



Australian Competition and Consumer Commission

Price Regulation of Airport Services

Submission in Response to the Productivity Commission's Draft Report

October 2001

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Attachments:

- A. Report by NECG, “Productivity Commission draft report on price regulation of airport services: Comments on land valuation and congestion issues”
- B. Report by Dr Colin Gannon, “Selected Comments on ‘Price Regulation of airport Services’, draft report by the Productivity Commission: Land Valuation and Congestion Pricing”
- C. Report by NECG, “Productivity Commission draft report on price regulation of airport services: Comments on New Zealand experience and incentives for monopoly pricing”
- D. Detailed comments on the Productivity Commission report

Introduction

The Productivity Commission's (PC's) report provides a detailed analysis of market power in the provision of airport services. In general the Australian Competition and Consumer Commission (Commission) agrees with the PC's conclusions about which airports and which services should be regulated.

The PC's report also provides a detailed analysis of the options for regulating airport services. The model proposed by the PC (option B: "Continuing reform") relies on prices monitoring and the Part IIIA access regime. The Commission considers that this model will not achieve the principles of good regulation identified in the PC's report. In the Commission's view the current arrangements or the PC's option A (labelled "Modified status quo") would give better outcomes.

This submission draws on the airport regulatory experience in New Zealand and the Australian experience to date with access arrangements in the aviation and telecommunications sectors. The submission also draws on detailed reports by NECG and Dr Gannon. The report at attachment A (NECG) provides comments on the PC's analysis of congestion and land valuation. The paper by Dr Colin Gannon also addresses these issues (see attachment B). A review of the New Zealand experience by NECG is provided at attachment C. This report also considers the likely conduct of unregulated airports (see attachment C).

The advice from independent experts (see attached reports) suggests that there are shortcomings in aspects of the PC's economic analysis. The Commission is also concerned that the report provides little empirical analysis and contains a number of factual errors. A number of these issues are addressed in this submission and in the consultancy reports. Attachment D provides further details.

Prices monitoring – a failed model

The need for some form of economic regulation of airport services has been widely recognised. It is also recognised in the PC's report. Governments in every developed country regulate prices at privatised airports – except in New Zealand. In the U.K. and Australia through price caps, in the U.S. through controls on rates of return, and in Europe through a mix of the two.

When the New Zealand Government privatised Auckland Airport in 1988 it did not impose price controls, but instead relied on prices monitoring and the threat of price controls. The Government also adopted this approach to regulation of electricity transmission and distribution and telecommunications services. The aim was for a 'light handed' approach which would minimise the possible disadvantages associated with formal price controls.

The PC's monitoring recommendation seems to follow this approach.

The problem with this approach is that it has been tried in New Zealand (for over a decade) and is widely recognised as having failed. In New Zealand airport charges are considerably higher than Australia, and airport operators and their customers have been involved in lengthy and costly litigation processes.

The high social costs of the results to date have prompted the New Zealand Government to reconsider the 'light handed approach' to regulation airports. The Government asked the New Zealand Commerce Commission to review the existing arrangements. In its draft report (released in July this year) the Commerce Commission's preliminary conclusion was that "Both AIAL [Auckland Airport] and CIAL [Christchurch Airport] have used their market power in airfield activities by raising prices above the competitive level in a sustained fashion". The draft report recommends introduction of price controls at Auckland Airport.

Similarly the shortcomings of the 'light handed' approach have been recognised in other industries. The New Zealand Government is now moving to re-regulate, with new regulatory arrangements in the electricity and telecommunications sectors.

In October 2000 the Government announced a package of reforms to regulation of the electricity distribution and transmission services in response to the Caygill Review¹. The reforms establish a new regulatory body and establish a mechanism for setting prices based on specified pricing principles².

In relation to telecommunications the New Zealand Government commissioned an inquiry to examine regulatory arrangements in the sector³. The inquiry found that "the existing regulatory regime [of relying on the Courts, arbitration, or industry self-regulation to resolve access disputes (e.g. terms and conditions of interconnection, number allocation and portability)] is not best suited to achieving the Government's objective [that the regulatory environment delivers cost-effective, timely and innovative telecommunications services]." The inquiry concluded, "industry specific regulation ... is required."⁴

¹ Inquiry into the Electricity Industry, Final Report to the Minister of Energy, June 2000. The report is available on the web site www.electricityinquiry.govt.nz.

² For details see attachment A to the Commission's submission to the Productivity Commission's review of the National Access Regime.

³ Final Report of the Ministerial Inquiry into Telecommunications, October 2000. The report is available on the web site www.teleinquiry.govt.nz.

