

29 May 2018

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Dear Jo,

Response to Draft Report on Auckland Airport's PSE3 pricing decision

Executive Summary

Target profitability

1. The Commerce Commission's Draft Report shows that Auckland Airport's prices are too high and the current regulations are not limiting the airport's ability to make excessive profits.
2. The Commission considers that it is for Auckland Airport to justify its target revenues and has concluded that the airport has not done this sufficiently. We agree. During the current pricing period Auckland Airport is charging its customers \$65m more than the benchmark target return developed by the Commission would allow. BARNZ agrees with the Commission that Auckland Airport has not demonstrated that this additional charge (ultimately paid for by passengers) is in the long-term interest of the airport's customers.
3. Auckland Airport has argued that it needs additional revenues as it has higher operating leverage (ie higher fixed costs as a proportion of total costs) than other comparable airports. However, the Commission has proven that the airport's operating leverage is actually lower than that of other comparable airport companies, so Auckland Airport has no basis for targeting higher profits. We also agree with the Commission that Auckland Airport's proposal for higher prices now would be more compelling if it had adopted lower prices in the past when, according to Auckland Airport's assertions, its operating leverage was lower, and if it had committed to set lower prices in the future when the airport's operating leverage is expected to be lower.
4. Assuming the Commission maintains its view in the final report, the implication is that consumers have been paying too much in terminal and landing charges at Auckland Airport since 1 July 2017. It will be essential for Auckland Airport to lower its prices as soon as possible after the final report is published on 30 September, to cease the overcharging as soon as possible. Furthermore, we would expect Auckland Airport to compensate consumers for the overcharging that has occurred since 1 July 2017.

Runway land charge

5. BARNZ is not convinced that the runway land charge, as included in the Airport's pricing decision, is consistent with workably competitive market outcomes. As the runway land charge is NPV-neutral to the airport over time, and does not provide any peak pricing signal, our members believe that considerable

weight should be given to the strong and clearly expressed preference of airport customers – ie airlines – to pay for the holding costs of runway land from the time the runway is used and useful, and not before.

Airport expenditure efficiency

6. BARNZ remains unconvinced of the underlying efficiency of Auckland Airport's operating costs. We welcome the Commission's commitment to review the levels of expenditure efficiency, innovation and quality of service at Auckland, Christchurch and Wellington airports after Wellington Airport publishes its FY19 disclosure statement. This analysis is well overdue and it is essential that these aspects of airport performance are properly reviewed.

Transparency improvements for pricing decisions

7. Finally, BARNZ agrees with the Commission that the publication of expert reports as part of airport pricing disclosures would improve transparency and make important information more available to all interested parties.

BARNZ submission

Introduction

8. BARNZ welcomes the opportunity to respond to the Commission's report *Review of Auckland International Airport's pricing decisions and expected performance (July 2017 – June 2022)*, dated 26 April 2018 (the "Draft Report").
9. This submission is made on behalf of the airlines¹ which BARNZ has written authority under s2A of the Airport Authorities Act 1966 to represent during consultation over charges with New Zealand airports.
10. It seems likely that Auckland Airport will provide detailed information as part of its submission. It is very plausible that a two-week cross-submission process will not provide BARNZ or other submitters enough time to fully review the Airport's submission material and we may need an extension of time in the cross-submission process. We will request an extension, if needed, as soon as possible once submissions are published.

Expected profitability – Auckland Airport is not limited in its ability to extract excessive profits

11. BARNZ agrees with the Commission's conclusion that Auckland Airport has not sufficiently justified its target return (7.06%). The evidence presented by the Commission in the report makes it clear that the airport's justification for its target return does not withstand scrutiny. BARNZ also agrees with the Commission that the expected return of 7.9% on leased aeronautical services has not been justified (very little justification has been provided by AIAL).
12. Assuming the Commission maintains its view in the final report, it will mean that consumers have been paying too much for aeronautical services in Auckland since 1 July 2017 (they were also paying too much before then, when prices were set using a poorly justified 75th percentile target return, but that is outside the scope of this review). It will be essential for Auckland Airport to lower its prices as soon as

