BARNZ assessment of CIAL's PSE3 pricing decision against Part 4 criteria

Introduction

On 19 June 2017, Christchurch International Airport Limited (CIAL) published its final decision on standard aeronautical charges that will apply from 1 July 2017 until 30 June 2022 (known as Price Setting Event 3, or PSE3).

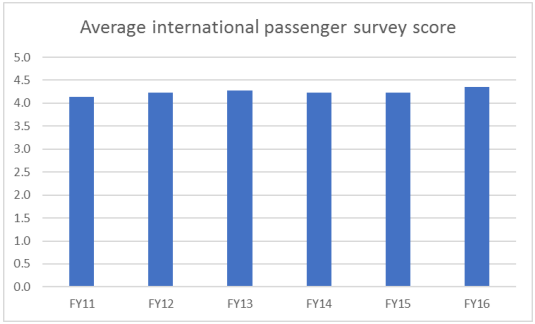
The Board of Airline Representatives of New Zealand (BARNZ) has reviewed the pricing decision against the Part 4 Purpose and the questions posed by the Commerce Commission in its reviews, carried out under section 56G of the Commerce Act 1986, into the airport pricing decisions for Price Setting Event 2 (PSE2). Our findings and conclusions are set out in this document, which we trust will be of assistance to the Commission as it carries out its own reviews of CIAL's pricing decisions for PSE3.

Analysis

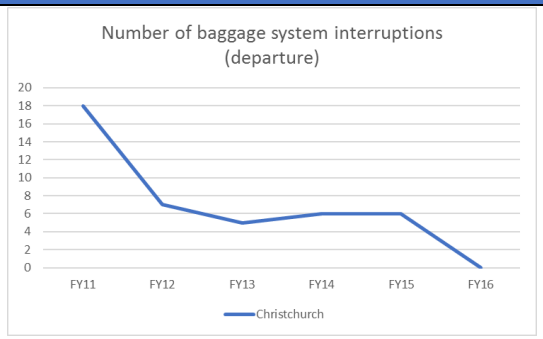
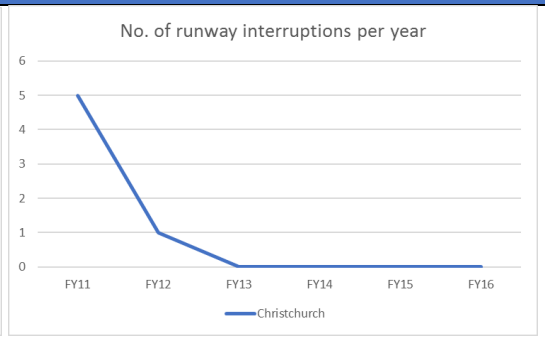
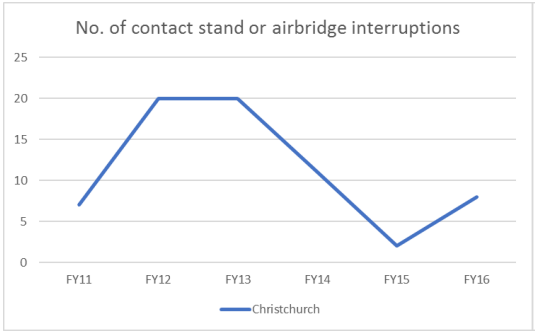
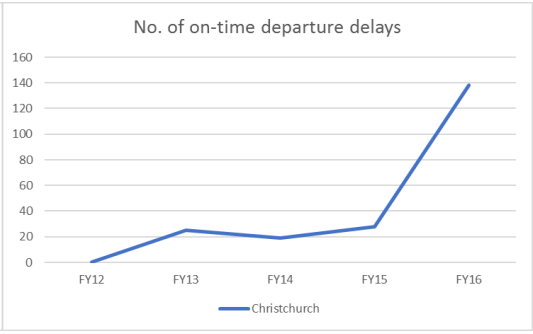
Question	Assessment
1) Is the Airport innovating appropriately?	**The Airport is investing in useful improvements in some areas, but we think more could be done in terms of working with airlines and other partners to find broader benefits.**
a) What evidence is there of innovation at the Airport?	Christchurch Airport is undertaking several activities which can be seen as innovation to improve Airport efficiency or service quality. These include: • investing in ground power units at gates, which enable airlines to save money by using mains power rather than operate their auxiliary engines • use 'swing' gates that can serve either domestic or international flights, to increase airport flexibility • recent changes to departure gate signs, which have been well received by the airlines.
b) Does the Airport enable or facilitate innovation through collaboration?	The Airport has worked well with airlines to introduce the ground power units and has recently started a process with BARNZ and Airways to develop a new SMART track route into CHC. In other areas (see question 1)c)), the Airport could do more to work with its partners to deliver service improvements and innovation.

