the RAB)	6.44%	$368.3m	51st
Christchurch Airport's expected return on its other regulated assets (about 15% of the RAB)	7.87%	$53.4m	84th
A WACC estimate reflecting Christchurch Airport's higher debt premium	**6.47%**	$415.6m	**52nd**
Our mid-point WACC estimate	6.41%	$414.7m	50th

Value and impact of Christchurch Airport's expected returns

101. As shown in **Table 2.1**:

101.1 Christchurch Airport's target return of 6.65% is consistent with expected revenue of $421.6m over PSE3, in present value terms.[72]

101.2 Christchurch Airport's target return of 6.65% is a weighted average of its:

101.2.1 target return of 6.44% on its priced services, which apply standard prices and are consulted on, over the five-year PSE3 period. Priced services represent about 85% of the RAB and include the use of airfield runways and taxiways, air-bridges and baggage handling services.

101.2.2 expected return of 7.87% on other regulated services, which are priced under individual contracts with varying start dates and varying durations that do not necessarily align with the five-year PSE3 pricing period.

101.3 A WACC estimate reflecting Christchurch Airport's higher debt premium would equal 6.47%. This is six basis points above our mid-point WACC estimate of 6.41%. This difference reflects our view that Christchurch Airport has sufficiently justified its use of a slightly higher cost of debt estimate.

101.3.1 Christchurch Airport's debt premium estimate is based on its actual credit rating of BBB+ (compared to our benchmark of A-).

101.3.2 In our view, Christchurch Airport's use of a debt premium estimate of 1.84%, rather than our estimate of 1.45%, is

[72] 'Present value' is 1 July 2017, the start of the PSE3 period. This is calculated using a cost of capital of 6.47% as the discount rate.

reasonable and appears to be consistent with prudent levels of debt financing.

101.4 Christchurch Airport's expected revenue is:[73]

101.4.1 $7.6m above the $414.7m revenue that would be consistent with our mid-point WACC estimate of 6.41%. This is equivalent to an average of 21 cents per passenger per flight. After accounting for tax, this translates to an additional $5.4m in profits.

101.4.2 $6.1m above the $415.6m revenue that would be consistent with a target return of 6.47% (which reflects Christchurch Airport's higher debt estimate).

101.5 As the target return on priced services (6.44%) is below the return which reflects Christchurch Airport's higher debt estimate (6.47%), this additional $6.1m revenue relates entirely to charges on other regulated assets. These charges are applied under individual contracts to customers including the Government (eg, police and MPI), airlines, and other businesses. These charges will be passed on to New Zealanders in a variety of ways, including through general taxation and flight fares.

102. Below, we discuss:

102.1 the appropriateness of Christchurch Airport targeting a return on its priced assets above our mid-point WACC estimate (6.44% compared to 6.41%, or about $7.6m in additional revenue); and

102.2 the appropriateness of Christchurch Airport's expected return on its other regulated assets (7.87%), including our decision to review these returns over a longer period of time.

103. Our key consideration is the extent to which Christchurch Airport's higher target returns are likely to promote the long-term benefit of consumers.

Christchurch Airport's target return on its priced services

104. Priced services are the most significant group of regulated services, representing about 85% of Christchurch Airport's RAB. These services include the use of airfield runways and taxiways, air-bridges and baggage handling services, and apply standard pricing terms, which are consulted on with 'substantial' customers[74] (at least) every five years.

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[73] This is based on our estimate of the difference between the revenues expected to be generated by Christchurch Airport over PSE3 and the revenues required to recover a return of 6.47% and 6.41% (using mid-year cash flows). We have estimated the total per passenger impact over the 5 year period by using total passenger volumes (this includes domestic, international and transit and transfer passengers). The present value of Christchurch Airport's expected revenue is $422.3m when assuming a discount rate of 6.41% and $421.6m when assuming a discount rate of 6.47%.

[74] Section 2A of the AAA.

105. Christchurch Airport's target return on its priced services is 6.44%. This is higher than our mid-point WACC estimate of 6.41% and equivalent to the 51st percentile of our WACC range, estimated as at 1 April 2017.

Christchurch Airport's target return on its priced services is below its estimated WACC

106. Unlike Auckland Airport, Christchurch Airport's target return on its priced services does not match its estimated cost of capital.

107. Christchurch Airport's own estimate of its cost of capital—incorporating its higher debt premium and higher asset beta estimate—is 6.82%. This is higher than its target return of 6.44% on its priced services. Christchurch Airport has explained that this difference primarily arises because it is providing concessions on expenditure to incentivise new airline routes.

108. Christchurch Airport submitted that:[75]

> The principal focus of the Commission (and interested parties) should be on [Christchurch Airport's] expected return over the period, rather than the WACC that was estimated and applied when setting the prices for priced services. [Christchurch Airport's] expected returns are the most direct measurement of its profitability, and are materially lower than [its] estimate of its cost of capital, in large part due to concessions that have been provided to airlines in order to encourage additional services to be established and maintained.

109. **Figure 2.1** shows the factors that explain the difference between:

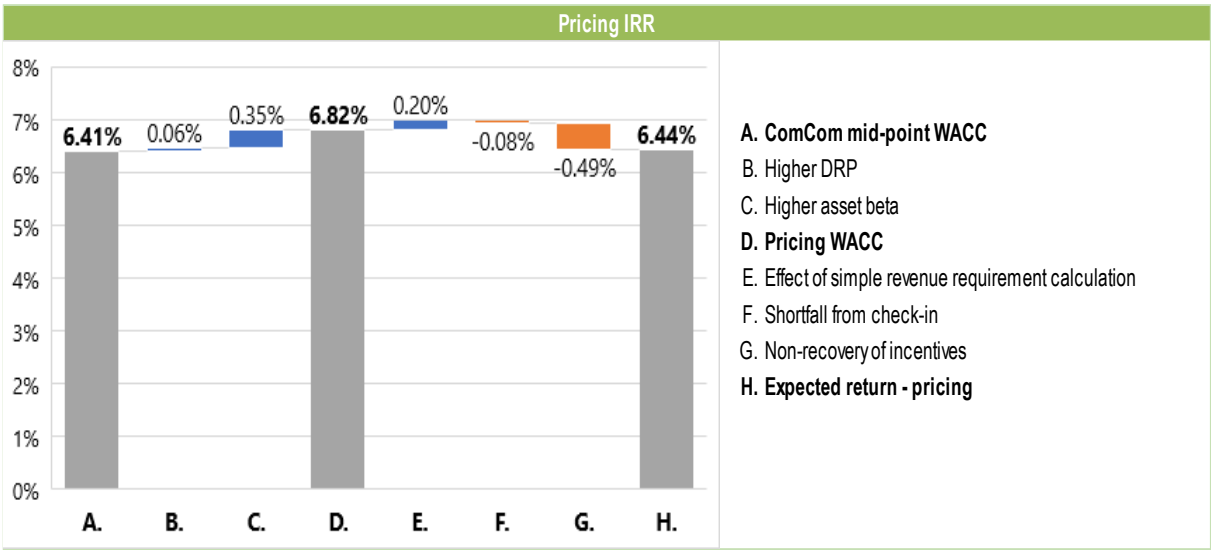
109.1 our mid-point WACC estimate of 6.41%;

109.2 Christchurch Airport's cost of capital of 6.82%; and

109.3 Christchurch Airport's target return on its priced services of 6.44%.

[75] Christchurch Airport "Cross-submission on issues and questions raised in the Commission's process and issues paper on the review of Auckland and Christchurch Airports' third price setting events for airport services" (19 December 2017), paragraph 12.1.

Figure 2.1 Differences between our mid-point WACC estimate and Christchurch Airport's target return and estimated WACC[76]



110. **Figure 2.1** shows that the 41 basis point difference between our mid-point WACC estimate (6.41%) and Christchurch Airport's estimated WACC (6.82%) is explained by:

110.1 Christchurch Airport's higher debt premium estimate (explaining 6 basis points);

110.2 Christchurch Airport's higher asset beta estimate (explaining 35 basis points).

111. **Figure 2.1** also shows that the 38 basis point difference between Christchurch Airport's estimated WACC (6.82%) and its target return on its priced services (6.44%) is explained by Christchurch Airport's:[77]

111.1 use of a simplified building block approach (explaining a 20 point basis increase above its WACC). Christchurch Airport's pricing model assumed most cash inflows and outflows happen at the end of the year and did not assume a distribution of cashflows throughout the year (ie, intra-period cash flows, which were introduced as part of the IM Review);

111.2 continuation of individual contracts for check-in charges (explaining an 8 basis point decrease below its WACC). Check-in charges, which have previously been provided to airlines under individual agreements, have been moved to priced services, provided under standardised contract terms in PSE3. However, the airport expects revenue from check-in activities to be lower than its revenue requirement because it must honour existing contracts; and

111.3 route incentive payments to incentivise new airline routes (explaining a 49 basis point decrease below its WACC). These bilateral arrangements with

[76] Christchurch Airport "Additional material on the reset of aeronautical prices for the period 1 July 2017 to 30 June 2022" (28 June 2018), page 2.

[77] Christchurch Airport "Additional material on the reset of aeronautical prices for the period 1 July 2017 to 30 June 2022" (28 June 2018), page 2-4.

airlines agree rebates (or similar) to encourage new services or capacity. These were not taken into account when determining prices (either in the operating expenditure or revenue forecast) but were included in the target return calculation provided as part of their information disclosure requirements.[78]

Our view on Christchurch Airport's target return on its priced services

112. Below we consider the appropriateness of Christchurch Airport targeting a return on its priced assets above our mid-point WACC estimate (6.44% compared to 6.41%). Our main focus is the appropriateness of Christchurch Airport's target return (rather than its WACC estimate) as this is the key measure that affects profitability. See **Attachment A** for our analysis on its own estimate of WACC (6.82%).

113. Having considered the reasons and evidence provided by Christchurch Airport, we are broadly satisfied that the target return of 6.44% on its priced services is reasonable and consistent with promoting the long-term benefit of consumers.

114. This is based on our view that Christchurch Airport has sufficiently justified its use of a slightly higher cost of debt estimate than we used to determine our mid-point WACC estimate.

Christchurch Airport's use of a higher cost of debt

115. We consider Christchurch Airport has provided legitimate reasons to apply its own debt premium estimate of 1.84%, which differs to our benchmark debt premium of 1.45%. Christchurch Airport's debt premium estimate is based on its actual credit rating of BBB+ (compared to our benchmark of A-). In our view, using a debt premium estimate of 1.84% is reasonable in Christchurch Airport's specific circumstances, and appears to be consistent with prudent levels of debt financing.

116. BARNZ disagreed with our use of Christchurch Airport's own credit rating. It submitted that the use of a BBB+ credit rating for Christchurch was inappropriate and a departure from regulatory precedent.[79] We note that although our (sector wide) mid-point WACC estimate is an appropriate starting point, we consider that under information disclosure regulation it is possible to depart from WACC parameters specified in the IMs when there are legitimate reasons to do so.

117. BARNZ also note that using a regulated supplier's own credit rating could create perverse incentives for the firm.[80] We recognise this concern, but note we are able to take into account a range of factors (including the potential for perverse incentives) when determining the appropriateness of an airport's return.

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78 We note that Christchurch Airport has incorporated forecast incentives in its demand forecasts used for pricing. Therefore we consider it is appropriate to take into account the cost of incentives when assessing Christchurch Airport's expected returns.

79 BARNZ "Draft Report on Christchurch Airport's pricing decisions and expected performance: PSE3" (16 August 2018), paragraph 22.

80 BARNZ "Draft Report on Christchurch Airport's pricing decisions and expected performance: PSE3" (16 August 2018), paragraph 25.

118. As explained in **Attachment A**, we continue to consider Christchurch Airport's cost of debt estimate to be reasonable. In particular we note:

118.1 Christchurch Airport's actual credit rating of BBB+ is still an adequate investment grade rating, and is sufficiently high to ensure there is an adequate buffer against the possibility that economic downturns or shocks lead to financial distress (while providing some flexibility over the level of gearing and the choice of debt instruments);[81]

118.2 Christchurch Airport's credit rating appears to be consistent with a prudent level of debt financing. In its pricing disclosure, Christchurch Airport stated that its gearing "is not substantially higher than the Commission's benchmark", noting that its current gearing (expressed as debt / (debt + equity)) based on book value is just under 30%, and its gearing based on commercial enterprise value would be approximately 21%;[82] and

118.3 BBB+ is consistent with the benchmark credit rating we use for regulated electricity lines and gas pipelines businesses.

Impact of route incentive payments

119. We note that Christchurch Airport is targeting a return below its own estimated WACC of 6.82%. The airport states that this difference is largely due to route incentive payments. Christchurch Airport explain how these payments are "Bilateral arrangements with airlines that agree rebates (or similar) to encourage the establishment of new services or capacity".[83]

120. We agree with Christchurch Airport that active promotion of growth in traffic through the airport is likely to be in the long-term interests of passengers. Incentive payments like this can be beneficial to all airlines and passengers by increasing the demand over which the large fixed costs of Christchurch Airport can be shared. Therefore, the existence of these types of payments does not, by itself, raise concerns that Christchurch Airport can expect excessive profits over the PSE3 period.

121. Despite this, we consider that for the benefit of route incentive payments to be shared with consumers, Christchurch Airport needs to ensure that when including route incentive payments within its disclosed target return:[84]

121.1 its demand forecasts appropriately takes into account the impact of the route incentive payments; and

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81 Commerce Commission "Input methodologies (airport services): Reasons paper" (December 2010), paragraph 6.3.23

82 Christchurch Airport "Disclosure relating to the reset of aeronautical prices for the period 1 July 2017 to 30 June 2022" (14 August 2017), footnote 14, page 26.

83 Christchurch Airport "Additional material on the reset of aeronautical prices for the period 1 July 2017 to 30 June 2022" (28 June 2018), paragraph 17.

84 If these criteria are not met then route incentive payments may not be in the long-term interest of consumers.

121.2 the route incentive payments are not sufficiently large such that the 'effective' charge (over the long-term) faced by an airline on a particular route is lower than the marginal cost incurred by Christchurch Airport in serving that route.[85]

122. We do not have any evidence to suggest that these two criteria have not been met in this instance by Christchurch Airport. However, we do have concerns that there was limited information provided by Christchurch Airport as part of its consultation process with airlines. This includes the extent of route incentives, their impact on forecast demand, and how they impact the overall target return. We consider that consultation can help ensure that the route incentives (at an aggregate level) remain appropriate and in the long-term interests of consumers.

123. Air New Zealand noted that there may be an incentive for Christchurch Airport to make excessive route incentive payments:[86]

> It also fails to recognise that any spend [on route incentives] which results in additional passengers will also increase non-aeronautical revenues at no expense to the non-aeronautical business, particularly when this is associated with an uplift in international passengers.

124. Airlines submissions note how Christchurch Airport excluded the impact of route incentive payments from the pricing model, limiting any scrutiny from consultation. Air New Zealand submitted that:[87]

> Target incentive payments were explicitly declared by CIAL during price consultation to be excluded from the building blocks model and the PSE3 information disclosures. Given they were so excluded, Air New Zealand does not see how they may be taken into account by the Commission in reviewing target returns.

125. Similarly, BARNZ submitted that:[88]

> BARNZ welcomes Christchurch Airport's decision to exclude route development incentive costs from the prices that were set. Unfortunately, this welcome decision has been undermined by the disclosure treatment of the costs – ie while the costs were not an input into the airport's aeronautical charges, they have been used to support the airport's case that its overall target return is reasonable and thus mitigate any concerns raised by airlines and the Commission in relation to the 6.82% WACC estimate that was used for price setting purposes.

126. Air New Zealand also noted that:[89]

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85 Christchurch Airport may have an incentive to provide payments that lower the 'effective' cost of the airport charge below its marginal cost if it had an expectation of increasing unregulated revenue from the increased demand.

86 Air New Zealand "Re: Review of Christchurch International Airport's pricing decisions and expected performance (July 2017 – June 2022)" (16 August 2018), paragraph 14.

87 Air New Zealand "Cross-submission to submissions received on the Commerce Commission's review of Christchurch International Airport's price setting event three" (6 September 2018), page 1.

88 BARNZ "Draft Report on Christchurch Airport's pricing decisions and expected performance: PSE3" (16 August 2018), paragraph 15.

> It is possible that CIALs payment of incentives has risen steeply over the previous two financial years. Variances noted in information disclosure on operational expenditure note an additional $6.3m paid over forecast in FY17 and an additional $5m over forecast in FY16. Information disclosure does not reveal total incentives paid.
>
> Air New Zealand submits that it is a payer of prices set by CIAL to make a regulated return of 6.82%, and yet is not in receipt of a share of incentive payments pro rata to its share of those prices. We consider that as domestic carrier we have been assigned an unfair price burden, and that we are delivering to CIALs own target return of 6.82%, rather than CIALs 'information disclosure return'.

127. Christchurch Airport responded in its cross submission that:[90]

> Air New Zealand has attempted to characterise incentives as some form of subsidy that it pays for the benefit of other airlines or types of passengers. That description is not accurate.
>
> CIAL's headline prices are set based on CIAL's cost-based building blocks model. As discussed by the Commission, and later in this cross-submission, CIAL's headline PSE3 prices efficiently recover costs and are subsidy free.
>
> Any airline (whether or not currently flying to Christchurch Airport) can approach CIAL and discuss growth incentive options. There is no weighting towards new airlines or international routes over others.

128. Although we have concerns regarding the transparency and consultation related to route incentive payments, we consider they can be a legitimate cost that should be included when assessing Christchurch Airport's target return and, as noted by the NZ Airports, are consistent with the approach outlined in the IM Review.[91]

> Christchurch Airport has transparently disclosed pricing incentives in accordance with the IRR schedules established at the conclusion of the IM Review. NZ Airports therefore believes the concerns airlines have raised about the way Christchurch Airport has presented its disclosure compared to what they understood at the time of pricing are unjustified. They knew what the disclosure requirements were and, as noted by BARNZ, there is no impact on profitability in any event.

129. As noted by Air New Zealand, some airlines are effectively charged prices that are consistent with a return to Christchurch Airport of 6.82%. However, they may still benefit from route incentive payments to other airlines, to the extent that they raise overall demand, either now or in future periods, and consequently reduce individual charges.

130. We expect Christchurch Airport to provide greater transparency on the impact of these route incentive payments in future, including consulting with airlines on price

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89 Air New Zealand "Re: Review of Christchurch International Airport's pricing decisions and expected performance (July 2017 – June 2022)" (16 August 2018), paragraphs 8-9.

90 Christchurch Airport "Cross-Submission on Commerce Commission's Review of Christchurch International Airport's Pricing Decisions and Expected Performance (July 2017 - June 2022) - Draft Report" (6 September 2018), paragraphs 19-20.

91 NZ Airports "Cross-submission on the Commission's Christchurch Airport draft report" (6 September 2018), paragraph 13.

and demand forecast impacts and being transparent on how they affect the overall target return.

131. We are not focussing on the airport's higher estimated WACC, given it is targeting returns below this. However, based on the evidence provided, we do not consider Christchurch Airport has sufficiently justified its own WACC estimate. This is because we do not consider it has sufficiently explained its asset beta of 0.65 (5 basis points above our benchmark estimate). The airport's asset beta and debt estimate is discussed in more detail in **Attachment A.**

Christchurch Airport's expected return on its other regulated services

132. Other regulated services are a smaller portion of regulated services, representing about 15% of Christchurch Airport's RAB. These services may include terminal lounges, and facilities and services for the operation of customs, immigration, quarantine checks, security and police services, refuelling of aircraft, and storage of freight.

133. Christchurch Airport's expected return on its other regulated service over PSE3 is 7.87%. This is above the 6.44% it is targeting on its priced services, and above a return of 6.47%, which we consider reasonable for Christchurch to target over PSE3.

134. We estimate Christchurch Airport will earn about $53m revenue on its other regulated services over PSE3, in present value terms. Christchurch Airport's higher return on these services means it expects to earn about $6m (or 1.5%) more than the revenue that would be consistent with a reasonable return of 6.47%.

135. We do not think comparing Christchurch Airport's expected return on its other regulated assets to a return that we have deemed reasonable on its priced services, or to our mid-point WACC estimate, provides interested parties with useful information to assess whether Christchurch Airport is extracting excessive profits.

136. In other words, the additional $6m revenue it expects to earn on these services (compared to revenue consistent with a return of 6.47%) may not necessarily provide much information on whether those returns are excessive. This is because the characteristics of the individual contracts that apply to these services (eg, the varying durations and start dates) are not necessarily well aligned with our mid-point WACC estimate, which is consistent with the five-year PSE3 pricing period.

137. We consider that an airport's returns on other regulated services can be better assessed over a longer timeframe.

138. Submissions from both airports and airlines broadly agreed with our view that these services can be best assessed over a longer timeframe. Further details on the submissions we received on this topic to both the Christchurch and Auckland Airport reports are provided from 151 below.

Christchurch Airport's explanation for differences in returns on priced and other regulated services

139. Christchurch Airport submitted that prices for its other regulated services:

139.1 are set through negotiated commercial agreements that take into account the nature of the specific non-priced services;[92]

139.2 normally relate to a contract for a lease over a building or land, for which customers may have options, such as commercial alternatives;[93] and

139.3 typically have prices agreed at a different time (and potentially a different interest rate environment), and for a different time period, compared to priced services.[94]

140. Overall, Christchurch Airport suggests that these arrangements differ to priced services, which apply standardised charges at each price setting event (ie, expected to remain in place for five years). This explanation is similar to Auckland Airport's explanation for its difference in returns on priced services and other regulated services.[95]

141. Christchurch Airport submits that in light of this difference, substantial caution is required when interpreting the expected returns on other regulated services. It suggests that our principal focus should be on the profitability of the priced services, reflecting that it is these services that were reviewed and re-determined as part of the price setting event.[96]

142. Christchurch Airport provided us further information on its contracts for other regulated services. It submitted that the average term of the contracts for other regulated services is materially longer than the five-year pricing periods that apply to priced services (between 16 and 26 years on average, depending on how customers' options for extension are treated). It also notes that these agreements are, on average, somewhat dated—with the average execution or commencement date approximately nine years prior to the commencement of PSE3 (ie, contracts which commenced in the year 2008 on average).[97]

143. Christchurch Airport suggests that it is more appropriate to assess the expected returns on these contracts based on the interest rate environment at the time the

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92 Christchurch Airport "Submission the Process and Issues Paper: Auckland and Christchurch Airports' third price setting events" (28 November 2017), paragraph 22.

93 Christchurch Airport "Additional material on the reset of aeronautical prices for the period 1 July 2017 to 30 June 2022" (28 June 2018), paragraph 58.

94 Christchurch Airport "Submission the Process and Issues Paper: Auckland and Christchurch Airports' third price setting events" (28 November 2017), paragraph 22.

95 Auckland Airport "Section 53B review of Auckland Airport's pricing decision and expected performance for PSE3: submission on the draft report" (29 May 2018), paragraphs 111-114.

96 Christchurch Airport "Submission the Process and Issues Paper: Auckland and Christchurch Airports' third price setting events" (28 November 2017), paragraphs 20-22.

97 Christchurch Airport "Additional material on the reset of aeronautical prices for the period 1 July 2017 to 30 June 2022" (28 June 2018), paragraph 59.

contracts were agreed.[98] Christchurch Airport has estimated that the risk-free rate component of a WACC more consistent with the date and term of their contracts, in effect over PSE3, would be more than 2% (ie, 200 basis points) above what was assumed in our mid-point WACC estimate.[99]

It is difficult to assess bilaterally negotiated contracts over a given five-year pricing period

144. We accept that prices set in bilaterally negotiated contracts for other regulated services are affected by a range of factors, including market conditions (eg, interest rate expectations), rent reviews and break clauses. These factors, and the volume of different contracts at any one time, make it difficult to determine whether returns on these contracts—over a given five-year pricing period—are appropriate.

145. In principle, the extent to which an assessment of the returns on these contracts, against our mid-point WACC estimate, is more or less appropriate will depend on:

    145.1 the extent to which the market conditions when the contracts were signed (eg, level of interest rates) are similar to today's market conditions;

    145.2 the degree to which rent reviews or break clauses within a contract can adjust original pricing arrangements over the five-year pricing period;

    145.3 the competitive environment in which any contracts were signed (eg, the degree to which airports use their market power when negotiating longer-term agreements, or whether there are feasible alternatives to the contract, such as a standard pricing contract); and

    145.4 how the existing contracts that the airport has with its customers match-up with its current target returns for other regulated services.

146. In light of this, we invited feedback on our approach to assessing other regulated services and how we should consider returns on individual negotiated contracts. We noted that we consider it appropriate to apply some flexibility in our assessment of these services and that it may be better to assess returns on these services over a longer period of time.[100]

Submitters provided feedback on how we should review other regulated services

147. We received a number of submissions to both the draft report for Auckland Airport and the draft report for Christchurch Airport outlining support for a longer term assessment of other regulated services.

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98 Christchurch Airport "Additional material on the reset of aeronautical prices for the period 1 July 2017 to 30 June 2022" (28 June 2018), Appendix C, page 6.

99 Christchurch Airport "Submission the Process and Issues Paper: Auckland and Christchurch Airports' third price setting events" (28 November 2017), paragraph 59.

100 Commerce Commission "Review of Christchurch International Airport's pricing decisions and expected performance (July 2017 – June 2022) - Draft report" (26 April 2018), paragraphs 124–128.

148. For example NZ Airports suggested:[101]

> NZ Airports agrees with the Commission's acknowledgement that flexibility in its assessment of non-priced services is required. Accordingly, it is more appropriate to assess target returns for these services over a longer period of time than the current five year pricing cycle.

149. BARNZ suggested that the approach should be aligned across Auckland Airport and Christchurch Airport[102] and submitted that:[103]

> We would be open to exploring options for reviewing returns on these services over different timeframes than a standard 5-year pricing period. We think the starting point is to gather more information (at an aggregate level) about the nature of the services, the timeframes of the contracts and how the charges are set. Once there is a clear understanding of the nature of the other regulated services and how their pricing is structured, it should be possible to identify a way forward that can provide sufficient comfort that the charges are reasonable.

150. Air New Zealand also noted:[104]

> Air NZ believes it is appropriate that greater flexibility be applied when considering returns on other regulated services, with analysis of these considered over the longer term, generally reflecting the tenure of contractually agreed arrangements and the nature of those arrangements (e.g. provision for rent reviews, etc). Air NZ also agrees with the Commission that lower returns on other regulated services should not be offset by higher returns on priced services.

151. Stakeholders appear to agree with our approach to undertake a longer term assessment of other regulated services. However we acknowledge that the details of any assessment still need to be considered in more detail.

152. We also note the concerns raised by Air New Zealand and BARNZ about the commercial environment under which leases are agreed and the degree to which airports can use their market power in setting prices for these services. For example, Air New Zealand notes that:[105]

> It is nevertheless important that the Commission maintains an oversight of returns on other regulated services. While these are generally subject to formal contracts, as the Commission has noted, the extent of alternative options available is an important factor in determining whether an airport may be able to leverage market power to impose inappropriate outcomes.

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101 NZ Airports "Cross-submission on the Commission's Auckland Airport draft report in light of the Christchurch Airport draft report" (23 August 2018), paragraph 49.

102 BARNZ "Cross-submission on Auckland Airport pricing in light of Christchurch Airport Draft Report" (21 August 2018), paragraph 7.

103 BARNZ "Draft Report on Christchurch Airport's pricing decisions and expected performance: PSE3" (16 August 2018), paragraph 6.

104 Air New Zealand "Re: Review of Christchurch International Airport's pricing decisions and expected performance (July 2017 – June 2022)" (16 August 2018), paragraph 38.

105 Air New Zealand "Re: Review of Christchurch International Airport's pricing decisions and expected performance (July 2017 – June 2022)" (16 August 2018), paragraph 39.

153. On the other hand, NZ Airports submits that terms for non-priced services are set appropriately:[106]

> a) Unlike priced services (i.e. common use airfield and terminal assets), each asset that forms part of non-priced services is typically used exclusively by one customer-such as leases or licences for space or buildings. These customers include many who do not consume priced services.
>
> (b) The leases are entered at different times, and typically for materially longer terms, than the standard 5 yearly pricing consultations.
>
> (c) The rent payable at the commencement of a lease is typically set by having regard to market conditions, and most leases include provisions that determine the rent payable at any subsequent rent reviews by reference to market evidence from both airport and off-airport. This assists customers to negotiate with airports.
>
> (d) Leases include dispute resolution provisions that provide leasing customers with the ability to contest the payable rent. This can involve:
>
> (i) dispute resolution whereby each party puts forward a valuation prepared by respective expert valuers; and
>
> (ii) if no agreement can be reached, lease terms can be resolved by arbitration or the parties' appointed valuers appointing a third valuer to make a final decision.

154. BARNZ suggested more detailed information should be obtained from airports through information disclosure or a section 53ZD notice to ensure counterparties to an airport's leases have confidence that the charges they are paying are reasonable.[107]

155. As part of any further assessment, we would consider whether any additional information is required from airports to assess the reasonableness of returns on other regulated services. Further information may be useful but, as previously stated, we consider any review of other regulated services needs to be flexible and proportionate to the value of these services, as provided by individual airports.

Our views on Christchurch Airport's returns on other regulated services and how we assess these returns over the long-term

156. As indicated in our draft report, our view is that an airport's returns on individual contracts for other regulated services are better assessed over a longer period of time.[108]

157. We consider a consistent approach across airports is appropriate, although the specific details of any ex-post assessment may vary to account for the context of different airports. For example, any assessment would need to be proportionate to

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106 NZ Airports "Submission on the Commission's Christchurch Airport draft report" (16 August 2018), paragraph 28.

107 BARNZ "Cross-submission on Draft Report on AIAL's PSE3 pricing decision" (26 June 2018), page 18.

108 Commerce Commission "Review of Auckland International Airport's pricing decisions and expected performance (July 2017 – June 2022) - Draft report" (26 April 2018), paragraph 115-124.

the size of other regulated services and take into account concerns that have been raised by counterparties.

158. We also do not wish to discourage commercial agreements between parties when the contract provides mutual benefits and the airport's market power has not unduly affected the terms of the contract. However, there can be limited competition in relation to the airport's supply of other regulated services, which limits customers' bargaining position.

159. A review of the returns associated with other regulated assets could potentially be included as part of an ex-post review of airport performance, which we expect to undertake after Wellington Airport has completed its first five-year pricing period in 2019. A review could consider both:

159.1 the actual return by airports over a longer period of time and how it compares to measures of the mid-point WACC estimate over time and the reasons for any differences; and

159.2 the process for agreeing individual negotiated leases and rent reviews.

160. We consider that this approach will provide scrutiny over the performance of these contracts in a way that balances the following objectives:

160.1 recognising that there is likely to be limited competition in relation to the airport’s supply of other regulated services, which limits customers’ bargaining position;

160.2 ensuring we do not discourage efficient contracts, which are in the long-term interest of consumers;

160.3 applying a consistent approach over time, ie, continuing to assess returns on other regulated services separately from priced services so that lower or higher returns on one group of services is not considered to “offset” the other group of services; and

160.4 proportionality to the size of the harm—we consider the possible harm to consumers over the long-term from these contracts is likely to be significantly smaller than priced services, given the relatively smaller scale of these services.

Chapter 3 Pricing efficiency: are the prices set by Christchurch Airport likely to promote efficiency?

Purpose

161. This chapter contains our analysis and conclusions on the extent to which Christchurch Airport's pricing methodology is likely to result in prices which raise efficiency concerns.

162. This analysis is relevant to the extent to which Christchurch Airport has incentives to set prices that are likely to promote efficiency (section 52A(1)(b) of the Act).

Conclusions

163. Over PSE3, Christchurch Airport will be charging passenger aircraft based on the number of passengers (not seats) in a departing aircraft, irrespective of other factors that were applicable in PSE2, such as the aircraft's weight or point of origin or destination.

164. By the end of PSE3, the international and domestic (non-regional) per passenger charge will be equivalent. Previously, international passengers paid more than domestic passengers. In addition, eliminating weight-based charges means that smaller aircraft are worse off (attracting relatively higher charges) and larger aircraft are better off (attracting relatively lower charges).