⁴ In particular, the Inquiry considered that:

- the existing regulatory regime:
 - has resulted, and is likely to continue to result, in significant delays and associated costs
 - is not able to provide consistent and clearly articulated guidelines in respect of access issues;
- and
- there is considerable scope for Telecom and, in some cases, other network operators, to:
 - refrain from passing cost reductions on to consumers
 - charge inefficient non-cost-based access prices
 - inhibit or delay competition, without necessarily breaching the Commerce Act.

The telecommunications experience suggests that the prices monitoring approach is unsatisfactory from everyone's point of view. It provides weak protection for users and puts facility owners in a difficult position. The experience was that there were continuous and constant complaints from users about what the service provider did. This was a one way street because they could not be shown to be right or wrong. Such expressed unhappiness lead to a lot of uncertainty. The telecommunications service providers just had to work on the assumption that the regime would not continue to exist. This led to less incentive to restrain pricing – “may as well make hay while the sun shines because the sun won't shine for long” was the approach (for a discussion about this see NECG's report on the New Zealand experience (at attachment C)).

To some extent the PC seems to have recognised the limitations of regulation by threat of regulation. It has proposed criteria which would “provide guidelines for what would be regarded as ‘good behaviour’ by the airports”.

The Commission considers that the proposal for ‘guidelines’ will not meet the objectives of good regulation set out by the PC in its report. If the guidelines are tightly defined the approach resembles price controls. On the other hand if they are loosely defined they will provide little or no guidance – leaving us with the New Zealand experience.

The Commission also has concerns about the process adopted by the PC in suggesting guidelines for good behaviour. Normally the PC's draft recommendations form the basis for comments from interested parties. In this case the PC has recommended guidelines but has not developed any specific proposals for comment. This means that interested parties will not have the opportunity to comment on guidelines developed by the PC. The Commission urges the PC to consult further with interested parties in the event that it chooses to pursue the option of ‘good behaviour guidelines’.

Reliance on Part IIIA of the Trade Practices Act

A general theme in the PC's report is the idea that airport pricing issues should be addressed through voluntary commercial agreements. Such agreements could take the form of access undertakings under Part IIIA of the *Trade Practices Act 1974*.

This approach works well where both parties to negotiations have bargaining power. They do not work if the bargaining position is one sided. In such circumstances “take it or leave it” negotiations would be expected, an outcome experienced in airport negotiations in New Zealand.

In a normal competitive environment potential users have bargaining power because they can use an alternative supplier. This option is not generally available for users of major airports. Indeed at major airports users have very limited bargaining (or countervailing power), a point made by Professor Forsyth⁵ and Professor King⁶.

⁵ 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, page 4.

One area where airport users may have countervailing power is through recourse to regulatory provisions. The Commission considers that recourse to Part IIIA arbitration is likely if the PC's recommendations are adopted. The absence of price caps or other price controls would leave arbitration, or the threat of arbitration, as the only real bargaining chip available to airlines in negotiations with major airport operators. The Commission's experience in regulation of telecommunications services suggests that negotiated outcomes are unlikely. Instead the experience suggests that the parties would resort to arbitration. So far over 40 arbitrations have been notified to the Commission. Similarly the Commission's experience in regulating airports suggests that it is unlikely that airport operators and airlines will reach negotiated agreements on aeronautical charges.

The Commission does not favour use of Part IIIA or other negotiate-arbitrate models 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;
- lack of certainty for both airport users and airport operators; and
- the potential in an airport context for the regulator to be drawn into micro-management of aspects of airport operations.⁷

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.

In Australia the primary application of the negotiate-arbitrate model has been in telecommunications. Procedural requirements and the complexity of the issues means that the process has been slow. Two of the Commission's final determinations are subject to appeal to the Australian Competition Tribunal. The Tribunal is required to re-arbitrate the dispute. Again procedural requirements and the complexity of the issues mean that this process will take some time. The Tribunal has flagged that its processes will take a further two years. Further appeals are available after the Tribunal has made its decision.

Similarly, the airports experience with Part IIIA is not encouraging. In 1996 Australian Cargo Terminal Operations (ACTO) sought declaration of certain airport facilities owned by the Federal Airports Corporation. The final determination was made in March 2000. In all the process took over three years. This is before arbitration or appeal processes. These processes could add a two or more years.

⁶ King, S., *Market power and airports*, Report to the Commission, January 2001, page 23.

⁷ 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.