Question	Assessment
c) Is the Airport receptive to airline-led innovation?	BARNZ considers that the Airport could do more in this area. The Airport has included modest kiosk and bag drop expenditure in its capex plan but does not appear to have discussed with airlines how these would be used. During the pricing process, BARNZ became aware of a potential opportunity to reduce the cost of quarantine waste management services at Christchurch Airport, but CIAL did not provide the necessary information to airlines and the opportunity has therefore not been realised.
d) Is ID promoting appropriate innovation at the Airport?	ID does not appear to have any notable effect on innovation at the Airport.
2) Is the Airport delivering services at the quality consumers demand?	**Broadly yes, for international airlines.**
a) What is the Airport's definition of quality? Are SLAs in place and agreed?	We are not aware of what the Airport's view of quality is. We could not find any performance measures relating to quality of service in the Airport's most recent Statement of Intent (there were performance measures relating to financial measures, employee health and safety, sustainability and community engagement).[1] No SLAs are in place with the Airport.
b) Is the Airport willing to respond to customer concerns and help partners deliver better services?	Yes, in operational areas. The Airline Operators Committee recently identified a series of operational concerns at Christchurch Airport (eg they believed improvements to signage and wayfinding were needed). These issues were raised with CIAL and were 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.
c) What are the results of consumer satisfaction surveys?	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.[2]

[1] http://www.christchurchairport.co.nz/en/about-us/corporate-information/financial-reporting/
[2] CIAL FY11-FY16 disclosures, Schedule 14.

Question	Assessment
	The 3 items where survey scores were highest in 2016 were: 'feeling of being safe and secure', 'cleanliness of airport terminal' and 'passport and visa inspection waiting time'. The 3 items where survey scores were lowest in 2016 were: 'check-in waiting time', 'comfort of waiting/gate areas' and 'cleanliness of washrooms/toilets'.  CIAL states that it "consistently ranks as the best of nine major Australasian airports across a number of service categories."[3]
d) How reliable is the service and what trends can be observed (eg airbridge outages, runway interruptions, baggage system interruptions)?	The 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.

[3] CIAL FY16 disclosures, Executive Summary section 4.2.

Question	Assessment
	    *Source: FY11-FY16 disclosures, Schedule 11*
e) Is the right level of capacity being provided and utilised?	We understand there are capacity constraints in the domestic regional departures area (although domestic regional flights are not an area of focus for BARNZ). 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 CIAL. In general, there is sufficient capacity for international arrivals and departures. The reasonable availability of capacity is reflected in the disclosure data on utilisation in the table below.

<table>
<tr><th>Question</th><th>Assessment</th></tr>
<tr><td></td><td>
<table>
<tr><th>Processing area</th><th>% of processing capacity utilised during busy hour (FY16)</th></tr>
<tr><td>Outbound baggage</td><td>58%</td></tr>
<tr><td>International outbound passport control</td><td>94%</td></tr>
<tr><td>International outbound security screening</td><td>95%</td></tr>
<tr><td>International inbound passport control</td><td>77%</td></tr>
<tr><td>International baggage reclaim</td><td>13%</td></tr>
<tr><td>International biosecurity</td><td>73%</td></tr>
</table>
Source: CIAL FY16 disclosures, Schedule 13
</td></tr>
<tr><td>f) To what extent are customers willing to pay for better quality?</td><td>Different airlines will have different preferences in this regard and any price-quality trade-off would need to be agreed between an airline and the Airport company. BARNZ does not participate in such agreements so we have limited information on willingness to pay for better quality.</td></tr>
<tr><td>g) Is ID promoting services at the quality consumers demand at the Airport?</td><td>It is not clear that ID has any effect on the quality of service provided by the Airport.</td></tr>
<tr><td>3) Is the Airport's price structure efficient?</td><td>The price structure has the benefit of simplicity, although there are some cross-subsidies in the current price structure.</td></tr>
<tr><td>a) Do the prices promote optimal use of scarce resources?</td><td>In PSE2, CIAL had a range of different aeronautical prices for different services. It has substantially simplified its pricing methodology for PSE3. All prices are now set on a per passenger basis, except for landing charges for freight aircraft, which are based on MCTOW.

BARNZ considers that the new pricing structure is beneficial because, as we said in our submission to the Airport of 7 February 2017:

“It is simple, which is beneficial as complexity adds costs to the airport and to airlines. It avoids arbitrary distinctions between turbo-prop, domestic jet and international jet aircraft that are not based on technical, operating or economic grounds. It therefore does not give airlines misleading signals for their choices of aircraft types to serve Christchurch Airport. The simplicity assists in aligning the interests of airlines with the airport – both parties would be keen to increase the numbers of passengers through Christchurch Airport, while being clear on the costs to airlines of doing so.”

BARNZ estimates that the effect of the new price structure will be to reduce charges to international airlines by around 45% on average. Prices to domestic airlines will increase.</td></tr>
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Question	Assessment
b) Does the pricing methodology create cross subsidisation?	Yes, in some areas. • The Airport has set international passenger charges for PSE3 above where they would otherwise be in order to "smooth" a price increase for domestic regional passengers.[4] While this cross-subsidy is expected to end by FY22, it is not desirable. • Although not an issue for international airlines, Christchurch Airport has dramatically increased prices for domestic flights to Wellington (BARNZ calculates that the effect is an increase in charges of around 110% per flight). This is primarily because Air NZ uses turbo-prop aircraft to fly between Christchurch and Wellington, which depart from the domestic regional area at Christchurch Airport. However, Christchurch Airport's pricing assumes that all flights between Christchurch and Wellington use jet aircraft that depart from the domestic trunk departure lounge.[5] Therefore turbo-prop flights to Wellington are paying a portion of the costs of the upstairs domestic jet departures area which, in general, they do not depart from and therefore do not use. • There may also be a small cross-subsidy for passenger aircraft landing charges, as the per passenger application of the charge may not fully reflect the additional costs created by larger aircraft. This can be seen as a trade-off with the simplicity benefits of applying a per-passenger charge to all services and BARNZ is comfortable with this trade-off. • Finally, CIAL allocates most shared space in the terminal to aeronautical costs even though it is used by retail providers for passenger seating and advertising (ie menus on tables).[6] This has the effect of airline passengers subsidising the costs of airport retail providers.
c) How stable and certain is the pricing methodology?	As noted, the pricing methodology has been changed substantially from PSE2. There is nothing in particular preventing another substantial change for PSE4, but given the benefits of the simplified pricing structure, we expect it will remain in place for some time.

