Australian Competition and Consumer Commission

Submission to the Productivity Commission’s Inquiry into Price Regulation of Airport Services

May 2001
## 10. INCENTIVES FOR NEW INVESTMENT

10.1 Introduction

10.2 Price caps - when are new investment provisions required?

10.3 Options for implementing investment provisions

10.4 Revised new investment provisions

## 11. IMPLEMENTING A PRICE CAP

11.1 Introduction

11.2 Starting point parameters for the price cap

11.3 Congestion management

11.4 Clarity about coverage of the price cap

11.5 Legislative base for a price cap

## 12. TRANSPARENCY PROVISIONS

12.1 Introduction

12.2 Monitoring

12.3 Accounts reporting

### Attachments:

A. Report by KPMG, “Review of Airports Regulatory Accounts”.

B. Regulation of airports overseas – an overview.

C. Report by Professor Stephen King, “Market power and airports”.

D. Report by NECG, “Treatment of New Investment at Regulated Airports”.
**Glossary**

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airports Act</td>
<td><em>Airports Act (Cth) 1996</em></td>
</tr>
<tr>
<td>APAC</td>
<td>Australia Pacific Airports Corporation</td>
</tr>
<tr>
<td>AR</td>
<td>Average revenue</td>
</tr>
<tr>
<td>BAA</td>
<td>British Airports Authority</td>
</tr>
<tr>
<td>CAA</td>
<td>Civil Aviation Authority (UK)</td>
</tr>
<tr>
<td>Commission</td>
<td>Australian Competition and Consumer Commission</td>
</tr>
<tr>
<td>FAA</td>
<td>Federal Aviation Authority (US)</td>
</tr>
<tr>
<td>FAC</td>
<td>Federal Airports Corporation</td>
</tr>
<tr>
<td>NECG</td>
<td>Network Economics Consulting Group</td>
</tr>
<tr>
<td>MC</td>
<td>Marginal cost</td>
</tr>
<tr>
<td>ODRC or DORC</td>
<td>Optimised Depreciated Replacement Cost</td>
</tr>
<tr>
<td>PS Act</td>
<td><em>Prices Surveillance Act (Cth) 1983</em></td>
</tr>
<tr>
<td>SACL</td>
<td>Sydney Airports Corporation Ltd</td>
</tr>
<tr>
<td>Trade Practices Act</td>
<td><em>Trade Practices Act (Cth) 1974</em></td>
</tr>
<tr>
<td>WACC</td>
<td>Weighted Average Cost of Capital</td>
</tr>
</tbody>
</table>
EXECUTIVE SUMMARY

In 1997 and 1998 the Federal Government privatised 17 of the 22 airports it owned and operated through the Federal Airports Corporation (‘FAC’). The airports were leased for 50 years with an option to renew for a further 49 years. The Government has announced that it will privatise the five remaining airports over the next year or so.

Before privatisation the Government established a comprehensive system of regulation to apply to the private airport operators. This includes:

- prices oversight;
- access arrangements;
- quality of service monitoring; and
- public reporting of financial and other types of performance.

After almost four years of operation the Government has asked the Productivity Commission to review the need for such arrangements and to advise on what form any future regulations should take.

This submission explains the Australian Competition and Consumer Commission’s (‘Commission’s’) experience in administering the airport regulatory arrangements and presents the Commission’s views on them along with suggestions for improvements.

The submission is structured as follows. Part A provides an overview of the current regulatory framework and how it has operated since its introduction in 1997. Chapters 1 to 5 explain each element of the framework that applies to the privatised airports, while chapter 6 explains the arrangements that apply at Sydney Airport. Part A also provides a brief history of previous regulation of airport services in Australia and a summary of the operation of the main legislative base for the framework, the Prices Surveillance Act 1983 (‘PS Act’).

Part B of the submission reviews the experience with the airports regulatory arrangements to date and the lessons learned. Chapter 7 considers the threshold question of whether airports should be price regulated. Chapter 8 considers which airports and which airport services should be regulated. Chapter 9 puts a case for ongoing use of price caps. Issues associated with implementation of price caps, including incentives for new investment, starting point prices, ‘X’ values and the legislative base are considered in chapters 10 and 11. Chapter 12 reviews the current transparency provisions (accounts reporting and quality of service monitoring).

Why regulate airports?

It is widely accepted that vigorous and effective competition normally provides the best means of promoting economic efficiency. In some markets, however, competition may not be possible. This can be the case with airports. Airports often face limited direct competition in the provision of aeronautical services either from other airports or from
other forms of transport. Furthermore barriers to entry, at least for larger airports, tend to be high. Reasons for high barriers include:

- Planning restrictions and limited availability of large land sites in or near large cities.
- The lumpy and sunk nature of new airport investments.
- Economies of scale and scope in the provision of airport services.
- Network externalities\(^1\) in the provision of airport services.

Combined with limited substitutability on the demand side these barriers to entry can give rise to significant market power. The circumstances in which such market power are likely to arise are discussed in detail in chapter 8 of this submission and in a report by Professor Stephen King to the Commission (see attachment C).

Failure to address the consequences of such market power may have significant implications for economic efficiency. Airlines providing international services to and from Australia generally operate in a competitive environment. New airline entry has increased competitive pressures in the domestic market. In both cases the impact of increased airport charges is likely to be passed through to the travelling public in the form of higher airfares.

These higher airfares can result in allocative inefficiency. As explained by the Productivity Commission in its Review of the National Access Regime:

> In the first instance, these effects stem from a higher price for, and lower use of, the final service, relative to the situation in which prices were set to encourage efficient use of that service. In the simple monopoly model, lower use of the final service is a cost to ‘allocative’ efficiency.\(^2\)

There are further allocative efficiency implications where the service is also an intermediate input. High prices can distort production and consumption patterns of the goods and services using air travel as an input. For example:

- Air travel is a business input for many companies. Higher prices can affect business input costs and the ability of such companies to compete in Australia and overseas.
- Air travel is critical to the development of the tourism industry. Tourism is a major contributor to the Australian economy. High airport charges have the potential to damage both domestic and international tourism.

\(^1\) Network externalities arise when the value of a service to a customer is positively related to the number of users of the service. As an example, a telephone service is more valuable to a user if more people can be called using the service.

The major role played by the aviation industry in Australia makes regulation of airport charges particularly important.

One of the arguments advanced in favour of deregulating airports is that demand for airport services is inelastic\(^3\). The argument seems to be that the allocative efficiency losses from increases in prices are limited when demand is inelastic – in other words that price rises would do little to change the behaviour of airlines and their passengers.

This argument misses the point. While it is true that the welfare losses associated with a given price increase will be lower the less elastic is demand, the real issue is what prices might be in the absence of regulation. A rational company will set prices to maximise profits. The less elastic is demand the higher the profit maximising price – and the larger the allocative efficiency losses. In setting prices firms trade off the additional revenue and profit from higher prices against the reduction in revenues and profits as customers stop using the service. If, as is argued, the demand for airport services is relatively inelastic the resulting profit maximising prices will be high, well above the charges currently levied.

Standard economic theory is clear about one thing – the less elastic is demand the stronger the case for regulation.

Having said this, if airports are in a position to price discriminate between different customers, the allocative efficiency losses resulting from monopoly pricing might be mitigated. At the limit, if they were able to perfectly price discriminate, the deadweight welfare losses to society could be eliminated altogether.

However, the Commission considers this irrelevant given practical realities. The evidence to date suggests that airlines and airports have little capacity to price discriminate in relation to aeronautical services\(^4\). Furthermore even if they could, the information requirements to enable such pricing behaviour are likely to be extremely high\(^5\).

Economic regulation is not new to airports or the airport privatisation process. In Australia and overseas Governments have recognised the potential for market failure in the provision of airport services. In every developed country Governments have responded by regulating prices at privatised airports – except in New Zealand. There the outcomes of the so called ‘light handed’ approach have been disappointing. Airport charges in New Zealand are considerably higher than Australia, and airport operators and their customers have been bogged down in lengthy and costly litigation processes. The results to date have prompted the Government to reconsider the ‘light handed approach’ to regulation. It is moving to re-regulate services in the energy and telecommunications sectors. In relation to airports it has instructed the New Zealand Commerce Commission to determine whether price controls should be implemented.

---

\(^3\) See for example, Peter Forsyth, *Airport Price Regulation: Rationales, Issues and Directions for Reform*, Submission to the Productivity Commission Inquiry into Price Regulation of Airport Services, March 2001.

\(^4\) See for example Network Economics Consulting Group’s report to the Commission, *‘Dual Till’ at Sydney Airport*, May 2000. A copy of this paper is available at [www.accc.gov.au](http://www.accc.gov.au)

\(^5\) See discussion in chapter 8 of this submission.
Market power of airport operators

The Commission engaged Professor Stephen King to provide advice on an approach to determining the extent of market power at airports in Australia. Professor King proposed a six-step iterative framework for considering this issue. These steps are:

1. define the problem;
2. determine the potential market participants;
3. determine the potential time-frame(s) and functional levels for analysis;
4. consider the substitution possibilities on both the demand and supply sides;
5. re-examine the underlying assumptions; and
6. examine the airport’s market power.

Professor King’s report is at attachment C. The report concludes that larger Australian Airports have significant market power in relation to a range of services.

A number of airport operators argue that they are not in a position to take advantage of market power because airlines have countervailing power. The argument seems to be that airlines may be in a position to withdraw or curtail services in response to price increases, or to change their existing or planned use of non-aeronautical services at the airport.

The Commission rejects this argument. Professor Forsyth describes countervailing power as a “mirage”. He states that “airlines cannot credibly threaten to leave airports because they do not have substitute sources of supply”. Professor King also rejects the argument, at least in relation to larger airports. In a case study of Melbourne Airport he concludes:

As noted in section 1.4, countervailing power from the airlines might be able to at least partially offset Melbourne airport’s market power. There are two main domestic carriers currently operating out of Melbourne airport as well as two smaller carriers. One of the major carriers, for example Qantas, might be thought to have significant countervailing power. However, because of its location in the second largest Australian city, it is not clear that even a major airline, such as Qantas, can credibly exercise countervailing power to Melbourne airport. It is likely that Qantas could not threaten to cease services to Melbourne or even to substantially curtail these services. If Qantas were to carry out such a threat, then this would undermine its own profitability and probably lead to significant gains to Qantas’ rival carriers.

The analysis does not deal with the possibility of airlines collectively threatening to cease services. However, the Commission notes that section 45 of the Trade Practices Act generally prohibits such actions.

This submission argues that airport regulatory provisions should be targeted at those airports and services where the market power of airport operators is significant. Price

---

6 Refer to Attachment C.
regulation should not apply to other airports and services. This means that the Commission supports the ‘dual till’ approach to regulation. It considers that the dual till approach has certain advantages over the ‘single till’ approach used in the past. In particular it is likely to provide superior investment outcomes.

Nevertheless a dual till approach should only be adopted if the delineation between services which are and are not subject to regulation reflects the market power of the airport operator. The risk of applying a dual till that is too narrow is that the regulatory measures will be ineffective. The current arrangements already show signs of regulatory bypass. The current price cap aims to reduce airport landing charges over time. However, the introduction of fuel throughput levies at Brisbane and Perth airports has offset a substantial part of those reductions.

Chapter 8 of this submission provides a detailed analysis of market power at Australian airports using the six-step iterative framework developed by Professor King and with a focus on demand and supply side substitution possibilities.

The Commission recommends use of Professor King’s framework for assessing market power. The Commission’s application of the framework suggests that Sydney, Melbourne, Brisbane, Perth, Adelaide, Canberra and Darwin airports should be subject to continued price regulation. The submission recommends prices monitoring of the deregulated airports (Alice Springs, Coolangatta, Hobart, Launceston and Townsville) as a transitional measure.

In relation to which services should be regulated, this submission’s application of Professor King’s framework suggests that the services currently in the price cap should continue to be regulated. It also suggests that price cap coverage should be broadened to include aircraft refuelling, check-in and certain ground access services provided by the airport operators.

**Incentive regulation**

Chapter 9 of this submission considers three options for regulating prices at airports:

- negotiate-arbitrate models such as in Part IIIA of the Trade Practices Act;
- tariff setting (eg rate of return pricing); and
- incentive regulation.

The submission favours ongoing use of incentive regulation in the form of CPI-X price caps. Price caps provide clarity and certainty for all of the parties about pricing outcomes. They also have provide strong incentives to service providers to reduce production costs. The Commission notes that this approach is consistent with the approach adopted in regulating electricity and gas transmission and distribution in Australia and airports in the U.K.

By contrast the submission does not favour use of the negotiate-arbitrate model as the primary means for price regulation of airports. The experience with negotiate-arbitrate models to date suggests that they have a number of fundamental limitations, including:
• the high propensity for the parties to seek arbitration rather than negotiate outcomes;
• time consuming and costly processes;
• the potential for the negotiate-arbitrate model to give rent sharing outcomes; and
• the potential in an airport context for the regulator to be involved in micro-management of aspects of airport operations.

The negotiate-arbitrate model was originally described as a ‘light handed’ model with arbitration only as a last resort. The experience since then suggests this is not the case.

Use of a price cap raises a number of implementation issues. The submission discusses the main issues, namely the price cap parameters, the legislative base for a price cap and new investment incentives.

Price cap parameters

Introducing new CPI-X price caps for regulated airports raises the question of how to set starting point prices and the ‘X’ values. The Commission proposes that prices from the current regulatory framework should be carried over to form the starting point for a new price cap. The alternatives, such as setting starting point prices to reflect costs, are likely to result in significant increases or decreases in charges. Given that these starting point prices relate to existing, mostly sunk assets, there is little if any reason to make such a change from an economic efficiency perspective. Instead the main effect of such a change would be a distributional one, either a transfer from airlines and their passengers to airport operators or vice versa.

The case for this approach has been recognised in the U.K. There assets are not revalued as part of the current regulatory framework. Instead, and as proposed by the Commission in this submission, prices are carried over from one five year regulatory period to the next.

In relation to the ‘X’ values the Commission proposes adopting the same approach as for the first five-year regulatory period, that is, to set the ‘X’ values on the basis of expected productivity gains, adjusted to take into account new investment.

---


10 See for example the Commission’s Delta Car Rentals determination (discussed in chapter 5 and 13). The issues of concern to Delta raised a number of ground access operational issues which the Commission could be obliged to consider as part of an arbitration.

11 Chapter 10 discusses possible approaches to new investment and proposes the inclusion of some new investment in the ‘X’ values.
**Legislative base for a price cap**

The Commission considers that the current PS Act does not lend itself to the regulation of airports through CPI – X price caps. The primary problem with the legislation is that compliance with the price cap is voluntary. The PS Act requires airport operators to notify the Commission of price increases, but does not prevent them from ignoring the requirements of the price cap. Other limitations relate to information gathering powers, processes for assessing notifications and the relationship between the PS Act and Ministerial directions made under section 20 of the PS Act. These are discussed in chapter 11 of this submission and in the Commission’s submission to the Productivity Commission’s Review of the PS Act.

As an alternative this submission proposes that the relevant provisions of the PS Act should be substantially strengthened or that the price cap should be enacted as a new part to either the Trade Practices Act or the Airports Act. On balance the Commission considers that there are advantages to including the price cap in the Trade Practices Act rather than separate industry specific legislation.

**New investment**

Price caps allow airport operators to improve their profit performance in two ways. One is to reduce costs, the other to increase revenues for any given cost structure. Airport operators will have strong incentives to carry out investments which achieve either of these objectives. In such cases price caps should achieve efficient investment outcomes without any additional investment incentive provisions.

However, in other cases, and in particular quality and capacity enhancing investments, price caps by themselves may not provide adequate incentives for investment, even if airport users want the investment and would be prepared to pay for it. In general price caps provide weak incentives for airport operators to carry out quality improving investments. This is because the relationship between the quality of airport services and traffic volumes (and in turn revenues) is likely to be weak except in extreme conditions.

Similar under certain circumstances capacity enhancing investments will not pay for themselves. Typically capacity enhancing investments pave the way for traffic growth over time. In turn under a price cap such increases in traffic volume translate into higher revenues. An airport operator will have strong incentives to carry out such investments if the additional revenues from the new facilities exceed the costs of constructing them. Whether or not this would be the case is an empirical question, dependent on the incremental cost of the new facility and the additional revenues generated by it. It may well be the case that the outcomes are such that capacity enhancing investments are not undertaken even if they are welfare enhancing.

Given this, investment provisions to provide additional incentives for quality and capacity enhancing investments would seem to be warranted.

Chapter 10 of this submission and the report to the Commission on new investment by NECG (at attachment D) consider options for providing such incentives. The main options considered are:
1. Set ‘X’ values to accommodate anticipated investment, so that the ‘X’ values are lower the more investment factored in;

2. Increase prices to recover the costs of new investments as they come on-line (the current arrangements work in this way); and

3. A hybrid of these two options.

This submission assesses each of these options against a number of objectives, focusing on economic efficiency and administrative simplicity. The discussion concludes in favour of a hybrid approach. This approach would factor ongoing smaller investments into the ‘X’ value or other price cap parameters, but still provide for a pass through of the costs of major projects such major new terminal or runway works.

The hybrid approach combines advantages of the other two options. It would provide strong incentives for investment by directly linking price increases to cost. At the same time it would reduce the administrative burden associated with the current arrangements by limiting the pass through provisions to major projects.

The challenge with this approach is to provide clarity about what projects are eligible for a pass through. To achieve this the Commission suggests introduction of a clear and workable cut off between what can and can not be passed through. The Commission also suggests that the projects and dollar amounts factored into the price cap parameters should be made available to all interested parties.
PART A
ECONOMIC REGULATION OF AIRPORTS – CURRENT ARRANGEMENTS

In 1997 and 1998 the Commonwealth Government privatised 17 of the 22 airports it owned and operated through the Federal Airports Corporation. The Government established a number of economic regulatory measures covering the privatised airports. The measures include:

- a price cap on ‘aeronautical’ services;
- monitoring of prices, costs and profits of ‘aeronautically related’ services;
- an access regime to complement Part IIIA of the Trade Practices Act 1974 (“Trade Practices Act”); and
- transparency provisions, including quality of service monitoring and accounts reporting requirements.

The Commission has the role of administering these measures. This part of the submission explains the regulatory arrangements and their implementation.
1. PRICE REGULATION OF AIRPORTS IN AUSTRALIA

1.1 Introduction

Corporatisation and privatisation of airports is a relatively recent development in Australia. This section provides background information on the history of price regulation of Australian airports. It also provides background information on the main legislative instrument for price regulation of airports, the Prices Surveillance Act 1983 ("PS Act").

1.2 History of airport price regulation in Australia

This section provides an historical context to the current regulatory framework. It provides a brief history of the economic regulation of airports in Australia leading up to the privatisation of the major airports in 1997 and 1998.

From the early days of aviation the Federal Government was active in developing and operating airport infrastructure. However the notion that the aviation industry should meet the cost of these facilities was slow to emerge. Prior to 1947 there was no systematic attempt to recover aviation industry costs, and it was not until 1961 that a policy of full cost recovery was adopted.

Over the next two decades successive governments pursued various incarnations of a cost recovery policy. These efforts were markedly unsuccessful. Recovery levels never exceeded two-thirds and were more commonly around one half of costs. The balance was funded by the general taxpayer.

In 1984 an inquiry identified numerous problems with the existing arrangements including:

- The costs of providing and maintaining aviation infrastructure were not adequately accounted for. Some infrastructure costs were simply not counted, whilst others were measured in a dubious manner;

- The methods of allocating costs to industry sectors (such as general aviation, domestic trunk aviation) were arbitrary;

- Charges were not closely related to costs. They generally fell short of average costs and in many cases facilities were made available at little or no cost to users, leading to distortions to demand;

- Investment decisions were taken without regard to financial consequences, including cost recovery implications; and

---

12 Amendments to the Air Navigation Act were intended to achieve recovery of 30 percent of the operating costs of Government provided aviation facilities and services.

• The administration of, and development of new, aviation infrastructure was perceived by the aviation industry as not closely related to its needs.\textsuperscript{14}

These issues were the backdrop to a broad reworking of aviation policy in the early 1980s. A key reform was the establishment of the Federal Airports Corporation (FAC) to manage Government owned aviation facilities. The rationale for the formation of the FAC was described in the second reading of the \textit{Federal Airports Corporation Bill 1985} thus:

Departments of state are of necessity bound by the Government processes which inhibit commercial flexibility and responsiveness. The aviation industry has been critical of this fact and of the inability of the current administrative processes to make changes in a timely manner to meet the requirements of a dynamic market. Additionally governments in the past have unduly influenced the priorities for aviation infrastructure development for reasons unrelated to economics or efficiencies. Indeed many of the decisions taken in the past have inhibited economy and efficiency in the industry.\textsuperscript{15}

The government intended the FAC to manage and develop airports on a commercial basis. The FAC was required to achieve a reasonable rate of return on its assets and pay a reasonable dividend to the government.

The FAC was nevertheless subject to a degree of government oversight. The economic rationale for maintaining government involvement was that an airport operator may possess significant market power and may use this power to restrict an airport's capacity, increase landing fees and earn monopoly profits.\textsuperscript{16} The FAC was required to submit financial plans and to carry out its functions in a manner which complied with government policies.\textsuperscript{17} The Minister was empowered to give directions to the FAC with respect to the performance of its functions but could not direct the FAC in relation to significant investment decisions without conducting an inquiry.

The FAC was required to notify the Minister prior to imposing or varying an aeronautical charge. The definition of ‘aeronautical’ charges is considered in more detail below. Briefly, it includes charges levied on aircraft for use of services and facilities provided by an FAC owned airport but not those imposed under a lease or licence. The legislation offered the FAC scope to move towards more efficient pricing principles. Section 56(10) of the \textit{Federal Airports Corporation Act 1986} (FAC Act) provided:

\begin{quote}
An aeronautical charge shall not be fixed at an amount that exceeds the amount that is reasonably related to the expense incurred or to be incurred by the [FAC] in relation to the matters in respect of which the charge is payable.
\end{quote}

The FAC did not embrace this concept. While it progressively brought charges more closely into line with costs, charges for most services (including landing and parking of aircraft and transfer of passengers and cargo) were imposed largely through a single

\begin{itemize}
\item Bosch Report p. 14.
\item Australia, House of Representatives\textit{1985, Debates}, p. 2692.
\item For example in relation to environment protection.
\end{itemize}
landing charge.\textsuperscript{18} As single rates for aeronautical charges were adopted across all FAC airports, no allowance was made for the very real possibility that costs may vary between airports.\textsuperscript{19} Charges paid by general aviation operators bore little relationship to their use of airport facilities.\textsuperscript{20}

Subsequent to the establishment of the FAC the Government declared the FAC’s aeronautical charges under section 21 of the PS Act. The imposition of independent scrutiny followed mounting concerns over the FAC’s position as a monopoly supplier of commercial airport services.\textsuperscript{21} The prices surveillance declaration adopted a formulation of ‘aeronautical charge’ which followed the FAC Act formulation. Section 56(1) of the FAC Act defines ‘aeronautical charge’ as follows:

A charge for or in respect of –

(a) the use by an aircraft of a Federal Airport; or

(b) services or facilities provided by the [FAC];

and, without limiting the generality of the foregoing, includes –

(c) a charge for the landing or parking of an aircraft at a Federal Airport;

(d) a charge relating to the embarkation or disembarkation of aircraft passengers at a Federal airport; and

(e) a charge relating to the handling of cargo carried on an aircraft;

But does not include any charge made under, or because of, a contract, lease, licence, or an authority, in writing under the common seal of the [FAC].

Neither definition was based on a rigorous study of the economic efficiency or market power issues that the declaration and FAC Act were attempting to address.

The definition of ‘aeronautical charge’ limited the scope of the prices surveillance declaration. The exclusion of contracts leases and licences excludes a number of services which would functionally be described as ‘aeronautical’ and in relation to the supply of which the FAC might well have market power. For example, refuelling services were and are provided by independent companies under licence so charges for these services were outside the scope of price scrutiny. However the refuelling of aircraft would appear to answer a functional definition of aeronautical services and meet the market power test in the legislation.

The arbitrary boundary between aeronautical and non-aeronautical services was criticised by the Prices Surveillance Authority (PSA). The PSA argued that the distinction rendered the interpretation of airport performance difficult. Moreover it allowed the FAC to shift functionally aeronautical services into the non-aeronautical

\hspace{1cm}

\textsuperscript{18} PSA report p. 71.

\textsuperscript{19} Non-aeronautical charges varied between airports.


area. The PSA argued that aeronautical activities should be defined by reference to the FAC’s core functions including:

- All aircraft movement related services, including refuelling, airfield security, the provision of hangars or hangar sites and some maintenance facilities;
- Certain terminal facilities including check-in and some office space necessary to accommodate staff managing the airport activities;
- Other airside related activities such as baggage handling and freight facilities. \(^{22}\)

The PSA considered that the FAC had varying degrees of market power in relation to the provision of car parking services and suggested that these charges be formally monitored.

The next phase in the regulation of airports was the transition to the current regime. The Industry Commission had expressed the view that the lack of effective competition was a fundamental source of inefficiency in the provision of air services. \(^{23}\) In 1997 and 1998 all major FAC airports except Sydney Airport were sold to private operators. The government described the sales as:

> A major step forward in the micro-economic reform agenda for the aviation sector. The sale of long-term leases over … our major airports enables world’s best practice to be brought to the management and operation of Australia’s major airports and facilitates future capital investment on a commercial basis. \(^{24}\)

The government implemented an oversight regime to prevent private airport operators from exercising monopoly power. The regime included price oversight arrangements in the form of a CPI-X price cap governing aeronautical services. The framework adopted a definition of aeronautical services based on that adopted in the FAC Act. At the time of sale there was no systematic evaluation of which services were subject to market power. This course was justified at the time by “the need for new owners of airports and aviation users to have some certainty about price structures and the impact of the CPI-X price cap”. \(^{25}\)

### 1.3 The Prices Surveillance Act

The PS Act was introduced in 1983 as part of the Commonwealth Government’s prices and incomes policy. The intention was to promote restraint in pricing to accompany wage restraint exercised under the Prices and Incomes Accord, as part of a strategy to control inflation and promote economic growth. It was intended that the Act would be

---

\(^{22}\) Prices Surveillance Authority 1993 *Inquiry into the Aeronautical and Non-aeronautical charges of the Federal Airports Corporation* AGPS, Canberra, ch. 4.


\(^{25}\) Pricing policy paper p. 2.
applied only where effective competition was lacking and where price increases could have pervasive effects throughout the economy.\textsuperscript{26}

The PS Act enables the responsible Commonwealth Minister, currently the Minister for Financial Services and Regulation, to direct the Commission to examine the prices of selected goods and services in the Australian economy.

**Overview**

Under the PS Act the Commission has the power to carry out three forms of prices oversight under the direction of the Minister:

1. *monitoring* of prices, costs and profits of companies and government authorities in relation to specified goods and services;

2. *public inquiries* into specified matters; and

3. *price notifications*, where the Minister declares that specified companies are to notify the Commission of a proposed price increase for specified goods and services.

The PS Act does not incorporate powers of price control. The Productivity Commission noted in its recent Draft Report of the review of the PS Act that:

> The Act was designed to be flexible in its application, allowing the responsible Minister to target specific companies and sectors, without necessarily involving many companies in unnecessary regulation.

> …

> The Act deliberately provides little guidance to the Minister regarding whether a product or service may be declared for price notification or subjected to monitoring, or whether to hold a public inquiry. The ACCC applies the instruments of prices oversight in accordance with the declarations and/or directions issued by the Minister.\textsuperscript{27}

The Minister is able to issue declarations and directions regarding prices oversight under sections 21(1), 18(1) and 27A of the PS Act. Section 21(1) provides for goods or services to be notified, or persons in relation to goods or services of a specified description to be declared by the Minister for the purposes of the PS Act. The Commission may also make such declarations with the approval of the Minister.

Section 18(1) provides that the Minister may require or approve an inquiry by the Commission into a specified matter.

Section 27A provides that the Minister may direct the Commission to monitor prices, costs and profits relating to the supply of goods or services by persons in a specified industry.


\textsuperscript{27} Productivity Commission, March 2001, Review of the Prices Surveillance Act 1983, pp. xvi, 4-5.
Section 20 provides that the Minister may direct the Commission in exercising its powers and performing its functions under the PS Act to give special consideration to specified matters and the Commission shall comply with such a direction.

**Prices Oversight at Australian airports**

Currently the 11 privatised airports (Adelaide, Alice Springs, Brisbane, Canberra, Coolangatta, Darwin, Hobart, Launceston, Melbourne, Perth and Townsville Airports) and (yet to be privatised) Sydney Airport are declared persons, pursuant to section 21(1), for the purposes of the PS Act.\(^{28}\)

There are 6 Ministerial Directions relating to declared airports. If a Direction is applicable the Commission must give the matters within it special consideration.

Direction No. 18 outlines matters relating to the pricing of aeronautical services at Sydney Airport. There is no price cap regime applicable at Sydney Airport. It also includes provision for the pass through of costs associated with new investment at Sydney Airport.

Direction No. 20 outlines the price cap regime and matters relevant to the pricing of the declared aeronautical services at the 11 privatised airports for the purposes of section 21(1) (price notification). It also provides for the pass through of costs associated with necessary new investment.

Direction No. 21 provides for the monitoring of aeronautical-related services at all airports pursuant to section 27A.

Direction No. 22 outlines that the Commission should not take into account the revenues generated or costs incurred in the provision of services other than aeronautical services when pricing aeronautical services at Sydney Airport.

Direction No. 23 provides that the overall charges paid by regional air services operators should not be increased in any year by a percentage in excess of the percentage increase occurring in the Consumer Price Index.

The Unit Cost Direction directs the Commission to give special consideration to the Government’s policy of generally not supporting price increases in excess of movements in unit costs.

Details on Direction numbers 18, 20 and 21 are provided in chapter 2.

**Price notifications**

The Commission must consider price notifications given to it by the declared airports under section 22(2)(a) of the PS Act. An airport must notify the Commission of a price rise if the proposed price is higher than the highest price level which has been operating

---

\(^{28}\) Declaration 87, 30 June 2000; Declaration 88, 30 June 2000, Declaration 89, 30 June 2000.
for the previous twelve months.\textsuperscript{29} If a declared airport fails to notify the Commission in breach of the PS Act a fine of $10,000 can be imposed.\textsuperscript{30}

In relation to these notices the Commission may take such action in accordance with Part III of the PS Act as it considers appropriate.\textsuperscript{31}

Section 21 of the Act requires that price notifications be assessed within 21 days. In addressing any procedural difficulties this may raise the Commission has published its \emph{Draft Statement of Regulatory Approach to Price Notifications}.\textsuperscript{32} This document outlines a process for assessing a draft notification prior to receiving a formal notification to allow for any consultation with interested/affected parties.