The PC sets out several principles for good regulation. These are that regulation should promote efficiency, minimise the regulatory burden on industry consistent with efficient outcomes, be transparent and low cost, be predictable and promote certainty, and be open to scrutiny and regulatory review. By relying so heavily on Part IIIA the PC's 'option B' does not meet the principles identified. Use of the negotiate-arbitrate provisions in Part IIIA:

- is *inefficient* in that it does not effectively constrain prices in the short to medium term. The regulated company would be free to set high prices while the declaration and arbitration process is running⁸;
- could make it difficult to achieve efficient pricing outcomes since the negotiate arbitrate model results in consideration of disputes on an ad hoc basis as they arise rather than considering regulated airport services as a whole;
- imposes a *high regulatory burden* on all parties, both in terms of the administrative costs and the delays involved;
- is *not transparent* since arbitrations are not public processes;
- may not be predictable and *will not promote certainty*. The PC states that: "Though compliance costs can be high, once precedents are set, the need for arbitration may decrease"⁹. This is not the case with Part IIIA arbitrations since they are not public processes. Arbitration outcomes are not made publicly available¹⁰;
- could deter investment because of the lack of certainty; and
- *limits scrutiny* because arbitration outcomes are not known to parties other than those directly involved.

Importantly the approach fails where regulation is most needed. The time frames involved make the process virtually irrelevant for new entrants. Similarly the costs involved may make the process inaccessible for small users such as new entrants and regional airlines.

The negotiate-arbitrate model makes most sense where flexibility is required. In the case of telecommunications, for example, Telstra is vertically integrated so has

⁸ Note this problem does not arise in the Telecommunications access regime since the regime allows for interim pricing arrangements.

⁹ Productivity Commission, *Price Regulation of Airports*, Draft Report, Melbourne, August 2001, page 285.

¹⁰ It could be argued that the 'good behaviour' guidelines proposed by the PC for purposes of prices monitoring would provide some certainty about arbitration outcomes. However, Part IIIA requires the Commission to have regard to specified criteria in carrying out arbitrations. The 'good behaviour' guidelines would not be directly relevant to those criteria and might or might not be relevant to the Commission consideration of a dispute. Furthermore, it could be difficult to give effect to the guidelines to the extent that they would relate to pricing of aeronautical services as a whole, while arbitrations relate to the specific services in dispute.

incentives to deny access. It could use non-price as well as price methods to do this. Arbitrations have the flexibility to deal with such matters.

In the case of airports the service providers are vertically separated. In general the operators should have every incentive to encourage access. The question then becomes one solely of price. In this case the flexibility advantages of the negotiate-arbitrate model would seem to add little. Because of this the Commission 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 provide strong incentives to service providers to reduce production costs. If well designed they can also provide good incentives for new investment¹¹. The approach is consistent with the approach adopted in regulating electricity and gas transmission and distribution in Australia and airports in the U.K.

Impact of recommendations - high prices

The PC states that its recommendation “rests on a *judgement* about likely behaviour of major airports. During the proposed five-year probationary period, the onus largely will rest on regulated airports to demonstrate their willingness to operate without exercising market power”(emphasis added)¹². A repeated theme in the report is that there will be price increases, but that these will not have a significant impact on economic efficiency. As acknowledged by the PC this is a judgements call. There is no empirical analysis to support the conclusion. The Commission considers that the PC’s judgement does not stand up to scrutiny.

High prices

The PC argues that the airport operators pricing behaviour will be moderated by “commercial incentives”. The argument is that high aeronautical charges will have an impact on passenger volumes and in turn non-aeronautical revenues and profits (such as car parking, retail and car rental concessions). In other words in making a decision on aeronautical charges the airport operator will take into account the impact on non-aeronautical activities. This implies a ‘single-till’ approach to pricing.¹³

The PC’s argument about the moderating effect of non-aeronautical activities only holds if demand for aeronautical services is reasonably *elastic*, otherwise restraining

¹¹ This point was made by the PC, see page 258 of the PC draft report.

¹² Productivity Commission, *Price Regulation of Airports*, Draft Report, Melbourne, August 2001, page 311.

¹³ This ‘single till’ approach is inconsistent with the PC’s discussion about investment. On the one hand it argues that the airport operator will take the whole of airport profit performance into account in setting aeronautical charges. The logic of this argument is that the airport operator would also take the impact on non-aeronautical revenues and profits into account in making decisions on aeronautical investments. Instead the report repeatedly emphasises the need for sufficient returns on aeronautical investments when considered in isolation (a dual-till model).

aeronautical charges will not maximise profit. However, in its report the PC argues that demand for aeronautical services is very *inelastic*¹⁴.