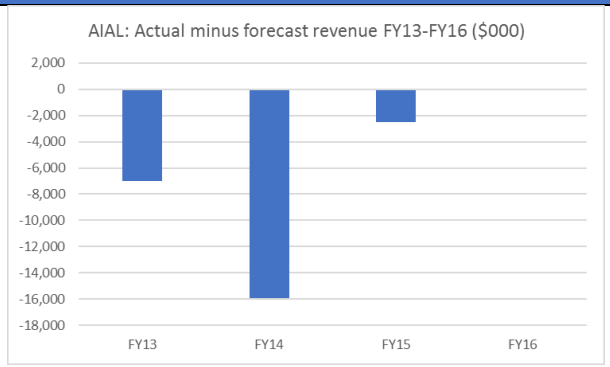
[4] CIAL, Disclosure relating to the reset of aeronautical prices for the period 1 July 2017 to 30 June 2022, 14 August 2017, paragraph 55.
[5] See definition of 'Terminal Price – Domestic Services' in CIAL's schedule of aeronautical charges: http://www.christchurchairport.co.nz/media/873985/aeronautical_prices_and_terms_and_conditions__1_july_2017_.pdf
[6] CIAL, Disclosure relating to the reset of aeronautical prices for the period 1 July 2017 to 30 June 2022, 14 August 2017, paragraph 35.2

Question	Assessment
	The pricing methodology also includes an improved depreciation method relative to the PSE2 depreciation method. BARNZ considers that the tilted annuity approach now being applied by CIAL is reasonable.
d) Do prices have regard to the demand responsiveness of consumers?	Prices are set on an accounting-based allocation of costs, which are then mostly recovered on a per-passenger basis. We consider this to be appropriate.
e) Do prices enable consumers to make price-quality trade-offs?	Prices are set on a per-passenger basis, so do not really provide for airlines to make price-quality trade-offs. BARNZ has no information about how open the airport is to discussing price-quality trade-offs with individual airlines.
f) Is the price development process transparent?	Yes, in relation to its substantial customers. The Airport consults with its substantial customers and provides a detailed model showing how the prices are derived from input costs and other assumptions. The price development process may not be transparent to stakeholders other than substantial customers.
g) Does the Airport try to improve price efficiency over time?	Yes. The change to pricing structure for PSE3 was intended to deliver efficiency improvements for airlines and the airport.[7]
h) Is ID promoting an efficient price structure at the Airport?	It is not clear that ID is promoting efficient prices at the Airport. The pricing structure change may well have happened absent ID regulation.
4) Is the Airport targeting excessive profits?	**Yes. The Airport's target WACC is too high and has not been justified in terms of the long-term benefits of consumers.**
a) How does the target return compare with the Commission's estimate?	The Airport's target return for priced services is 6.82%. The Commission's most recent mid-point estimate of WACC for specified airport services is 6.41%. 6.82% is the 61st percentile of the 6.41% estimate. BARNZ calculates that the impact of using 6.82% rather than 6.41% is $10m over PSE3 (in nominal terms).

[7] Ibid, Part E and Part F.

Question	Assessment
b) Are the calculations of the Airport's estimate valid?	BARNZ interprets this question to mean "are the inputs to the target return calculation robust?". If the inputs are not, then that would imply that a different return from the target return may be expected. We do not see any evidence that the cost forecasts are likely to exceed actual costs (although, as discussed below, current CIAL operating costs appear high relative to other major New Zealand airports). Christchurch Airport's international passenger growth forecasts are unduly conservative. This is because the Airport's demand forecasts assume that Christchurch's proportion of New Zealand's total international air travel will remain constant over PSE3. This assumption seems unlikely because: • The Airport's demand forecasting consultants (Three Consulting) considered that there is pent-up demand in Christchurch and passenger volumes at Christchurch have not reached pre-earthquake proportions.[8] • CIAL 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.[9] This should stimulate demand over PSE3 relative to the other New Zealand international airports. For these reasons, we believe that Christchurch Airport's proportion of New Zealand's total international travel will trend upwards over PSE3 towards the level reached before the Canterbury earthquakes and thus passenger volumes are likely to exceed those forecast by CIAL. We note that in PSE2 CIAL under-forecast revenues in FY13-FY15 and came very close to forecast in FY16. These trends seem to have been driven by lower than forecast international passenger volumes in FY14 in particular. The chart below shows the difference between forecast and actual revenues over PSE2.