165. Overall, Christchurch Airport's new charging structure does not raise significant efficiency concerns. Per passenger charges are simple to understand, transparent and are likely to reduce airlines exposure to demand risk.

166. Christchurch Airport appears to have set its per passenger charges with a view to:

166.1 remove incentives on airline customers to alter fleet mix in ways that did not reflect the airport's forward-looking costs; and

166.2 send price signals about the relative capacity constraints facing its regional and international terminals.

167. This is likely to encourage changes in usage patterns across the different terminals, ie, move passengers from the more congested regional terminal to the less congested integrated terminal. Improved allocation of demand is likely to be efficient if it lowers future costs across the different terminals.

168. In the specific case of Christchurch Airport, we conclude that the evidence before us does not indicate that its change in price structure will result in a greater likelihood of cross-subsidisation between servicing different types of aircraft.[109]

169. In our view, Christchurch Airport's new charging structure could represent an improvement in efficiency compared to PSE2. However, this is difficult to assess and will be somewhat dependent on whether the airport seeks to maintain this charging arrangement over the long-term. Price stability and predictability are important for airlines' ability to plan and invest over the long-term where airlines are also undertaking risky investments, such as in new aircraft.

170. Given that much of the airport's costs are fixed in nature and only moderately affected by the type of aircraft, we would expect airports' charging structures to remain relatively stable over the long-term. Where significant changes are proposed, we encourage airports to provide robust evidence regarding the efficiency benefits and to have regard to the benefits of price stability and predictability over the long-term.

171. We accept that it is difficult to determine the relative price responsiveness of domestic and international passengers. There are a range of stakeholder views, and international evidence on this, which may not be entirely applicable in the New Zealand context. It therefore may be difficult to effectively differentiate prices according to consumers' demand responsiveness. Doing so works to minimise distortions to the efficient use of airport services.

172. On this basis, we do not have particular concerns with Christchurch Airport's decision to transition to per passenger prices that are uniform across international and domestic passengers.

173. We think that Christchurch Airport could have been more transparent about its intentions behind its charging structure in its PSE3 disclosure, and the relevant impacts on different customer groups.

174. Our understanding and views on Christchurch Airport's charging structure was shaped by material provided by the airport to us after their consultation with airlines. This material is now publicly available.[110] However, including this information in their pricing consultation with airlines and as part of their PSE3 disclosure would have allowed us and other interested parties to better understand, and engage with, Christchurch Airport's performance and pricing efficiency, through our consultation process.

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[109] Ie, we consider that Christchurch Airport's per-passenger charges are likely to cover the incremental costs, and not exceed standalone cost, of servicing different types of aircraft. Covering incremental costs is sufficient to ensure there is no cross-subsidy.

[110] Christchurch Airport "Additional material on the reset of aeronautical prices for the period 1 July 2017 to 30 June 2022" (28 June 2018), Appendix C, p. 6.

Our approach to assessing Christchurch Airport's pricing methodology

175. We assess whether Christchurch Airport's pricing methodology is likely to result in prices which raise efficiency concerns by considering the following objectives. This is consistent with our approach in the section 56G review.[111]

175.1 Prices should be subsidy free.[112]

175.2 Prices should have regard to consumers' demand responsiveness.

175.3 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.

175.4 Prices should enable consumers to make price-quality trade-offs or non-standard arrangements for services, where practical, to reflect cost and relative value placed on services.

175.5 The development of prices should be transparent, and promote price stability and certainty for consumers, where demanded.

Overall approach to assessing pricing efficiency outcomes

176. In applying each of these pricing efficiency principles to Christchurch Airport's pricing structure, we take account of Christchurch Airport's particular circumstances.

177. We note that a few submitters have raised concerns about the fairness (or lack of) created by the airport's prices. In particular, Air New Zealand suggests that as a domestic carrier, it has been assigned an unfair price burden.[113] Mr Wilson suggests it must be determined whether such a fee is "fair, reasonable, and efficient", and states that the airport's proposal is neither fair nor reasonable and is contrary to the purpose of Part 4 of the Act.[114] Air New Zealand submits that it agrees with Mr Wilson's statement.[115]

178. Our view on the airport's pricing methodology is based on our consideration of the extent to which Christchurch Airport's prices may raise concerns about inefficient outcomes for consumers, given Part 4's focus on ensuring regulated suppliers have incentives to improve efficiency. Efficient prices may be viewed as fair or unfair by different groups, depending on their particular perspectives.

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111 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 Christchurch Airport – Section 56G of the Commerce Act 1986" (31 July 2013), paragraph D15.

112 Subsidy free prices are generally a necessary but not sufficient condition for efficient pricing.

113 Air New Zealand "Re: Review of Christchurch International Airport's pricing decisions and expected performance (July 2017 – June 2022)" (16 August 2018), paragraph 9.

114 Patrick Wilson "Submission on draft report for review of Christchurch International Airport's pricing decisions and expected performance (July 2017 - June 2022)" (16 August 2018), pages 1 – 2.

115 Air New Zealand "Cross-submission to submission received on the Commerce Commission's review of Christchurch Airport's price setting event three" (6 September 2018), page 2.

179. We also note that a key feature of an airport's cost structure is the high proportion of fixed and common costs, which are not dependent on the level of output (eg number of passengers). This means airport prices largely recover fixed costs rather than the cost of servicing an additional aircraft (marginal cost).

180. We applythe principles described above to assess the airport's pricing efficiency. Transpower has broadly supported these principles and further suggested that "...prices should be actionable, simple (no more complex than necessary), and understood".[116] Elements of these objectives are embedded into our analysis of Christchurch Airport's performance against the pricing principles.

181. In coming to our conclusions on Christchurch Airport's pricing efficiency, we recognise that many factors can impact on overall efficiency outcomes—the structure of prices is only one tool and not always the most effective, depending on the industry and other constraints participants are subject to. We also recognise that not all the potential objectives of these principles may be able to be met at once—there can be trade-offs. Hence we have examined the extent to which Christchurch Airport has considered these principles and in particular whether their pricing decisions are in direct conflict with these principles and if so why.

Summary of Christchurch Airport's charging structure for PSE3

182. Christchurch Airport has made significant changes to its pricing structure over the PSE3 period (FY18-FY22), compared to the PSE2 period (FY13 – FY17).

183. Over PSE3, Christchurch Airport has set charges based on the number of passengers (not seats) in a departing aircraft, except in the case of non-passenger aircraft. This compares to PSE2, where it used a combination of fixed charges and variable charges linked to the weight of the aircraft, and number of seats and passengers in an aircraft. These changes are illustrated in **Table 3.1** below.

[116] Transpower "Auckland International Airport's pricing decisions" (29 May 2018), page 2.

Table 3.1 Summary of Christchurch Airport's charging structure for the PSE3 period

Charged services	PSE3 charge applicable to airlines	How charge compares to PSE2
Airfield services – including runways, taxiways, and repairs and maintenance	▪ Per arriving or departing passenger (not per seat). ▪ Non-passenger aircraft are charged in proportion to the weight ('maximum certified take-off weight' or MCTOW) of the arriving or departing aircraft.	▪ A fixed charge and a variable charge in proportion to the weight (MCTOW) of the departing aircraft.[117]
Terminal services – including baggage handling, air-bridges, and queueing areas	▪ For international and domestic services: per arriving or departing passenger (not per seat).	▪ For international services: per departing seat and per arriving and departing passenger. ▪ For domestic services: per departing seat.
Check-in hall services Check-in counter services	▪ Per departing passenger (under $0.70). ▪ Per departing passenger (under $0.50).[118]	▪ Charges applied under commercial arrangements with individual airlines.

Impacts on different airport users

184. **Table 3.2** below shows that Christchurch Airport's change in prices to different groups is expected to result in:

184.1 international airlines benefitting from lower prices; and

184.2 domestic airlines (non-regional and regional) paying slightly more compared to PSE2, and the same amount (per passenger) as international airlines by the end of PSE3.

117 Over PSE2, one of two fixed charges applied to an aircraft, depending on the aircraft's weight.

118 This charge does not apply to passengers using check-in facilities under which individual commercial arrangements apply (eg, Air New Zealand's kiosk area).

Table 3.2 Impacts of price changes on different groups (per passenger)[119]

Average Charge per passenger				
		FY17 (PSE2 final year)[120]	**FY18 (PSE3 – first year)**	**FY22 (PSE3 – final year)**
International services	**Airfield**	$7.80	$4.75	$5.13
	Terminal	$13.15	$8.01	$7.66
	Total	**$20.95**	**$12.76**	**$12.79**
Domestic services (Non-regional)	**Airfield**	$5.41	$4.75	$5.13
	Terminal	$4.84	$7.10	$7.66
	Total	**$10.25**	**$11.85**	**$12.79**
Regional domestic services	**Airfield**	$4.26	$4.75	$5.13
	Terminal	$2.00	$2.14	$3.49
	Total	**$6.26**	**$6.89**	**$8.62**

Terminal charges for some of Air New Zealand's flights have increased

185. In addition to the higher domestic charges, Air New Zealand will incur further increases because some of its turbo-prop flights between Christchurch and Wellington will shift from the 'regional' category to the 'non-regional' category (see **Table 3.2** above).

186. Regional services receive a lower terminal charge because they are assumed to use the regional lounge, and are charged for that under a commercial contract with Air New Zealand. It is our understanding that this commercial contract remains in place and unchanged since PSE2.

187. We understand that over PSE2 a portion of Air New Zealand flights between Christchurch and Wellington used turbo-prop aircraft and the regional lounge (which is suited to smaller turbo-prop aircraft). However, under the new charging structure, services travelling to or from Wellington are explicitly excluded from the definition of 'regional services'.[121] As a result, some of Air New Zealand's turbo-prop services will shift to a more expensive terminal charge category ('non-regional' services) that assumes they do not use the regional lounge (even if they do). This is a point of

[119] Christchurch Airport "Additional material on the reset of aeronautical prices for the period 1 July 2017 to 30 June 2022" (28 June 2018), page 12.

[120] Christchurch Airport "Annual information Disclosure Year Ended 30 June 2017" (30 November 2017), schedule 17, page 48.

[121] Christchurch Airport has defined 'regional services' as those services which are not: international services, travelling to or from Wellington or Auckland, or using the first floor integrated terminal.

contention between Christchurch Airport and Air New Zealand, and is discussed in this chapter.

Christchurch Airport's rationale for changing its charging structure

188. Christchurch Airport stated in its PSE3 disclosure that:[122]

> [its] primary goal is increasing the productivity and efficient use of its existing assets. Accordingly, [it has] proposed setting its PSE3 prices on a per passenger basis [where feasible] … per passenger prices allow [it] to increase and incentivise flexible and efficient use of its airfield and terminal. They also increase simplicity of prices and align [its interests with] airlines interests.

189. Christchurch Airport noted the following as key considerations for adopting its per passenger charges.[123]

189.1 Promoting productivity gains by encouraging assets to be used in a way that minimises forward-looking costs:

> [In PSE2], international terminal charges were substantially higher, and yet this part of the terminal has spare capacity. The new joint terminal charge is more consistent with the plans for the terminal to become increasingly integrated / flexible. That is, [Christchurch Airport] views the terminal as an asset where specific areas cannot be said to be associated with any particular type of traffic, but rather as an asset that jointly provides all services and where any latent capacity is available to be deployed where it is most needed.

189.2 Reducing its risk exposure from airline's decisions: avoiding differential charges that create perverse incentives for behavioural change:

> [In PSE2], airfield charges [which were linked to aircraft weight] per passenger were much higher for larger aircraft, disproportionate to the cost impact, and the structure of check-in charges encouraged airlines to change check-in practices, unrelated to cost. The new per passenger basis is likely to be the least susceptible to providing perverse incentives.

189.3 Reducing complexity: creating conditions that are more conducive to the entry of new airlines and the creation of new services and routes:

> Previous charges for an airline bringing a passenger were a mixture of: aircraft weight (landing), fixed per aircraft (landing), per seat (terminal), per hour (check-in). The new charging basis - per passenger - is the simplest for airlines to understand and implement (and for [Christchurch Airport] to market).

Overview of stakeholders' views

190. Christchurch Airport notes that during its consultation with airlines, BARNZ and Qantas strongly supported the charging structure, while Air New Zealand did not.[124]

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122 Christchurch Airport "Disclosure relating to the reset of aeronautical prices for the period 1 July 2017 to 30 June 2022" (14 August 2017), paragraph 43-45.

123 Christchurch Airport "Additional material on the reset of aeronautical prices for the period 1 July 2017 to 30 June 2022" (28 June 2018), pages 11-12.

124 Christchurch Airport "Disclosure relating to the reset of aeronautical prices for the period 1 July 2017 to 30 June 2022" (14 August 2017), page 13.

Statements from BARNZ support this view.[125] BARNZ considers the simplicity of the charging structure to assist in aligning the interests of airlines with the airport to increase the numbers of passengers through Christchurch Airport, while being clear on the costs to airlines of doing so.[126]

191. However, Air New Zealand responded to Christchurch Airport's statement noting that:[127]

> while this may be true, it is also true that the price structure is constructed in favour of the majority of airlines arriving into [Christchurch Airport] – and that these beneficiaries are international airlines. Routes most affected by increased prices for turbo prop aircraft are regional routes. The increased charges are detrimental to existing route traffic and discourage new entrants from growing tier three carriers [smaller airlines, boarding fewer passengers each year].

192. Mr Wilson agrees with Air New Zealand's view that Christchurch Airport's pricing structure represents a fundamental departure from efficient pricing principles and favours international operators at the expense of smaller operators.[128]

193. Prior to Christchurch Airport finalising its prices, Air New Zealand advised the airport that the proposed increase in airfield and terminal charges for regional passengers was significant and could adversely impact regional passenger numbers.[129]

194. Air New Zealand's concern appears to reflect the combined impact of:

194.1 the price increase for regional services that was initially proposed (increasing to $7.53 rather than $6.89 in 2018, as per **Table 3.2**); and

194.2 some of its turbo-prop services between Wellington and Christchurch shifting from the 'regional' category to the more expensive 'non-regional' category (see **Table 3.2**).

195. In response to Air New Zealand's feedback, Christchurch Airport introduced a 'transitional path' where terminal charges increase gradually for regional services from FY17 until they reach the long-term price at the end of the PSE3 period (FY22).

196. To offset this reduction in forecast revenue, Christchurch Airport mirrored this transitional path for international services—terminal charges for international

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125 BARNZ "Draft Report on Christchurch Airport's pricing decisions and expected performance: PSE3" (16 August 2018), paragraph 4.

126 BARNZ "Review of Auckland and Christchurch Airport's third price setting events – Process & Issues paper" (28 November 2017), table 4, row 24.

127 Air New Zealand "Cross-submission to submission received on the Commerce Commission's review of Christchurch Airport's price setting event three" (6 September 2018), page 2.

128 Patrick Wilson "Submission on draft report for review of Christchurch International Airport's pricing decisions and expected performance (July 2017 - June 2022)" (16 August 2018), page 2. Air New Zealand "Response to the Process and Issues Paper: Auckland and Christchurch Airports' third price setting events (July 2017-June 2022)" (28 November 2017), paragraph 90.

129 Christchurch Airport "Disclosure relating to the reset of aeronautical prices for the period 1 July 2017 to 30 June 2022" (14 August 2017), paragraph 54-55.

services reduced gradually over the forecast period (rather than the previously proposed step change reduction).[130] **Table 3.2** above incorporates the effect of this transitional path.

Prices should be subsidy free

197. To be subsidy free, prices should be equal to or greater than the incremental cost of producing an additional service, and less than or equal to the stand-alone costs that would have occurred if the supplier solely undertook that activity.[131]

198. In the specific case of Christchurch, we conclude that the evidence before us does not indicate that its change in price structure will result in a greater likelihood of cross-subsidisation between servicing different types of aircraft.

We previously concluded that Christchurch Airport's pricing methodology over PSE2 was unlikely to result in cross-subsidisation

199. During our section 56G review, we concluded that "Christchurch Airport's pricing methodology is unlikely to result in cross-subsidisation, and the evidence suggests its pricing methodology better reflects the principle of being subsidy free relative to PSE1."[132] This conclusion recognised:[133]

    199.1 Christchurch Airport's view that the introduction of a fixed charge per aircraft departure was designed to address concerns about previous cross-subsidisation between aircrafts (turbo-prop aircraft subsidised by jet aircraft); and

    199.2 that Christchurch Airport had further limited the likelihood of cross-subsidisation occurring in PSE2 by introducing charges for children who were previously not charged.

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130 Christchurch Airport "Disclosure relating to the reset of aeronautical prices for the period 1 July 2017 to 30 June 2022" (14 August 2017), paragraph 54-55.

131 This means considering whether a customer (or group of customers) contributes at least the cost of continuing to serve them but no more than the cost of being served on a stand-alone basis at an alternative (hypothetical) airport. See Commerce Commission "Input Methodologies (Electricity Distribution and Gas Pipeline Services) Reasons Paper" December 2010, paragraph 7.2.5 for further discussion on this issue.

132 Commerce Commission "Report to the Ministers of Commerce and Transport on how effectively information disclosure regulation is promoting the purpose of Part 4 for Christchurch Airport" (13 February 2014), paragraph D17.

133 Commerce Commission "Report to the Ministers of Commerce and Transport on how effectively information disclosure regulation is promoting the purpose of Part 4 for Christchurch Airport" (13 February 2014), paragraph D18-D19.

Some stakeholders have raised concern about per passenger airfield charges imposing cross-subsidies

200. As noted above, airfield charges are on a per passenger basis over PSE3. Previously, airfield charges were applied via a fixed and a variable charge in proportion to the weight of the departing aircraft.[134]

201. In BARNZ's view, per passenger airfield charges avoids arbitrary distinctions between different aircraft (turbo-prop, domestic jet and international jet) that are not based on technical, operating or economic grounds. [135]

202. Contrary to this view, Air New Zealand suggests that per passenger charges:

202.1 ignore the significant sunk costs in infrastructure, resulting in some user groups paying for infrastructure they neither require nor use;[136] and

202.2 favour larger wide-body operators at the expense of smaller operators and therefore does not leave airlines free to innovate in choosing and changing their fleets, as was suggested by Christchurch Airport.[137]

203. Air New Zealand maintains that the investment required for larger, heavier aircraft significantly exceeds the investment required for smaller aircraft, particularly investment in core assets (runways, taxiways and apron areas). As an example of this, Air New Zealand notes that the $15.3 million Christchurch Airport spent upgrading runway shoulders in FY16 would not be required for turbo-prop aircraft.[138] It notes that capital-related costs comprise about 60% of Christchurch Airport's airfield revenue requirement and reflect investment in longer, wider and stronger runways, taxiways and aprons required to service larger aircraft.[139]

204. Mr Wilson appears to support this view from Air New Zealand. He states that international passengers flying on large aircraft (who will receive a nearly 40% reduction in fees) must use dedicated, specialised facilities and require reinforced runways and taxiways. Mr Wilson suggests that regional passengers do not require these facilities but will face a fee increase of nearly 40%.[140]

205. To support its view that per passenger charges result in some user groups paying for infrastructure they neither require nor use, Air New Zealand cites:

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134 Over PSE2, one of two fixed charges applied to an aircraft, depending on the aircraft's weight.

135 BARNZ "Review of Auckland and Christchurch Airport's third price setting events – Process & Issues paper" (28 November 2017), table 4, row 24.

136 Air New Zealand "Response to the Process and Issues Paper: Auckland and Christchurch Airports' third price setting events (July 2017-June 2022)" (28 November 2017), paragraph 91.

137 Air New Zealand "Response to the Process and Issues Paper: Auckland and Christchurch Airports' third price setting events (July 2017-June 2022)" (28 November 2017), paragraph 101-102.

138 Air New Zealand "Response to the Process and Issues Paper: Auckland and Christchurch Airports' third price setting events (July 2017-June 2022)" (28 November 2017), paragraph 93.

139 Air New Zealand "Re: Review of Christchurch International Airport's pricing decisions and expected performance (July 2017 – June 2022)" (16 August 2018), paragraph 17.

140 Patrick Wilson "Submission on draft report for review of Christchurch International Airport's pricing decisions and expected performance (July 2017 - June 2022)" (16 August 2018), page 2.

205.1 analysis that Christchurch Airport undertook during PSE2 (informed by advice from Beca), which indicated that if Christchurch Airport only served turbo-prop aircraft, the airfield would cost 33 percent of the configuration at that time;[141] and

205.2 ICAO[142] policies which recommend the use of weight-based methodologies for landing charges because they "reflect how wear and use of airport-provided facilities tend to increase as the weight of aircraft increases."[143]

206. Similarly, BARNZ suggests the per passenger charge may not fully reflect the additional costs created by larger aircraft. However, BARNZ considers this to be a trade-off with the simplicity benefits of a per passenger charge—which it is comfortable with.[144]

207. On the other hand, Christchurch Airport suggests that per passenger charges do not create cross-subsidisation between operators of different sized aircraft. It states that: [145]

> Airlines' fleet decisions have little effect on [our] forward-looking costs. There is only a minimal difference in the cost caused by different types of aircraft when using [the] airfield, reflecting the fact that the vast majority of the airfield cost being recovered comprises costs that are common (like land) or are "sunk" costs (such as the existing sealed surfaces). As such, any cost-reflective pricing differences that would occur as a result of aircraft-specific airfield pricing would not meaningfully impact airlines' incentives. In this context, [our] price structure is efficient as it avoids influencing airlines' fleet decisions in circumstances where doing so is not justified by changes to cost (and [our] price structure is also transparent and simple).

208. Christchurch Airport supports this view with analysis by Incenta, which suggests that:[146]

> a substantial portion of the asset-related cost base is completely unaffected by the and level of aircraft use in any particular period (namely, the land estate, security fences and

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141 This assumes runways would be shorter and narrower with less pavement thickness, and less taxiways and parking areas would be required, and annual maintenance costs would be less. Air New Zealand also states that Christchurch Airport's per-passenger pricing approach results in a cost per landed tonne for turbo-prop aircraft of around of $20 per tonne (in FY18) compared to around $9 (per landed tonne) for wide-body aircraft. Air New Zealand considers this to be grossly inappropriate given the operational requirements of the smaller aircraft. Air New Zealand "Response to the Process and Issues Paper: Auckland and Christchurch Airports' third price setting events (July 2017-June 2022)" (28 November 2017), paragraph 98-99.

142 International Civil Aviation Organisation, a UN specialised agency established to manage the administration and governance of the Convention on International Civil Aviation.

143 Air New Zealand "Response to the Process and Issues Paper: Auckland and Christchurch Airports' third price setting events (July 2017-June 2022)" (28 November 2017), paragraph 94.

144 BARNZ "Review of Auckland and Christchurch Airport's third price setting events – Process & Issues paper" (28 November 2017), page 24-25.

145 Christchurch Airport "Submission on process and issues paper on the review of Auckland and Christchurch Airports' third price setting event" (28 November 2017), paragraph 63.1.

146 Christchurch Airport "PSE3 airline consultation material – Annex A: Incenta response to Air New Zealand comments, 7 April 2017" (28 November 2017), page 5.

> airfield infrastructure assets). In addition, much of the cost associated with pavement-related assets is irreversible, with only the quantum of ongoing pavement maintenance able to be influenced by the type and level of aircraft usage … [at the time of Christchurch Airport's initial pricing proposal in November 2016] the forecast pavement maintenance expenditure was forecast to amount to approximately 14 per cent of the total airfield revenue requirement over PSE3 and 11 per cent over the long term.

209. Incenta illustrates that under PSE2 charges, the average per passenger charge for wide-body jets was at least $8 more than for turbo-prop jets, while less than a $1 differential could be justified on the basis of the aircrafts' respective contributions to forward-looking costs.[147]

210. Incenta's analysis estimates the average charges for turbo-prop, narrow body jet and wide-body jets under the previous and new charging structure. The new charging structure greatly reduces the extent of differences in charges but maintains the order. Turbo-props will remain the cheapest and wide-body jets the most expensive. The analysis is carried out on 80% and 70% load factors and could materially vary with lower load factors. Incenta makes the point that because the reduction in the variation of charges between aircraft is a better reflection of forward-looking costs, it will also provide better price signals for airlines' choice of aircraft.

211. Incenta also responds specifically to the Beca analysis cited by Air New Zealand, which suggested that the stand-alone costs of an airfield configured solely for turbo-prop aircraft would be materially lower than one that also served jets. Incenta estimated the stand-alone and incremental costs of turbo-prop and jet operations, using the assumptions adopted in Beca's advice. Incenta's analysis suggested that Christchurch Airport's proposed per passenger airfield charges are above the incremental costs and below the stand-alone cost of providing a turbo-prop only airfield—with a reasonable margin, given the assumptions of the analysis (this was also the case for jet aircraft).

212. In response to our draft report, Air New Zealand suggests that airfield costs associated with turbo-prop only airports around the country are about 25% of the costs estimated by Incenta. Air New Zealand is of the view that Christchurch Airport's forecast revenue from turbo-prop aircraft could well exceed the stand-alone cost, if Incenta's analysis had acknowledged there may be additional costs (mainly operational expenditure) associated with serving the larger market at Christchurch.[148] We understand this statement to be suggesting that Incenta's analysis understated the extent to which airfields serving only jet aircraft are likely to face higher operating costs than airfields serving only turbo-prop aircraft.

213. Incenta acknowledges aspects of Beca's assumptions, which it adopted, could be open to question or were not well justified in available material. This includes the assumptions about operating expenditure for a stand-alone airfield, which Air New

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147 Christchurch Airport "PSE3 airline consultation material – Annex A: Incenta response to Air New Zealand comments, 7 April 2017" (28 November 2017), page 7.

148 Air New Zealand "Re: Review of Christchurch International Airport's pricing decisions and expected performance (July 2017 – June 2022)" (16 August 2018), paragraph 21.

Zealand raised concerns with. However, Incenta also considers that some assumptions may introduce material biases in the opposite direction (ie, may understate the stand-alone costs of an airfield serving only turbo-prop aircraft). This includes the implicit assumption that turbo-prop and jet operations are independent. Incenta suggests they are not independent, noting that operating a turbo-prop only airfield would not benefit from the same expanded pool of customers (via connecting flights) and flexibility (to switch between aircraft types) that exists at an airport (and terminal) that serves different forms of aircraft.[149]

214. Overall, Incenta considers the possible biases operate in both directions and the net effect is unclear, and notes that there is a substantial margin between Christchurch Airport's proposed price for turbo-prop aircraft and Incenta's estimated stand-alone cost of a turbo-prop only airfield.[150]

215. Mr Wilson also describes Christchurch Airport's prices as "a fee that penalises a majority of the public [regional and domestic passengers] to subsidise the activities of a privileged few [international passengers]", and considers this is contrary to the long-term interests of consumers and against the public interest.[151]

216. In support of this view, Mr Wilson refers to two cases considered by United States courts.[152] Mr Wilson notes that the US First Circuit Court of Appeal found that a new fee structure proposed by Massachusetts Port Authority—the operator of Boston-Logan International Airport—to be 'unreasonable'. Mr Wilson notes that the effect of the new fee structure was to increase the cost for smaller aircraft while decreasing it for larger aircraft. He states that "to the First Circuit[153] and the United States Supreme Court[154], reasonableness required acknowledging that larger and heavier aircraft required upgraded facilities that smaller and lighter aircraft did not need."[155]

217. As noted above, our view on the airport's pricing methodology is based on our consideration of the extent to which Christchurch Airport's prices may raise concerns about inefficient outcomes. Our review does not consider the extent to which prices may be viewed by particular stakeholders as 'reasonable' or 'unreasonable'. We also

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149 Incenta also notes the assumption that the RAB was a good proxy for current day replacement costs is likely to be materially conservative. This may also understate the stand-alone costs of an airfield serving only turbo-prop aircraft. Christchurch Airport "PSE3 airline consultation material – Annex A: Incenta response to Air New Zealand comments, 7 April 2017" (28 November 2017), page 10.

150 Christchurch Airport "PSE3 airline consultation material – Annex A: Incenta response to Air New Zealand comments, 7 April 2017" (28 November 2017), pages 2 and 9.

151 Patrick Wilson "Submission on draft report for review of Christchurch International Airport's pricing decisions and expected performance (July 2017 - June 2022)" (16 August 2018).

152 Evansville-Vanderbergh Airport Authority District v Delta Airlines, 405 US 707 (US Supreme Court, 1972) and New England Legal Foundation v Massachusetts Port Authority, 883 F.2d 157 (First Circuit Court of Appeal 1989).

153 In New England Legal Foundation v Massachusetts Port Authority, 883 F.2d 157 (First Circuit Court of Appeal 1989)

154 In Evansville-Vanderbergh Airport Authority District v Delta Airlines, 405 US 707 (US Supreme Court, 1972)

155 Patrick Wilson "Submission on draft report for review of Christchurch International Airport's pricing decisions and expected performance (July 2017 - June 2022)" (16 August 2018), pages 1 – 2.

do not consider it necessary to comment on the cases cited by Mr Wilson as these cases are not binding under New Zealand law and appear to relate in part to particular United States federal legislation.

Our view

218. Based on the evidence provided, we consider that Christchurch Airport's pricing methodology is unlikely to result in cross-subsidisation between operators of different aircraft. On this basis, we are not concerned that Christchurch Airport's prices create cross-subsidies that are contrary to the long-term interests of consumers or against the public interest, as has been suggested.

219. That is, we consider that Christchurch Airport's per passenger charges are likely to cover the incremental costs, and not exceed the stand-alone costs, of servicing different types of aircraft.[156]

220. We note that in response to our draft report, Air New Zealand submitted that we appear to have accepted without comment Christchurch Airport's (and Incenta's) claim that the airfield asset-related cost base is largely unaffected by the type and level of aircraft use, and a focus on the forward-looking cost (i.e. pavement maintenance) is therefore appropriate.[157] Christchurch Airport responded to this, noting that Air New Zealand did not offer any evidence in support of this position, despite analysis undertaken by Incenta and the Commerce Commission.[158]

221. We maintain our view that it is appropriate to consider a type of aircraft's contribution to forward-looking costs (as well as considering that aircraft type's stand-alone costs) as Christchurch Airport has done. This allows an assessment of whether prices are likely to provide efficient usage signals by reflecting the aircraft type's contribution to the future infrastructure costs of the airport. An aircraft type's contribution to these costs is influenced by an airline's own investment decisions and its use of the airport's infrastructure (eg, if airlines' investment in larger aircraft prompts the airport to invest more in infrastructure sooner, this will increase the airport's forward-looking costs).

222. We acknowledge the reservations raised about some of the assumptions used in Incenta's analysis on the "stand-alone cost" test (from Air New Zealand and Incenta itself). However, the information does not convince us that Incenta's analysis should be rejected and we are not convinced that it raises concerns about cross-subsidisation between aircraft types. Further, it is reassuring that Incenta's analysis shows there is a substantial margin between the airport's proposed price for turbo-prop aircraft and the estimated cost of an airfield that serves only turbo-prop aircraft.

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156 Covering incremental costs is sufficient to ensure there is no cross-subsidy. The stand-alone costs test can also be relevant to whether a cross-subsidy exists where a firm's profits are constrained.

157 Air New Zealand "Re: Review of Christchurch International Airport's pricing decisions and expected performance (July 2017 – June 2022)" (16 August 2018), paragraph 17.

158 Christchurch Airport "Cross-submission on Commerce Commission's Review of Christchurch International Airport's Pricing Decisions and Expected Performance (July 2017 – June 2022) – Draft Report" (6 September 2018), paragraph 24.