¹ Air Calin, Air China, Air Tahiti Nui, Air Vanuatu, Airwork, American Airlines, Cathay Pacific Airlines, China Airlines, China Eastern, China Southern, Emirates, Fiji Airways, Hong Kong Airlines, Korean Air, LATAM Airlines, Malaysia Airlines, Philippine Airlines, Qatar Airways, Singapore Airlines, Tasman Cargo Airlines, Tianjin Airlines, Thai Airways International, United Airlines, Virgin Australia.

possible after the final report is published 30 September, to cease the overcharging as soon as possible. Furthermore, Auckland Airport should be expected to compensate consumers for the overcharging that has occurred since 1 July 2017.

The onus of proof is with Auckland Airport to justify its target return

13. BARNZ agrees with the Commission that the onus of proof lies with Auckland Airport as the party seeking to justify a target return that is higher than the mid-point WACC benchmark. This is critical – any party that wants to charge consumers more than is provided by the mid-point WACC estimate needs to provide clear and compelling evidence of why it is in their consumers’ long-term interest to pay the higher prices.

Framework for assessing target returns

14. The Draft Report has a helpful framework for assessing target returns, set out on pages 79-80. BARNZ supports the framework but believes that contextual factors should receive increased emphasis and be applied by the Commission to AIAL in its Final Report (and also to CIAL in the forthcoming reports on that airport).
15. There are various factors that can influence the asset beta of a firm and it should not be expected that they would all move in the same direction. So, even if we accept that a single factor such as operating leverage can affect beta, it should not be accepted that all an airport needs to do to justify an increased WACC is to demonstrate that they have a materially higher operating leverage than the comparator sample airport companies.
16. For the airport to prove that the comparator sample estimate of beta is not appropriate for them, the onus of proof should also be on the airport to provide evidence of other factors that affect beta and how the airport compares with other airports on those factors. This is necessary to demonstrate that those factors which may justify a higher WACC are not outweighed by any other factors where the airport’s beta is below the comparator sample average. Without this comprehensive analysis, no party can have any confidence that the airport’s beta is materially different from the comparator sample average, as the analysis would be based on one factor only.
17. Also, the Draft Report should place more weight on the contextual factors in relation to pricing decisions made in past and future pricing periods. As the report recognises, AIAL targeted a 75th percentile WACC in PSE2 when operating leverage was lower (according to Auckland Airport’s analysis) and used different rationale to justify this target. AIAL has also not committed to setting a lower WACC in future when its operating leverage is likely to be lower.
18. Even if an increased asset beta could be justified by AIAL for PSE3 on the basis of increased operating leverage, we do not believe this should be accepted as a justification given the lack of commitment to apply the same principle in other pricing periods when the airport’s operating leverage will be lower.
19. These points (other factors that affect beta and past pricing decisions) are recognised in the framework on pages 79-80. However, our concern is that these aspects of the framework do not appear to have not been applied to Auckland Airport in the Draft Report. The Draft Report’s conclusions in relation to WACC are based on the analysis that demonstrates the operating leverage arguments put forward by AIAL and NERA do not withstand scrutiny.
20. The Draft Report does not then go on to apply the framework in full (ie it doesn’t consider whether AIAL’s WACC is justified or not when considering other factors that affect asset beta or AIAL’s past and

future pricing conduct). We think this is a gap. We would have expected the Draft Report to say anything like “even if AIAL had demonstrated that its operating leverage was materially higher than the comparator sample average, then based on the contextual factors the Commission would consider the target return is [justified / unjustified]”.

21. The Final Report should take the additional step of applying the full framework (from pages 79-80) to AIAL’s target WACC. This would give helpful guidance to airports and their substantial customers on how these contextual factors would influence the Commission’s decisions on whether a particular target WACC is justified.