[8] Three Consulting, Traffic Forecast FY18-FY22 v3.3, 7 April 2017.
[9] BARNZ calculation based on CIAL's pricing schedules.

Question	Assessment
	 *Source: BARNZ analysis, CIAL PSE2 disclosure and FY13-FY16 disclosures*
c) What is the context / justification for the target return?	The Airport's justification for its higher target return was that:[10] • CIAL used an asset beta that was 0.05 higher than the asset beta for the average New Zealand airport calculated by the Commission. This reflects CIAL's belief that it has a greater systematic risk than the other major New Zealand airports because CIAL has a greater exposure to holiday and leisure travellers. BARNZ's adviser, Dr John Small, has disputed this analysis. • CIAL estimated the debt risk premium using a BBB+ credit rating, rather than an A- credit rating, noting that CIAL's actual credit rating is BBB+ and its "standalone credit rating" is BBB. In other words, CIAL's position is that the Commission's mid-point estimate differs from its own circumstances in respect of two WACC parameters. CIAL did not attempt to justify using a 61st percentile WACC in terms of the long-term benefits of consumers and we do not believe an above mid-point WACC will deliver better services to consumers in return for the higher prices. CIAL is not undertaking substantial investment in the PSE3 pricing period. It also makes substantial profits from its commercial till activities (see chart), and these profits will increase with passenger growth. As such, we do not believe there would be any plausible under-investment risk if CIAL's target WACC were set at 6.41%.

[10] CIAL, Disclosure relating to the reset of aeronautical prices for the period 1 July 2017 to 30 June 2022, 14 August 2017, paragraphs 112-113.

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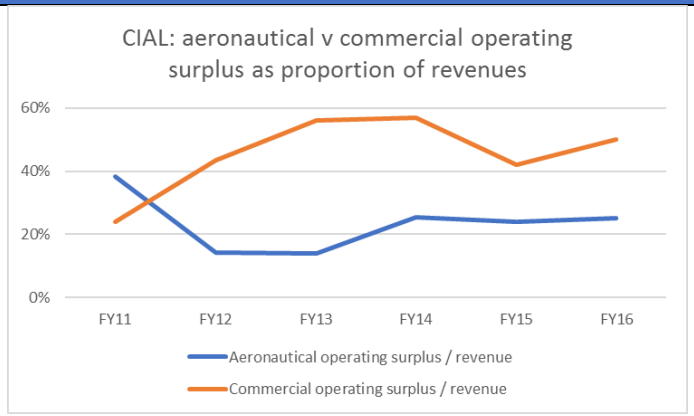
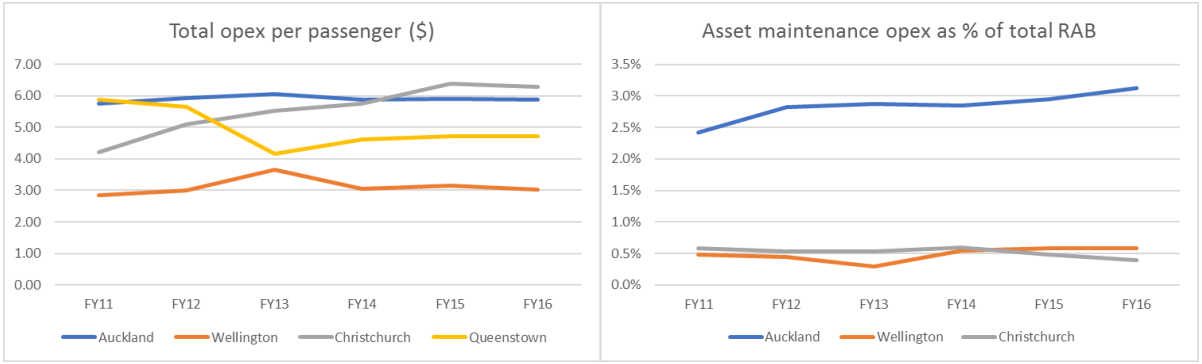
	 *Source: BARNZ analysis, CIAL FY11-FY16 disclosures, Schedule 8* However, we acknowledge that Christchurch Airport's approach to depreciation (the tilted-annuity approach) has the effect of setting a price path that better reflects demand than would be achieved through straight-line depreciation, as the tilted annuity method will increase depreciation over time as passenger volumes grow.[11] The tilted annuity depreciation method will reduce target revenues over PSE3 than would have been achieved under straight-line depreciation.
d) Is a higher return the result of superior performance?	This is not CIAL's own justification for the higher return. As discussed in section 5) below, CIAL's operating costs per passenger have increased substantially in PSE2, which implies the Airport's performance has not been superior.
e) Does the Airport's conduct imply it is targeting an excessive return? (eg did it reduce its target return in response to submissions?)	The Airport did not reduce its WACC in response to submissions or justify setting a higher WACC in terms of the long-term interest of consumers.
f) Is ID limiting the Airport's ability to extract excessive profits?	Potentially in part, but not enough. CIAL has set a WACC that is higher than the Commission's mid-point estimate and has not explained why this is in the long-term interest of consumers. However,

[11] Ibid, Section G3.