The Commission has certain powers to obtain information under the PS Act. Section 32(1) enables the Chairperson to request that organisations or individuals provide information or documentation relevant to a price notification. Failure to comply with such a request gives rise to a penalty of $1,000. However, a person does not have to comply with such a request if they have a reasonable excuse.\textsuperscript{33} A reasonable excuse includes, but is not limited to, the fact that the information may incriminate the individual or expose the individual to penalty.\textsuperscript{34}

When performing its functions in relation to prices oversight the Commission must have particular regard to the criteria contained in section 17(3) of the PS Act, subject to the above ministerial directions.

These criteria are:

(a) the need to maintain investment and employment, including the influence of profitability on investment and employment;

(b) the need to discourage a person who is in a position substantially to influence a market for goods or services from taking advantage of that power in setting prices; and

(c) the need to discourage cost increases arising from increases and wages and changes in conditions of employment inconsistent with principles established by relevant industrial tribunals.

The Commission must have regard to the section 17(3) criteria as fundamental elements of its analysis.

After assessing price notifications the Commission may either not object to the notification or not object at a lower price.\textsuperscript{35} However, while the declared airport is required to notify the Commission and observe the procedures of the PS Act, it has no

\textsuperscript{29} Section 22(1), Prices Surveillance Act 1983 (Cth).
\textsuperscript{30} Section 22(1), Prices Surveillance Act 1983 (Cth).
\textsuperscript{31} Section 17(1)(a), Prices Surveillance Act 12983 (Cth).
\textsuperscript{32} Australian Competition and Consumer Commission, \emph{Draft Statement of Regulatory Approach to Price Notifications}, April 1998.
\textsuperscript{33} Section 32(1), Prices Surveillance Act 1983 (Cth).
\textsuperscript{34} Section 32(2A), Prices Surveillance Act 1983 (Cth).
\textsuperscript{35} Section 22(2)(b), Prices Surveillance Act 1982 (Cth).
legal obligation to comply with a decision made by the Commission in relation to the notification.
2. CPI-X PRICE CAP

2.1 Introduction

A CPI-X price cap applies to all of the larger privatised airports\(^{36}\). The price cap does not, however, apply to Sydney Airport. This part of the submission provides background information on the price cap. Section 2.2 explains how the price cap works and section 2.3 reviews price cap compliance to date. The price cap includes two “pass through” provisions, one for new investment, the other for government mandated security requirements and demand management schemes. These are discussed in sections 2.4 and 2.5.

2.2 The price cap

The price cap applies to a range of ‘aeronautical’ services at leased Phase I and Phase II airports. These services are declared by the Treasurer pursuant to section 21 of the PS Act. Declaration numbers 87 and 88 set out the facilities and services covered by the price cap. They are:

- Aircraft movement facilities and activities, comprising:
  - (a) airside grounds, runways, taxiways and aprons;
  - (b) airfield lighting, airside roads and airside lighting;
  - (c) airside safety;
  - (d) nose-in guidance;
  - (e) aircraft parking;
  - (f) visual navigation aids;

- Passenger processing areas, comprising:
  - (a) forward airline support area services;
  - (b) aerobridges and airside buses;
  - (c) departure lounges and holding lounges (excluding commercially-important-persons lounges);
  - (d) immigration and custom service areas;
  - (e) public address systems, closed circuit surveillance systems, security systems;
  - (f) baggage make-up, handling and reclaim;
  - (g) public areas in terminals, public amenities, public lifts, escalators and moving walkways;
  - (h) flight information display systems;
  - (i) landside roads, landside lighting, and covered walkways.

\(^{36}\) The price cap applies to Adelaide, Alice Springs, Brisbane, Canberra, Coolangatta, Darwin, Hobart, Launceston, Melbourne, Perth and Townsville Airports.
Services in this list which were subject to a contract, lease, licence or authority given under the common seal of the FAC are excluded from the price cap.

A range of services provided at airports are not covered by the price cap. Some of these services are subject to prices monitoring (see section 3). There is no prices oversight of the other services, including revenues from rents or leases for retail shops and cafes, administration and office space, catering facilities, valet parking services and VIP lounges.

The rationale for subjecting some services to a price cap but not others is to limit the scope of regulation. A number of services at airports are reasonably contestable because they can be provided away from the airport or because alternative services are available to airport users.

As stated in the Government’s *Pricing Policy Paper*\(^3^7\), the intention was that the price cap would apply to the group of services covered by the *Federal Airports Corporation Act 1986*. The reason for this was explained as follows: “This coverage best meets the need for new owners of airports and aviation users to have some certainty about price structures and the impact of the CPI-X cap.”\(^3^8\)

The price cap is a CPI-X cap. The CPI measure used is the underlying measure of national CPI, recorded in the year to the previous March quarter, as calculated by the Commission.

The ‘X’ values range from 1 per cent at Townsville and Canberra Airports to 5.5 per cent for Perth Airport (see table 1). They were set by the Commonwealth Government on recommendations from the Commission. The Commission’s advice was based on its analysis of projected demand, costs and productivity improvements.

**Table 1: ‘X’ values at leased airports:**

<table>
<thead>
<tr>
<th>Airport</th>
<th>‘X’ value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adelaide</td>
<td>4.0</td>
</tr>
<tr>
<td>Alice Springs</td>
<td>3.0</td>
</tr>
<tr>
<td>Brisbane</td>
<td>4.5</td>
</tr>
<tr>
<td>Canberra</td>
<td>1.0</td>
</tr>
<tr>
<td>Coolangatta</td>
<td>4.5</td>
</tr>
<tr>
<td>Darwin</td>
<td>3.0</td>
</tr>
<tr>
<td>Hobart</td>
<td>3.0</td>
</tr>
<tr>
<td>Launceston</td>
<td>2.5</td>
</tr>
<tr>
<td>Melbourne</td>
<td>4.0</td>
</tr>
<tr>
<td>Perth</td>
<td>5.5</td>
</tr>
<tr>
<td>Townsville</td>
<td>1.0</td>
</tr>
</tbody>
</table>


\(^3^8\) Ibid, page 2.
Starting point prices for the price cap were those FAC charges in place at the time of the transfer of the lease.

The price cap formula is specified in direction number 20. The formula compares movements in the average price of services covered by the cap with CPI-X. Compliance is achieved when the movement in average prices equals CPI-X. The average change in price is calculated by weighting the price change for each service by the service’s revenue weighting.

Because the price cap operates under the PS Act, airport operators are required to notify the Commission of a proposal to increase charges on services covered by the declaration. The primary consideration for the Commission in assessing such notifications is whether the price increases proposed fall within the parameters set by the price cap.

The price cap allows airport operators to restructure prices. The price cap formula uses a weighted average of prices, with price movements for each service weighted by its previous period revenue share. Even if some prices increase, as long the weighted average of price changes meets the CPI-X requirement the airport operator has complied with the price cap.

The price cap allows for any over- or under-recoveries to be carried over between years within the five-year duration of the price cap. In relation to over-recoveries, there will be a requirement for these to be passed back to customers within the following two years from the period of over-recovery (except in the case of year 4, where the over-recover is to be passed back in year 5).

### 2.4 Compliance

Each year the Commission assesses price cap compliance at each of the regulated airports. The results are published annually in the Commission’s airport regulatory reports. In calculating an airports compliance (or non-compliance) with the price cap the price cap formula requires the Commission to derive the average movement in prices. This is calculated as follows:

- The average price for each service over the year is derived by dividing revenue from the service by the number of units (for example landed tonnes or passengers).
- The average price for each service is compared to its previous year average, to give a percentage price change for each service.
- The price change for each service is then weighted by its previous period revenue share.

---

39 The regulatory reports are available on the Commission’s web site at [www.accc.gov.au](http://www.accc.gov.au). The reports cover price cap compliance as well outcomes from the Commission’s prices monitoring, quality of service monitoring and accounts reporting.
The average price change for all service is derived by summing the weighted price change of each service.

Compliance occurs when the weighted average price change equals CPI-X.

The Commission has now assessed price cap compliance for the first three year of the price cap for the Phase I airports, and for the first two years for the Phase II airports. Table 2 below provides a summary of the price cap reconciliations for Phase I and II airports for 1999-00, and the cumulative position of each airport regarding its price cap compliance.

Table 2: Price Cap Compliance as at July 2000

<table>
<thead>
<tr>
<th>Airport</th>
<th>Cumulative over/under recovery $</th>
<th>Cumulative over/under recovery % of 99/00 Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brisbane</td>
<td>1 072 870</td>
<td>3.29%</td>
</tr>
<tr>
<td>Melbourne</td>
<td>(9 281)</td>
<td>-0.02%</td>
</tr>
<tr>
<td>Perth</td>
<td>560 621</td>
<td>3.19%</td>
</tr>
<tr>
<td>Adelaide</td>
<td>860</td>
<td>0.01%</td>
</tr>
<tr>
<td>Alice Springs</td>
<td>(11 563)</td>
<td>-0.71%</td>
</tr>
<tr>
<td>Canberra</td>
<td>(15 559)</td>
<td>-0.36%</td>
</tr>
<tr>
<td>Coolangatta</td>
<td>88 931</td>
<td>1.53%</td>
</tr>
<tr>
<td>Darwin</td>
<td>(32 092)</td>
<td>-0.77%</td>
</tr>
<tr>
<td>Hobart</td>
<td>14 448</td>
<td>0.80%</td>
</tr>
<tr>
<td>Launceston</td>
<td>(4 918)</td>
<td>-0.32%</td>
</tr>
<tr>
<td>Townsville</td>
<td>(15 712)</td>
<td>-0.78%</td>
</tr>
</tbody>
</table>

Brisbane Airport has over recovered for the last two years and now has a significant cumulative over-recovery of just over $1 million. Melbourne Airport marginally over recovered in 1999/00, but taken with the net under recovery of the last two periods has now under recovered and complies with the price cap. Perth Airport has over recovered for the last three years and therefore failed to comply with the cap. Perth’s cumulative over-recovery now amounts to around $560,000.

For the Phase II airports, Adelaide refunded the over charge in 1998/99 by providing a rebate and are now left with a small over recovery. Alice Springs decreased aeronautical charges to bring it in line with the price cap. Canberra Airport made no changes to charges in 1999-00 and has provided rebates in 1997-98 and 1998-99 to now record a net under recovery and comply with the cap. Coolangatta Airport over recovered in 1998/99 but reduced charges in 1999/00 to have a slight over recovery. Darwin Airport over recovered in 1998/99 but decreased aeronautical prices in 1999/00 to bring it into line with the cap. Hobart Airport under recovered in 1999/00, however taken with the over recovery in 1998/99 is still over recovered. Launceston Airport has under recovered for the last two years. Townsville did not increase charges in 1999/00 by as much as they were allowed and have a net under recovery.
Taxi charges

Since privatisation Perth, Brisbane and Canberra airports have introduced vehicle access charges for taxis. The aeronautical services subject to the price cap include, ‘landside roads, landside lighting, and covered walkways’. Direction 20 states that “new or varied charges on existing services and charges on new or varied services are to be factored into the price cap arrangements if the services are declared”. The Commission received legal advice that the taxi charges would fall under this definition of ‘aeronautical’ service.

The Commission therefore considers that revenue derived from taxi charges at these airports should be included in the price cap and the price cap reconciliation statement. All relevant airports notified the Commission of their disagreement with its interpretation of the regulatory instruments. Canberra Airport instigated an action in the Federal Court against the Commission under the Administrative Decisions (Judicial Review) Act 1977 (Cth). The Federal Court recently ruled (on 23 March 2001) that the charge is within the price cap because it relates to the use of landside roads at Canberra Airport, and charges for landside roads are covered by the price cap.

Canberra, Brisbane and Perth airports have provided the Commission with revenue or unit data for vehicle access charges on taxis, and these charges have been included in the price cap reconciliation for the above airports.

2.5 New Investment

The price cap arrangements include a necessary new investment pass through provision, designed to provide incentives for airport operators to carry out new investment. This provision allows airport operators to increase charges to fund new investment provided the investments meet certain criteria. The criteria focus on user support and the relationship between the cost of the project and the proposed charges. They are as follows:

(a) the operator's plans for new investment or service innovation and the associated costs;
(b) the relationship between the proposed increases in aeronautical charges and the costs (including the level of the rate of return) of the new investment or service;
(c) support from airport users with a significant interest in the investment for the operator's proposals, including in relation to charging changes;
(d) contribution of the new investment/service to productivity improvements at the airport;
(e) overall efficiency of the airport's operation;

See directions no. 18 and 20.
The Commission has the role of assessing new investment proposals. The new investment pass through provision states that the Commission must take the above criteria into account in deciding whether to approve a proposal to increase charges outside the price cap. The Commission must provide a statement of reasons for its determination.  

In assessing new investment proposals the Commission typically conducts an extensive public consultation process in which the Commission:

- invites interested parties to provide preliminary comments on the proposals;
- releases a draft decision;
- invites submissions in response to the draft decision; and
- releases a final decision having regard to the submissions.

**Commercially driven outcomes**

As stated in the *Pricing Policy Paper* the intention of the new investment provisions is to encourage commercially driven outcomes: “Pricing oversight arrangements are intended to promote operation of the airports in as an efficient and commercial a manner as possible. Pricing is fundamental to the efficient use of airport infrastructure. It is in the interests of airport users in particular, and the national economy in general, that commercially-driven decisions be made about maintaining existing airport infrastructure, and building new infrastructure”.  

The outcomes are encouraging. A number of significant new investment projects have been negotiated by the parties and approved by the Commission, including new passenger facilities to service new entrant airlines at Sydney, and Melbourne airports, a new $220 million passenger terminal facility at Adelaide Airport, and various airside investments at Brisbane, Perth, Canberra and Darwin Airports (details below).

---

41 Direction no 13 (6) 22 May 1998.

However, lack of clarity in the framework initially impeded negotiations and continues to concern some of the parties. Airport operators and airport users could not agree on what constituted ‘new investment’. The main issues were as follows:

- Some investment was already factored into the ‘X’ values. The parties were advised of this during the sales process, but not advised of the amounts involved. Subsequent negotiations between the airport operators and airport users failed to resolve this issue.

- In a number of cases the parties did not agree on whether an expenditure item was new investment or maintenance.

Following requests from the parties the Commission developed a position paper on what constitutes ‘new investment’ in April 2000. In developing the paper the Commission sought independent advice on the matter and conducted a public consultation process.

The approach adopted was to define ‘investment’ as “an increase in fixed durable inputs, or capital”. ‘New’ investment was defined as “a changed in fixed durable inputs that does not simply seek to replace natural degradation of capital”. The position paper provides a number of examples of how this definition applies in practice.

In general the approach adopted by the Commission distinguishes ‘new’ investment in two ways. The first is in a temporal sense. Projects completed or substantially completed prior to privatisation by the FAC are not considered to be new investment. The second is to distinguish between maintenance of service levels and additions to service levels. The approach adopted defines investment as ‘new investment’ if it either adds to capacity or increases quality levels above pre-existing levels.

Since the release of the position paper airport operators and users have reached agreement on a range of projects at most privatised airports.

**New investment decisions to date**

The Commission has approved over $200 million in new investments at the privatised airports. The main projects are as follows:

- **Common User Facilities – Melbourne and Sydney Airports.** These facilities provide passenger terminal services for Impulse Airlines and Virgin Blue. New charges for both facilities were approved by the Commission. Both facilities have been constructed and are now operational.

---


44 See for example the Commission’s decision *Australia Pacific Airports Pty Ltd Range of Projects – New Investment Decision*, October 2000. In this case Melbourne Airport sought to recover the costs of two projects completed before the transfer of lease.
• **Adelaide Airport Multi User Integrated Terminal.** In October 1999 the Commission released its final decision approving a ‘Passenger Facility Charge’ of $6.00 for international passengers, $4.09 for domestic passengers and $1.00 for regional passengers. The charges allow Adelaide Airport to recover the ‘aeronautical’ costs associated with the new terminal’s construction costs, a return on the investment and a contribution to additional operating costs associated with the new facility.

• **Brisbane Airport new investments.** In April 2000 the Commission released its decision not to object to price increases to fund a $20.5 million investment program. The investments include apron expansions to service international and regional users of the airport, new runway signage and taxiway lighting. Approval followed consultation between Brisbane Airport and airport users. The parties reached agreement on most of the proposals.

• **Canberra Airport Apron Extension.** In August 2000 the Commission approved new charges to fund a major apron expansion at the airport. The new apron will provide additional aircraft parking bays for Impulse Airlines and other new entrants as well as catering for growth by Qantas and Ansett.

• **Perth Airport new investments.** In April 2000 the Commission released its decision not to object to price increases to fund some $3.5 million in new investments including an international apron expansion, a taxiway upgrade and a new GA apron.

• **Melbourne Airport new investments.** In October 2000 the Commission released its decision not to object to price increases to fund over $4.0 million in new investments, including for an elevated road extension and a range of environmental projects.

• **New investment at Darwin and Alice Springs Airports.** As with Melbourne and Perth Airport Northern Territory Airports proposed increased charges for new investment projects at Darwin and Alice Springs airports covering a range of facilities. In September 2000 the Commission released a decision which did not object to new charges associated with over $1.0 million in new investments.

In total the Commission has received 18 new investment cost pass through proposals to date. The Commission’s new investment decisions are available at [www.accc.gov.au](http://www.accc.gov.au).

The investments undertaken by airport operators to date to suggest that the Commission’s pricing decisions have not deterred investment in airports. In particular the experience suggests that the Commission has adequately allowed for the risks facing the airport operators. In relation to rates of return the Commission notes that the returns on equity used by the Commission in its decisions on new airport investment range from 14 to 16 per cent. This compares favourably with the 11.3 per cent average for the Australian share market over the past 10 years. Research by NERA also shows that the rates of return adopted by the Commission more generally compare favourably with rates used in North America and the U.K.
In relation to the Melbourne Airport common user facility, Melbourne Airport has claimed that the Commission’s decision blocked a deal made with Impulse Airlines. The Commission notes the following. When Melbourne Airport approached the Commission seeking agreement to a new charge no agreement had been reached between Melbourne and the other major user of the terminal, Virgin Blue. Furthermore the price submitted by Melbourne Airport at that time was significantly higher than the price agreed to with Impulse. When an agreement was reached between Melbourne Airport, Impulse and Virgin Blue, the Commission approved it.

2.6 Airport security

As well as allowing price increases outside the price cap for new investment the price cap arrangements also allow for a 100 per cent pass through of Government mandated security requirements and a 100 per cent pass through of congestion charges employed as part of an airport demand management scheme under the *Airports Act 1996* (Airports Act)**. The security pass through provision covers passenger screening, baggage screening and counter terrorist security.

To assist airport operators the Commission provided guidance on what security costs can be passed through. In March 2000 it released a position paper *Government-Mandated Security Requirements: The meaning of “direct cost” as it relates to the price cap pass-through provisions*. The paper concludes that the avoidable cost approach to determining the cost of complying with government-mandated airport security requirements accords most closely with the pass through provisions in the prices oversight arrangements.

To date the Commission has assessed over 30 security cost pass-though proposals with notifications from all of the leased airports.

---

45 See Direction no. 20.
3. PRICES MONITORING

3.1 Introduction

Some of the airport services not covered by the price cap are monitored. This part of the submission explains the Commission’s role in monitoring aeronautically related services that are outside the price cap and the results to date. Section 3.2 reports on the prices monitoring results. Section 3.3 provides more detail on one of the services monitored, aircraft refuelling.

The monitoring function is conducted pursuant to section 27A of the PS Act. Section 27A provides for the Minister to direct the Commission to monitor costs, revenues and profits of a company. In May 1998, the Treasurer directed the Commission to monitor the following services:

- aircraft refuelling;
- aircraft maintenance sites and buildings;
- freight equipment storage sites;
- freight facility sites and buildings;
- ground support equipment sites;
- check-in counters and related facilities; and
- car parks (including public and staff parking but not valet parking).

The rationale for monitoring these services is that airport operators may exert significant market power in relation to some services that are outside the price cap. As such, the Government considered that a number of aeronautical-related services should be monitored for misuse of market power the airport operator may have in setting prices.

Under section 27B of the PS Act, the Commission is required to report annually to the Treasurer on its formal prices monitoring activities. The Commission is also required to make its reports publicly available. In exercising its role, the Commission may investigate particular pricing issues where users have raised concerns and it appears that the airport operator may have taken advantage of its market power. To date the Commission has investigated the imposition of fuel throughput levies at Brisbane and Perth airports.

3.2 Monitoring outcomes

The table below summarises the monitored cost and revenue data for aeronautically related services at the Phase I and II airports and Sydney Airport.

---

See Direction no. 21.
### Table 3: Prices monitoring outcomes

<table>
<thead>
<tr>
<th>Airport</th>
<th>For Period Ending</th>
<th>Costs $000s</th>
<th>Revenue $000s</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>30 June 1998</td>
<td>4 558</td>
<td>20 344</td>
</tr>
<tr>
<td></td>
<td>30 June 1999</td>
<td>4 097</td>
<td>24 174</td>
</tr>
<tr>
<td></td>
<td>30 June 2000</td>
<td>4 754</td>
<td>27 360</td>
</tr>
<tr>
<td></td>
<td>30 June 1998</td>
<td>2 988</td>
<td>9 915</td>
</tr>
<tr>
<td></td>
<td>30 June 1999</td>
<td>3 832</td>
<td>10 741</td>
</tr>
<tr>
<td></td>
<td>30 June 2000</td>
<td>3 755</td>
<td>11 892</td>
</tr>
<tr>
<td></td>
<td>30 June 1998</td>
<td>12 780</td>
<td>29 921</td>
</tr>
<tr>
<td></td>
<td>30 June 1999</td>
<td>14 139</td>
<td>33 793</td>
</tr>
<tr>
<td></td>
<td>30 June 2000</td>
<td>14 080</td>
<td>37 050</td>
</tr>
<tr>
<td></td>
<td>30 June 1999</td>
<td>27 418</td>
<td>55 431</td>
</tr>
<tr>
<td></td>
<td>30 June 2000</td>
<td>27 951</td>
<td>63 021</td>
</tr>
<tr>
<td></td>
<td>30 June 1999</td>
<td>1 431</td>
<td>6 154</td>
</tr>
<tr>
<td></td>
<td>30 June 2000</td>
<td>1 888</td>
<td>6 805</td>
</tr>
<tr>
<td></td>
<td>30 June 1999</td>
<td>1 960</td>
<td>1 628</td>
</tr>
<tr>
<td></td>
<td>30 June 2000</td>
<td>1 937</td>
<td>1 686</td>
</tr>
<tr>
<td></td>
<td>30 June 1999</td>
<td>841</td>
<td>1 849</td>
</tr>
<tr>
<td></td>
<td>30 June 2000</td>
<td>911</td>
<td>2 190</td>
</tr>
<tr>
<td></td>
<td>30 June 1999</td>
<td>N/A</td>
<td>2 063</td>
</tr>
<tr>
<td></td>
<td>30 June 2000</td>
<td>4 044</td>
<td>4 610</td>
</tr>
<tr>
<td></td>
<td>30 June 1999</td>
<td>661</td>
<td>3 104</td>
</tr>
<tr>
<td></td>
<td>30 June 2000</td>
<td>844</td>
<td>3 269</td>
</tr>
<tr>
<td></td>
<td>30 June 1999</td>
<td>189</td>
<td>933</td>
</tr>
<tr>
<td></td>
<td>30 June 2000</td>
<td>257</td>
<td>945</td>
</tr>
<tr>
<td></td>
<td>30 June 1999</td>
<td>345</td>
<td>561</td>
</tr>
<tr>
<td></td>
<td>30 June 2000</td>
<td>447</td>
<td>621</td>
</tr>
<tr>
<td></td>
<td>30 June 1999</td>
<td>856</td>
<td>2 063</td>
</tr>
<tr>
<td></td>
<td>30 June 2000</td>
<td>590</td>
<td>2 273</td>
</tr>
</tbody>
</table>

Revenues exceed costs for all airports apart from Alice Springs. However, it should be noted that costs do not include amortisation of intangible assets or interest. The Commission asked for these items to be excluded for the purposes of the monitoring reports because:

(a) their allocation to services would have involved a degree of subjectivity, and

(b) there would be risk of circularity if an allocation of the costs of the lease premium were included.
Any detailed analysis of the monitoring results should include an allocation that recognises a cost of capital.

### 3.3 Fuel throughput levies

Price capping has resulted in cheaper prices for aeronautical services. Surveys indicate that this has generally been achieved without a loss in service quality (see chapter four below). However, the Commission has been concerned that moves by some airport operators to introduce a new charge – a fuel throughput levy – might offset some of these gains.

In July 1998 Brisbane Airport began to charge oil companies 0.4 cents per litre of aviation gas supplied to aircraft. Perth announced its intention to introduce a similar charge. No Australian airport has applied this type of levy before. At the time of leasing, the government did not intend to include the fuel throughput levy in the price cap.

In line with the requirement that the Commission formally monitor aircraft refuelling charges, and following concerns expressed by airlines and oil companies about introduction of the fuel throughput levies, the Commission undertook a public review of the levies. It released its final report in December 1998.

The report is structured around and addresses the section 17(3) criteria in the PS Act. 17(3) guides the Commission in carrying out its functions under the PS Act. It includes a requirement for the Commission to consider “the need to discourage a person who is a position substantially to influence a market for goods or services from taking advantage of that power in setting prices”. The Treasurer, in announcing the monitoring direction, emphasised this criterion.

In preparing this report and assessing fuel throughput levies against the section 17(3) criteria the Commission drew on information and input from three sources:

- from airport operators on prices, costs and profits as discussed above;
- from BAC and WAC, giving them the opportunity to explain the reasons for introducing fuel throughput levies; and
- from submissions from interested parties.

The Commission released a discussion paper on the proposed fuel throughput levies in July to encourage and assist interested parties develop submissions. It received 16 submissions from airport operators, airlines, fuel companies and other interested parties.

The report found that the new charge would raise some $2.0 to $2.5 million per annum at Brisbane Airport and some $700,000 per annum at Perth Airport.

Based on its assessment of the relevant criteria the report reached the following conclusions:

---

• Introduction of the fuel throughput levies at Brisbane and Perth Airports will significantly increase the price of refuelling services.

• The price increases are not justified in terms of increases in costs or through offsetting reductions in other charges.

• There is a strong case that airport operators have market power in the provision of refuelling services.

• When considered in light of the lack of cost related justification for the levies, or offsetting reduction in charges, there is a strong case that introduction of a fuel throughput levy is taking advantage of market power.

The Treasurer asked the Commission, as part of its monitoring functions, to consider the need for stricter forms of prices oversight. In light of the report’s conclusions the Commission recommended that stricter forms of prices oversight should be considered in relation to aircraft refuelling services.

The report considered what forms the stricter prices oversight should take, assessing a number of options and the advantages and disadvantages of each of them. The report recommended that refuelling services should be included within a CPI-X price cap.

The report also considered a number of options for implementation of a CPI-X price cap for refuelling services. It did not make recommendations in relation to these, but concluded that there do not appear to be significant issues which would prevent effective implementation of the report’s recommendation.
4. TRANSPARENCY PROVISIONS

4.1 Introduction

The regulatory arrangements covering core regulated airports include accounts and reports information requirements. These are in addition to the requirements under Corporations Law. The provisions also include quality of service monitoring requirements.

The intent behind these provisions was explained in the Department of Transport and Regional Development’s Pricing Policy Paper as follows:

..this initiative is designed to improve the transparency of airport operations. Such transparency assists users in assessing the performance of airports, the Government in ensuring compliance with the leases and other regulatory requirements, and the ACCC in carrying out effective price oversight.48

The Commission publishes an annual report on each core regulated airport. These include summaries of their accounts, details of compliance with prices oversight and assessments of quality of service. The reports are available on the Commission’s web site at www.accc.gov.au.

Section 4.2 explains the accounts reporting requirements and provides an overview of the outcomes for each airport. Section 4.3 sets out the quality of service monitoring provisions and summarises the results to date.

4.2 Accounts reporting

Part 7 of the Airports Act and regulations made pursuant to Part 7 require operators of core regulated airports to provide the Commission with annual financial accounts within 90 days after 30 June. The accounts must include profit and loss accounts, balance sheets and cash flow statements together with supporting explanatory statements and notes.

Separate accounts must be provided for the aeronautical and non-aeronautical parts of the businesses. In some cases both aeronautical and non-aeronautical revenue comes from the same asset. For example, landside road services generate revenues both for the price-capped passenger terminal services and the unregulated car parks. In such cases, the accounts must show how costs have been allocated.

All information provided to the Commission must be audited. In addition the arrangements require a Directors’ responsibility statement stating that the accounting statements and supporting schedules are presented fairly and in accordance with the Airports Act, regulations made pursuant to the act and guidelines produced by the Commission.

The Commission has developed guidelines to assist airport operators prepare their regulatory reports. The guidelines explain the accounts reporting information requirements and the principles for preparation of the reports. The guidelines also include pro-formas to assist airport operators prepare the accounts. The guidelines were developed with the assistance of KPMG.

**Results**

The Commission sought advice from KPMG on the financial performance of core regulated airports. Tables 4 and 5 draw on KPMG’s report to provide a summary of the returns on assets achieved by each of the core regulated airports since privatisation. The table shows returns on net tangible assets. For the major airports it also shows returns on total assets, which includes the lease premium. Some of the main points from KPMG’s analysis are as follows:

- Returns on net tangible assets at Melbourne, Brisbane and Perth Airports averaged around 13.5 per cent over the period 1997-98 to 1999-2000;
- Returns on total assets at the three airports were lower (averaging around 5 per cent), reflecting the lease premium paid by the airport operators;
- At the smaller Phase II airports returns on net tangible assets varied considerably, ranging from 0.6 per cent to 18.2 per cent. The Phase II average was around 7.5 per cent; and
- Returns on non-aeronautical services are typically considerably higher than returns on aeronautical services.

A recent upgrade in Australia Pacific Airports Corporation’s (APAC’s) credit rating by Standard and Poor’s from BBB to A- suggest that Melbourne Airport has performed well against expectations. This was confirmed by APAC which stated “Melbourne Airport continues to perform ahead of the shareholders’ bid business plan and is expected to report its first profit in the financial year ended 30 June 2002”.

The Commission does not have information on the performance of the other airports against their bid plans, but notes that Brisbane and possibly Perth airports were adversely affected by the Asian downturn in 1998.

The Commission’s regulatory reports also provide details on airport operating and maintenance costs. The results show that the new private operators were effective in controlling these costs. On average Melbourne, Brisbane and Perth airports cut total costs.