The evidence does not support an increased beta for Auckland Airport

22. BARNZ agrees with the Commission’s analysis of Auckland Airport’s operating leverage compared to the comparator sample, which demonstrates that Auckland Airport’s operating leverage appears to be below the average of the comparator sample. Given this current state, to exceed the average of the comparator sample the airport would need to increase its operating leverage dramatically relative to the other airport companies.
23. The Draft Report considers that, in principle, there are reasons to expect that a higher operating leverage would drive a higher asset beta, and therefore WACC, but notes that this is not observable within the comparator sample.² BARNZ does not support moving away from the comparable sample estimate of asset beta based purely on the theory of operating leverage – we consider that there needs to be some real-world evidence that higher operating leverage does increase beta for airport companies.
24. We offer some observations as to why it may be expected that high capital expenditure at airports would not necessarily imply an increase in beta:
 - a. Crucially, we observe that high capital intensity does not necessarily result in high betas. Utility businesses, such as energy networks, are particularly capital intensive. Yet they have some of the lowest betas among all industries. This empirical observation decisively contradicts Auckland Airport’s presentation of their argument for a higher beta. It supports the Commission’s scepticism in the Draft Report that an increase in Auckland Airport’s capital intensity would justify applying a higher beta.
 - b. An important reason why capital intensity does not necessarily imply a high beta is that capital costs are not entirely fixed costs. Several components of capital costs are subject to variation over the economic cycle:
 - i. Firstly, the return on capital can often fall in periods of economic downturn, since the risk-free rate – a significant component of the cost of capital - will likely fall. This is one reason why estimation of operating leverage as indicated by the ratio of capital costs to total costs is not valid.
 - ii. Secondly, physical depreciation of assets is driven in part by usage of those assets. Taking a runway as an example, if in periods of economic downturn the number of flights declines that would be expected to reduce wear and tear of the runway asset, therefore reducing the depreciation charge (and extending the life of the capital assets held by an airport).
 - iii. Thirdly, economic depreciation conceptually should reflect the decline in the economic value of the asset. Thus this component of the capital cost is also variable potentially in a way that acts to offset any decline in revenue.

² Draft Report, paragraph A86.

25. We support the Commission's conclusion that operating leverage is better estimated by considering the change in EBIT divided by the change in total revenue. We note however that even this measure does not fully allow for the effect of the potential variation in capital costs, described above, which could imply operating leverage is lower than indicated by the Commission's methodology.
26. We agree with the Commission that Auckland Airport has not discussed the effect of its price setting ability on operating leverage and beta. As the Commission is aware, Auckland Airport is able to price as it sees fit and must reset prices at least every five years. This gives the airport significant scope to stem any financial losses caused by reductions in demand (as may occur during an economic downturn), as it would be able to reset prices to reflect the new demand environment. Also, AIAL's pricing schedule contains a 'Regulatory or Requested Investment Policy', which enables the airport's prices to be adjusted to cater for new regulatory requirements, or additional expenditure requested by airlines during a pricing period, which further mitigates any expenditure risk that the airport faces.

Other international airports are making substantial capital investments also

27. The international aviation industry is in a significant growth phase, with IATA predicting the number of air travellers globally to nearly double by 2036. Airport infrastructure globally is also growing at a high pace to try and meet demand and this is driving significant investment around the world.³ A recent study by CAPA suggests there is USD 803 billion in airport infrastructure spending being planned globally, which puts AIAL's expenditure plans into context.⁴ AIAL's capital spend should therefore be seen as in line with the global trend, rather than an outlier on the upside, as they are implying.
28. This is relevant for the asset beta discussion because other airport companies in the comparator sample are also undertaking significant capital investment in coming years, which makes it less likely that Auckland Airport's capital spend will make it materially different to the sample. We have researched publicly available information on these companies' capital plans and found that a significant number are making or planning very substantial capital investments. Our results are set out in the **Appendix**.

Financeability concerns raised by Auckland Airport are not compelling

29. BARNZ agrees with the Commission that financeability concerns raised by Auckland Airport are not compelling reasons to justify a higher target return. The airport itself has said that it has other means available to raise capital.⁵ We do not believe that the airport's financing concerns should be taken seriously when the airport is maintaining a policy of paying 100% of Net Profit After Tax in dividends and has undertaken a very large return of capital to shareholders.
30. Auckland Airport's argument that the \$454m capital return to shareholders in FY14 was necessary to avoid an increased credit rating is incompatible with its arguments regarding financeability. That the airport was on a 'credit watch positive' is indicative that the airport should have no difficulty sourcing finance for its capital expenditure programme. We also question what this payment tells us about the airport's planning capacity; it made its largest ever capital return to shareholders just a few years before a very large capital programme needed to be funded – a prudent operator would have reasonably been expected to retain most or all of the \$454m to assist with the future expenditure. Either way, the airport should not be raising financeability concerns so soon after making this capital return.