Question	Assessment
	CIAL's target WACC percentile for PSE3 is lower than in PSE2, which will reflect the WACC input methodology amendments made in December 2016.
5) Is the Airport operationally efficient?	**No. The Airport is expecting a decline in operating efficiency.**
a) How does the Airport's opex trends compare to other NZ airports', including total values, category values and expenditure per unit (eg passenger or aircraft movement)?	As the charts below show (all charts were developed by BARNZ using data from the Airports' FY11-FY16 disclosures): • CIAL's opex per passenger has grown by more than 50% over PSE2 and is now the highest of the major NZ airports. CIAL forecasts that its opex per passenger will decline over PSE3; this is based on assumptions that passenger volumes will grow while operating costs remain flat. • CIAL's asset maintenance opex as % of RAB is similar to WIAL and much lower than at AIAL.  • CIAL's corporate overheads opex per passenger is between that of AIAL and CIAL. CIAL's asset management and airport operations opex per passenger is the highest of the three airports and has grown significantly over PSE2 – this has been the category driving the increase in CIAL's total opex per passenger.

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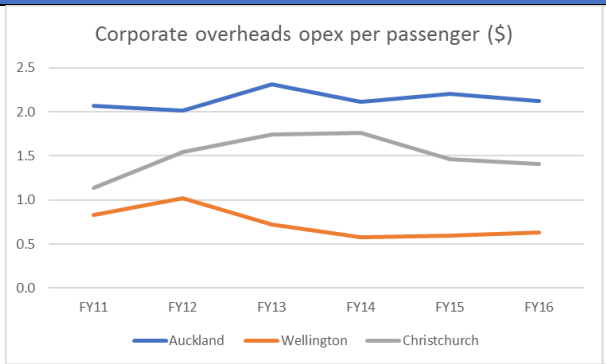
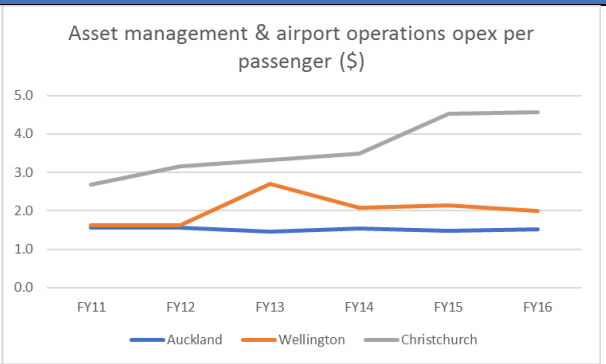
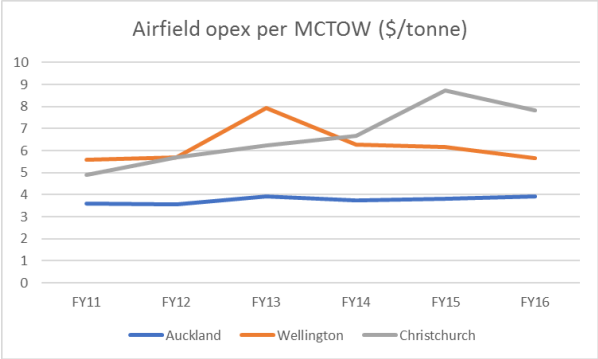
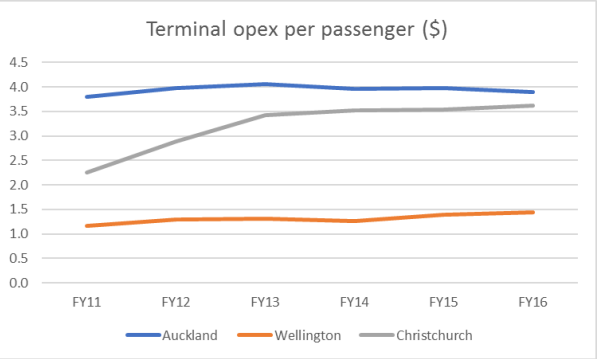
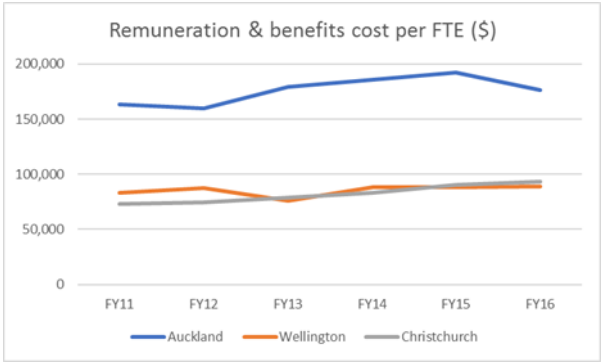
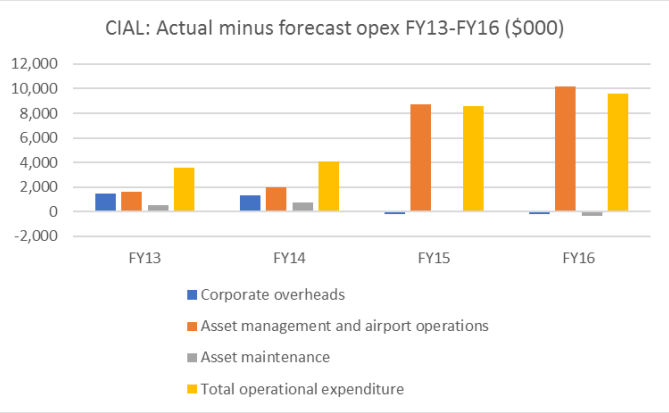
	  • CIAL has seen significant increases in both airfield opex per MCTOW landed (especially in FY15) and terminal opex per passenger (especially in FY13). It now has the highest airfield opex per MCTOW and is not far below AIAL's terminal opex per passenger. These trends are concerning. We would have expected terminal opex to decline once the new terminal was completed as newer buildings should require less maintenance expenditure.   • It seems the bulk of CIAL's cost increases have come from expenditure on the new terminal. BARNZ is surprised by this as the terminal is new and operating well within capacity. We would have expected a new and improved asset to drive lower operating expenditure rather than more, as maintenance etc costs should be reduced. The terminal expenditure at CIAL seems particularly inefficient.