---


50 Operating profits/(tangible non-current assets + working capital).

51 Operating profits/(total non-current assets + working capital).

52 Australia Pacific Airports Corporation’s owns Melbourne and Launceton Airports.

aeronautical costs by around four per cent per annum in real terms. This translates into a cost reduction of around seven per cent per passenger per annum.

KPMG’s report is provided at attachment A. Airport accounts are published annually by the Commission. The reports are available on the Commission’s web site at www.accc.gov.au.

Table 4: Airport profitability – Melbourne, Brisbane and Perth airports

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Melbourne</td>
<td></td>
<td>11.2</td>
<td>12.0</td>
<td>13.0</td>
</tr>
<tr>
<td>Brisbane</td>
<td></td>
<td>14.0</td>
<td>16.2</td>
<td>8.0</td>
</tr>
<tr>
<td>Perth</td>
<td></td>
<td>16.3</td>
<td>16.3</td>
<td>18.2</td>
</tr>
</tbody>
</table>

Table 5: Airport profitability – Phase II airports

<table>
<thead>
<tr>
<th>Airport</th>
<th>Return on net tangible assets (%)</th>
<th>1998-99</th>
<th>1999-2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adelaide</td>
<td></td>
<td>15.3</td>
<td>14.0</td>
</tr>
<tr>
<td>Alice Springs</td>
<td></td>
<td>1.6</td>
<td>1.7</td>
</tr>
<tr>
<td>Canberra</td>
<td></td>
<td>4.3</td>
<td>4.8</td>
</tr>
<tr>
<td>Coolangatta</td>
<td></td>
<td>8.4</td>
<td>2.8</td>
</tr>
<tr>
<td>Darwin</td>
<td></td>
<td>0.6</td>
<td>1.6</td>
</tr>
<tr>
<td>Hobart</td>
<td></td>
<td>18.2</td>
<td>17.1</td>
</tr>
<tr>
<td>Launceston</td>
<td></td>
<td>5.8</td>
<td>6.0</td>
</tr>
<tr>
<td>Townsville</td>
<td></td>
<td>6.5</td>
<td>10.9</td>
</tr>
</tbody>
</table>

4.3 Quality of service monitoring

Part 8 of the Airports Act gives the Commission responsibility for monitoring the quality of certain key airport services and facilities.

Quality of service monitoring complements the prices oversight arrangements. It aims to ensure that airport operators do not reduce service quality as a means of reducing costs. It also allows the Commission to monitor each airport’s performance over several years.

Quality is measured against performance indicators jointly developed by the Commission and the Department of Transport and Regional Development. Not all factors contributing to service quality are under the airport operators’ direct control, but the adequacy of facilities they provide is a major determinant.
The key performance indicators include efficiency in aircraft movement areas, terminal crowding and waiting times in passenger processing and baggage handling areas. Data on these issues is gathered from a variety of sources. Airport operators must provide the Commission with annual reports on airport infrastructure, such as aircraft parking bays, aerobridges, check-in desks, security clearance systems, gate lounges and car parks.

Other information is sourced from Airservices Australia, a statutory corporation responsible for air traffic control and emergency services. It provides annual data on aircraft delays and other aspects of airport performance. The Australian Customs Service also provides data on the adequacy of its facilities at the airport.

The performance indicators and the requirements for provision of information are set out in regulations made pursuant to Part 8 of the Airports Act.

Details on the indicators and the methodology used by the Commission in monitoring quality of service are provided in a statement of the Commission’s approach to quality of service monitoring 54 and its annual regulatory reports 55.

**Airline and passenger surveys**

The Commission annually surveys airline companies’ views on the standard of airport facilities and services. These include runways and taxiways, gates, aerobridges, equipment storage, check-in and baggage processing facilities as well as airport operator responsiveness to airline concerns.

Annual passenger surveys are conducted at the largest airports (Sydney, Melbourne, Brisbane and Perth). These assess satisfaction with services such as airport access, car parking, information display, check-in facilities, security, government inspection amenities and gate lounges.

All this information is compared assessed against the Department of Transport and Regional Development performance indicators. The Commission can then assess airport performance.

The Commission raises any problems with the airport operator for comment. The Commission publishes the results of its quality of service monitoring on each key regulated airport in its annual report. It assesses whether service quality is being maintained, improved or reduced over time, and this will be taken into account in the five-year review of the overall regulatory arrangements.

**Quality of service results**

Quality of service monitoring for the Phase I airports has been undertaken since 1997/98 and since 1998/99 for Sydney airport. The results of the airline and passenger

---


55 The reports are available on the Commission’s web site at www.accc.gov.au.
surveys for these airports are generally satisfactory and have not changed markedly over the periods for which the airports have been surveyed.

There was a decline in ratings by airlines for some facilities at Melbourne and Sydney airports in 1999/00. However, it should be noted that both airports were undergoing construction works during the 1999/00 reporting period, which may have affected the airline ratings\textsuperscript{56}.

As in 1997/98 and 1998-99, Brisbane Airport achieved high quality service ratings from both airline operators and passengers in 1999/00. At Perth Airport users and passengers were satisfied, though there were marginal improvements and declines in the ratings for individual facilities as compared to the previous two years. As mentioned above, Melbourne Airport received lower quality ratings from airlines in 1999/00 compared to the previous financial years, however, the 1999/00 passenger survey indicated good quality results, which was similar to previous years. The airlines’ quality assessment of Sydney Airport for 1999/00 is mixed and a comparison of the assessment with that of the previous period 1998/99 is ambiguous. The passenger survey for Sydney airport indicated good quality standards in 1999-00. This was similar to 1998/99 results, however as Sydney airport changed its rating scale for the 1999-00 survey, a direct comparison is not possible.

Details on the quality of service monitoring results from the Airline surveys are published in the annual Regulatory Reports. The Passenger Survey results for all four airports as contained in the 1999-00 Reports are shown in the charts 1 to 4 below.

\textsuperscript{56} Melbourne Airport was undergoing roadworks, expansion of the Qantas terminal and construction of the Multi User Domestic Terminal (MUDT). Sydney Airport was under going a major redevelopment of its international terminals and other works as part of the SA 2000 project.


Chart 4: Sydney Airport survey results 1999-2000
5. AIRPORT ACCESS PROVISIONS

5.1 Introduction

Airport specific access measures operate in parallel with the price cap. The access provisions establish legal rights for current and potential airport users to have access, on commercial terms, to certain services provided by the airport operator. The access regime establishes rights for access seekers to negotiate terms and conditions of access, and if negotiations fail for either the access seeker or airport operator to have the dispute arbitrated by the Commission.

Section 4.2 explains how the provisions operate. Section 4.3 outlines the services covered by section 192 and section 4.4 outlines the experience to date with airport access undertakings.

5.2 Section 192 of the Airports Act

The airport specific access measures are set out in section 192 of the Airports Act. These provide for airport services at most of the leased airports (but not Sydney Airport) to be declared for purposes of Part IIIA. Declaration triggers the same rights to negotiation and arbitration as services declared through Part IIIA. As with Part IIIA, services subject to an access undertaking approved by the Commission cannot be declared.

Section 192 requires the relevant Commonwealth Minister to determine that airport services are declared unless the services are the subject of an access undertaking. The Minister’s determination must be made as soon as practicable after the end of a designated period. The designated period is twelve months after an airport has been privatised. The designated period was intended to give the new private airport operators the opportunity to develop access undertakings. As in Part IIIA, undertakings cannot be lodged once a service is declared.

Since no undertakings have been accepted and the designated period has expired the Minister has now determined that ‘airport services’ at all of the leased airports are declared.

Declaration is by reference to criteria specified in section 192. The Airports Act gives the Commission the role of assessing whether a particular service meets the requirements of the criteria. The Commission makes its determinations on receiving a request to do so.

In reaching a decision on whether a service is declared the Commission will generally seek the views of interested parties. The Commission’s determinations are

57 The declaration provisions in section 192 of the Airports Act 1996 (Cwlth) apply to leased ‘core regulated’ airports. These comprise Alice Springs, Adelaide, Brisbane, Canberra, Coolangatta, Darwin, Hobart, Launceston, Melbourne, Perth and Townsville airports.

58 Section 192 provides for the period to be extended to 24 months for some airports.
disallowable instruments, which means that they are not reviewable by the Australian Competition Tribunal, but can be reviewed by Parliament.

5.3 Services covered by section 192

The services declared by section 192 are not listed. Instead declaration is by reference to specified criteria. The criteria are that the service:

(a) is necessary for the purposes of operating and/or maintaining civil aviation services at the airport; and

(b) is provided by means of significant facilities at the airport, being facilities that cannot be economically duplicated.

The Commission can determine whether a particular service satisfies the criteria and therefore is, or is not, an ‘airport service’.

The second of these criteria is similar to one of the matters that the National Competition Council and Minister must consider in assessing declaration requests under Part IIIA, namely “that it would be uneconomical for anyone to develop another facility to provide a service”. In practice the section 192 test may be narrower than the Part IIIA test by referring to ‘duplicate’ rather than ‘develop another facility’.

In October 1998 the Commission released a draft guide to section 192 to provide guidance on which airport services are likely to be declared. In relation to criterion (I) the draft guide stated that:

In assessing specific airport services against criteria (I), the ACCC has distinguished between services that are necessary for purposes of operation and/or maintenance of civil aviation services and services that are not necessary for civil aviation services. On this basis, services such as those provided by retail outlets do not meet the requirements of criterion (I). Although such services are convenient for airport users, they are not necessary for operating and/or maintaining civil aviation services.

In relation to the second criterion, the Commission’s starting point was to consider whether the airport as a whole could be economically duplicated. Two factors were considered relevant. One was economies of scale in provision of airport services. The other was the significance of entry and exit costs. The Commission’s analysis of these two factors indicates that it is unlikely that large airports could be economically duplicated.

This raises a number of further issues about whether individual services provided at such airports could be duplicated, in particular:

1. Could the service be provided at an off-airport location? For example, the NCC concluded that it would be economic to locate cargo terminal facilities off-airport.

---

2. Could the service be provided at another airport? For example, heavy maintenance services are only provided at a limited number of airports indicating that they do not need to be provided at all airports.

Taking these matters into consideration the draft guide listed the services considered likely to be declared under section 192 of the Airports Act. They are:

- airside facilities (runways, taxiways, aprons, etc.);
- certain passenger processing areas (check-in, holding lounges, immigration and customs service, etc.);
- land for providing refuelling services;
- sites for storing ground service and freight handling equipment;
- sites for light/emergency maintenance; and
- landside vehicle facilities.

In addition, the draft guide stated that whether domestic passenger processing areas (terminals), certain refuelling facilities such as pipelines and ground service and freight handling equipment facilities satisfy the criteria of airport services in subsection 192(5), should be addressed on a case by case basis.

To date the Commission has received two requests for determinations on whether or not a service is declared under section 192. One was from Delta Car Rentals, the other from Virgin Blue. Both relate to services at Melbourne Airport.

In relation to the Delta Car Rentals request the Commission determined the service of “provision of landside roads and associated vehicle facilities for dropping off and picking up passengers” at Melbourne Airport is declared. Neither Delta Car Rentals nor Melbourne airport have sought Commission arbitration over the dispute.

Virgin Blue has sought a determination on whether or not the domestic common user facility at Melbourne Airport is declared. The matter is currently under consideration.

5.4 Access undertakings

Melbourne and Perth Airports lodged access undertaking in 1997. Both undertakings covered a range of services, some covered by the price cap, some outside the cap. Both committed to providing access at prices consistent with the price cap for capped services, and for non-capped services at prices determined by the airport operator or negotiated between the parties. The undertakings established mechanisms for dispute resolution in the event of disputes over terms and conditions of access.

---


The undertakings were not accepted. The main reasons for this were that:

- The Commission did not consider that the undertakings provided sufficient clarity for them to be enforceable.

- The Commission considered that the undertakings would not provide sufficient financial information to access seekers to allow for meaningful negotiation.

- In relation to Melbourne Airport’s undertaking the Commission was concerned that the pricing proposals for services outside the price cap would not be effective in limiting the airports use of market power.

- In relation to Perth Airport’s undertaking the Commission was concerned at the scope for delays in the dispute resolution process and the potential that the arbitrator would not have sufficient skills.

In reaching its conclusions the Commission sought and received submissions from interested parties. Details about the undertakings and the reasons for the Commission’s decisions are set out in draft determinations released by the Commission in May 1998\textsuperscript{62}.

6. SYDNEY AIRPORT

6.1 Introduction

The Commonwealth Government decided not to privatise the Sydney (Kingsford Smith) airport at the same time as the other airports, though it has stated its intention to do so in the near future. In the interim, ownership of the Sydney airport has been transferred to a new Commonwealth statutory authority, the Sydney Airports Corporation Limited (SACL).

Three Sydney general aviation airports — Bankstown, Camden and Hoxton Park — are operated by subsidiaries of SACL. Melbourne’s Essendon airport, which did not attract a suitable bid when offered for lease, is also managed by a subsidiary of the SACL. The Government’s long-term intention is that all these airports be privately operated.

Sydney airport is subject to a number of the same regulatory provisions as the other core-regulated airports. As with the leased airports ‘aeronautical’ services are declared for prices surveillance under section 21 of the PS Act and ‘aeronautical related services’ are subject to prices monitoring under section 27(A) of the PS Act. Similarly the quality of service monitoring and accounts reporting provisions apply to Sydney Airport in the same way as the leased airports.

However, the regulatory arrangements differ in two ways. The first is that a price cap does not apply at Sydney Airport. The second is that the section 192 airport access provisions in the Airports Act do not apply to Sydney Airport.

6.2 Prices Surveillance

While Sydney Airport is not subject to a price cap it is subject to surveillance under the PS Act. The services subject to prices surveillance are the same as the services subject to the price cap at privatised airports. Sydney Airport must notify the Commission of any price increases in the services subject to surveillance. In assessing pricing proposals the Commission must give special consideration to matters set out in a Ministerial Direction and have regard to criteria set out in section 17 of the PS Act. These criteria focus on market power and the need to maintain investment and employment.

In October 2000 SACL submitted proposals to increase aeronautical charges by some 130% at Sydney Airport. The proposals represent a move away from the network pricing approach previously adopted by the FAC. The main drivers of the price increase proposed are:

---

63 See Declaration number 89.
64 See Direction number 21.
65 The Minister can direct the Commission to give special consideration to specified matters under section 20 of the Prices Surveillance Act 1983 (Cwlth). Direction 18 requires the Commission to give special consideration to new investment proposals (including the cost of the proposals and user support for the proposals) and quality of service information.
- a revaluation of existing assets, including land;
- a move away from ‘single till’ pricing to ‘dual till’ pricing; and
- additional costs resulting from new investment spending undertaken by SACL in the lead up to the Olympics.

The Commission did not object to a price increase of 97%. In assessing SACL’s proposals the Commission conducted an extensive public consultation process. It released an issues paper in October seeking submissions by late November and held a public discussion forum in mid December. Following consideration of the submissions the Commission released its draft decision with a detailed statement of reasons in early February 2001. The draft decision invited further submissions. The Commission released its final decision on 11 May 2001. Release of the final decision was delayed when the Minister for Financial Services and Regulation issued a new direction in relation to Sydney Airport on 19 April 2001.

6.3 Airport access

The declaration provisions in section 192 do not apply to Sydney Airport or the other airports that are still government owned. However, the access regime in Part IIIA of the Trade Practices Act does apply.

In November 1996 Australian Cargo Terminal Operators applied to the National Competition Council (NCC) for declaration of various freight handling and related services at Sydney and Melbourne airports. These included the freight aprons and stands needed to load and unload freight from international aircraft, areas for moving and handling freight, equipment storage areas and land to construct cargo terminals. These facilities were variously owned by the former FAC, QANTAS and Ansett.

Part IIIA requires the NCC to have regard to a number of criteria, which focus on whether access would “promote competition in at least one market”, whether it “would be uneconomical for anyone to develop another facility to provide the service” and whether the facility is of “national significance”. The NCC found that the freight aprons, stands and freight movement and storage facilities met the test, and recommended declaration. It did not recommend declaration of land for constructing cargo terminals as ACTO could do this off-airport.

The NCC found that there was little competition in the freight forwarding, cargo terminal operations and related markets. It found that the apron and equipment movement and storage facilities could not be considered separately from the airport as a whole, and that these were nationally significant facilities, accounting for 70 per cent of Australian’s international air freight. It recommended that the services be declared at Sydney Airport for five years and at Melbourne Airport for a period to expire 11 months after the airport was leased.


67 The 11 month time period recommended for the declaration at Melbourne Airport reflected timing of the introduction of the section 192 access provisions. Declaration of services under section 192 was to take effect
The Treasurer accepted the recommendations and declared the services in July 1997. The FAC applied to the Australian Competition Tribunal for a review of the Treasurer’s declarations at Sydney Airport. The application was taken over by the SACL and heard in December 1998. The Tribunal upheld the Minister’s decision.

Some 12 months after the airports were leased. It was considered likely that the services recommended for declaration in the NCC’s decision on ACTO’s request for declaration would also be declared under section 192. Under Part IIIA an access undertaking cannot be accepted in relation to a declared service. The NCC’s recommendation for expiry of the declaration 11 months after granting of the airport’s lease would give a one month period between declaration under Part IIIA and section 192 in which the services were not declared. In turn this would give Melbourne Airport the opportunity to have an undertaking covering the declared services formally accepted by the Commission before declaration under section 192.
PART B
IMPROVING ECONOMIC REGULATION OF AIRPORTS

The airport regulatory arrangements described in Part A of this submission have been in place since July 1997 for Melbourne, Brisbane and Perth airports and since mid 1998 for Sydney, Adelaide, Alice Springs, Canberra, Coolangatta, Darwin, Hobart, Launceston and Townsville airports. This part of the submission reviews the Commission’s experience in administering the arrangements and the lessons learned. A number of changes to the arrangements are suggested.

Part B is structured as follows. Chapter 7 considers whether continued regulation of airports is warranted. Chapter 8 provides a framework for assessing market power at Australian airports and applies it to consider which airports and which services should be regulated. Options for the regulation of airport charges are set out in chapter 9. The Commission favours continued use of CPI-X price caps. Implementing this option is discussed in chapters 10 and 11. Provisions to encourage efficient levels of new investment are discussed in chapter 10. Legislative implementation of the proposed framework is discussed in chapter 11 along with suggestions for determining ‘X’ values and starting point prices. The accounts reporting and quality of service provisions are considered in chapters 12 and 13.
7. IS PRICE REGULATION OF AIRPORTS NECESSARY?

7.1 Introduction

Australian airports have been formally regulated by the Federal Government since the FAC was established in 1988. Section 7.2 considers the economic theory behind economic regulation of airports.

Historically, as in Australia, most overseas airports have been government owned. This is changing rapidly with privatisation of airports in the U.K and a number of other European countries, New Zealand, South Africa and some South American countries. The merits of economic regulation of airports in such circumstances have been widely recognised. In most cases privatisation has been accompanied by comprehensive regulatory regimes. Section 7.3 provides an overview of the approaches adopted.

7.2 Economic theory

It is widely accepted that vigorous and effective competition normally provides the best means of promoting economic efficiency, a competitive economy and the welfare of consumers.

Competition is a process which centres on the active efforts of firms to keep ahead by reducing costs, developing new products and enhancing the quality of their services. It is a process which forces businesses to offer “more for less” by improving quality and/or lowering prices. At a broader level competition also helps to ensure that the community’s scarce resources are used in the most valuable way now and through time.

In some markets, however, competition may not be possible. This can be the case with airports. Airports often face limited direct competition in the provision of aeronautical services because of limited substitutability between airports and other forms of transport, and because of high barriers to entry.

Economic theory suggests that effective competition will not be sustainable under a range of circumstances. These are summarised in the Commission’s submission to the Productivity Commission’s review of the national access regime. In relation to airports the Commission notes the following:

- Planning restrictions and limited availability of large land sites in or near large cities mean that new entry may not be possible. The difficulty of constructing a major new airport at Sydney provides an example of this.

- Even if it were possible to build a major new airport the lumpy and sunk nature of new airport investments may create barriers to entry and limit the scope for competitive conditions in the market for airports. An investment is ‘sunk’ when its cannot be readily be converted to another use. This means that a firm will incur substantial costs in exiting an industry which in turn increases the risks of entry.
When an investment is also lumpy\textsuperscript{68} entry may give rise to substantial excess capacity relative to current demand. The combination can deter entry and be a source of market power\textsuperscript{69}.

- **Economies of scale and scope** may also deter entry in as much as that new entrant may face higher production costs than the incumbent. When combined with substantial sunk investment costs, economies of scale and scope create substantial barriers to entry. As stated by the Australian Competition Tribunal “The Tribunal heard that most major commercial airports around the world exhibit strong natural monopoly or bottleneck characteristics. Once the basic infrastructure (runways, taxiways, control tower) is in place, the owner faces sharply falling costs of servicing increments in demand (economies of scale). By contrast, a new entrant would have to replicate this basic infrastructure which is inherently capital intensive”.\textsuperscript{70}

- **Network externalities**\textsuperscript{71} in the provision of airport services can act as a barrier to entry. Network externalities give rise to economies of scale on the demand side, with increased willingness to pay for the service as the number of users increases. In the case of airports these may arise for interconnecting travellers (domestic to international, domestic to regional etc). They can act as a deterrent to entry in a similar way to economies of scale and scope\textsuperscript{72}.

Combined with limited substitutability on the demand side these barriers to entry can give rise to significant market power. The circumstances in which such market power are likely to arise is discussed in detail in chapter 8 and in Professor Stephen King's report to the Commission at attachment C.

Failure to address the consequences of such market power may have significant implications for economic efficiency. Airlines providing international services to and from Australia generally operate in a competitive environment. New airline entry has increased competitive pressures in the domestic market. In both cases the impact of increased airport charges is likely to be passed through to the travelling public in the form of higher airfares.

These higher airfares can result in allocative inefficiency. As explained by the Productivity Commission in its Review of the National Access Regime:

\begin{itemize}
\item \textsuperscript{68} Investments are lumpy when capacity can only economically be added in large increments.
\item \textsuperscript{70} Australian Competition Tribunal, *Decision on declaration of freight handling facilities at Sydney International Airport*, March 1 2000, paragraph 84.
\item \textsuperscript{71} Network externalities arise when the value of a service to a customer is positively related to the number of users of the service. As an example, a telephone service is more valuable to a user if more people can be called using the service.
\end{itemize}
In the first instance, these effects stem from a higher price for, and lower use of, the final service, relative to the situation in which prices were set to encourage efficient use of that service. In the simple monopoly model, lower use of the final service is a cost to ‘allocative’ efficiency.\textsuperscript{73}

There are further allocative efficiency implications where the service is also an intermediate input. High prices can distort production and consumption patterns of the goods and services using air travel as an input. For example:

- **Business input costs.** Travel is a business input for many companies. Higher prices can affect business input costs and the ability of such companies to compete in Australia and overseas.

- **Tourism industries.** Tourism is a major contributor to the Australian economy. Often tourists are highly price sensitive. Higher airport charges have the potential to damage both domestic and international tourism.

The Commission is aware of arguments against the need for regulation of airports on the grounds that demand for airport services is relatively inelastic\textsuperscript{74}. The argument seems to be that the allocative efficiency losses arising from increases in prices are limited when demand is inelastic – in other words that a price rise would do little to change the behaviour of airlines and their passengers.

The Commission considers that this argument misses the point.

It is true that the welfare losses associated with a given price increase will be lower the less elastic is demand. It may also be true that relatively large price increases (such as the doubling of prices at Sydney Airport approved by the Commission in April 2001) will only have a small impact on airline and passenger behaviour.

However, the real issue here is what the prices might be in the absence of regulation. A rational company will set prices to maximise profits. The less elastic is demand the higher the profit maximising price – and the larger the allocative efficiency losses (ie deadweight welfare losses). In setting prices firms trade off the additional revenue and profit from higher prices against the reduction in revenues and profits as customers stop using the service. If, as is argued, the demand for airport services is relatively inelastic the resulting profit maximising prices will be high, well above the charges currently levied\textsuperscript{75}(see diagram below).

Standard economic theory is clear about one thing – the less elastic is demand the stronger the case for regulation.


\textsuperscript{74} See for example Peter Forsyth, *Airport Price Regulation: Rationales, Issues and Directions for Reform*, Submission to the Productivity Commission Inquiry into Price Regulation of Airport Services, March 2001.

\textsuperscript{75} The aeronautical charges now levied at Sydney Airport are around $10 to $20 per passenger, but lower at other airports (see the Commission’s regulatory reports for details).
Having said this, if airports are in a position to price discriminate between different customers, the allocative efficiency losses resulting from monopoly pricing might be mitigated. By price discriminating between categories of traveller, the airport would be maximising its profits, albeit at a cost to consumers. At the limit, if it was able to perfectly price discriminate, deadweight losses would be eliminated altogether. This scenario would involve substantial transfers of value away from consumers and to the airport operator. By better targeting the particular demand characteristics of these specific categories, however, the airport would be able to capture some surplus which would otherwise be lost to society.

The evidence to date, however, suggests that airports have little capacity to price discriminate in relation to aeronautical services. As NECG notes:
Price discrimination on aeronautical services may be limited to some degree because airlines generally serve different customer groups. That is, airlines are differentiated by their location in quality space. As a result they are limited to price discriminate between customers whose demand spans part of that space. Because airlines cannot readily alter their quality location they are unlikely to be able to price discriminate between customers whose demand falls outside the quality space they are in.\(^\text{76}\)

NECG highlights the limitations on the ability of airlines to price discriminate. Airports are likely to be subject to even greater constraints, as demand for airport services is derived from the demand for airline services. To perfectly price discriminate an airport must be able to not only distinguish between particular airlines and particular flights, but also distinguish between individual travellers on each flight. The information requirements to enable such pricing behaviour are obviously extremely high. A further limitation on the extent to which airports can price discriminate is the slot allocation system currently in place. Slots are not allocated on the basis of price, rather by an administrative mechanism, implying that they are not necessarily allocated to those who value them most highly. Again, this is a substantial impediment to price discrimination. The net result of these limitations on potential price discrimination is that deadweight losses from monopoly pricing will occur, and that the passenger mix at airports will be a critical determinant of these allocative inefficiency consequences.

The major role played by airports in Australia’s transport industry makes economic regulation of airport charges particularly important. In 1999/2000 Sydney Airport and the leased core regulated airports\(^\text{77}\):
- Handled 63 million passengers (some 16 million of which where international passengers);
- Managed $7.7 billion in assets;
- Generated $783 million in revenues; and
- Accounted for around 5 per cent of total aviation industry turnover.

Economic regulation is not new to airports or the airport privatisation process. Governments have recognised the potential for market failure in the provision of airport services for some time. Historically governments have addressed the problem through government ownership. When it corporatised its airports, the Commonwealth Government addressed the issue by declaring the FAC’s aeronautical charges\(^\text{78}\) for prices surveillance. With privatisation the Government introduced the stronger provisions in the current regulatory framework.


\(^\text{77}\) Source: Commission 1999/2000 regulatory reports.

\(^\text{78}\) Aeronautical charges covered by the declaration include:
- Charges for landing and parking of aircraft;
- Charges relating to embarkation and disembarkation of aircraft passengers; and
- Charges relating to handling of cargo.

However charges made under a contract, lease or licence are not covered by the declaration (for example domestic terminal leases).
Countervailing power

Airport operators may not be in a position to take advantage of market power if airlines or other airport users have countervailing power. At many airports Qantas and Ansett and their subsidiaries remain the dominant players. In such circumstances they may be in a position to withdraw or curtail services in response to price increases.

In practice it is unlikely that the airlines have significant countervailing power, at least in relation to major airports. Professor Stephen King considered market power at Melbourne Airport in his advice to the Commission (report at attachment A) concluding the following:

As noted in section 1.4, countervailing power from the airlines might be able to at least partially offset Melbourne airport’s market power. There are two main domestic carriers currently operating out of Melbourne airport as well as two smaller carriers. One of the major carriers, for example Qantas, might be thought to have significant countervailing power. However, because of its location in the second largest Australian city, it is not clear that even a major airline, such as Qantas, can credibly exercise countervailing power to Melbourne airport. It is likely that Qantas could not threaten to cease services to Melbourne or even to substantially curtail these services. If Qantas were to carry out such a threat, then this would undermine its own profitability and probably lead to significant gains to Qantas’ rival carriers. While this issue requires further investigation, at first pass it is not obvious that there exists countervailing power that would offset any market power for Melbourne airport.

High prices at many smaller regional airports suggest that the lack of countervailing power may extend to small airports.

Stephen King’s example does not deal with the possibility of airlines collectively threatening to cease services. However, the Commission notes that section 45 of the Trade Practices Act generally prohibits such actions.

7.3 Prices regulation overseas

The need for regulation of airports has been recognised in most countries. While the nature and degree of regulation varies its application is almost universal. This section provides an overview of the approaches to airport regulation in the United Kingdom, the European Union, the United States, New Zealand and Canada. A more detailed overview is provided in attachment B.

In these countries there is a distinct association between airport ownership and the type of regulation that is subsequently applied. In many cases, the privatisation of airports is accompanied by comprehensive regulation. Government-owned airports are generally subject to less detailed scrutiny.

The United Kingdom Airports Act 1986 initiated the privatisation of the British Airports Authority (BAA). This marked the first major airport privatisation in the world. The privatisation and corporatisation of many other British airports followed.

---

Public listed companies were set up to manage the UK’s larger regional airports. These airports are still owned by municipal governments. The Act also introduced a two-tier system of airport regulation. In the first instance, airports with an annual turnover of more than £1 million are subject to broad economic regulation. The second level imposes stricter monitoring and price cap regulation over designated airports.

Airports in the United States (US) are predominantly owned and operated by local governments. Some airports are operated by entities established by local or state governments specifically to operate their airports.\(^{80}\) Regulation is based on principles for the levying of airport charges, without any formal price controls. However, the Department of Transportation has the authority to set aside prices that it considers to be excessive.\(^{81}\)

The Federal Aviation Authority (FAA) administrates two programs for the capital improvement of airports: the Airport Improvement Grant Program (AIP), and the Passenger Facility Charge Program. Airports that receive these grants are required by Federal law to make certain assurances regarding airport access and pricing in return for the funds. In regard to privatisation, the FAA has repeatedly expressed concern about the potential for private airport operators to earn unreasonable profits and has therefore maintained a cautious policy for some time.\(^{82}\) Nevertheless, in 1996 the FAA established the Airport Privatisation Pilot Program (APPP) in order to evaluate the benefits of privatisation. Preliminary results indicate that there is little interest, largely due to the popularity of the existing system of funding.\(^{83}\)

Similarly, airports in Canada are mostly government owned, and operated by local airport authorities. There is no direct economic regulation of Canadian airports. Public accountability principles oblige Canadian Airport Authorities to levy fair and reasonable airport charges, and the airports must be run as non-profit organisations. The 2000 Report of the Auditor-General describes the Canadian Airport Authorities as monopolies that enjoy a captive market. The report further states that the absence of economic regulation allows the airport authorities to set fees to finance capital expansions, make any kinds of investments, and accumulate large reserves tax-free.\(^{84}\) Nonetheless there are no apparent plans to introduce economic regulation.