³ <http://www.orbisresearch.com/reports/index/global-airport-infrastructure-market-size-trends-and-forecasts-2017-2021#linux>

⁴ <https://centreforaviation.com/analysis/reports/global-airport-construction-review-2q2018-usd803-billion-costs-412850>

⁵ Draft Report, paragraph A145.

The runway land charge remains unjustified

31. BARNZ continues to believe that the runway land charge is unjustified and counter-productive. The Commission's Draft Report makes it clear that (a) the charge is NPV-neutral to the airport and (b) it does not provide any useful price signal.
32. In the absence of any compelling reason for the charge to be introduced, we believe that the strongly-expressed consumer preference to pay for the runway when it is built, and not before, should be given prominence in assessing whether the charge is reasonable and in consumers' interests. That this charge has been included in AIAL's prices despite airline opposition is strong evidence of the power imbalance present in current airport pricing consultations, where airlines, in the end, are required to live with decisions they fundamentally oppose.
33. BARNZ agrees with the Commission's analysis that one effect of AIAL's inflated WACC will be to recover additional excess revenue through the runway land charge. The Commission estimates that the value of this will be \$8m in PSE3.
34. BARNZ notes the Draft Report's conclusion that AIAL should have considered the potential efficiency benefits of decreasing charges on non-peak users relative to peak users, which could in theory spread the demand for runway usage. While the Draft Report is correct in theory, in practice international airline slot choice is driven by availability of slots at other ports and connection times for onward flights. Setting an off-peak charge that is lower than a peak charge may not have a noticeable effect.

Questions remain about AIAL's expenditure efficiency

35. The Draft Report concludes that "Auckland Airport's forecast operating expenditure per passenger does not appear unreasonable compared to historic levels"⁶.
36. This highlights a gap in the current Part 4 regime (a similar issue applies to the regulated energy businesses). Just because expenditure may look similar to historical levels, that does not mean the expenditure level is necessarily efficient; only that efficiency is not getting worse. We believe that the regulatory review should do more than compare forecast expenditure levels with historical levels. It should also carry out benchmarking and analysis to determine whether the starting expenditure levels for a price setting event were at an efficient point for an airport of a particular scale. Without this analysis, it is not possible for interested persons to know whether the airport is delivering efficient services that are in consumers' interests.

BARNZ supports a review of annual airport disclosure information

37. As will be clear from the previous section, BARNZ considers that a review of airports' expenditure efficiency in New Zealand is necessary. So we were pleased with the Commission's commitment on page 15 of the Draft Report to undertake a review of the historical performance of the three regulated airports after Wellington Airport publishes its FY19 information disclosure report.
38. As we have said in previous submissions, we think it is essential to review airports' performance in terms of expenditure efficiency, quality of service and innovation as well as the items focused on in the Draft Report, to provide a full view of airport performance over time and how well information disclosure regulation of airport services is delivering the objectives set out in the Part 4 Purpose.

⁶ Draft Report, Paragraph A30.

Incremental improvements can be made to the transparency of pricing disclosures

39. BARNZ agrees with the Commission that it would improve transparency if the expert reports that were received through the pricing consultation process were published as part of airports' pricing disclosures. BARNZ has no objection in principle to making its own expert reports public.
40. We also agree that it would help if airports specified the magnitude of each WACC parameter that differs from the WACC parameters specified by the Commission. This is essential for the Part 4 purpose to be achieved by information disclosure as it applies to the three designated airports.

Contact details

41. If you have any questions about this submission, please contact me on 09 358 0696 or at ian@barnz.org.nz.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Ian Ferguson', written in a cursive style.

Ian Ferguson
Regulatory Manager

Appendix: Capital expenditure plans for firms in the asset beta comparator sample (excluding AIAL)

An assumption in NERA's report for AIAL was that operating leverage would not change materially over the period for other companies in the comparator sample.⁷ The Commerce Commission has noted that "it is unclear whether [this assumption] is appropriate"⁸.