Question	Assessment
	• CIAL has similar average remuneration and benefits costs[12] per FTE to Wellington Airport, but much lower costs than Auckland Airport. 
b) Did the Airport improve opex efficiency in the previous pricing period?	No, opex efficiency became significantly worse in PSE2. See charts in the answer to 6)a). Passenger demand was substantially lower than forecast over this time due to the effects of the Christchurch earthquake recovery, but it does not appear that the Airport reduced its expenditure to match the reduced demand.
c) What were the reasons for increased or decreased opex in the previous pricing period?	BARNZ understands that CIAL has experienced large and unforecast increases in rates and insurance costs during PSE2 and also unexpected airfield security costs.[13] We are not aware of what proportion of the increased opex over PSE2 is explained by these factors.
d) What are the reasons for forecast increased or decreased opex in the next pricing period?	CIAL has forecast that opex will remain flat in real terms over PSE3, so is not forecasting any net efficiency gains during this time.

[12] We use "Human resource costs" as disclosed in schedule 16 as equivalent to 'remuneration and benefits cost'. The definition of Human resource costs in clause 1.4 of the ID Determination is "means the remuneration, including the value of benefits, that is payable to employees".
[13] CIAL FY16 disclosures, Executive Summary pages 5-6.

Question	Assessment
e) How did actual opex compare to forecast opex in the previous pricing period?	CIAL overspent its PSE2 opex forecasts by $26m in the years FY13-FY16 (FY17 data is not yet available). This meant opex was 22.5% above forecast for those years. The majority of the overspend ($22m) was in the Asset management and airport operations category. We understand that part of the overspend is because certain activities are included in disclosed aeronautical opex but were excluded from pricing when PSE2 charges were set (eg airport promotions / incentives for new routes)[14] – it is not clear how much of the overspend is due to these factors. The overspend is summarised in the chart below and is consistent with the charts in 5)a) above.  *Source: BARNZ analysis, CIAL PSE2 and FY13-FY16 disclosures*
f) Could variances between actual and forecast opex have been controlled by the Airport?	The Airport will always have the ability to control how much it spends, particularly in areas such as airport promotions and incentives for new routes. BARNZ is concerned that opening PSE3 opex forecasts may be too high, as they have been based on PSE2 actuals, which were greatly above forecast and higher in per-passenger terms than any other major New Zealand airport.

[14] CIAL FY16 disclosures, Schedule 6.

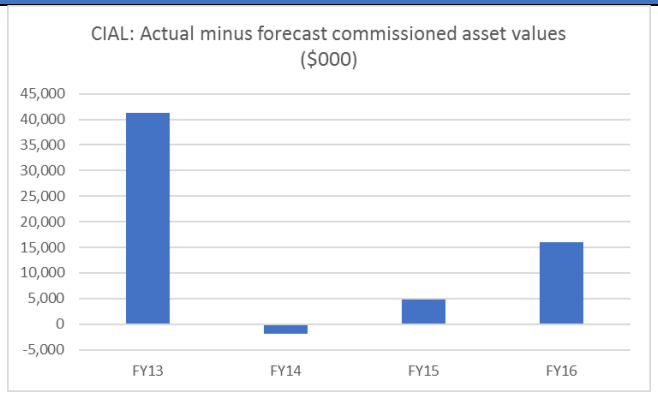
Question	Assessment
g) Is the trend in opex per unit going up or down over time?	Opex per passenger at Christchurch Airport has increased from $3.56 in FY05 (the earliest available CIAL information disclosure is the FY05 disclosure) to $6.28 in FY16, a compound annual growth rate of 5.3%.[15] If we only consider the years from FY11, when the new information disclosure requirements began, opex per passenger has increased from $4.21 to $6.28, a compound annual growth rate of 8.3%. These growth rates are well above the rate of inflation. The Airport's pricing forecasts are for growing passenger volumes and flat (in real terms) operating costs, so CIAL is forecasting opex per passenger to decline over PSE3.
h) How does the Airport's opex trends compare to Australian airports'?	It appears that operating costs per passenger in Australian airports have also been growing significantly. As stated in the ACCC Airport Monitoring Report 2015-16, March 2017:[16] "over the past decade... All airports have reported increases in aeronautical costs per passenger in real terms. The biggest increases have been at Perth Airport with 50.9 per cent and Melbourne Airport with 48.9 per cent, followed by Brisbane (32.5 per cent) and Sydney (14.4 per cent) airports. Such large increases in costs—despite some possible downward pressure as a result of economies of scale—raises questions about whether the airports have sufficient incentive to maintain cost control rather than simply passing on costs to airlines." "One airport told the ACCC that very high demand from airlines for the same timeslots during peak periods had resulted in the need for investment in duplicate facilities, which represents higher costs than if flights could be spread more evenly across the day. The airport also said that its increasing costs per passenger were due to factors such as passenger volumes not growing at the level they expected and the higher cost of running an airport in a more security-sensitive environment."
i) Do the current opex forecasts indicate reasonable future efficiency gains? (eg is unit opex forecast to decline over	CIAL's current opex forecasts indicate future efficiency gains. This is because operating costs are forecast to stay flat in real terms, while passenger volumes increase.