The 'transitional path' to gradually increase prices for regional services

223. BARNZ notes Christchurch Airport's decision to "smooth" a price increase for domestic (regional) passengers has set international passenger charges for PSE3 above where they would otherwise be. It states that while this cross-subsidy is expected to end by FY22, it is not desirable.[159]

224. Christchurch Airport disagrees with BARNZ's assertion that its price smoothing adjustment will cause international traffic to cross-subsidise other passengers. Christchurch Airport states that the adjusted prices for international passengers remain well below the stand-alone cost of serving these passengers (ie, below the upper bound of the subsidy free range).[160]

225. In our view, the airport's "price smoothing adjustment" does not raise cross-subsidisation concerns.

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

226. Scarcity at airports may arise through congestion at facilities, and a lack of capacity where required.

227. Where a service is scarce and demand for the service exceeds supply, prices can promote allocative efficiency by reflecting the opportunity costs of consuming the service. This will likely result in higher prices for those scarce resources and will ensure that those who benefit most from consuming the service do so.

228. Below we consider whether Christchurch Airport's prices are likely to allocate congested or scarce facilities efficiently to manage competing demands for limited capacity and resources, for example by setting lower prices to offload demand to an under-utilised area of the airport or an under-utilised time of day (and higher prices for areas approaching capacity). This may promote both allocative and dynamic efficiency by improving quality of services, reducing costs of a given service, or delaying investment.

Over PSE3, Christchurch Airport is seeking to better distribute capacity among its existing assets

229. Across all of the airport's land and buildings, Christchurch Airport appears to be operating within capacity. We note in particular that the completion of the airport's integrated terminal coincided with a reduction in passenger numbers as a result of the Canterbury earthquakes and subsequent aftershocks. Passenger numbers

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159 BARNZ "BARNZ assessment of CIAL's PSE3 pricing decision against Part 4 criteria" (28 November 2017), page 6.

160 Christchurch Airport "Cross-submission on issues and questions raised in the Commission's process and issues paper on the review of Auckland and Christchurch Airports' third price setting event for airport services" (19 December 2017), paragraph 56.

reduced steadily from 6.0m in 2010 to 5.5m in 2013 (-8.3%) and are starting to pick up now—in 2017, passenger numbers sat at 6.6m.[161]

230. Christchurch Airport suggests that capacity could be better distributed among its terminal space. Specifically, the airport states that its investment in the integrated terminal (which opened in 2013):[162]

> created a facility that can operate as one flexible and integrated terminal by placing a new terminal building and integrated check-in and baggage handling facilities in between **an existing regional lounge that is at times over-capacity and an international terminal that is currently under-capacity**" (emphasis added).

231. This appears consistent with BARNZ's understanding that:

231.1 it is not aware of significant capacity constraints within the integrated terminal, which is arguably larger than necessary for current passenger volumes; [163] and

231.2 there are capacity constraints in the domestic regional departures area.[164]

232. To manage future passenger growth, Christchurch Airport plans to spend $10.4m reconfiguring its terminal (making physical changes to walls, security areas, and passenger facilities).[165] These physical changes are intended to more effectively enable aircraft to flexibly switch between domestic and international services through the use of the integrated terminal's "swing" gates and lounges.

233. Christchurch Airport suggests that this investment is to make better use of the flexibility and efficiencies captured in the current integrated terminal, rather than incurring substantial capital expenditure in a specific area approaching capacity when other parts of its facilities are under-utilised.[166]

234. The possible efficiency benefits of this investment, which is intended to better manage capacity flows between the terminals, are somewhat dependant on price signals encouraging airlines to use spaces of the terminal that are under-utilised. Christchurch Airport appears to have structured its terminal prices to do this.

Domestic and regional terminal charges have increased

235. Christchurch Airport has increased the relative price of the regional terminal, compared to the international and domestic jet terminal. This has been by:

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161 Christchurch Airport "Specified Airport Services Annual Information Disclosure" 2010 to 2017.

162 Christchurch Airport "Additional material on the reset of aeronautical prices for the period 1 July 2017 to 30 June 2022" (28 June 2018), paragraph 50.

163 BARNZ "BARNZ assessment of CIAL's PSE3 pricing decision against Part 4 criteria" (28 November 2017), page 16.

164 BARNZ "BARNZ assessment of CIAL's PSE3 pricing decision against Part 4 criteria" (28 November 2017), page 4.

165 Christchurch Airport "Additional material on the reset of aeronautical prices for the period 1 July 2017 to 30 June 2022" (28 June 2018), paragraph 51.

166 Christchurch Airport "Additional material on the reset of aeronautical prices for the period 1 July 2017 to 30 June 2022" (28 June 2018), paragraph 51.

235.1 increasing the charges for regional services—the sole users of the regional terminal—from $6.26 in FY17 to $8.62 in FY22 per passenger; and

235.2 decreasing the charges for 'international' services—the main users of the under-utilised part of the integrated terminal –from $20.95 in FY17 to $12.79 in FY22 per passenger so that by FY22, all users of the integrated terminal (international and 'non-regional' domestic services) will be charged the same price.

236. Christchurch Airport has sought to further incentivise some of Air New Zealand's turbo-prop services, currently using the regional terminal, to use the integrated terminal.

236.1 Flights between Wellington and Christchurch are now charged a 'non-regional' terminal price (which assumes they use the integrated terminal, rather than the regional terminal).

236.2 BARNZ calculates that as a result, charges for these aircraft will increase by about 110% per flight (assuming they were previously using the regional lounge).[167]

236.3 It is now of no monetary benefit for Air New Zealand to continue using the regional terminal for its turbo-prop flights between Wellington and Christchurch as it had previously done in PSE2.

237. These changes are a point of contention, particularly between Christchurch Airport and Air New Zealand.

238. Air New Zealand remains sceptical that the entire integrated terminal airside areas will ever become fully flexible, and as such, it objects to its domestic passengers paying for international facilities.[168] Air New Zealand states its concern is that:[169]

> [Christchurch Airport] has moved to implement a pricing structure which reflects this fully flexible utilisation of the terminal when the physical and operational changes to enable this have not been implemented, and Christchurch Airport acknowledges that it has yet to develop detailed plans let alone engage with airlines on these.

239. Air New Zealand submits that the terminal is not configured to easily handle turbo-prop operations and using the terminal for this purpose would be inefficient and add considerable operational cost to ground handler and airline operations.[170]

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167 BARNZ "Review of Auckland and Christchurch Airport's third price setting events – Process & Issues paper" (28 November 2017), page 24.

168 Air New Zealand "Re: Review of Christchurch International Airport's pricing decisions and expected performance (July 2017 – June 2022)" (16 August 2018), paragraph 25.

169 Air New Zealand "Re: Review of Christchurch International Airport's pricing decisions and expected performance (July 2017 – June 2022)" (16 August 2018), paragraph 24.

170 Air New Zealand "Re: Review of Christchurch International Airport's pricing decisions and expected performance (July 2017 – June 2022)" (16 August 2018), paragraph 23.

240. Christchurch Airport responds to Air New Zealand's concern, confirming that turbo-prop aircraft are able to use the integrated terminal and are already doing so. It states that:[171]

> the recently commissioned gates 15 and 16 at Christchurch Airport's first floor integrated terminal are fully operational and able to service turboprop aircraft arriving from and departing to any destination... Air New Zealand is free to use these gates for turboprop aircraft on any routes, and is in fact doing so.

241. Air New Zealand also suggests that airline unit costs for smaller turbo-prop aircraft are already higher than for larger jet aircraft, and the new pricing structure increases this penalty. It notes that smaller turbo-prop aircraft are used on routes where the market size and infrastructure would not support larger aircraft, or where customer convenience can be improved through operating more frequently with smaller aircraft.[172] Air New Zealand considers Christchurch Airport is deliberately targeting its strategy to serve the Christchurch – Wellington market in a sustainable and responsive manner.[173]

242. While BARNZ notes although this is not a matter that directly affects the international airlines it represents, "from a principled perspective, BARNZ supports pricing arrangements that do not incentivise or penalise the use of particular aircraft types on specified routes."[174]

243. We note that Christchurch Airport has a regional lounge commercial agreement with Air New Zealand, which we are not privy to. We understand that the regional lounge is intended to be used for predominantly regional services (ie, domestic except for flights to or from Auckland and Wellington).

244. Christchurch Airport's decision to increase regional prices (and align prices between international and domestic), and explicitly charge Wellington-Christchurch flights as users of the integrated terminal, may send better price signals and provide for a more efficient use of the terminals.

245. However, we also acknowledge that the change in treatment of Wellington-Christchurch flights may reduce the profitability of Air New Zealand's previous investment in turbo-prop aircraft (which may have occurred based on its understanding of the previous charging structure). This is an example of less stability and predictability of prices, which is important for airlines' ability to plan and invest. We note that Christchurch Airport's decision to gradually increase prices for regional flights has somewhat alleviated this impact.

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171 Christchurch Airport "Cross-Submission on Commerce Commission's Review of Christchurch International Airport's Pricing Decisions and Expected Performance (July 2017 - June 2022) - Draft Report" (6 September 2018), paragraph 29.

172 Air New Zealand "Re: Review of Christchurch International Airport's pricing decisions and expected performance (July 2017 – June 2022)" (16 August 2018), paragraph 18.

173 Air New Zealand "Response to the Process and Issues Paper: Auckland and Christchurch Airports' third price setting events (July 2017-June 2022)" (28 November 2017), paragraph 112.

174 BARNZ "Draft Report on Christchurch Airport's pricing decisions and expected performance: PSE3" (16 August 2018), paragraph 28.

246. Mr Wilson suggests that we may wish to seek comment from the Minister of Transport and the Civil Aviation Authority (CAA) to determine if Christchurch Airport's pricing proposal could be an attempt to regulate air traffic. He considers Christchurch Airport's fees have the effect of unjustly discriminating against regional air operators, and notes that it is beyond the Commission's scope to consider this directly.[175]

247. We do not agree with Mr Wilson's suggestion that Christchurch Airport's prices are an attempt to regulate air traffic (and in particular, reduce regional demand). We expect the airport has incentives to set prices that maximise its output, particularly given it is not facing significant capacity constraints. Accordingly, we do not intend to seek comment from the Minister of Transport and the CAA.

Comparing per passenger to per seat charges

248. It may be that per passenger charges send potentially poorer price signals about the scarcity of resources relative to a seat-based charge. This is because two identical aircraft, using identical resources at the airfield, could be charged materially differently if one is carrying significantly less passengers. The impacts of this on airlines' landing decisions are likely to be relatively minor. We expect airlines have other incentives that discourage them from landing aircraft with few passengers (eg, recovering its own costs, such as fuel) and therefore do not expect this pricing change alone to materially incentivise aircraft operators to land with few passengers.

249. We note that compared to a per seat charge, a per passenger charge is potentially more directed at:

    249.1 addressing capacity constraints, which may exist at gates in handling the volume of passengers in the domestic regional departure area; and

    249.2 encouraging more marginal flights to a terminal with spare capacity (eg, an airline may add capacity to a route or is less likely to remove capacity from a route that provided only marginal benefit if it is charged in a way that better matches fluctuations in its own revenue).

Conclusion

250. Overall, we consider that Christchurch Airport has set prices that may send better price signals about the relative capacity constraints facing its regional and integrated terminals. This is likely to encourage more passengers to use less congested services, resulting in lower future costs across the different terminals.

251. This approach is consistent with the airport's stated focus on improving the management of the distribution of current and future demand growth between its terminals, which is underpinned by planned investment and operational changes.

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[175] Patrick Wilson "Submission on draft report for review of Christchurch International Airport's pricing decisions and expected performance (July 2017 - June 2022)" (16 August 2018), page 3.

252. This view was shaped by material provided by Christchurch Airport to us after their consultation with airlines, which was not available to interested parties at the start of our consultation process. In our view, Christchurch Airport did not clearly explain in its PSE3 disclosure how its pricing structure is consistent with (or relates to) encouraging airlines to use spaces of the terminal that are under-utilised. Instead, it made broad statements that its charging structure seeks to increase the productivity and efficient use of its existing resources.

253. We think that Christchurch Airport should have been more transparent about these intentions in its PSE3 disclosure. This would allow us and other interested parties to better understand, and engage with, Christchurch Airport's performance and the efficiency of its prices, through our consultation process.

254. This conclusion compares to our findings in our section 56G review, at the time the integrated terminal opened, where we concluded that:[176]

> although Christchurch Airport's prices are unlikely to result in more efficient use of scarce resources at Christchurch Airport relative to PSE1, this does not appear to be a concern. This is because identified capacity constraints are expected to be managed through additional investment and operational changes.

Prices should have regard to consumers' demand responsiveness

255. In an industry with high fixed and common costs, such as airports, prices based on efficient incremental costs would under-recover the required revenues. Where this occurs, a possible efficient outcome is to make up any shortfall by differentiating prices according to consumers' demand responsiveness, consistent with Ramsey pricing principles (to the extent practicable). This works to minimise distortions to the efficient use of airport services.

256. Applying Ramsey pricing principles means that fixed costs are recovered by allocating more of those costs to those airport users who are relatively price insensitive (inelastic demand). This means those users least sensitive to price increases pay the highest mark-ups and those users most price sensitive pay the lowest mark-ups. [177]

257. For differentiated 'Ramsey' prices to be efficient, the differentiated prices should increase use of the airport (output) relative to a common price for all customers.

258. Applying pricing consistent with Ramsey pricing principles relies on the ability to price discriminate between groups of customers and requires information on demand characteristics of the customer groups. Demand characteristics may be

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176 Commerce Commission "Report to the Ministers of Commerce and Transport on how effectively information disclosure regulation is promoting the purpose of Part 4 for Christchurch Airport" (13 February 2014), paragraph D23.

177 Specifically, under Ramsey Pricing, the price for each user (or group of users) would be set by adding a percentage mark-up on marginal cost, with the size of the mark-up being inversely proportional to the price elasticity of demand of that user or group of users. The mark-ups are scaled up until revenues cover costs.

inferred to some degree from the aircraft weight and route characteristics of different flights.

259. Christchurch Airport pays route incentives to certain airlines introducing new routes. These payments are a form of Ramsey pricing and are described from paragraph 119.

Christchurch Airport considers its prices are indifferent to airlines' choices about types of aircraft, load factors, and routes

260. Christchurch Airport states that its pricing structure is not indifferent to the number of final passengers but is indifferent to airlines' choices about types of aircraft, load factors, and whether passengers are travelling to/from international or domestic locations.[178] Despite suggesting its indifference to airlines' choices, the airport does highlight that its pricing structure may cause behavioural responses from airlines. It notes that:[179]

> [it did not] expect or intend [for its changes in price structure] to impact on overall demand, but on the way a given level of demand used [its] facilities. Rather, to the extent that [Christchurch Airport] expected the new structure could cause a behavioural response, it was for the airlines to bring the same passengers to Christchurch in a different manner (for example, more Wellington passengers arriving jets and fewer by turbo-props, or possibly more international passengers arriving directly into Christchurch rather than via another New Zealand airport).

261. While the airport suggests that it did not expect its prices to impact on overall demand, it does note that it was mindful of how its prices may promote demand growth. Christchurch Airport considers its per passenger prices encourage: airlines to introduce new capacity earlier than otherwise; new entry and stimulation of greater competition; and direct international flights (that may have otherwise gone through other New Zealand airports).[180]

262. Christchurch Airport notes that it is difficult to determine how different groups of passengers will respond to price changes and considers that it is not in a position to judge the impact of small changes in airline-ticket prices on demand.[181]

263. Christchurch Airport, BARNZ and Mr Wilson provide different perspectives on which group of passengers (international or domestic) is likely to be most price sensitive.[182]

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178 Reference draft report response. Christchurch Airport "Submission on process and issues paper on the review of Auckland and Christchurch Airports' third price setting event" (28 November 2017), paragraph 47.

179 Christchurch Airport "Additional material on the reset of aeronautical prices for the period 1 July 2017 to 30 June 2022" (28 June 2018), paragraph 9.

180 Christchurch Airport "Submission on Commerce Commission's Review of Christchurch International Airport's Pricing Decisions and Expected Performance (July 2017 - June 2022) - Draft Report" (16 August 2018), paragraph 65.

181 Christchurch Airport "Submission on Commerce Commission's Review of Christchurch International Airport's Pricing Decisions and Expected Performance (July 2017 - June 2022) - Draft Report" (16 August 2018), paragraph 63.

182 Christchurch Airport "Additional material on the reset of aeronautical prices for the period 1 July 2017 to 30 June 2022" (28 June 2018), Appendix C, paragraphs 67-72. BARNZ "Review of Auckland and

264. We accept that it is difficult to determine the relative price responsiveness of domestic and international passengers; there are a range of stakeholder views, and international evidence on this, which may not be entirely applicable in the New Zealand context.

265. It therefore may be difficult to effectively differentiate prices according to consumers' demand responsiveness. While doing so, works to minimise distortions to the efficient use of airport services, we do not have particular concerns with Christchurch Airport's decision to transition to per passenger prices that are uniform across international and domestic passengers.

266. Christchurch Airport notes that its charging structure was advised to its independent demand forecast expert (Three Consulting), who considered the new charging structure did not materially impact on passenger demand forecasts.[183]

267. Nonetheless, the airport introduced a transitional price path (allowing for domestic prices to increase more slowly), in response to a statement by Air New Zealand that it might withdraw capacity from regional destinations.

268. Christchurch Airport describes this transitional path as a decision that "was seen as an essential measure to maintain the original demand forecast in light of airline feedback".[184] However, it also notes that this decision does not reflect its own assessment that passenger demand itself would respond differently with or without the transition.[185]

269. We note that once prices are set under a PSE, Christchurch Airport has a strong incentive to make best use of its available capacity. If it becomes apparent that prices are limiting demand, it has a strong incentive and the ability to offer incentives to keep air traffic at the airport.

Conclusion

270. We accept that the relative price sensitivities of domestic and international are not unequivocal. There are a range of stakeholder views, and international evidence, which may not be entirely applicable in the New Zealand context.

271. As such, we do not have particular concerns with Christchurch Airport's decision to transition to per passenger prices that are uniform across international and domestic passengers. We do note that the airport's decision to explicitly charge Wellington-Christchurch flights as users of the integrated terminal (which attracts a higher

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Christchurch Airport's third price setting events – Process & Issues paper" (28 November 2017), page 25. Patrick Wilson "Submission on draft report for review of Christchurch International Airport's pricing decisions and expected performance (July 2017 - June 2022)" (16 August 2018), page 3.

183 Christchurch Airport "Additional material on the reset of aeronautical prices for the period 1 July 2017 to 30 June 2022" (28 June 2018), paragraph 67.

184 Christchurch Airport "Additional material on the reset of aeronautical prices for the period 1 July 2017 to 30 June 2022" (28 June 2018), paragraph 67.

185 Christchurch Airport "Submission on Commerce Commission's Review of Christchurch International Airport's Pricing Decisions and Expected Performance (July 2017 - June 2022) - Draft Report" (16 August 2018), paragraph 66.

price), rather than simply charging all users of the regional lounge a higher price, may suggest the airport considers this route to be relatively less price sensitive than other routes using the regional terminal.

272. We consider it is plausible that Christchurch Airport's change in price structure would not materially affect demand. Therefore, we are comfortable that the overall demand forecast did not need to be revised.

273. However, we note the introduction of the transitional path, suggests that the airport recognises demand from various destinations (and overall demand) is at least somewhat affected by its price changes (ie, it is not indifferent to demand on specific airline routes, as it has suggested).[186]

Prices should enable price-quality trade-offs

274. Consumers may demand different levels of quality or quantity of service, for which they are willing to pay different prices. Where practical, consumers should therefore be able to make price-quality trade-offs. This may include the use of non-standard contracts or commercial agreements for individual consumers.

275. During the section 56G review, we concluded that the price-quality trade-offs in Christchurch Airport's pricing methodology were appropriate. This reflected evidence that:

275.1 Christchurch Airport enabled consumers to make price-quality trade-offs through commercial arrangements and individual contracts; and

275.2 airlines had not raised any concerns about their ability to make price-quality trade-offs through the standard charges set at Christchurch Airport for the PSE2 period.

Price-quality trade-offs are not a strong feature of the PSE3 pricing structure

276. Christchurch Airport's pricing structure for PSE3 does not allow for explicit price-quality trade-offs (eg, explicit charges for air-bridge or walking access).

277. Christchurch Airport has introduced standardised prices for check-in services (see **Table 3.1**), but indicates that individual commercial agreements still exist for these services.

278. BARNZ notes that because Christchurch Airport's prices are set on a per passenger basis, they do not particularly provide for airlines to make price-quality trade-offs. BARNZ states it has no information about how open the airport is to discussing price-quality trade-offs with individual airlines, and indicated there were no service level agreements in place with the airport. [187]

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186 See paragraph 260 above.

187 BARNZ "BARNZ assessment of CIAL's PSE3 pricing decision against Part 4 criteria" (28 November 2017), pages 2 and 7.

279. During the section 56G review we identified some examples of consumers making price-quality trade-offs through agreements for the use of specific assets including negotiating long-term contracts for the use of ground power assets by domestic aircraft, and specific commercial arrangements for dedicated check-in counters.

280. We are unclear about the availability of customised agreements, which may facilitate airlines making price-quality trade-offs for PSE3. We received no submissions on this issue.

The development of prices should be transparent, and promote price stability and certainty for consumers, where demanded

281. During the section 56G review, we concluded that the development of Christchurch Airport's pricing methodology for PSE2 promotes appropriate price stability and certainty for stakeholders. However, we considered that the development of the PSE2 pricing methodology by Christchurch Airport had not been fully transparent.[188]

Christchurch Airport's pricing structure is simple

282. A key benefit of the adopted per passenger prices is their simplicity. Christchurch Airport states that during its consultation with airlines, BARNZ considered per passenger pricing to be "well founded" and "simple", with the simplicity "aligning the interests of airlines with the airport." Qantas Group agreed that it "improved transparency and simplicity in charging mechanisms."[189]

Christchurch Airport sought to provide transparency about its pricing

283. BARNZ acknowledged that the airport consults with its substantial customers and provides a detailed model showing how the prices are derived from input costs and other assumptions. It then noted that the price development process may not be transparent to stakeholders other than substantial customers.[190]

284. Based on the information provided and stakeholders' views, Christchurch Airport appears to have engaged considerably with its customers regarding its significant changes to its pricing structure. In particular, the simplicity of per passenger prices helps provide transparency to airlines about their respective charges. We also acknowledge that the airport's pricing methodology includes a more transparent tilted annuity depreciation method, compared to the implied depreciation method it applied over PSE2. BARNZ considers that the tilted annuity approach is reasonable.[191]

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188 Commerce Commission "Report to the Ministers of Commerce and Transport on how effectively information disclosure regulation is promoting the purpose of Part 4 for Christchurch Airport" (13 February 2014), paragraph D33.

189 Christchurch Airport "Submission on process and issues paper on the review of Auckland and Christchurch Airports' third price setting event" (28 November 2017), paragraph 61.3.

190 BARNZ "BARNZ assessment of CIAL's PSE3 pricing decision against Part 4 criteria" (28 November 2017), page 7.

191 BARNZ "BARNZ assessment of CIAL's PSE3 pricing decision against Part 4 criteria" (28 November 2017), pages 6-7.

285. Nonetheless, we also consider that Christchurch Airport could have more clearly explained its intentions behind its significant change in its charging structure in its PSE3 disclosure, to help interested parties understand its performance, including the efficiency of its prices.

Risk sharing, certainty and price stability over the long-term

286. BARNZ and Christchurch Airport consider that the move to per passenger charges help align the airport's interests (and risks) with that of airlines in regard to passenger growth.[192] BARNZ considers this arrangement makes clear to airlines the associated costs.[193]

287. In other words, the per passenger charge—as opposed to a per seat charge and/or fixed charges—increases the degree to which changes in airlines' costs now move in proportion to changes in airlines' revenues. This helps reduce airlines' profit volatility and means the upside and downside demand risk affects the airport's profits more directly than previously.

288. On the other hand, the charging structure is now independent of aircraft weight. This represents the removal of risk to the airport that aircraft will be 'downgraded'. Christchurch Airport indicates in its annual disclosure that after it had set its forecast, airlines have modified their fleets significantly from what had been expected during pricing consultation, with airlines increasing the number of turbo-prop aircraft used and decreasing the number of jet aircraft. As turbo-prop aircraft previously fell in a lower charging weight group, this resulted in reduced revenue for the airport compared to its expectations.[194]

289. It is difficult to conclude how this change in charging structure has impacted the airport's exposure to risk. Overall, per passenger charging appears to reduce risk to airlines. However, we note that large changes to an airport's pricing structure can create significant fluctuations in individual customers' charges when prices are reset (ignoring any changes in the overall revenue collected).

290. NZ Airports states that it has not seen evidence that demonstrates a link between airport price stability and airlines' long term investment decisions (eg fleet acquisitions), and more directly their deployment decisions. It suggests that airlines have more flexibility than airports regarding short-term deployment of already acquired assets. Further it notes that "this is why price stability and predictability is also very important to airports" and that it "seeks sustained stability and

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192 BARNZ "Review of Auckland and Christchurch Airport's third price setting events – Process & Issues paper" (28 November 2017), page 24. Christchurch Airport "Submission on process and issues paper on the review of Auckland and Christchurch Airports' third price setting event" (28 November 2017), paragraph 61.2.

193 BARNZ "Review of Auckland and Christchurch Airport's third price setting events – Process & Issues paper" (28 November 2017), page 24.

194 Christchurch Airport "Specified Airport Services Annual Information Disclosure for the year ending 2017" (no date), page 5.

predictability in regulatory settings after a prolonged period of change and uncertainty with the ID regime."[195]

291. We consider that price stability is important for airlines' ability to plan and invest over the long-term where airlines are also making risky investments based on expectations about future costs, such as in new aircraft.

292. Christchurch Airport agrees that long term stability (both in pricing and the regime) is important and states that its focus on stability and sending a consistent signal to airlines aligns with its commercial approach to setting prices.[196]

293. We acknowledge that in response to Air New Zealand's feedback, Christchurch Airport reduced price fluctuations by allowing some domestic charges to transition to the new (higher) price more gradually over the period.

294. Given that much of the airport's costs are fixed in nature and only moderately affected by the type of aircraft, we would expect airports' charging structures to remain relatively stable over the long-term. Where significant changes are proposed, we encourage airports to provide robust evidence regarding the efficiency benefits and to have regard to price stability over the long-term.

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195 NZ Airports "Submission on the Commission's Christchurch Airport draft report" (16 August 2018), paragraph 11.

196 Christchurch Airport "Submission on Commerce Commission's Review of Christchurch International Airport's Pricing Decisions and Expected Performance (July 2017 - June 2022) - Draft Report" (16 August 2018), paragraph 27.

Attachment A Our assessment of Christchurch Airport's cost of capital

Purpose

A1 This attachment contains our analysis and conclusions on whether Christchurch Airport has sufficiently justified its cost of capital of 6.82%.

A2 This attachment does not assess Christchurch Airport's expected returns of 6.65%, which are discussed in **Chapter 2**.

Structure of this attachment

A3 This attachment sets out our:

A3.1 framework for assessing Christchurch Airport's target return, taking into account the relevant context of the IM Review undertaken in 2016 and the previous section 56G reports; and

A3.2 assessment of Christchurch Airport's target return, focussing on the reasons it has provided for adopting a higher cost of equity and cost of debt than our benchmark values.

Framework for assessing Christchurch Airport's estimated cost of capital

A4 This section outlines our approach to assessing Christchurch Airport's estimate of its cost of capital in this review. This approach differs from the section 56G reviews, undertaken in 2013 and 2014, reflecting changes to the IMs made in 2016. It is consistent with the approach taken in our report on Auckland Airport.[197]

A5 This section discusses:

A5.1 our past approach in the section 56G reviews, where we primarily focussed on the 75th percentile WACC estimate;

A5.2 the changes made in the IM Review, which led to us now publishing only a mid-point WACC estimate and associated standard error;

A5.3 our mid-point WACC estimate for airports as at 1 April 2017, which is a key reference point for this review; and

A5.4 our approach for assessing Christchurch Airport's estimate of its cost of capital in this review, in light of the changes made in the IM Review.

[197] Commerce Commission "Review of Christchurch International Airport's pricing decisions and expected performance (July 2017 – June 2022) - Final report" (1 November 2018) Attachment A.

Our approach in the section 56G reports primarily focussed on the 75th percentile

A6 We considered a range from the mid-point to 75th percentile when assessing airport profitability in the section 56G reports. We noted that:[198]

A6.1 the mid-point (50th percentile) was the appropriate starting point;

A6.2 the 75th percentile was also considered to allow for the uncertainty of estimating the true cost of capital, in light of the potential asymmetric consequences of estimation error on pricing and investment; and

A6.3 the low end of the range (the 25th percentile) was not relevant when considering whether airports were targeting excessive profits.

A7 Any supplier-specific adjustments to our benchmark cost of capital were rejected in the section 56G reports. We made the following points.[199]

A7.1 The purpose of IMs is to promote certainty in the rules and assumptions to assess performance. This certainty would be undermined by ad hoc adjustments.

A7.2 A supplier which sets prices based on a higher estimate of cost of capital than the actual cost at which capital is available in an industry cannot expect consumers in a workably competitive market to pay these higher prices.

A7.3 Although individual airports are subject to company-specific risks, investors can diversify these away. The cost of capital reflects risks which investors cannot diversify away.

A8 This approach reflected our original IM Determination in 2010, where we decided to use a WACC range from the 25th to the 75th percentile. We also decided that service-specific (ie, industry-wide), rather than supplier-specific, WACC estimates would be used.[200]

A8.1 We noted that leverage, debt premium and beta could potentially be considered on a supplier-specific basis.

A8.2 However, we considered each of these parameters individually and concluded that service-specific estimates would be more appropriate for each of them.

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198 For example, see: Commerce Commission "Report to the Ministers of Commerce and Transport on how effectively information disclosure regulation is promoting the purpose of Part 4 for Wellington Airport Section 56G of the Commerce Act 1986" (8 February 2013), paragraphs F26-F50.

199 For example, see: Commerce Commission "Report to the Ministers of Commerce and Transport on how effectively information disclosure regulation is promoting the purpose of Part 4 for Wellington Airport Section 56G of the Commerce Act 1986" (8 February 2013), paragraphs F45-F50.

200 Commerce Commission "Input methodologies (airport services): Reasons paper" (December 2010), paragraph E2.82.

A9 In the section 56G, reports the upper limit of our WACC range (the 75th percentile) effectively became the key benchmark when assessing airport profitability. This was also the percentile that was used when setting price-quality paths for energy businesses at that time.

We now only publish a mid-point WACC following the IM Review

A10 In the 2016 IM Review we decided to change our approach, due to two main problems with the previous framework:[201]

A10.1 the upper limit of our WACC range had become the de facto benchmark when assessing airport profitability; and

A10.2 there was limited and weak rationale for using the 75th percentile as the upper limit of the WACC percentile range.

A11 We decided to remove the WACC range, and instead publish only the mid-point WACC and a standard error so that any required percentile can be calculated. We noted that this approach:[202]

A11.1 enables flexibility in assessing the acceptability of airport returns, and will reduce the focus of any assessment on the upper limit of the range; and

A11.2 will provide flexibility to enable any assessment to take into account different contextual factors affecting an airport's required return expectations, or the expectations of a particular project.

A12 The 2016 IM Review also reiterated our 2010 decision that the 50th percentile is the appropriate starting point for any assessment of airport profitability.[203]

A13 Given airports are not subject to price-quality path regulation, it is not necessary to specify a particular WACC percentile estimate. This is in contrast to electricity lines and gas pipelines, where we specify the 67th percentile WACC estimate for price-quality path regulation.

Our mid-point WACC estimate for airports as at 1 April 2017

A14 When considering Christchurch Airport's estimate of its cost of capital for this review, the key reference point is our mid-point WACC estimate for airports as at 1 April 2017. This was our most recently available WACC estimate for airports at the time Christchurch Airport set its prices for PSE3.

A15 The parameter values used to calculate our airports WACC estimate as at 1 April 2017 are shown in **Table A1** below.[204]

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

202 Commerce Commission "Input methodologies review decisions – Topic paper 6: WACC percentile for airports" (20 December 2016), page 3.

203 Commerce Commission "Input methodologies review decisions – Topic paper 6: WACC percentile for airports" (20 December 2016), paragraphs 22 and 87.

