



Australian Government
Productivity Commission

Economic Regulation of Airports

Productivity Commission
Inquiry Report
Overview & Recommendations

No. 92, 21 June 2019

© Commonwealth of Australia 2019

ISSN 1447-1337 (online)

ISSN 1447-1329 (print)

ISBN 978-1-74037-679-2 (PDF)

ISBN 978-1-74037-678-5 (print)



Except for the Commonwealth Coat of Arms and content supplied by third parties, this copyright work is licensed under a Creative Commons Attribution 3.0 Australia licence. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/3.0/au>. In essence, you are free to copy, communicate and adapt the work, as long as you attribute the work to the Productivity Commission (but not in any way that suggests the Commission endorses you or your use) and abide by the other licence terms.

Use of the Commonwealth Coat of Arms

Terms of use for the Coat of Arms are available from the [Department of the Prime Minister and Cabinet's website](#).

Third party copyright

Wherever a third party holds copyright in this material, the copyright remains with that party. Their permission may be required to use the material, please contact them directly.

Attribution

This work should be attributed as follows, *Source: Productivity Commission, Economic Regulation of Airports, Inquiry Report*.

If you have adapted, modified or transformed this work in anyway, please use the following, *Source: based on Productivity Commission data, Economic Regulation of Airports, Inquiry Report*.

An appropriate reference for this publication is:

Productivity Commission 2019, *Economic Regulation of Airports*, Report no. 92, Canberra.

Publications enquiries

Media, Publications and Web, phone: (03) 9653 2244 or email: mpw@pc.gov.au

The Productivity Commission

The Productivity Commission is the Australian Government's independent research and advisory body on a range of economic, social and environmental issues affecting the welfare of Australians. Its role, expressed most simply, is to help governments make better policies, in the long term interest of the Australian community.

The Commission's independence is underpinned by an Act of Parliament. Its processes and outputs are open to public scrutiny and are driven by concern for the wellbeing of the community as a whole.

Further information on the Productivity Commission can be obtained from the Commission's website (www.pc.gov.au).

Contents

Overview	1
The economic regulation of airports	4
What has the Commission been asked to do?	7
Australia's four largest airports have significant market power	9
Negotiating agreements between airports and airlines	13
Airports' operational and financial performance	15
Car parking prices at the monitored airports	20
Data on some aspects of landside access are inadequate	23
Reforming the monitoring regime	23
Access arrangements at Sydney Airport	28
Competition in markets to supply jet fuel	32
Infrastructure at regional airports	34
Recommendations and findings	37

The full report is available at <https://www.pc.gov.au>

OVERVIEW

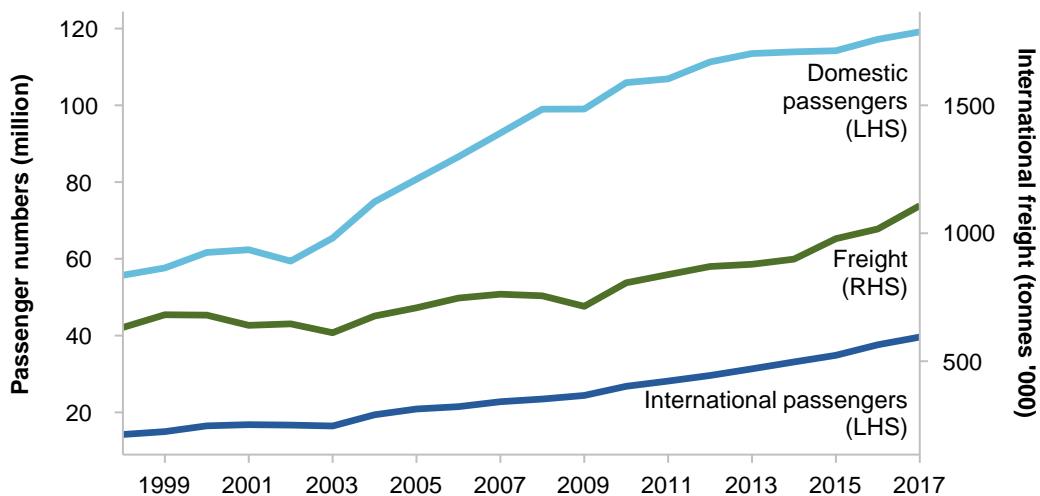
Key points

- The four airports monitored by the Australian Competition and Consumer Commission (ACCC) — Sydney, Melbourne, Brisbane and Perth — have not systematically exercised their market power in commercial negotiations, aeronautical services or car parking.
 - However, some airport performance indicators could present cause for concern if considered in isolation. High international charges at Sydney and Brisbane airports, Sydney Airport's profitability, and high operating costs at Perth Airport show that there is reason to remain vigilant.
 - On balance, most indicators of operational efficiency (including costs and service quality), aeronautical revenue and charges, and profitability are within reasonable bounds. Each airport has generated returns sufficient to enable investment while not earning excessive profits, and passengers consider airports to have good service quality.
 - Airport car park prices are consistent with the costs of service provision (including the opportunity cost of land) and the need to manage congestion. Competition from off-airport car parks and alternative modes of transport are the best constraints on the exercise of market power at on-airport car parking, but effective competition requires landside operators to have access to the terminal on reasonable terms.
- The current approach to airport regulation benefits passengers and the community and remains fit for purpose at this time. But the monitoring regime should be strengthened to enhance transparency over airports' operations and to more readily detect the exercise of market power.
 - Monitored airports should be required to report to the ACCC their revenues and costs from providing domestic and international aeronautical services to airlines. Separate reporting is needed to determine whether aeronautical charges are the result of an airport exercising its market power, or the higher costs of providing international services.
 - Airport operators should be required to provide more information to the ACCC on the terms of landside access to enable greater scrutiny of the airports' performance.
 - Some agreements between airports and airlines contain anticompetitive clauses. These clauses should be removed from all agreements between airport operators and airport users.
- The Commission would not hesitate to recommend regulatory changes, including price regulation, if airports were found to have systematically exercised their market power.
 - An airport-specific negotiate-arbitrate regime that bypasses the safeguards in the National Access Regime would have few benefits and substantial risks. It should not be implemented.
- Regulatory arrangements for airlines to access Sydney Airport should be improved.
 - Airlines should be able to use any peak-period slot for flights servicing regional New South Wales.
 - Measuring the number of actual aircraft movements once (rather than four times) an hour would help to achieve the intended 80 movements an hour, and benefit airlines and their passengers.
 - Alternative types of freight aircraft should be allowed to operate during the curfew, provided aircraft noise and the number of movements are not increased above current levels.
- The structure of the markets to supply jet fuel at the monitored airports has likely led to higher prices to access infrastructure services and higher jet fuel prices. Conditions for competition are improving with some airports and fuel suppliers agreeing on lease arrangements for on-airport infrastructure that include access for third party fuel suppliers.
- Government funding for infrastructure at regional airports should be independently assessed to improve decision making. Governments should also improve capability at council-operated regional airports to enable operators to better manage airport assets.

Overview

The number of passengers travelling through Australia's airports has more than doubled over the past 20 years, to about 160 million in 2017. The volume of international air freight has increased by about 75 per cent over the same period (figure 1). Most people who use Australian airports travel domestically, but growth in the number of international passengers has outpaced domestic passenger growth every year since 2009. This growth is expected to continue. Tourism Research Australia, for example, forecast that the number of international passengers will grow by about 75 per cent over the decade to 2027. About three quarters of international visitors come to Australia for leisure (on holidays and to visit friends and relatives).

Figure 1 **Passenger and international freight movements**



Increasing passenger demand for air transport has led to increasing demand by airlines for airport services. Changes in the volume and mix of passengers affect the level and type of investments made by airport operators. For example, three of Australia's major airports have capacity expansions in design or under construction, with new runways due to commence operation at Brisbane Airport (by 2020), Melbourne (2024) and Perth (2028). Airports that are serving an increasing number of international passengers must provide terminal space for security, biosecurity and border processing services, which are typically more costly to

provide than equivalent services for domestic passengers. Some airports, such as Melbourne and Avalon, have built dedicated terminals to meet the needs of low-cost carriers (LCCs).

Similarly, changes in aircraft technology require changes to airports' infrastructure. Airport operators upgraded taxiways, aerobridges and added apron and gate space to accommodate the Airbus A380 in the mid-2000s. Ten years on, airlines are gradually switching from A380s to smaller and more fuel-efficient aircraft that operate more frequently, and require airport services and infrastructure that can support an efficient turnaround on the ground.

Australia's airports are critical infrastructure and airports that face limited competition could have market power that, if exercised, would be detrimental to the community. An airport operator exercising its market power could mean that users of airport services — passengers and airlines — face unduly high charges, poor service quality, or both. The economic regulation of airports must keep that market power in check, while promoting efficient airport (and airline) operations and timely investment in infrastructure.

The economic regulation of airports

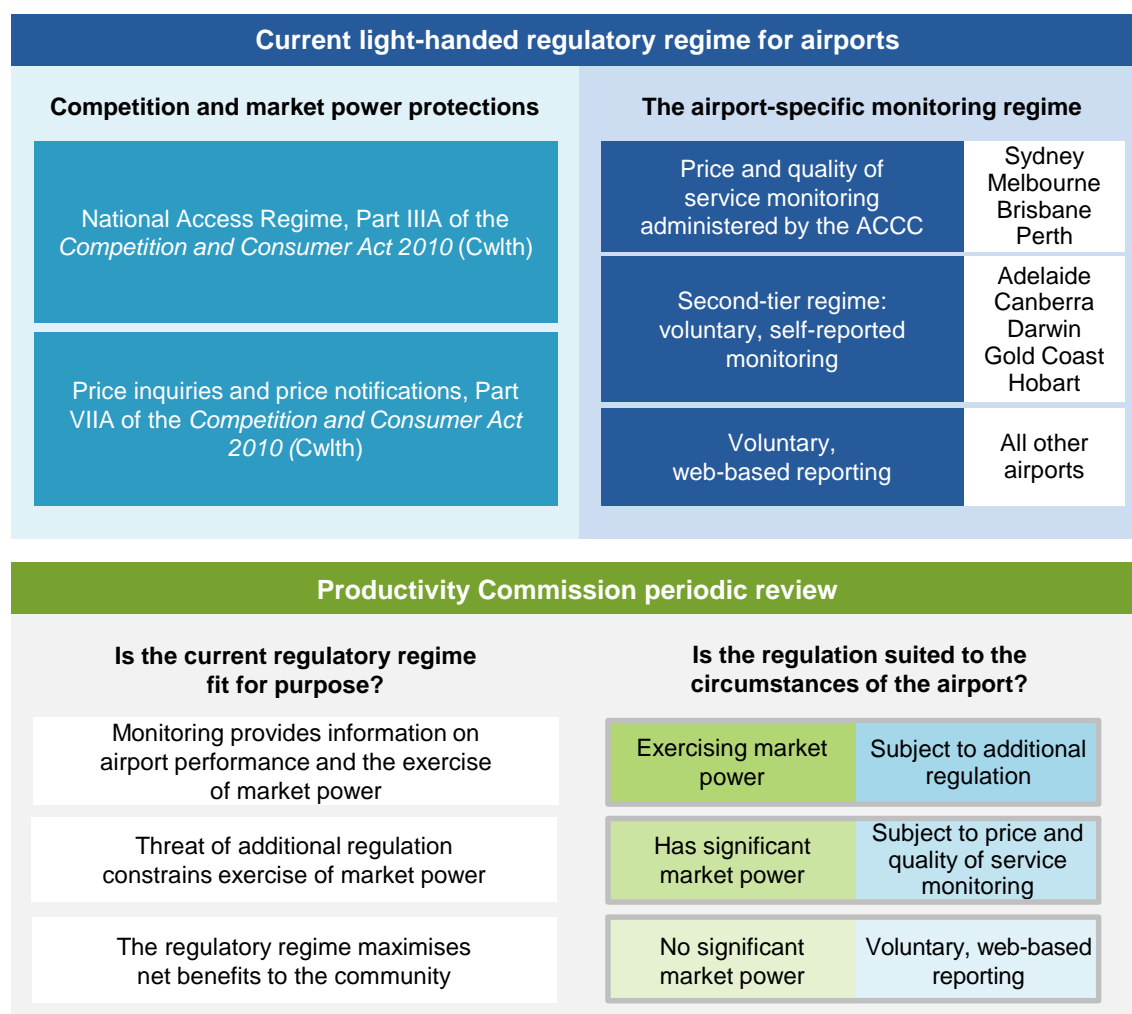
Airports in Australia operate under a light-handed economic regulatory regime that is designed to facilitate commercially negotiated outcomes. Airport users, including airlines and operators of landside services, negotiate directly with airport operators on charges and other terms of access to a range of infrastructure services. Except for some regional services at Sydney Airport, governments do not intervene in the setting of charges or other terms of access.