The majority of European airports are state-owned business enterprises. However, unlike the North American regimes, privatisation is increasingly prevalent in Europe. Airports in Hamburg, Dusseldorf, Berlin, Zurich, Copenhagen, Brussels, Rome, Naples, and Vienna have been partially privatised, typically via share flotations. Despite the extensive liberalisation of the air transport sector, the European Commission (EC) introduced legislation to further mitigate the market power of


\(^{81}\) Refer to City of Los Angeles v. United States Department of Transportation, et al., February 1999 (www.lw.bna.com)


The airport charges directive requires Member States to ensure non-discrimination, cost-relatedness, and transparency in setting airport fees. The directive is due for implementation across all Member States by January 2002.

Prior to 1988, all New Zealand airports were government owned and operated. In 1998 the government divested its 51 percent share of Auckland airport through a share float, Wellington airport is 66 percent privately owned, and Christchurch Airport remains publicly owned. The New Zealand Commerce Commission is currently undertaking an inquiry to determine whether price controls should be implemented at New Zealand’s three international airports- Auckland, Wellington and Christchurch. The inquiry was established due to Government concerns that the current system of light-handed regulation was not adequately preventing airport companies from exploiting their monopoly power. The primary regulatory protection under the Airports Act 1966 is that airports must provide sufficient consultation with airlines regarding aeronautical charges. This requirement has been the subject extensive litigation. The airlines claim that the requirement is inadequate, while the airports argue that the countervailing power of airlines is sufficient to constrain pricing behaviour, particularly at smaller airports.

To date, there are no published findings of the Commerce Commission’s inquiry, which is due for completion in August 2002. However, a substantial part of the inquiry is considering an update of the provisions in Parts IV and V of the Commerce Act 1986 to allow the Commerce Commission increased flexibility in its application of price controls. Currently, the Commerce Act contains reserve powers which allow for the introduction of price control over specific goods and services. The proposed amendments detail methods by which the Commerce Commission can authorise prices, revenues, and quality standards in respect to the supply of controlled goods and services. The proposed methods include:

- the application of minimum or maximum prices for, or revenue derived from controlled goods or services; and
- a CPI-X or sliding scale regulation approach to prices and revenue monitoring.

The review of international airport regulation at attachment B shows that there is a steady departure from the traditional pattern of government ownership. Today, more than 100 airports around the world have been privatised. The review also shows that Governments typically respond by imposing comprehensive regulation over airport activities. The EU’s recent airport charges directive and the New Zealand price control study are examples of such government action. Meanwhile, the US government maintains a cautious stance on airport privatisation. Together, this suggests that

---

88 New Zealand Commerce Commission (1), op. Cit, p2.
governments are aware of the potential disadvantages of privatising airports without introducing some degree of price control.
8. MARKET POWER

8.1 Introduction

Chapter 7 outlined the economic justification for the regulation of airports. In particular, it was argued that a number of factors give rise to market power in the provision of airport services. These factors are:

- planning restrictions and limited availability of land;
- lumpy and sunk airport investments;
- economies of scale and scope; and
- the existence of network externalities.

Furthermore, the limited substitutability of demand and the airlines’ lack of significant countervailing power result in a market environment in which airports are likely to have market power that allows monopoly pricing. The disadvantages of such pricing, in particular in terms of allocative inefficiency, are discussed in chapter 7.

This broad market power in the provision of airport services does not necessarily imply that all airports have significant market power, nor that market power extends across the full range of services offered by an airport. This chapter addresses these questions in more detail. Section 8.2 examines more closely the specific airports in Australia in which market power may be sufficiently significant as to justify price regulation. Section 8.3 evaluates two general methods of regulation, the dual till and single till approaches. In the context of that discussion, section 8.4 examines the specific services provided by these airports and provides a recommendation on the bundle of services the Commission believes should be included in any price regulation arrangements.

The Commission engaged Professor Stephen King to provide advice on an approach to determining the extent of market power at airports in Australia. Professor King proposed a six-step iterative framework for considering this issue. These steps are:

1. define the problem;
2. determine the potential market participants;
3. determine the potential time-frame(s) and functional levels for analysis;
4. consider the substitution possibilities on both the demand and supply sides;
5. re-examine the underlying assumptions; and
6. examine the airport’s market power.

Professor King argues that this framework can be applied to the question of whether specific airports have market power over general aviation and also to the question of whether an airport with such market power holds this power in relation to specific airport services.

---

90 Refer to Attachment C.
8.2 Which airports?

Define the problem

In considering the issue of market power in relation to airports, the primary issue to be addressed is essentially determining whether or not a particular airport is in fact a monopoly provider of airport services. The concern here is not so much whether a firm has market power which it may employ in an anti-competitive fashion (which is generally dealt with through the Trade Practices Act 1974) but rather market power which manifests itself in prices which, from society’s perspective, are too high. Professor King frames the question as follows: ‘do some or all of these [leased] airports have the ability to raise prices to a supra-competitive level over a relevant time frame?’ This is the question to be addressed with reference to King’s framework. Prices here are taken to refer to the broad set of services provided, or potentially provided by an airport, rather than limiting the functional market to narrower definitions. This latter analysis is left to section 8.4 of this paper.

Determine the potential market participants

The list of potential participants in the markets in which airports are operating is very broad. From a supply perspective, airports might compete directly with other airports, while alternative forms of transport such as road, rail and shipping may provide sufficient competition to limit the scope for an airport to raise prices. Certain services – for example retail leases - might be subject to competition from non-airport providers. The airports under consideration in this review might also face competition from airports not under examination, or may compete between themselves in the provision of some services or some bundles of services. Section 8.4 discusses in more detail which specific services might be subject to constraints from either other airports or other service providers.

From a demand perspective, airport users fall into a number of categories. The most important are the ultimate consumers of airport services, air travellers. Within this group it is worth identifying a further two sub-categories: business travellers and tourists. These two groups are likely to have significantly different demand characteristics which may affect the extent to which an airport has market power. The demand of business travellers is likely to be relatively unresponsive to changes in airport prices, as the choice of destination is primarily related to factors other than cost. By contrast, holiday-makers are likely to be more responsive to price changes, with cost a significant factor in the choice of holiday destination. The level of demand by each of these types of traveller, the relative mix between business and tourist travellers, and the responsiveness of each to changes in airport charges will be crucial determinants of potential allocative inefficiency, and hence welfare loss, from monopoly pricing.

---

91 Prices that are ‘too high’ from society’s perspective are those which result in welfare losses when compared to competitive market outcomes. See chapter 7 for a discussion of the consequences of monopoly pricing.

92 King, S., Report for the ACCC - Market Power and Airports, January 2001, p. 17 (Attachment A to this paper).
A second major category of airport user is airlines, which may be differentiated as providers of passenger or freight transportation services. It may be the case that airlines hold significant countervailing power which limits the ability of the airport to raise charges. As noted in chapter 7, however, the Commission does not believe such countervailing power is a feature of the aviation market in Australia. The responses of these intermediate users to changes in airport charges is therefore less relevant than the responses of end-users when evaluating the potential market power of airports. While it may be argued that the airline market is not perfectly competitive, it would be inappropriate to rely on imperfect competition in a downstream market as a constraint on any monopoly power an airport might have. Such arguments overlook the wider allocative inefficiencies that flow from either airports or airlines pricing above the socially optimal levels. Accordingly, the response of end users, rather than intermediate users, to changes in airport prices is the Commission’s primary consideration in assessing the question of airports’ market power.

Other categories of airport users might include retail concessionaires, taxi operators and car rental companies. In general, demand from such users for facilities at airports relates to travellers’ broader demand for air travel to a particular destination. For the purposes of determining market power at particular airports, therefore, demand from these businesses is likely to also be a secondary consideration. Demand from this category of users is likely to be more relevant when evaluating the specific sub-services in which an airport operator may have market power. For a more detailed discussion of this issue, see section 8.4.

Determine the potential time-frame(s) and functional levels for analysis

The long timeframes associated with developing an airport necessitate a consideration of the market over a reasonably long period. An extended period of monopoly pricing, however, may have serious efficiency consequences due to the misallocation of resources. The view expressed by Professor King, that a one to five year period should be considered when analysing the market power of airports, seems reasonable.

The functional level of an airport’s operations could broadly be defined as ‘airport services’. While this moniker does not explain the precise nature of what these services are, nor incorporate all services provided by an airport operator, the term might be used loosely to refer to the unique groupings of services which can be provided by airports. It would include all services necessary for facilitating the take-off and landing of aircraft and the processing of freight and passengers. Section 8.4 discusses in more detail the particular services which the Commission considers should be included within the definition of airport services. For the purposes of addressing the question as to which airports have market power, however, the broader definition should generally suffice.

Consider the substitution possibilities on both the demand and supply sides

The above steps provide the setting in which to conduct the main analysis of the market power question; namely, to examine the demand and supply substitution possibilities in the market for airport services. This exercise amounts to an assessment of the geographic and product dimensions of the market. In making its assessment the Commission has considered those airports in which it has had regulatory experience.
This group comprises the privatised Phase I (Brisbane, Melbourne and Perth) and Phase II (Adelaide, Alice Springs, Canberra, Coolangatta, Darwin, Hobart, Launceston and Townsville) airports, as well as Sydney (Kingsford-Smith) Airport.

The markets in which these airports operate will each be distinctive. In some cases, alternative forms of transport provide competitive pressure, while certain pairings of the above airports may be sufficiently proximate to suggest that they are operating in the same geographical market. This proximity does not in itself guarantee that an airport operator is constrained in its pricing; functional differences may provide barriers to entry and exit which allow sustained monopoly pricing. These barriers include economies of scale and scope, sunk costs, planning restrictions and network externalities as discussed in chapter 7.

The geographic dimension will remain an important element of these considerations, and a significant determinant of an airport’s market power. Airports are a means of access to a particular location and, as such, will be constrained or otherwise by the presence/absence of viable alternatives. These alternatives may involve alternative means of transport, or may simply be other airports. The former is considered in the discussion on demand side substitutability, and the latter in the discussion on supply side substitutability, below. Demand side substitution relates to the ability of users to substitute services acquired from the airport with other services which are close substitutes. Supply side substitution relates to the scope for other producers to supply the service in question. In the context of the current discussion this amounts to the ability of airport users to substitute between airports.

**Demand side substitution**

In the general case of airport services, demand side substitution entails an examination of the extent to which alternative forms of transport are substitutable for air transport. Such analysis is likely to differ for different groups of airport user. In particular, air travellers will face different substitution possibilities from those available to freight transport operators.

The alternative transport options available to travellers include road (car and bus) and rail transport, and potentially shipping. In general these appear to be weak substitutes for air travel. For business travellers the convenience of air travel is vastly superior to the alternatives. It is likely that for this customer group, location is primarily determined by factors other than airport pricing, and that time constraints are a critical element of the travel decision. In such circumstances, there are no viable substitutes to flying to a particular destination; the choice is simply between travelling and not travelling.

For tourists, particularly domestic tourists, the alternatives may be more palatable. While the available substitutes are imperfect, the differences in cost between air travel and other forms of transport may be large enough to compensate consumers for the associated disutility of using the inferior mode of transport. International tourists face somewhat narrower choices. In considering a particular destination, these users face the same basic alternative as business travellers; namely to travel by air or not to travel. However, both international and domestic tourists might substitute *destination* on the basis of cost differences. For example, a tourist may decide to visit Coolangatta rather
than Fiji, if the cost of doing so is substantially lower. The passenger mix at each airport is therefore an important indicator of the possibility for demand side substitution. As pointed out by Hooper:

> [t]hose studies which have calculated elasticities for single routes, or groups of routes, invariably find that those routes with higher proportions of business traffic have lower price and income elasticities.\(^{93}\)

In general, airports where tourists are a substantial proportion of total passengers are more susceptible to competitive pressure from either alternative modes of transport or other destinations.

This conclusion is subject to a further qualification. As journey distances increase, alternative transport options become less attractive for two reasons. Firstly, the difference in journey times between air transport and the alternatives increases rapidly. Secondly, the cost differential between air transport and any alternative mode of transport may narrow as the distance increases.\(^{94}\) The remote location of a number of the airports currently under consideration will limit the extent to which the existence of other transport options provides a competitive constraint on an airport’s pricing. The geographical dimension must therefore be considered along with the passenger mix in order to evaluate the scope for demand side substitution at airports.

The following table provides an indicative breakdown of inbound international traffic at the locations under consideration.

### International Visitors 1998/99 – Reason for Journey

<table>
<thead>
<tr>
<th>Airport</th>
<th>Business/VFR</th>
<th>Holiday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adelaide</td>
<td>52%</td>
<td>42%</td>
</tr>
<tr>
<td>Alice Springs*</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Brisbane**</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Canberra*</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Coolangatta</td>
<td>32%</td>
<td>66%</td>
</tr>
<tr>
<td>Darwin</td>
<td>20%</td>
<td>68%</td>
</tr>
<tr>
<td>Hobart</td>
<td>28%</td>
<td>44%</td>
</tr>
<tr>
<td>Launceston*</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Melbourne</td>
<td>51%</td>
<td>42%</td>
</tr>
<tr>
<td>Perth</td>
<td>40%</td>
<td>53%</td>
</tr>
<tr>
<td>Sydney</td>
<td>41%</td>
<td>51%</td>
</tr>
<tr>
<td>Townsville</td>
<td>15%</td>
<td>43%</td>
</tr>
</tbody>
</table>

*Source: Australian Bureau of Statistics*

* These airports do not service international traffic.

** The Commission did not have corresponding data relating to Brisbane Airport.

---


\(^{94}\) This might reflect increased energy costs (which may be spread across fewer passengers), infrastructure costs associated with road or rail transport, and potentially accommodation and other associated costs.
While corresponding information regarding domestic travellers is not readily available, the above information tends to support the conclusion that a defining characteristic of the major airports is the relatively large volume of traffic for the purposes of business or visiting friends and relatives (VFR). This is not surprising given the bigger populations, and associated business activity, in these centres. Adelaide, Brisbane, Melbourne, Perth and Sydney airports would fall into this category. As the national capital, traffic at Canberra Airport is also likely to be heavily weighted towards passengers travelling for business and VFR purposes. By contrast, the other regulated airports generally have a higher proportion of tourism travellers.

As already noted, the composition of travellers is likely to be a primary indicator of the extent to which demand side substitution is feasible. In many cases business travellers are unlikely to substitute air travel to these destinations with any alternative means. However, the geographic dimension is relevant also. The relative locations of these destinations provide a further guide to the feasibility of alternative transport options. For example, their distance from other major centres suggests that there are few viable transport alternatives to and from Perth or Darwin. Air travel is therefore likely to be a relatively attractive option, suggesting that in the case of Perth and Darwin Airports demand side substitution possibilities will be relatively low. While geographic isolation is less marked in the case of other capital airports, the basic argument still applies.

These considerations may serve to support the case for deregulating some airports. For example, Hobart Airport has a high proportion of tourism related traffic. Furthermore, ferry services connecting Melbourne and northern Tasmania are an attractive alternative to flying (for many visitors). In this case the demand side substitution possibilities are much greater than for other capital city airports.

In general, it is the Commission’s view that alternative modes of transport are only weak substitutes for air transport. Only in a small proportion of cases are air travellers likely to consider these alternatives. These cases will generally relate to journeys over shorter distances, or to destinations that are infrequently serviced by airlines.

The second category of airport user that might be considered are freight operators, although as freight movements are generally only a fraction of total aircraft movements, these are of lesser importance. Again, these can be further sub-categorised into domestic and international freight operators, as these two separate groups are likely to face different substitution possibilities. While for domestic operators, the alternative to air freight is likely to be road or rail transport, for international operators the alternative is most likely to be shipping.

As may be the case for business travellers, timeliness is likely to be a critical aspect to the service a freight operator is seeking. This differential between air and the alternatives is greatest for international freight operators, where shipping is the only viable alternative mode of transport. However, time constraints will be critical to all freight operators, and they will therefore generally have limited available substitutes.

---

95 Hobart Airport is also likely to face competition from Launceston Airport. This is discussed in the section on supply side substitution below.
The matrix below summarises some key characteristics of the airports under consideration and indicates the Commission’s view of the potential for significant demand side substitution in light of the preceding discussion.

### Demand side substitution by airport

<table>
<thead>
<tr>
<th>Airport</th>
<th>Major Passenger Category</th>
<th>Alternative Transport Feasibility</th>
<th>Demand Side Substitution Possibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adelaide</td>
<td>Business / VFR</td>
<td>Medium</td>
<td>Low</td>
</tr>
<tr>
<td>Alice Springs</td>
<td>Tourism</td>
<td>Low</td>
<td>Medium</td>
</tr>
<tr>
<td>Brisbane</td>
<td>Business / VFR</td>
<td>Medium</td>
<td>Low</td>
</tr>
<tr>
<td>Canberra</td>
<td>Business / VFR</td>
<td>Medium</td>
<td>Low</td>
</tr>
<tr>
<td>Coolangatta</td>
<td>Tourism</td>
<td>Medium</td>
<td>Medium</td>
</tr>
<tr>
<td>Darwin</td>
<td>Tourism</td>
<td>Low</td>
<td>Medium</td>
</tr>
<tr>
<td>Hobart</td>
<td>Tourism</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Launceston</td>
<td>Tourism</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Melbourne</td>
<td>Business / VFR</td>
<td>Medium</td>
<td>Low</td>
</tr>
<tr>
<td>Perth</td>
<td>Business / VFR</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Sydney</td>
<td>Business / VFR</td>
<td>Medium</td>
<td>Low</td>
</tr>
<tr>
<td>Townsville</td>
<td>Business / VFR&lt;sup&gt;96&lt;/sup&gt;</td>
<td>Medium</td>
<td>Low</td>
</tr>
</tbody>
</table>

### Supply side substitution

For a number of Australian airports, supply side substitution possibilities are also limited. This is essentially a question as to whether other producers (airports) can supply the service in question, in this case airport services. In addressing this issue, it is important to note that there is a bundle or package of services which airport users must use if they are to use the airport at all.

The Prices Surveillance Authority commented on this issue:

> In arriving at a functional definition of aeronautical services it is necessary to consider what package of facilities is necessary to efficiently provide air transport services. On this basis it could be argued that all services relating to the transport of passengers and freight, from ground facilities (roadway or freight terminal) to the aircraft take-off, are aeronautical.

> To provide the whole package of services and facilities to users of air transport, all aircraft-movement related facilities, terminals, (including all passenger facilities), baggage handling, check-in and ticketing, roads, car parks and access to other transport modes (such as buses, trains and taxis) which provide access to the airport are typically provided by a single supplier – the airport authority.<sup>97</sup>

---

<sup>96</sup> While Townsville has only a small proportion of inbound international traffic related to business/VFR, a very significant proportion of its outbound international traffic falls into this category.

The concept of this package of services has been identified elsewhere. The Australian Competition Tribunal, in its decision *Sydney International Airport*, notes that “airports typically provide a bundle (sometimes called a cluster) of services, utilising a different variety and mix of assets”. The decision considers extent to which the use of a particular service is necessary when using the broader ‘set of physical assets’ of airport services. It concluded that the:

…minimum set of physical assets necessary for international aircraft to land at [Sydney Airport], unload and load passengers and freight and depart in a safe and commercially sustainable manner” comprises “all the basic air-side infrastructure, such as the runways, taxiways and terminals and the related land-side facilities integral to the effective functioning of airside services.

NECG has also identified the issue in terms of the concept of cluster markets. In previous advice to the Commission, NECG defined cluster markets in the following way.

The defining feature of a cluster market is that it groups services which are characterised by economies of scope in production and/or consumption so great as to require firms to compete not on individual services but rather on the set of services taken jointly. Expressed in terms of substitutability, the ‘unbundled’ components of the cluster when procured separately are not close substitutes for the cluster procured as a whole. As a result, the pricing of a firm that supplied the cluster as a whole, and was the sole firm to do so, would not be constrained by competition from suppliers of the separate parts.

It follows that in considering airport services as a cluster market, a consideration of supply side substitution must look at airports offering a similar cluster of services. The concept of a service cluster is one approach to determining the functional dimension of a market.

At many of the airports currently subject to price regulation, the cluster of available services appear inferior to other operators. Furthermore, there are significant limitations on the extent to which supply side substitution can occur. For example, from a functional perspective, only some of the regulated airports provide facilities to land, and provide associated airport services to, large jet aircraft such as Boeing 747s. Sydney, Melbourne, Brisbane, Perth, Adelaide and Canberra fall into this category. Such runway and terminal capacity is an important element to potential market power, as the combination of scale and scope economies and associated network externalities generate correspondingly stronger entry barriers, and the sunk nature of large airport investments creates exit barriers.

It is the Commission’s view that these factors apply to most capital city airports. In particular, the Commission considers that Sydney, Melbourne, Brisbane, Perth, Adelaide and Canberra operate as monopoly providers in geographically and functionally distinct markets. This distinction need not be symmetric; for example,

98 *Sydney International Airport* [2000] ACompT 1, paragraph 74 ff and paragraph 81 ff.
99 Ibid., at paragraph 99 ff.
101 Canberra Airport is in the process of upgrading its main runway to accommodate such aircraft.
while Brisbane is geographically and functionally distinct from Coolangatta, the reverse does not apply. That is, Coolangatta faces competition from Brisbane, but Brisbane is not necessarily constrained in its pricing by the proximity of Coolangatta, given the capacity limitations at the latter.

The following table summaries the Commission’s views regarding the potential for supply side substitution at the regulated airports.

**Supply side substitution by airport**

<table>
<thead>
<tr>
<th>Airport</th>
<th>Geographic Substitutes Available?</th>
<th>Barriers to New Entrants</th>
<th>Supply Side Substitution Possibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adelaide</td>
<td>No</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>Alice Springs</td>
<td>Yes¹</td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Brisbane</td>
<td>No²</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>Canberra</td>
<td>No</td>
<td>High¹</td>
<td>Low</td>
</tr>
<tr>
<td>Coolangatta</td>
<td>Yes</td>
<td>Medium</td>
<td>High</td>
</tr>
<tr>
<td>Darwin</td>
<td>No</td>
<td>Medium</td>
<td>Medium</td>
</tr>
<tr>
<td>Hobart</td>
<td>Yes</td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Launceston</td>
<td>Yes</td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Melbourne</td>
<td>No</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>Perth</td>
<td>No</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>Sydney</td>
<td>No</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>Townsville</td>
<td>No</td>
<td>Low</td>
<td>Medium</td>
</tr>
</tbody>
</table>

1. Faces competition from facilities at Uluru.
2. Potential competition from Coolangatta Airport is limited due to the constraints faced at Coolangatta (limited runway capacity and constrained expansion due to environmental factors).
3. Canberra is in the process of expanding its capacity to cater for larger aircraft (eg Boeing 747s).

Some further comments on the above table are warranted. Alice Springs and Coolangatta airports are rated as having good available substitutes due to the proximity of airports with similar or greater capacity; namely Uluru and Brisbane airports respectively. In the case of Hobart and Launceston, the Commission believes that these airports are likely to compete with each other, and perhaps also with Devonport Airport, for the (predominantly tourism-related) business to Tasmania. Again, the proximity of these airports is a factor likely to facilitate competition. For the remaining regulated airports there appear to be few viable alternatives at present.

**Re-examine the underlying assumptions**

As Professor King notes in his paper, the examination of market power is an iterative process, requiring the re-examination of the assumptions made prior to conducting the type of analysis sketched out in the discussion on demand and supply side substitutability. Professor King also notes the importance of market inquiries to an analysis of this sort. The Commission has not undertaken such inquiries as it considers this to be the role of the Productivity Commission in its deliberations. The Commission anticipates that the assumptions spelt out earlier in section 8.2 will be validated or invalidated as appropriate by the Productivity Commission as part of its review. Should
the Productivity Commission disagree with the assumptions already outlined, the Commission urges the Productivity Commission to subject its views to the tests advocated by Professor King.

In light of the discussion on demand and supply side substitutability, however, the assumptions detailed earlier regarding the functional dimensions of the market should be now briefly touched upon.

The above discussion demonstrates that in some cases it will be worth considering the functional dimensions at a slightly more disaggregated level than outlined earlier. For example, not all airports have the same maximum capacity, where capacity is referring to the size of aircraft that can be landed and processed at that airport. The generic functional grouping of ‘airport services’ might be amended to distinguish aircraft types. As already argued, it is likely that the largest airports, with the capacity to land the largest planes, will in general be least subject to competitive constraints.

**Examine the airport’s market power**

The preceding discussion examined both the demand and supply substitution possibilities available in relation to the airports currently subject to regulation. The absence of significant substitution opportunities on either the supply or demand side implies that an airport holds monopoly market power.

The following table summarises the Commission’s views in relation to the question of which airports have market power of a magnitude sufficient to warrant regulatory intervention.

**Case for regulation by airport**

<table>
<thead>
<tr>
<th>Airport</th>
<th>Demand Side Substitution Possibilities</th>
<th>Supply Side Substitution Possibilities</th>
<th>Case for Regulation?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adelaide</td>
<td>Low</td>
<td>Low</td>
<td>Yes</td>
</tr>
<tr>
<td>Alice Springs</td>
<td>Medium</td>
<td>High</td>
<td>No</td>
</tr>
<tr>
<td>Brisbane</td>
<td>Low</td>
<td>Low</td>
<td>Yes</td>
</tr>
<tr>
<td>Canberra</td>
<td>Low</td>
<td>Low</td>
<td>Yes</td>
</tr>
<tr>
<td>Coolangatta</td>
<td>Medium</td>
<td>High</td>
<td>No</td>
</tr>
<tr>
<td>Darwin</td>
<td>Medium</td>
<td>Medium</td>
<td>Yes</td>
</tr>
<tr>
<td>Hobart</td>
<td>High</td>
<td>High</td>
<td>No</td>
</tr>
<tr>
<td>Launceston</td>
<td>High</td>
<td>High</td>
<td>No</td>
</tr>
<tr>
<td>Melbourne</td>
<td>Low</td>
<td>Low</td>
<td>Yes</td>
</tr>
<tr>
<td>Perth</td>
<td>Low</td>
<td>Low</td>
<td>Yes</td>
</tr>
<tr>
<td>Sydney</td>
<td>Low</td>
<td>Low</td>
<td>Yes</td>
</tr>
<tr>
<td>Townsville</td>
<td>Low</td>
<td>Medium</td>
<td>No</td>
</tr>
</tbody>
</table>

In the case of Townsville Airport, the Commission does not consider regulation warranted for two particular reasons. Both relate to the fact that the airport itself is very small in comparison to the other airports under consideration. Given its size, the barriers to entry by potential competitors are likely to be relatively low. Thus potential
competition (as opposed to actual competition) may act as a constraint on pricing. The second reason is the issue of regulatory cost. The Commission’s view is that in this particular case the costs of regulation may outweigh the benefits.

8.3 Dual till

In its decision in relation to aeronautical charges at Sydney Airport, the Commission extensively considered the merits of two alternatives to the cost-based price regulation of aeronautical services. The dual till approach to pricing conceptually separates the aeronautical from the non-aeronautical functions of an airport. It identifies those costs involved in the provision of aeronautical services and uses them as the basis for setting aeronautical charges. This approach necessitates an identification of those services considered as aeronautical, along with an allocation of the costs that are common to aeronautical and non-aeronautical functions.

Until recently regulation both in Australia and overseas has tended to be based on the single till approach to pricing. Under a single till approach to pricing, airport revenues are determined by setting an appropriate rate of return on all assets that are used for the provision of all services at the airport. Total costs of the whole airport are calculated, along with non-aeronautical revenues. Aeronautical prices are then set as a residual to meet a rate of return target for the airport as a whole. Under this approach the allocation of costs between aeronautical and non-aeronautical services is less significant, given that the allowable revenue figure is based on total costs. The single till approach is used in the U.K. regulatory regime - total costs are projected over a five-year regulatory period along with non-aeronautical revenues.

In the past airport prices were set by the FAC on a ‘single till’ basis. The FAC adopted a rate of return target on the airport as a whole, and set aeronautical charges at the level required to meet the rate of return target. Since profitability on non-aeronautical services was high, and well above the target rate of return, this meant that returns on the aeronautical side of the business were low, often negative. By contrast, the regime applicable to privatised airports has been more along the lines of a dual till approach. The dual till approach was also explicitly adopted in the Commission’s decision regarding aeronautical charges at Sydney Airport. This section reviews the economic merits of the two approaches to pricing and variants of them. Each alternative is evaluated in terms of its implications for both efficiency and market power.

For the reasons detailed in chapter 11 of this submission, the Commission does not consider that existing aeronautical prices at privatised airports should be revisited using a cost based methodology (as adopted in the case of Sydney Airport). Nonetheless, a number of the key points of that analysis remain relevant when considering the appropriate approach to airport regulation in the future. These relate to incentives for new investment, allocative efficiency, congestion (where applicable) and market power.

**Efficiency - signals for new investment**

---

102 While the price caps for privatised airports were not explicitly determined by reference to costs, the pass through of necessary new investment is essentially predicated on a dual till basis.
A significant concern arising from the application of the single till is the potential effect on the investment incentives of the airport operator. In the United Kingdom, for example, users of the airport’s aeronautical facilities bear the risk associated with non-aeronautical activities, as lower than expected revenues from these services results in higher aeronautical charges and vice versa. This separation of decision-making and risk bearing is clearly an unsatisfactory outcome. Airport operators do not receive appropriate signals on which to base their investment decisions, and the risk is shifted to aeronautical users, who are potentially less informed than the airport operator and who do not make the investment decision. Thus, under a single till there is the potential for the incentives for efficient investment in non-aeronautical services to be blunted. It follows that the dual till approach to regulation generally provides the airport operator with more appropriate incentives for new investment in non-aeronautical assets than the single till.

This is consistent with the Commission’s view that competitive market outcomes should prevail wherever possible and that regulation should only occur where market failure is apparent. An added advantage of the dual till is that it reduces the information requirements associated with the regulation of prices.

This view is supported by NECG\textsuperscript{103}, which argues that the dual till approach does not require the regulator to assess the optimal level of investment in relatively competitive non-aeronautical services, as would be the case under single till. This represents a substantial lessening of regulatory risk, and therefore is likely to result in a greater level of dynamic efficiency in the provision of these services compared to the single till approach.