Table A1 Parameters used to calculate our airports WACC estimate as at 1 April 2017[205]

Parameter	5 year estimate
Risk-free rate	2.76%
Average debt premium (A-)	1.45%
Leverage	19%
Asset beta	0.60
Equity beta	0.74
Tax adjusted market risk premium	7.0%
Average corporate tax rate	28%
Average investor tax rate	28%
Debt issuance costs	0.20%
Cost of debt	4.41%
Cost of equity	7.17%
Standard error of WACC	0.0146
Mid-point vanilla WACC	6.64%
Mid-point post-tax WACC	6.41%

Our proposed framework for assessing Christchurch Airport's estimated cost of capital

A16 We have developed a framework for assessing Christchurch Airport's estimate of its cost of capital in this review, taking into account the relevant context of the section 56G reviews, and the changes made during the IM Review in 2016.

A17 Our high-level framework for assessing Christchurch Airport's cost of capital, including the key factors we have considered, is set out below.

204 Cost of capital determination for information disclosure year 2018 for electricity distribution services and specified airport services (March year-end disclosure year) [2017] NZCC 7, table 7, page 11.

205 The cost of debt is calculated as the risk-free rate + debt premium + debt issuance costs. The cost of equity is calculated as the risk-free rate × (1- investor tax rate) + the equity beta × the tax adjustment market risk premium. The mid-point vanilla WACC is calculated as the cost of equity × (1 - leverage) + the cost of debt × leverage.

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.[206]
- 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 (for example, 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.[207]
- 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 section 52A(1)(d) requirement to limit the ability of airports to earn excessive profits)?[208]
- **If we are not satisfied there are legitimate reasons, then the airport-specific adjustment to that parameter is unjustified.**

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

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

[208] Commerce Commission "Input methodologies review decisions – Topic paper 6: WACC percentile for airports" (20 December 2016), 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.[209]
- 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 section 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.**

Submissions on the framework for assessing airport target returns

A18 We received a number of submissions on our application of the revised framework and our interpretation of the framework set out as part of the IM Review. Given the framework is applied to assessing returns across all airports we have referred to submissions on both the Auckland Airport and Christchurch Airport draft reports in this section.[210]

A19 In particular, NZ Airports and other airport submissions suggested that:

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

[210] Commerce Commission "Review of Auckland International Airport's pricing decisions and expected performance (July 2017 – June 2022) - Draft report" (26 April 2018); Commerce Commission "Review of Christchurch International Airport's pricing decisions and expected performance (July 2017 – June 2022) - Draft report" (19 July 2018).

A19.1 we had not sufficiently taken into account the context of an airport's decision on its target return and had narrowly focussed on WACC parameter values;[211]

A19.2 the evidentiary burden required to justify a departure from the mid-point is too onerous and has resulted in the mid-point becoming a bright line benchmark;[212]

A19.3 too much focus has been placed on profitability and not the wider performance of airports;[213]

A19.4 we should provide more information of the performance of airports over time and make it clear that there has not been a 'backwards step' since PSE2.[214]

A20 We consider these points below.

The role of our mid-point WACC estimate and the appropriate evidentiary burden when considering target returns

A21 We agree with the submissions that note how our mid-point WACC estimate is not intended to be a bright line.[215] We explicitly stated in the IM Review that we consider there may be legitimate reasons for an airport to target returns that are different to our mid-point WACC estimate. However, we also noted that:[216]

> …the key consideration for us when assessing the appropriateness of an airport targeting returns above the mid-point estimate is the extent to which it promotes the long-term benefit of consumers. Any reasoning for setting a targeted return above the mid-point needs to consider this purpose.
> …
> …the airports will be required to provide information and evidence to explain those reasons to interested parties. This explanation will then be considered in light of the s 52A(1)(d) requirement to limit the ability of airports, as regulated suppliers, to earn excessive profits.
> …

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211 NZ Airports "Submission on draft report for review of Auckland International Airport's pricing decisions and expected performance (July 2017 - June 2022)" (29 May 2018), paragraph 10; Auckland Airport "Section 53B review of Auckland Airport's pricing decision and expected performance for PSE3: submission on the draft report" (29 May 2018), paragraph 49.

212 Auckland Airport "Section 53B review of Auckland Airport's pricing decision and expected performance for PSE3: submission on the draft report" (29 May 2018), paragraph 78f; NZ Airports "Submission on draft report for review of Auckland International Airport's pricing decisions and expected performance (July 2017 - June 2022)" (29 May 2018), paragraph 31 (b).

213 Wellington Airport "Response to draft report on Auckland Airport's PSE3 pricing" (29 May 2018), pages 1-2.

214 NZ Airports "Submission on draft report for review of Auckland International Airport's pricing decisions and expected performance (July 2017 - June 2022)" (29 May 2018), paragraphs 41-42.

215 NZ Airports "Submission on draft report for review of Auckland International Airport's pricing decisions and expected performance (July 2017 - June 2022)" (29 May 2018), paragraph 9; Auckland Airport "Section 53B review of Auckland Airport's pricing decision and expected performance for PSE3: submission on the draft report" (29 May 2018), paragraph 20.

216 Commerce Commission "Input methodologies review decisions – Topic paper 6: WACC percentile for airports" (20 December 2016), paragraphs 59, 94, and 132.

> We also expect greater explanation, reasoning and evidence to be required as any divergence from the mid-point increases. Such reasoning and evidence should be specific to the circumstances of the airport or specific project at the time of the estimate. Relying on generic arguments concerning other airports or other time periods will not be considered sufficient, in our view.

A22 As noted in the IM Review, section 52T(1)(a)(i) requires the input methodologies relating to a particular good or service to include an IM for the cost of capital. Airports do not have to apply the cost of capital established under the cost of capital IM for airports (section 53F(1)). However, we can use the cost of capital IM to "monitor and analyse" information made available by regulated suppliers (section 53F(2)(a)).[217]

A23 As also noted in the IM Review, we consider that our mid-point WACC represents our starting point when assessing airports' profitability, but we will also consider whether each airport has legitimate reasons for targeting a different return to our mid-point WACC estimate.[218]

A24 A degree of judgement is required when determining target returns. However we consider that any judgement which results in targeted returns above our mid-point WACC estimate needs to be supported by evidence. As indicated in the quotes at paragraph A21 above, the onus is on airports to provide sufficient evidence to support any judgement calls they have made, in light of the Part 4 purpose statement.

A25 BARNZ submitted in its cross submission on the draft report how care needs to be taken when considering the impact of this uncertainty when assessing target returns:[219]

> The airports are correct that WACC estimates are uncertain. But they are seeking to use that uncertainty to create an environment where excessive profits become easier to extract. Auckland Airport and NZ Airports' Association appear to want to see the reintroduction of a WACC range. The effect of this, of course, would be that all of the regulated airports would then set prices based on a WACC set at the top of whatever range the Commission determines. This would mean consumers would consistently pay prices above the best estimate of the cost of capital. This consumer harm is why the previous WACC range was criticised by the High Court and then removed by the Commission.

A26 We outlined in our draft reports how we had not been persuaded by the evidence provided by the airports to explain their cost of capital estimates.[220] More explicitly,

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217 Commerce Commission "Input methodologies review decisions Topic paper 5: Airports profitability assessment" (20 December 2016), paragraph 52.

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

219 BARNZ "Draft Report on Christchurch Airport's PSE3 pricing - cross-submission" (6 September 2018), paragraph 9

220 Commerce Commission "Review of Auckland International Airport's pricing decisions and expected performance (July 2017 – June 2022) - Draft report" (26 April 2018); Commerce Commission "Review of Christchurch International Airport's pricing decisions and expected performance (July 2017 – June 2022) - Draft report" (19 July 2018).

we had not been persuaded that the reasons given in Auckland Airport's pricing disclosure (ie, the argument that an increase in capital expenditure leads to an increased operating leverage and a higher asset beta) explained the magnitude of the increase in the asset beta (and thus cost of equity). We also were not persuaded by Christchurch Airport's reasoning that its higher number of leisure passengers justified its higher estimate of asset beta.

A27 The draft reports provided an opportunity for more evidence to be provided that could change that judgement. This has been characterised by some submissions that a certain evidential threshold needs to be met.[221] We consider that it is wrong to interpret the framework in this way. We do not consider a specific evidence threshold (empirical or otherwise) needs to be passed.

A28 We consider that NZ Airport's view that 'extensive empirical evidence' is needed to justify small deviations from the WACC IM overstates the evidentiary burden on airports under our framework:[222]

> NZ Airport's concern is that the Commission's requirement for airports to provide extensive empirical evidence to justify the reason for, and size of, each deviation from individual WACC IM parameters means that, in practice, little or no flexibility is provided to consider airport specific context.

A29 We stated in the draft report that empirical evidence would be useful, but given the uncertainties associated with asset beta estimates, any empirical data would also be considered together with other forms of evidence and reasoning provided by the airport.[223]

A30 NZ Airports also stated:[224]

> Our concern now is that the Commission's assessment framework in fact increases the focus on WACC IM values (particularly the WACC IM mid-point), as discussed below. NZ Airports submits that to avoid this risk, instead of primarily focussing on technical parameter adjustments, the Commission's assessment of expected profitability must more carefully consider and assess the judgement that airports must reasonably exercise when estimating an airport-specific WACC and target return.

A31 We agree that any assessment should consider the judgement that airports exercise in estimating WACC and setting a target return. However, any assessment of contextual factors ultimately has to consider how those factors impact the target return that has been chosen. Our framework focusses on the impact of contextual or airport-specific factors on individual WACC parameters to enable greater clarity when assessing the evidence provided.

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221 NZ Airports "Cross-submission on draft report for review of Auckland International Airport's pricing decisions and expected performance (July 2017 - June 2022)" (26 June 2018), paragraph 21 (b).

222 NZ Airports "Submission on draft report for review of Auckland International Airport's pricing decisions and expected performance (July 2017 - June 2022)" (29 May 2018), paragraph 61.

223 Commerce Commission "Review of Auckland International Airport's pricing decisions and expected performance (July 2017 – June 2022) - Draft report" (26 April 2018), paragraph 107.

224 NZ Airports "Submission on draft report for review of Auckland International Airport's pricing decisions and expected performance (July 2017 - June 2022)" (29 May 2018), paragraph 44.

A32 We note that BARNZ made a similar point in its cross submission to the Auckland Airport draft report.[225]

> We think these views overlook what the Commission's assessment framework does. From our reading of the Draft Report, the Commission clearly understands AIAL's logic and rationale for a higher WACC. However, having understood the rationale, it must be tested. Ultimately the way to test it is to consider whether the case put forward (ie that higher capex leads to higher operating leverage, which justifies an asset beta 0.08 higher than the Commission's estimate) stands up to scrutiny. The best way to do this is to consider whether the evidence supports a beta uplift of that size.

A33 Overall we consider the approach we have taken to assessing the evidence provided by Christchurch Airport and Auckland Airport is consistent with the approach outlined as part of the IM Review.

Assessment of profitability

A34 The overall performance of airports depends on a number of aspects of the business (eg, quality, operating expenditure efficiency).[226] However, we put a significant focus on airport profitability because it is a key aspect of overall performance.

A35 Airports are able to set prices as they see fit, however changes to our information disclosure regime are likely to have influenced their behaviour to some extent. Airports are now required to explain any differences from our mid-point WACC estimate. Previously their target return was assessed against a reasonable range, with the 75th percentile as the top of the range.[227]

The evolution of the regime

A36 NZ Airports suggested we should provide more information on the performance of airports over time and make it clear that there has not been a 'backward step' compared to previous price setting events.[228]

A37 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. [229]

A38 We acknowledge that we are broadly satisfied Christchurch Airport is not targeting excessive profits over PSE3 and that this is an improvement on our previous view on Christchurch Airport's expected profitability. In PSE2, we concluded that Christchurch Airport had not provided sufficient information to allow interested persons to assess

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225 BARNZ "Cross-submission on Auckland Airport pricing in light of Christchurch Airport Draft Report" (26 June 2018), paragraph 6.

226 These aspects of performance are considered Attachment B.

227 Airport Authorities Act 1966, Section 4A.

228 NZAA "Submission on the Commerce Commission's ("Commission") draft report "Review of Auckland International Airport Limited's pricing decisions and expected performance (July 2017 – June 2022)" (29 May 2018), paragraph 41.

229 Commerce Commission "Input methodologies review decisions – Topic paper 6: WACC percentile for airports" (20 December 2016), paragraphs 59 and 97.

its expected profitability performance and that its price setting disclosure did not fully or transparently reflect its pricing approach.

A39 Previously in PSE2, the upper limit of our WACC range (the 75th percentile) effectively represented the key benchmark when assessing airport profitability. Now 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.

A40 Although not a focus of this report, we consider Christchurch Airport's responses to improve the transparency of its pricing approach between PSE2 and PSE3 suggests that the extent to which the information disclosure regime limits Christchurch Airport's ability to extract excessive profits, and influences its conduct, has increased from PSE2 to PSE3.

Other important factors to consider in assessing an Airport's target return

A41 Two other important contextual aspects are the significance of the dual till in assessing target returns and ensuring consistency across airports and over time.

The significance of dual till in assessing target returns

A42 Air New Zealand and BARNZ agreed with our view that airports can earn significant revenue from unregulated complementary activities, and this should be recognised when determining an appropriate return from aeronautical activities.[230]

A43 Air New Zealand has previously noted that considering aeronautical returns in isolation from overall airport returns is an artificial construct, and does not reflect the practice of markets which will be assessing airport performance on the basis of total returns (and making investment decisions accordingly).[231]

A44 Auckland Airport submitted that the dual till does not "automatically provide mitigation for the risks and potential social costs of underinvestment",[232] while NZ Airports submitted:[233]

> It appears that the Commission's view on the impact of the dual till is a key reason why the Commission is reluctant to consider whether a WACC higher than its mid-point can provide long-term benefits for consumers – including passengers. That is, it believes that the incentives arising from the non-regulated business mean that it does not need to be concerned about whether its WACC IM mid-point

230 Air New Zealand "Submission on draft report for review of Auckland International Airport's pricing decisions and expected performance (July 2017 - June 2022)" (29 May 2018), pages 2-3; BARNZ "Cross-submission on Draft Report on AIAL's PSE3 pricing decision" (26 June 2018), paragraphs 17-18.

231 Air New Zealand "Response to the Process and Issues Paper: Auckland and Christchurch Airports' third price setting events (July 2017-June 2022)" (28 November 2017), paragraph 20.

232 Auckland Airport "Section 53B review of Auckland Airport's pricing decision and expected performance for PSE3: submission on the draft report" (29 May 2018), paragraph 135.

233 NZ Airports "Submission on draft report for review of Auckland International Airport's pricing decisions and expected performance (July 2017 - June 2022)" (29 May 2018), paragraph 26.

> underestimates the true WACC for each airport, such that investment that benefits passengers in the long-term could be put at risk.

A45 We do not consider that the dual till automatically provides mitigation against the costs of underinvestment. However, we agree with Air New Zealand and BARNZ that the dual till approach can be relevant when assessing target returns. For example, we stated in the IM Review that we consider that the case for providing an uplift above our mid-point WACC estimate to mitigate the risk of underinvestment is significantly weaker for airports than for energy businesses. In particular, we noted that airports:[234]

A45.1 are subject to a dual till structure (whereby they can earn significant amounts of revenue from unregulated complementary activities) —this means that aeronautical investments are likely to take place even in instances when the regulated return is too low if the difference can be made up from complementary unregulated revenue streams;

A45.2 have regular consultations with a small number of engaged customers—this engagement protects against underinvestment because airlines can identify investment that they are willing to pay for (which is likely to be the majority of efficient investment in regulated airport services); and

A45.3 there could be other regulatory requirements (such as safety) that result in the investment being made.

A46 Although complementary revenue streams are unregulated, they can directly impact incentives to invest in regulated services. Therefore, we noted in the IM Review that:[235]

> When we are assessing airports under the ID regime and considering whether it is in the long-term interest of consumers to increase returns above the mid-point WACC, it is highly relevant that we understand the actual risk of under-investment.

A47 This approach seems consistent with Auckland Airport's view that:[236]

> We think that [a dual till regime] creates better investment incentives than a single till regime for both the aeronautical and non-aeronautical business, and that it is more consistent with promoting aeronautical investment in the long-term interest of consumers than a single till approach.

A48 Consequently, we consider that the most appropriate approach is to recognise the reality that airports are dual till when assessing their target returns.

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234 Commerce Commission "Input methodologies review decisions – Topic paper 6: WACC percentile for airports" (20 December 2016), paragraph 139.

235 Commerce Commission "Input methodologies review decisions – Topic paper 6: WACC percentile for airports" (20 December 2016), paragraph 145.

236 Auckland Airport "Section 53B review of Auckland Airport's pricing decision and expected performance for PSE3: submission on the draft report" (29 May 2018), paragraph 136a.

Consistency in approach between airports and over time

A49 BARNZ is concerned that the regulatory framework is producing a situation where each airport finds its own reason to justify an uplift, but those reasons are not consistent over time, or with each other.[237]

A50 We agree that it is important to consider consistency between airports' rationale for their target returns. As indicated in our framework above, we intend to consider whether each airport has applied consistent logic over time, and whether there are any off-setting considerations which would reduce airports' target returns. This includes considering arguments other airports have made when setting their target returns.

A51 NZ Airports suggested that this may imply airports should coordinate their pricing decisions in advance of them being made or undertaking an analysis of all the differences and similarities between each airport.[238]

A52 For the avoidance of doubt, we are not suggesting that airports should coordinate pricing decisions in advance. As noted above we would expect consistency in pricing decisions by an individual airport over time and consideration of any off-setting factors. We would also expect airports to consider factors which have been used by other airports to explain a departure from our mid-point estimate and which we have considered in any previous assessments of price setting events.

Assessment of Christchurch Airport's cost of capital

Christchurch Airport's estimated WACC for priced services is 6.82%

A53 Christchurch Airport estimates that its cost of capital for priced activities (priced services) is 6.82%, which is equivalent to the 61st percentile of our WACC range (estimated as at 1 April 2017).

A54 When estimating its cost of capital, Christchurch Airport has used our inputs for all WACC parameters except asset beta and credit rating. Christchurch Airport has used:

A54.1 an asset beta of 0.65, which is 0.05 higher than our benchmark; and

A54.2 a debt premium of 1.84% based on its actual credit rating of BBB+, rather than our benchmark of 1.45% based on an A- credit rating.[239]

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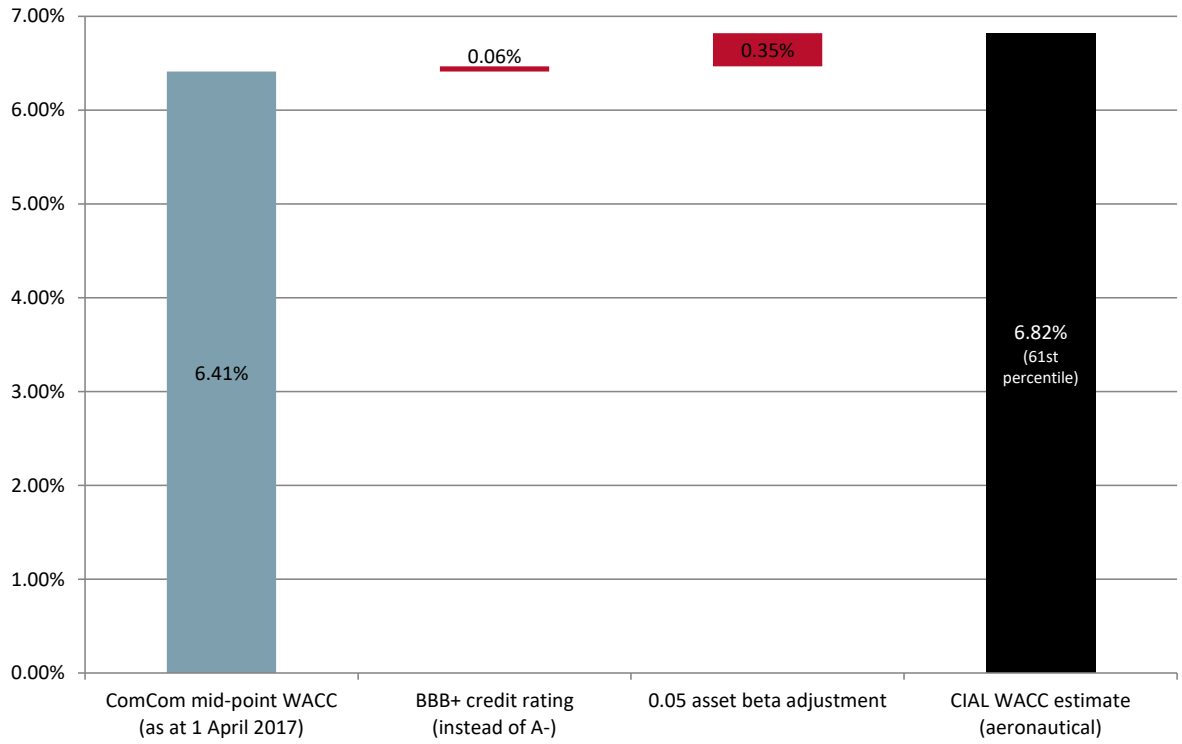
237 BARNZ "Review of Auckland and Christchurch Airport's third price setting events – Process & Issues paper" (28 November 2017), table 4, row 18.

238 NZAA "Submission on the Commerce Commission's ("Commission") draft report "Review of Auckland International Airport Limited's pricing decisions and expected performance (July 2017 – June 2022)" (29 May 2018), paragraph 76.

239 We note that our normal practice has been to round the estimate of equity beta (within the WACC calculation) to two decimal places. For example, the equity beta is set at 0.74 for airports in the Input Methodologies. Applying this rounding approach with an asset beta of 0.65 and a debt premium of 1.84% results in a slightly different WACC estimate of 6.80% (compared to the 6.82% estimated by Christchurch).

A55 The materiality of Christchurch Airport's adjustments is demonstrated in **Figure A1** below.

Figure A1 Waterfall chart showing the difference between our mid-point WACC and Christchurch Airport's estimated WACC



A56 The sections below discuss our assessment of Christchurch Airport's approach to asset beta and debt premium in more detail.

Our assessment of Christchurch Airport's approach to asset beta

A57 This section discusses Christchurch Airport's decision to use an asset beta of 0.65, rather than our estimate of 0.60. Christchurch Airport gives two main reasons for its 0.05 asset beta uplift.[240]

A57.1 A greater exposure to holiday/leisure travellers is expected to result in greater systematic risk relative to the other New Zealand airports. Christchurch Airport noted that it applied a 0.05 upwards adjustment in PSE2 for this reason.

A57.2 Proxy analysis undertaken by Incenta to assess systematic risk at airports in our sample suggests that Christchurch Airport has a materially greater degree of systematic risk than the "average airport" in our sample.

[240] Christchurch Airport "Disclosure relating to the reset of aeronautical prices for the period 1 July 2017 to 30 June 2022" (14 August 2017), paragraph 112.

A58 Our view is that Christchurch Airport's asset beta has not been sufficiently justified. We consider that both Christchurch Airport's leisure-travel rationale and Incenta's proxy analysis do not provide sufficient justification for a higher asset beta.

A59 Incenta's analysis, and our views regarding Christchurch Airport's rationale for its asset beta uplift, are discussed in more detail below.

Submissions to the draft report on asset beta

A60 Submissions on the draft report provided limited further comment on the asset beta estimate for Christchurch Airport.

A61 BARNZ agreed with our view that Christchurch Airport's asset beta has not been sufficiently justified:[241]

> We agree with the Commission that Christchurch Airport's asset beta uplift to compensate for the supposed higher risk of having a higher proportion of leisure travellers is not justified and the evidence provided by the airport for this uplift is weak.

A62 Christchurch Airport noted that it would consider our assessment on asset beta when assessing prices in PSE4.[242]

> CIAL appreciates the further guidance the Commission has given about the evidence that CIAL provided in its proposal and on the further matters the Commission would like to see addressed. CIAL will consider and reflect on this guidance when considering its pricing for PSE4.

A63 In response Air New Zealand cross-submitted that:

> Air New Zealand encourages the Commission to note in its final report that a response such as this is insufficient – and that it expects more from airport companies than a promise to do better in future, while keeping excess profits earned in the current regulatory period. Such behaviour in fact demonstrates that information disclosure and Commission led reviews of price setting deliver insufficient regulatory threat to stop airports retaining excess profits.

A64 Although we do not consider Christchurch Airport has justified its asset beta, our overall assessment of profitability does not lead to a conclusion of excessive profits on priced services. The higher asset beta, as estimated by Christchurch Airport, is broadly offset by the cost of route incentive payments.

A65 In its submission Christchurch Airport also requested that:

A65.1 we (ie, the Commerce Commission) provide a "clear confirmation" that we are open to applying a different asset beta to the benchmark and that we do

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241 BARNZ "Draft Report on Christchurch Airport's pricing decisions and expected performance: PSE3" (16 August 2018), paragraph 3a

242 Christchurch Airport "Submission on Commerce Commission's Review of Christchurch International Airport's Pricing Decisions and Expected Performance (July 2017 - June 2022) - Draft Report" (16 August 2018), paragraph 46

not have an in-principle view that a single asset beta should apply across the regulated New Zealand airports;[243] and

A65.2 we are forthcoming about factors that we consider to be most significant in terms of their potential to cause a difference in systematic risk.[244]

A66 As stated previously, we are open to applying a supplier-specific asset beta that departs from our mid-point WACC estimate. However, it requires an airport to persuade us that there are legitimate reasons why the asset beta should be different to the sector wide asset beta, as determined during the IM Review process.

A67 The evidence provided by Christchurch Airport has not persuaded us that, for PSE3, a higher asset beta for Christchurch Airport is justified. However, under different circumstances and/or with different evidence there may be a different outcome.

A68 Christchurch Airport has also requested that we provide guidance on the most significant factors that could cause a difference in systematic risk.

A69 On the whole, we are reluctant to provide specific guidance. There are potentially factors that we are not aware of, but will consider if they are brought to our attention as part of our consultation process. We also note that our conclusions are based on both the importance of a particular factor in affecting systematic risk and the magnitude of any difference in how a factor affects a particular airport compared to the airport sector as a whole.

A70 However, at a high level, some of the most important factors affecting systematic risk for airports have previously been provided to us by Martin Lally. These factors include: industry, nature of the customer, duration of contract prices with suppliers and customers, presence of regulation, degree of monopoly, nature of real options, operating leverage, market weight and capital structure. [245]

Summary of Incenta's analysis regarding Christchurch Airport's exposure to systematic risk

Incenta's proxy analysis tests whether Christchurch Airport's beta is higher than comparators

A71 In its initial pricing proposal, Christchurch Airport stated that "[c]omparisons of [Christchurch Airport] with the other airports in the Commission's sample is difficult because reliable and comparable qualitative data on the nature of the different airports' traffic is not available".[246]

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243 Christchurch Airport "Submission on Commerce Commission's Review of Christchurch International Airport's Pricing Decisions and Expected Performance (July 2017 - June 2022) - Draft Report" (16 August 2018), paragraph 49.

244 Christchurch Airport "Submission on Commerce Commission's Review of Christchurch International Airport's Pricing Decisions and Expected Performance (July 2017 - June 2022) - Draft Report" (16 August 2018), paragraph 51.

245 Martin Lally, "The cost of capital for the airfield activities of New Zealand's international airports" (June 2001), pages 369-373.

246 Christchurch International Airport Limited "Proposal for the reset of aeronautical prices for the period 1 July 2017 to 30 June 2022" (16 November 2016), paragraph 173.

A72 In light of perceived difficulties in comparing Christchurch Airport's proportion of leisure travellers with the companies in our comparator sample, Christchurch Airport asked Incenta to advise "as to whether there is a reliable empirical basis for comparing the level of systematic risk of [Christchurch Airport] to the average airport in the Commission's sample".[247]

A73 Incenta used proxy analysis to compare Christchurch Airport's beta to the rest of the companies in the comparator sample, and concluded that this supports a 0.05 uplift. Incenta noted that:[248]

A73.1 as Christchurch Airport is not a listed business, its asset beta cannot be estimated directly from financial market data (and therefore, a direct comparison of Christchurch Airport's asset beta to the companies in the comparator sample is not possible);

A73.2 it is not possible to compare the relative passenger mix across the airports in the sample, because reliable and consistent information on such matters across all of the airports is unavailable; but

A73.3 it is possible to infer the relativity between Christchurch Airport's asset beta and the average airport in the sample by estimating a proxy for systematic risk.

A74 Incenta's proxy analysis involved regression analysis of changes in passenger volumes against changes in real GDP. Incenta pooled data on percentage changes in GDP and passenger volumes for the sample of 26 comparator companies, spanning 2005-2015. This was then compared to data for Christchurch Airport for 1987-2015.[249]

A74.1 Incenta found that Christchurch Airport's proxy beta (0.92-1.08) is 40-60% higher than the average airport (0.67), depending on whether certain years are excluded.

A74.2 Incenta noted that a 0.05 increment to the asset beta amounts to less than 10% above the Commission's estimate. Incenta stated that this would "only require the relative accounting betas to account for between 14% and 22% of total beta risk", which it considers to be plausible.

A75 When reaching its conclusions, Incenta does not assume any specific factor is the underlying driver of Christchurch Airport's higher exposure to systematic risk. Specifically, Incenta noted that its analysis "does not rely upon assumptions about

247 Christchurch International Airport Limited "Proposal for the reset of aeronautical prices for the period 1 July 2017 to 30 June 2022" (16 November 2016), paragraph 173.

248 Incenta "Depreciation, allocation of implied depreciation and asset beta – Report for Christchurch International Airport Limited" (November 2016), page 25.

249 Incenta "Depreciation, allocation of implied depreciation and asset beta – Report for Christchurch International Airport Limited" (November 2016), page 24-28.

the factors that may cause differences in systematic risk (i.e., the question of whether greater leisure-based travel causes more systematic risk)".[250]

Dr Small raised several concerns regarding Incenta's analysis

A76 Dr John Small (for BARNZ) raised concerns regarding Incenta's analysis across three reports. Dr Small's reports refer to three primary areas of concern.[251]

A76.1 **Approach to estimating a proxy beta.** The use of growth rates in passenger numbers and real GDP (rather than levels) is problematic. Incenta's analysis ignores relationships between flow variables and stock variables.

A76.2 **Period of analysis.** The very large difference in sample periods between Incenta's Christchurch Airport proxy beta and the benchmark sample should be justified. If there is no sufficient justification, consistent sample periods should be used.

A76.3 **Statistical significance.** The estimated accounting beta for Christchurch Airport is not statistically significantly different from the sample. Incenta's claim that it is "practically impossible" to estimate asset betas with conventional levels of statistical significance is unsupported by evidence.

A77 Regarding the statistical significance of Incenta's results, Dr Small stated:[252]

> Incenta is actively seeking to differentiate its client's risk from the benchmark sample *by using statistical analysis*. In this context, it is not clear why normal statistical standards should not apply. If Incenta has chosen to use a different evidential approach to try to identify CIAL's level of systematic risk, this matter would not have arisen. [Christchurch Airport] cannot both rely on statistical analysis to produce its results and then defend its findings by arguing that statistical analysis cannot be relied on.

A78 Incenta's response to the issues raised by Dr Small is discussed below.

Incenta's response to Dr Small's concerns

A79 Incenta revisited its analysis in response to Dr Small's first two reports, but its conclusions remained unchanged.[253] Incenta's results table, after considering Dr Small's comments, is shown in **Table A2** below.

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250 Incenta "Depreciation, allocation of implied depreciation and asset beta – Report for Christchurch International Airport Limited" (November 2016), page 25.

251 John Small "Comments on ChCh Airport's PSE3 Proposal" (1 February 2017); John Small "Comments on Incenta's WACC Analysis for ChCh Airport" (23 March 2017); and John Small "Further Comments on Incenta's WACC Analysis for ChCh Airport" (4 May 2017).

252 John Small "Further Comments on Incenta's WACC Analysis for ChCh Airport" (4 May 2017), paragraph 16(b).

253 The issues raised by Dr Small in his first two reports (dated 1 February 2017 and 23 March 2017) were consistent with those expressed in his final report, as summarised above.