Light-handed economic regulation is intended to achieve outcomes that would be consistent with those found in markets with effective competition, but will only do so if there is both:

- transparency as to how an airport operator is performing over time, to enable an assessment of whether it is likely to be exercising its market power
- a credible threat of additional regulation if an airport operator is found to be exercising its market power to the detriment of the community.

The light-handed approach to the economic regulation of airports includes the general provisions of competition and consumer law, and airport-specific regulations that were introduced following the privatisation of airports (by long-term lease from the Commonwealth) (figure 2). Sydney, Melbourne, Brisbane, Perth, Canberra, Darwin, Hobart and Adelaide airports, among others, are also subject to a range of lease conditions, including that the lessee must: supply services to air transport operators; invest in airport infrastructure to meet current and expected demand; and obtain ministerial approval of a major development, such as a new runway or terminal.

Figure 2 **The economic regulation of airports**



Assessing airport performance

The Australian Competition and Consumer Commission (ACCC) administers a price and quality of service monitoring regime. The operators of airports subject to the monitoring regime — Sydney, Melbourne, Brisbane and Perth — are required to provide the ACCC with information annually on their prices, costs and profits for aeronautical services and car parking. The ACCC also monitors the quality of some aeronautical services, such as terminal and aircraft services and facilities, and some non-aeronautical services, such as car parking and landside access. At its discretion, the ACCC collects financial information relating to landside access, including revenue and access charges for selected landside services, such as those used by taxis, hire cars and shuttle buses between off-airport car parks and the terminal. Airport operators provide this financial information on landside access voluntarily. The ACCC publishes a report each year, presenting financial and quality information for each monitored airport and outlining general trends and developments across the industry.

The Commission has conducted inquiries into the performance of the economic regulatory regime for Australia's airports approximately every five years, beginning in 2000. Essentially the Commission's role is to conduct a health check of the regime to determine whether it remains fit for purpose. The Commission can recommend (among other things): adding airports to the monitoring regime or removing them; tightening or relaxing regulatory requirements for monitored airports; and sanctions for any airport found to have systematically exercised its market power to the detriment of the community. The Commission recommended changes to the regulatory regime in each of the three previous inquiries and governments, for the most part, have implemented those recommendations.

The second-tier regime — voluntary monitoring

In addition to the ACCC's monitoring of the four major airports, a second tier of airports — Adelaide, Canberra, Darwin, Gold Coast and Hobart — are subject to a self-administered monitoring regime. These airports voluntarily publish information on their aeronautical charges, car parking, service quality and complaint handling procedures. Cairns Airport, which is operated under a 99-year lease from the Queensland Government and is not regulated under the *Airports Act 1996* (Cwlth), voluntarily publishes the same information as the second-tier airports (but does not publish service quality outcomes). The Australian Government established the self-administered second-tier monitoring regime through a policy statement rather than regulation. The policy statement does not set out the level of detail airport operators must provide (the approach is different between airports) or any repercussions for operators who do not participate.

There is a threat of additional regulation

An airport operator that exercises its market power faces the threat of additional regulation. The Australian Government has several regulatory options that it could take if it considered that airports are exercising their market power. It could:

- declare under section 95X of the *Competition and Consumer Act 2010* (Cwlth) (CCA) that an airport is required to notify the ACCC if it intends to increase the price of its services and take into account the regulator's decision on the proposed price change (noting the decision would not be binding on the airport operator)
- require an airport to lodge an access undertaking with the ACCC over one or more of its infrastructure services for a specified period
- deem certain infrastructure services to be declared for the purposes of the National Access Regime under Part IIIA of the CCA
- regulate the price of certain infrastructure services, such as by reintroducing the price-cap approach that applied for five years following the privatisation of airports
- direct the ACCC to conduct a price inquiry under Part VIIA of the CCA into the activities of a particular airport.

The Commission would not hesitate to recommend regulatory changes, including price regulation, if it found in the future that airport operators had systematically exercised their market power to the detriment of the community. The threshold for each regulatory measure is different, and the response could be targeted to one or more airports, but no regulatory action is off-limits. The ongoing threat of additional regulation acts as a deterrent against the exercise of market power.

In addition, an airline, or any other party, can take action if commercial negotiations to access certain infrastructure services fail. A party can apply to the National Competition Council to recommend that the relevant Minister declare those services under the National Access Regime. The Regime provides a role for the ACCC to arbitrate access disputes where a service has been declared and commercial negotiations to access that infrastructure have failed.

What has the Commission been asked to do?

The purpose of this inquiry is to determine the effectiveness of the economic regulation of services provided by airports to passengers, airlines and commercial operators that require landside access to the terminal precinct. The Australian Government has asked the Commission to assess the current regime against the following objectives:

- promoting the economically efficient operation of, and investment in, airports and related industries
- minimising compliance costs
- facilitating commercially negotiated outcomes between airport operators and users.

The terms of reference specify the consideration of aeronautical services at the main passenger airports operating in Australia's major cities. The Commission has focused on domestic and international aeronautical services at the four airports monitored by the ACCC — Sydney, Melbourne, Brisbane and Perth — and airports in the second tier of monitoring, such as Adelaide, Canberra and Gold Coast.

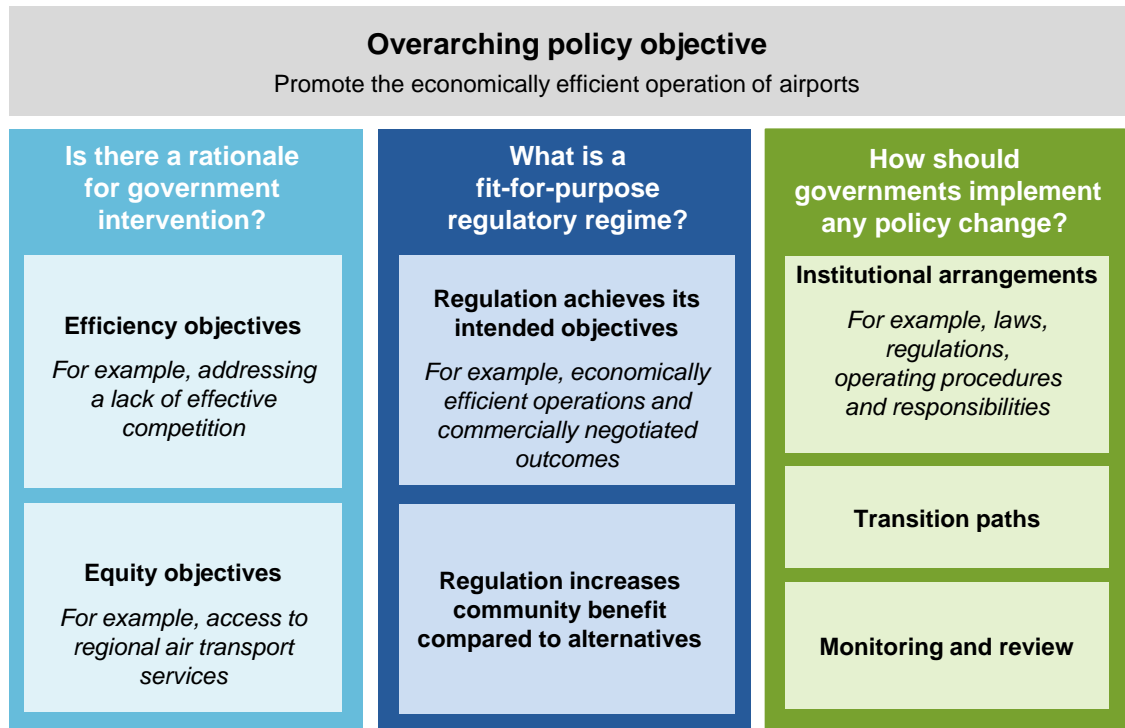
The Commission also examined:

- provision of on-airport car parking and access to the terminal precinct for landside operators at the monitored airports, including taxis and shuttle buses transferring passengers from off-airport car parks
- arrangements for airlines offering regional services in New South Wales to access Sydney Airport
- competition in markets to supply jet fuel.

The Commission’s approach to this inquiry

The Commission has analysed each issue in a consistent manner according to the framework presented in figure 3. The Commission has considered the case for government intervention, whether the current approach to economic regulation is fit for purpose, or whether there are alternatives that would result in greater net benefits for the community.

Figure 3 **Assessing the economic regulation of airports**



The rationale for the economic regulation of airports is that the operator of an airport with market power could *exercise* that power by setting unduly high charges for airport services, operating the airport inefficiently, or making inefficient investment decisions. The Commission assessed whether airport operators have exercised their market power to the detriment of the community based on indicators of airports’ operational and financial performance, and the conduct of commercial negotiations between airport operators and service users. This assessment also considered the constraints an airport operator faces, including the countervailing power of airlines, which limits an operator’s ability to exercise its market power. Some inquiry participants have proposed alternative approaches. The ACCC, for example, considered that the existence of market power was sufficient rationale for additional economic regulation, and that an unconstrained monopoly with market power will use that power.

The test for any policy change is whether it would generate the greatest increase in the welfare of the Australian community compared with other options, including the status quo.

The mere fact that an airport has market power is insufficient to justify a change to the regulatory regime. Regulation has costs and intervention to address market power where airport operators are unable to exercise that power will likely lead to net costs for the community.

Australia's four largest airports have significant market power

The competitive constraints faced by an airport operator determine whether it has market power. These constraints include potential market entry by competitor airports, opportunities for airlines (or other airport users) to switch to another airport, and the nature of passenger demand for air travel.

Even if an airport has market power, its ability to *exercise* that power may be limited. Constraints on an airport's exercise of market power include countervailing power, airline bargaining power more broadly, and the level of demand for airport services.

Countervailing power can be an effective constraint on an airport's effort to exercise its market power when an airline can credibly threaten to reduce demand for an airport's services. An airline could, for example, bypass the airport, reduce the range of services it uses, or change (even at the margin) parts of its operations, including its aircraft types and schedules.

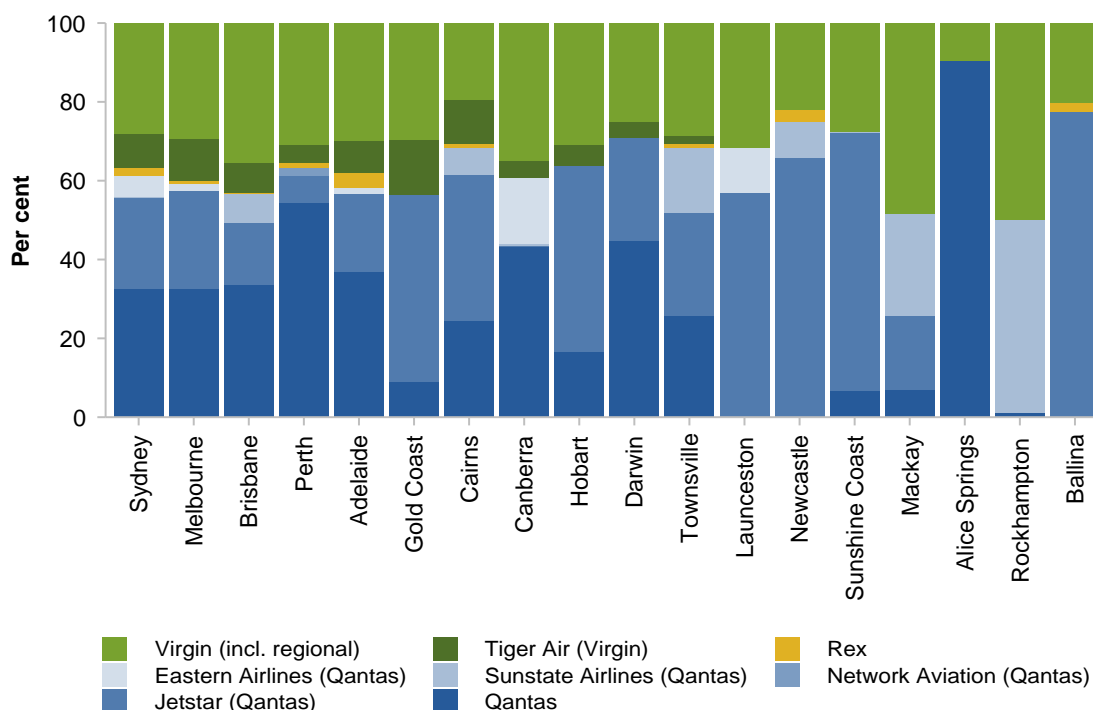
A threat to withdraw or substantially reduce demand for airport services is more credible where the airline has a large proportion of the airport's business, so the degree of countervailing power differs by airline and by airport. The market for domestic air transport services in Australia is highly concentrated. Together Qantas Group, Virgin Australia Group and Regional Express (Rex) accounted for over 95 per cent of all domestic regular public transport flights. Qantas Group is the dominant player in the domestic market accounting for about 60 per cent of all passenger movements in Australia and the majority of passenger movements at Australia's largest airports in 2017 (figure 4).