In relation to aeronautical assets, the Commission considers that the types of provisions relating to necessary new investment discussed in chapter 10 provide appropriate incentives for airport operators to undertake efficient investment under a dual till framework.

**Efficiency - signals for efficient use of airport services**

In assessing the dual and single till approaches to pricing, two particular issues arise with respect to the price signals sent to airport users. The first is which approach maximises allocative efficiency. The second is the potential impact of each approach in circumstances where an airport is experiencing congestion.

\textsuperscript{103} NECG, ‘Dual Till’ at Sydney Airport, May 2000. The report is available on the Commission’s website at accc.gov.au.
**Allocative Efficiency**

In its decision in relation to Sydney Airport, the Commission expressed concern about possible allocative efficiency losses associated with the adoption of a dual till approach. One reason for this is that the airport operator is able to charge the profit-maximising prices for the non-regulated (non-aeronautical) services. If an airport operator has market power in relation to some or all of these non-regulated services then it may be able to set prices above the levels that would prevail in a competitive market. This has the effect of both restricting output below socially optimal levels and generating relatively high returns to the airport. Specifically, the bundle of services required by travellers may be priced above cost.

These high prices for aeronautical services cause a net welfare loss to society as consumers’ valuations of aeronautical services are not reflected in the level of charges. This is a form of allocative inefficiency.

The size of any welfare loss associated with allocative inefficiency depends upon the airport’s elasticity of supply and consumers’ elasticity of demand. Of particular concern is the response of consumers; the more elastic their demand response to a given price change, the greater is the extent of the welfare loss. In this context, NECG argues:

- The size of the efficiency losses associated with high aeronautical prices will be larger the higher the airport consumers’ elasticity of demand for aeronautical services. That is, the consumption distortion (and efficiency loss) associated with higher aeronautical charges will be greater the more sensitive consumers are to airline prices; while
- The efficiency loss associated with higher non-aeronautical charges is less of a problem as consumers that are price sensitive have the opportunity to substitute these services for those obtained outside the airport. Therefore, the greater the ability of airport consumers to substitute non-aeronautical services for services outside the airport, the lower the efficiency losses associated with higher non-aeronautical charges.

In general, a dual till approach to regulation results in reasonable outcomes in regard to allocative efficiency provided that the regulated part of the till covers all of the services in which the service provider has significant market power. The Commission has some concerns that the current definition of aeronautical services has not been based on a rigorous assessment of market power. While this is largely a question of degree, the potential for allocative inefficiency thus remains. It should be noted that this concern relates primarily to the application of the dual till rather than the dual till approach per se.

A counter to allocative inefficiency arguments has been put forward by Professor Kahn, who suggests that at congested airports, the move to dual till primarily results in a transfer of income and welfare from airlines to the airport operator. Professor Kahn’s

---

104 Information on the returns from non-aeronautical services is available in the airport regulatory reports published by the Australian Competition and Consumer Commission. These are available on the Commission’s website at www.accc.gov.au.

105 Network Economics Consulting Group, 2000, op. cit., p. 3.

reasoning is that where capacity is constrained, effective competition between airlines is limited by the scarcity of landing slots. Airfares thus already reflect the full scarcity value associated with those slots. The implication of such an argument is that allocative efficiency concerns are irrelevant, as changes in aeronautical charges merely redistribute income between airports and airlines.

The Civil Aviation Authority (CAA) in the United Kingdom also commented on this issue:

The effect however is different at capacity constrained airports. If prices are below their market clearing level they do not act as the primary mechanism by which capacity is allocated. Price changes away from the ‘single till’ would therefore primarily result in rent re-distribution. It may have a secondary impact if some users are currently operating at marginal profitability (because they are unable to appropriate the full scarcity value of access, but are unable to sell their rights of access to those who could make better use of it).\(^{107}\)

While the Commission recognises the merits of Professor Kahn’s argument, it considers that with regard to Australian airports, the conditions necessary for the transfer argument to hold (and thus for allocative efficiency arguments to be refuted) do not hold. In particular, there remains significant scope for competition between airlines at Sydney Airport.\(^{108}\) There is still significant scope for airlines to increase capacity in response to competitive pressures by increasing aircraft size.\(^{109}\) Furthermore, many off-peak slots are still available. The empirical evidence to date does not support the argument that effective competition at Sydney is limited. The entry of Virgin Blue and Impulse Airlines has had a significant impact on airfares, including on airfares to and from Sydney.

**Congestion**

A fundamental criticism of the proposition that returns from non-aeronautical services should be used to fund aeronautical services (as implied by a single till approach) is made by SACL:

…ignores the role of price as a mechanism for allocating capacity amongst users and uses […] To the extent that aeronautical prices are constrained to below the opportunity cost of providing aeronautical services, due to the inclusion of returns from non-aeronautical prices, this encourages artificially high demand for aeronautical services.\(^{110}\)

In the UK, the single till approach has been criticised on the basis that it has contributed to congestion problems at London and Heathrow airports. This stems from the fact that aeronautical charges do not necessarily reflect the costs of providing the services. If total airport allowable returns are based on average costs, then as the CAA notes:

---

\(^{107}\) Civil Aviation Authority, July 2000a, *Issues for the Airport Reviews – Consultation Paper*, p. 11.

\(^{108}\) Sydney Airport is the regulated airport at which congestion is currently an issue.

\(^{109}\) This may be one difference between Sydney Airport and the London airports whose price-cap is the subject of review by the CAA. The London airports have a much larger proportion of slots occupied by Boeing 747s and other large aircraft.

The result at congested airports is that the landing charges do not reflect their true value to users and thus compromise best use of capacity (especially where a cross subsidy between commercial revenues and airport charges is observed).\(^{111}\)

Congestion pricing principles imply that scarce capacity is allocated through prices which take into account consumer valuation of services. By contrast, both the single and dual till approaches are essentially cost-based methodologies for determining an appropriate level of a basket of charges. Each gives little attention to the structure of prices most appropriate for allocating the use of congested facilities.

This point is supported by NECG, which suggests that congestion is not fundamentally related to the adoption of single till. A congested airport may be in a position to ration demand through price, thereby capturing congestion rents. This gives rise to regulatory problems common to either single or dual till, namely:

- Is it possible to design a congestion pricing approach that rations demand, but which maintains regulated revenue at the appropriate level — can the regulator hold revenue below the revenue cap;
- If not, is it possible to design an alternate and efficient non-price rationing approach which does this; and
- If not, who should get the congestion rent from the market clearing approach, and what mechanism should be used to make the necessary transfers.\(^ {112}\)

NECG argues that the single till should therefore not be rejected on the basis that it adds to congestion.

The Commission’s view is that the dual till/single till approach is not a primary cause of congestion at affected airports. There are three main reasons for this.

The first is that an increase in prices may indeed suppress some demand; however, there is no reason to believe that it will suppress demand in a way that leads to increased community welfare. It is only appropriate congestion charges that can have this effect. These, as NECG points out, can be adopted at any level of revenue consistent with the continued coverage of the variable costs of operating the airport.

The second reason is that while the prices for the services currently subject to regulation are an important component of the signals airport users receive, they are not the only component. To the extent that other services are necessary in order to use the airport (ie, to the extent they are non-discretionary), then the decision to use the airport will take all these prices into account. For example, airlines will take into account refuelling charges, and passengers the costs of access to the airport. It follows that prices which send efficient signals to airport users will take account all of these services.

The third reason is that price is not the primary mechanism by which landing slots are allocated. Rather they are allocated through an administrative process.

\(^{111}\) Civil Aviation Authority, October 2000b, The CAA Approach to Economics Regulation and Work Programme for the Airport Reviews – Position Paper, p. 32.

\(^{112}\) Network Economics Consulting Group, 2000, op. cit., p. 9.
The primary issue in considering the benefits of dual till in managing congestion is the extent to which peak period pricing and other changes to airports’ price structure would be sufficient to satisfactorily deal with these issues.

**Market Power**

During the course of the Commission’s assessment of the SACL aeronautical pricing proposal, both SACL and BARA sought expert advice on the dual till/single till issue. SACL engaged Emeritus Professor Alfred Kahn to comment on its proposal with respect to both this issue and its approach to the valuation of land, while BARA sought the advice of Professors Michael Crew and Paul Kleindorfer. These advisers examined the efficiency implications of the dual versus single till approaches to pricing, coming to considerably divergent conclusions. Professor Kahn concludes that ‘the effects of single-till are inefficient’ while Crew and Kleindorfer that ‘a single-till regulatory approach is likely to be preferred significantly on efficiency grounds to multi-till operations’. This difference of opinion appears to stem from fundamentally different assumptions regarding the extent of SACL’s market power at Sydney Airport. For example, Professor Kahn argues that the apparently high returns accruing to airport operators from retail services is related to the locational advantage of the airport. Implicit in this argument is the point that SACL’s monopoly market power does not extend beyond those services defined as aeronautical. By contrast, Professors Crew and Kleindorfer explicitly state that SACL’s proposal ‘develops a multi-till approach to price regulation, but this proposed approach leads to a number of problems, not least of which is that it allows non-aeronautical services to be priced at monopoly levels’.

For the reasons outlined above, the Commission agrees with Professor Kahn that the dual till is in general a superior approach to aeronautical pricing, provided the services defined as aeronautical include all those in which the airport operator has significant market power. The extent to which non-aeronautical services are, or are not, effectively disciplined by competition is a question of degree. This issue is addressed in more detail in section 8.4.

**Conclusion**

The dual till approach to regulating aeronautical services provides certain important advantages over the single till approach traditionally applied by regulators. Most importantly, airports face significantly better signals for investment into contestable non-aeronautical services. Furthermore, the Commission has sympathy with the view that a dual till approach is effectively adopted in most other regulated industries and no compelling reasons have been provided for deviating from this practice in relation to airports.

---


114 Kahn, 2001, op. cit., p. 22.


116 Ibid., p. 4.
The Commission’s endorsement of the dual till approach to regulation is qualified by its concerns relating to allocative efficiency and market power. As already discussed these are not concerns about the dual till per se. Instead they primarily relate to the application of the dual till. The Commission considers that the allocative efficiency and market power disadvantages associated with dual till only arise if an airport’s market power extends beyond the current definition of aeronautical services.

8.4 Which services?

In other regulated industries, such as gas, regulators commonly distinguish between contestable and non-contestable services supplied by the same company and only regulate the latter. Unlike other industries, however, the regulation of airport services has not been founded upon a systematic analysis of the extent of market failure. Instead, the aeronautical/non-aeronautical distinction is an historical legacy, described by the PSA as an essentially ‘arbitrary boundary’.

The current inquiry has the opportunity to thoroughly address this issue. Determining the aeronautical/non-aeronautical distinction involves a detailed whole of business analysis. The framework outlined by King provides a methodology for undertaking such an analysis.

Section 8.2 provided a high level analysis of which Australian airports have significant market power across the market broadly defined as airport services. Section 8.3 has argued the case for adopting the dual till approach to the price regulation of these airports. That discussion highlighted the need for an analysis of the services in which airports hold significant market power. ‘Airport services’/’aeronautical services’ are inclusive terms which draw together a bundle of more specific services provided by an airport. These more narrowly defined services might potentially be provided by other parties, either individually or as part of other service clusters. This section looks more closely at the specific services provided by airports, and identifies specific services to which the Commission considers market power extends. As in section 8.2, Professor King’s framework is used to broadly examine the issue.

Define the problem

The problem to be addressed in relation to specific airport services is very similar to that considered in section 8.2. With some slight modification, the question becomes: ‘for which specific services do some or all of these [leased] airports have the ability to raise prices to a supra-competitive level over a relevant time frame?’ Approaching this question generally requires narrower market definitions than those adopted in the previous section. While this submission will be necessarily brief in its assessment, some suggestions are put forward as to the set of services which the Commission believes are potentially susceptible to monopoly pricing practices.

Determine the potential market participants

---

In section 8.2 the potential participants in the markets in which the airports under consideration operate were considered. From a demand perspective, the main participants are air travellers and, as downstream providers, airlines. Similarly, a number of other types of downstream businesses require certain services from airports. These include retail concessionaires, taxi operators and car rental companies.

In considering the market power in relation to specific services at an airport, the scope for provision of the service by off-airport providers is also relevant. For example, in leasing terminal space to retail businesses, an airport may be competing with other property management operators such as Westfield. The potential market participants are therefore likely to be many and varied, according to the particular service in question.

While the Commission’s submission does not attempt to be exhaustive in defining these market participants, the Commission’s experience in administering the regulatory regime in recent years has on occasion warranted the consideration of these issues. The arguments that follow reflect the nature of these considerations.

**Determine the potential time-frame(s) and functional levels for analysis**

The timeframe in which specific airport services may be offered by other market participants – ie new entrants – is likely to be shorter than the timeframe in which an entire airport can be duplicated. It follows, therefore, that when examining the subset of services in which an airport may have significant market power, the time-frame for analysis should be shorter than when examining the market power of the airport as a whole. Following King, the Commission would consider a period of one to two years as generally sufficient to allow entry by potential competitors into the market for the more narrowly defined individual airport services.

The functional dimension of the market will obviously vary from service to service. It is not the Commission’s intention to exhaustively define the various functional markets that may exist at the airports currently under consideration, but rather to draw on previous experience to highlight the major areas of potential concern. It should be stressed, however, that the appropriate functional dimension of a market is a critical consideration in assessing the scope of an airport’s market power.

**Consider the substitution possibilities on both the demand and supply sides**

In the course of carrying out its regulatory functions the Commission has had a number of instances in which it was required to consider the extent of the market power of airport operators. These include the consideration of services to nominate for formal prices monitoring under section 27A of the *Prices Surveillance Act 1983* (‘the PS Act’), the draft guide to section 192 of the *Airports Act 1996*, a report on fuel throughput levies, the Delta Car Rentals determination and the recent Sydney Airport aeronautical pricing decision.

As in section 8.2, the identification of market participants and temporal and functional dimensions of the market provides the setting in which to conduct the main analysis of the market power question; namely, to examine the demand and supply substitution possibilities in the markets for specific services provided by airports.
In many cases, such an analysis will vary from airport to airport. The general question is whether the provision of a particular service by a particular airport operator is in a market in which there exist barriers to entry and exit which allow sustained monopoly pricing. These barriers may include economies of scale and scope, sunk costs, planning restrictions and network externalities as discussed in chapter 7.

King notes that “the source of an airport’s market power for the bundle might be one or more specific services”. For the purposes of considering this question, King uses the example of Melbourne Airport to illustrate his arguments. In so doing, he notes that

…if Melbourne airport has market power over a bundle of services, it must have market power over at least some of the component services in the bundle. If not, then an airline could usurp Melbourne airport by buying the elements of the bundle from competitive suppliers and assembling the bundle for itself.

To some extent this point has been assumed in assessing which airport should be subject to regulation. It follows, however, that the assessment of demand and supply side substitutability that follows should apply to those airports deemed (in section 8.2) to be worthy of general price regulation.

The Commission’s view is that, in many cases, the set of services currently defined as ‘aeronautical’ is too narrow for price regulation to be fully effective. That is, airport operators have a significant degree of market power in relation to some unregulated services (‘non-aeronautical services’). Any failing to constrain such market power may lead to significant allocative inefficiency and associated social welfare losses. The Commission’s reasons for such views are laid out in what follows.

**Demand side substitution**

As noted in section 8.2, there is a bundle or package of services which airport users must use if they are to use the airport at all. Thus the scope for demand side substitution of particular airport services – ie, using alternative services - is essentially determined by the extent to which air travel is substitutable for other transport options. The earlier discussion argued that the scope for demand side substitution was limited at a number of airports.

The point here is that the use of some of the services currently classified as non-aeronautical are part of the package of services that must be used. In this sense they are non-discretionary. In such circumstances to effectively constrain an airport operator’s market power, it is necessary to consider the price of the full package of the non-discretionary services.

---

119 King, 2001, op. cit., p. 27.
120 Section 8.2 also notes the comments of the Prices Surveillance Authority, the Australian Competition Tribunal and Network Economics Consulting Group on this issue.
As previously noted, this concept of a package of services has been identified elsewhere, for example by the Australian Competition Tribunal and NECG.

Following from this, regulation of airport services should take into account all services in the cluster market or package of facilities necessary to efficiently provide air transport services. Airport users make decisions on the basis of the entire package of the services used and the prices paid for all of those services, not just the services currently subject to regulation. Without taking the other services in the package into account the market power and allocative efficiency issues associated with the pricing of airport services cannot be meaningfully addressed.

Determining the services which should be included in the cluster of ‘airport services’ therefore rests primarily on an assessment of the scope for supply side substitution.

**Supply side substitution**

The conclusion that pricing for aeronautical services should be assessed in the context of the relevant market cluster or package of non-discretionary services raises the question: which services form part of the cluster? Two issues need to be addressed in order to understand this. The first is the extent to which an airport user can obtain the service from an alternative provider. The second is the assessment of whether use of the service is discretionary. While conducting an exhaustive analysis is beyond the scope of this submission, certain arguments are presented here.

To some extent a rigorous assessment of this question has been undertaken in the past. The distinction between aeronautical-related services (the set of non-aeronautical services to be price monitored) and other non-aeronautical services was determined by the Minister on the basis of an analysis, undertaken by the Commission, of the extent to which these services were subject to competitive constraint. The resulting direction, now Direction No. 21, made pursuant to section 27(A) of the Prices Surveillance Act, requires the Commission to monitor certain specified services. These are:

- aircraft refuelling;
- aircraft maintenance sites and buildings;
- freight equipment storage sites;
- freight facility sites and buildings;
- ground support equipment sites;
- check-in counters and related facilities; and
- car parks (including public and staff parking but not valet parking).

The Commission also undertook an analysis of specific services in its draft guide to section 192 of the *Airports Act 1996*. Section 192 relates to the declaration of airport services for the purposes of Part IIIA of the *Trade Practices Act 1974*. Section 192(5) specifies two criteria by which the Commission is to determine whether a service is an airport service. These criteria are that the service in question:

(a) is necessary for the purposes of operating and/or maintaining civil aviation services at the airport; and
(b) is provided by means of significant facilities at the airport, being facilities that cannot be economically duplicated.

The Commission noted in its draft guide that two factors particularly relevant to an assessment of criterion (b) are economies of scale in the provision of airport services and the significance of entry and exit costs. The Commission’s assessment essentially amounts, therefore, to an assessment of market power. In particular, the draft guide to section 192 provides an examination of the scope for supply side substitutability of particular airport services by considering the scope for either provision of the service off-airport, provision of the service at another airport, or duplication of the service on-site.

The Commission’s conclusions in the draft guide to section 192 are therefore directly relevant to the consideration of the market power of airport operators with respect to certain services. Those services which are likely to be within the definition of section 192(5) would generally be those in which an airport operator holds significant market power. A brief summary of the Commission’s views in relation to specific services follows. In some cases, these have evolved slightly since the draft guide to section 192 was prepared. The discussion deals with the necessity of the service in question and the question of whether the service is provided by facilities that cannot be economically duplicated.\(^\text{121}\)

**Aircraft movement facilities and activities**

Services that derive from the use of airside facilities qualify as airport services. Such services directly relate to the functions of an airport. Without some airside facilities it would be impossible for civil aviation services to be undertaken at an airport. For example, if an airport did not have a runway, planes would be unable to land. If it did not have taxiways, aircraft would have to be loaded and unloaded on the runway and, for reasons of safety, other aircraft would be unable to land or take off on that particular runway. It is inconceivable that an airport could operate feasibly in the absence of airside facilities.

Airside facilities also appear to be subject to economies of scale. That is, the average cost of 20 aircraft using the facilities is generally less than if 19 aircraft use the facilities. Furthermore, there are large sunk costs associated with airside facilities. That is, such infrastructure is expensive and not readily used for purposes other than providing air transport.

Airside facilities may also be subject to economies of scope. Aircraft of many different sizes can land on a single runway designed for the largest jet aircraft. Subject to any congestion costs, construction of a single large facility will be cheaper than construction of a number of facilities for each type of aircraft. In the presence of economies of scope it will be uneconomic to have multiple facilities.

---

\(^{121}\) The concept of ‘economic to duplicate’ is discussed in more detail in *Draft Guide - Section 192 of the Airports Act: Declaration of Airport Services*. This document is available on the Commission’s website at [www.accc.gov.au](http://www.accc.gov.au).
Passenger processing facilities and activities

Passenger processing areas in international terminals include check-in desks, aerobridges, airside buses, departure and holding lounges (except for commercially operated VIP lounges), immigration and customs service areas, public address systems, closed circuit surveillance systems, security systems, baggage handling and reclaim areas, public amenities, other public areas in terminals, lifts, escalators, moving walkways and flight information display systems. These services are essentially of a complementary nature in that passenger processing involves passengers moving through a stream of services. Hence, in the discussion below these services will be considered collectively under the category ‘passenger processing areas’.

International passenger processing services are necessary for the operation of an international airport. They relate directly to important functions of that airport. A major purpose of an international airport is to facilitate international passenger air travel. Without the means and support services requisite to undertake the processing of such passengers, the airport might not be viable as an international passenger airport.

The passenger processing services that are necessary for domestic air transport and international air transport are not the same. For example, passenger processing services for international travel require additional services, such as customs inspection, that are unnecessary for domestic air transport.

The services required for domestic passenger air transport will also vary according to the nature of the passenger air transport service. Passenger embarkation services will vary according to the type of plane. For example, a small aircraft will not require an aerobridge, whereas many commercial jet aircraft will.

Yet in all instances some passenger processing facilities will be required. The general conclusion remains. Without some means and requisite support services to undertake the processing of passengers, a passenger airport would not be viable.

The majority of international passenger processing facilities, for example aerobridges, public areas in terminals and security systems, clearly must be provided on site. There is limited scope for some services such as check-in to be provided off site. But for many passengers, in particular international passengers in transit, off-site facilities are unlikely to be a viable option.

In addition, customs regulations require that certain airport facilities are mandatory for international air travellers where they enter the country. Certain international passenger handling facilities simply cannot be duplicated other than on site in the terminal building.

It is difficult to conceive of how off-site international passenger processing services could be developed unless they involved bussing people onto the tarmac from the off-site facility. Even if such a facility was developed, the question of access to the airport may arise. An airport operator is likely to be in a position to levy access charges on the operator of the off-site terminal. The off-site operator’s reliance on the airport operator for access means it cannot effectively compete.
In relation to the issue of whether domestic passenger terminal facilities can be economically duplicated, the existence of more than one domestic terminal at some airports lends support to the argument that domestic terminal facilities can be economically duplicated. However, the existing domestic terminals were developed in the past, under a highly regulated domestic airline duopoly. Under the present system the decision to duplicate facilities is not clearly the same.

The Commission considers a forward looking approach is the preferred interpretation of ‘economic to duplicate’. In the case of terminals the relevant question is whether the facilities can be economically duplicated again. This may often be difficult given the limited availability, at most regulated airports, of space adjacent to runways and with access to landside roads. Furthermore, any party seeking to build a new terminal would still require access to a site with such characteristics; such a site would almost inevitably be under the exclusive control of the airport operator.

_Landside vehicle facilities_

Facilities for landside vehicle access include roads for vehicles to access the airport site, terminal buildings and airside facilities. Vehicles require access to landside facilities for the purposes of transporting people or goods to the airport. The types of vehicles that use these facilities include private cars, rental cars, buses, taxis and trains.

The complementary nature of landside vehicle facilities with aviation activities means the question of whether it is economic to duplicate landside vehicle facilities corresponds closely to whether it is economic to duplicate the airport itself. That is, landside vehicle facilities at an airport would be of little value if they were not located adjacent to an airport.

As far as being economically duplicated on site, airport roads are generally not duplicated. In as much as a duplicate road would have to access the same facilities it is conceivable that it would have to occupy the same space as an existing road. Alternatively, it would have to approach the facilities from another path which would typically be highly constrained by the availability of land. In addition, landside vehicle facilities cannot be located off site.

The issue of substitutability as it applies to car-parks is discussed separately below.

_Aircraft refuelling_

Refuelling at airports is typically provided by common-user fuel storage tanks and pipelines, or the use of fuel trucks. Permanent facilities appear to be more cost effective at large airports. Oil companies generally own refuelling facilities (tanks, pipelines, etc.) and the airport operators the relevant sites. While aircraft clearly require fuel to fly, they do not necessarily have to refuel every time they land if they are only flying short distances. However, to minimise airlines’ running costs, aircraft generally do not carry more fuel than necessary. As such, aircraft often refuel upon each landing. On long haul flights, aircraft use most of their fuel and as a result must refuel upon landing. Hence, refuelling facilities are required for the purposes of providing civil aviation services at airports. If an airport did not have refuelling facilities, some airlines could not fly to that airport.
The issue of economic duplication of refuelling facilities hinges on the scope for refuelling facilities to be provided off site and the scope for the facilities to be economically duplicated on site.

Location off site may be possible if fuel can be trucked from facilities to the airside, provided that appropriate vehicle access provisions exist. However, at the larger airports this would be likely to impose a significant additional cost on fuel users. In addition, for safety and other reasons this approach may not be workable in practice. For these reasons the Commission considers that it would not be economical to duplicate refuelling facilities off site, at least in the case of high traffic volume airports. It should be noted that in relation to the provision of refuelling services on site the Commission also considers land within the airport perimeter to be a facility which is uneconomic to duplicate. This effectively limits the extent to which potential entrants can compete against the airport for the provision of refuelling services.

**Aircraft light/emergency maintenance sites**

This form of maintenance is unplanned, but essential for aircraft to be able to fly safely. For safety and operational reasons the major airlines would be unlikely to fly to airports that did not have light or emergency maintenance facilities. Furthermore, maintenance workers require access to land within the airport perimeter to perform light or emergency maintenance on aircraft. Therefore these facilities are necessary for the operation of civil aviation services at an airport.

There are sunk costs associated with the sites for light and emergency maintenance facilities in the form of the airport apron that is expensive to build and not readily portable. As aircraft often stop at airports for only a brief period of time, such repairs need to be done on site. The time wasted, and costs associated with, moving the aircraft to an off-site location for such unplanned maintenance could lead to aircraft delays and significant additional costs to airlines.

The question remain of whether these types of maintenance facilities could simply be provided at other airports as an alternative. This seems unlikely, as these facilities need to be available at all major airports to cater for emergency and unexpected maintenance and for frequent maintenance services.

**Aircraft heavy maintenance sites**

Heavy and planned maintenance such as an engine overhaul or refurbishing an aircraft interior is usually planned well before its occurrence. Sites for heavy maintenance are necessary as aircraft would be unable to fly without having heavy maintenance performed.

As heavy maintenance is normally planned in advance it is not clear these facilities need to be located on the airport site. It may be feasible for such facilities to be located near the airport site, as long as aircraft operators have access on reasonable terms to a road or tarmac suitable for moving aircraft from the airport to the off-site heavy maintenance facility. For example, Avalon Airport has heavy maintenance facilities which service Qantas aircraft.
Furthermore, it is not necessary for these facilities to be provided at all airports. Aircraft owners can simply schedule the performance of heavy maintenance when aircraft are at an airport that has the relevant facilities. Given that heavy/planned maintenance facilities and the sites for such facilities do not need to be located at a specific airport location, they probably satisfy the economic to duplicate test.

**Freight equipment storage sites**

The facilities required for storing freight handling and ground service equipment are space within the airport perimeter that may include, but is not limited to, freight and passenger aprons and hard stands. While the services provided by ground service and freight handling equipment are different, the discussion concerning facilities for storing this equipment is similar enough to warrant joint treatment.

The services provided by ground service and freight handling equipment directly relate to the functions of an airport. Without ground service equipment, aircraft would be unable to operate effectively. Similarly, freight handling equipment is necessary to provide freight handling services at an airport.

Ground service and freight handling equipment are used frequently at airports. As such, facilities for their storage are necessary. That is, sites for storing this equipment are probably necessary for the provision of civil aviation services.

Two main issues arise in assessing the scope for economic duplication of these services. The first is the scope to provide the services off site. The second is the scope for duplication on site.

Concerning off-site provision of these services, ground service and freight equipment are used frequently. The NCC contended that off airport storage of freight handling equipment is technically possible but not commercially feasible as the frequent movement of this equipment on and off site would impose additional costs on the airlines and freight handling companies. As the equipment is not designed for road transport the additional costs would be significant. In addition, the NCC pointed out that off airport storage would reduce the flexibility and efficiency of freight equipment operators.\(^\text{122}\)

Regarding the scope for duplicating these services on site, the NCC contended there is an inherently strong connection between the services provided by space for storing freight handling equipment and other services provided by airport infrastructure. Accordingly, to duplicate facilities such as the aprons and hard stands, any duplicated facilities must have those characteristics of airports that attract passenger and freight aircraft.

**Freight facilities sites and buildings**

\(^{122}\) National Competition Council, *Applications for Declaration of Certain Airport Services at Sydney and Melbourne International Airports — Reasons for Decision*, May 1997, p. 34.
Cargo terminal facilities are used for the make up and break down of freight and for short term storage of freight. Thus sites for the storage of freight are probably necessary for the purposes of loading and unloading freight.

The NCC considered the issue of economic duplication of cargo terminal facilities at Sydney and Melbourne airports. The NCC concluded that it is economic to duplicate a site on which to build the cargo terminals off airport, provided that there are adequate provisions for vehicle access to the airport. Indeed it seems difficult to argue that sites for cargo terminal facilities have some type of natural monopoly characteristics as off airport duplication freely occurs.

*Ground support equipment sites*

Ground service equipment is equipment used for pushing aircraft on the airport apron. In relation to the questions of necessity and economic duplication refer to the above discussion in relation to freight equipment storage sites.

*Check-in counters and related facilities*

Check-in counters are essentially a component of passenger processing facilities. As noted earlier, some passenger processing facilities will be required at airports. Without some means and requisite support services to check-in passengers, a passenger airport would not be viable. There is limited scope for services such as check-in to be provided off site. But for many passengers, in particular international passengers in transit, off-site facilities are unlikely to be a viable option.

*Administrative office space*

To operate effectively at airports and provide various corporate functions, airline operators need office space. However, it is difficult to see why, in every set of circumstances, airlines would require more than some minimal level of administration to be located at the airport. That is, an airline’s office space at the airport appears discretionary. With the growth of telecommunications and the development of information technology services, there is a reduced need for administration to be situated in any specific location. Indeed many airlines’ administrative functions are not located on airport, but in off-airport offices. In some cases airlines are even undertaking administrative functions overseas because of labour cost differentials. Thus it is seems likely that these services could be economically duplicated.