Table A2 Incenta's empirical estimates of accounting betas

	[1] Asset beta sample	[2] Asset beta sample + CIAL	[3] Asset beta sample + CIAL + dummy variable for CIAL	[4] CIAL stand-alone (since 2006)	[5] CIAL stand-alone (since 1987)
Accounting beta	**0.67**	**0.68**	**0.68**	**1.54**	**1.08**
Standard error	0.09	0.09	0.09	0.70	0.54
p-value	0%	0%	0%	6%	5%
CIAL dummy variable			**-0.82**		
Standard error			0.95		
p-value			39%		
Intercept	**0.04**	**0.04**	**0.04**	**-0.02**	**0.01**
Standard error	0.01	0.01	0.01	0.02	0.02
p-value	0%	0%	0%	40%	57%

A80 When analysing these results, Incenta suggested that comparing Christchurch Airport's stand-alone beta since 1987 (equation 5) with the asset beta sample (equation 1) is most relevant. Incenta concluded that:[254]

> …the comparison of the accounting beta for the asset beta sample with the stand-alone estimate of the [Christchurch Airport] accounting beta (measured over the longest period) provides evidence to a reasonable standard from which to conclude that [Christchurch Airport] is likely to have a greater systematic risk than what is reflected in an asset beta that is obtained as an average of the asset beta sample.

A81 In addition, Incenta made the following points in response to the issues raised by Dr Small.[255]

A81.1 Accounting beta estimates that focus on the relationship between the (discrete) rate of growth of passenger numbers and GDP will mimic most closely the process of asset beta estimation, as well as overcoming likely empirical issues with testing the relationship between levels in these variables. Incenta noted that "a regression between the *levels* is likely to produce a very strong, but spurious, relationship arising from the fact that both passenger numbers and GDP have an underlying time trend".[256]

A81.2 Use of the longest available period for estimation of the Christchurch Airport accounting beta is appropriate in order to maximise its reliability and robustness.

A81.3 Although the analysis does not provide evidence to a conventional level of statistical significance that Christchurch Airport's asset beta is higher than the comparator companies, this standard is not appropriate given:

A81.3.1 it is not practically achievable in the context of asset beta estimation;

254 Incenta "Empirical evidence for an asset beta differential: response to Dr. Small" (8 April 2017), page 6.
255 Incenta "Empirical evidence for an asset beta differential: response to Dr. Small" (8 April 2017), pages 1-2.
256 Incenta "Empirical evidence for an asset beta differential: response to Dr. Small" (8 April 2017), page 3.

A81.3.2 the process through which our asset beta was derived (and most notably the adjustment of 0.05 for non-aeronautical activities) did not comply with such a standard; and

A81.3.3 as the proposition being tested in the current context relates to the WACC, erroneously rejecting a correct proposition (ie, that the true WACC is higher than our benchmark) may have consequences for the effect on investment incentives and hence this risk is not costless.

We consider Christchurch Airport's asset beta has not been sufficiently justified

There is insufficient evidence to support Christchurch Airport's leisure-travel rationale

A82 We consider that there is insufficient evidence to support Christchurch Airport using a higher asset beta based on a greater exposure to leisure travellers.

A83 Conceptually, we agree that the proportion of leisure-based travellers could be expected to affect an airport's asset beta. This is because leisure-travel has a relatively high income elasticity of demand (ie, it is more akin to a luxury service).

A84 Other things being equal, businesses which produce services with a high income elasticity of demand would generally be expected to have higher asset betas (and vice versa). Dr Lally has previously advised that:[257]

> Firms producing products with low income elasticity of demand (necessities) should have lower sensitivity to real GNP shocks than firms producing products with high income elasticity of demand (luxuries), because demand for their product will be less sensitive to real GNP shocks. Rosenberg and Guy (1976b, Table 2) document statistically significant differences in industry betas after allowing for various firm specific characteristics, and these differences accord with intuition about the income elasticities of demand. For example energy suppliers have particularly low betas whilst travel and recreation are particularly high.

A85 At the time of the section 56G review, Christchurch Airport provided data suggesting that it has a higher proportion of leisure-based travellers than Auckland and Wellington Airports. As shown in **Table A3** below, data for the 12 months to 30 June 2011 indicated that approximately 84% of Christchurch Airport's visitors were leisure-based. Auckland Airport and Wellington Airport had leisure-based visitors of 75% and 73%, respectively.

[257] Martin Lally "The cost of capital for the airfield activities of New Zealand's international airports" (June 2001), page 370.

Table A3 Relative passenger mix at Christchurch, Auckland and Wellington Airports[258]

New Zealand Airports – Purpose of visit - 12 mths to 30 June 2011			
Purpose of Visit	***Christchurch***	***Auckland***	***Wellington***
Holiday/vacation	55%	42%	31%
Visiting friends and family	29%	33%	42%
Subtotal leisure	**84%**	**75%**	**73%**
Business	8%	13%	16%
Conference / Education/ other	8%	12%	11%
TOTAL	**100%**	**100%**	**100%**

A86 Christchurch Airport's advisor at the time, PwC, also referred to regulatory decisions from Australia and the UK where the proportion of discretionary leisure traffic had been considered. Specifically, PwC noted that:[259]

A86.1 in 2001, the Australian Competition and Consumer Commission (ACCC) provided Launceston Airport a beta of 0.80 with a debt beta of 0.13 (equivalent to a beta of 0.71 with a zero debt beta), based on traffic analysis showing a higher proportion of discretionary passengers relative to other Australian airports; and

A86.2 the UK Civil Aviation Authority applied an asset beta to Stansted that is 0.09 and 0.14 higher than Gatwick and Heathrow, respectively, to reflect its higher proportion of charter group travel.

A87 However, no evidence was presented regarding the proportion of leisure-based travellers at Christchurch Airport relative to the companies in our asset beta comparator sample. We consider that our asset beta sample is the key point of comparison, given our benchmark asset beta of 0.60 is based on the average of the sample.

A88 Consequently, we rejected Christchurch Airport's leisure-travel rationale in the section 56G review. We noted that:[260]

A88.1 no evidence was provided to show that the proportion of leisure-based travellers for Christchurch Airport is materially different to the sample of comparator airports used to estimate asset beta in the IMs;

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258 Christchurch Airport "Price setting disclosure in accordance with clause 2.5 of the Commerce Act (Specified Airport Services Information Disclosure) Determination 2010" (19 December 2012), Table 7, page 28.

259 PwC "Opinion on the regulatory weighted average cost of capital for Christchurch International Airport" (6 March 2012), page 9.

260 Commerce Commission "Report to the Ministers of Commerce and Transport on how effectively information disclosure regulation is promoting the purpose of Part 4 for Christchurch Airport: Section 56G of the Commerce Act 1986" (13 February 2014), paragraph F131.

A88.2 even if Christchurch Airport has a materially higher proportion of leisure-based travellers than the sample of comparator airports, it is not clear that the asset beta should be increased. In the IMs reasons paper, we stated that "[i]n the context of information disclosure for Airports, the Commission considers a service or Airport-specific asset/equity beta to be more appropriate as making supplier-specific estimates is not practical or necessary, and would require even greater judgement than making service specific estimates";[261] and

A88.3 ad hoc adjustments to the asset beta specified in the IMs would undermine the certainty intended by setting the IMs.

A89 In the context of PSE3, no additional evidence has been provided regarding the proportion of leisure-based travellers for Christchurch Airport, or the companies in our asset beta comparator sample. As noted above, Christchurch Airport and Incenta stated they were unable to find reliable data to enable comparisons with the sample.[262]

A90 In addition, no updated evidence has been provided comparing Christchurch Airport's proportion of leisure travellers with Auckland and Wellington Airports. The only data currently before us was for the 12 months to 30 June 2011 (see **Table A3** above). Travel patterns during this period were likely to have been influenced by the Canterbury earthquakes, so it is not clear whether this data is representative of Christchurch Airport's proportion of leisure travellers in recent years.

A91 More generally, the relative proportions of international and domestic leisure travellers may be relevant when considering an airport's exposure to systematic risk. This distinction does not appear to have been explored by Christchurch Airport. For example, we note that:

A91.1 the value to an airport of international leisure travellers is likely to be greater than domestic leisure travellers; however

A91.2 the correlation between changes in international arrivals at an airport and changes in the national stock market is likely to be lower than for domestic arrivals.

A92 This distinction between international and domestic travellers and their relative impact on systematic risk is explored in the ACCC's 2001 pricing decision for Sydney Airport, referenced by Incenta.[263]

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261 Commerce Commission "Input methodologies (Airport services) reasons paper" (December 2010), paragraph E8.13.

262 As described in paragraphs A71 to A75 above, this led to Incenta undertaking proxy analysis which does not rely on assumptions about the underlying factors leading to differences in exposure to systematic risk between companies.

263 Incenta "Depreciation, allocation of implied depreciation and asset beta – Report for Christchurch International Airport Limited" (November 2016), page 26.

A93 The ACCC report suggests that changes to national income have the least impact on international (foreign) leisure travellers and the most impact on domestic leisure travellers (whether travelling domestically or internationally). The impact on business travellers (whether international or domestic) lies somewhere in between these two categories.[264]

A94 In this context, assessing the percentage of business and leisure travellers without reference to whether they are international or domestic travellers provides limited information. It does not provide further understanding on how the split of passengers affects Christchurch Airport's exposure to systematic risk, and consequently their asset beta.

A95 Given that no new evidence has been presented, and no information has been provided on the breakdown between domestic travellers and international travellers, our view remains that there is insufficient evidence to depart from our benchmark asset beta due to the proportion of leisure-based passengers at Christchurch Airport. Our views regarding Incenta's proxy analysis, which does not rely on the leisure-travel rationale, are discussed below.

We consider Incenta's analysis is not sufficient to justify Christchurch Airport's asset beta

A96 We also consider that Incenta's proxy analysis is not sufficient to justify Christchurch Airport's asset beta of 0.65.

A97 We acknowledge the practical difficulties in comparing Christchurch Airport's exposure to systematic risk to the companies in our asset beta comparator sample, particularly given:

A97.1 Christchurch Airport is not publicly listed, so standard beta estimates are not available (therefore, Incenta has used proxies);

A97.2 beta estimates for an individual company tend to be unreliable (given beta estimates are 'noisy'); and

A97.3 it may be difficult to obtain reliable data across the 26 companies in our comparator sample (particularly detailed statistics regarding the breakdown of passenger volumes).

A98 However, we are concerned that Incenta appears to rely almost exclusively on statistical analysis to support its recommended asset beta, despite noting that its work "…does not provide evidence to a conventional level of statistical significance…".[265] Incenta has not provided clear justification regarding the underlying factor (or factors) it expects to cause Christchurch Airport to have a greater exposure to systematic risk relative to the average of our comparator sample.

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[264] ACCC "Sydney Airports Corporation Ltd: Aeronautical pricing proposal – Decision" (May 2001), pages 186-187.

[265] Incenta "Empirical evidence for an asset beta differential: response to Dr. Small" (8 April 2017), page 2.

A99 Although Incenta refers to the proportion of leisure-based travellers at Christchurch Airport, no new evidence has been presented to support this specific factor as being a driver of relatively high exposure to systematic risk at the airport. Rather, Incenta notes that its analysis "does not rely upon assumptions about the factors that may cause differences in systematic risk".[266]

A100 Incenta has argued that a requirement for proof to conventional levels of statistical significance would be "inconsistent with the manner in which the airport asset betas were determined in the first place". It referred specifically to the 0.05 downwards adjustment we made to account for the difference between regulated aeronautical activities and unregulated activities, noting that there was "very little direct evidence for the adjustment, and instead this decision largely reflected a judgement of the Commission or other commentators".[267]

A101 The difficulties in determining specific adjustments to asset beta (particularly for individual airports) through statistical methods are well known. When applying an adjustment to the asset beta for airports set out in the IMs, we considered the underlying reasons for adjusting the asset beta determined for the comparator sample to make it consistent with the risk faced by the regulated element of major New Zealand airports. The subsequent adjustment was not overturned by the High Court, despite being challenged in the IMs merits appeals.[268]

A102 The lack of a specific reasoning for the adjustment proposed by Incenta means that it should be seen in a different context. As noted by Dr Small, "Incenta is actively seeking to differentiate its client's risk from the benchmark sample *by using statistical analysis*. In this context, it is not clear why normal statistical standards should not apply".[269]

A103 We also have additional reservations about Incenta's proxy analysis.

A103.1 Incenta has used a different GDP measure for New Zealand than the rest of the countries in the comparator sample, for reasons that are unclear. Specifically, Incenta uses a (seasonally adjusted) central government consumption expenditure-based measure of GDP for New Zealand.[270] For the other countries in its analysis, Incenta uses the annual year-on-year percentage change in real GDP.

A103.2 Regardless, it is not clear to us that regressing percentage changes in passenger volumes against percentage changes in GDP is the best available proxy for Christchurch Airport's beta. We have reservations about Incenta's

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266 Incenta "Depreciation, allocation of implied depreciation and asset beta – Report for Christchurch International Airport Limited" (November 2016), page 25.

267 Incenta "Empirical evidence for an asset beta differential: response to Dr. Small" (8 April 2017), page 6.

268 *Wellington International Airport Ltd and others v Commerce Commission* [2013] NZHC 3289 (11 December 2013), paragraphs 1554-1555 and 1559-1560.

269 John Small "Further comments on Incenta's WACC analysis for ChCh Airport" (4 May 2017), paragraph 16

270 Data provided by Incenta shows that it used data sourced from Bloomberg for "NZNTCGSC Index". This index is described in Bloomberg as "New Zealand GDP Central Govt Final Consumption Expenditure Chain Volume SA".

exclusive reliance on this. We think measures of earnings could be expected to reflect an airport's returns more closely than passenger numbers, though we accept that there are also limitations of using earnings-based proxies to estimate accounting betas. We note that Incenta tested earnings-based proxies for airport cash flows (including accounting profit), but found it difficult to find a statistical relationship. As with any analysis of this type, there is a risk that the use of different data can result in different conclusions. Therefore a clear rationale for the underlying reasoning behind specific data sets is important to provide confidence in the analysis.

A103.3 In contrast to conventional beta estimates, Incenta's proxy analysis appears to fail to capture expectations of *future* returns. Conventional beta estimates effectively compare the expectations of all future returns for one company against the expectations of all future returns for all companies in the market.[271] The relationship between short-term changes in passenger numbers and short-term changes in real GDP seems relatively immaterial in that assessment. [272]

A104 We have produced a revised version of Incenta's results using GDP data for New Zealand that is consistent with the other countries in Incenta's analysis.[273] The results are shown in **Table A4** below.[274] Although the stand-alone accounting beta for Christchurch Airport (since 1987) increases (and has a lower p-value) than in Incenta's results, other changes suggest relativity between Christchurch Airport and the sample may not be robust. In particular:

A104.1 The coefficient on the Christchurch Airport dummy variable (in equation 3) suggests that an increase in GDP is associated with a reduction in passenger volumes for Christchurch Airport.[275] This result is statistically significant at the 10% level (the p-value is 9.6%) when the alternative GDP data is used for New Zealand.

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271 Conventional betas are measured by regressing changes in a firm's share price against changes in the market index. This effectively involves regressing the future value of all cash flows of the firm into perpetuity (discounted back) against the future value of all cash flows of every firm in the market into perpetuity (discounted).

272 A similar point was made by John Small who outlined how the Incenta Analysis implicitly assumed "short-term (i.e. annual) variation in one (of many) relevant flow variables is a reliable indicator of the long-term expectations that affect market prices and (through those prices) returns to equity holders" John Small "Further Comments on Incenta's WACC Analysis for ChCh Airport" (4 May 2017), paragraphs 4-7.

273 The Bloomberg index we have used for New Zealand is "EHGDNZY Index", which is described as "New Zealand Real GDP (Annual YoY %)". This index appears to be consistent with that used by Incenta for the other countries included in its analysis.

274 For consistency, we have presented the results in the same format as Incenta (as shown in **Table A2** above).

275 The "CIAL dummy variable" in Incenta's analysis is an interaction variable, where a dummy variable for Christchurch Airport (CIAL = 1, non-CIAL = 0) is multiplied by the percentage change in GDP. The results in **Table A4** suggests that, for Christchurch Airport, a 1% increase in GDP is associated with a 0.88% reduction in passengers (ie 0.66 – 1.54). However, for the overall sample (excluding Christchurch Airport), a 1% increase in GDP is associated with a 0.66% increase in passengers.

A104.2 Christchurch Airport's stand-alone accounting beta (since 2006) reduces significantly, from 1.54 to 0.18. However, the p-value increases from 6% to 87%, so this result is statistically insignificant.

Table A4 Revised regression results using alternative GDP data for New Zealand

	[1]	[2]	[3]	[4]	[5]
	Asset beta sample	**Asset beta sample + CIAL**	**Asset beta sample + CIAL + dummy variable for CIAL**	**CIAL stand-alone (since 2006)**	**CIAL stand-alone (since 1987)**
Accounting beta	**0.66**	**0.67**	**0.66**	**0.18**	**1.43**
Standard error	0.09	0.09	0.09	1.04	0.54
p-value	0%	0%	0%	87%	0%
CIAL dummy variable			**-1.54**		
Standard error			0.92		
p-value			10%		
Intercept	**0.04**	**0.04**	**0.04**	**0.01**	**-0.01**
Standard error	0.01	0.01	0.01	0.03	0.01
p-value	0%	0%	0%	74%	47%

A105 Incenta's statistical analysis would be more valid if there was a clear hypothesis regarding the underlying factor (or factors) expected to lead to a higher beta at Christchurch Airport, supported by evidence. If the primary driver is the proportion of leisure-based travellers (as suggested in Christchurch Airport's pricing disclosure), we would expect to see additional evidence to support this.

A106 Further, as noted in paragraphs A49 and A52 above, we consider that consistency in approach over time (and between airports) is important. It is possible that similar analysis for future PSEs (or other regulated airports) could result in an accounting beta that is lower than the average of our comparator companies. In this event, we would again be concerned about simply accepting the results of statistical analysis alone, in the absence of sound supporting evidence regarding the underlying factor(s) expected to drive the difference.

Our assessment of Christchurch Airport's approach to the debt premium

A107 This section discusses Christchurch Airport's decision to use a debt premium of 1.84%, rather than our estimate of 1.45% (as at 1 April 2017).

Christchurch Airport has used its actual credit rating when determining its debt premium

A108 Christchurch Airport has used a debt premium of 1.84%, based on its actual credit rating of BBB+. This is compared to our debt premium estimate of 1.45%, which is based on an A- credit rating.

A109 Christchurch Airport considers a BBB+ credit rating is more relevant to its specific circumstances because:[276]

[276] Christchurch Airport "Disclosure relating to the reset of aeronautical prices for the period 1 July 2017 to 30 June 2022" (14 August 2017), paragraph 112.

A109.1 BBB+ is consistent with its "stand-alone" credit profile (ie, excluding the effect of government ownership); and

A109.2 it is the stand-alone credit profile that is relevant to the estimation of WACC for pricing purposes (to avoid including an element of government subsidy).

A110 In its pricing disclosure, Christchurch Airport noted that although its actual credit rating is BBB+, its stand-alone credit rating (excluding the effect of government ownership) is BBB. However, Christchurch Airport stated that:[277]

A110.1 its credit rating metrics currently support a stand-alone rating of BBB+, so there is potential for its stand-alone rating to be raised (as concerns previously expressed by the rating agency about a potential for increase in debt or the need to pay special dividends are assuaged); and

A110.2 its actual credit rating (incorporating the effect of government ownership) consequently has the potential to be raised to A-.

We consider Christchurch Airport's debt premium is reasonable

A111 Our view is that Christchurch Airport's debt premium of 1.84% is reasonable, given:

A111.1 it is based on its actual credit rating of BBB+ and appears to reflect a prudent level of debt financing; and

A111.2 the value of the debt premium reflects our estimate for electricity distribution businesses (EDBs).

We consider Christchurch Airport has legitimate reasons to depart from our benchmark debt premium

A112 Our estimated debt premium for airports is based on a benchmark long-term credit rating of A-. The debt premium used by Christchurch Airport, on the other hand, reflects its actual credit rating of BBB+.

A113 In general, we have concerns regarding the incentives associated with using a supplier's actual credit rating when estimating its debt premium in the regulatory context. In our 2010 IMs reasons paper we noted that we specify a notional benchmark credit rating because "if suppliers' actual credit ratings were used, they would have an incentive to increase gearing with adverse implications for consumers".[278]

A114 We noted that excessive levels of debt are not in the long-term interests of consumers, because there are potentially significant costs and risks to consumers if a supplier becomes financially distressed. For example, a supplier in financial distress may curtail maintenance spending or reduce or defer efficient investment in network

[277] Christchurch Airport "Disclosure relating to the reset of aeronautical prices for the period 1 July 2017 to 30 June 2022" (14 August 2017), page 26, footnote 13.

[278] Commerce Commission "Input methodologies (airport services): Reasons paper" (December 2010), paragraph 6.3.22.

assets. This, in turn, may adversely affect the quality and reliability of service experienced by consumers.[279]

A115 However, in this case we note that:

A115.1 Christchurch Airport's actual credit rating of BBB+ is still an adequate investment grade rating, and is sufficiently high to ensure there is an adequate buffer against the possibility that economic downturns or shocks can lead to financial distress (while providing some flexibility over the level of gearing and the choice of debt instruments);[280]

A115.2 Christchurch Airport's credit rating appears to be consistent with a prudent level of debt financing. In its pricing disclosure, Christchurch Airport stated that its gearing "is not substantially higher than the Commission's benchmark", noting that its current gearing (expressed as debt / (debt + equity)) based on book value is just under 30%, and its gearing based on commercial enterprise value would be approximately 21%;[281] and

A115.3 BBB+ is consistent with the benchmark credit rating we use for regulated electricity lines and gas pipelines businesses.

A116 In the IMs judgment, the High Court noted that if differences between our benchmark credit rating and an airport's actual credit rating lead to a material underestimation, this can be addressed through the information disclosure regime. The High Court stated:[282]

> The Commission's judgement that A– was the appropriate comparator long-term credit rating can be seen as reflecting the current ratings of two of the three Airports, and being not inconsistent with the approaches of other regulators. If, in [Wellington Airport's] case, the use of the A– comparator actually results in a material underestimation, in the ID regime applicable to the Airports, commentary by [Wellington Airport] may address that.

A117 At the time of the original IMs, both Auckland and Christchurch Airport had an A- long-term credit rating, but Wellington Airport had a BBB+ rating. Christchurch Airport's actual credit rating was subsequently downgraded by Standard and Poor's from A- to BBB+, in December 2012.

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279 Commerce Commission "Input methodologies (airport services): Reasons paper" (December 2010), paragraph 6.3.21.

280 Commerce Commission "Input methodologies (airport services): Reasons paper" (December 2010), paragraph 6.3.23.

281 Christchurch Airport "Disclosure relating to the reset of aeronautical prices for the period 1 July 2017 to 30 June 2022" (14 August 2017), footnote 14, page 26.

282 *Wellington International Airport Ltd & Ors v Commerce Commission [2013] NZHC* (11 December 2013), paragraph 1307.

The size of departure from our benchmark debt premium is reasonable

A118 In terms of the size of departure from our benchmark debt premium, we consider that the BBB+ credit rating of 1.84% used by Christchurch Airport is reasonable. This is our debt premium estimate for EDBs as at 1 April 2017.[283]

A119 The observed debt premiums on bonds issued by Christchurch Airport appear to be broadly consistent with our recent BBB+ debt premium estimates. This suggests our BBB+ debt premium for EDBs is likely to be suitable for Christchurch Airport. Three examples of recent debt premium estimates are provided below.[284]

A119.1 As at 1 March 2017, we determined a BBB+ debt premium for gas pipeline businesses of 1.65% (for a five-year term to maturity). For the same period, the observed debt premium on Christchurch Airport's bond (with a remaining term of 5.1 years) was 1.71%.[285]

A119.2 As at 1 September 2017, we determined a BBB+ debt premium for EDBs of 1.63% (for a five-year term). The observed debt premium on Christchurch Airport's bond (with a remaining term of 4.6 years) was also 1.63%.[286]

Consistency with our report for Auckland Airport

A120 As discussed above, we consider that Christchurch Airport's debt premium of 1.84% is reasonable—particularly given that it reflects its actual credit rating of BBB+.

A121 This differs from the situation with Auckland Airport. Auckland Airport's actual credit rating is A-, which is the same as the notional credit rating we use when estimating our benchmark debt premium for airports.

A122 Given that Auckland Airport's actual credit rating is the same as our benchmark, we consider there is no case for a supplier-specific adjustment due to differences in credit rating.

Submissions on the cost of debt for Christchurch Airport

A123 BARNZ disagreed with our use of Christchurch Airport's own credit rating. They submitted that the use of a BBB+ credit rating for Christchurch Airport was inappropriate and a departure from regulatory precedent.[287] We note that although the sector wider WACC is an appropriate starting point, we consider that under

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283 *Cost of capital determination for information disclosure year 2018 for electricity distribution services and specified airport services (March year-end disclosure year)* [2017] NZCC 7 (28 April 2017).

284 We note that Christchurch Airport recently announced a new offer of up to NZ$75m of 6 year, unsecured, unsubordinated, fixed rate bonds maturing on 24 May 2024. Christchurch Airport "NZX announcement – Christchurch International Airport Limited Lodges Product Disclosure Statement for Retail Bond Offer" (4 May 2018).

285 *Revised cost of capital determination for gas distribution and gas transmission businesses' default price-quality paths* [2017] NZCC 13 (24 May 2017), Table 3, page 10.

286 *Cost of capital determination for disclosure year 2019 – Electricity distribution businesses and Wellington International Airport* [2018] NZCC 7, Table 5, page 6.

287 BARNZ "Draft Report on Christchurch Airport's pricing decisions and expected performance: PSE3" (16 August 2018), paragraph 22.

information disclosure regulation it is possible to depart from WACC parameters specified in the IMs when there are legitimate reasons to do so.

A124 BARNZ also note that using a regulated supplier's own credit rating could create perverse incentives for the firm.[288] We recognise this concern, but note we are able to take into account a range of factors (including the potential for perverse incentives) when determining the appropriateness of an airport's return.

A125 NZ Airport's submissions supported the use of Christchurch Airport's own cost of debt.[289] Wellington Airport also suggested that we should consider accepting the use of a forward-looking cost of debt estimate to set the debt premium.[290] This proposal is of limited relevance for Christchurch Airport, given it used a debt premium consistent with the IM methodology for a BBB+ rated businesses. As described in the framework we require legitimate reasons from an airport to justify a departure from parameters and/or the methodology used to determine our mid-point WACC estimate.

Our assessment of Christchurch Airport's cost of capital

A126 This section discusses:

A126.1 whether there are any additional factors relevant to Christchurch Airport's cost of capital; and

A126.2 our overall view regarding Christchurch Airport's cost of capital.

Are there any additional factors relevant to Christchurch Airport's cost of capital?

A127 For consistency with our report on Auckland Airport, we have also considered whether Christchurch Airport's degree of operating leverage should affect its asset beta. Auckland Airport's main reason for adopting a target return higher than our mid-point WACC estimate was that it expects its operating leverage to increase over the PSE3 period, due to its large capital expenditure programme.[291]

A128 Christchurch Airport's historical operating leverage appears to be similar to the average of the companies in our asset beta comparator sample. Based on data in Christchurch Airport's annual reports, we estimate that:[292]

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288 BARNZ "Draft Report on Christchurch Airport's pricing decisions and expected performance: PSE3" (16 August 2018), paragraph 25.

289 NZ Airports "Submission on the Commission's Christchurch Airport draft report" (16 August 2018), paragraph 51; Wellington Airport "Response to Draft Report on Christchurch International Airport's PSE3 Pricing" (16 August 2018), page 3.

290 Wellington Airport "Response to Draft Report on Christchurch International Airport's PSE3 Pricing" (16 August 2018), page 3.

291 Commerce Commission "Review of Auckland International Airport's pricing decisions and expected performance (July 2017 – June 2022)" (26 April 2018), paragraphs X13-X15.

292 We estimated operating leverage from Christchurch Airport's Annual Financial Statements. We also used Bloomberg's approach of excluding operating leverage estimates in which the change in revenue and the change in EBIT are not the same sign.

A128.1 for FY2017, Christchurch Airport had a degree of operating leverage of 1.55, which is below the mean (2.11) and slightly below the median (1.57) of the comparator sample; and

A128.2 when averaging across FY2013-FY2017, Christchurch Airport has a degree of operating leverage of 2.23, which is below the mean (3.47) and above median (1.91) of the comparator sample.

A129 Incenta also estimated operating leverage for Christchurch Airport using both the 'Bloomberg standard measure of operating leverage' and 'Operating leverage based on underlying earnings' including estimates that excluded a small number of very large values (outliers).[293] It found that:

> Under the Bloomberg measure of operating leverage, CIAL's operating leverage is very close to (and slightly above) the median for the sample, but below the mean
>
> – When outliers (as we have defined them) are excluded, CIAL's place in the order remains the same, but its operating leverage becomes closer to the mean
>
> With operating leverage defined in terms of underlying EBIT, CIAL's operating leverage exceeds the median of the asset beta sample and is only marginally below the sample mean
>
> – And, under this measure, if outliers (as we have defined them) are excluded, then CIAL's operating leverage is above the mean for the asset beta sample.

A130 We consider the results provide no evidence to suggest that Christchurch Airport's operating leverage is materially different from the average of the comparator sample. We also note that, unlike Auckland Airport, Christchurch Airport does not have large capital expenditure programme planned over the PSE3 period. Therefore, Christchurch Airport's operating leverage is expected to not change significantly over the period.

A131 Therefore, we consider there is no strong reason to consider an adjustment to Christchurch Airport's asset beta based on its degree of operating leverage.

Our conclusion regarding Christchurch Airport's cost of capital

A132 Our view is that Christchurch Airport's estimate of its cost of capital of 6.82% has not been sufficiently justified.

A133 In our view, Christchurch Airport has not sufficiently explained its asset beta of 0.65. Based on the evidence before us, we consider that both Christchurch Airport's leisure-travel rationale and Incenta's proxy analysis do not provide sufficient justification for a higher asset beta.

A134 However, we consider that a debt premium of up to 1.84% is reasonable for Christchurch Airport. This is because a debt premium of 1.84% reflects Christchurch

[293] Incenta (For Christchurch Airport) "Christchurch International Airport Limited: Additional material on the reset of aeronautical prices for the period 1 July 2017 to 30 June 2022" (28 June 2018), Appendix C – Operating leverage of CIAL.

Airport's actual credit rating of BBB+, rather than our benchmark of A-. This appears to be consistent with prudent levels of debt financing.

A135 We have allowed for the difference between Christchurch Airport's debt premium and our benchmark value in our assessment of the airport's expected returns in **Chapter 2**. As a result, we consider Christchurch Airport has sufficiently justified a cost of capital of 6.47%. This is our mid-point of 6.41% plus an additional six basis points to reflect the higher debt premium.[294]

A136 Although we do not consider Christchurch Airport has justified its stated cost of capital, it has actually targeted a return lower than its WACC. Its target return for PSE3 is 6.44% for pricing assets and 6.65% across all regulated assets. The assessment of profitability in **Chapter 2** uses these target returns as a benchmark value.

[294] As shown in **Figure A1** above, using a BBB+ credit rating of 1.84% instead of our A- benchmark of 1.45% increases our mid-point WACC estimate by six basis points.

Attachment B Our assessment of forecasts affecting Christchurch Airport's expected returns

Purpose

B1 This attachment contains our analysis and conclusions on Christchurch Airport's values and forecasts affecting its profitability. This includes its forecast asset values, demand, operating expenditure, and capital expenditure.

B2 This analysis influences our assessment of whether Christchurch Airport is limited in its ability to extract excessive profits over the PSE3 period (section 52A(1)(d) of the Act). This is discussed in **Chapter 2**.

B3 Our analysis on forecast operating efficiency also considers whether Christchurch Airport has incentives to improve its operating efficiency and provide services at a quality that reflects consumer demands (section 52A(1)(b) of the Act).