A threat will be more credible if an airline has previously acted on a threat (at this or another airport) or has otherwise signalled it is prepared to take a strong negotiating stance.

An airline's threat to withdraw or substantially reduce services at an airport is less credible when the airline has competitors that can meet any gap in demand for the airport's services. All of the monitored airports are served by multiple airlines. In contrast, most of the regional airports for which the Commission has data are serviced by a single regular public transport airline. Thus, in practice, complete withdrawal of services on a route is more likely to occur at regional airports. For example, Rex withdrew services on the Mildura–Sydney route in response to what it described as 'exorbitant' charges. The airline stated that it redeployed resources to Griffith, in New South Wales, as part of a five-year agreement with Griffith City Council, although Rex maintains flights to Mildura from Melbourne and Adelaide.

Figure 4 **Domestic air transport services are concentrated**

Share of domestic passenger market, by airline



More broadly, an airline’s bargaining power with an airport can also limit an airport’s ability to exercise its market power. Besides reducing demand for an airport’s services, other factors that improve an airline’s bargaining position include its ability to:

- leverage Commonwealth lease conditions that limit the circumstances where an airport operator can deny access to aeronautical services (even when negotiating parties disagree on charges or other terms of access, as discussed below). This provides airlines with an incentive to delay concluding commercial negotiations with, and potentially to delay payment to, airport operators until a more favourable outcome is reached
- engage in lobbying (for example, through media) to achieve a more favourable outcome
- apply for an infrastructure service to be declared under the National Access Regime, which, as noted above, can lead to arbitration by the ACCC to determine terms of access.

Wielding bargaining power in negotiations can result in commercial consequences for either party. For example, following the expiry of its commercial agreement, Qantas Group refused to pay charges at the level proposed by Perth Airport because it considered them unjustified. As a result, Perth Airport commenced action against Qantas Group in the Supreme Court of Western Australia in December 2018, stating that the difference between what the airport charged and the airline group had paid between July and September 2018 was in excess of \$11 million. These legal proceedings were ongoing at the time this inquiry report was submitted to the Australian Government.

The Commission has considered the range of competitive constraints, including airlines' countervailing power, in its assessment of which airports have market power. It found that Sydney, Melbourne, Brisbane and Perth airports have significant market power in the provision of domestic aeronautical services, creating a *prima facie* case for regulatory intervention.

- Sydney Airport:
 - is a geographic monopoly (at least until Western Sydney Airport commences operation after 2026)
 - is the gateway to Sydney, which is a significant business hub and highly differentiated product in domestic (and international) tourism markets; passengers are less likely to substitute to another destination
 - has few modal substitutes, with the exception of the Sydney–Canberra route, which accounts for less than two per cent of total domestic passenger movements at Sydney Airport.
- Melbourne Airport services Melbourne which, like Sydney, is a business and tourism hub; passengers are less likely to substitute to another destination. There are no strong modal substitutes for the majority of its passengers and it faces little competitive constraint from Avalon Airport, even in the market to serve LCCs.
- Brisbane Airport faces competition for some domestic services — Gold Coast and Sunshine Coast airports could theoretically service up to about 90 per cent of its passenger movements. In reality, these two airports are imperfect substitutes for Brisbane Airport as flight times and schedules, facilities and travel time to Brisbane vary significantly.
- Perth Airport is a geographic monopoly with few modal substitutes — 94 per cent of interstate overnight domestic visitors to Western Australia use air transport. However, Perth is less of a business and tourism hub compared to other major cities (especially following the end of the resources boom).

In addition, Sydney, Melbourne, Brisbane and Perth airports have significant market power in international aeronautical services, also creating a *prima facie* case for regulatory intervention. They are — to varying extents — gateways to cultural, business and tourism hubs and, for many passengers travelling from overseas, are not readily substitutable for other locations. Further, the market for international flights is highly competitive, reducing the potential for airlines to exert countervailing power.

Airports in the second-tier of monitoring do not have significant market power

The Commission considers that the airports that participate in the second-tier regime — Adelaide, Cairns, Canberra, Darwin, Gold Coast and Hobart — do not have significant market power and should not be added to the monitoring regime at this time.

-
- Adelaide Airport serves a relatively higher proportion of leisure passengers than the monitored airports. Leisure passengers are more responsive than non-leisure travellers to increases in charges (which reduces the airport's market power).
 - Canberra Airport has a high proportion of non-leisure passengers, which tend to be relatively insensitive to price changes. However, there is good availability of road transport alternatives for the Canberra–Sydney route — a route that is equivalent to one third of passenger movements at Canberra Airport.
 - Gold Coast, Cairns, Hobart and Darwin airports do not have a level of market power that warrants regulation — these airports are not gateways to major business hubs and they serve a relatively higher proportion of leisure passengers than the monitored airports.

The competitive constraints faced by an airport operator change over time, so an airport that currently does not have significant market power could do so in the future. The Commission will again examine which airports have market power in its next inquiry into airport regulation.

The information published by airports in the second-tier regime is not required for future assessments of market power. In the draft report the Commission stated that government agencies, industry bodies and other stakeholders do not make use of this information — no party has disputed that conclusion. The second-tier monitoring regime serves no purpose and should be discontinued.

Regional airports are unlikely to exercise, or even have, market power

Many of Australia's regional airports are serviced by, at most, a single regular public transport airline and have relatively few passengers each year. Low demand for services means that operators of many regional airports are unable to cover their operating costs. It is not clear how many regional airports run at a loss because data on the profitability of regional airports are sketchy. A 2016 report commissioned by the Australian Airports Association found that more than half of the regional airports in the sample of 36 did not cover their operating expenditures in 2014-15.

Of those profitable regional airports, some, such as Hervey Bay, cater to the tourism industry and others play an important role in the resources sector providing services to charter aircraft. This means that some regional airports will have market power, but they will be unlikely to be able to exercise it for reasons that include:

- the relatively lower barriers to entry for small scale private airports that support construction and extraction activities in the resources sector
- countervailing power from airlines — of the 103 airports for which the Commission has data, 53 are serviced by only one airline offering regular public transport services
- competition from other airports in tourism destinations.

Regional airports that cannot cover their operating costs do not have market power, let alone the ability to exercise it — the aeronautical charges needed to cover the cost of running the

airport are higher than what passengers and airlines are willing to pay. Concerns raised by participants about unjustified infrastructure investments and unduly high aeronautical charges at regional airports are more likely to reflect poor decision making and governance than the exercise of market power (discussed below).

Negotiating agreements between airports and airlines

Airport and airline operators typically engage in commercial negotiations to secure aeronautical and terminal agreements on charges, types of services, service quality and future capital investments. Typically these agreements outline service charges, including price paths for future access, consultation requirements, dispute resolution arrangements, charges to recover passenger security screening costs, and discounts on scheduled aeronautical charges if, for example, agreed passenger numbers are reached. Negotiating agreements for airport services is challenging — it is time consuming, resource intensive and costly, and the argy bargo between airports and airlines sometimes plays out in the media. This is in part because agreements can involve complex and contested investments that affect many parties, including competing airlines, with different objectives.

An infrastructure operator that exercises its market power during negotiations could, for example:

- deny access to the service (or credibly threaten to)
- refuse to provide sufficient and timely information to negotiating parties to assess the service offer
- make take-it-or-leave-it offers on charges and other terms of access that are accepted by negotiating parties, given an inability to negotiate any alternative
- set charges above the long-run average cost of provision — the minimum an infrastructure operator can charge to ensure it remains viable over time (and a benchmark for economic efficiency).

The Commission is satisfied that, on balance, airports have not systematically exercised their market power in commercial negotiations with airlines. There are several reasons for this.

First, airports have strong incentives to reach agreements with airlines, especially given the need for new investments to meet demand growth. Agreements underpin cash flow and other measures of financial performance that support investor certainty. As discussed above, Commonwealth lease conditions require airports to supply services to air transport operators, with limited exceptions. This means that airlines can pay existing (or sometimes lower) charges and continue to access airport services if an agreement has expired and parties have not yet reached a new agreement. The Commission heard, for example, that Qantas Group does not pay charges it does not agree to. Other airlines have also previously refused to pay charges at the level determined by airports.

Second, negotiating agreements is information intensive. Airport operators often use a building block model, where charges are ‘built up’ based on an airport’s expected costs. Use of this model indicates that airport operators consider it necessary to justify their prices during negotiations. Airlines are able to test each block of the model for reasonableness, and this can be a highly contentious process.

Third, the evidence provided to the Commission does not indicate that airport operators make take-it-or-leave-it offers to airlines *and* that airlines are compelled to accept them. In practice, airlines have more mobile capital than airports and can strengthen their bargaining position in negotiations if they can credibly threaten to reduce demand for an airport’s services. Threatening to reduce services, and the ability to carry out that threat, means that Qantas Group, Rex and Virgin Australia Group can have countervailing power at airports. Where this is the case, airports have limited ability to exercise their market power using take-it-or-leave-it offers.

Fourth, the operational and financial performance of the monitored airports does not indicate they are systematically exercising their market power in aeronautical services by setting charges above efficient levels (discussed below).

Airports have not systematically exercised their market power in negotiations with airlines, but the negotiation process could still be improved. Both airlines and airports have suggested a need for a set of agreed negotiating and contracting principles, including standard contract clauses and performance incentives for airports. Parties could voluntarily pursue these principles through industry-led measures, or request that the Australian Government facilitate this process.

Anticompetitive clauses should be removed from all agreements

Some agreements between airport operators and airlines contain anticompetitive clauses that:

- establish financial disincentives or loss of contractual rights if an airline is involved in a declaration application under the National Access Regime — these clauses could reduce the effectiveness of the regulatory regime by reducing the threat of declaration
- restrict an airport operator’s ability to offer lower charges or other incentives to airlines other than the signatory airline — these ‘no less favourable’ clauses seek to limit competition in both domestic and international markets, and protect the incumbency of an airline that has negotiated these favourable terms.

The Australian Government should amend the *Aeronautical Pricing Principles* (which are used by airports and airlines as guidelines during the negotiation process) to specify that any agreement between an airport and an airport user must not contain anticompetitive clauses. To deter the use of these clauses in agreements, the Australian Government should stipulate in the terms of reference for any future Productivity Commission inquiry that the monitored airports, on request, make their agreements with airport users available to the Commission on a commercial-in-confidence basis.

Airports' operational and financial performance

The Commission examined indicators of the monitored airports' operational and financial performance that could be consistent with the exercise of market power, including:

- operational efficiency — whether an airport provides aeronautical services that reflect efficient costs and input utilisation, and are of a quality that meets users' reasonable expectations
- aeronautical revenues and charges — whether the prices of aeronautical services reflect efficient costs
- profitability — whether an airport's returns are reflective of the cost of capital, accounting for the long-term nature of airport investments and operational constraints.