*Commercial and retail facilities*

This includes facilities at the airport such as restaurants, retail shops including duty free shops and car rental desks. These facilities add to the profitability of an airport and make an airport more attractive to tourists. However, it is doubtful that these facilities are essential for the provision of civil aviation services, as such services do not directly relate to the functions of the airport. For example, why would an airport require duty free shops to transport passengers? Indeed many small airports have very limited

---

123 Ibid., p. 35.
commercial and retail facilities and it appears that this has a negligible impact on the airport’s viability.

Commercial and retail facilities can be readily located off site. This is displayed by the abundance of substitute facilities available. In addition, these facilities have negligible monopoly characteristics. Accordingly, it is highly likely that these services could be economically duplicated.

*Flight catering facilities*

The services provided by flight catering facilities are sometimes not necessary for the purposes of transporting passengers and freight. Such services may be very necessary on long haul international flights. However, it is questionable whether these facilities are necessary for the provision of civil aviation services at airports that do not operate international flights. On many short distance flights and on small aircraft, minimal meals are served. As such the lack of flight catering facilities at a particular airport may have little effect on the airport’s viability as a civil aviation centre.

It seems doubtful that flight catering facilities have some type of monopoly characteristics. The infrastructure is not associated with high sunk costs. It is not clear that all airports need to have flight catering facilities. Aircraft could be serviced when they land at airports with flight catering facilities. Furthermore it is not clear these facilities need to be located at the airport — the preparation of meals can certainly be carried out off site, as there appear to be many substitutes for such facilities. For example, catering companies could provide the same services as flight catering facilities.

If the airport operator provides the airlines with reasonable terms of access to roads and airside facilities at the airport to enable the airlines to transport meals from off-site catering facilities to the aircraft, then off-site catering facilities appear to be an alternative. As such, flight catering facilities are likely to be economic to duplicate.

*Helicopter facilities*

These facilities are necessary for the provision of helicopter services, which is a form of aviation service. It would seem, however, to be economic to duplicate the facilities required to land such aircraft. Helicopters do not require lengthy runways nor terminals approaching the scale and scope required for larger fixed wing aircraft. Barriers to entry associated with sunk costs and irreversible investment are therefore not substantial. Similarly, the network economies associated with operating at a large airport do not necessarily arise. It is therefore likely that landing facilities for helicopters could be economically duplicated at other locations.
**Waste disposal facilities**

When aircraft land at an airport, waste facilities are needed to dispose of aircraft refuse such as aircraft oil, sewerage and food. Airlines may be less inclined to fly to an airport that does not have waste disposal facilities.

It is difficult to regard waste disposal facilities as being not economical to duplicate. The infrastructure is not associated with significant sunk costs. It is not obvious that these facilities need to be located on the airport site — the disposal of waste could certainly be carried out off site, as there appear to be many alternative facilities available. For example, waste could be trucked off the airport site. If the airport operator provides the airlines (or contractors who provide waste disposal services) with reasonable conditions of access to the airport site to enable the disposal of waste, then off-site waste disposal facilities appear a viable alternative. Hence, waste disposal facilities are likely to be economic to duplicate.

**Summary**

A number of points should be made in relation to the above findings. The first is that those services currently defined as ‘aeronautical’ for the purposes of price regulation fall within the set of services in which the Commission considers airport operators hold market power. Accordingly, the Commission is of the view that the scope of current prices oversight is the minimum that should be adopted; at least at the airports for which the Commission considers any regulation is justified (see section 8.2).

A second point to note is that the above discussion should not be considered exhaustive. There may be other services in which an operator may hold market power, which have not yet arisen as issues in the ongoing operation of the regulated airports. This view provides support for retaining some form of access regime alongside specific price regulation of airport services.

**Further Discussion**

The above discussion should be considered in light of other statements by the Commission in relation to specific services. For example, in its report on fuel throughput levies, the Commission concluded that ‘[t]here is a strong case that large airports have market power in the market for refuelling services’. Furthermore, the Commission concluded that there was a strong case that, in introducing fuel throughput levies, some airport operators had taken advantage of such market power.

The Commission also examined these issues in its Delta Car Rentals determination, finding that ‘the provision of landside roads and associated vehicle facilities for dropping off and picking up passengers at Melbourne Airport’ is a declared service for the purposes of section 192 of the Airports Act.

---

124 ‘Aeronautical services’ are defined in Declaration No. 87, Declaration No. 88 and Declaration No. 89.
SACL, in its response to the Commission’s draft decision on aeronautical charges at Sydney Airport, also acknowledged that market power at airports extends beyond the current definition of ‘aeronautical’ services.

…SACL concedes that a detailed analysis may conceivably conclude that SACL does possess significant market power in the following aeronautical related services:

- check-in counters and related facilities;
- ground support equipment sites;
- freight equipment storage sites;
- light and emergency maintenance facilities; and
- aircraft refuelling.

SACL notes that the above list is consistent with the ACCC’s draft guide to Section 192 of the Airports Act – Declaration of airport services, October 1998.\(^\text{126}\)

Nevertheless, SACL’s response to the draft decision criticised the Commission’s approach to addressing market power concerns. In particular SACL focused on the inclusion of car parks in the Commission’s pricing approach:

SACL contends in the strongest of terms that it does not possess and is not taking advantage of any significant market power in relation to the provision of public car-parks.\(^\text{127}\)

The Commission’ preliminary view is that the provision of car parks is a service that warrants further scrutiny. In its deliberations regarding SACL’s pricing proposal, the Commission found evidence to support the case that this service is one in which airport operators have a significant degree of market power. This rationale presumably underpins the Government’s inclusion of car parks in the list of monitored services.

Some of the indicators of market power associated with car parking, especially short-term car parking, include:

- **High reported profits at regulated airports.** This information is available from the Commission’s annual regulatory reports. A relevant question is whether these profits reflect monopoly rent or location rents. In practice they may reflect both. Conceptually it may be possible to separate the two elements, but this may be difficult to observe. Based on information collected during its assessment of SACL’s aeronautical pricing proposal, the Commission considers that there are significant monopoly rents in the provision of car parks at Sydney Airport, especially short term car parking. There seems no reason to believe that an examination of other airports’ profitability from car-parking would contradict this view.

- **Limited competition.** Off-airport car parking is a poor substitute for short term on-airport car parking. Furthermore, competition for short-term car parking is minimal, with off airport operators generally only pricing for stays of longer than a day’s duration.

---


\(^\text{127}\) Ibid., p. 44.
• **Observed car parking prices.** A comparison of the car-parking charges levied by SACL with car-parking charges at nearby locations suggest that SACL is able to sustain prices in excess of potential competitors.\(^{128}\) Again, there is little reason to believe that this is not also the case at other airports.

• **Basis for setting car park prices.** SACL drew the Commission’s attention to the fact that its pricing is not predicated on its cost of provision or by reference to the rates offered by nearby operators. Rather, ‘car-park rates at Sydney Airports are set by benchmarking prices against other comparable locations, such as the Sydney CBD and the cost of alternative forms of travel’.\(^{129}\) It is questionable whether such an approach to price setting would be sustainable in a competitive market. Indeed, in his submission to the current inquiry, Professor Peter Forsyth makes a similar argument with respect to terminal rents.

    …if airports are setting rents for terminal space with reference to benchmarks such as rents in the CBD, this is symptomatic of use of market power. If rents are true locational rents, the seller does not set the price with reference to benchmarks (of questionable relevance); rather, the seller takes what the market offers. The seller of a block of land in the CBD of Melbourne cannot simply choose a benchmark, such as the price of land in Sydney, and charge that price. Instead, the seller must accept what the market is prepared to pay.\(^{130}\)

• **Discretion in use of car parks.** Car parks are part of a market that could be described as landside passenger access. Landside access is required for all travellers – it is non-discretionary. While passengers may use different forms of transport to access the airport, for example taxis or buses, airports generally have a monopoly position in relation to those alternatives. For example, many airports impose charges on buses servicing off-site car parks. Similarly, a number of privatised airports have introduced taxi levies. Where an airport is serviced by rail, there may also be scope for the introduction of an access levy. The point here is that an off-airport provider could not provide on-airport landside access. There is therefore limited scope for supply-side substitution in the market for landside access.

It should be noted that the Prices Surveillance Authority (‘the PSA’) also identified potential concerns with respect to airport operators’ potential market power in car parks.

    …the FAC’s market power also stems from its land ownership and ability to control the number of car park spaces that have these desirable location characteristics. The PSA is concerned that at some airports the FAC has the ability to ration these spaces to such an extent that premiums for on-airport car parking, over and above those related to location and the opportunity cost of expanding spaces, can be earned.\(^{131}\)

\(^{128}\) Information on SACL’s car-parking prices is supplied to the Commission as part of its monitoring duties. SACL charges around $13 per day for long-term car-parking, as opposed to off-site car-parks which generally charge $10 per day.


The case for including car parking services in the price cap depends to some extent on the scope for airport users to substitute between different modes of transport. If, for example, taxis charges are price regulated and they are considered a close substitute for car parks, then the case for including car parks in the price cap may be weak. However, the revenue-weighted approach to the determination of these price caps raises a further important issue. If some forms of airport access are subject to the price cap but not others, an airport operator could potentially re-balance regulated charges to, for example, increase taxi levies while reducing landing charges. While this might still equate to compliance with the price cap, it increases the scope for the operator to raise charges for unregulated forms of airport access, for example car parks. For these reasons, the Commission is of the view that car parks, and other access services and facilities, should be given detailed consideration by the Productivity Commission as part of its current inquiry.

The Commission notes that the existence of complementarities between aeronautical and most non-aeronautical services does not necessarily imply that all non-aeronautical services should be regulated. The reason for this is that many of the non-aeronautical services provided by airports are not necessary for the facilitation of air travel. While the fact that the airport is the monopoly provider of airport services provides a competitive advantage in these complementary markets, evidence is not available to suggest that the services provided in these markets are not contestable. As already noted, the Commission in general presumes that competitive market outcomes should prevail wherever possible and that regulation should only occur where market failure is apparent. Regulating all airport services, including those that are contestable, is therefore considered inappropriate. Instead, and as discussed above, the Commission has focused on the relevant cluster market or package of services that are non-discretionary.

Re-examine the underlying assumptions

As noted in section 8.2, addressing the question of market power requires a certain degree of iteration. The Commission anticipates that such an iterative process, conducted by the Productivity Commission as part of its review, will validate or otherwise the assumptions spelt out earlier in section 8.4. Should the Productivity Commission disagree with the views formulated in this section, the Commission urges the Productivity Commission to subject its assumptions to the tests advocated by Professor King. As already argued, the functional dimension of these markets is a particularly important element of this analysis.

Examine the specific services in which the airport has market power

The following table highlights the range of services considered by the Commission as part of its regulatory duties and summarises the views outlined above in relation to an airport operator’s likely market power in particular services. These should not

---

132 Certain services might be excluded from this characterisation; for example, the services provided at some significant distance from the aeronautical facilities. Complementarity occurs when lower aeronautical charges give rise to increased revenues to other businesses at the airport as a result of increases in passenger throughput.
necessarily be considered as a comprehensive list, but certainly indicates the Commission’s main areas of concern. It should also be noted that the Commission’s view is that regulation of these specific services is only warranted where regulation of the airport as a whole is considered appropriate. That is, the Commission recommends regulation of more services, but at fewer airports.

### Airport Services

<table>
<thead>
<tr>
<th>Service</th>
<th>Is the service ‘non-discretionary’?</th>
<th>Supply Side Substitution Possibilities</th>
<th>Case for Regulation?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aircraft movement facilities and activities</td>
<td>Yes</td>
<td>Low</td>
<td>Yes</td>
</tr>
<tr>
<td>Passenger processing facilities and activities</td>
<td>Yes</td>
<td>Low</td>
<td>Yes</td>
</tr>
<tr>
<td>Landside vehicle facilities</td>
<td>Yes</td>
<td>Low</td>
<td>Yes</td>
</tr>
<tr>
<td>Aircraft refuelling</td>
<td>Yes</td>
<td>Low</td>
<td>Yes</td>
</tr>
<tr>
<td>Aircraft light/emergency maintenance sites</td>
<td>Yes</td>
<td>Low</td>
<td>Yes</td>
</tr>
<tr>
<td>Aircraft heavy maintenance sites</td>
<td>Yes</td>
<td>High</td>
<td>No</td>
</tr>
<tr>
<td>Freight equipment storage sites</td>
<td>Yes</td>
<td>Low</td>
<td>Yes</td>
</tr>
<tr>
<td>Freight facility sites and buildings</td>
<td>Yes</td>
<td>High</td>
<td>No</td>
</tr>
<tr>
<td>Ground support equipment sites</td>
<td>Yes</td>
<td>Low</td>
<td>Yes</td>
</tr>
<tr>
<td>Check-in counters and related facilities</td>
<td>Yes</td>
<td>Low</td>
<td>Yes</td>
</tr>
<tr>
<td>Administrative office space</td>
<td>Yes</td>
<td>High</td>
<td>No</td>
</tr>
<tr>
<td>Commercial and retail facilities</td>
<td>No</td>
<td>High</td>
<td>No</td>
</tr>
<tr>
<td>Flight catering facilities</td>
<td>Yes(^1)</td>
<td>High</td>
<td>No</td>
</tr>
<tr>
<td>Helicopter facilities</td>
<td>Yes</td>
<td>High</td>
<td>No</td>
</tr>
<tr>
<td>Waste disposal facilities</td>
<td>Yes</td>
<td>High</td>
<td>No</td>
</tr>
</tbody>
</table>

1. In some circumstances, this may not be necessary, eg short haul journeys.

The Commission’s views on the range of services that should be subject to regulation is very similar to those articulated by the PSA. In its *Inquiry into the Aeronautical and Non-Aeronautical Charges of the Federal Airports Corporation*, the PSA favoured a broader functionally-based definition of aeronautical services as it encompasses the key areas of market power.

The preferred definition would include those activities nominated by the FAC’s Act, without the possibility of a contract, lease or licence arrangement being a basis for exclusion of a service from the aeronautical definition. Also all aircraft-movement related (‘airside’) operations should be included, which would mean that refuelling is also regarded as an aeronautical service. As well, airfield security, the provision of some hangars, or hangar sites, and some maintenance

---

\(^{133}\) Service offerings and market conditions are not static. The set of regulated services should be reviewed on a regular basis, for example, every five years.
facilities should be included. [...] In relation to terminal facilities, this definition would also include check-in and some office space necessary to accommodate staff managing the airport activities. Other air-side related activities, such as baggage handling and freight facilities should also be included.\textsuperscript{134}

The Commission notes that the recommendations of the PSA have not been substantially incorporated into the regulatory framework. The current review has the opportunity to again address these issues.

\section*{8.5 Conclusion}

The Commission is of the view that the framework recommended by Professor King should be adopted by the Productivity Commission to make a detailed analysis of the question of market power at airports.

This chapter has applied the framework in presenting the Commission’s view as to which airports, and which services at those airports, should be subject to price regulation. The Commission generally endorses the dual till approach to regulation, but on the condition that the basket of regulated services includes all services in which an airport operator has significant market power. Section 8.4 provided the Commission’s views on the services which fall into this category.

The Commission’s application of Professor King’s framework suggests that the following airports be subject to price regulation: Sydney, Brisbane, Melbourne, Perth, Adelaide, Canberra and Darwin Airports. The Commission recommends that the other airports which are currently subject to price cap arrangements have such regulation removed.

The Commission’s application of Professor King’s framework also suggests that, at the aforementioned airports, the following services be subject to regulation:

- aircraft movement facilities and activities;
- passenger processing facilities and activities;
- landside vehicle facilities;
- aircraft refuelling;
- aircraft light/emergency maintenance sites;
- freight equipment storage sites;
- ground support equipment sites; and
- check-in counters and related facilities.

In light of these recommendations, the following chapters of this submission outline the Commission’s views on the appropriate approach to airport regulation.

\textsuperscript{134} Prices Surveillance Authority, 1993, op. cit., p. 60.
9. INCENTIVE REGULATION

9.1 Introduction

There are a number of options for regulating prices of those services covered by any regulatory arrangements. They include:

- **Negotiate-arbitrate models.** Part IIIA of the Trade Practices Act, for example, establishes a framework for negotiations with the option of arbitration in the event that negotiations are unsuccessful.
- **Tariff setting.** The most common approach to setting tariffs is rate of return regulation.
- **Incentive regulation.** This approach is adopted in the current regulatory regime. CPI-X price caps apply at all of the regulated privatised airports.

This chapter discusses each of these options. Section 9.2 considers the merits of the negotiate-arbitrate model. Section 9.3 and 9.4 consider the alternatives, and in particular tariff setting and incentive regulation.

The Commission favours ongoing use of a CPI-X price cap. The implementation issues associated with adopting this approach are considered in chapters 10 and 11.

9.2 Negotiate-arbitrate model

The Commission’s submission to the Productivity Commission’s Review of the National Access Regime considers the merits of the negotiate-arbitrate model, considering both the economic theory underpinning the approach and the Commission’s experience in implementing the arrangements in regulating telecommunication and airport services.

The Commission’s submission concludes that the experience to date points to a number of fundamental disadvantages with the approach. The main limitations are as follows:

- **The high propensity for parties to seek arbitration rather than negotiate outcomes.**

  The Commission’s experience in conducting arbitrations in relation to telecommunications services suggests that a ‘take it or leave it’ approach is common when the access seeker has little or no countervailing market power. The net outcome has been a high propensity to seek arbitrated outcomes rather than engage in meaningful negotiations.

  The Commission’s experience in administering the new investment provisions of the current prices oversight arrangements suggests that the propensity to seek arbitrated solutions could also be high under a regulatory framework that relies on the negotiate arbitrate model. It also suggests that any such arbitrations would be complex.

  The new investment provisions of the current prices oversight arrangements encourage commercially negotiated outcomes. However, the Commission has not yet received a proposal that has been fully agreed to by the various parties. The Commission has had to address the question of whether price increases proposed by
the airport operators relate to “new investment”, whether the new investments are “necessary”, and the costs proposed including the rate of return proposed. The process has inevitably required the Commission to assess the details of proposals submitted.

- **Lack of certainty.**  
  Arbitrations about service specific issues limit the scope for the regulator to consider broader issues. Combined with the bilateral and closed nature of arbitrations under Part IIIA the outcome is likely to be uncertainty about pricing outcomes.

- **Time consuming and costly processes.**  
  Arbitrations are time-consuming to conduct and so impose costs and delays on participants, at an inevitable cost to the efficiency of the market and the certainty with which new entrants can establish their own operations. Appeals can further delay the process.

  In New Zealand the ‘light handed’ regulatory approach does not set airport charges but requires airport operators to consult with airport users. Since privatisation the new operators of the larger airports have substantially increased prices. The outcome has been protracted and costly litigation between airlines and the major airports including Auckland and Wellington Airports. A similar outcome could be expected if Part IIIA was relied on, both in terms of the arbitration process, but also the scope for appeals to the Australian Competition Tribunal and then to the Federal Court.

- **Prohibitive costs for some access seekers.**  
  This is most relevant in two circumstances. The first is where there are a large number of possible users operating in diverse downstream markets, whose use of the facility is incidental. The second is where the access seeker is a small business. For these access seekers the costs of arbitration may be prohibitive.

  These costs and delays are particularly relevant to new entrant airlines. Impulse and Virgin Blue have both argued that timely access to airports facilities on reasonable terms and conditions is essential to their success. A particular concern for them has been establishing access to passenger terminal facilities on reasonable terms and conditions.

  The slow and costly processes involved in Part IIIA could render declaration/arbitration ineffective. At a minimum it would delay pricing outcomes when quick outcomes are most important. Higher access costs could affect the probability of success of the new entrants or limit their size and growth.

The Commission’s submission to the Productivity Commission’s Review of the National Access Regime also identifies other potentially economically inefficient

---

135 This is potentially an issue at airports where some of the access seekers operate relatively small businesses. See for example Australian Competition and Consumer Commission 1999, *Delta Car Rentals Request for Determination – Statement of Reasons.*
outcomes from the negotiate-arbitrate model. One is that negotiations may result in rent sharing rather than efficient pricing outcomes. Another is that the framework could deter investment into higher risk greenfield investments. Both are discussed in chapter 7 of that submission.

The negotiate-arbitrate model was originally described as a ‘light handed’ model with arbitration only as a last resort. The experience since then suggests this is not the case.

The limitations of the negotiate-arbitrate model are most apparent where services are vertically separated as is the case with airports. The model seems to have been designed to cater for circumstances where the service provider is vertically integrated and the provider may have incentives to deny access to protect its business interests in downstream markets either through price or non-price means. By contrast when a service provider is vertically separated it will usually have little incentive to deny access. While the service provider may exploit its market power by setting high prices it is unlikely to manipulate other terms and conditions to limit access. Nevertheless the negotiate-arbitrate provisions allow an access seeker to seek arbitration over non-price terms and conditions. This could result in unnecessarily intrusive arbitration over detailed operational matters.

Part IIIA has played, and continues to play, an extremely important role as a catalyst for the development of industry specific regimes. However, as discussed above, Part IIIA and the negotiate-arbitrate model have a number of limitations. These limitations are particularly acute in relation to airports. The Commission considers that well designed airport specific price regulation will give more workable and efficient outcomes.

9.3 Pricing principles and tariff setting

The alternatives to Part IIIA and the negotiate-arbitrate model revolve around providing greater guidance on pricing. Such guidance could supplement negotiations or replace them. This section considers two possible alternatives, pricing principles and tariff setting. A third option would be to implement price caps. This option is considered in section 9.4.

Pricing Principles

Pricing principles could take the form of:

- Guidance on the economic principles for setting prices. Examples include the pricing principles proposed by the Productivity Commission in its Review of the National Access Regime or the Commission’s guidelines on telecommunications access pricing principles\textsuperscript{136}.

\textsuperscript{136} Australian Competition and Consumer Commission 1997, \textit{Access Pricing Principles Telecommunications – a draft guide.}
Maximum and minimum prices. These could be stated explicitly or by reference to the principles that they would set on. As an example, the New South Wales rail access regime states that prices must be between the incremental cost of providing a service and the stand alone cost of providing the service\(^\text{137}\).

Setting pricing principles could be a useful supplement to negotiate-arbitrate provisions. They have the advantage that they provides additional guidance to parties in negotiations and may improve the probability of successful outcomes. As stated in the Hilmer Report: “Once principles are in place the parties have a greater degree of certainty over their respective rights and obligations”\(^\text{138}\).

Nevertheless the experience to date has been mixed. The guidelines developed by the Commission for telecommunications adopt detailed cost based principles. Even with this guidance many parties have elected to seek Commission arbitration over pricing matters. So far over 30 disputes have been notified.

Similarly a number of rail matters have gone to arbitration by the Independent Pricing and Regulatory Tribunal in New South Wales, even though the rail access regime includes pricing principles.

Both examples suggest that setting general pricing principles at best only partially addresses the limitations of the negotiate-arbitrate model. The experience to date suggests that these problems are better addressed by more specific pricing guidance. One way of doing this could be to more tightly define pricing principles. The more specific the pricing principles are the more they resemble tariff setting.

**Tariff setting**

Tariff setting could take the form of specifying or listing prices. The most common way of setting tariffs is to use the cost of service to determine the allowable revenue to the service provider. This allows the service provider to set prices that cover the costs of providing the service. It would include a return on capital, return of capital (depreciation) and operating, maintenance and administration costs. The approach involves determining a rate of return allowed on capital which means that the service provider’s assets need to be valued to form a ‘rate base’ and a rate of return specified to apply to this base.

This approach is similar to the rate of return approach that has been used extensively in the United States for more than a century.

Tariff setting has a number of advantages. It provides clarity and certainty for all of the parties about pricing outcomes. It can also reduce the delays and costs associated with

---


\(^{138}\) Independent Committee of Inquiry into a National Competition Policy (1993), *National Competition Policy* (F. G. Hilmer, Chairman), AGPS, Canberra, p. 255.
the negotiate-arbitrate model and the possibility of negotiated rent sharing outcomes raised by King and Maddock\textsuperscript{139}.

Tariff setting also has a number of disadvantages. One is that it may be heavy handed compared to the negotiate-arbitrate model. The reason for this is that all access prices are regulated from the outset while arbitration is only triggered on an as needs basis.

The main disadvantage of tariff setting is the incentives for efficiency when a cost of service approach is used. Prices set on this basis may provide weak signals for the service provider to minimise production costs. They may also provide incentives for the service provider to increase the rate base (and returns) by choosing an inefficient mix of capital and labour inputs (the Averch-Johnson effect).

To a large extent the lack of incentives for efficiency can be addressed by setting tariffs on the basis of efficient rather than actual costs. For example prices could be based on the forward looking costs that an efficient firm would incur in providing the service. This approach has been adopted by the Commission in administering the Telecommunications access regime\textsuperscript{140}. They can also be addressed through the use of price caps.

\section*{9.4 Incentive regulation – price caps}

Price caps set the maximum price that a service provider can charge for a specified period. They allow the service provider to retain profits achieved by increasing volume or reducing costs.

Price caps can be set on the basis of a cost of service approach or by using pre-existing prices as a starting point. In either case prices can be adjusted over time to reflect future cost changes. Typically price caps are set by applying CPI-X adjustments (or RPI-X in the United Kingdom) to a starting point, with CPI a proxy for changes to input prices, and ‘X’ an estimate of future productivity gains.

In Australia price caps have been applied in economic regulation of airports, gas, electricity and telecommunications. In the United Kingdom they have been used in regulating these sectors as well as water and rail.

As with the tariff setting model price caps have the advantage that they provide clarity and certainty for all of the parties about pricing outcomes.

Price caps have the added advantage that they provide incentives to the service provider to reduce production costs. Where existing prices are used as a starting point price caps may also have the advantage of simplicity.


\textsuperscript{140} See Australian Competition and Consumer Commission 1997, \textit{Access Pricing Principles Telecommunications – a draft guide}.
However, price caps also have possible disadvantages. One is that they do not necessarily provide incentives to provide appropriate quality of service standards. This concern arises because price caps provide strong incentives for the service provider to cut costs. One way that this can be achieved is through quality of service reductions.

A second is that price caps may not provide adequate incentives for new investment. This is most likely to be the case where the investment is quality enhancing rather than capacity enhancing.

A third possible disadvantage of price caps, and for that matter any form of tariff setting, is that they do not address non-price terms and conditions of access. These non-price terms and conditions could be used by an operator to prevent access.

On balance the Commission proposes continued use of price caps. The advantages of price caps in terms of incentives for efficient operation of facilities are well documented. Furthermore the Commission considers that the disadvantages of a price cap can be addressed through a well designed and implemented framework.

This submission includes proposals for implementing a price cap. It includes proposals for provisions to provide appropriate incentives for efficient new investment. These provisions are discussed in chapter 10. The submission also proposes ongoing monitoring of quality of service.

In relation to non-price terms and conditions, the Commission notes that airports are vertically separated. When vertically separated service providers normally have every incentive to provide access. The issue is not about access per se, rather about the price of access. By contrast if the service provider is vertically integrated it may have incentives to prevent access through non-price terms and conditions in order to protect its upstream or downstream operations from new entry.
10. INCENTIVES FOR NEW INVESTMENT

10.1 Introduction

Airports are infrastructure intensive operations that require substantial amounts of new investment over time. Price caps may not provide airport operators with sufficient incentives to undertake such investments unless there are additional provisions to compensate them for the costs incurred. The problem can arise when the airport operator cannot increase prices under a price cap, even if airport users want a new investment to go ahead and would be prepared to pay more for the resulting benefits.

In general price caps provide strong incentives to carry out cost saving investments. However, they do not always provide adequate incentives for capacity and quality enhancing investments. The risk is sub-optimal investment – where investments are not undertaken even though the benefits to society as a whole outweigh the costs. Under such circumstances additional provisions to provide airport operators with the incentives to carry out investment are warranted.

This chapter considers possible distortions to investment incentives under a price cap and options for addressing them. Section 10.2 outlines circumstances where a price cap does and does not provide adequate incentives for new investment. Section 10.3 sets out possible options for addressing investment distortions that may arise under a price cap. Section 10.4 proposes revised new investment provisions.

To assist in developing this submission the Commission sought advice from the Network Economics Consulting Group. Its paper “Treatment of New Investment at Regulated Airports” is provided at attachment D.

10.2 Price caps - when are new investment provisions required?

Under a price cap airport operators can improve their profit performance in two ways. One is to reduce costs, the other to increase revenues for any given cost structure. Airport operators will have strong incentives to carry out investments which achieve either of these objectives. In such cases price caps should achieve efficient investment outcomes without any additional investment incentive provisions. In practice investments may not achieve either objective but still be socially desirable.

Airport operators may carry out investments for a number of purposes. These can be classified as follows:

- cost saving investments;
- capacity enhancing investments;
- quality enhancing investments; and
- replacement of assets.
This section assesses the extent to which price caps provide adequate incentives for investment in each of these categories. A more detailed assessment is provided in NECG’s paper (see attachment D).

Cost saving investments

Cost saving investments typically reduce ongoing operating and maintenance costs or extend assets lives. An example could be investment into new runway flanks which reduce runway cleaning requirements.

No additional incentive mechanisms should be required to achieve efficient levels of investment into cost saving investments if the cost savings are achieved by the airport operator. Under a price cap such investments should add to the airport operator’s profitability if they reduce total costs over time.

By contrast, if the cost savings accrue to airport users, the airport operator may have no incentives to carry out such invests. This arises because of vertical separation of the airport operator from airlines and other service providers at the airport. If vertically integrated the entity would have every incentive to carry out such cost saving investments irrespective of where the cost saving were achieved. If vertically separated, the airport operator is unlikely to benefit from investments that reduce costs to airport user costs unless there are additional investment provisions outside the price cap.

Capacity enhancing investments

Typically capacity enhancing investments pave the way for traffic growth over time. In turn under a price cap such increases in traffic volume translate into higher revenues. An airport operator will have strong incentives to carry out such investments if the additional revenues from the new facilities exceed the costs of constructing them. Whether or not this would be the case is an empirical question, dependent on the incremental cost of new facility, the additional traffic volume generated and the per unit revenue generated under the price cap.

Forward looking pricing models such as the pricing model proposed by Turvey\textsuperscript{141} show the conditions under which a capacity enhancing investment will pay for itself under a price cap – and by implication the conditions under which it will not. Such models take into account:

- the investment requirements resulting from projected demand over the regulatory period;

the net additional (efficient) costs to the service provider of the new investment, or as Turvey describes it the “marginal cost” of the investment\textsuperscript{142}; and

- the revenue impact of the projected demand growth.

NECG’s report to the Commission sets up a model to explore these issues in the context of a CPI-X price cap. The model establishes the conditions under which a capacity enhancing or cost saving investment will pay for itself.

In general the more direct and the stronger the relationship between the cost of capacity enhancing investments and the additional revenues generated by them, the less need there is for additional investment incentives outside the price cap. Conversely, there is a stronger case for additional new investment provisions the less direct the relationship.