B4 Our analysis on forecast capital expenditure also considers whether Christchurch Airport has incentives to invest appropriately, efficiently and at a quality standard that reflects consumer demands (sections 52A(1)(a) and (b) of the Act).

Conclusions

B5 Overall, we consider that Christchurch Airport's opening and closing (forecast) investment values, forecast demand, operating expenditure, and capital expenditure are not unreasonable.

B6 These forecasts do not raise concern that the airport would be expected to extract excessive profits. Accordingly, we have used these values and forecasts as a basis for assessing Christchurch Airport's expected profitability.

Christchurch Airport's approach to disclosing its asset values appears reasonable

B7 We consider that Christchurch Airport's opening and closing (forecast) investment values are appropriate to use as a basis for profitability analysis because:

B7.1 Christchurch Airport's approach to disclosing its asset values appears reasonable and is consistent with our IM and ID Determinations; and

B7.2 Christchurch Airport's disclosure of its carry forward adjustment is consistent with our IM and ID Determinations.

Forecast demand is not unreasonable

B8 Based on submissions received, we consider that Christchurch Airport's overall demand forecast for PSE3 is unlikely to result in excessive profits.

B9 Christchurch Airport has used expert advice, and its demand forecast does not appear unreasonable given Christchurch Airport's knowledge at the time prices were set.

Forecast operating expenditure is not unreasonable

B10 Christchurch Airport's PSE3 operating expenditure forecast does not appear unreasonable relative to historic levels.

B11 Christchurch Airport's historical operating expenditure performance provides context for its PSE3 forecast and does not necessarily indicate that the starting point for the PSE3 forecast is unreasonable.

Forecast capital expenditure is not unreasonable

B12 In our view, Christchurch Airport's capital expenditure forecasts do not raise concerns that it would be expected to extract excessive profits.

B13 Airlines generally support most of Christchurch Airport's capital expenditure projects included in the pricing decision and note that the level of investment is modest over PSE3.

B14 Christchurch Airport appears willing to respond to customer concerns and resolve issues quickly. Submitters have noted examples of the airport responding to identified concerns.

B15 Our review of Christchurch Airport's historic expenditure compared to forecast capital expenditure over PSE3 does not provide evidence of planned under-investment or over-investment.

B16 Airlines have raised a concern about the airport's inclusion of $10.4m for terminal redevelopment, particularly about the lack of consultation on, and specificity provided, about the project. Greater consultation with airlines on this project may have allowed airlines to provide more meaningful feedback on the project and alleviated concerns about the likely benefits of the project. Nonetheless, as the airport has indicated that a key focus of PSE3 is to improve the flexibility of its integrated terminal, it would be expected that some degree of investment would be necessary to achieve this, and this level of expenditure does not appear unreasonable.

B17 Christchurch Airport may have been able to better mitigate risk and airlines' concerns that actual capital expenditure may differ from forecasts through a risk allocation adjustment. However, we have not seen evidence to suggest that the risk of outcomes being different to forecasts is likely to be in the airport's favour. In this instance, the absence of a risk allocation adjustment is not a significant concern affecting our assessment of Christchurch Airport's profitability.

Structure of this attachment

B18 This attachment contains our analysis on Christchurch Airport's:

B18.1 opening and closing investment values, including the reasonableness of the airport's disclosed asset values and carry forward adjustments;

B18.2 demand forecasts over the PSE3 period;

B18.3 operating expenditure forecasts over the PSE3 period; and

B18.4 capital expenditure forecasts over the PSE3 period.

Opening and closing investment values

Disclosure changes following the Input Methodology review

B19 The IM Review introduced a requirement for airports to disclose a forward-looking IRR for the current pricing period in the price setting event disclosure requirements. The IRR calculation includes an estimate of the opening and closing investment value.

B20 In its forward-looking IRR calculation, Christchurch Airport's opening investment value for PSE3 reflects the initial capital to be recovered. It comprises two items:

B20.1 the IM-compliant closing RAB from the ex-post disclosure of the year preceding the start of the current price setting event or an equivalent estimate;[295] and

B20.2 any adjustments reflecting decisions made in previous price setting periods that have an impact on charges for the current pricing period.

B21 The inclusion of these adjustments helps achieve consistency between the opening investment value and the forecast cash flows that are used in a forward-looking IRR calculation. Christchurch Airport has included a carry forward adjustment, which is discussed below.

B22 In its forward-looking IRR calculation, Christchurch Airport's forecast closing investment value reflects the remaining capital to be recovered. It comprises of two parts:

B22.1 the forecast closing asset base used when setting prices, reflecting the airport's assumed time profile of capital recovery; and

B22.2 any adjustments reflecting decisions made by the airport that affect charges for the current and future price setting events that are not already reflected in the forecast closing asset base. This helps to derive a forecast closing investment value that is a good reflection of the remaining capital to be recovered.

B23 As part of the IM Review, we stated that provided the opening and forecast closing investment values are determined in the manner discussed above, the forward-looking IRR of the current pricing event effectively links past and future pricing periods together. This allows for a profitability assessment that is a good reflection of

[295] Given that the 2017 closing RAB value (the year which precedes the start of PSE3) will not be available until after the PSE3 disclosure, the ID Determination requires the Airport to use the closing RAB value from the most recent ex-post disclosure (in this case, 2016) rolled forward to the first day of the PSE3 period. See: Commerce Commission "Input methodologies review decisions Topic paper 5: Airports profitability assessment" (20 December 2016), footnote 158, page 97.

an airport's pricing intent.[296]

Asset values

B24 This section considers the appropriateness of Christchurch Airport's approach to valuing its RAB, and ultimately whether its RAB is an appropriate baseline to assess profitability against.

Christchurch Airport's approach to valuing its priced assets

B25 In setting prices for PSE3, Christchurch Airport has reflected its expected return of capital (depreciation) of its integrated terminal over time (initially low cost recovery, then increasing over time as utilisation of the terminal increases) by adopting a tilted annuity approach to depreciation. This is instead of using the CPI-increasing price path to achieve this depreciation profile. Christchurch Airport considers this to be more transparent and robust, and results in similar outcomes to its use of the CPI-increasing price path that it applied over PSE2.

B26 In response to concerns raised by us and other stakeholders, Christchurch Airport is no longer setting prices based on a levelised (CPI-increasing) price path over a 20-year period. This approach was adopted in PSE2 to reflect the 20-year life cycle of Christchurch Airport's investment in the integrated terminal. Specifically, this approach resulted in commercially based prices for PSE2, and a 'levelised constant real price' path for the remaining 15 years.

B27 We noted the following in our section 56G report about the use of the 20-year levelised price path:[297]

> "Christchurch Airport's reason for wanting to establish a levelised price path over multiple price setting periods is understandable. The commissioning of the new integrated terminal will result in a significant increase in the value of Christchurch Airport's asset base, at a time when the expected utilisation of the terminal will be relatively low."

B28 However we also raised some concerns about the manner in which Christchurch Airport's methodology had been implemented through its disclosure:[298]

> "… sufficient information is not available to interested persons to assess Christchurch Airport's expected profitability performance, because its price setting disclosure does not fully or transparently reflect its pricing approach … Nonetheless, we certainly welcome Christchurch Airport's intention to make its pricing approach more transparent in future and also the airlines' positive response to engaging in that process."

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296 Commerce Commission "Input Methodologies review decisions Topic paper 5: Airports profitability assessment" (20 December 2016), pages 44–47.

297 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 Christchurch Airport" (13 February 2014), paragraph E 13.

298 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 Christchurch Airport" (13 February 2014), paragraph E8 and 11.

Christchurch Airport has valued its priced assets consistent with our IM and ID Determinations

B29 Christchurch Airport's disclosure of its asset valuation is consistent with IM and ID requirements for airports. This includes applying its tilted annuity depreciation method, consistent with the high-level principles when disclosing non-standard depreciation profiles. These principles were included as part of the IM Review in 2016 to help improve interested persons' understanding about non-standard approaches to depreciation, such as the tilted annuity approach adopted by Christchurch Airport.[299] This means that:

B29.1 Christchurch Airport's non-standard depreciation methodology is net present value (NPV) neutral.[300]

B29.2 Christchurch Airport has explained how the time profile of capital recovery implied by its price setting methodology is consistent with the long-term benefit of consumers. [301]

B29.3 Christchurch Airport's decision to use non-standard depreciation was made ex-ante at the time prices were set. We expect Christchurch Airport to continue to reflect this non-standard depreciation methodology in its annual disclosures.[302]

B29.4 Christchurch Airport has explained how its expected time profile of capital recovery reflects its expected utilisation priced assets and is consistent with the long-term benefit of consumers.[303]

Land revaluations

B30 Christchurch Airport has not revalued its land assets for PSE3. The airport's land valuation forecasts are based on its disclosures for 2016, which have been rolled forward to determine an opening land asset value for PSE3 using an updated forecast of inflation for 2017. This opening value has then been projected over PSE3 using forecast CPI.[304]

B31 Christchurch Airport notes that it chose not to revalue any assets in PSE3 (with land only revalued for CPI), and Christchurch Airport's substantial customers did not

299 Commerce Commission "Input methodologies review decisions Topic paper 5: Airports profitability assessment" (20 December 2016), paragraph 274.

300 Christchurch Airport "Price setting disclosure – In accordance with clause 2.5 of the Airport Services Information Disclosure Determination 2010" (1 August 2017), paragraph 101–102, and 106.2.

301 Christchurch Airport "Price setting disclosure – In accordance with clause 2.5 of the Airport Services Information Disclosure Determination 2010" (1 August 2017), paragraph 100-101, and 105-106.

302 Christchurch Airport "Price setting disclosure – In accordance with clause 2.5 of the Airport Services Information Disclosure Determination 2010" (1 August 2017), paragraph 106.3.

303 Christchurch Airport "Price setting disclosure – In accordance with clause 2.5 of the Airport Services Information Disclosure Determination 2010" (1 August 2017), paragraphs 100-101.

304 Christchurch Airport "Submission on process and issues paper on the review of Auckland and Christchurch Airports' third price setting event - Attachment - PSE3 airline consultation material" (28 November 2017), attachment 1, Initial Proposal – 16 November 2016, paragraph 109.

comment on that choice or suggest an alternative approach.[305]

B32 We note that during our section 56G review for Christchurch Airport, we considered Christchurch Airport's most recent land valuation (from 2012) to be consistent with the IMs.[306] This land valuation forms the basis of the CPI-based land valuation disclosed for PSE3.

Other regulated assets

B33 Other regulated assets include assets associated with those activities not covered by the standard prices. This includes aircraft, freight, leased tenancies and collection facilities for duty free). Charges for these activities are set through agreements with individual customers.

B34 While these assets do not form part of the price setting consultation, they are included in the total RAB. Therefore, we are interested in the way they have been valued and disclosed.

B35 As with PSE2, Christchurch Airport has applied a standard depreciation approach to other regulated assets. Other regulated assets were disclosed at carrying value and indexed over the forecast period to provide opening PSE3 asset values. This is consistent with the IMs.

Asset allocation between priced and other regulated assets

B36 Christchurch Airport considers that its asset values provide an appropriate basis for assessing its expected returns. Christchurch Airport has sought to align, where possible, its asset values used to set standardised prices and the asset values that are disclosed annually.

B37 BARNZ stated that it has not identified any issues of concern with the asset values provided by Christchurch Airport. However, given the materiality of the asset values to target returns, it considers that it would be useful for the Commission to review the asset values used.[307]

B38 Christchurch Airport states that its substantial customers raised no concerns with its general approach to align its priced asset base with its RAB. However, it notes that some concerns were raised about the allocation of specific assets within its RAB.[308]

B39 Christchurch Airport also states that it has included the relevant assets in its RAB and allocated these, 100 percent, to priced services. It considers this aligns its disclosed

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305 Christchurch Airport "Submission the Process and Issues Paper: Auckland and Christchurch Airports' third price setting events" (28 November 2017), paragraph 38.

306 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 Christchurch Airport" (13 February 2014), paragraph F87.

307 BARNZ "BARNZ assessment of CIAL's PSE3 pricing decision against Part 4 criteria" (28 November 2017), table 4 row 20.

308 Christchurch Airport "Disclosure relating to the reset of aeronautical prices for the period 1 July 2017 to 30 June 2022" (14 August 2017), paragraph 73.

asset base with the pricing asset base and best creates a transparent asset base. It also considers that this approach aligns with our process in assessing its returns.[309]

B40 Air New Zealand raised concern that Christchurch Airport's approach to align its pricing asset base with its disclosed asset base means the airport has included assets in the pricing asset base that are not required for the provision of priced services. This includes the 'Antarctic Apron,' which Air New Zealand considers should be allocated to aircraft and freight activity (which is part of the RAB, but charged to customers of other regulated services, rather than priced services).[310] Air New Zealand suggests that including the 'Antarctic Apron' in the pricing asset base masks the return that Christchurch Airport is targeting on its pricing assets.[311]

B41 In its submission on the draft report, BARNZ states that it "shares Air New Zealand's concern that 100% of the cost of the Antarctic Apron has been included in the pricing asset base even though it is not used to provide priced services." BARNZ agrees with Air New Zealand's view that this allocation understates the disclosed return on the assets that really are priced assets.[312]

B42 Christchurch Airport responds to this, noting that the Antarctic Apron is used by a variety of non-passenger aircraft that are assumed in the price calculation to pay the standard airfield price for non-passenger services. It notes that the name of the apron indicates its location; the apron is not dedicated to Antarctic services.[313]

B43 It is not entirely clear whether the Antarctic Apron is used for other regulated services, in addition to being used for priced services. However, we note that the impact of allocating the Antarctic Apron does not appear to be material, at about 1% of the opening land value included in the RAB at the start of PSE3.[314]

B44 We note that allocation decisions between pricing and other regulated asset bases do not affect the total return Christchurch Airport is targeting on its RAB, but will impact the relative returns on the priced and other regulated services. As we have now focussed on the airport's expected return on its priced services, the allocation of assets between priced and other regulated services may be more important in future reviews. We encourage Christchurch Airport to consider how it can be more transparent in how it allocates assets between priced services and other regulated services.

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309 Christchurch Airport "Disclosure relating to the reset of aeronautical prices for the period 1 July 2017 to 30 June 2022" (14 August 2017), paragraphs 74-75.

310 The 'Antarctic Apron' refers to the airport's new freight apron and apron adjacent to Gates 32 to 35.

311 Air New Zealand "Response to the Process and Issues Paper: Auckland and Christchurch Airports' third price setting events (July 2017-June 2022)" (28 November 2017), paragraphs 76 and 77.

312 BARNZ "Draft Report on Christchurch Airport's pricing decisions and expected performance: PSE3" (16 August 2018), paragraph 8.

313 Christchurch Airport "Cross-Submission on Commerce Commission's Review of Christchurch International Airport's Pricing Decisions and Expected Performance (July 2017 - June 2022) - Draft Report" (6 September 2018), paragraph 33.

314 Christchurch Airport "Submission on process and issues paper on the review of Auckland and Christchurch Airports' third price setting event - Attachment - PSE3 airline consultation material" (28 November 2017), attachment 1 Initial Pricing Proposal 16 November 2016, page 32.

Christchurch Airport's approach to disclosing its asset values appears reasonable

B45 Overall, we consider Christchurch Airport's disclosed asset values are appropriate and have used these as the basis for our profitability analysis. Accordingly, we have not made any adjustments to Christchurch Airport's disclosed asset values as part of our profitability assessment in **Chapter 2**.

Opening and closing carry forward adjustments to asset values

B46 During the IM Review, we considered how to transparently reflect that an airport's pricing decision in one period could impact on a future price setting period.

B47 We introduced a carry forward mechanism in the ID requirements that allowed an airport to recognise commitments made in a prior pricing period that would impact the prices of another pricing period (eg, risk allocated adjustments).

B48 The introduction of the carry forward mechanism was intended to provide greater transparency around the targeted profitability of airports and to improve the ability of interested persons to assess if airports are targeting excessive profits.

Christchurch Airport's approach to the carry forward adjustments

B49 Christchurch Airport has made carry forward adjustments to its opening and closing RAB in its PSE3 disclosure. These adjustments have been made to reflect a permanent difference in the value of the assets disclosed by the airport through information disclosure and the value of the assets that the airport has used to set prices.

B50 The adjustments are required because Christchurch Airport was unable to give effect to its non-standard depreciation methodology in the way it had intended when it set prices for PSE2, because doing so would have breached the cost allocation IM. As a result, the disclosed asset values under ID do not appropriately reflect the value split between pricing and non-pricing assets.[315]

B51 The impact of this adjustment is to increase the opening value for the total asset base by 1.5% (from $524.4m to $532.2m).

B52 The calculation of the value of Christchurch Airport's carry forward adjustment to the RAB has been reviewed by Deloitte. This review was carried out in response to requests made by stakeholders through Christchurch Airport's pricing consultation process.[316]

[315] Christchurch Airport "Price setting disclosure – In accordance with clause 2.5 of the Airport Services Information Disclosure Determination 2010" (1 August 2017), paragraphs 77-80.

[316] Christchurch Airport "Price setting disclosure – In accordance with clause 2.5 of the Airport Services Information Disclosure Determination 2010" (1 August 2017), paragraph 84.

Stakeholder views

B53 Christchurch Airport submitted that its substantial customers provided no feedback on the adjustment following the Deloitte audit.[317]

B54 BARNZ submits that it has not identified any problems with this adjustment, but a check by the Commission would be of value.[318]

Conclusion

B55 Christchurch Airport's carry forward adjustment is consistent with the IM and ID requirements. While this adjustment does not allocate risk, it is an appropriate use of the mechanism to account for ongoing differences between the disclosed asset values and those used for price setting. This allows the opening and closing investment values to better reflect the present value of the expected remaining cash flows from the assets.

B56 Accordingly, we have not made any adjustment to Christchurch Airport's disclosed opening and closing carry forward values as part of our profitability assessment in **Chapter 2**.

B57 Christchurch Airport has not proposed other carry forward mechanisms to adjust the default risk allocation between itself and airlines for the current pricing period. This means the airport will bear all of the risks, or rewards, if outcomes differ to forecasts over the pricing period. Consideration of the potential use of risk allocation adjustments in relation to demand forecasts and capital expenditure forecasts is included in this attachment.

Demand forecasts

B58 This section considers whether Christchurch Airport's demand forecasts for the PSE3 period are reasonable, based on the information available at the time prices were set. Demand forecasts directly impact the reasonableness of the airport's forecast revenues, and therefore influence our assessment of whether the airport is limited in its ability to extract excessive profits.

Regulatory disclosure requirements

B59 Under information disclosure regulation, airports are required to report on demand forecasts used to calculate the total revenue requirement over the five-year pricing period. This includes:

B59.1 annual and busy hour forecasts of international and domestic passenger arrivals and departures;

B59.2 international transit and transfer passengers (as applicable); and

317 Christchurch Airport "Price setting disclosure – In accordance with clause 2.5 of the Airport Services Information Disclosure Determination 2010" (1 August 2017), paragraph 85.

318 BARNZ "BARNZ assessment of CIAL's PSE3 pricing decision against Part 4 criteria" (28 November 2017), Table 4 row 20.

B59.3 aircraft runway movements by busy hour, busy day and financial year, expressed in total maximum certified take-off weight (MCTOW) and number of aircraft.

B60 Airports are also required to provide an additional five years of forecast passenger, aircraft numbers and MCTOW demand.

Differences between forecast demand and actual demand impact profitability

B61 An airport's demand forecasts are a key determinant of the prices it sets, and through this, are a key determinant of its actual profits. This is because prices are set by assuming a volume forecast for each charged service. Prices (combined with the volume forecast) set to recover only the Airport's target revenue forecast are consistent with not targeting excessive profits.

Demand may vary from forecast due to factors in and outside airports' and airlines' control

B62 Christchurch Airport may have an incentive to under-forecast the demand used to derive its prices so as to earn higher profits. If volumes are then higher than assumed, Christchurch Airport will receive higher total revenue and likely higher returns.

B63 Notwithstanding this, actual volumes will likely vary from forecast volumes due to factors outside the Airport's control, such as international policy and economic growth. These variations may be positive or negative. Actual volumes may also exceed forecast volumes due to Christchurch Airport's efforts in attracting additional passengers and aircraft over the PSE3 period.

B64 NZ Airports commented that "the Commission fails to note that airlines have an incentive to be optimistic in their forecasts to minimise prices", while noting that "the Commission should be very cautious about reopening the demand forecasts used by airports when they have been developed by airports and rigorously tested with independent experts and airlines."[319]

B65 We maintain that airports may have an incentive to under-forecast its demand forecasts to earn higher profit than forecast. We also acknowledge that airlines may have a counter incentive to over forecast demand, or to be less forthcoming about prospective reductions in services, to benefit from lower prices. More broadly, we consider that there are forecasting risks that arise from factors beyond both airlines' and airports' control.

Demand forecasts over PSE2 were relatively close to overall actual demand

B66 Christchurch Airport has experienced average annual growth of 3.4% over PSE2. This is greater than its forecast growth rate of 2.3% at the time when it set prices for PSE2.[320]

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319 NZ Airports Association "Submission on process and issues paper on the review of Auckland and Christchurch Airports third prices setting for airport services" (28 November 2017), paragraph 45 and 46.

320 We have estimated this information in Schedule 16 of Christchurch's information disclosure.

B67 Christchurch Airport experienced greater growth in domestic passengers than international passengers. Domestic passenger growth outperformed Christchurch Airport's PSE2 forecasts, growing on average at 3.5% per annum (compared to forecast growth of 1.8%). International passengers grew at 3.1% per annum over PSE2 compared to forecast growth of 3.7%. Christchurch Airport's demand forecasts for PSE2 were heavily influenced by the expected timing of the recovery from the 2010 and 2011 Christchurch earthquakes.

Christchurch Airport's approach to forecasting demand

B68 Demand forecasts are an important component when determining an airport's expected returns as they are a key driver of the actual revenue that the airport will earn over PSE3 based on the prices set. Where airports are able to outperform projections, they are able to earn returns that are greater than the target return.

B69 Christchurch Airport engaged Three Consulting to provide independent passenger demand forecasts for PSE3. Three Consulting's demand forecasts took into account the Ministry of Business, Innovation and Employment passenger forecasts, airline fleet predictions, immigration data, consensus outbound growth rates and GDP growth predictions among other metrics.[321]

B70 According to Three Consulting, passenger numbers at Christchurch Airport are expected to continue to grow over this period with forecast average annual demand growth of 3.1% for international passengers and 2.6% for domestic passengers.[322]

B71 In its price setting event disclosure, Christchurch Airport indicated that stakeholders were generally supportive of its approach to forecasting demand. However, there were some concerns raised during consultation about whether the international passenger growth forecast was conservative.[323]

Demand growth projected over PSE3

B72 Christchurch Airport is forecasting average annual growth of 2.6% in domestic passenger and 3.1% in international passengers over PSE3.[324] This represents a slow-down in demand growth compared to the PSE2 period where average annual growth was 3.5% in domestic passengers and 3.1% in international passengers.

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321 Christchurch Airport "Price setting disclosure – In accordance with clause 2.5 of the Airport Services Information Disclosure Determination 2010" (1 August 2017), schedule 20.

322 Christchurch Airport "Submission on process and issues paper on the review of Auckland and Christchurch Airports' third price setting event - Attachment - PSE3 airline consultation material" (28 November 2017), CIAL PSE3 Revised Pricing Proposal – 10 April 2017, paragraphs 169-170.

323 Christchurch Airport "Price setting disclosure – In accordance with clause 2.5 of the Airport Services Information Disclosure Determination 2010" (1 August 2017), paragraph 123.

324 Christchurch Airport set these forecasts prior to the end of FY17. Actual international passengers in 2017 were approximately 2% higher than it forecast and actual domestic passengers in 2017, 0.3% higher than forecast. Christchurch Airport "Submission on process and issues paper on the review of Auckland and Christchurch Airports' third price setting event – attachment - PSE3 airline consultation material" (28 November 2017), CIAL PSE3 Revised Pricing Proposal – 10 April 2017, paragraphs 169-170.

Some airlines have suggested that there is some conservatism in international passenger forecasts

B73 BARNZ submitted that Christchurch Airport's international passenger growth forecasts may be unduly conservative. BARNZ considers Christchurch Airport's assumption—that the proportion of New Zealand's international air travel visiting Christchurch will remain constant over PSE3—is unlikely. This is on the basis that the airport's demand forecasting consultants (Three Consulting) consider there is pent-up demand in Christchurch and consider passenger volumes in Christchurch have not reached pre-earthquake proportions.[325]

B74 Similarly, Qantas' view is that Christchurch Airport's international passenger targets are understated, given the current growth rates both at Christchurch Airport, and in New Zealand more generally.[326]

B75 Air New Zealand had previously indicated it was generally comfortable with Christchurch Airport's forecast international passenger growth.[327] However, in response to our draft report, it submitted that the forecasts adopted by Christchurch Airport were "by no means stretch forecasts and would not require additional incentive spend to be achieved."[328] It suggests the starting point forecasts for FY18 were extremely conservative with international passengers forecast to increase by only 0.33% and domestic passengers to increase by only 2.5% compared to demand in FY17.

B76 Air New Zealand also questioned whether the forecast route incentive payments were included in the demand forecast.[329]

> The Commission has noted that it considers it appropriate to take the cost of these incentives into account when assessing CIAL's expected returns as these were taken into account in the demand forecasts. Air NZ questions whether the forecast incentives not included in the pricing model, as opposed to the marketing spend which was included, were in fact taken into account when developing demand forecasts.

B77 Christchurch Airport responded to Air New Zealand's concern, noting that its forecast demand used bottom up (or "supply-based") information wherever possible and

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325 BARNZ "BARNZ assessment of CIAL's PSE3 pricing decision against Part 4 criteria" (28 November 2017), page 13.

326 Qantas "Review of Auckland and Christchurch Airports' third price setting events – Qantas Group feedback to the Process and issues paper" (28 November 2017), page 2.

327 Christchurch Airport "Submission on process and issues paper on the review of Auckland and Christchurch Airports' third price setting event - Attachment - PSE3 airline consultation material" (28 November 2017), Initial Proposal – responses – 7 February 2017, page 10.

328 Air New Zealand "Re: Review of Christchurch International Airport's pricing decisions and expected performance (July 2017 – June 2022)" (16 August 2018), paragraph 16.

329 Air New Zealand "Re: Review of Christchurch International Airport's pricing decisions and expected performance (July 2017 – June 2022)" (16 August 2018), paragraph 15.

focussed on demand growth, which they suggest inherently takes into account incentives and their impact on the starting point demand.[330]

B78 Christchurch Airport submits that its international passenger numbers have grown particularly fast over the last three years due to earthquake recovery. The airport notes that by the end of PSE3, it expects international passenger growth will trend closer to the national average with no material impact on its current market share.[331]

B79 Christchurch Airport considers that it is unreasonable to expect it to recover its relative share of international demand from other New Zealand airports over PSE3.[332]

B80 Christchurch Airport suggests that South Island tourism growth will be shared with other airports due to:[333]

B80.1 Auckland Airport acting as an international hub facilitating domestic transfers to South Island locations; and

B80.2 Queenstown Airport providing direct routes from Australia.

B81 Christchurch Airport has also noted that it will not earn additional revenue on a one-for-one basis where there has been additional passenger growth above forecast. This is because a portion of the passenger growth is subject to pricing incentives.[334]

Our view

B82 Christchurch Airport is forecasting for PSE3 average annual growth of 2.6% in domestic passenger and 3.1% in international passengers. This is slightly lower but not inconsistent with its average annual growth in international and domestic passengers over PSE2 (3.1% and 3.5% respectively).

B83 There are a number of reasons why it may be reasonable to expect Christchurch Airport's demand growth to be lower in PSE3 than in PSE2.

B83.1 It is likely that over PSE2 the easiest demand growth to recapture was recovered following the earthquake, and from now on, attracting additional demand will be relatively more difficult.

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330 Christchurch Airport "Cross-Submission on Commerce Commission's Review of Christchurch International Airport's Pricing Decisions and Expected Performance (July 2017 - June 2022) - Draft Report" (6 September 2018), paragraph 43.

331 By comparison, Auckland Airport is forecasting 4.1% annual PSE3 growth in international passengers against Christchurch Airport's forecast of 3.2%.

332 Christchurch Airport "Cross-submission on process and issues paper on the review of Auckland and Christchurch Airports third price setting for airport services (issues and questions raised)" (19 December 2017), paragraphs 28-31.

333 Christchurch Airport "Submission on process and issues paper on the review of Auckland and Christchurch Airports' third price setting event - Attachment - PSE3 airline consultation material" (28 November 2017), CIAL PSE3 Revised Pricing Proposal – 10 April 2017, paragraph 176.

334 Christchurch Airport "Additional material on the reset of aeronautical prices for the period 1 July 2017 to 30 June 2022" (28 June 2018), paragraph 34.

B83.2 It may not be reasonable to assume Christchurch Airport will recover its pre-earthquake share of international travel to New Zealand airports over PSE3. This is because since the Canterbury earthquakes, Auckland Airport has taken a greater role as an international hub facilitating domestic transfers to South Island locations, and Queenstown Airport is now providing direct routes from Australia.

B83.3 A potential reduction in international demand growth across New Zealand is due to a range of factors. For example, Auckland Airport notes that it is forecasting lower demand growth over PSE3 compared to PSE2 due to a number of factors (some of which are also relevant to Christchurch Airport), including: [335]

B83.3.1 "one-off" type events occurring in PSE2 (eg, Jetstar expansion) which are unlikely to be repeated;

B83.3.2 inbound visitor growth rates have peaked and are now declining; and

B83.3.3 airline capacity additions have slowed due to less favourable conditions.

B84 We also note the potential for Christchurch Airport to earn additional revenue from higher than forecast demand growth is mitigated if the higher demand is due to additional spending on incentives that are not included in the current forecast.

B85 We understand that the forecast incentive payments reflected in the airport's demand forecasts cover agreements that were in place at the end of PSE2 and continue into PSE3, as well as an assumption that one of those agreements will be extended in substantially similar form.[336]

Impacts on demand forecast from changes in Christchurch Airport's price structure

B86 BARNZ notes that Christchurch Airport has reduced its charges to international airlines by 45% on average from FY17 to FY18 and the terminal price per passenger will decline further over PSE3. It submits that this should stimulate demand over PSE3 relative to the other New Zealand international airports.[337]

B87 Qantas believes that the significant (~45%) reduction in the terminal price per passenger from FY17 to FY18 will stimulate demand specifically at Christchurch Airport, relative to comparable airports in New Zealand.[338]

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335 Auckland Airport "Submission on process and issues paper on the review of Auckland and Christchurch Airports third prices setting for airport services" (28 November 2017), page 15.

336 Christchurch Airport "Additional material on the reset of aeronautical prices for the period 1 July 2017 to 30 June 2022" (28 June 2018), paragraph20

337 BARNZ "Submission on process and issues paper on the review of Auckland and Christchurch Airports third prices setting for airport services" (28 November 2017), page 24.

338 Qantas "Review of Auckland and Christchurch Airports' third price setting events – Qantas Group feedback to the Process and issues paper" (28 November 2017), page 2.

B88 The airport's pricing methodology has resulted in significantly reduced charges for international passengers over PSE3. Christchurch Airport advised its expert consultant (Three Consulting) of the changes made to its pricing structure, and requested that they review whether the changes would affect its demand forecasts. Three Consulting considered this and noted that Christchurch Airport's change in pricing strategy would not materially affect demand forecasts.[339]

B89 To forecast demand, Three Consulting used airline scheduling forecasts for the years they were available as the best evidence of likely volumes in the near term, and for the years beyond that to extrapolate forecasts based on macro variables. It considered that the changes in charging structure would not be a significant factor in airlines scheduling decisions.[340]

B90 Christchurch Airport submits that although prices went down materially for international passengers, airport charges are likely to be a smaller share of their total ticket price. Christchurch Airport also notes that where there are additional international flights at the expense of domestic flights (ie, direct rather than through the Auckland Airport hub) there is little effect on its revenue.[341]

Our view

B91 In response to feedback from airlines, Christchurch Airport introduced a transitional price path. This means that any potential demand responses to the pricing structure changes will be somewhat reduced in the early years of PSE3 given that changes in terminal charges are being gradually introduced.