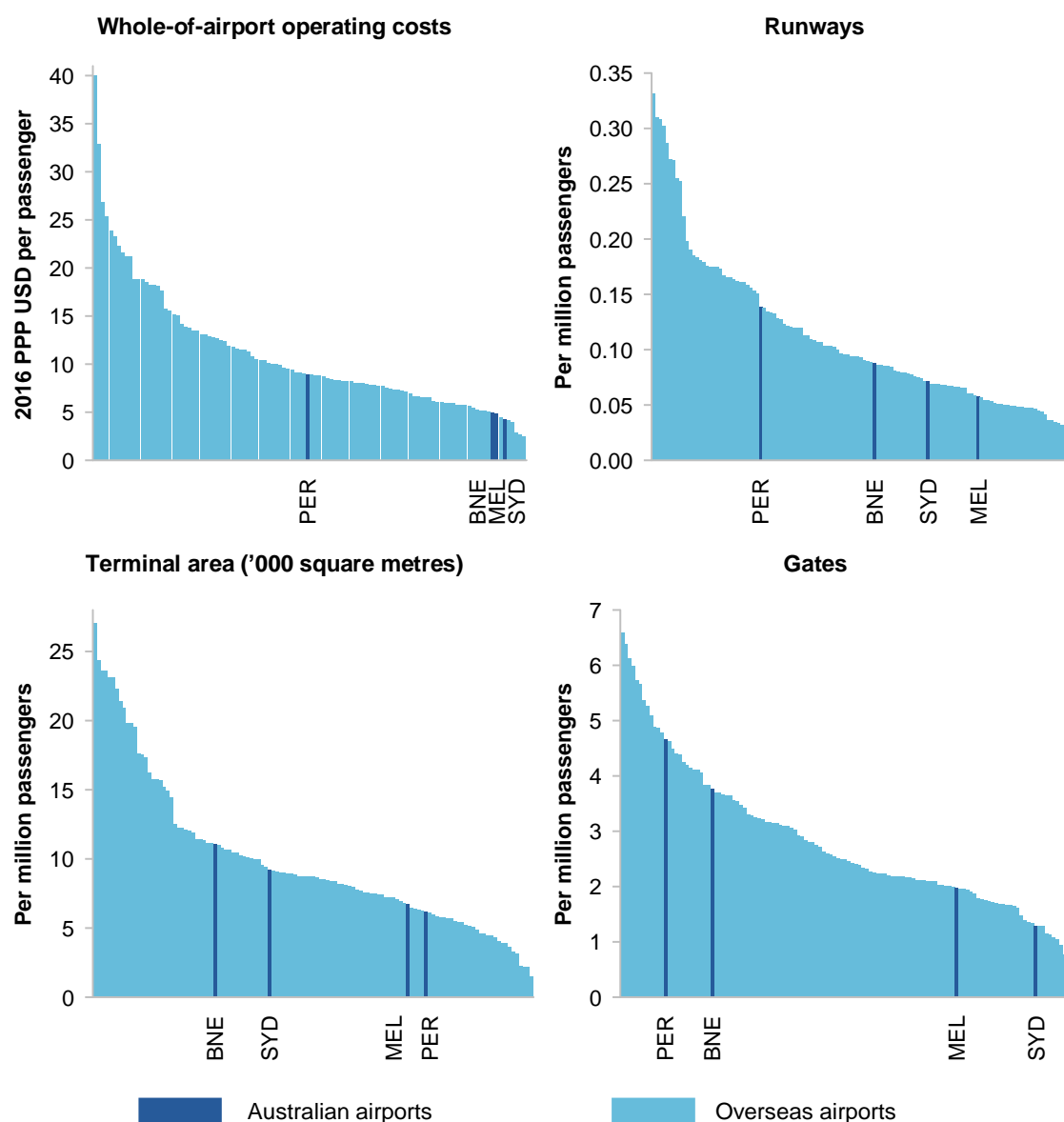
Airports' performance in aeronautical services was examined separately from non-aeronautical services. Some airline participants in the inquiry suggested that airports' performance should be assessed as a whole, with aeronautical and non-aeronautical revenues, costs and profits considered together. However, this approach would obscure important detail. Analysing whole-of-airport performance could reveal whether an airport's total profits exceed some benchmark, but would not show whether profits could be attributed to the exercise of market power in aeronautical services specifically. The Commission would not be able to identify areas of concern or recommend targeted regulatory solutions if it had taken the whole-of-airport approach.

The Commission did not set benchmarks for individual indicators. Each airport has different circumstances so it is not practical (or sensible) to define a benchmark for each indicator that would signal an exercise of market power at each airport. Instead, the Commission assessed indicators of airport performance over time, and relative to comparable airports in Australia and overseas, to determine whether the *indicator* could be consistent with the exercise of market power. It then assessed whether the *overall performance* of each airport in aeronautical services could be consistent with the systematic exercise of market power.

Sydney Airport is profitable and efficient

Sydney Airport has limited space to expand and its operations are constrained by regulatory caps on aircraft movements and a curfew. There is congestion at peak times, but the airport has low operating costs and uses its assets intensively (figure 5). Passengers rated Sydney Airport's service quality relatively well, although airlines rated it poorly.

Figure 5 Australian and overseas airports — operating costs and input utilisation, 2016

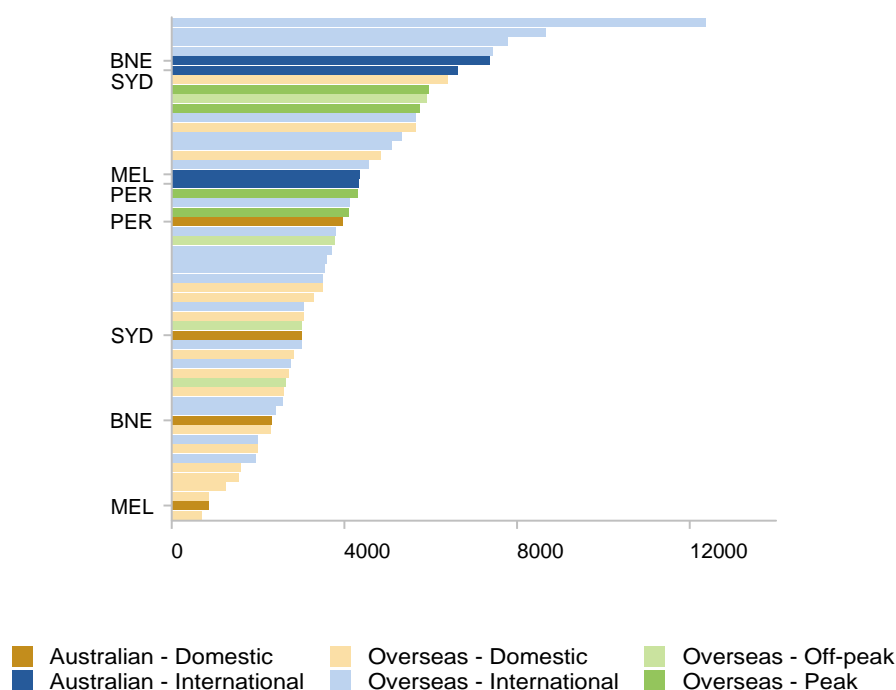


Aeronautical charges for domestic services at Sydney Airport are higher than those for Melbourne and Brisbane airports, but are not particularly high by international standards and have been relatively stable in recent years. Charges for international services increased more rapidly and are high when compared with overseas airports (figure 6). The divergence in growth rates between international and domestic charges could reflect the higher levels of competition, and lower levels of airline countervailing power, in the downstream market for international air transport. It could also be explained by the higher capital and operating costs of providing international aeronautical services. More information on domestic and international costs would help determine whether high international charges reflect higher costs of servicing international passengers.

Figure 6

Australian and overseas aeronautical charges

Airport turnaround costs for a Boeing 737-800 in purchasing power parity US dollars (current published schedules)



In the past four years Sydney Airport earned the highest return on aeronautical assets (ROAA) of the monitored airports (11–12 per cent) (figure 7). The Commission does not consider these profits to be a result of the systematic exercise of market power. Taking a ten-year timeframe to better account for cyclical factors and lumpy investment, Sydney Airport’s ROAA averaged 10 per cent per year — less than Melbourne and Perth airports, which averaged about 11 and 12 per cent per year, respectively. The level of returns at Sydney Airport also reflect its limited opportunities to invest. Passenger demand has grown more rapidly than the asset base, which has led to increasing returns on its existing assets.

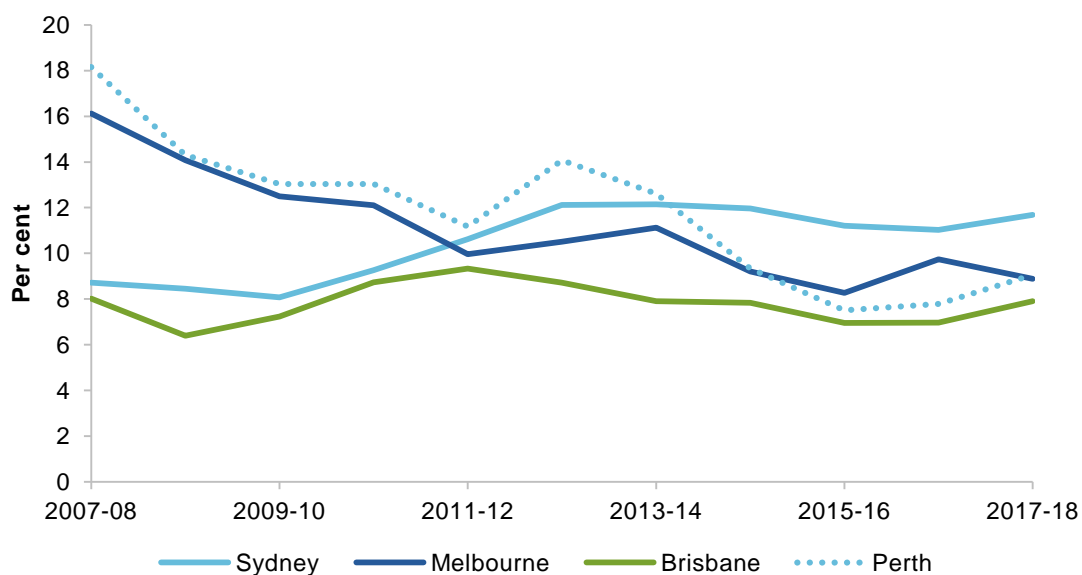
Sydney Airport’s ROAA could continue to increase if current regulatory constraints remain in place and demand for Sydney Airport’s aeronautical services continues to grow. With scarce capacity, increasing charges could be an efficient way to ration access to services, so increasing returns will not necessarily indicate the airport is exercising its market power. The addition of Western Sydney Airport will affect Sydney Airport’s future passenger growth and put competitive pressure on Sydney Airport’s charges, revenues and profits.

Sydney Airport clearly belongs in the monitoring regime — it has significant market power and its ROAA and aeronautical charges for international services are currently relatively high. Taken as a whole though, the indicators of Sydney Airport’s performance do not suggest that it has systematically exercised its market power in aeronautical services.

Melbourne Airport has invested to deal with growing demand

Melbourne Airport has a relatively high level of operational efficiency, although on-time performance at Melbourne Airport fell to its lowest point in the past eight years. The airport uses its assets intensively (figure 5) and delivers relatively good service quality. Melbourne Airport has made continued investments to meet increasing demand, but this has led to a reduction in its ROAA — from about 16 per cent in 2007-08 to less than 10 per cent for the past four financial years (figure 7).

Figure 7 **Return on aeronautical assets**



Trends in Melbourne Airport's aeronautical charges do not reflect the systematic exercise of market power. Although international charges have increased somewhat faster than domestic charges, they are in line with overseas airports (figure 6). Overall, the Commission is satisfied that Melbourne Airport has not exercised its market power in aeronautical services to the detriment of the community.

Brisbane Airport has high international charges but moderate profitability

Brisbane Airport's scheduled aeronautical charges for international services are the highest of the monitored airports, and are also high when compared with overseas peers (figure 6). It had a large increase in international charges, which could reflect one or more of the following factors: exercise of market power for international aeronautical services; divergence in costs to process domestic and international passengers; and recovery of

investment costs. Brisbane Airport justified its international charges as being reflective of recent investment in international terminals and runway capacity.

Brisbane Airport's total costs per passenger increased significantly from 2007-08 to 2017-18, but were much lower than Sydney and Perth airports. Brisbane Airport's overall service quality rating was the highest of the monitored airports in 9 of the past 11 years, although its average airline rating has been trending downwards (figure 8).

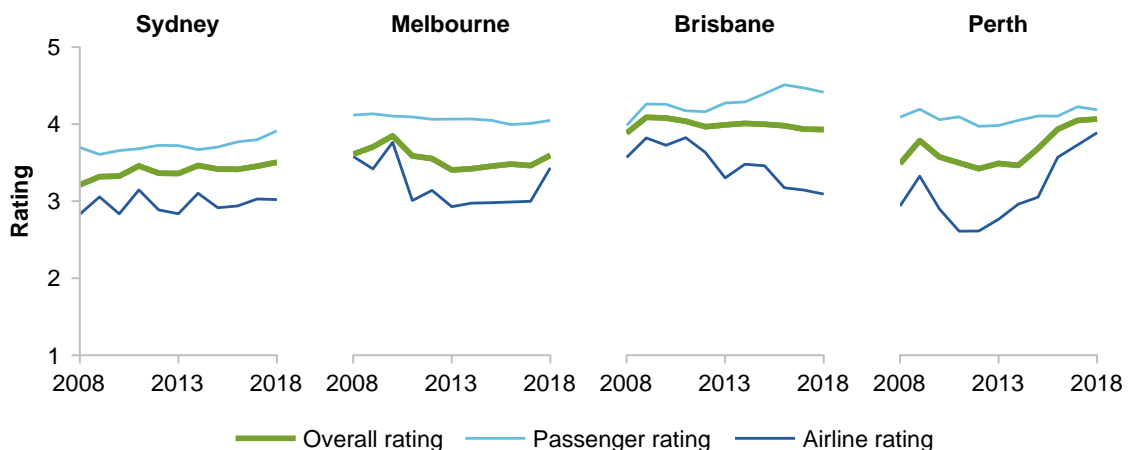
In any case, high international charges have not translated into higher profitability, with Brisbane Airport's ROAA seldom exceeding 8 per cent in the past decade (figure 7). Its moderate profitability performance and high charges would be more of a concern if they were coupled with poor operational performance but, as this is not the case, there is no suggestion that market power is being exercised at Brisbane Airport.