In practice determining whether a capacity enhancing investment pays for itself may be difficult. One of the main complications is identifying the extent to which the investment generates increased traffic. As an example, additional runway capacity accommodates more aircraft take offs and landings during peak periods. However, this additional traffic does not necessarily add to total traffic volumes. The additional peak period capacity may merely allow airlines to switch from off-peak to peak period time slots. In these circumstances the investment may be better characterised as a quality enhancing investment.

The case for having new investment provisions outside the price cap is stronger the less well understood the relationship between costs and revenues. Under these circumstances the risk is under-investment by airport operators.

**Quality enhancing investments**

Quality of service improvements can take many forms. These include:

- runway lighting, fuel containment and other investments which improve safety;
- cleanliness and spaciousness of airport passenger terminals;
- speed and reliability of baggage processing equipment;
- availability of aerobridges; and
- and adequacy of vehicle access to the terminals.

As discussed above the availability of runway landing and take-off slots during peak periods may also be a quality measure.

Poor quality of service may deter some people from travelling, especially if the service provided results in delays or reduces availability of peak period services. As such quality enhancing investments may generate additional traffic volumes and revenues. Nevertheless quality improvements are unlikely to significantly contribute to improved

\textsuperscript{142} This includes the impact on operating as well as capital costs.
revenues. This is because the relationship between the quality of airport services and traffic volumes is likely to be weak except in extreme conditions. Given this, investment provisions to provide additional incentives for quality of service investments would seem to be warranted.

**Replacement of assets**

This type of investment maintains the existing service potential of assets. It typically involves like-for-like replacement of assets. NECG’s report concludes that there is no basis for additional investment provisions to cover such investments:

To the extent that this investment represents the most efficient means of maintaining without enhancement existing service potential, it is most appropriate to treat such investments as though they were a form of maintenance expenditure.

Given the neutral impact on both costs and revenues over time from planned like-for-like cyclic renewal of assets, investments with a maintenance purpose should be included within the price cap. These would provide no basis for modifying the price cap parameters.143

**Investments with multiple purposes**

Often investments serve more than one purpose. For example, the Multi-user Integrated Terminal proposed by Adelaide Airport is likely to address each of the purposes discussed above. It will increase capacity, replace existing assets, improve quality of service, and may improve airline operating costs. It may be desirable to separate out the costs of the investment attributable to the different purposes and pass through investment costs or provide investment incentives in other ways according to the principles discussed above. This may not be possible to do in practice. At a minimum it would be administratively complex.

### 10.3 Options for implementing investment provisions

The above discussion suggests that there are a number of scenarios where investment incentive provisions would be desirable. They arise where investments are considered desirable by users and were the users would be willing to pay for the improvements. Under a pure price cap such price increases are not possible – resulting in under-investment in the circumstances discussed above.

This section considers four options for implementing investment provisions:

- No additional new investment provisions;
- Set X values to accommodate anticipated new investment;
- Adjust prices as new investments come on-line;
- A hybrid of the above options.

In each case the investment provisions compensate the airport operator for the costs and risks incurred in undertaking an investment, either through price rises or through adjustments to the price cap parameters.

This section assesses each of the options against specified objectives. First the objectives for assessing the options are discussed. Then the options are assessed against the objectives drawing on the Commission’s experience to date with the current regulatory provisions. The discussion concludes in favour of revised new investment provisions.

Assessing the options - objectives

Any new investment provision should have the following properties:

1. It should promote economically efficient investments;
2. It should address market power concerns; and
3. It should be administratively simple.

For purposes of this assessment these properties will form the basis of the objectives used to assess the various options.

The first of these, that any new investment provision promotes economically efficient investments, addresses the requirements of dynamic efficiency. Dynamic efficiency means that firms (in this case the airport operators) have appropriate incentives to invest, innovate and improve the range and quality of services, increase productivity and lower costs over time. It requires that prices are sufficiently high to provide incentives for the operators to undertake efficient maintenance and upgrading of infrastructure. At the same time it requires mechanisms to address possible “Averch-Johnson” and “gold plating” outcomes.

The second objective, addressing market power concerns, goes to the fundamental efficiency objectives behind regulation in the first place. If the new investment provisions do not address market power that airport operators may have in relation to new investment it may undermine the overall effectiveness of the regulatory regime.

The third objective, administrative simplicity, is important in terms of delivering a workable regulatory framework that is understood by the parties. Simplicity is also important in limiting the costs of administering the regulations for all of the parties, including the airport operators, airport users and the regulator.

Options 1: No additional investment provisions

Under this option the only incentives to carry out investment would be those already inherent in the CPI-X price cap. This approach would not adjust prices to compensate for new investments or factor new investment costs into the determination of X values.

This approach meets two of the three objects outlined above, namely administrative simplicity and addressing market power.
However, it fails the objective of promoting efficient new investment. As discussed in section 10.2 this approach would provide incentives for some types of new investment, but not others. It is likely that certain quality and capacity enhancing investments would not proceed even if welfare enhancing for society as a whole.

This option is not recommended.

**Option 2: Set X values to accommodate anticipated investment**

Setting X values to accommodate anticipated investment is widely used in regulating utility prices in Australia and the U.K.

The Australian gas and electricity codes, which cover regulation of transmission services, adopt this approach. In both cases regulated prices are set using an optimised depreciated replacement cost (ODRC) valuation of assets. Using the building block approach projected operating and maintenance costs are added to a rate of return on the asset base and a return on capital (depreciation) to give allowable revenue. Unit prices are then derived by dividing allowable revenue by projected usage levels. The starting point prices and X values in the CPI-X price cap determine both the price levels and price path\(^ {144}\).

In both cases prices are set for a five-year period. Capital expenditure over the five-year regulatory period is estimated at the start of the regulatory period and added into the asset base. Capital redundancy is also factored in.

Similarly in the U.K. airports regulatory framework, prices are reset each five years based on a review of costs and volume projections. New investment over the five-year regulatory period is estimated by the regulator in consultation with the industry and rolled into the asset base. Where the U.K. model differs from the electricity and gas models is that the asset value used for determining prices is based on the sale price of the airports, not the ODRC value\(^ {145}\).

The approach has a number of desirable properties. In terms of the objective of promoting economically efficient investments it appears to be consistent with forward looking pricing models such as the pricing model proposed by Turvey\(^ {146}\) in that it takes into account both projected costs and revenues. In modelling whole of business costs and revenues it also limits compensation to the service provider to that required and addresses the market power objective.

---

\(^ {144}\) For more details see the Commission’s *Draft Statement of Principles for the Regulation of Transmission Revenues*, May 1999.

\(^ {145}\) Note: in the U.K. the airports were floated at around the book value of assets, in Australia they were sold by trade sale

At the same time the approach has limitations. The main one relates to investment outcomes. Factoring investment into X values may not yield efficient investment levels. There are two main reasons for this.

The first is the difficulty of correctly specifying investment projections for purposes of setting the price cap parameters. In general the regulator will have limited information on which to determine this. At the same time the service provider may have strong incentives to overstate investment requirements since this will give higher price outcomes. Similarly airport users may have incentives to understate investment requirements. One approach might be to set investment projections on the basis of outcomes agreed to by airport operators and airport users. The experience here and in the U.K. suggests that such agreement is difficult to achieve.

A further complication in projecting investment levels over a specified regulatory period is uncertainty about demand levels and costs. The timing and size of new investments is highly sensitive to traffic volume. Costs can also be difficult to determine in advance. For example, projected costs of the proposed multi-user domestic terminal at Adelaide Airport moved substantially following discussions with users. To a large extent the cost revisions reflected the needs of the prospective users.

The second and perhaps more important issue is the incentives for airport operators to carry out the investments once they have been factored into the price cap parameters. The risk is that airport operators will not carry out desirable investments or that they will unnecessarily delay them. The incentives to do this may be strong. Prices are locked in over a fixed period (in Australia and the U.K. this is usually a five-year period) irrespective of the capital expenditure actually carried out.

The risk of under-investment can be addressed by setting service standard requirements. In the U.K., for example, regulation of water transmission and distribution services sets clearly specified service standards. Similarly in Australia the electricity code sets out a number of service standard requirements.

The experience to date in the U.K. suggests that the prospect of operators under-investing is a real risk. Where quality of service requirements are not in place there has been chronic under investment in rail track services subject to CPI-X price caps. There is also some evidence to suggest that airport operators in the U.K. have under invested\textsuperscript{147}.

In relation to the objective of administrative simplicity, the approach of factoring new investment into the price cap parameters is easy to administer once the parameters are in place. However five-year reviews of the price cap parameters in the U.K. have been lengthy and complex. This suggests that the administrative requirements can be quite onerous for all of the parties.

On balance the Commission considers that this approach warrants consideration. It has the potential to deliver efficient investment outcomes and has the attraction of taking a whole of airport perspective in determining the cost and revenue implications of

\textsuperscript{147} BAA has underspent against investments factored into the X values. The most significant contributor to this has been the delay to the terminal 5 development at Heathrow Airport.
investments. It has also been widely used in price regulation both in Australia and overseas.

Nevertheless there are downside risks in terms of under investment. If this approach is pursued consideration of options to address these downside risks would be useful, and in particular possible mechanisms to provide incentives for the airport operator to carry out investments as and when required. In the U.K., for example, regulators have stated that they will consider investment under-spending in subsequent reviews. Alternatives might be to penalise operators for poor investment outcomes or simply to monitor and make transparent investment outcomes.

Option 3: Adjust prices as investments come on line

Adjusting prices as investments are made is the approach adopted in the current regulatory framework. Direction number 20 allows the costs of “necessary new investments” to be passed through the price cap provided they have been approved by the regulator following an assessment of the proposal against certain specified criteria. The criteria focus on the support from users for new investment proposals and the relationship between the proposed price increases and costs. Details on the arrangements are provided in chapter 2 of this submission.

In effect the current regime allows for a specified dollar increase in prices. A variant on this is would be a CPI-X+k price cap, in which k is adjusted over time to compensate the airport operator for investments as they are undertaken.

The main advantage of this approach is that it directly links prices to new investments. Price increases are only granted when the investment is undertaken. This removes the possibility that airport operators are compensated for investments not undertaken or investments delayed.

The approach also provides flexibility. It has the capacity to address new investment needs as they arise. In this way the timing and scale of new investments can be determined taking into account the latest information on traffic volumes and costs.

The current arrangements also have the advantage that they encourage airport operators to consult with airport users. One of the problems with any new investment provision is determining appropriate levels of investment and resulting quality of service standards. The difficulty arises because of the subjective nature of quality of service, and the different preferences of different travellers (eg backpackers versus business travellers). Consultation between airport operators and airport users can be an effective means of addressing the issues. It can also address potential concerns about gold plating. Consultation has the potential to work well where, as in this industry, there are a limited number of well-informed users. Brisbane Airport provides an example of how such consultative arrangements can work. There the airport operator has successfully negotiated price increases to recover the costs of around $30 million in new investments.

At the same time the approach, at least as currently implemented, has some limitations. It is administratively complex. Each pass through must be assessed by the regulator, first to assess whether it meets the definition of “new investment” and secondly how it performs against the assessment criteria in Direction 20. So far the Commission has
received dozens of applications for new investment proposals, including for small items such as drainage works, baggage room fans, installation of doors to passenger terminals and revegetation works. The process imposes administrative costs on the airport operator, airport users and the regulator and in some cases may delay the investment works.

A lack of clarity in the regulatory instruments has added to the administrative complexity of the regime and created considerable uncertainty about what could be passed through the price cap. The Government factored in significant new investment spending into the ‘X’ values. Airport operators and users were advised of this during the airport sales process. However, the projects or dollar amounts factored in were not disclosed. Subsequent negotiations between airport operators and users failed because of this. In considering new investment proposals airport users argued that the costs could already have been factored into the ‘X’ values. Airport operators put the position that they would not invest without a pass through. The failure of negotiations and requests from the industry for clarification led the Commission to provide guidance on the new investment provisions. Since then airport operators and users have reached agreement on a range of projects. Details are provided in chapter 2.

A further complication is that the framework requires each of the proposals to be assessed individually on their merits. A more satisfactory way to assess the impact of new investments on the airport operator may be to take a whole of airport perspective as is the case with option 2 (setting price cap parameters to accommodate anticipated investment).

In relation to user consultation, while this approach to new investment has a number of advantages there are also risks of strategic gaming, both from airport operators and airport users. For example, incumbent airlines may not support investments that promote and assist new airline entry. NECG considers possible strategic behaviour in its consultancy report in some detail (see attachment D).

Overall the approach of adjusting prices as investments come on line has some merit in terms of investment outcomes and encouraging consultation between airport operators and airport users. However, if pursued as an option, the Commission suggests that three changes should be considered:

- Changes to provide clarity about what can be passed through the price cap and what has already been factored into the price cap parameters;
- Changes to address the administrative complexity of the current pass through provisions. For example, a mechanism to encourage bundling of new investment proposals rather than multiple separate proposals; and
- Changes to limit the assessment of new investment proposals to major proposals.

---

148 In April 2000 the Commission released a position paper new Investment Costs Pass-through – The distinction between “necessary new aeronautical investment” and other forms of expenditure, as it relates to the price cap. The Commission conducted a public consultation process in developing the paper.
The last of these proposed changes is discussed below in the context of the ‘hybrid’ option.

**Option 4: A hybrid**

A hybrid model could combine aspects of options 2 and 3. The hybrid option preferred by the Commission would only pass through the costs of major projects. Other projects would be funded by the airport operator, but with compensation through the price cap parameters as in option 2.

The Hybrid model would need to distinguish between investments that could and could not be passed through. There are a number of ways in which this could be done. For example, the pass through provisions could be limited to:

- developments over a specified dollar amount;
- developments requiring development planning approval under the *Airports Act*;
- developments that could not be anticipated at the time the ‘X’ values were set.

As a variant on this airport operators could be asked to set out their forward investment plans over a five-year period, with pass throughs limited to projects not in the plans.

**10.4 Revised new investment provisions**

The discussion above suggests that having a price cap without provisions to encourage investment (option 1) could result in substantial under investment. Options 2 (factoring anticipated investment spending into the price cap parameters) and 3 (investment pass through provisions) could go a substantial way to addressing concerns about under investment. Nevertheless, as discussed above, both have limitations.

The Commission proposes the inclusion of investment provisions as part of any price cap arrangements to apply to airports. These provisions would compensate users for undertaking investments. Without such provisions it seems likely that investment outcomes would be sub-optimal in that some investments would not be undertaken even if users wanted them and were prepared to compensate the airport operator for undertaking them.

From an economic efficiency point of view any new investment provisions should only compensate airport operators if the price cap provides inadequate incentives by itself. In practice, and as discussed in section 10.2, it is likely to be difficult to distinguish when the price cap provides sufficient incentives and when it does not, especially when an investment combines multiple purposes. Given the likely administrative complexity and possible subjectivity this approach is not recommended. Instead the Commission proposes provisions which cover all investments.

A minimal change option would be to maintain new investment cost pass through provisions, but address the more serious limitations of the approach. This would involve addressing the lack of clarity and high administrative costs associated with the current provisions.
On balance, however, the Commission favours a different approach. It suggests adoption of a hybrid approach provided that it can be set up in a way that is clear and administratively workable. This approach would factor in ongoing smaller investments into the ‘X’ value or other price cap parameters, but still provide for a pass through of the costs of major projects.

The hybrid approach combines a number of the advantages of options 2 and 3. As with option 3 it would directly link price increases to the investments undertaken for the major investments. It could also be set up in a way that encourages consultation. At the same time the hybrid model would reduce the administrative burden associated with the current arrangements since any pass through provisions would only apply to major projects. Examples of such projects could be major terminal developments such as the Adelaide Airport multi-user integrated terminal.

The challenge with this approach is to provide clarity about what projects are eligible for a pass through. Lack of clarity can result in two problems. The first mirrors those of the current framework. The lack of clarity initially resulted in a failure in consultation and negotiations, with the parties arguing about what is eligible for a pass through rather than focusing on the merits of particular investment proposals.

The second possible problem associated with lack of clarity is the risk of gaming. For example, if a dollar amount is specified as the cut off for the pass through arrangements operators may try to bundle investments to reach the cut off, or gold plate to reach the cut off. Such gaming has been a feature of the current arrangements. One example of this is that even though the current pass through provisions relate to “new investment” some operators have tried to pass through costs which solely relate to labour costs. Another example is the proposal by one operator to recover the costs of investments already carried out by the FAC prior to privatisation.

To address issues of clarity the Commission suggests that there be a clear and workable cut off between what can and can not be passed through. The Commission also suggests that the projects and dollar amounts factored into the price cap parameters should be made available to all interested parties.
11. IMPLEMENTING A PRICE CAP

11.1 Introduction

A number of implementation issues arise if a price cap is adopted. This chapter considers the main issues. Section 11.2 discusses starting point prices and ‘X’ values for a new price cap. Congestion has arisen as an issue at Sydney Airport. Section 11.3 considers possible implications for a price cap. Clarity of coverage of the price cap is discussed in section 11.4, while section 11.5 considers the legislative base for a price cap.

11.2 Starting point parameters for the price cap

Introduction of new price caps for regulated airports raises the question of what price cap parameters to adopt. Both the starting point prices for the price caps and the ‘X’ values would need to be reviewed.

Starting point prices

Two options are available for starting point prices. One is to carry over prices from the previous price cap. The second is to reset the prices. Prices could be reset by reference to costs (see for example the Commission’s Sydney Airport decision\(^{149}\)) or by reference to some benchmark. A benchmark could set prices based on a ‘best practice’ airport operation or simply set prices by reference to other comparable.

The current prices are a carry over from the prices charged by the FAC before privatisation. These charges were determined on a network basis. They were also determined on a single till basis. This means that the current charges are unlikely to closely correlate to aeronautical costs.

A number of airport operators argue that their current rate of return on aeronautical assets is low. If this is the case then resetting prices to reflect aeronautical costs would result in price increases. The impact on prices of resetting prices based on some efficient benchmark is less clear. Presumably the resulting prices would be no more than the operator’s current costs. The resulting prices could be higher or lower than the current charges.

The Commission proposes the first of the two options for starting point prices, namely a carry over of prices from the existing regulatory arrangements. The alternative is likely to result in significant increases or decreases in charges. Given that these starting point prices relate to existing, mostly sunk assets, there is little if any reason to make such a change from an economic efficiency perspective. Instead the main effect of such a change would be a distributional one, either a transfer from airlines and their passengers to airport operators or visa versa. The Commission notes that there is nothing to suggest that any commitments were made to airport bidders during the sales process to reset prices.

These arguments have been recognised in the U.K. There assets are not revalued as part of the current regulatory framework. Instead, and as proposed by the Commission in this submission, prices are carried over from one five year regulatory period to the next.

‘X’ values

The current ‘X’ values were set to reflect “expected general productivity improvements which can be made in the delivery of aeronautical services at each airport”. The Commission provided advice to the government on the X values. The advice was accepted. In formulating its recommendations the Commission modelled the expected costs and revenues of airports. The modelling drew on traffic volume projections and expected cost savings (based on an analysis by BZW of each airport). It also factored in estimates of new investment spending, also provided by BZW.

The Commission proposes that future ‘X’ values are set on the same basis as for the first five-year regulatory period, namely on the basis of expected productivity gains. The ‘X’ values should also reflect the approach adopted to new investment.

An alternative approach could be to retain the current ‘X’ values. Another approach could be to set ‘X’ to zero. In either case the approach would be arbitrary and is not recommended by the Commission.

A less arbitrary approach would be to reset ‘X’ values on the basis of an assessment of costs. However, the Commission does not recommend this approach for the reasons set out in the discussion above about starting point prices.

The Commission conducted a major review of price cap arrangements in the telecommunications industry earlier this year. The report discusses starting point prices and ‘X’ values in detail. The findings are relevant to the airport price caps. The Commission suggests that the Productivity Commission have regard to the report in considering airport price cap issues.

11.3 Congestion management

The issue of congestion management has been raised in the context of Sydney Airport’s aeronautical pricing proposals. The limited size of Kingsford Smith airport limits the scope for the airport operator to increase capacity, and in particular runway capacity, at the airport. Already many of the peak period slots at the airport are full. As traffic volumes grows the congestion problem will become more acute. The problem is compounded by the Government’s decision not to proceed with the development of an airport at Badgery’s Creek (or other alternatives), the movement cap at the airport and the Government’s protection of landing slots for regional airline users.

In its decision on Sydney Airport’s Aeronautical pricing proposal\textsuperscript{152}, the Commission encouraged the airport operator to introduce appropriate peak period charges. The decision argued that well designed charges would:

- encourage some airlines to switch from peak to off peak period slots; and
- encourage airlines to use slots more intensively, by using larger aircraft during peak periods.

In the context of price cap regulation the question is whether there should be special provisions relating to congestion management.

Under the current regulatory framework the \textit{Airports Act} includes provisions addressing demand management at airports. Part 13 (division 6) of the Airports Act establishes a demand management scheme. This allows the Minister to:

- prevent certain aircraft categories from using an airport;
- introduce a slot allocation scheme; and
- limit aircraft movements at an airport.

The Ministerial Directions made pursuant to section 20 of the PS Act also allow the charges under demand manage scheme to be passed through the price cap.

The price cap provides airport operators with the flexibility to rebalance charges. It would allow them to introduce peak charges, minimum charges and other measures to better manage congestion.

In general the price cap should also provide airport operators with incentives to introduced appropriate charging structures. Poorly managed congestion limits the traffic throughput at an airport in terms of passengers and landed tonnes. Under the price cap the airport operators have strong incentives to maximise traffic volumes at the airport. They retain the additional revenues associated with those higher volumes. They also benefit from the additional non-aeronautical revenues generated by increased traffic.

The price cap, then, should encourage the airport operators to set charges which most efficiently use the available infrastructure, in other words the charges which maximise traffic volumes. For this reason there is no clear reason to include congestion management provisions in the prices oversight arrangements.

\subsection*{11.4 Clarity about coverage of the price cap}

The current regulatory framework leaves an undue amount of uncertainty as to which services are notified. Some degree of uncertainty is inevitable: cases will always emerge in grey areas that were outside the draftsperson’s contemplation. However the

airports framework is unclear in relation to a number of services which were in existence at the time of its drafting.

The issue of taxi fees exemplifies the hazy boundary of the price cap. Landside roads are passenger processing facilities. The provision of such facilities is an aeronautical service and thus a declared service. The Commission considers that taxi fees are fees for the use of landside roads and therefore are within the price cap. However, the current instruments do not explicitly address the question of taxi charges, giving rise to some uncertainty about whether or not the charges fall within the price cap. Canberra Airport appealed a Commission decision relating to taxi charges. The Federal Court determined in the Commission’s favour, concluding that taxi fees imposed at Canberra Airport are within the price cap. The matter has now been appealed.

The Commission’s concern is that the matter of taxis could easily have been addressed in the regulatory instruments. The failure to explicitly address the issue has resulted in unnecessary uncertainty for airport operators and airport users. It has also resulted in substantial costs to the various parties because of the litigation process.

A further area in which the framework is unclear is the exclusion of services which are provided under contract with the FAC. The framework provides:

The facilities referred to in sub-paragraphs 4(a) and 4(b) [which give the meaning of aircraft movement facilities and passenger processing activities respectively] do not include, in relation to an airport, the provision of a service which, on the date the airport lease was granted, was the subject of a contract, lease, licence, or authority given under the common seal of the [FAC].

This excludes from the price cap any income received by airport operators under leases of domestic terminals to Qantas and Ansett. Beyond this the breadth of the exception is uncertain. The FAC had licence agreements with a large number of businesses in various categories, but often not all users in the category. For example, many coach operators had licences to collect and deposit passengers at the terminal kerbside. Many other coach operators did not. This raises a number of questions, for example:

- Are individual users in or out of the cap because of the licence arrangements in place at the time of privatisation?
- Or are individual users excluded when other users in the service category were subject to a lease or licence?
- If so what are the relevant service categories?

The current lease licence distinction also has a limited useful life. Provision that refer to the arrangements at a particular point in time become less viable as time passes.

The Commission proposes that the delineation between services in and out of the cap should be more clearly stated. It also proposes that the lease/licence distinction be removed and replaced with an explicit statement of the services in the cap. The delineation could either list services or service categories.
11.5 Legislative base for a price cap

The current framework uses the PS Act as the legislative base for the price cap. Ministerial Directions made under the PS Act provide details on the coverage of the cap and how it is to be administered by the Commission.

The Commission considers that there are significant difficulties with the PS Act, the Directions and the interrelationship between the two, which render the current arrangements complex and uncertain. In practice there is also the limitation that there are no formal penalties for non-compliance with the price cap. This section details those difficulties and proposes that any price cap be framed in a separate part of either the Trade Practices Act or the Airports Act.

General issues under the PS Act

The Productivity Commission is currently reviewing the PS Act. The Commission’s submission to the Productivity Commission’s Review details the Commission’s view of the limitations of the PS Act.153 The Commission’s views are summarised in the following paragraphs.

Voluntary compliance

Under the PS Act a declared company must, in certain circumstances, notify the Commission of a price increase.154 Failure to notify exposes a declared company to a penalty of $10,000.155 However there is no obligation to comply with a decision made by the Commission in response to a notification.

In the period prior to this review airports have tended to comply with the Commission’s decisions on notifications. However the objective of a price cap is to prevent firms with monopoly power from charging higher than efficient prices. A firm which increased prices regardless of a Commission decision is likely to entail an exercise of market power. The Commission considers a regime of voluntary compliance does not sit well with the objective of a price cap.

Assessment criteria

The PS Act provides that, when performing its functions under Part III, the Commission shall have particular regard to:

- The need to maintain investment and employment, including the influence of profitability on investment and employment;
- The need to discourage a person who is in a position substantially to influence a market for goods or services from taking advantage of that power in setting prices; and

154 PS Act s.22(2)
155 PS Act s.22(1)
• The need to discourage cost increases arising from increases in wages and changes in conditions of employment inconsistent with principles established by relevant industrial tribunals.\textsuperscript{156}

These criteria clearly reflect the economic policies of an earlier time, when wage restraint and inflation were key issues. The Commission considers these criteria provide a basis for promoting efficient pricing and restraining the exercise of monopoly power.\textsuperscript{157} However the Commission considers it would be preferable to express these criteria unambiguously.

\textit{Regulatory processes in response to price notifications}

The PS Act does not clearly delineate the actions the Commission can take in response to a price notification and may unduly limit the scope of possible responses. It describes one of the functions of the Commission as “tak[ing] in relation to such notices such actions in accordance with this Part as it considers appropriate.”\textsuperscript{158} The PS Act also refers to the Commission either not objecting to the proposed increase or alternatively not objecting to a smaller increase.\textsuperscript{159}

The PS Act does not expressly confer any other power on the Commission. It may be inferred that the Commission has the power to object to a proposed increase and to request that the Minister approve the holding of an inquiry.\textsuperscript{160} Beyond this the position is less clear.

The Commission considers there are a range of other actions which would in appropriate cases enhance the prospect of achieving efficient outcomes. This is well illustrated by conditions which the Commission has attached to its approval of notifications of price increases to recover the cost of new investment projects. For example:

• Approving a price increase on condition that the operator delay the increase until a future time such as when the new asset comes into operation;

• Approving an increase on condition that the operator remove the charge at the end of the project recovery period; and

• Approving a price increase based on estimated project cost but requiring the airport operator to calculate the actual price increase on the basis of actual project costs.

The Commission considers it can properly impose such conditions under the current framework but acknowledges that the position is not beyond doubt. Indeed the Commission has been challenged by airport operators as to its power to impose

\textsuperscript{156} PS Act s.17(3). The matters specifically relating to airports which the Commission must have special regard to are discussed later in this section


\textsuperscript{158} PS Act s.17(1)(a)

\textsuperscript{159} PS Act s.22(2)

\textsuperscript{160} PS Act ss.18, 19
conditions of this nature. The Commission considers the transparency and efficient administration of a price cap would be enhanced if the framework expressly provided a more flexible range of responses.

**Requirement to assess price notifications within 21 days**

The Commission is required to assess notifications of proposed price increases within 21 days.161 This is very difficult to achieve. Price notifications for airports generally involve complex economic issues. SACL’s proposal to increase landing charges by 130%.162, for example, was complex and with significant implications for the various parties.163 Accordingly the Commission consults widely with interested parties and often obtains independent economic advice.

To address this issue the Commission has developed an informal process. The Commission encourages declared companies to submit draft notifications which provide a basis for consultation and analysis.164 As part of this process the Commission generally issues a draft decision and statement of reasons and seeks further submissions from interested parties. When the consultation process is complete the declared company submits a formal notification.

An informal process is less than ideal.Declared companies retain the right to lodge a notification without prior consultation. A company sticking by its entitlement to formally notify without prior notice would seriously impede the Commission’s ability to effectively analyse the issues. In the period prior to this review airport operators tended (though not universally) to follow the informal consultative process. However, as the price cap is intended to constrain firms with market power, the Commission considers a regime of voluntary adherence to an informal procedure is inappropriate.

The alternative, a formal process through Commission inquiries, is also less than ideal. It can be a slow and cumbersome way to deal with narrowly based pricing proposals.

**Information gathering powers**

The Commission is dependent upon regulated businesses making the notification for the provision of information. The PS Act provides the Commission few powers to gather information. The PS Act provides that the Chairman may issue a notice requiring a person to furnish information or produce documentation relevant to a notification.165 However the penalty of failure to comply with an information gathering notice is $1000. By contrast the penalties for failing to comply with an information gathering notice issued under section 155 of the Trade Practices Act are, for a body corporate a fine of up to $10 000 and, for a natural person, a fine of up to $2000 or

---

161 PS Act s.22
163 In the case of SACL’s proposals the Government also introduced new regulatory instruments part way through the process requiring re-consideration of a number of matters and a further consultation process.
165 Section 32. The power may also be used for certain other purposes: Section 32(1)(d) and (e)
imprisonment for 12 months. The Commission considers the penalty for failing to comply with an information gathering order under the PS Act is unduly light and has the potential to impede the effective administration of a price cap.

A further limitation on the Commission’s ability to obtain information under the PS Act is that an individual may refuse to comply with a notice on the ground that it might tend to expose the individual to a penalty. The Commission recognises that information powers must not be unfettered but considers the current privilege goes further than is necessary. The Commission considers a more appropriate solution is to remove the privilege but impose a threshold on the exercise of the power. For example the information gathering power in the Trade Practices Act is not subject to a privilege against self incrimination but may not be exercised by the Chairman unless he has a reason to believe the person has information relating to a matter that may constitute an offence. The Commission considers the removal of the privilege against self-incrimination and the introduction of a threshold on the exercise of the information gathering power would assist the effective administration of a price cap.