The Commission modelled profit maximising prices for Sydney Airport based on available published elasticities of demand for air travel. The modelling takes into account the impact of changes in aeronautical charges on non-aeronautical profits. The modelling indicates that *in a genuinely unconstrained environment* Sydney Airport would maximise profits by setting the following charges:

- \$120 per departing domestic passenger; and
- \$510 per departing international passenger.¹⁵

This compares with current charges of around \$8 per passenger for domestic passengers, and around \$35 for international passengers.¹⁶

The Commission would not expect prices of this magnitude because of the threat of government intervention. However, the modelling suggests that the PC's arguments about "commercial incentives" do not stand up to empirical scrutiny. Similarly, and as pointed out by NECG in its comments on incentives for monopoly pricing (see attachment C), the PC's arguments are not consistent with economic theory.

The New Zealand experience suggests that the PC's recommendations would result in substantial price increases if implemented. Even though prices monitoring is accompanied by consultation requirements and an explicit threat of price controls, charges at Auckland airport have increased rapidly over the past few years and are considerably higher than at Sydney Airport or the other major Australian airports.

The impact on consumers of a New Zealand outcome would be substantial. If Australia's major airport operators achieved Auckland Airport's rate of return on assets prices at some airports would more than double and the transfer from consumers to airport operators would be around \$1.4 billion over a five-year period.¹⁷

¹⁴ See for example the discussion about price discrimination in chapter 7 of the PC's draft report.

¹⁵ The estimates have been derived as follows. A demand function (for aeronautical services) was estimated for both the domestic and international segments of the aeronautical business using elasticities from the New Zealand Commerce Commission report and Productivity Commission draft report. The profit maximising prices and outputs were estimated using the demand function and assuming a constant average cost function over the relevant output range. The modelling took into account the impact on non-aeronautical profitability. The Commission estimated non-aeronautical earnings per passenger based on information from the Commission's 1999-2000 regulatory reports. The Commission then optimised profit across the whole airport business.

¹⁶ Based on a return trip not including the noise levy or government departure taxes.

¹⁷ These estimates are derived by applying the average rate of return achieved by Auckland Airport on 'airfield' assets to the aeronautical asset base as reported by Melbourne, Brisbane and Perth airports in their 1990-2000 regulatory reports and as determined by the Commission in its May 2001 decision on aeronautical pricing at Sydney Airport.

In its draft report on whether price regulation should be imposed on its three major airports, the New Zealand Commerce Commission estimated the annual returns on assets achieved by Auckland airport

Efficiency impact

The PC argues that allocative efficiency losses arising from monopoly pricing would be mitigated by price discrimination.

In practice there are limitations to the extent to which airports can price discriminate. Airports are restricted from price discrimination under ICAO policy¹⁸ which makes it difficult for them to discriminate between airlines except at the margin. For example, the policy makes it difficult for airports to discriminate between a low cost carrier (eg Virgin Blue) and a full service carrier such as Qantas or to distinguish between routes. The PC also assumes that airport operators will always structure prices efficiently. Based on the experience in Australia and elsewhere this is far from clear.

Furthermore, and as explained by the PC: “An airport also will have an incentive to give price discounts only to marginal flights/passengers. However, there may be limits to such targeting. For example, an airline might substitute ‘new’ flights for existing ones, and while airports can distinguish between international and domestic flights and between airlines, their capacity to target passengers more finely may be limited”¹⁹.

The PC’s argument that price rises will have a limited impact on efficiency seems to rest heavily on price discrimination arising from levying charges on a tonnage basis. The report argues: “MTOW [tonnage] based charges roughly assume the properties of so-called Ramsey pricing. That is airport charges will be levied in inverse proportion to the price elasticity of demand”. The argument is that the tonne/passenger ratio is higher the larger the aircraft; that larger aircraft tend to fly the longer routes; and that since these longer routes are more expensive the passengers will be less sensitive to higher aeronautical charges.

To argue that tonnage based charges reflect Ramsey pricing seems questionable for a number of reasons:

- often large aircraft fly on short haul services (eg Melbourne-Sydney), while smaller aircraft service many longer haul international routes (eg some New Zealand routes, and other smaller international destinations);

since 1989. The average return was 13.47%, which is effectively a post-tax nominal WACC. Commission staff modelled the price increases for the 4 major Australian airports that would arise were they to achieve this rate of return. The modelling shows that aeronautical charges at Sydney Airport would rise by a further 60%-70%, and that aeronautical charges would increase by around 200% at Brisbane Airport, 90% at Melbourne Airport and 50% at Perth Airport. These increases would generate \$1.46 billion in additional revenues over five years.