Perth Airport's performance can be explained by investment decisions

Perth Airport invested more heavily than the other monitored airports. It opened a dedicated regional terminal in 2013 and a new domestic pier in 2015. However, unlike the other monitored airports, there was an unexpected fall in passenger numbers at Perth Airport following the end of the resources boom.

The investment in new infrastructure has led to mixed performance on different indicators of operational efficiency. Perth Airport has the highest operating costs per passenger and the lowest rate of input utilisation of the monitored airports (figure 5). However, Perth Airport had the greatest improvement in the ACCC's quality of service ratings since 2011-12, largely because of an improvement in survey ratings from airlines (figure 8).

Figure 8 **Average quality of service ratings from ACCC monitoring**
Financial year



Perth Airport's investments were accompanied by a more than 100 per cent increase in domestic scheduled charges from 2011-12 to 2016-17. Perth Airport stated that this large increase was to fund the construction of the two new terminals, and that domestic charges were reduced by 39 per cent in real terms in 2018-19.

Investment has also influenced Perth Airport's ROAA. The airport's aeronautical asset base quadrupled in real terms from 2007-08 to 2017-18. This investment, combined with lower passenger numbers in recent years, contributed to its ROAA falling from 18 per cent in 2007-08 to 9 per cent in 2017-18.

Some of the investments undertaken by Perth Airport were supported by airlines and, to the extent that they were completed at a reasonable cost, these findings do not suggest that Perth Airport has exercised its market power.

No systematic problem but airport performance requires more scrutiny

Overall, the evidence does not suggest that the monitored airports have systematically exercised their market power in aeronautical services to the detriment of the community. Some financial indicators could be consistent with the exercise of market power, when taken in isolation. In particular, the high international charges at Sydney and Brisbane airports, Sydney Airport's profitability, and the high operating costs at Perth Airport show that there is reason to remain vigilant.

On balance, most indicators of operational efficiency (including costs and service quality), aeronautical revenue and charges, and profitability are within reasonable bounds. Each airport has generated returns sufficient to enable investment while not earning excessive profits, and passengers consider airports to have good service quality. There is no justification for significant change to the current form of regulation of aeronautical services at these airports. The Commission is, however, recommending improvements to the monitoring regime to enhance transparency over airports' operations and to more readily detect the exercise of market power.

Car parking prices at the monitored airports

Passengers can choose from a range of options to get to and from the airport. Many passengers are dropped off and picked up at the terminal by taxis, rideshare services or family and friends, or use public transport. Passengers who want to use their own cars can park in airport-operated car parks (either at-terminal car parks which are adjacent to the terminal or at-distance car parks that provide a shuttle bus service). They can also use independently owned off-airport car parks that have shuttle bus connections to the airport.

Airport operators have market power in at-terminal car parking — they are the only provider and there are no substitutes for people who want the convenience of parking within a short

walk to the terminal. Independent off-airport car parks provide a similar service to airport-operated at-distance car parking, and their competition acts as a constraint on airports' market power in that service.

Some car parking prices at the monitored airports fell over the period 2010-11 to 2017-18, while others increased. The Commission examined the factors that influence airport car parking prices at the monitored airports and found that prices are consistent with the fixed and variable costs of service provision (including the opportunity cost of land), the need to manage congestion at highly sought after parking facilities, and the value users place on the convenience of parking within a short walk to the terminal.

- Evidence does not suggest that airport operators have deliberately restricted the supply of on-airport car parking to inflate prices.
- Revenue per vehicle increased at a slower rate than operating costs per vehicle between 2010-11 and 2017-18.
- Airport operators use price to ration demand for car parking spaces close to the terminal. Using price to ration car park spaces can be an efficient way to allocate limited car parking spaces to the consumers who value them most, provided airports do not *deliberately* underinvest in infrastructure to restrict the supply of car parking. The alternative — a lower price — would result in queuing and more congestion.
- Passenger surveys show that service quality of car parking remains acceptable.

Evidence also shows that the price of airport car parking reflects the premium consumers are willing to pay to access limited car parking close to terminals — this is also consistent with efficient pricing. The price of car parking close to entertainment and sporting venues is broadly comparable to airport at-terminal car park prices, particularly for short-term use and when events are taking place (figure 9). At airports and at other venues people value proximity and are prepared to pay a premium for access to limited space.

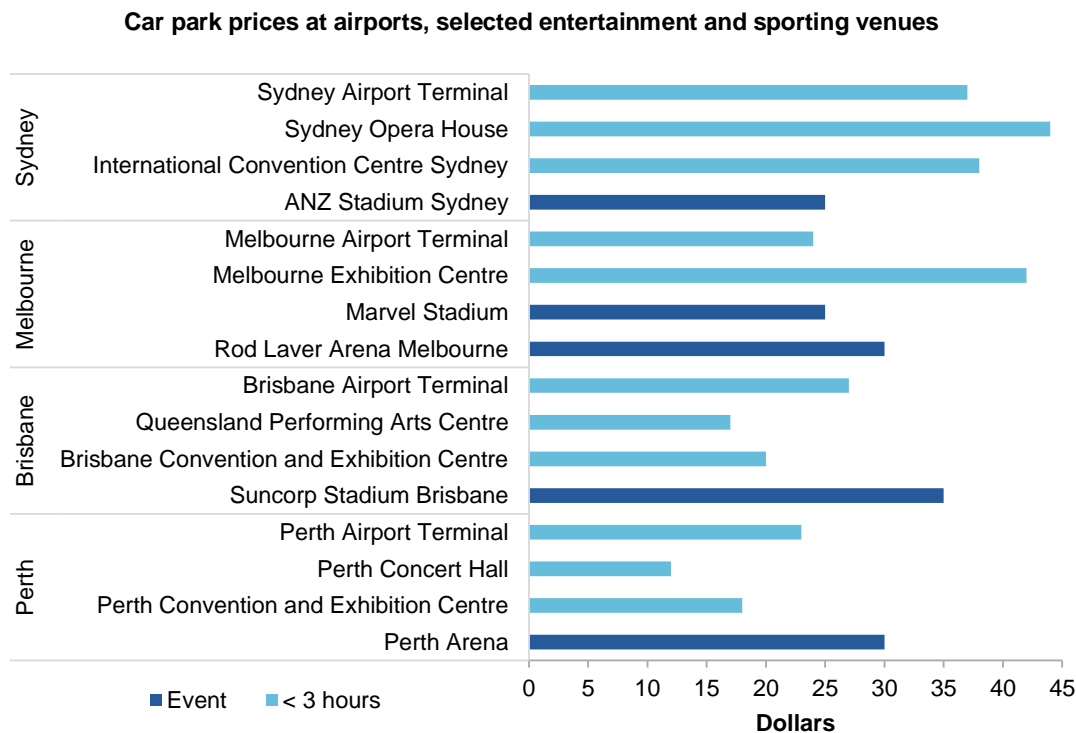
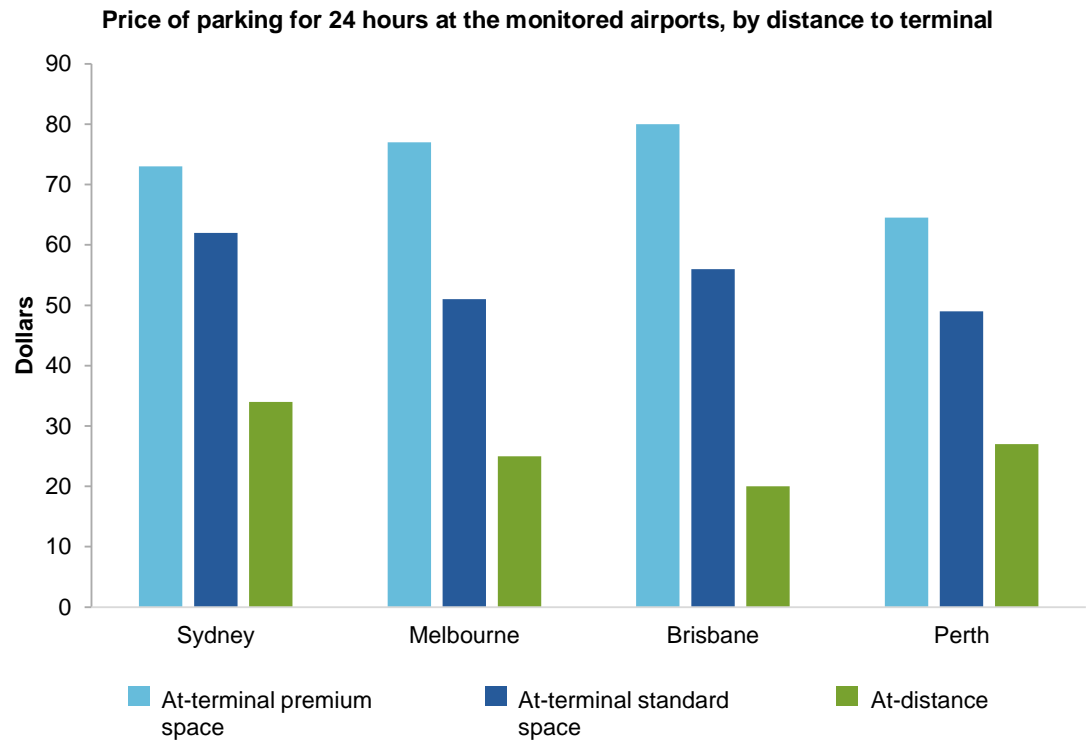
The contribution of car parking revenue to airports' profits attracts considerable public attention. However, regulatory intervention to lower car parking prices would have costs — it could lead to increased congestion and reduced investment by airport operators in car parking infrastructure.

The most effective constraint on airport operators exercising their market power in car parking is to ensure that consumers have choice and airports face robust competition from alternative modes of transport. Airports have taken some steps to increase access for alternatives, including by providing facilities and space for rideshare services and free waiting areas for meeters and greeters. The widespread adoption of smartphones has also made it easier for consumers to compare options and prices, and access online discounts.

The Commission is recommending reforms to the monitoring regime to keep up with developments in car parking and landside access, and to ensure that the regime enables adequate scrutiny of airport car parking and landside operations (discussed below). Ongoing

scrutiny is an important check on the ability of airports to limit competition from other modes of transport and other providers of car parking services.

Figure 9 Car park users value proximity



Data on some aspects of landside access are inadequate

Airport operators are able to exercise their market power in negotiations to access landside services, and by setting higher than efficient charges and unreasonable terms of access to the terminal. Airport operators could benefit by reducing the competition they face from landside operators and increasing the demand for on-airport car parking.

Inquiry participants raised concerns about airports' behaviour in landside access including inadequate consultation with landside operators, the use of take-it-or-leave-it offers during negotiations, poor service quality and unreasonable access charges. Airport operators have argued (supported by evidence) that they consult with operators when undertaking infrastructure investments and setting terms of access to the terminal precinct.

The Commission is mindful that ground transport operators have less bargaining power than airlines — they have no ability to switch to an alternative provider. This means that airport operators can make take-it-or-leave-it offers, but this is not necessarily reflective of an exercise of market power. Bilateral negotiations for bespoke arrangements with multiple landside operators are not always practical. Airport operators cannot satisfy every landside operator seeking access to limited forecourt space while meeting safety and efficiency objectives. Based on the evidence, the Commission considers that airport operators have not systematically exercised market power in negotiations with landside operators.

Airports have supported the introduction of new ground transport services, such as rideshare, and have provided facilities to enable their operation. Reported quality of service has also been within a reasonable range at the monitored airports (although there is scope for improvement at Sydney Airport) and has not deteriorated despite increases in the demand for kerbside space over time. The evidence shows that airports' investment in landside infrastructure has been reasonable and they have supported competition in ground transport options to and from the airport precinct. Airports have also worked with governments to improve land transport links, including the capacity of roads and adequacy of public transport services to airports.

Like car parking, landside access charges are influenced by capital and operating costs, the need to manage congestion, and the efficient operation of the terminal forecourt. The available evidence suggests that the *structure* of landside access charges appears to be consistent with efficient operations, but the Commission is unable to be definitive about the efficient *level* of charges due to inadequate data. Changes to the monitoring regime to collect more data on landside access would inform future assessments of whether airport operators have exercised market power in setting landside access charges.

Reforming the monitoring regime

Sydney, Melbourne, Brisbane and Perth airports have market power in domestic and international aeronautical services at levels that justify regulatory oversight — they should

continue to be monitored. Other capital city airports and airports in regional centres have less (or no) market power and should not be subject to increased monitoring at this time.

The Australian Government should continue with the current light-handed approach to economic regulation. The pillars of the regime should remain in place, including annual price and quality of service monitoring administered by the ACCC and periodic reviews by the Productivity Commission — both are critical to deliver transparency over airports' operations and to maintain a credible threat of additional regulation. The combination of the monitoring reports and Commission reviews allows a regular assessment of the performance of airports, whether an airport should be added to the monitoring regime (or removed from it), and whether a monitored airport should be subject to additional regulation.