To assist the Commission, BARNZ has reviewed publicly available information about the 25 companies in the comparator sample (excluding AIAL) to assess whether they are making or are likely to make substantial increases in capital expenditure. This is relevant because if other companies in the comparator sample are increasing their capital expenditure, this would make it less likely that AIAL's increasing capital expenditure will cause it to have materially higher operating leverage than the comparator sample's average.⁹

Our findings are summarised in the table below. As the nature of the publicly available information is variable, it has not been possible to quantify the impact on operating leverage of the capital plans of each airport. What we have been able to do is make an assessment of the relative scale of the capital plans of 19 of the 25 companies (for the other 6, we could not find useful information).

In summary our findings are that, of the 19 companies:

- 8 are making or planning to make substantial investments in their airport operations
- 4 are making moderate investments in their airport operations
- 7 do not appear to be planning significant investments in their airport operations (for four of these companies, this is due to space constraints that are being addressed through construction of new airports as the expansion of the existing airports is not feasible).

These findings indicate that many other airports in the comparator sample are making and/or planning to make substantial capital investments over the next 5-10 years. This makes it even less likely that AIAL's increased capital expenditure will materially increase its operating leverage relative to the comparator sample.

⁷ NERA Economic Consulting, *A Peer Review of Auckland Airport's Approach to WACC and Target Return for Aeronautical Pricing*, 22 March 2017 page 7.

⁸ Draft Report, Figure A2, page 87.

⁹ We note that, to the extent that operating leverage is increased as a result of substantial investment, the effect will typically show up only after the investment has been completed, eg a new runway is brought into operation. The measure suggested by the Commission as the best estimate of operating leverage - the ratio of the change in EBIT to the change in revenue - will reflect the investment with a lag (eg interest paid on funds used to pay for a new runway capex will be capitalised until the runway is commissioned). However, we have focused on airports that are increasing their capital expenditure at a similar time to Auckland Airport.

Table: Assessment of capital expenditure plans by company in the comparator sample

Company	Summary of capital expenditure plans
Making substantial investments	
Grupo Aeroportuario del Centro	<p>This company owns airports in northern and central Mexico, of which by far the largest is Monterrey.</p> <p>The company plans to double the capacity of Monterrey Airport by 2030 (from 9.7 million to 20 million passengers per annum). By 2025, they will add a second runway and integrate the current terminals into a single terminal¹⁰.</p>
Airports of Thailand (AOT) PCL	<p>Manages 6 of Thailand’s airports, with annual pax movements of 133 million per year.</p> <p>In 2017, AOT announced it intended to invest 200 billion baht (NZD 9 billion) to develop its airports over 10 years. Half of this will be invested in increasing the capacity of Suvarnabhumi Airport (Bangkok), to increase capacity from the current 83.5 million pax per annum to nearly 200 million pax per annum. This includes (by 2020):^{11 12}</p> <ul style="list-style-type: none"> • Building a second passenger terminal and a “satellite passenger terminal” • Building a third runway • Extending the main terminal’s eastern wing. <p>Further investments will be undertaken over 2020-2025.</p> <p>In 2016 AOT approved the Master Plan for Chiang Mai airport which sought to increase capacity to 18 million pax per annum over 2016-2025 (capacity of the airport was 9.4 million pax in 2016).¹³</p> <p>In 2016 AOT approved the Master Plan for Phuket Airport for 2017-2025:</p> <ul style="list-style-type: none"> • Over 2017-2022, add monorail and car parking; expand apron space and domestic terminal. This will increase capacity from 12.5 to 18 million pax per annum (cost 270 million baht)

¹⁰ <https://a21.com.mx/aeropuertos/2018/02/15/anuncian-plan-de-expansion-del-aeropuerto-de-monterrey>

¹¹ <http://www.interairport-southeastasia.com/english/inter-airport-news/industry-news/?id=654>

¹² <http://englishnews.thaipbs.or.th/aot-invest-200-billion-develop-six-airports/>