Risk sharing of demand forecasts

B92 Air New Zealand proposed a risk sharing mechanism to address concerns regarding the accuracy of passenger forecasts. It noted that Christchurch Airport rejected this approach, instead indicating its preference to establish headline prices and develop bespoke arrangements with individual airlines. Air New Zealand considers this demonstrates Christchurch Airport is using the regulatory pricing regime to disguise a 'divide and conquer' strategy, to benefit the airport.[342]

B93 Christchurch Airport states that it remains confident in its demand forecasts and that therefore there is no need for risk sharing arrangements. It also notes that so far in PSE3, demand is tracking very closely to Christchurch Airport's forecasts.[343]

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339 Christchurch Airport "Additional material on the reset of aeronautical prices for the period 1 July 2017 to 30 June 2022" (28 June 2018), paragraph 67.

340 Christchurch Airport "Additional material on the reset of aeronautical prices for the period 1 July 2017 to 30 June 2022" (28 June 2018), paragraphs 2-4.

341 Christchurch Airport "Additional material on the reset of aeronautical prices for the period 1 July 2017 to 30 June 2022" (28 June 2018), paragraph 71.

342 Air New Zealand "Response to the Process and Issues Paper: Auckland and Christchurch Airports' third price setting events (July 2017-June 2022)" (28 November 2017), paragraph 81 and 85.

343 Christchurch Airport "Cross-submission on process and issues paper on the review of Auckland and Christchurch Airports third price setting for airport services (issues and questions raised)" (19 December 2017), paragraph 44.

B94 Christchurch Airport also states that given demand risks are shared between Christchurch Airport and a variety of airlines with different circumstances and associated risks, Christchurch Airport is clearly best placed to manage demand risk.[344]

B95 Christchurch Airport notes that the pricing incentives included in its PSE3 disclosures reflect the rebates forecast under agreements in place at the end of PSE2, as well as an assumption that one of those agreements will be extended in substantially similar form.[345]

Our view

B96 Further details on Air New Zealand's proposed risk sharing mechanism were not provided. However, we note that depending on the specific design, a mechanism which allows existing airlines to benefit from any upside risk may not incentivise the Airport to proactively attract new air services (which would provide competition to the existing airlines) for the benefit of consumers.

B97 We agree that Christchurch Airport may be better placed to manage demand risks, however we also note that future demand levels are not entirely within the airport's control because demand is determined to an extent by both the airlines and the airport.

B98 We note Christchurch Airport has absorbed the cost of incentives under existing contracts but allowed for the effect of currently forecast incentive spend on its forecasts of demand. This is to the benefit of airlines who gain from (without paying for) potentially lower unit costs as a result of higher demand. We also note that any additional incentive spending above that forecast for PSE3 will not be included in the cost base and will therefore be spent entirely at Christchurch Airport's risk.

B99 Generally, we consider that some sharing of risk for volumes associated with route development activities is appropriate. This is because the route development activities may increase demand relative to a situation where these activities were not undertaken. Airlines may subsequently benefit from lower unit costs resulting from these increased volumes and economies of scale over the long-term.

Conclusion on the reasonableness of the demand forecasts

B100 We note that future demand levels are not entirely within the airport's control and we therefore expect actuals to be different to forecast. We note that Christchurch Airport has used expert advice, and that its forecast does not appear unreasonable given Christchurch Airport's knowledge at the time prices were set.

B101 There are a number of reasons why it may be reasonable to expect Christchurch Airport's demand growth to be lower in PSE3 than in PSE2. We also note that to the

[344] Christchurch Airport "Cross-submission on process and issues paper on the review of Auckland and Christchurch Airports third price setting for airport services (issues and questions raised)" (19 December 2017), paragraph 44.

[345] Christchurch Airport "Additional material on the reset of aeronautical prices for the period 1 July 2017 to 30 June 2022" (28 June 2018), paragraph 20.

extent that PSE3 international demand was under forecast, the ability for this to contribute to Christchurch Airport's revenue would be limited by factors such as:

B101.1 International demand represents only approximately 25% of overall demand. Therefore, any under forecasting of international demand will have a relatively small impact on the accuracy of the overall demand forecast.

B101.2 Christchurch Airport's incentive spending mitigates the amount of additional revenues it earns from higher than forecast demand growth.

B101.3 Christchurch Airport introduced a transitional price path. This means that any potential demand responses to the pricing structure changes will be somewhat reduced in the early years of PSE3 given that changes in terminal charges are being gradually introduced.

B102 We also note that Christchurch Airport has been responsive to feedback from airlines, in particular it has:

B102.1 reviewed its forecasts, and made an amendment to its initial domestic demand forecast; and

B102.2 adjusted the rate of change to its new price structure for regional and international passengers.

Operating expenditure forecasts

B103 This section considers whether Christchurch Airport's operating expenditure (operating expenditure) forecasts for the PSE3 period are reasonable, based on the information available at the time prices were set. Similar to demand forecasts, operating expenditure forecasts influence our assessment of whether the Airport is limited in its ability to extract excessive profits because they are a key driver of forecast cash flows.

B104 Consistent with section 52A(1)(b) of the Act, we have also considered whether Christchurch Airport has incentives to improve its operating efficiency and provide services at a quality that reflects consumer demands.

Incentives on Christchurch Airport to forecast its expenditure and to operate efficiently

B105 Christchurch Airport's operating expenditure forecast influences the prices it charges customers. When actual expenditure is lower than forecast, Christchurch Airport can earn higher profits. Christchurch Airport can outperform its forecast expenditure by:

B105.1 achieving efficiency gains: reducing operating expenditure while maintaining (or increasing) the quality and quantity of service provided or increasing the quantity or quality of service while maintaining the operating expenditure; and

B105.2 forecasting operating expenditure above an efficient level so as to earn higher profits by outperforming operating expenditure forecast without necessarily being efficient.

B106 Over time, the public disclosure of information on historic and forecast operating expenditure can provide transparency about whether Christchurch Airport has over-forecast operating expenditure for the purpose of price setting and its performance relative to other suppliers. The availability of this information potentially increases the countervailing power of consumers at Christchurch Airport.

B107 Forecast operating and capital expenditure are significant parameters for the determination of the expected return for airports. There may be an incentive for airports to project expenditure such that there is a greater likelihood of expenditure being below forecast than above forecast. We note the existence of such an incentive does not mean that airports will necessarily act on that incentive.

How Christchurch Airport has forecast operating expenditure

B108 Christchurch Airport forecast its PSE3 operating expenditureby:

B108.1 starting with its budgeted FY18 and FY19 operating expenditure;

B108.2 increasing those costs in aggregate cost buckets for FY20 to FY22 at a pre-set rate (usually CPI); and

B108.3 excluding promotion and airline incentives.

B109 Christchurch Airport has derived its prices on the basis of recovering the operating expenditure allocated to the priced services, with the exception of the certain incentive costs. Christchurch Airport has, as a commercial concession, absorbed the cost of incentives under existing contracts. The expected impacts on demand growth from this incentive spend are included in its demand forecasts.[346]

Forecast trends in unit operating expenditure

B110 The forecast trend in unit operating expenditure at Christchurch Airport, relative to actuals for PSE2, is shown in **Figures B1 and B2**. We consider operating expenditure per passenger and operating expenditure per aircraft are appropriate measures of Christchurch Airport's unit operating expenditure as they are likely to reflect some of the drivers of Christchurch Airport's variable costs.

[346] Christchurch Airport "Disclosure relating to the reset of aeronautical prices for the period 1 July 2017 to 30 June 2022" (14 August 2017), page 27.

Figure B1 Unit operating expenditure over 2013 - 2017[347]

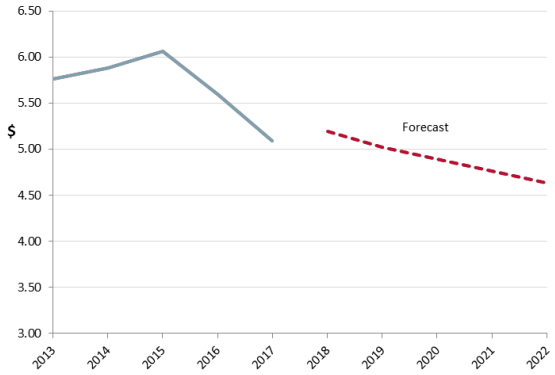
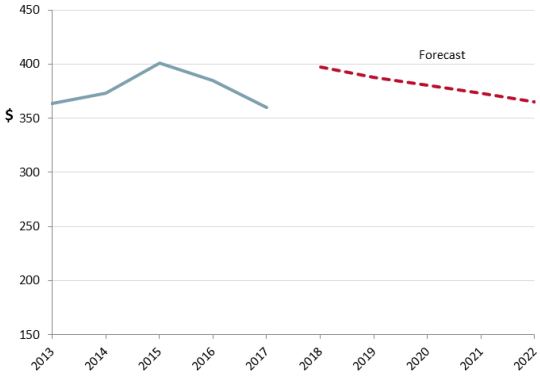


Figure B2 Forecast unit operating expenditure over 2018 - 2022



** Please note that the y-axis of these figures does not start at 0.*

Operating expenditure per passenger

B111 **Figure B1** shows that over PSE3, Christchurch Airport's real operating expenditure per passenger is forecast to decrease across PSE3.

B112 Over the whole PSE3 period, real operating expenditure per passenger is forecast to be $4.89. This compares to $5.66 over the 2013-2017 (PSE2) period.

Operating expenditure per aircraft movement

B113 **Figure B2** shows that operating expenditure per aircraft movement is forecast to increase in 2018 (driven by slightly higher forecast operating expenditure and fewer forecast movements in that year), but then reduce across the remainder of PSE3. By 2022, forecast operating expenditure per aircraft unit is forecast to decrease to $365.04, slightly up from $359.77 in 2017.

B114 Over the whole PSE3 period, operating expenditure per aircraft movement is forecast to be $380.47 this compares to $376.37 over the 2013-2017 (PSE2) period.

Airlines consider the starting point for the operating expenditure forecast is inefficiently high

B115 Airlines have raised concerns that the forecast starts from a historically high base.

Operating expenditure per passenger

B116 BARNZ submits that no efficiency gains appear to have been achieved in the previous pricing period, and that operating expenditure efficiency worsened over PSE2. It also notes that as PSE3 starting prices were based on Christchurch Airport's actual

347 The figures in this graph are adjusted into real terms, and assume no incentive expenditure.

expenditure, this means that the inefficiencies incurred over PSE2 are now included in PSE3 prices, pushing up costs for passengers.[348]

B117 BARNZ also submits that it would like to see a stronger focus on driving improved efficiencies across airports. It states that it does not accept that because costs at a particular airport have been relatively high in the past it necessarily means the current relatively high costs are reasonable.[349]

B118 Airlines are concerned about Christchurch Airport's expenditure efficiency. Christchurch Airport's operating expenditure per passenger grew by more than 50% over PSE2 and is now the highest of the major NZ airports. This increase has been driven by increasing expenditure in the category "asset management and airport operations".[350]

B119 BARNZ considers that the bulk of these cost increases have come from expenditure on the new terminal. BARNZ notes that it would have expected a new and improved asset to drive operating expenditure down rather than up, as maintenance costs should be reduced.[351]

B120 BARNZ submits that Christchurch Airport overspent its PSE2 operating expenditure forecasts by $26m in the years FY13-FY16. This meant operating expenditure was 22.5% above forecast for those years. The majority of the overspend ($22m) was in the asset management and airport operations category. BARNZ notes that part of that overspend is because certain activities are included in disclosed operating expenditure but were excluded from pricing when PSE2 charges were set (eg, airport promotions / incentives for new routes), however it is not clear how much of the overspend is due to these factors.[352]

B121 BARNZ understands that Christchurch Airport has experienced large and un-forecast increases in rates and insurance costs during PSE2, and also unexpected airfield security costs. However, BARNZ is not aware of what proportion of the increased operating expenditure over PSE2 is explained by these factors.

B122 Air New Zealand submits that it shares BARNZ's concerns.

Airport's view

B123 Christchurch Airport submitted that its new terminal is significantly larger than, and different to, its previous terminal, and consequently has a different operating expenditure footprint. This change has been coupled with increases in costs that are

348 BARNZ "BARNZ assessment of CIAL's PSE3 pricing decision against Part 4 criteria" (28 November 2017), page 20.

349 BARNZ "Draft Report on Christchurch Airport's pricing decisions and expected performance: PSE3" (16 August 2018), paragraph 42.

350 BARNZ "BARNZ assessment of CIAL's PSE3 pricing decision against Part 4 criteria" (28 November 2017), Table 4 row 23.

351 BARNZ "BARNZ assessment of CIAL's PSE3 pricing decision against Part 4 criteria" (28 November 2017), Table 4 row 23.

352 BARNZ "BARNZ assessment of CIAL's PSE3 pricing decision against Part 4 criteria" (28 November 2017), page 14.

out of Christchurch Airport's control (e.g. rates, insurance and CAA requirements, as explained during consultation).[353]

B124 The airport also notes that its PSE3 operating expenditure is based on its actual and budgeted costs, specific to the circumstances of the Airport.[354]

B125 Christchurch Airport argues that while operating expenditure considered on a per passenger basis is one available measurement, it should not be considered as a proxy for performance, as it focusses only on the total operating expenditure amount and demand (which experienced a downward step change in PSE2) rather than actual efficiency. It also notes that efficiency is the better metric for performance, as assessed by considering costs in their full context with regard to actual efficiency outcomes (e.g. quality of service, innovation and customer satisfaction).[355]

Our response to airlines' concerns

B126 We have focussed our analysis on whether there is evidence to suggest the starting point for the PSE3 forecast may be unreasonable, by exploring:

B126.1 how Christchurch Airport's actual operating expenditure compares to its operating expenditure forecasts over PSE2 and PSE3, and the reasons for any differences; and

B126.2 how Christchurch Airport's operating expenditure compares to other airports.

B127 We acknowledge BARNZ would like to see a stronger focus on driving improved efficiencies across airports. We note that a performance indicator of efficiency is not the focus of this review, and is better assessed as part of a review of ex-post annual disclosures. We consider it preferable to commence an ex-post analysis of airports' performance against a complete five-year pricing period for all three regulated airports (Auckland, Wellington and Christchurch) after Wellington Airport has completed its first five-year pricing period in mid-2019. We may also consider the appropriateness of seeking additional information to inform our ex-post review, including benchmarking, at the time.

How Christchurch Airport's historical operating expenditure compares to its operating expenditure forecasts

B128 Actual operating expenditure per passenger and per movement were consistently higher than forecast over PSE2 as shown in **Figures B3 and B4**.

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353 Christchurch Airport "Cross-submission on process and issues paper on the review of Auckland and Christchurch Airports third price setting for airport services (issues and questions raised)" (19 December 2017), paragraph 33.

354 Christchurch Airport "Cross-submission on process and issues paper on the review of Auckland and Christchurch Airports third price setting for airport services (issues and questions raised)" (19 December 2017), paragraph 33.

355 Christchurch Airport "Cross-submission on process and issues paper on the review of Auckland and Christchurch Airports third price setting for airport services (issues and questions raised)" (19 December 2017), paragraph 33.

Figure B3 Forecast and actual operating expenditure per passenger (2013 – 17)

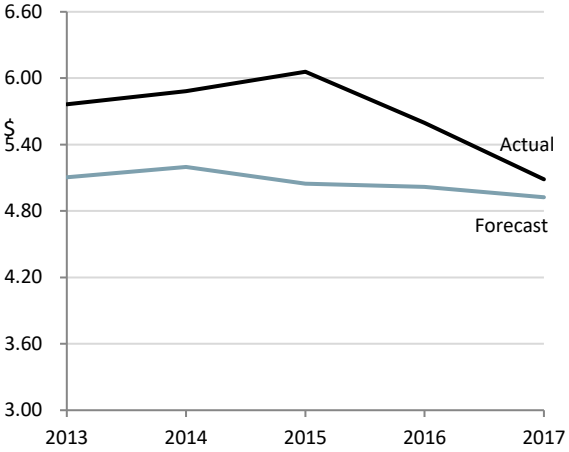
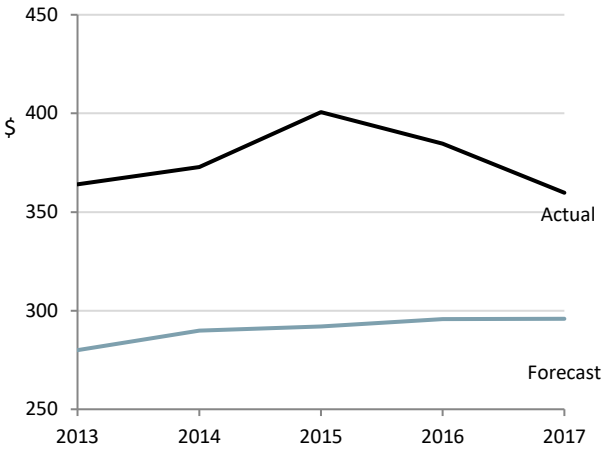


Figure B4 Forecast and actual operating expenditure per aircraft movement (2013 – 17)



** Please note that the y-axis of these figures does not start at 0.*

B129 Christchurch Airport's actual nominal operating expenditure expenditure across PSE2 excluding incentive expenditure was $166.7m actual against a forecast of $145.4m—a difference of 21.3m or 14.6%.[356]

B130 Christchurch Airport attributes this additional expenditure to:

B130.1 promotions and incentives to specific airlines or route destinations that were excluded from the forecast used for pricing after consultation with airline customers;[357]

B130.2 insurance and rate increases being greater than forecast;

B130.3 a CAA ruling that labour costs for airfield security gates are an airport cost rather than an aviation security cost. The resulting charge was a cost that commenced in 2013 and was not included in Christchurch Airport's forecast;

B130.4 other costs including maintenance, cleaning and personnel costs;

B130.5 increased emergency service personnel costs are now incurred, in line with the Task and Resource Analysis carried out to ensure compliance with CAA guidelines; and

356 Please note that Christchurch Airport's disclosed actual operating expenditure across this period was $179m. This differs from the $166.7m figure noted above because it includes $12.4m of incentive expenditure across 2015-17. This has not been included in this comparison because Christchurch Airport's forecast operating expenditure does not include these incentives.

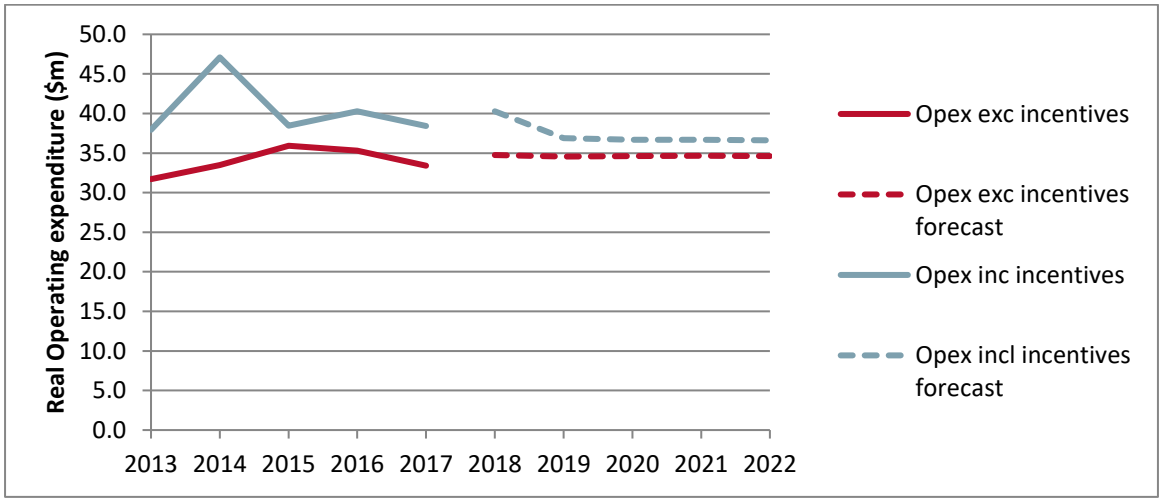
357 Note we have removed incentive expenditure from actual operating expenditure in this comparison against forecast operating expenditure, therefore this argument is no longer relevant.

B130.6 a change in approach for how a lease termination cost should be recovered.[358]

Actual and forecast operating expenditure with and without incentive expenditure

B131 As noted above Christchurch Airport has indicated that it has not included promotion and airline incentives expenditure in its forecast. To provide a more accurate comparison between actual and forecast numbers we have therefore removed promotion and airline incentives expenditure from actual operating expenditure over PSE2.

Figure B5 Actual operating expenditure for PSE2 and forecast operating expenditure for PSE3



B132 **Figure B5** shows a slight increase in operating expenditure (with and without incentives) between FY17 and FY18. Operating expenditure including incentives increases in FY18 but then reduces below historic levels over the remainder of PSE3. This reflects the significant reduction in forecast incentives expenditure in PSE3 relative to PSE2 ($14.0m in PSE3 versus $32.4m in PSE2). Operating expenditure excluding incentives slightly increases in FY18 and then remains flat across the remainder of PSE3. Christchurch has noted that they have used budgeted FY18 and FY19 operating expenditure as the basis for estimating PSE3 operating expenditure.

How Christchurch Airport's operating expenditure compares to other airports

B133 Airlines' submissions have not suggested an alternative PSE3 forecast for total operating expenditure or particular operating expenditure items. Airlines' submissions have queried whether differences between Christchurch Airport's operating expenditure and that of other airports are reasonable.

[358] Christchurch Airport "Specified Airport Services Annual Information Disclosure for the year ending 2017", page 6.

Airlines' views on how Christchurch Airport's operating expenditure compares to other airports

B134 BARNZ provides several observations comparing Christchurch Airport's operating expenditure to that of other NZ airports.

B134.1 Christchurch Airport's asset maintenance operating expenditure as percentage of RAB is similar to Wellington Airport and much lower than at Auckland Airport.[359]

B134.2 Christchurch Airport's corporate overheads operating expenditure per passenger is between that of Auckland Airport and Wellington Airport.[360]

B134.3 Christchurch Airport's asset management and airport operations operating expenditure per passenger is the highest of the three airports and has grown significantly over PSE2—this has been the category driving the increase in Christchurch Airport's total operating expenditure per passenger.[361]

B134.4 Christchurch Airport has seen significant increases in both airfield operating expenditure per MCTOW landed (especially in FY15) and terminal operating expenditure per passenger (especially in FY13). It now has the highest airfield operating expenditure per MCTOW and is not far below Auckland Airport's terminal operating expenditure per passenger.[362]

B134.5 Christchurch Airport has similar average remuneration and benefits costs per full-time equivalent (FTE) employee to Wellington Airport, but much lower costs than Auckland Airport.[363]

B135 BARNZ also notes that it appears that operating costs per passenger in Australian airports have also been growing significantly.[364]

Christchurch Airport's view on how its operating expenditure compares to other airports

B136 Christchurch Airport argues that it is inappropriate to draw substantive conclusions from benchmarking operating expenditure per passenger against other New Zealand airports. Christchurch Airport and the other airports are clearly not comparable; they differ significantly in terms of size, terminal configurations, demand, relative passenger splits (international/domestic) and stages within their capital investment cycles.

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359 BARNZ "BARNZ assessment of CIAL's PSE3 pricing decision against Part 4 criteria" (28 November 2017), page 11.

360 BARNZ "BARNZ assessment of CIAL's PSE3 pricing decision against Part 4 criteria" (28 November 2017), page 11.

361 BARNZ "BARNZ assessment of CIAL's PSE3 pricing decision against Part 4 criteria" (28 November 2017), page 11.

362 BARNZ "BARNZ assessment of CIAL's PSE3 pricing decision against Part 4 criteria" (28 November 2017), page 12.

363 BARNZ "BARNZ assessment of CIAL's PSE3 pricing decision against Part 4 criteria" (28 November 2017), page 13.

364 BARNZ "BARNZ assessment of CIAL's PSE3 pricing decision against Part 4 criteria" (28 November 2017), page 14.

Conclusion

B137 As noted by BARNZ, certain measures of Christchurch Airport's operating expenditure performance indicate poorer performance compared to other New Zealand airports. However, these discrepancies in airports' performance have existed over PSE1 – PSE2 and have not changed remarkably to raise significant concern. We also acknowledge that differences in airports' passenger mix may contribute to differences in unit operating expenditure performance.

B138 Christchurch Airport's PSE3 operating expenditure forecast does not appear unreasonable relative to historic levels which provide context for its PSE3 forecast and does not necessarily indicate that the starting point for the PSE3 forecast is unreasonable.

B139 We note that the higher management and operations expenditure were almost the entire source of variance between actual operating expenditure and forecast operating expenditure over PSE2. This increase in management and operations expenditure is not unexpected given that at the start of PSE2 Christchurch Airport had just completed its new integrated terminal, which required a different operating expenditure 'footprint' while experiencing reduced demand. This would suggest that Christchurch Airport's PSE2 operating expenditure was not optimal but, as demand increases, we would expect to see improvement in the efficiency of the terminal utilisation.

We have tested the impact of a change in operating expenditure forecast on expected profitability

B140 We have tested the impact on Christchurch Airport's expected profitability of actual operating expenditure being 10% different to its operating expenditure forecasts.

B140.1 If actual operating expenditure was 10% higher than Christchurch Airport's operating expenditure forecast it would reduce the airport's expected return of 6.65% by 0.5 percentage points to 6.15%.

B140.2 Conversely, if actual operating expenditure was 10% lower than Christchurch Airport's operating expenditure forecast it would increase the airport's expected return of 6.65% by about 0.5 percentage points to 7.2%.

Capital expenditure forecasts

B141 There are two relevant limbs of the Act (section 52A(1)(a) and(b)) when assessing whether there are any significant concerns that Christchurch Airport's capital expenditure forecasts for PSE3 is not appropriate. These require considering whether the airport has:

B141.1 incentives to invest in services at a quality that reflects consumer demand; and

B141.2 incentives to improve the efficiency of its investment.

Outline of our approach to assessing Christchurch Airport's capital expenditure forecasts

B142 Our approach to assessing this is to consider whether Christchurch Airport's consultation process has been reasonable and the outcomes of the process have been generally supported by stakeholders (ie, whether it is investing in the right assets).

B143 We also consider whether:

B143.1 there are concerns that the forecasts are not an appropriate starting point for assessing profitability (ie evidence of any planned under- or over-investment); and

B143.2 Christchurch Airport has adequately mitigated any risks relating to actual outcomes differing from its capital expenditure forecasts.

B144 We consider expected service quality and any evidence from current and past disclosures to indicate that the capital expenditure plan is not expected to be deliverable.

B145 In our section 56G review we could not conclude whether information disclosure regulation under Part 4 of the Act was effectively promoting efficient investment at Christchurch Airport because at that stage we did not have actual investment information for PSE2. We now have actual investment information for PSE2 and can compare this against PSE2 forecasts to draw inferences about potential risks to the delivery of planned PSE3 investments.

Has Christchurch Airport's consultation process been reasonable and have the outcomes of the process been generally supported by stakeholders?

B146 Christchurch Airport is forecasting to spend $82m in capital expenditure over PSE3. This is a similar level of expenditure to PSE2, where the airport forecast to spend $75m. Christchurch Airport's expenditure forecasts for PSE3 reflect predominantly business as usual capital expenditure and only three major capital projects over the five-year period:

B146.1 $10.4m for terminal reconfiguration in order to increase productivity and flexible use of the airport's terminal;

B146.2 $5m for further work to install jet ground power at remaining stands which is a key sustainability initiative for the airport; and

B146.3 $5m as an initial step to install centreline lighting to enable low visibility aircraft operation.

B147 The airport is also seeking to improve the efficiency of its passenger processing through the investment in common use check-in kiosks and baggage drop stations.

B148 Christchurch Airport had initially proposed to spend $20m to extend its cross-wind runway. However as a result of consultation with major customers, the airport decided to remove the extension from its final pricing decision.

Airlines' views

B149 BANRZ indicates that Christchurch Airport's capital plan for PSE3 is fairly modest, reflecting where the Airport is at in its capital investment cycle. BARNZ was pleased that the Airport chose not to progress with its project to extend the length of the cross-runway, as the benefits of this project did not outweigh the costs.[365]

B150 Qantas also generally supports Christchurch Airport's (comparatively) modest approach to capital expenditure in PSE3.[366]

B151 A number of airlines raised concerns at the lack of specificity attached to the proposed 'terminal reconfiguration' capital expenditure project.[367] BARNZ notes that this is not a clearly defined project that airlines provide views on, but appears to be a contingency fund for the Airport to spend, or not, as it chooses over PSE3.

Conclusion

B152 Airlines generally support most of Christchurch Airport's capital expenditure projects included in the pricing decision and note that the level of investment is modest over PSE3.

B153 Airlines also acknowledge that Christchurch Airport did respond to airline feedback by removing a $20m extension to the cross-runway from its capital plan.

B154 However, airlines do not support the proposed 'terminal reconfiguration' capital expenditure project, highlighting the lack of detailed spend breakdown or planning proposals associated with this project.

B155 Christchurch Airport has responded that the proposed 'terminal reconfiguration' capital expenditure project:

B155.1 is a key component of Christchurch Airport's approach to improve productivity and flexible use which it has explained in detail; and

B155.2 It is a project that it will definitely undertake in PSE3.

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365 BARNZ "Review of Auckland and Christchurch Airport's third price setting events – Process & Issues paper" (28 November 2017), Table 4 row 23.

366 Qantas "Review of Auckland and Christchurch Airports' third price setting events – Qantas Group feedback to the Process and issues paper" (28 November 2017), page 2.

367 Qantas "Review of Auckland and Christchurch Airports' third price setting events – Qantas Group feedback to the Process and issues paper" (28 November 2017), page 2. BARNZ "Review of Auckland and Christchurch Airport's third price setting events – Process & Issues paper" (28 November 2017), page 23; Air New Zealand "Response to the Process and Issues Paper: Auckland and Christchurch Airports' third price setting events (July 2017-June 2022)" (28 November 2017), paragraphs 88–89.

Is Christchurch Airport expected to provide services at a quality that reflects consumer demands?

B156 BARNZ considers that Christchurch Airport is generally expected to provide services at a quality that reflect consumer demands. BARNZ notes for example that issues recently identified by the Airline Operators Committee were raised with the Airport and resolved reasonably quickly. The airport also made an investment in FY17 to improve airfield efficiency by widening a taxiway to enable A380 aircraft to use the taxiway rather than use the runway as a taxiway to return to the terminal.[368]

B157 BARNZ notes that the results of the standard survey of international passengers reported through information disclosures have been between 4.1 and 4.3 (out of 5) in every year since 2011 for Christchurch Airport. Christchurch Airport states that it "consistently ranks as the best of nine major Australasian airports across a number of service categories."[369]

B158 BANRZ indicates that Christchurch Airport's service reliability appears to be of a reasonable standard. Airlines have not reported significant concerns to BARNZ about service reliability at Christchurch Airport. The disclosed performance indicators up to FY16 show improved performance over time except for on-time departure delays.[370]

B159 BARNZ also states that, in general, there is sufficient capacity for international arrivals and departures. However, BARNZ does note a two areas where the airport can experience capacity constraints or delays:[371]

B159.1 there are capacity constraints in the domestic regional departures area at Christchurch Airport; and

B159.2 there are usually queues in the early morning at international departures due to the opening times of the Customs and Aviation Security check points, but this is primarily an issue for Avsec and Customs to resolve rather than Christchurch Airport.

Conclusion

B160 Christchurch Airport consistently achieves high ratings on passenger surveys. In 2017, the airport received an average rating of 4.4 for its domestic travellers and 4.3 for international (on a scale of 1 – 5). This is the highest rating of the regulated New Zealand airports.

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368 BARNZ "Review of Auckland and Christchurch Airport's third price setting events – Process & Issues paper" (28 November 2017), Table 5, row 28.