Significant changes to the regulatory regime are not justified at this time, but the monitoring regime should be enhanced to increase the scrutiny of airport operators' behaviour and ensure that any airport that exercises its market power will be more readily detected. The Commission is therefore recommending reforms to improve the level of detail in the monitoring reports.

More detailed reporting on airports' operations

International passenger numbers have grown faster than domestic passenger numbers at the monitored airports over the past decade. Airports are providing a different mix of services to airlines and passengers, and the sources of airports' revenues and costs have changed. Airport charges for international aeronautical services are significantly higher than charges for domestic services — airport operators stated that providing international services is more costly but the Commission cannot verify this because, currently, the ACCC does not publish separate data on the costs or revenues associated with domestic or international services. The Commission is recommending separate reporting of costs and revenues in relation to domestic and international aeronautical services to determine whether charges are the result of an airport exercising its market power, or the higher costs of providing international services.

The Commission recognises that there are challenges in disaggregating the costs of providing aeronautical services. Some operating and capital costs can be directly attributed to international or domestic services, and should be reported as such. The costs of common-use infrastructure (such as costs related to runways or shared terminal infrastructure) should be reported as common costs. Airport operators should be required to disclose to the ACCC any methods they use to allocate common costs between domestic and international services.

The enhanced monitoring regime will assist the ACCC, the Commission and other parties to monitor the relationship between the costs of providing aeronautical services and the airports' charges for those services. The information could also assist airport users in their commercial negotiations.

The ACCC's indicators of aeronautical service quality were last updated in 2013 and are due for revision. The Australian Government should direct the ACCC to consult with airports and airport users on quality of service indicators for aeronautical services, with a view to updating the set of indicators that are used in its annual monitoring reports.

The Commission identified gaps in the monitoring regime as it applies to car parking and landside access. The Australian Government should require airport operators to provide the ACCC with separate information on the number of users of at-terminal and at-distance car parking, and the revenues and costs associated with these services. Airport operators should also be required to provide information on the number of people that use various landside access services (such as taxis, shuttle buses and public transport) and the charges, revenues and costs associated with each service type.

The benefits of updating the monitoring regime outweigh the costs

Monitored airports generally supported the Commission's draft recommendations to improve the monitoring regime, with the caveat that, in some cases, disaggregated data on aeronautical revenues could be used to back out commercially sensitive information. The Commission has revised its recommendation to safeguard against this.

Improving the monitoring regime would also entail additional administration costs for the ACCC and compliance costs for the monitored airports — these costs are expected to be modest and less than the benefits of increased oversight. The impost on the ACCC would be small and airports should be able to extract most of the additional data from their financial reporting systems.

Other reform options canvassed during this inquiry that would have greater costs and risks than the Commission's recommendations are discussed in the body of this report. An airport-specific negotiate-arbitrate model supported by airlines, their representative Airlines for Australia and New Zealand (A4ANZ), and the ACCC was the reform option that featured most prominently in consultations, submissions and hearing testimonies. The Commission has considered the merits of the proposal and has set out its assessment below to inform future discussions.

An airport-specific negotiate-arbitrate regime — risky with few benefits

A user (or potential user) of airport infrastructure can apply to the National Competition Council for the service to be declared under the National Access Regime if agreement cannot be reached with the airport operator on reasonable terms. The declaration criteria, along with the opportunities for merits and judicial review, are safeguards to ensure that arbitration is only available when it would encourage competition and promote the public interest. The CCA establishes matters that the ACCC, as the arbitrator, must take into account when making a determination. These arbitration rules ensure that one access seeker cannot use

arbitration to restrict a competitor's access to the service, or require a competitor to bear the costs of extending the infrastructure facility, among other things.

Bypassing checks and balances when market power has not been exercised

Airlines, A4ANZ and the ACCC suggested introducing an airport-specific negotiate-arbitrate framework that would skip over the declaration stage of the National Access Regime, giving an airport user access to arbitration (by a commercial arbitrator) at any time it considered that negotiations were not leading to a favourable outcome. A4ANZ submitted a draft design of a proposed model that it stated would not deviate significantly from the National Access Regime were an arbitration to occur. The Commission disagrees and has identified some important differences between the A4ANZ model and the National Access Regime.

First, the A4ANZ proposal defines the scope of the proposed regime as 'core regulated airports', whereas the scope of the National Access Regime is determined on a case-by-case basis that involves applying the declaration criteria (among other things) to the infrastructure service. Airline participants argued that getting an infrastructure service declared under the National Access Regime is time consuming, costly and uncertain, and that an easier path to arbitration is needed to 'level the playing field' in negotiations with airport operators.

The Commission has a different view. The Australian Government established the declaration criteria to promote competition and the public interest — they are essential regulatory tests to ensure arbitration is available when it would be beneficial to the community, not obstacles to be avoided at the discretion of an airline. The A4ANZ proposal would impose a negotiate-arbitrate framework on the monitored airports even though the evidence does not support a conclusion that they have *exercised* their market power to the detriment of the community. It would also apply to airports, such as Gold Coast and Hobart, that *do not* have market power. There would be no requirement to demonstrate that arbitration would promote competition or the public interest.

Second, the A4ANZ proposal does not include access to administrative or judicial review, which are available for decisions under the National Access Regime.

Overriding the declaration and appeal processes would not 'level the playing field' — it would be inherently unbalanced in favour of airlines. An arbitrator would be able to compel airports to provide services to airlines at the arbitrated price, but would not be able to compel airlines to use airport services at that price. If the airport is not satisfied with an arbitrated outcome, it has no choice — it must provide services at the arbitrated price. An airline that is not satisfied with an arbitrated outcome could change (even at the margin) parts of its operations, including its aircraft types and schedules. The imbalance in an airport-specific negotiate-arbitrate regime is a result of the mobility of airline capital and the immobility of airport capital.

Risks to commercial negotiation, airport investment and competition

Some inquiry participants stated that negotiate-arbitrate frameworks rarely lead to arbitration and instead, incentivise parties to reach commercially negotiated outcomes. A4ANZ drew heavily on the framework that applies to East Coast gas pipelines in developing its proposal, and noted there has been only one arbitration in the 20 months since those rules came into effect.

The implementation of an airport-specific arbitration regime that is binding on airport operators would change the incentives and behaviour of negotiating parties in ways that would be detrimental, rather than beneficial, to the community. Airport operators and airport users would negotiate ‘in the shadow’ of arbitration, with the outcomes of negotiations based on assumptions about the arbitrator’s potential decisions rather than the negotiating parties’ commercial incentives.

Providing airlines with access to arbitration without the checks and balances of the National Access Regime would distort airports’ incentives to make investments. Airport operators make long-lasting investments in common-use infrastructure (such as runways and terminals) and recover the costs of the investment from numerous airport users over decades. This creates two issues for arbitration.

First, airport investment can be risky and irreversible. An airport operator could be subject to arbitration at the discretion of airlines and, when considering new capital investment, would be obligated to consider the possible outcomes of future arbitrations. An arbitrator could re-evaluate the value of assets and the revenue that airports can earn from them. Airport operators would reduce the level of investment in airport infrastructure unless they are compensated for this extra risk through higher up-front charges or guaranteed future revenues.

Second, airports invest in common-user facilities to provide services to multiple users. Unrestricted access to arbitration would create opportunities for incumbent airlines to engage in anticompetitive conduct, such as using arbitration over a common-user facility to reduce the ability of other airlines to compete. For example, a full-service airline might use arbitration to seek a higher level of common-user service and then have this same service — with the resultant higher price — imposed on LCC competitors. The National Access Regime limits access to arbitration so that it is only available where it would increase competition.

An arbitration between an airport and one airport user about a common-user facility would have implications for other users of that facility. The arbitrator would have to take these effects into account, as well as the effects on passengers and the community. The greater the number of affected parties, the higher the risk that the arbitrator would make an error.

Effects on passengers and the community

Airlines and A4ANZ argued that an airport-specific negotiate-arbitrate framework would lead to lower airfares. The Commission considers that the link between arbitration and airfares is tenuous, and that passengers might be worse off compared with the current

light-handed approach. As noted above, a negotiate-arbitrate regime without the protection of the declaration process under the National Access Regime would likely distort airport investment decisions and could result in a reduction of competition between airlines. Both of these would be detrimental to passengers and the community. Contrary to the claim made by the airlines and A4ANZ, airfares could be higher if, for example, anticompetitive behaviour successfully delayed necessary airport investment, and this resulted in congestion.

There is no doubt that some commercial negotiations between airports and airlines have been challenging but, on balance, airports have not exercised their market power in their negotiations or conduct. An airport-specific negotiate-arbitrate framework that bypasses the protections offered by the National Access Regime would have perverse effects, leading to outcomes that would harm competition and the community. The benefits would need to be very large for the costs and risks of such a framework to be tolerable. They are not.

Access arrangements at Sydney Airport

Sydney Airport's regional ring fence, and the price cap and price notification regime, aim to support access for airlines operating flights between Sydney Airport and regional New South Wales (box 1). Sydney Airport is also subject to broader regulatory constraints, in particular, the movement cap, curfew and slot management scheme.

Box 1 Regional access arrangements at Sydney Airport

The Sydney Airport Slot Management Scheme sets out guidelines for the allocation of aircraft movement slots at Sydney Airport. The regional ring fence is a feature of the scheme that reserves a number of slots for airlines operating flights to or from regional New South Wales. Airlines can only operate regional services in legislated peak periods (weekdays from 6 am to 11 am, and 3 pm to 8 pm) using the ring-fenced slots.

Under the regional price cap and price notification regime, prices for aeronautical services and facilities are capped for airlines operating flights between regional NSW destinations and Sydney Airport. Sydney Airport must notify the ACCC before it can increase prices for these services. Price-capped regional charges are currently about half of Sydney Airport's scheduled domestic aeronautical charges.

The regional ring fence, and the price cap and price notification regime

The current regional access arrangements facilitate access for airlines operating regional flights into Sydney Airport, but there is scope for improvement. Allowing airlines to use any peak-period slot for regional air transport services would enable airlines to more easily trial regional services in peak periods, more flexibly respond to changes in market demand on different routes, and use their aircraft more efficiently. Increased competition on existing routes and new regional air transport services resulting from this reform would also benefit

passengers and regional communities. Airlines that use non-regional slots for regional air transport under the Commission's proposed reform should pay domestic aeronautical charges or negotiate charges with Sydney Airport. This would prevent the price cap and notification regime, and any associated costs, from expanding due to a change in the use of slots.

The ACCC may request information such as financial models and cost allocation methodologies when conducting a price notification assessment. Some of this material can be treated on a confidential basis, but Sydney Airport's proposed prices and other terms are made public. The public nature of price notifications can discourage commercially negotiated outcomes because airlines may not wish for their competitors to learn sensitive information. Encouraging commercial negotiations between Sydney Airport and airlines operating regional services could lead to better outcomes, including mutually agreed improvements in aeronautical services and facilities used by those airlines. Commercial negotiations would be facilitated by updating the price cap and notification regime such that it applies only to regional aeronautical services that are not covered in commercial agreements.

The regional ring fence, and the price cap and price notification regime, are among a range of factors that affect airlines' decisions to service a regional route. The opening of Western Sydney Airport in 2026 may also affect these decisions in the longer term. The Commission's next inquiry into airport regulation should consider the continued need for regional access arrangements at Sydney Airport in light of the development of Western Sydney Airport and any other future considerations. This analysis would be supported by implementation of the Commission's recommendation to expand the monitoring regime to include data for Sydney Airport on costs and revenues in relation to the provision of aeronautical services for air transport to regional New South Wales. This proposal would allow the Commission and others to more easily evaluate the costs of the regional access arrangements against their benefits.