¹³ <http://www.nationmultimedia.com/breakingnews/AOT-approves-Chiang-Mai-airports-development-maste-30286688.html>

Company	Summary of capital expenditure plans
	<ul style="list-style-type: none"> Over 2023-2025, extend the runway & international terminal, expand domestic terminal. Will raise passenger capacity to 25 million (cost 1.2 billion baht)¹⁴.
GMR Infrastructure Ltd	<p>Operates New Delhi and Hyderabad Airports and has a majority stake in the owners of each airport. Both airports have significant expansion plans:</p> <ul style="list-style-type: none"> Delhi airport is to merge the domestic departure terminal T1D and arriving terminal T1C into one to accommodate 40 million passengers per annum. Also, to build a fourth runway by 2021¹⁵. [for reference, Delhi airport processed 66 million pax in the year to March 2018] Hyderabad airport is to grow from 18m to 40m passengers per annum. Expansion plans include adding a new runway and a second terminal, with several taxiways.¹⁶
Kobenhaven Lufthavne	<p>Owens Copenhagen Airport. Plan is to increase passenger numbers to 40m per annum over 25 years from 2014 (about a 60% increase). Main immediate focus seems to be on terminal expansion. Some airfield improvements are planned out to 2029.^{17 18}</p>
Fraport AG Frankfurt	<p>Frankfurt Terminal 3 construction began in 2015, with completion expected in 2022. Total footprint addition of 90,000m² with added capacity of 14m passengers per year.^{19 20} This would increase capacity of the total airport by 22% by 2022.</p>
Aeroports de Paris	<p>The Airport authority that owns and manages the 14 airports & airfields in the Paris region, including Charles de Gaulle and Orly. The 2016-2020 strategic plan involved:</p> <p style="padding-left: 40px;">“an unprecedented capital expenditure programme of 4.6 billion euros, of which 3 billion euro is allocated to regulated activities”²¹</p>

¹⁴ <https://centreforaviation.com/news/airports-of-thailand-approve-phuket-airports-master-plan-outlines-expansion-project-616989>

¹⁵ <http://m.newdelhiairport.in/delhi-airport-to-expand-capacity-add-new-runway-by-2021.aspx>

¹⁶ <http://www.hyderabad.aero/master-plan.aspx>

¹⁷ <https://www.trbusiness.com/regional-news/nordic/copenhagen-airport-reveals-masterplan-to-accomodate-capacity-increase/38351>

¹⁸ <http://www.frinet.dk/media/754232/Lufthavne.pdf>

¹⁹ <https://terminal3-infografiken.frankfurt-airport.com/en/>

²⁰ <https://www.airport-technology.com/projects/future-terminal-3-frankfurt-international-airport/>

²¹ https://www.parisaeroport.fr/docs/default-source/groupe-fichiers/presse/dossier-de-presse/press-kit-connect-2020.pdf?sfvrsn=4b930fbd_4

Company	Summary of capital expenditure plans
Grupo Aeroportuario del Pacifico	<p>Owns and operates airports in western Mexico and in Jamaica. The largest are Guadalajara, Tijuana and Los Cabos.</p> <p>The company issues a Master Development Plan every five years. The most recent (2015-2019) involves:²²</p> <ul style="list-style-type: none"> • Investment of MXP5.5 billion, the largest since the company began operations • At Guadalajara, the addition of new boarding gates and a cargo apron, plus redesign terminal 2 • At Tijuana, construction of a new terminal and improvements to the current terminal • At Los Cabos, increases to terminal capacity.
Toscana Aeroporti SpA	<p>This company owns Pisa and Florence Airports.</p> <ul style="list-style-type: none"> • Pisa Airport Master Plan was approved in October 2017. This plan involves adding 20,000m² of terminal space to meet growing demand.²³ • The Florence Airport 2014-2019 Master Plan involved adding a new runway and apron areas, developing a new passenger terminal and related road access and parking.²⁴
Making moderate investments	
Malta International Airport PL	<p>In February 2018 announced 100m euro Master Plan, of which 40m euro is Terminal Expansion (the rest is commercial / car parking).²⁵</p>
Sydney Airport	<p>A new Master Plan is to be published later in 2018.</p> <p>The 2014 Master Plan contemplated an increase in passengers from 36.9m in 2012 to 74m in 2033 – some of these may now be diverted to the new Western Sydney Airport. The investments listed in the 2014 Master Plan look relatively modest (addition of new gates, airport roading improvements, etc).²⁶</p>