[15] BARNZ analysis of CIAL disclosures, FY05-FY16.
[16] https://www.accc.gov.au/system/files/2015-16%20AMR%20revised%206%20March_0.pdf

Question	Assessment
time? Are economies of scale apparent?)	BARNZ notes that over the period FY11-FY16, CIALs passenger volumes grew by 1.8% per annum (CAGR), while total opex grew at 10.3% per annum (CAGR). CIAL will need to improve its ability to achieve operational efficiencies to keep operating costs flat while passenger volumes grow.
j) Does the Airport's conduct indicate that it will seek to improve efficiency over time? (Transparency, consumer engagement, etc)	We have seen statements that the Airport intends to seek to improve operating efficiency.[17] BARNZ has limited information on the Airport's conduct in this area. As noted in question 1)c), CIAL could have been more helpful to airlines in seeking an opportunity to reduce quarantine waste costs at the Airport.
k) Is ID promoting improvements in operating efficiency at the Airport?	No. Operating cost efficiency at Christchurch Airport has got worse since ID was introduced.
6) Is the Airport investing efficiently?	**Only limited capex is required for PSE3 and most of it appears reasonable.**
a) Does the Airport have an efficient capex plan?	In 2013 CIAL opened its new integrated terminal. We are not aware of significant capacity constraints within the terminal or airfield and this is reflected in the fairly modest capex proposals for PSE3. Arguably the terminal is larger than is necessary for current passenger volumes. BARNZ and the airlines we represent agree with most of the capex projects included in the pricing decision. The key exception (which makes up around 10% by value of the total forecast commissioned asset values) is the 'terminal reconfiguration project'.[18] This is not an actual identified project that airlines could consider and provide feedback on through consultation. Instead, the Airport believes that it might need to spend $8.5m or $10m[19] on one or more not-yet-identified projects within the terminal during PSE3, so has added this as a capex item in its forecasts. BARNZ would expect that investments of this magnitude have a clear scope and plan and are subject to meaningful consultation with airlines before they are included in pricing.

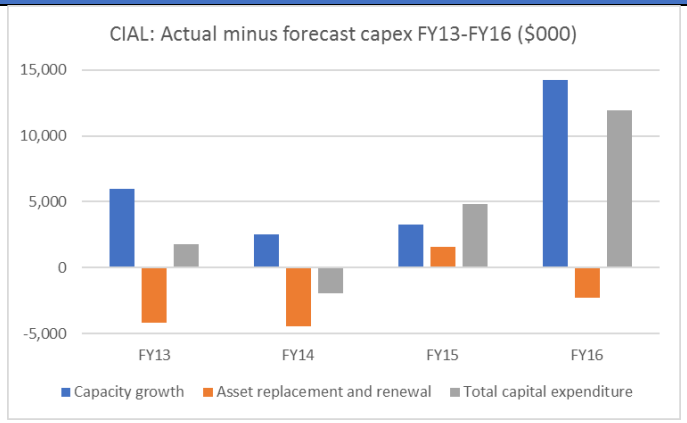
[17] For example: CIAL, Disclosure relating to the reset of aeronautical prices for the period 1 July 2017 to 30 June 2022, 14 August 2017, paragraphs 18.2.
[18] Ibid, paragraphs 86.1 and 87. CIAL PSE3 disclosure Schedule 18.
[19] The project has a value of $8.5m in CIAL's PSE disclosures (Schedule 18), but a value of $10.4m in CIAL's final decision documentation. This may be due to the way the values are reported.

Question	Assessment
b) Does the Airport consult on major capex projects appropriately?	The Airport consulted on its capital proposals and held teleconference calls to discuss them with airlines. The Airport removed one project – a $20m extension to the cross-runway – from its capital plan following airline feedback.
c) Are investments delivered at the lowest possible cost, while still delivering required outcomes and not compromising quality?	BARNZ has no information on whether the Airport's capex projects could have been delivered more cheaply while achieving the same quality of output.
d) Is there evidence of planned over- or under-investment?	The evidence is not clear on this point. The Airport forecast commissioned asset values of $66.8m over FY13-FY16, but actually commissioned assets with values of $126.8m over this time, an 'overspend' of $60m, or 90%. Most of this was the result of commissioned asset values in FY13 being $41.3m above forecast. It may be that this large divergence from forecast is due to one or more large projects that were expected to be commissioned in FY12 being completed late. However, we cannot determine if this is the case as CIAL did not disclose forecast commissioned asset values for FY12 in its Schedule 18 disclosure that related to its 2009 price setting event. For the remainder of the variance, the largest portion relates to FY16 where actual commissioned asset values were $16m greater than forecast. CIAL has stated that in this year it upgraded its main runway shoulders at a cost of $15.3m to "future proof it for the next 20 years". This investment was not forecast in PSE2, but CIAL considered that it should future reduce airfield maintenance costs.