Broader regulatory constraints at Sydney Airport

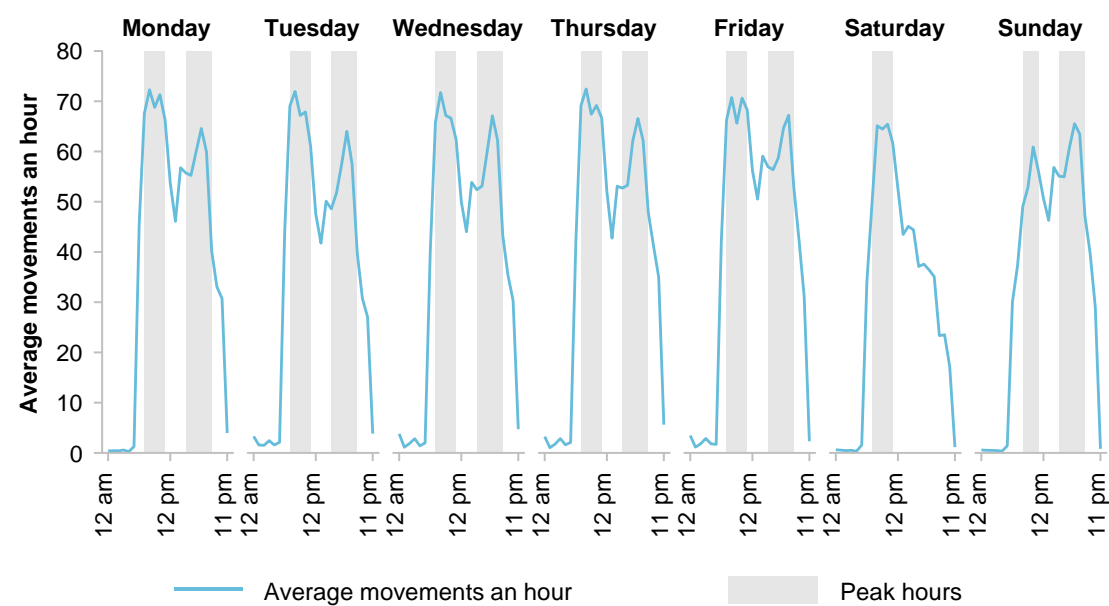
The Australian Government implemented a regulatory movement cap and curfew at Sydney Airport to manage the effects of aircraft noise on residents. The movement cap restricts the capacity of Sydney Airport to 80 movements an hour (in non-curfew periods). In general, the average number of actual movements exceeds 70 an hour only a few times a week during morning peak periods (figure 10). The curfew limits aircraft movements between 11 pm and 6 am, with only a small number of flights permitted, including pre-approved freight aircraft.

Sydney Airport's movement cap and curfew are important for managing the effects of aircraft noise and maintaining Sydney's liveability. Airservices Australia (ASA) estimated that about 96 000 Sydney residents lived within an Australian Noise Exposure Index contour in 2017 (figure 11). Residents underneath a flight path in Sydney in 2018 experienced, on average, one disruptive noise event every 14 minutes, or about 70 noise events across the airport's non-curfew period each day. Residents emphasised the importance of the curfew for an unbroken night's sleep and that disruptive noise events can have negative effects on

health, including mental and social wellbeing. There was strong resistance from the residents of Sydney to any change that would relax the regulatory constraints.

The movement cap has unintended consequences. For example, it can exacerbate delays when there are disruptions, such as those due to weather events. Delays can lead to significant costs for airlines and passengers that cascade across Australia’s aviation network, due to the high number of aircraft that pass through Sydney Airport. However, the extent to which the movement cap is responsible for compounding delays is complicated by other factors. Airline crew displacement, airline cancellation decisions, and physical and operational constraints at Sydney Airport, can also prolong the time taken to recover from disruptive events.

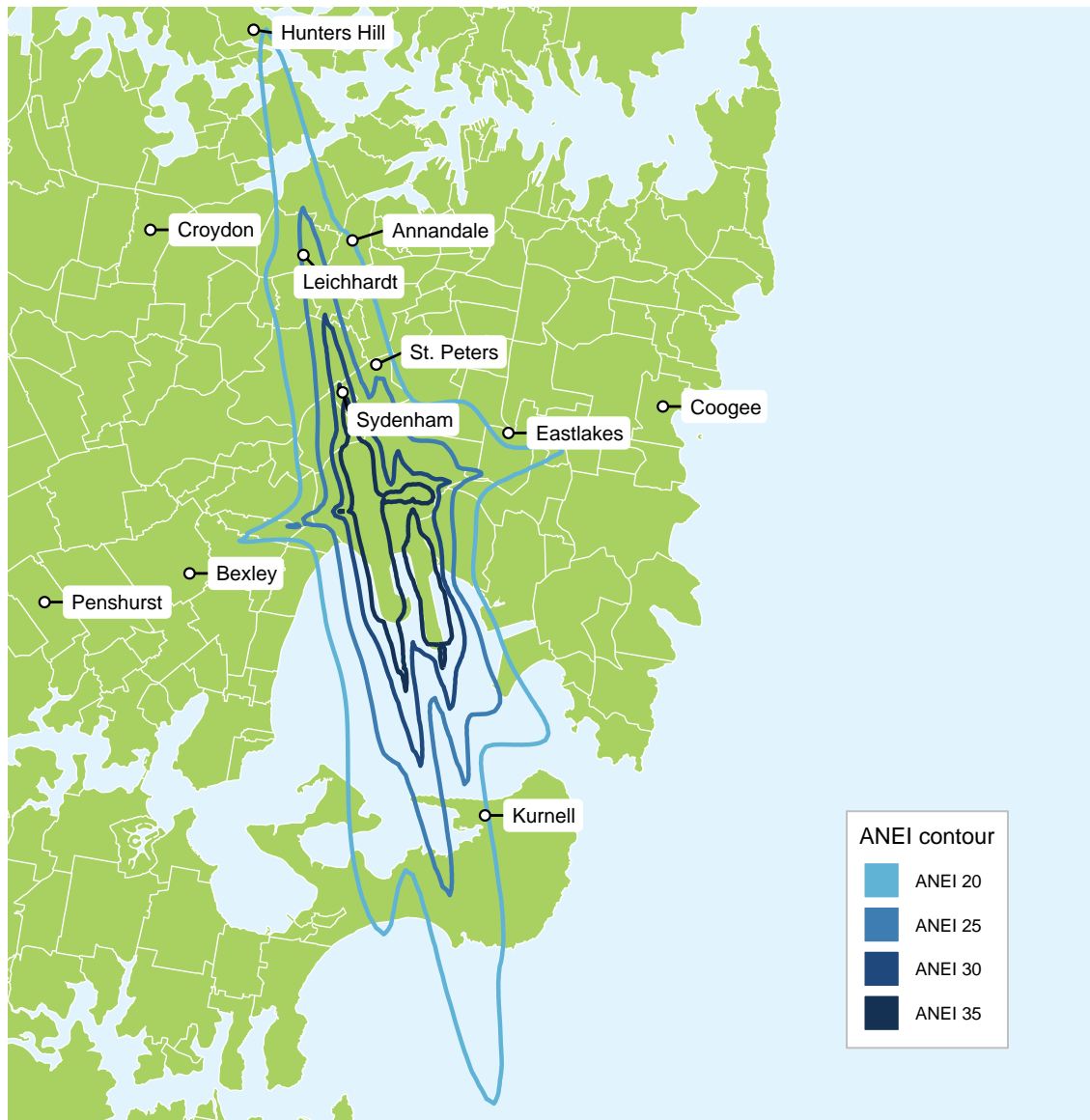
Figure 10 **Average hourly movements at Sydney Airport by day of the week**
2018



Sydney Airport and airlines supported changes to the movement cap that address some of its unintended consequences. There is a case for reform to the measurement of the movement cap — this can be done without changing the limit on the actual number of movements and would make it more likely that the intended 80 actual movements an hour could be achieved. The movement cap is currently measured on a 15-minute rolling hour basis — there are effectively four ‘regulated hours’ within any non-curfew 60-minute period. A reform that requires ASA to measure the cap on actual movements only once (rather than four times) an hour would allow ASA to process movements more smoothly and less conservatively, and reduce its compliance costs. This reform would also reduce any necessary delays to departing aircraft that are caused by the movement cap, benefiting airlines and their passengers. The

cap would ensure that the number of actual movements within a 60-minute period starting on the hour does not exceed 80.

Figure 11 **Australian Noise Exposure Index (ANEI) contours around Sydney Airport**
2018



There would also be benefits from allowing alternative types of freight aircraft to operate during the curfew hours of 11 pm to 6 am. The Sydney Airport Curfew Act 1995 (Cwlth) permits the use of one type of jet aircraft (the British Aerospace 146 (BAe-146)) for freight operations during this time. Introducing noise standards for freight aircraft would allow alternative types of freight aircraft that are no louder (but are potentially larger) than the BAe-146 to move through Sydney Airport at night. This would benefit consumers, freight

service providers, the airport and the community more broadly. The Commission proposes that the current cap on the number of freight aircraft movements be retained, so local residents would not be affected by an increase in the number of actual movements or noise events.

Historical precedence provisions in Sydney Airport's slot management scheme mean that airlines are entitled to their slots from a previous scheduling season, provided they meet certain criteria. These provisions can provide certainty to existing airlines and their customers, but also prevent new entrants from gaining access to an airport and could be exploited by incumbents to limit competition between airlines. The Australian Government should commission a public review of Sydney Airport's slot management scheme to assess possible reforms to the current arrangements. The proposed review should seek to achieve a system that delivers better outcomes for passengers, and the broader community, by enabling a wider variety of routes or lower airfares. Investigating the need to implement or revise slot management at other major Australian airports would also be beneficial.

Competition in markets to supply jet fuel

Jet fuel accounted for the largest single source of airline operating costs, at about 20 per cent in 2017-18 (although this share varies by airline). In the same year, the demand for jet fuel in Australia was 9000 megalitres, which cost airlines between \$7–9 billion. This means a one cent per litre decrease in the jet fuel price could result in a \$90 million reduction in operating costs for airlines refuelling in Australia.

Infrastructure to supply jet fuel

Markets to supply jet fuel comprise a complex chain of infrastructure services to transport jet fuel from its origin as refined crude oil in international or domestic refineries to the wingtip at Australian airports. The supply chain includes both off- and on-airport infrastructure, including joint user hydrant installation (JUHI) infrastructure and pipelines. JUHI infrastructure owners lease land from airport operators for a period of up to 20 years. In addition to lease fees, some airports charge fuel suppliers fuel throughput levies, which can be justified if they are agreed to during lease negotiations as part of an efficient pricing regime.

The jet fuel supply chain is dominated by four large vertically integrated suppliers — BP, Caltex, Mobil and Viva — that are involved in each part of the supply chain, often in a joint venture arrangement between two or more of these suppliers. Vertical integration and horizontal coordination generate benefits by capturing economies of scale and scope, and by lowering coordination costs where related services, such as the piping, storage and distribution of fuel, would otherwise be provided separately.

The structure of markets to supply jet fuel can result in a more efficient provision of infrastructure services, but these benefits are tempered by potential losses in competition.

- Vertical integration of suppliers and the concentrated ownership of infrastructure alone provide some scope and incentive for providers to charge prices above the efficient level.
- High barriers to accessing infrastructure at multiple points in the supply chain have made it difficult for new jet fuel suppliers to establish a supply chain at some airports.
- Most of the fuel supplied from import terminals to the monitored airports is transported through pipelines owned by existing suppliers. New suppliers could truck fuel to the airport, but there are congestion and environmental cost disadvantages associated with trucking large volumes of fuel. Trucking is also unlikely to be a viable substitute to pipelines for supplying fuel to the monitored airports over the long term.

There is cause for concern with the level of competition

Markets to supply jet fuel are characterised by a small number of vertically integrated suppliers and high barriers to entry, and this has likely led to higher prices to access infrastructure services and higher fuel prices. Greater third party access to infrastructure services would increase competition and put downward pressure on prices to access those services, as well as on fuel prices.

The conditions for competition are improving with some airports, such as Melbourne and Darwin, introducing lease arrangements for the JUHI infrastructure that incorporate open access arrangements for third party fuel suppliers. In addition, Perth, Sydney and Adelaide airports are currently renegotiating their JUHI leases (and the joint operated storage facility lease in Adelaide) and have indicated that open access will be an important feature of any new agreement. Including open access in lease agreements is a positive development in markets to supply jet fuel as it could allow third parties to gain access to the supply chain and increase competition. In addition, the National Access Regime acts as backstop regulation to provide third party access to infrastructure services to supply jet fuel.

Ensuring the JUHI at Western Sydney Airport operates on an open access basis, including after any future privatisation, would avoid competition problems associated with limited access JUHI infrastructure when the airport commences operation.

The Australian Government should stipulate in the terms of reference for the next airports inquiry that the Productivity Commission assess the state of competition in markets to supply jet fuel, and review progress toward open access at JUHIs.

The jet fuel supply chain is critical for aviation operations and requires sufficient capacity to minimise fuel disruptions. Infrastructure owners need certainty, including through long-term leases with airport operators, to make investments in jet fuel infrastructure. Long-term investment should be supported by good planning and consultation between fuel companies, airport operators, airlines, and the Australian, State and Territory Governments.

A jet fuel infrastructure planning group should be established at each of the monitored airports as part of the master planning process. The group's remit could include, among other things: capacity constraints and any foreseeable pressure points; linkages between different parts of the infrastructure supply chain; demand forecasts and actions to ensure security of supply; and future infrastructure requirements and investment planning.

Infrastructure at regional airports

Regional airports — the majority of which are owned and operated by local councils — provide important services for communities, but are prone to poor decision making and governance. For example, airlines and their representatives questioned the financial asset management practices at some council-operated airports. Concerns raised included arbitrary revaluations of airport assets and the treatment of government-funded assets in financial reporting that leads to increases in aeronautical charges.