²² <https://www.aeropuertosgap.com.mx/GAP/growth.html>

²³ <https://www.streetinsider.com/SEC+Filings/Form+6-K+CORPORACION+AMERICA+AIRP+For%3A+Apr+25/14092462.html>

²⁴ <http://www.corporacionamericaitalia.com/wp-content/uploads/2017/07/Fascicolo-BIL-2016-CAI-ENG-DEF.pdf>

²⁵ <http://rizzofarrugia.com/news-events/2018/master-plan-approval-mia1805/>

²⁶ <https://www.sydneyairport.com.au/corporate/planning-and-projects/master-plan/master-plan-downloads>

Company	Summary of capital expenditure plans
	More recent published information indicates Sydney Airport is investing in expanded baggage facilities, additional contact gates, remote stands and aprons. ²⁷
Flughafen Wien AG	<p>Announced a terminal development project in April 2016. The project involves expenditure of up to 500m euro over 2016-2033 (not all of this will be aeronautical):²⁸</p> <ul style="list-style-type: none"> • Expansion and modernisation of existing terminal • Expand shopping and food offerings • Create a central security area.
SAVE SpA/Venezia	<p>Venice and Treviso Airports</p> <p>The 2012 Master Plan for Marco Polo Airport in Venice involves the following steps from 2017:²⁹</p> <ul style="list-style-type: none"> • Terminal expansion “an expansion of about 95,000 sq.m and therefore a total area of approximately 160,000 sq.m.” • Widen the main runway, new taxiways, enlarged apron space.
Not planning significant investments	
Beijing Capital International Airport	No clear information available. This airport is constrained and a new airport is being built in Beijing.
Airport Facilities Co Ltd	Company has focus on airport utility services.
Xiamen International Airport	Terminal 4 was completed in 2014 and there is limited space to grow further. A new airport is being constructed and should open in 2025.
Grupo Aeroportuario del Sureste	Operates 9 airports in southern Mexico, of which Cancun is by far the largest. It appears that the major investment in Cancun was in the years 2014-2017 and is now winding down. ³⁰
Guangzhou Baiyun International Airport	This airport is reaching capacity and a new airport is to be built in Guangzhou.

²⁷ https://downloads.ctfassets.net/v228i5y5k0x4/26gjDSk0PKi4mmOAKe2my2/8547022191a49b5a997928120eb3d32f/Part_1_Lodgement.pdf

²⁸ <https://www.airport-technology.com/projects/vienna-airport-terminal-development-project/>

²⁹ <http://www.marcopolodomani.it/en/>

³⁰ http://www.asur.com.mx/assets/files/en/investors/press_releases/ASUR-Airport-Cancun-Mexico-MDP-Approval-Jan-14.pdf

Company	Summary of capital expenditure plans
TAV Airports holding	This company operates 11 airports in Turkey, Georgia, Tunisia and Macedonia. The largest airport owned is Istanbul Ataturk Airport, which is constrained and due to be closed when a new airport is constructed in Istanbul. Other major airports owned by TAV also do not appear to require major capital expenditure, although only limited information is available.
Aerodrom Nikola Tesla AD Beogr	This company operates Belgrade Airport. Recent expansion work seems to have been completed in 2016.
Unknown	
Japan Airport Terminal Co Ltd	Company involved in the operation of Haneda Airport. Also owns 51% of Tokyo International Air Terminal Corp (TAIT), which owns Haneda Airport International Terminal. TAIT has plans to expand the international passenger terminal but details are unclear.
HNA Infrastructure Co Ltd	No information available.
Flughafen Zurich AG	No information available.
Shenzhen Airport Co Ltd	No information available.
Shanghai International Airport	No clear information available.
Malaysia Airports Holdings Berhad	No clear information available. Kuala Lumpur Long Term Master Plan 2056 indicates significant development, but it is not clear when this investment will occur or who will fund it.