The information gathering power in the PS Act is not flexible. It may be exercised against the person who has notified the Commission of a price increase but not against other parties such as the suppliers, customers or competitors of that person. There may be occasions when such parties have information which would assist the Commission to perform its functions. Such parties may not wish to be seen to be cooperating freely with the Commission. The Commission considers this restriction on the use of the PS Act information gathering power restricts its utility as an investigative tool.

Specific issues under the airports framework

A number of additional issues arise under the Ministerial Directions which impose the price cap. These are outlined in the following paragraphs.

Relationship between Ministerial Directions and PS Act criteria

Significant uncertainty arises from the interrelationship between the Directions made by the Minister under section 20 and the assessment criteria set out in the PS Act. Section 17(3) of the PS Act provides that “in exercising its powers and performing its functions under this Act, the Commission shall, subject to any directions under section 20, have particular regard to” the matters set out in that provision.

The Direction setting out price cap arrangements for regulated airports are made by the Minister pursuant to section 20. This Direction is expressed in mandatory terms. It does not on its face appear to give the Commission discretion to take into account any other considerations such as those in section 17(3).

---

166 Section 32(2A). The Commission cannot use section 155 of the Trade Practices Act to circumvent this limitation: Trade Practices Act s.155(2A)
168 These criteria are discussed under the heading Assessment Criteria above
The Commission considers it has broad discretion to determine what matters are relevant to its consideration of notices. The Commission considers the words “subject to” in section 17(3) must be read in light of the general reluctance of courts to adopt a construction of an act that would empower the executive to override it by regulation or subordinate instrument. The mandatory tenor of the Direction sits uneasily with the breadth of the Commission’s discretion.

It is arguable that the mandatory approach of the Direction leads to the invalidating of the Direction. It appears to the Commission to be arguable that, because the Direction leaves the Commission with no real discretion whether to apply the price cap, it goes beyond an instrument directing the Commission to give special consideration to a matter. This casts uncertainty on the legal status of the airports price cap regime. 169

In addition, the Commission notes that it was a clear intention of the Government, in proposing the PS Act in 1983, that the prices surveillance function ‘remain within the framework of government policy, including government policies on pricing by the Commonwealth authorities’. Given the change in the economic environment since 1983 it may now be open to question whether it is appropriate in prices oversight legislation that the Minister has a broad power to issue directions confining the scope of the Commission’s powers under the legislation.

Is the price cap mechanism consistent with the price notification mechanism?

The price cap provides for airport operators to pass-back any over-recoveries in a particular year over the following two years. The provisions for pass-back makes it difficult for the Commission to determine that the overall price cap has been breached until at least the end of year 3 or even later after the commencement of the cap mechanism, and even then it may not be possible.

Furthermore, because the price cap formula operates by reference to a bundle of average prices over an annual period, it is not possible to say that a particular price change breaches or will breach the Act.

The Commission considers a procedure fixing on assessment of specific proposed price increases is an inappropriate mechanism for the administration of the airports price cap. This is essentially because the price cap clearly intends the airports to be able to adjust prices within the basket of declared services, and that overall assessment of the price cap be made at regular intervals, perhaps annually. There would appear to be no need to review individual price changes in order to be able to effectively ensure compliance with the cap.

169 Consider input from legal unit here. The approach we took in SACL canvassed the relationship between 17(3), the SACL direction and the unit cost direction. The upshot of all that was that the Commission has broad discretion to give these matters the weight it considers appropriate.
**Commission’s power to conduct annual price cap reviews**

As indicated above the Commission conducts annual assessments of compliance by each of the regulated airports (other than Sydney Airport) with the price cap set out in Direction 13. Generally speaking the airports have complied voluntarily with the Commission’s requests for information relating to price cap compliance.

In the Commission’s view there is insufficient certainty as to the legislative basis for the Commission to either gather information for the annual assessments or to actually conduct such assessments. There is no clear basis for the gathering of information. Section 32 does not provide adequate powers as it only relates to information necessary to consider notifications or conduct inquiries or monitoring activities. The assessments have been conducted to date on the basis that the implementation of the cap effectively requires such reviews. However, arguably apart from the Commission’s general powers under section 28 of the Trade Practices Act, these activities are not supported by the provisions of the PS Act, the *Airports Act*, the *Airports Regulations* or any other legislation.

As noted earlier, even if the Commission has power to carry out the assessment, the PS Act does not provide any mechanism for enforcement in the event that an airport is found to have breached the price cap.

**An alternative legislative framework**

The Commission considers the above discussion clearly demonstrates the need for an alternative framework. The form of a new framework will depend upon what features are thought to be desirable. However it is possible to enumerate a set of core features for a price cap framework:

- The framework should be enforceable and backed by a significant penalties for non-compliance. One option would be to provide for a penalty which was proportional to the amount of over-recovery (say, double the over-recovery);
- The framework should clearly specify the matters the regulator should take into account when considering notifications;
- The framework should clearly define the services which are to be subject to a price cap;
- The framework should specify a flexible range of actions the regulator may take in response to a notification;
- The framework should provide for a realistic period for the regulator to consider notifications;
- The framework should provide for stronger information gathering powers, akin to those under section 155 of the Trade Practices Act.

The Productivity Commission has provisionally recommended that the PS Act be repealed and that a new section should be inserted into the Trade Practices Act to provide for inquiries and prices monitoring in nationally significant markets where
there may be monopolistic pricing. Regardless of its ultimate fate, the Commission considers the current PS Act in its current form does not lend itself to the regulation of airports through CPI – X price cap.

The Commission considers that unless the relevant provisions of the PS Act are substantially strengthened the framework should be enacted as a new part to either the Trade Practices Act or the Airports Act. It would seem especially logical to use the Trade Practices Act if the Productivity Commission’s provisional recommendation that the price monitoring function be housed in that Act is implemented. The Trade Practices Act would further seem logical if it is determined that the information gathering powers in section 155 apply to the airports framework.
12. TRANSPARENCY PROVISIONS

12.1 Introduction

The accounts reporting and monitoring (quality of service monitoring and price monitoring of aeronautical-related services) undertaken by the Commission with respect to airports are designed to provide some transparency of airport operations. Transparency provisions complement more stringent forms of prices oversight.

By undertaking these measures, airport users, regulators, policy makers and the community generally can gain a better understanding of the workings of the aviation market.

The publication of such information allows scrutiny of airport operator performance and behaviour. Such scrutiny may achieve three aims: firstly, it provides information to assist interested parties determine whether or not an operator is misusing any market power that it may have. Secondly the scrutiny may in itself discourage airport operators from misusing any such market power, particularly if there is a threat of further review of the regulatory arrangements and the possibility of re-regulation. Thirdly, it may have a role in easing public concerns about the exercise of market power and provide reassurance that the market is functioning appropriately.

The Productivity Commission recognised such value in transparency measures such as monitoring in its *Review of the Prices Surveillance Act 1983 – Draft Report*.

Additionally, prices oversight provides regulators and governments with an intermediate alternative between price control and complete deregulation.

12.2 Monitoring

There are two types of monitoring that the Commission undertakes in relation to airports. The first, price monitoring, relates to monitoring the costs, revenues and profits of certain aeronautical related services as specified in Direction No. 21. The second is quality of service monitoring pursuant to Part 8 of the *Airports Act 1996*.

Price monitoring of aeronautical-related services

The Government identified aeronautical-related services as services where operators could exert significant market power at individual airports. Those aeronautical-related services to be subject to formal price monitoring were nominated by the Commission following consultation with users and operators.

As previously discussed in chapter 8 it is suggested that the range of services subject to price regulation be extended to include some services previously monitored as aeronautical-related services. Specifically, this is because the Commission has identified market power issues concerning these services. The analysis recognised that

---

the service may be non-discretionary and supply side substitution possibilities may be low. In cases where these factors are present the Commission has recommended these services be included in the scope of price regulation.

For those services recommended not to be subject to direct price regulation, the Commission recommends that these services should not be subject to any prices oversight, including monitoring.

However, the Commission considers in relation to those airports where deregulation is suggested that some form of prices oversight remain during a transitional period. This would provide reassurance that the market is functioning properly and would allow for comparisons with the regulated airports.

The Commission suggests that the appropriate services to be price monitored at the deregulated airports are the aeronautical services to be subject to price regulation at the regulated airports.

**Quality of service monitoring**

The Commission is required to monitor quality of service at the 11 privatised airports and Sydney Airport under Part 8 of the *Airports Act 1996*. Quality of service monitoring is required for certain key airport services and facilities.

Quality of service monitoring aims to ensure that airport operators do not reduce service quality as a means of reducing costs while staying within the price cap. Price caps provide incentives for the airport operators to reduce costs. A reduction in costs may sometimes lead to a decline in service quality. Ordinarily, in competitive markets firms there is a price/quality trade off. Typically lower quality yields lower prices. This is unlikely to be the case for the regulated airports. Quality of service monitoring provides scrutiny over service levels. It also allows the Commission to monitor each airport’s performance over several years.

Not all factors contributing to service quality are under the airport operators’ direct control, but the adequacy of facilities they provide is a major determinant. Service quality performance indicators include efficiency in aircraft movement areas, terminal crowding and waiting times in passenger processing and baggage handling areas. Data is gathered from the airport operators themselves, Airservices Australia, Australian Customs Service and airline and passenger surveys.

The information allows the Commission to assess whether service quality is being maintained, improved or reduced over time. The Commission can then raise any particular problems with the airport operator for their comment. The Commission can take into account such quality of service monitoring in its deliberations on pricing decisions. Reporting on quality of service outcomes can also assist the Government to address any public interest matters other than those related to pricing.

The quality of service measures can be viewed as a compliment to the price cap. They are there because of the possible incentives for the airport operators to reduce quality as a means of cutting costs. Where price caps are not in place quality of service scrutiny is less relevant. The Commission proposes discontinuation of quality of service monitoring at those airports where price caps are removed.
12.3 Accounts reporting

Accounts reporting includes audited profit and loss accounts, balance sheets and cash flow statements together with supporting explanatory statements and notes pursuant to Part 7 of the Airports Act 1996. Currently accounts reporting applies to the 11 privatised airports and Sydney Airport.

Accounts reporting provides audited, separate accounts for the aeronautical and non-aeronautical aspects of the business. In some cases both aeronautical and non-aeronautical revenue come from the same asset (for example, landside roads). In such cases accounts reporting shows the allocation of costs, assets and source of revenues between aeronautical and non-aeronautical services. Details are provided in chapter 4.

The accounts reporting provisions are the most appropriate means of ensuring accountability and transparency, particularly as not all airport operators report publicly. The Commission proposes ongoing accounts reporting for regulated airports.

The Commission also proposes continued accounts reporting for the deregulated airports as a transitional measure in conjunction with prices monitoring of aeronautical services. Such reporting would be a useful supplement to prices monitoring in that it would provide information to interested parties on the basis for price changes over time.

Conclusion

Activities such as accounts reporting, prices monitoring and quality of service monitoring will provide accountability and transparency of regulated and deregulated airports. Such measures are particularly important in transitional periods following major changes such as privatisation and deregulation. Having such information available for comparison and analysis allows the effectiveness and results of deregulation to be assessed.

The following table lists the suggested transparency measures for regulated and deregulated airports.

**Recommendations:**

<table>
<thead>
<tr>
<th></th>
<th>Regulated airports</th>
<th>Deregulated airports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price regulation of aeronautical services?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Accounts reporting?</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Price monitoring of aeronautical services?</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Quality of service monitoring?</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>
ATTACHMENT B: Global airports overview

Chapter 7 of the Commission’s submission to the Productivity Commission provides a summary of the various regulatory frameworks as they apply to airport regulation in the United Kingdom, the European Union, New Zealand, the United States and Canada. This attachment provides a more detailed outline of airport regulation in these countries. An examination of these regimes reveals that governments adapt regulation according to changes in airport ownership. Today, more than 100 airports worldwide have been privatised, typically accompanied by comprehensive regulatory controls. Where airports are predominantly government-owned, such as in the United States and Canada, the regulatory regimes are somewhat more relaxed. Nonetheless, a review of future policy directions in these countries shows that as airport privatisation becomes more widespread, there is increasing interest in the merits of price cap regulation.

1. The United Kingdom

The British government established the British Airports Authority (BAA) in 1965. Before then all commercial aviation was controlled by the Ministry of Civil Aviation. In 1987 the BAA was privatised under the Airports Act 1986. The BAA owns four English airports - Heathrow, Gatwick, Stansted, and Southampton, and three in Scotland- Glasgow, Edinburgh, and Aberdeen. The Airports Act 1986 also led to the corporatisation of many other British airports. The management of these airports was transferred to public listed companies, but the airports remain owned by municipal governments.

The direct regulation of British airports operates under a two-tier structure. The first level of regulation imposes a broad system of accounts monitoring according to a revenue threshold. In the second instance, airports can be designated by the Secretary of State for more detailed regulation. The Airports Act applies economic regulation to airports whose annual revenue has exceeded £1 million in two of the past three financial years. Once an airport meets the turnover qualification it must apply to the CAA for permission to levy airport charges. A broad system of monitoring is then imposed, where all airport operators must routinely supply the CAA with their annual statutory accounts, schedules of airport charges and any known changes to the charges.

Section 40 of the Airports Act provides for the designation of an airport. Designated airports are subject to more stringent monitoring of their statutory accounts, but the main feature of designation is the price cap regulation, which governs the maximum level of airport charges. Currently, four airports are designated for price regulation: Heathrow, Gatwick, Stansted and Manchester. There are no explicit criteria for airport designation under the Airports Act, but the Government has stated that it considers the relevant criteria to be as follows:

---

172 Civil Aviation Authority (1), Economic Regulation of Airports-general guidance, March 2000, p3.
173 Civil Aviation Authority (2), Easyjet application for designation of Luton airport, July 2000, p1.
• the market position of the airport, including the degree of competition from other airports or modes of transport;
• prima facie evidence of excessive profitability or abuse of a monopoly position;
• the scale and timing of investment, and the implications for profitability; and
• the efficiency and quality of service at the airport.

The task of airport regulation is shared between the UK Civil Aviation Authority (CAA) and the Competition Commission. The CAA is responsible for setting and monitoring price caps for designated airports in consultation with the Competition Commission. The Airports Act 1986 requires the CAA to refer the designated airports to the Competition Commission for regulatory review. The purpose of each review is to reset the price caps in advance of a five-year period. During the review process, the Competition Commission provides the CAA with analyses and recommendations on the price caps, and considers whether the designated airports have acted outside the public interest during the previous five-year period. In instances where the Competition Commission makes a public interest finding, the CAA must impose conditions to remedy or prevent the adverse effects in addition to the price cap requirements. The Office of Fair Trading also has authority to impose conditions on airports to rectify anti-competitive practices.

Price regulation operates according to the combination of a price cap and rate-of-return model, and is set in advance of a five-year period. This is based on the regulator’s forecast of demand, the scope for cost efficiencies, and to enable a rate of return which reflects the airport companies’ estimated capital investment costs in order to incentivise new investment. The charges are limited to a fixed number of percentage points (X) below the RPI where X reflects various factors including productivity and efficiency gains, effects of technology changes, expected changes in real costs, and an implicit allowable rate of return. The maximum allowable airport charges are levied using a single-till approach.

Exhibit one (see below) provides a perspective on the BAA’s pricing conduct following privatisation. At the time the experience led some U.K. commentators to argue in support of regulation of some aeronautical-related facilities and in particular certain landside activities.

New Investment

In re-setting the price cap the CAA considers the airport company’s future capital investment program. There are no pass-through provisions for new investment under the current regulatory framework. However airports are permitted to pass 95 percent of the costs of implementing new Government security requirements through the price cap.

---

176 Civil Aviation Authority (3), Issues for the Airport Reviews, Consultation Paper, July 2000, p13.
Exhibit 1: Pricing conduct at The BAA airports 1987-1990.

Immediately following its privatisation in 1987, the then chief executive of the BAA, Mr. Jeremy Marshall, stated the company’s goal as follows: ‘Let us be absolutely clear about our main strategic objective, with no beating about the bush: Profit.’

The BAA pursued this objective by attempting to extract revenue from every area of its business. This included proposals to levy charges on taxis for use of the taxi compound, and buses for servicing Heathrow and Gatwick airports. The Office of Fair Trading (OFT) considered numerous complaints about these charges, car parking and duty-free prices, and other restrictions on competition. As a result the BAA dropped its proposals and agreed to index its car parking fees to inflation, along with other undertakings. The OFT then abandoned its plans to request an investigation by the MMC into the BAA’s trading practices. Where the BAA had once been perceived as one of the most successful state-owned industries, it quickly attracted a reputation as a ‘rapacious monopolist’ after privatisation.

Access

There is no explicit access regime under British competition law. Essential facilities are not declared by legislation, they are deemed ‘essential’ on a case by case basis. The Competition Act 1998 allows the Director-General of the Office of Fair Trading to make determinations on access to essential facilities. Where the Director General finds that access to an essential facility is not provided at economically efficient prices, this usually constitutes a breach of the Competition Act by the facility owner unless the restriction can be justified objectively.

Future Regulation

The 1998 White Paper on utility regulation outlined the British Government’s intention to have the CAA become the primary airport regulator, with the Competition Commission undertaking an appellate role. This policy would require the CAA to conduct the full regulatory review and also to enforce the Competition Act 1998 in the airports sector. The purpose of the proposal is to make airport regulation consistent with the other regulated industries in the United Kingdom. Meanwhile the CAA intends to undertake a fundamental review of its approach to the regulation of designated airports within the framework of the Airports Act 1986. In so doing, the CAA plans to consider issues including but not limited to- the composition of the price cap, the introduction of service quality measures, and criteria for cost pass-throughs.

2. The European Union

The direct regulation of the European Union’s (EU) air transport industry has a relatively short history. The European Commission (EC) did not adopt its air transport policy until 1987. This package of legislation gives the EC the power to enforce competition rules in air transport sector across all of the EU Member States.

---

178 Ibid.
180 Civil Aviation Authority (3) op. cit., p vi.
The majority of EU airports are state-owned, corporatised enterprises. There is increasing interest in airport privatisation, particularly in Germany. The ownership of European airports usually takes the form of either:

- publicly owned and run by a government department;
- a public corporation (corporatised)- the majority of European airports are operated this way; or
- regional government ownership (UK and France only).\(^{181}\)

Airports in Hamburg, Dusseldorf, Berlin, Zurich, Copenhagen, Brussels, Rome, Naples, and Vienna have been partially privatised. The only fully privatised airports in Europe are those owned by the BAA, and Belfast International Airport, which was sold by public tender.

Articles 85 and 86 of the European Community Treaty of Rome contain the general competition rules that govern trade between and within EU Member States. Article 85 prohibits collusive behaviour between firms. Article 86 prohibits the abuse of dominant market position. Both Articles 85 and 86 are used extensively by the Commission in a wide range of competition cases in the airport context.\(^{182}\)

**Airport specific regulation**

The EC perceived that certain aspects of the existing infrastructure could limit competition in the aviation industry. Firstly, the EC perceived limited availability of airport slots to be a capacity-limiting factor for airlines, and to impede access for new entrants. The EC therefore issued Council directive 95/93 (slot allocation) to address the problem. Secondly, Council directive 96/67 (ground handling) was introduced to strengthen competitive pressures in the ground handling market and to address problems of discriminatory pricing. Finally, the EC recently introduced an airport charges directive whose intention is to set basic rules to govern airport charges throughout the EU. The directive requires that airport charges comply with the following principles:\(^{183}\)

1. **Non-discrimination**- Charges must not discriminate between intra-community and domestic air transport services;

2. **Cost-relatedness**- Airport charging systems must reflect the actual costs of services and facilities provided, allowing for a reasonable rate of return on investments, depreciation of assets, and capacity management; and


\(^{182}\) For example, the EC prohibited the fees charged at Brussels-Zaventum airport in June 1995. The airport discounted the landing fees according to a traffic threshold. Sabena airlines, Belgium’s national carrier, was the only airline that could meet even the lowest traffic threshold and receive discounts. The EC determined this to be discriminatory and an infringement of Article 86 (SeeHumbert Drabbe, EC Competition Policy in Relation to Airports <http://www.europa.eu.int>, updated December 1999, accessed 24 January 2001.

3. **Transparency**- Airports are required to disclose detailed information on costing systems for charges. Member States are also required to establish procedures for consultation between airport managers and the airport users.

Member states must implement the directive by January 1 2002.  

3. **New Zealand**

New Zealand has three international airports, Auckland, Wellington, and Christchurch, and a number of provincial airports. New Zealand’s airports were originally owned and operated by government controlled entities. Airport infrastructure has been significantly restructured since the late 1980s. Auckland Airport and Wellington Airport have been privatised while a number of other airports are operated as government owned commercially oriented corporations.

New Zealand takes a light-handed approach to airport regulation. The relevant statutes are the *Airport Authorities Act 1986* and the *Commerce Act 1986*.

The *Airports Authority Act* requires airports to consult with airport users about charges and capital expenditure. It does not prescribe how charges are to be set but rather leaves a wide field for negotiation between the parties. The consultation requirement has been the subject of extensive litigation. In *Wellington International Airport v Air New Zealand (1993)*, the Appeal Court disagreed with Air New Zealand’s allegation that Wellington Airport did not provide sufficient consultation, and defined ‘consultation’ as thus:

> If the party having the power to make a decision after consultation holds meetings with the parties it is required to consult, provides those parties with relevant information and with such further information as they request, enters the meetings with an open mind, takes due notice of what is said and waits until they have had their say before making a decision, then the decision is properly decided as having been made after consultation.”

Where proper consultation has not occurred airport users can initiate legal proceedings under Section 4 (2) of the *Airport Authorities Act* to have the prices declared invalid. However, the requirements relating to consultation under the *Airport Authorities Act* are not specific and the interpretation of the requirements by airport companies can limit the effectiveness of the consultation process.

---

184 Hamburg Airport recently dropped its system of setting fixed fees in favour of a price-cap system in anticipation of the airport charges directive. The system is based on a price-cap rule that commits the airport to reducing user charges over time. The charges paid per passenger are to be reduced by 2% each year, after taking inflation into account. The charges will also be reduced according to passenger increases, allowing airlines to share in additional revenue growth. See California Aviation, Hamburg Airport Announces Plan to Cut Airline Charges Over Time <http://www.californiaaviation.org>, updated 6 September 2000, accessed 20 February 2001.


Airport companies are also subject to the *Commerce Act*. This Act prohibits various forms of anti-competitive conduct in terms similar to Part IV of the *Trade Practices Act*. The *Commerce Act* contains no access provisions. Persons seeking access to essential facilities must rely on section 36 of the *Commerce Act*, which deals with misuse of market power.

The *Commerce Act* also provides that the Commerce Commission may recommend the imposition of price controls where there is limited competition in a market for goods or services and price control is necessary or desirable in the interests of consumers, users or suppliers. The Commerce Commission is currently inquiring whether controls should be imposed in relation to airfield activities at New Zealand’s three international airports. ‘Airfield activities’ are limited to those which enable aircraft to take off and land at airports. However it is acknowledged that thorough examination of these activities will require the Commerce Commission to assess such factors as allocation of assets, revenues and costs between airfield activities and other areas of the airport.

If the Commerce Commission considers price control should be introduced, it will make recommendations as to the scope of price control and as to the conditions it considers would be useful in judging whether price control should be imposed at a particular airport.

Since the inquiry commenced a number of significant changes have been proposed to the *Commerce Act*. The changes are likely to give the Commerce Commission discretion in its approach to administering controls and to make provision for the control of revenues and quality standards (as distinct from controlling prices only). The proposed amendments detail methods by which the Commission can authorise prices, revenues, and quality standards in respect to the supply of controlled goods and services. These are as follows:

- Imposing minimum and maximum prices for, or revenue derived from controlled goods and services.
- The use of a formula such as CPI-X or a sliding scale-type regulation in order to ascertain price/revenue movements.
- The application of other methods considered appropriate by the Commission to determine prices/revenues of controlled goods and services.\(^{187}\)

### 4. The United States

Airports in the United States are regulated by the Federal Aviation Authority (FAA). The FAA regulates air safety as well as the commercial aspects of airport operations. Federal law currently restricts the sale or lease of airports to private interests. Therefore, most civil aviation airports in the United States (US) remain government owned. Usually they are owned and operated by local governments. Some local and state governments have established airport authorities as separate entities to manage their airports.\(^{188}\) Management contracts with private companies are becoming increasingly popular, although none of the large hub airports are privately operated.

\(^{187}\) Ibid.

The FAA established a pilot program in 1996 to evaluate the benefits of airport privatisation. The program allows the ownership or control of up to five airports to be transferred to private interests. However, the early results indicate that there has been limited interest in airport privatisation. This is largely attributed to the popularity of the current funding system, as detailed in the following section. Airline tenants must also approve of the sale of an airport and have been reluctant to do so.

The FAA administrates two programs to aid the development of airport infrastructure: 1. the Airports Improvement Grant Program, and 2. the Passenger Facility Charge Program.

The former, initiated in 1982, derives funds from various taxes levied upon passengers. By the late 1990s over $20,000 million had been allocated under this scheme. The Passenger Facility Charge Program allows airport operators to impose charges to fund projects to expand or repair airport infrastructure. Federal approval is required for the implementation of these charges. Airports also raise capital through tax exempt bonds.

The *Airport and Airway Improvement Act 1982* requires airport revenues to be used solely for the capital and operating costs of the airport. Airports are required to set airport charges to recover residual costs using the single till approach. The Act also requires airport operators to make certain assurances in return for the funds distributed by the FAA. Essentially, the airports must agree to provide facilities on a non-discriminatory basis, to levy fair and reasonable airport charges, and to re-invest profits for airport purposes only.  

Airport charges can reflect but not exceed the full cost to the relevant charging authority of providing the airport, or airport facilities (environmental, navigational, and security) at an airport or within an airport system. The total cost factor allows for a reasonable rate of return on assets after depreciation. The economic regulation of airports is broadly based on the view that by requiring airport operators to reinvest profits into airport facilities only, there will be no incentive for them to impose unfair user charges. Public ownership exempts all airports in the United States from State and Federal anti-trust laws. However, the Department of Transportation has the authority to set aside unreasonable charges.

---

189 Ibid.
Access regulation

Airports in the United States are required to provide access to airside services on a nondiscriminatory basis. In order to receive airport improvement funds from the FAA, an airport operator must agree to make the airport available for public use without unjust discrimination. Federal law prohibits airport operators from granting air carriers exclusive rights to operate at their airport.\textsuperscript{191} The FAA also stipulates that an airport cannot deny access to a carrier solely on the basis of non-availability of existing facilities. In such cases the airport must attempt to accommodate the carrier where possible. This directive has since led to expansion projects at many US airports.\textsuperscript{192}

5. Canada

The majority of Canadian airports are owned by municipal, provincial, or territorial governments. The National Airports System (‘the NAS’) consists of Canada’s 26 largest airports, which are federally owned by Transport Canada. In 1992 the Canadian government began the process of transferring the management of the NAS airports to airport authorities. These are non-profit organisations established in order to operate and develop the transferred airports. The transfers took place in two rounds. The second round commenced in 1994 following the introduction of the National Airports Policy. The government introduced the transfers as a means of:

- funding expansion in the NAS;
- making Canada’s airports more competitive; and
- aiding economic development in local communities.

Under the transfer model, the airport authorities make rental payments to the Government over the term of the lease (usually 60 years + 20-year option) for the use of the land and airport facilities. Transport Canada is responsible for overseeing the entire NAS. The lease arrangements have proved to be lucrative for the department. In 1999, Transport Canada received over $170 million in rent from the transferred airports. This accounted for more than one quarter of the total transfer revenue since 1992.\textsuperscript{193}

The 2000 Report by the Canadian Auditor-General, examined Transport Canada’s role in managing the financial and oversight aspects of the transfer process. Several shortcomings were observed. The main concerns raised by the audit were that:

- Transport Canada did not determine the fair market value of the airports to be transferred in the second round of transfers, and in the renegotiations of existing leases. The audit states that the quality of information for decision making has been significantly impaired as a result;

\textsuperscript{191} FAA/OST, op. cit., p(v).
\textsuperscript{192} OECD (1), Competition policy roundtables, \textit{Competition policy and international airport services}, The United States, 1998, p10.
• The renegotiated leases were not subject to independent review and differed from key government directions; and that

• Eight years into the transfer process, Transport Canada was yet to define its role as the overseer of the NAS and landlord of the transferred airports. The report states that as a result, Transport Canada’s oversight of the activities of the airport authorities has been generally inadequate.

The Report also states that these shortcomings represent a clear departure from sound management practice. It concludes that there is a pressing need for Transport Canada to exercise greater diligence in its oversight of the NAS, in contrast to the passive approach it has demonstrated so far.

Canadian airports are not subject to economic regulation. The airports have complete freedom in setting landing charges and passenger fees. Canadian Airport Authorities are expected to follow Public Accountability Principles, which provide a broad accountability framework. The principles contain guidelines to ensure fair access by all airlines, and reasonable user charges. The only statutory control over transferred airports is that they must be non-profit organisations, where similar to the US rules, airport profits can be reinvested for airport purposes only. The Auditor General’s report describes the airport authorities as follows:

Airport authorities…are largely monopolies and enjoy a captive market. They can, without regulation, set fees (for example, landing fees) to fund capital works and operations at airports, make any type of investment, and accumulate large reserves, tax-free. Thus, many large airports in the NAS have been given a financial position that enables them to carry out very large projects in a short period of time.

Similarly, in its 1995 paper- Perspectives on Public Policy, Canada’s Consumer Policy Institute argues that

A non-price regulated airport monopoly is an independent taxing authority with the freedom to abuse its airport monopoly power by arbitrarily increasing aircraft fees and imposing passenger user charges without a third party check or legislative balance.

Airport authorities typically raise finance through borrowing, and by levying airport improvement fees (AIFs) on passengers. The AIFs have become an increasingly significant source of revenue for the airport authorities. In 1998, AIFs constituted 22 percent of the combined total revenues of those airport authorities that introduced the fees. Together, these sources of funding have enabled significant capacity expansions at the transferred airports. The Auditor-General’s Report states that expansions of this extent would not have been possible under government management.

195 Juan, op. cit., p113.
There is no specific access regime under the Canadian Competition Act 1985. The only airport-specific access measures are the guidelines of the Public Accountability Principles, under which CAAs are expected to provide fair and reasonable access to user airlines.

The airport authorities are ultimately responsible for ground handling access. The airport operator selects the ground handlers for the airport, in conjunction with a committee of user airlines. There are no statutory limitations on the number of ground handlers at Canadian airports. Currently, the only criteria for restricting access to the ground handling market relate to the ability of the airport to accommodate service providers safely.\(^{199}\)

---