Capability at council-operated regional airports would be improved by providing operators with tools that enable them to better manage airport assets. The WA Department of Transport recognised this need and has developed the Strategic Airport Assets and Financial Management Framework (the WA Framework). The aim of the WA Framework is to provide a transparent approach for managing airport assets and improve airport operators':

- engagement with stakeholders
- understanding and financial management of the asset base
- determination of future demand for air transport services and the appropriate charges to maintain and replace airport assets.

Broader adoption of the WA Framework would help build the capability of local councils in other jurisdictions. The Australian Government should review the efficacy of the WA Framework in 2022, in consultation with State, Territory and Local Governments. Pending the findings of that review, the WA Framework should be adapted and rolled out by governments in other jurisdictions with the objective of providing a template for sound asset management practices and greater transparency when determining airport charges at regional airports.

The criteria used by the Australian, State and Territory Governments to assess the merit of financial support for many infrastructure projects at regional airports can lack rigour and lead to unwarranted investments. Further, a council's regional development objectives can be in conflict with the efficient provision and operation of airport services. Participants gave the example of Kangaroo Island Airport, stating that infrastructure was upgraded — with Australian and State Government funded support — to cater for more passengers and larger aircraft based on overly optimistic assumptions of future passenger numbers and aircraft requirements. Unjustified infrastructure upgrades funded by the Australian, State and Territory governments could lead to the perverse outcome of a loss of air services to communities if they result in increased aeronautical charges that airlines and passengers are not willing to pay.

Australian, State and Territory Governments should adopt transparent and independent public assessment processes for the funding of airport infrastructure to improve decision making and investment outcomes that include:

- an assessment of the merit of and airport users' willingness to pay for proposed infrastructure
- demonstration of the application of sound asset management practices by the airport operator seeking government support for infrastructure investments.

Improving these processes would help ensure that infrastructure at regional airports remains fit for purpose and meets the needs of airlines and communities.

Recommendations and findings

Airports with market power

FINDING 5.1 AIRPORTS ARE NOT SYSTEMATICALLY EXERCISING THEIR MARKET POWER

Sydney, Melbourne, Brisbane and Perth airports (the monitored airports) have significant market power in aeronautical services, but they have not systematically exercised their market power to the detriment of the community. There is no justification for significant change to the current form of regulation of aeronautical services at any of these airports at this time.

Relatively high international charges at Sydney and Brisbane airports give reason to remain vigilant. More specific data on costs and revenues for international and domestic aeronautical services provided at the monitored airports would allow greater scrutiny of airport performance (Recommendation 9.4).

Access arrangements at Sydney Airport

RECOMMENDATION 7.1 USING ANY PEAK-PERIOD SLOT FOR REGIONAL FLIGHTS

The Australian Government should amend the Sydney Airport Slot Management Scheme 2013 (Cwlth) to allow peak-period slots that are not part of a permanent regional service series (PRSS) to be used for flights servicing regional New South Wales. These slots should not become PRSS slots when used for regional flights.

Future declarations relating to the regional price cap and notification regime should only apply to regional flights operated through PRSS slots after the current declaration ceases on 30 June 2019.

RECOMMENDATION 7.2 COMMERCIAL NEGOTIATIONS FOR NSW REGIONAL SERVICES

The Australian Government should ensure that future declarations relating to the regional price cap and notification regime at Sydney Airport only apply to aeronautical services that are not covered in commercial agreements between Sydney Airport and airlines operating flights servicing regional New South Wales, after the current declaration ceases on 30 June 2019. Future declarations should specify that prices in commercial agreements cannot be used to assess whether Sydney Airport has breached section 95Z of the *Competition and Consumer Act 2010* (Cwlth).

The Australian Government should consult with stakeholders about the drafting of any legislative instruments relating to this reform.

RECOMMENDATION 7.3 MEASURING SYDNEY AIRPORT'S MOVEMENT CAP ONCE AN HOUR

The Australian Government should amend section 6(2) of the *Sydney Airport Demand Management Act 1997* (Cwlth) to define a regulated hour as a period of 60 minutes starting on the hour.

RECOMMENDATION 7.4 ALTERNATIVE TYPES OF FREIGHT AIRCRAFT DURING THE CURFEW

The Australian Government should amend the *Sydney Airport Curfew Act 1995* (Cwlth) to introduce noise standards for freight aircraft allowed during the curfew, rather than specifying only one type of freight aircraft (the British Aerospace 146). The noise standards should allow alternative types of freight aircraft to operate during the curfew, provided they do not increase aircraft noise above current levels, or the number of freight aircraft movements above the current cap (74 a week).

The new freight aircraft noise standards should be in place by the end of 2020.

RECOMMENDATION 7.5 REVIEWING SLOT MANAGEMENT AT AUSTRALIAN AIRPORTS

The Australian Government should commission a public review of the Sydney Airport Slot Management Scheme 2013 (Cwlth) following the completion of the International Air Transport Association's review into the Worldwide Slot Guidelines (WSG), expected at the end of 2019.

The public review should assess how effectively the Scheme contributes to the efficient use of airport infrastructure, taking into account regional access and noise management objectives. The review should consider reform options in relation to:

- whether slot allocation arrangements generate the greatest net benefits to the community or if alternatives that are not based on historical precedence would improve outcomes for passengers
- the outcomes of the WSG review and any WSG provisions that are not currently part of the Scheme
- the costs and benefits of continued alignment with the latest WSG, including the effects on competition between airlines.

The review should also investigate the need to implement or revise slot management at other major Australian airports.

Competition in markets for jet fuel

FINDING 8.1 PRICES ARE LIKELY HIGH BUT THERE IS NO ROLE FOR NEW ACCESS REGULATION

The structure of markets to supply jet fuel at Sydney, Melbourne, Brisbane and Perth airports (the monitored airports) gives cause for concern about the level of competition. The markets are characterised by vertically integrated suppliers and high barriers to entry and this has likely led to higher prices to access infrastructure services and higher fuel prices.

Any change to the regulatory environment at this time is likely to result in a net cost to the community. The risks associated with industry-specific access regulation could be considerable, given the potential effect on infrastructure investment incentives. The National Access Regime under Part IIIA of the *Competition and Consumer Act 2010* (Cwlth) remains an effective tool for providing access to significant infrastructure.

Some airports and fuel suppliers have acted to improve competition at the joint user hydrant installation (JUHI), through introducing open access in JUHI lease agreements. This removes a hurdle to accessing the JUHI infrastructure but does not improve access to upstream infrastructure.

RECOMMENDATION 8.1 JET FUEL INFRASTRUCTURE AT WESTERN SYDNEY AIRPORT

Through the Shareholder Ministers of the Western Sydney Airport Corporation (the Minister for Finance and the Minister for Urban Infrastructure), the Australian Government should recommend to the Western Sydney Airport Corporation Board that the on-airport jet fuel infrastructure operate on an open access basis and that this should be a condition of any future privatisation.

RECOMMENDATION 8.2 INTRODUCING JET FUEL INFRASTRUCTURE PLANNING GROUPS

The Minister for Infrastructure should recommend a jet fuel infrastructure planning group be incorporated into the master planning process at each monitored airport. The group should be sufficiently flexible to suit the arrangements at each airport, but could be tasked with discussing, among other things:

- capacity constraints and any foreseeable pressure points
- linkages between different parts of the infrastructure supply chain
- demand forecasts and actions to ensure security of supply
- future infrastructure requirements and investment planning.

Improving airport regulation

FINDING 9.1 AN AIRPORT-SPECIFIC NEGOTIATE-ARBITRATE REGIME WOULD BE DETRIMENTAL

An airport-specific negotiate-arbitrate regime that bypasses the checks and balances of the National Access Regime would:

- undermine the incentives for genuine commercial negotiation between airport operators and airport users
- increase the risks that airports would face in making investments and distort their incentives to make investments
- create opportunities for incumbent airlines to engage in anticompetitive conduct.

Such a regime would be detrimental to the community as a whole.

RECOMMENDATION 9.1 REMOVING ANTICOMPETITIVE CLAUSES FROM AGREEMENTS

The Australian Government should amend the *Aeronautical Pricing Principles* to specify that any agreement between an airport and an airport user must not contain anticompetitive clauses. This includes clauses that would constrain a user's access to regulatory remedies for the exercise of market power and clauses that directly or indirectly reference the terms offered to users' competitive rivals.

RECOMMENDATION 9.2 FUTURE PRODUCTIVITY COMMISSION REVIEWS

The Australian Government should continue the practice of five yearly Productivity Commission inquiries into the economic regulation of airports, to determine the effectiveness of the regulatory regime in achieving the following objectives:

- promoting the economically efficient operation of, and timely investment in, airports and related industries
- minimising unnecessary compliance costs
- facilitating commercially negotiated outcomes in airport operations.

In requesting the next inquiry, the Australian Government should also ask the Commission to consider:

- whether any airports should be added to, or removed from, the price and quality of service monitoring regime
- if there is a continued need for arrangements to facilitate access for airlines servicing regional New South Wales
- the state of competition in markets to supply jet fuel, including progress toward open access joint user hydrant installation infrastructure lease agreements.

The Australian Government should stipulate in the inquiry terms of reference that the monitored airports make their agreements with airport users available to the Commission on request, on a commercial-in-confidence basis.

RECOMMENDATION 9.3 DISCONTINUE SECOND-TIER AIRPORT MONITORING

The Australian Government should issue a statement that the voluntary self-reporting system for second-tier airports is discontinued.

RECOMMENDATION 9.4 MORE DETAILED INFORMATION ON AIRPORT PERFORMANCE

The Australian Government should amend Part 7 of the Airports Regulations 1997 (Cwlth) such that, in addition to current requirements, monitored airports are required to provide to the Australian Competition and Consumer Commission (ACCC), for each financial year, statements that:

- show the number of passengers that depart from and arrive at each terminal
- separately show the costs and revenues in relation to the provision and use of aeronautical services for domestic flights and for international flights
- for Sydney Airport, show the costs and revenues in relation to the provision and use of aeronautical services for flights servicing regional New South Wales
- separately show the number of users, costs and revenues in relation to the provision and use of at-terminal and at-distance car parking, and the utilisation rates for each type of parking
- separately show the number of vehicles using different landside services, and the charges (and other terms of access), operating revenues and costs attributed to the provision of each landside service
- report any costs that are allocated to the provision of specific services, including: international and domestic aeronautical services; at-terminal and at-distance parking; and landside access services
- report the methodologies that they use to allocate costs to specific services.

The Australian Government should direct the ACCC to:

- publish annual monitoring reports
- publish the methodologies the monitored airports use to allocate costs across different services
- publish a database of the information the airports provide
- consult with airports and airlines to determine whether any of the information they provide is commercially sensitive and to develop approaches to reporting that balance disclosure with the need to protect sensitive information.

The Australian Government should implement these changes in time for the 2020-21 monitoring report.

RECOMMENDATION 9.5 IMPROVING QUALITY OF SERVICE MONITORING

The Australian Competition and Consumer Commission (ACCC) should, within 12 months, provide advice to the Australian Government on an updated set of quality of service indicators, in consultation with airports, airlines, other airport users and the Department of Infrastructure, Transport, Cities and Regional Development.

Once the ACCC has developed its recommended set, the Australian Government should amend schedule 2 of the Airports Regulations 1997 (Cwlth) to codify the updated set of indicators.

Regional airports

RECOMMENDATION 10.1 **ASSET MANAGEMENT AT REGIONAL AIRPORTS**

The Australian Government should review the efficacy of the Western Australian Strategic Airport Assets and Financial Management Framework in 2022, three years after its implementation in Western Australia. The review should be conducted in consultation with State, Territory and Local Governments.

Pending the findings of that review, the Western Australian Strategic Airport Assets and Financial Management Framework should be adapted and rolled out by governments in other jurisdictions with the objective of providing a template for sound asset management practices and greater transparency when determining airport charges at regional airports.

RECOMMENDATION 10.2 **FUNDING FOR REGIONAL AIRPORT INFRASTRUCTURE**

The Australian, State and Territory Governments should:

- ensure that an independent analysis of proposed government funding of regional airport infrastructure is completed before funding is committed. The analysis should include a public consultation process and assess:
 - the economic and financial viability of proposed infrastructure investment, including the ongoing operational costs
 - whether the project is consistent with the long-term strategy of the region and the airport's master plan
 - the social and economic benefits and the recipients of those benefits
 - users' (airlines and communities) willingness to pay for the infrastructure
 - whether the airport operator has in place sound asset management practices
- assess proposed government-funded investments in airport infrastructure using the relevant functional economic region as the basis for decisions, not individual local councils
- monitor and independently evaluate any project that receives funding to assess whether the project outcomes have been achieved. The evaluation report should be published.

The Australian, State and Territory Governments should publish the justification for funding any infrastructure projects that were not supported by independent analysis.