369 BARNZ "BARNZ assessment of CIAL's PSE3 pricing decision against Part 4 criteria" (28 November 2017), page 2-3.

370 BARNZ "BARNZ assessment of CIAL's PSE3 pricing decision against Part 4 criteria" (28 November 2017), page 3.

371 BARNZ "BARNZ assessment of CIAL's PSE3 pricing decision against Part 4 criteria" (28 November 2017), page 4.

B161 Christchurch Airport appears willing to respond to customer concerns and resolve issues quickly. Submitters have noted examples of the airport responding to identified concerns.

Are Christchurch Airport's capital expenditure forecasts an appropriate starting point for assessing profitability?

B162 We recognise that there may be an incentive for airports to overstate capital expenditure if airports expect that they are able to capture any underspend that actually occurs. In addition, efficiency gains and losses may be rewarded differently depending on the year in which they occur. This time inconsistency can create incentives for airports to delay efficiency improvements.

B163 The incentive for airports to delay efficiency improvement under information disclosure regulation may be weaker than price-quality regulation. This is because airports can set prices as they see fit and can opt to reset prices earlier than every five years so long as they consult with major customers.

Airlines views

B164 Air New Zealand notes that pricing in capital expenditure, then failing to deliver this, or delivering it more cheaply, is how airports are incentivised to make additional returns for shareholders at the expense of consumers under the current regulatory regime.[372]

B165 NZ Airports disagrees with the airlines' allegation that airports are over estimating their capital expenditure in forecasts to obtain higher returns and suggests there is no evidence from historical performance that airports' actual expenditure is systematically below their capital expenditure forecasts. NZ Airports considers that Christchurch Airport incurred expenditure materially above forecast for PSE2 and notes that airlines do not propose wash-ups that would allow airports to recover such additional un-forecast expenditure.[373]

B166 Christchurch Airport also strongly disagrees, stating that the ID/IM regime includes annual disclosures by airports that track actual capital expenditure spend and allow the Commission and interested parties to easily understand airports' actual capital expenditure compared to forecasts. Christchurch Airport also states that Air New Zealand cannot point to a track record of Christchurch Airport intentionally underspending on capital expenditure.

B167 Air New Zealand considers that the expenditure disclosed in such 'pre-set cost buckets' by Christchurch Airport is insufficiently transparent to consumers, and in fact is set to be large enough, and opaque enough to allow Christchurch Airport to use that expenditure buckets as a vehicle for excessive profits. The $10.4m allowed

372 Air New Zealand "Response to the Process and Issues Paper: Auckland and Christchurch Airports' third price setting events (July 2017-June 2022)" (28 November 2017), paragraph 34.

373 NZ Airports "cross-submission on the process and issues paper on the review of Auckland and Christchurch Airports third price setting event for airport services (issues and questions raised)" (19 December 2017), paragraph 40.

by Christchurch Airport for 'terminal reconfiguration' is an example of opaque expenditure.[374]

B168 BARNZ notes that Christchurch Airport's major capital expenditure projects are appropriately included in prices, except for the terminal development project. It also states that capital expenditure is included in prices from the forecast date of commissioning. BARNZ argues that the terminal development project is not an actual project but funds for the Airport to use when it chooses, and therefore it has limited confidence that the prices will reflect this project from the actual date of commissioning.[375]

B169 Christchurch Airport argues that airlines have also mischaracterised its $10.4m investment in the terminal as a "blank cheque", or "contingency fund". Christchurch Airport insists this is not the case and that the purpose of the expenditure is fixed and clear. Christchurch Airport states that it has assured its substantial customers (with reasons) that it will undertake the proposed capital works during PSE3.[376]

B170 BARNZ undertook a review of the 13 projects listed in Christchurch Airport's PSE2 disclosure and identified that the amount budgeted for was ultimately underspent or not spent at all. BARNZ also suggests there was a large amount of expenditure on 'other capital expenditure' and non-forecast projects that was greater than in the PSE2 forecast.[377]

B171 BARNZ acknowledges that in part this variation reflects the difficulty in forecasting capital expenditure requirements for five-year periods in a changing commercial environment and that it supports changes to the capital plan when circumstances necessitate this. However, BARNZ is concerned that the Airport's capital expenditure can vary so much from the forecasts used to set prices.[378]

Conclusions

B172 In total, Christchurch Airport spent $126m, or 67%, more than forecast over FY13-FY17. This overspend was concentrated in FY17. Capital expenditure was below forecast in FY14 but above forecast in all other years.

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374 Air New Zealand "Cross submission on issues raised in submissions to the Process and Issues Paper: Auckland and Christchurch Airports' third price setting events (July 2017-June 2022)" (19 December 2017), paragraphs 60-61.

375 BARNZ "BARNZ assessment of CIAL's PSE3 pricing decision against Part 4 criteria" (28 November 2017), page 20.

376 Christchurch Airport "Cross-submission on process and issues paper on the review of Auckland and Christchurch Airports third price setting for airport services (issues and questions raised)" (19 December 2017), paragraph 37.

377 BARNZ "BARNZ assessment of CIAL's PSE3 pricing decision against Part 4 criteria" (28 November 2017), pages 18-19.

378 BARNZ "BARNZ assessment of CIAL's PSE3 pricing decision against Part 4 criteria" (28 November 2017), page 19.

Table B1 Forecast compared to actual capital expenditure over PSE3

(Figures in $000s)	**30/06/2013**	**30/06/2014**	**30/06/2015**	**30/06/2016**	**30/06/2017**
Forecast capital expenditure	**33,557**	**12,137**	**7,366**	**13,331**	**9,083**
Actual capital expenditure	**35,686**	**10,189**	**12,113**	**25,274**	**42,767**
Difference	**2,129**	**-1,948**	**4,747**	**11,943**	**33,684**
Cumulative difference	**2,129**	**181**	**4,928**	**16,871**	**50,555**

B173 We do not see evidence of a strategy to gain from either setting forecasts too high with the intention to underspend on capital expenditure or from delaying projects.

B174 We note that the over-expenditure at the end of the PSE2:

B174.1 came mainly from un-forecast projects, which are difficult to predict and more likely to occur towards the end of a PSE; and

B174.2 would be a concern if Christchurch Airport had consistently underspent up till then, whereas it was actually spending above forecast across PSE2. This means it was not earning returns on any of the commissioned assets over and above forecast.

B175 We note that there was significant expenditure on un-forecast projects of approximately $55m (including $24.3m on 'New Freight Apron Facility' and $15.3m on 'runway shoulder upgrade' projects). However, we understand that airlines were closely engaged in the development and approval of these un-forecast projects.

B176 We understand that the airlines have particular concerns about the airport's inclusion of $10.4m for 'terminal redevelopment' and the lack of meaningful consultation and specificity about what this project entails.

B177 A4ANZ considers that Christchurch Airport has not provided sufficient detail on the planned works and objects to the lack of transparency and consultation.[379] BARNZ raises similar concerns with the lack of consultation and notes that had the airport been more specific in its proposed use of the funds, the airlines could have provided more meaningful feedback and may have supported the investment.[380]

379 A4ANZ "Submission - Review of Christchurch International Airport's pricing decisions & expected performance (July 2017 - June 2022)" (16 August 2018), page 2.

380 BARNZ "Draft Report on Christchurch Airport's pricing decisions and expected performance: PSE3" (16 August 2018), paragraphs 35-36.

B178 More meaningful consultation with airlines on this project may have and allowed airlines to provide more constructive feedback on the project and alleviated concerns about the likely benefits of the project.

B179 Nonetheless, as the airport has indicated that a key focus of PSE3 is to improve the flexibility of its integrated terminal, it would be expected that some degree of investment would be necessary to achieve this, and this level of expenditure does not appear unreasonable.

B180 In order to better understand the materiality of the airport's capital expenditure on its expected returns, we have tested the impact on Christchurch Airport's expected profitability of actual capital expenditure being 10% different to its capital expenditure forecasts.

B180.1 If actual capital expenditure was 10% higher than Christchurch Airport's capital expenditure forecast it would reduce the airport's expected return of 6.65% by about 0.3 percentage points to 6.3%.

B180.2 Conversely, if actual capital expenditure was 10% lower than Christchurch Airport's capital expenditure forecast it would increase the airport's expected return of 6.65% by about 0.3 percentage points to 7.0%.

Has Christchurch Airport adequately mitigated any risks relating to actual outcomes differing from its capital expenditure forecasts?

B181 Air New Zealand states that it proposed adopting an approach whereby prices could be adjusted during PSE3 if capital expenditure that was not agreed during consultation, was subsequently agreed to and carried out. It notes that Christchurch Airport rejected this approach but included the un-agreed capital expenditure in its pricing forecasts.[381]

B182 However, BARNZ states that it did not propose any additional risk allocation adjustments to Christchurch Airport during the price consultation. BARNZ notes that given the size of Christchurch Airport's capital expenditure programme, it should be able to deliver on its capital expenditure forecasts. In PSE2, the Airport spent more than the value included in its capital expenditure forecast.[382]

B183 Christchurch Airport has stated it has no objection to a capital expenditure adjustment process in the right circumstances. However the starting point of the Airport Authorities Act and IM/ID regime is that prices are set for a period based on robust consultation. This process gives certainty up-front and allows airports and their customers to make informed decisions for the pricing period. Where capital expenditure is reasonable and well consulted on, as is the case for Christchurch

381 Air New Zealand "Review of Auckland and Christchurch Airport's third price setting events – cross-submission on process matters" (12 December 2017), paragraph 82.

382 BARNZ "Review of Auckland and Christchurch Airport's third price setting events – Process & Issues paper" (28 November 2017), table 4, row 21.

Airport's modest PSE3 capital expenditure, there is no reason to exclude it from pricing.[383]

B184 Christchurch Airport also notes that Air New Zealand's proposal to adjust prices during PSE3 to reflect capital expenditure projects agreed after price setting was not emphasised during consultation.

Conclusions

B185 In this instance, the absence of a risk allocation adjustment is not a significant concern affecting our assessment of Christchurch Airport's profitability.

B186 We consider that risks should be allocated to suppliers or consumers depending on which are best placed to manage them.[384] Applying this principle in the context of Part 4 regulation promotes the section 52A(1)(a)-(d) outcomes for the long-term benefit of consumers in a similar way as if those outcomes are promoted in workably competitive markets.[385]

B187 We note that actual capital expenditure may differ from forecast levels for several reasons, including:

B187.1 the forecast was reasonable, but the airport failed to deliver the projects on time / within budget (for example due to inefficiencies);

B187.2 the forecast was reasonable, but actual expenditure was lower due to efficiency gains;

B187.3 the forecast was deliberately set above the efficient level, so that the airport would profit from outperforming the forecast without necessarily being efficient; and

B187.4 the forecast was inaccurate due to the inherent uncertainty regarding key inputs.

B188 We consider that achieving an appropriate allocation of risk between the parties cannot necessarily be realised through applying a simple wash-up, as proposed by some airlines. This is because there are different types of risk associated with the forecasting and delivery of Christchurch Airport's PSE3 capital expenditure, and this has implications around which party is best placed to manage the risks. Relevant types of risk are included below.

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383 Christchurch Airport "Cross-submission on process and issues paper on the review of Auckland and Christchurch Airports third price setting for airport services (issues and questions raised)" (19 December 2017), paragraph 41.

384 Commerce Commission "Input Methodologies (Electricity Distribution and Gas Pipeline Services) Reasons Paper" (22 December 2010), paragraph 2.6.4, 5.29, 8.20; Commerce Commission "Setting the customised price quality path for Orion New Zealand Limited" (29 November 2013), paragraph B22.

385 Commerce Commission "Input methodologies review decision – Framework for the IM review" (20 December 2016), paragraphs 124-127 and 131.

B188.1 **Delivery risk** - because Christchurch Airport is best placed to manage delivery on time, it is more appropriate for Christchurch Airport to bear some of the consequences of its non-delivery of outputs where these investments are still needed and where deferral is not efficient. In this instance a related wash-up resulting in lower future prices for airlines might be appropriate.

B188.2 **Unit cost risk** - because Christchurch Airport is best placed to manage delivery within budget, it is appropriate for Christchurch Airport to receive some reward (or penalty) if unit costs are lower (or higher) than unbiased forecasts (ie, which occurs if any differences in unit costs are not passed through to prices during the PSE3 period). Doing so provides capital expenditure efficiency incentives for Christchurch Airport, and the benefits of any capital expenditure efficiency gains will potentially be shared with airlines at the next PSE, through prices lower than they otherwise would be. In this case, a wash-up is potentially inappropriate as it could remove that incentive.

B188.3 **Forecast bias risk** - it is not appropriate for Christchurch Airport to receive rewards solely due to biased (eg, inflated) forecasts. If that were a key concern, then a wash-up might be appropriate.

B188.4 **Forecast error risk** - there is inherent uncertainty regarding key inputs, for example demand is determined to an extent by both the airlines and Christchurch Airport. Nevertheless, Christchurch Airport is still better placed than airlines to do the capital expenditure forecasting and to manage the risk of getting the forecast wrong. Again, assuming the forecasts are unbiased, that would suggest that introducing a simple wash-up might remove a desirable incentive.

B189 As discussed above, Christchurch Airport's forecast capital expenditure is relatively moderate for PSE3 with total capital expenditure across this five year period representing 15.7% of total RAB in 2017. This is not sufficient to cover depreciation of 21.2%, therefore the asset base is actually declining in real terms, airlines are generally happy with the airport's forecast expenditure plan.

B190 Airlines have questioned whether the 'terminal reconfiguration' project worth $10.4m will actually go ahead, however we have no evidence from past behaviour to suggest that the airport intentionally set its capital expenditure forecast too high.

B191 We will continue to monitor ex-post disclosures to ascertain whether Christchurch Airport undertakes the 'terminal reconfiguration' project and consider any justification if this project were to materially deviate from forecast.

Attachment C Methodology for our profitability assessment

Purpose

C1 This attachment describes our methodology for our assessment of Christchurch Airport's profitability discussed in **Chapter 2**.

C2 Our profitability analysis has been published alongside this report.

Profitability assessment methodology

C3 We have estimated Christchurch Airport's expected return for PSE3 on its total RAB as 6.65%. This estimate is based on our understanding of Christchurch Airport's forecasts and consistent with its disclosed target return of 6.65%.

C4 Consistent with our approach to assessing airport profitability outlined in the IM Review, we calculated an IRR forecast when assessing the returns targeted by Christchurch Airport over the PSE3 period. This required information on Christchurch Airport's:

C4.1 opening investment value;

C4.2 forecast cash flows over the duration of the pricing period; and

C4.3 forecast closing investment value.[386]

C5 In a forward-looking IRR calculation, the opening investment value reflects the initial capital to be recovered. It comprises:

C5.1 the IM-compliant closing RAB value from the ex-post disclosure of the year preceding the start of the current price setting event; and

C5.2 any adjustments reflecting decisions made in previous price setting periods that have an impact on charges for the current pricing period. This is important in order to achieve consistency between the opening investment value and the forecast cash flows that are used in a forward-looking IRR calculation.[387]

C6 The forecast cash flows over the duration of the pricing period comprise:

C6.1 revenues;

C6.2 operating expenditure;

[386] Commerce Commission "Input methodologies review decisions – Topic Paper 5 – Airport profitability assessment" (20 December 2016), paragraph 163.1.

[387] Commerce Commission "Input methodologies review decisions – Topic Paper 5 – Airport profitability assessment" (20 December 2016), paragraph 152.

C6.3 capital expenditure; and

C6.4 tax.[388]

C7 In a forward-looking IRR calculation, the forecast closing investment value reflects the remaining capital to be recovered. It comprises:

C7.1 the forecast closing asset base used by airports when setting prices, reflecting an airport's assumed time profile of capital recovery; and

C7.2 any adjustments reflecting decisions made by airports that affect charges for the current and future price setting events that are not already reflected in the forecast closing asset base. This is important in order to derive a forecast closing investment value that is a good reflection of the remaining capital to be recovered.[389]

We have confirmed Christchurch Airport's disclosed target return

C8 Our assessment of Christchurch Airport's expected return is consistent with Christchurch Airport's disclosure of its expected returns. However, our assessment of Christchurch Airport's expected returns did not solely rely on Christchurch Airport's own estimate or modelling.

C9 We created our own profitability model based on our profitability analysis carried out in relation to Christchurch Airport's PSE2 disclosure. This reflects recent amendments to the IM and ID Determinations resulting from the IM Review (for example, cash flow timing and carry forward adjustments – see **Attachment D** for more information).

C10 The purpose of undertaking our own modelling is to confirm whether Christchurch Airport's disclosure of its target return is consistent with the methodologies and approach used in the IM and ID Determinations. In addition, our own modelling allows us to test identified scenarios and sensitivities. Finally, our analysis allows us to estimate the revenues that would be required to support returns other than the airport's target cost of capital.

C11 Our profitability analysis has used Christchurch Airport's information disclosures, as required under the ID determination and its pricing model as key inputs. We have received additional information from Christchurch Airport regarding assumptions related to the forecasting of other regulated assets in order to be able to model and quantify returns on the total RAB.

388 Commerce Commission "Input methodologies review decisions – Topic Paper 5 – Airport profitability assessment" (20 December 2016), paragraph 153.

389 Commerce Commission "Input methodologies review decisions – Topic Paper 5 – Airport profitability assessment" (20 December 2016), paragraph 155.

Adjustments to our analysis since PSE2 to reflect recent outcomes from the IM Review

C12 We have updated how we estimate the revenues required to support a target cost of capital. This is to reflect Christchurch Airport's opening and closing carry forward adjustment to the RAB and to account for new cash flow timing assumptions.

C13 We have adjusted the calculation of the regulatory investment value to reflect the impact of the opening and closing carry forward adjustments when estimating the revenue required to target an IM-compliant cost of capital. We have assumed change from the opening carry forward adjustment value to the closing carry forward adjustment value is spread evenly over time.

C14 We have also introduced cash flow timing factors, in order to reflect that our IRR calculation now included specifically defined cash flow timing assumptions for revenues and costs. Prior to the IM Review, all cash flows were assumed to occur at year end.

Attachment D Have recent amendments as part of the IM Review improved the transparency of airports' profitability?

Purpose

D1 This attachment considers how effective recent amendments to the IM and ID Determinations have been in improving the transparency of Christchurch Airport's expected profitability.

Recent amendments to the IM and ID Determinations

Internal rate of return and carry forward mechanism

D2 We amended the Airports ID disclosure to require airports to disclose a forward-looking profitability indicator by using an IRR calculation that comprises:

D2.1 an opening investment value at the beginning of the pricing period;

D2.2 a forecast closing investment value; and

D2.3 forecast cash flows over the duration of the pricing period.[390]

D3 The amendments also supplement the IRR with a carry forward mechanism that can be used to adjust the opening investment value and the closing investment value to better reflect an airport's pricing intent and that can take into account multiple pricing periods. [391]

D4 These amendments were introduced to enable greater transparency for interested parties to better understand an airport's approach to pricing and, in particular, whether the airport is limited in its ability to extract excessive profits.

Stakeholder views

D5 Christchurch Airport notes that the new scope to articulate carry forward adjustments has assisted its efforts to align its pricing decision with its past and future annual disclosures.[392]

D6 Christchurch Airport submits that establishing the expected IRR as the focus of a pricing event disclosure—and setting out its calculation—has also assisted airports with communicating their pricing decisions.[393]

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390 Commerce Commission "Input methodologies review decisions – Topic Paper 5 – Airport profitability assessment" (20 December 2016).

391 Commerce Commission "Input methodologies review decisions – Topic Paper 5 – Airport profitability assessment" (20 December 2016), Table 3.1.

392 Christchurch Airport "Submission on process and issues paper on the review of Auckland and Christchurch Airports' third price setting event" (28 November 2017), paragraph 34.

393 Christchurch Airport "Submission on process and issues paper on the review of Auckland and Christchurch Airports' third price setting event" (28 November 2017), paragraph 34.

D7 Christchurch Airport submits that the structure of the WACC disclosure templates—which envisage that airports' expected IRRs may differ from their estimated WACC, which may differ from our benchmark WACC—is a useful acknowledgement of the need for the ID regime to cater for a variety of different contexts across the New Zealand airports and over time.[394]

D8 Air New Zealand submits that the amendments to the IM and ID requirements have increased the transparency of target profitability of airports.[395]

Our view

D9 Christchurch Airport has used the price setting event disclosure templates to disclose its estimated post-tax WACC, which differs from its post-tax IRR. Using this template has made the difference between these measures transparent. Christchurch Airport provided the factors that contributed to this difference in its PSE3 disclosure.

D10 However, until further requested information was provided from Christchurch Airport, the relative contributions of the factors contributing to the difference between the post-tax WACC and post-tax IRR was unclear. These factors are:

D10.1 the use of a simplified version of the building block calculation in relation to the timing of intra-year cash flows;

D10.2 the exclusion of pricing incentives from the operating expenditure and revenue forecast when deriving prices; and

D10.3 the airport expects revenue from check-in activities to be lower than the revenue requirement because it is required to honour existing contracts.

D11 In general, we required a reasonable amount of additional clarity about the information that Christchurch Airport provided under ID to effectively assess its expected profitability. This appears to be primarily due to differences in expectations between us and Christchurch Airport about the type and level of information required under ID, rather than actual shortcomings with the IM regime itself.

Cost of capital

D12 As part of the IM Review we decided to change our approach to disclosing WACC, due to two main problems with the previous framework:[396]

D12.1 the upper limit of our WACC range had become the de facto benchmark when assessing airport profitability; and

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394 Christchurch Airport "Submission on process and issues paper on the review of Auckland and Christchurch Airports' third price setting event" (28 November 2017), paragraph 34.

395 Air New Zealand "Response to the Process and Issues Paper: Auckland and Christchurch Airports' third price setting events (July 2017-June 2022)" (28 November 2017), paragraphs 14-15.

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

D12.2 there was limited and weak rationale for using the 75th percentile as the upper limit of the WACC percentile range.

D13 We decided to remove the WACC range, and instead publish only our mid-point WACC and a standard error so that any required percentile can be calculated. We also required airports to explain and provide evidence to support the use of target returns above our mid-point cost of capital.

Our views

D14 Christchurch Airport's target WACC percentile has decreased in PSE3 compared to PSE2.

D15 Christchurch Airport's PSE3 disclosures have provided greater transparency regarding its forecast cost of capital, the return it has targeted through prices and the rationale for these when compared to its PSE2 disclosures. Christchurch Airport has provided an explanation for its target returns in its price setting event disclosures.

D16 Christchurch Airport has explained the differences between its WACC estimate and our mid-point WACC estimate by providing its own alternative estimates of key WACC parameters, such as asset beta and its debt premium. We consider that the specific magnitude of adjustment to each parameter is an important factor when considering whether the airport's approach is justified.

D17 There was a lack of evidence supporting Christchurch Airport's expected return on its other regulated services in its price setting event disclosure. Christchurch Airport subsequently provided additional evidence in support of the level of returns it is expected to earn on its other regulated services.

D18 Therefore it would appear that the amendments have had some impact on Christchurch Airport's approach to cost of capital and the transparency of its disclosures.

The returns on priced services and other regulated services

D19 The following changes were introduced to the Airports ID Determination with respect to priced services:

D19.1 addition of a new schedule to the Airports ID Determination reflecting airports' targeted profitability based on the pricing asset base only; and

D19.2 requiring airports to explain any differences in profitability based on the pricing asset base and the profitability based on the total RAB.

D20 The objective of these changes was to provide greater transparency for interested parties to better understand an airport's approach to pricing.

Stakeholder views

D21 Christchurch Airport states that it appreciates the effort the Commission has undertaken to improve the ease with which airports are able to communicate their

pricing decisions, and expects these changes to assist interested parties to interpret pricing decisions and price setting event disclosure.[397]

Our views

D22 The amendments have made it easier for us to reconcile the outcomes of Christchurch Airport's price setting event decisions (including its forecast modelling) with the disclosure of expected returns for its total RAB.

D23 The amendments appear to provide greater clarity and transparency about the different target returns for priced and other regulated services, and the reasons for the expected returns on priced services. The reasons for the expected return on other regulated services are not best understood through the airport's price setting disclosure.

D24 As noted in Chapter 2, prices set in bilaterally negotiated contracts for other regulated services are affected by a range of factors, including market conditions (eg, interest rate expectations), rent reviews and break clauses. These factors, and the volume of different contracts at any one time, make it difficult to determine whether returns on these contracts—over a given five-year pricing period—are appropriate.

D25 In light of this, we consider that an airport's returns on individual contracts for other regulated services are likely to be better assessed over a longer period of time and primarily on an ex-post basis, separately from priced services. A review of the returns associated with other regulated assets could potentially be included as part of ex-post review of airport performance, which we expect to undertake after Wellington Airport has completed its first five-year pricing period in 2019.

Forecast over and under-recoveries

D26 The following requirements were introduced to the Airports ID Determination with respect to forecast over and under-recoveries:

D26.1 including in the carry forward mechanism adjustments to the forecast closing investment value, any forecast over and under-recoveries that are intended by airports to be offset in future pricing events;

D26.2 requiring airports to summarise the views of substantial customers, as expressed during price setting consultation, regarding those forecast over and under-recoveries included in the carry forward mechanism;

D26.3 when an airport has included forecast over and under-recoveries in the carry forward mechanism to adjust the forecast closing investment value, requiring the airport to provide information on:

[397] Christchurch Airport "Submission on process and issues paper on the review of Auckland and Christchurch Airports' third price setting event" (28 November 2017), paragraph 33.

D26.3.1 why the resulting forecast closing investment value is a good indicator of the remaining capital to be recovered at the end of the current pricing period;

D26.3.2 the purpose and appropriateness of including these amounts in the carry forward mechanism;

D26.3.3 the intended duration until these forecast over and under-recoveries have been fully offset; and

D26.3.4 why using the carry forward mechanism to adjust the forecast closing investment value seems more appropriate in reflecting the airport's pricing intent than an alternative approach to accounting for these forecast over and under-recoveries already provided for under the Airport IM and ID Determinations.

D27 The objective of these changes was to provide greater transparency for interested parties to better understand an airport's approach to pricing, and greater clarity about the requirements in the Airport IM and ID Determinations.

Stakeholder views

D28 Air New Zealand submits that little incentive exists for airports to share risk because by participating in a risk sharing mechanism, airports effectively agree to lower their asset beta, and therefore their rate of return. Air New Zealand also notes that to the extent that any risk sharing was entered into, that risk would be reallocated every year, and that under the current settings, it is unlikely that airports will adopt any mechanism to share risk as available in the IMs.

D29 Air New Zealand states that it proposed adopting an approach whereby prices could be adjusted during PSE3 if capital expenditure, which was not agreed during the price setting consultation, but was subsequently agreed and carried out. It notes that Christchurch Airport rejected this approach but included the un-agreed capital expenditure in its pricing forecasts.[398]

Our views

D30 In response to Air New Zealand's statement, we note that the use of risk sharing mechanisms in the context of EDBs—moving from a price cap to a revenue cap—did not change the applicable asset beta.

D31 Christchurch Airport has made one carry forward adjustments consistent with IM and ID requirements. This was to reflect disclosure inconsistencies relating to the use of a non-standard depreciation approach. This adjustment was appropriate to align the airport's disclosed RAB and the approach it took to valuing its assets used for setting prices. This is discussed in more detail in **Attachment B**.

[398] Air New Zealand "Review of Auckland and Christchurch Airport's third price setting events – cross-submission on process matters" (12 December 2017), paragraph 82.

D32 Christchurch Airport has not proposed any forward-looking risk allocation adjustments.

D33 In response to Air New Zealand's submission, we note that while the airport has not proposed any forward-looking risk allocation adjustment in PSE3:

D33.1 we have seen greater discussion between Christchurch Airport and airlines in consultations of these types of mechanisms, which suggests such a mechanism is now more likely to be used in future; and

D33.2 achieving an appropriate allocation of risk between the parties cannot necessarily be realised through applying a simple wash-up reflecting the cost of a capital expenditure project after it has been carried out. There are different types of risk associated with the forecasting and delivery of Christchurch Airport's capital expenditure, and this has implications for which party is best placed to manage the risks.

Depreciation

D34 The following requirements were introduced to the Airports ID Determination with respect to depreciation:

D34.1 requiring airports to apply specified principles when using alternative depreciation approaches; and

D34.2 allowing airports to apply alternative methodologies with equivalent effect where the application of the asset valuation IMs would prove prohibitively complex or costly. (Alternative methodologies can only be applied if they do not detract from the purpose of Part 4.)

D35 The objective of these changes was to provide greater clarity about the requirements in the Airport IM and ID Determinations, and while balancing complexity and compliance costs.

Our views

D36 Christchurch Airport's disclosure of its asset valuation, including its disclosure of its non-standard depreciation, is consistent with current IMs and ID requirements for airports. This includes changes made during the IM Review about principles that must be applied when using non-standard depreciation approaches. This means that:

D36.1 Christchurch Airport's non-standard depreciation methodology is NPV neutral.[399]

D36.2 The methodology is consistent with the time profile of capital recovery implied by Christchurch Airport's price setting methodology and its RAB indexation approach.[400]

[399] Christchurch Airport "Price setting disclosure – In accordance with clause 2.5 of the Airport Services Information Disclosure Determination 2010" (1 August 2017), paragraph 106.2.

D36.3 Christchurch Airport has explained how the time profile of capital recovery implied by its price setting methodology is consistent with the long-term benefit of consumers.[401]

D36.4 The decision to use non-standard depreciation was made ex-ante (ie, at the time it set prices) and we expect Christchurch Airport to continue to reflect this methodology in its annual disclosures.[402]

D36.5 Christchurch Airport has explained how its expected time profile of capital recovery reflects its expected utilisation of its priced assets.[403]

D37 Airlines appear to have a greater understanding of Christchurch Airport's non-standard depreciation methodology for PSE3 compared to PSE2 and appear to be more comfortable with the outcomes for pricing.[404]

D38 The IM and ID amendments appear to have provided greater clarity and certainty on the treatment of non-standard depreciation compared to our review on the airport's PSE2 disclosure.

Timing of cash flows

D39 The following requirements have been introduced to the Airports ID Determination with respect to the timing of cash flows. Airports are now required to:

D39.1 specify, in the annual ex-post disclosures, 182 days before year-end timing assumptions for all expenditures and 148 days before year-end for all revenues;

D39.2 specify, in the price setting event disclosures, 182 days before year-end timing assumptions for all expenditures and 148 days before year-end for all revenues; but

D39.3 provide, in the price setting event disclosures, the flexibility for airports to deviate from the default cash flow timing assumption if airports provide evidence that the actual cash flow timing for specific cash flow items is different from the default cash flow timing assumption.

D40 The objective of these changes was to provide transparency for interested parties to better understand an airport's approach to pricing.

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400 Christchurch Airport "Price setting disclosure – In accordance with clause 2.5 of the Airport Services Information Disclosure Determination 2010" (1 August 2017), paragraph 101–102.

401 Christchurch Airport "Price setting disclosure – In accordance with clause 2.5 of the Airport Services Information Disclosure Determination 2010" (1 August 2017), paragraph 100-101.

402 Christchurch Airport "Price setting disclosure – In accordance with clause 2.5 of the Airport Services Information Disclosure Determination 2010" (1 August 2017), paragraph 106.3.

403 Christchurch Airport "Price setting disclosure – In accordance with clause 2.5 of the Airport Services Information Disclosure Determination 2010" (1 August 2017), paragraph 100.

404 BARNZ "Review of Auckland and Christchurch Airport's third price setting events – Process & Issues paper" (28 November 2017), page 4.

Our views

D41 Christchurch Airport has disclosed on the basis of mid-period cash flows and has not suggested alternative cash flow timing assumptions. It appears our amended approach to cash flow is generally appropriate for Christchurch Airport.

D42 We note, however, that Christchurch Airport did not use these cash flow timings in its models used to set prices.

D43 The changes have enabled greater clarity and consistency on cash flow timing assumptions compared to our review on the airport's PSE2 disclosure. We no longer have to test sensitivities on the impact of cash flow timing on expected airport profitability.