Question	Assessment
	 *Source: BARNZ analysis of CIAL PSE2 and FY13-FY16 disclosures*
e) Does investment occur at the right time?	We have no information to suggest that Christchurch Airport's investment is being made too early or too late.
f) What is the Airport's conduct when planning and delivering capex projects?	The team at BARNZ is relatively new and we have not been involved in a capex project at Christchurch Airport. We have indicated to the Airport company that we would like to be consulted on significant capex projects, even where they fall below the (very high) threshold set in the Airport Authorities Act. We particularly hope to be consulted on any proposal to spend the 'terminal development' capex money (see question 6)a)).
g) Were projects delivered above or below forecast in the previous pricing period?	In total, in its PSE2 disclosures CIAL forecast to spend $66.8m over FY13-FY16, but has spent $83.3m. A review of the 13 projects listed in the PSE2 Schedule 18 disclosure indicates that:[20] • Three projects have had zero capex spent on them in FY13-FY16 when, in total, they were supposed to have $9.5m spent on them in those four years. • One project (airfield pavement maintenance works) was underspent by $6m over the four years, or 26%. There was a project called "Pavement Maintenance" in the 2009 pricing disclosures and expenditure on this project was only 67% of what was forecast. There appears to be a trend of underspending against forecast on pavement maintenance.

[20] BARNZ analysis of CIAL PSE2 and FY13-FY16 disclosures.

Question	Assessment
	• There was a slight underspend against two other projects (Apron/taxiway remediation and Pound Road Realignment and RESA). • There was no overspending on any project listed in Schedule 18 of the PSE2 disclosure. • Seven projects have had zero capex forecast or spent on them in FY13-FY16. The Airport's project forecast extends for ten years, so these projects had forecast capex in or after FY17. • There has been substantial unforecast expenditure on projects not include in the PSE2 capex plan, totalling $26.6m in FY13-FY16. • 'Other capital expenditure' was forecast to be $9.7m over FY13-FY16, but was actually $16.7m over those years, an overspend of $6.8m. In all projects where expenditure was recorded, it seems that the amount budgeted was ultimately underspent or not spent at all, so the actual by-project forecasting seems to include too much capex. However, there was a large amount of expenditure on 'other capital expenditure' and non-forecast projects that was greater than in the PSE2 forecast. There seems to be a trend of under-spending and/or over-forecasting the costs of pavement maintenance. In part, this will reflect the difficulty in forecasting capex requirements for five-year periods in a changing commercial environment and we support changes to the capital plan when circumstances necessitate this. However, we are concerned that the Airport's capital expenditure can vary so much from the forecasts used to set prices.
h) What is the comparison between actual and forecast total capex and capex by category?	CIAL spent $16.6m capex more than forecast over FY13-FY16, which represents a 14% overspend relative to the forecast capex for those years. There was consistent overspend in all years in the Capacity Growth category, slightly offset by an underspend in most years the Asset Replacement and Renewal category. As shown in the chart below, the extent of the overspend has increased over time.

Question	Assessment
	 *Source: BARNZ analysis, CIAL PSE2 and FY13-FY16 disclosures*
i) Are major capex projects appropriately included in prices?	Yes, except for the terminal development project. Capex is included in prices from the forecast date of commissioning. As discussed in question 6)a) the terminal development project is not an actual project but funds for the Airport to use when it chooses, thus we have limited confidence that the prices will reflect this project from the actual date of commissioning.
j) Is ID promoting incentives to invest efficiently at the Airport?	ID may be having some influence on the reporting of capital spend, but we do not see it is as a major incentive on the Airport's capex decisions.
7) Does the Airport share efficiency gains with consumers?	**No. If the airport achieved efficiencies these would eventually find their way into prices. However, the Airport is not delivering opex efficiencies and, in fact, opex efficiency is getting worse.**
a) Do prices reflect efficiency gains achieved in the previous pricing period?	No efficiency gains appear to have been achieved in the previous pricing period. As discussed above, opex efficiency worsened over PSE2. As PSE3 starting prices were based on the Airport's actual expenditure, this means that the inefficiencies incurred over PSE2 are now included in PSE3 prices, pushing up costs to passengers.
b) Do prices reflect forecast efficiency gains during the current pricing period?	The prices reflect some forecast efficiency gains during PSE3. As discussed in question 5)i), the Airport is forecasting opex to remain flat in real terms while passenger numbers increase and the prices reflect this.

Question	Assessment
c) Does the Airport have explicit mechanisms for sharing efficiency gains with consumers?	Not that we are aware of, other than the standard price setting process. If the Airport did find long-term opex efficiencies, we expect these would be seen in lower opex forecasts set at future price setting events.
d) Have efficiency gains been passed on in improvements to service quality or asset investment at no cost to consumers?	No efficiency gains have been achieved. We are not aware that the increasing opex per passenger over PSE2 has led to commensurate improvements in service quality.
e) Is ID promoting the sharing of efficiency gains with consumers at the Airport?	No.