¹⁸ International Civil Aviation Organisation (ICAO), ICAO’s policies on Charges for Airports and Air Navigation Services, Sixth edition, 2001, see paragraph 15.

¹⁹ Productivity Commission, *Price Regulation of Airports*, Draft Report, Melbourne, August 2001, page 161.

- tonnage charges are paid irrespective of load factors. Typically load factors are lowest for new entrants (which means that the new entrant airline may well pay *more* per passenger than the incumbents);
- tonnage charges do not distinguish between budget and full service carriers;
- tonnage charges do not differentiate between tourists and business services;
- tonnage charges do not distinguish between passengers;
- the tonnage/passenger ratio does not vary a great deal between passenger jets; and
- at some airports (including Sydney and Canberra airports) charges are levied on a per passenger basis;

To some extent airlines can price discriminate between passengers. However, airlines are not perfect price discriminators. Furthermore effective price discrimination would require the airport operator to distinguish between airlines (eg low cost versus full service) and routes.

While some of the impact of higher prices would be purely distributional, significant increases in airport charges *will* have efficiency implications. These cannot be ignored.

Aviation industry stability and user protection

The difficulties experienced by Ansett Airlines and the anticipated downturn in international tourism makes the current aviation environment difficult and uncertain. The Commission considers this the wrong environment to be experimenting with major regulatory changes.

The current aviation environment makes stability in airport regulation and pricing more important than ever. Assurance of reasonable access prices for all airport users is needed to encourage new domestic entrants and safeguard competition. The price increases that are likely to flow from implementation of the PC's recommendations will work against new entry and will work against a recovery in air traffic. This will compound the major downturn already being experienced by downstream sectors. The risks are particularly high for the tourism industry. With four million international tourists per annum and \$16 billion in spending the stakes are high.

Market power

The ACCC generally agrees with the PC's conclusions in relation to market power, both in terms of the depth and breadth of market power at airports, and across a range of their services. This submission comments on two aspects of the PC's analysis:

- market power at Adelaide, Canberra and Darwin Airports; and
- taxi and other forms of passenger access to terminals.

In its original submission the Commission concluded that the market power of Darwin was materially less substantial than the other airports it recommended for regulation.

The PC came to the same conclusion in its draft report. Given Darwin Airport's limited market power the Commission agrees with the PC's recommendation to remove the price cap and to replace it with monitoring.

The PC also argues that the market power of Adelaide and Canberra airports is limited by demand side substitution possibilities. The PC argues that road travel is a viable alternative for travellers to these destinations. This seems questionable given that road travel is an unattractive option for business purposes, and that business represents a major share of traffic at both airports. Nevertheless Canberra and Adelaide airports are relatively small. While they are important to the South Australian and ACT regional economies, they are not so material to the national economy. For this reason the Commission does not disagree with the PC's recommendation to replace price caps with prices monitoring at these airports.

In relation to taxi charges the PC states:

On balance, the market power of airports in providing these [taxi parking] facilities appears moderate. The ability of airports to impose charges above efficient levels appears to be limited if access for competing modes is provided on reasonable terms and conditions.²⁰

The position that there are competing modes of access was made in the Commission's submission. The point made in the submission was that the airport operator would have significant market power in relation to access to passenger terminals unless one or more of the access options was price restrained. The PC also makes this point but does not address it in its recommendations.

The competing modes of access discussed by the PC consist of:

- taxis;
- buses;
- limousines;
- trains (at some airports); and
- private vehicles.

The PC argues that regulation of "vehicle access facilities" (ie kerbside access to terminals) would be sufficient to keep taxi charges reasonable. This approach works for passengers *arriving* at the airport - private vehicles, taxis etc can drop off passengers and immediately leave the airport. However, for passengers *departing* from the airport, use of kerbside by itself is of little use. In practice the picking up vehicle can only use the kerbside in conjunction with parking or waiting areas. This is because congestion problems would arise if vehicles waited for passengers. Airport operators typically address this congestion problem by requiring taxis to use holding ranks in order to pick up passengers and by strictly limiting private vehicle, limousine and bus use of the kerbside area for purposes of picking up passengers. In other words, airport operators control taxi and all non-taxi modes of access.

²⁰ Productivity Commission, *Price Regulation of Airports*, Draft Report, Melbourne, August 2001, pages 142-143.

The best way of addressing market power the airport operator has in relation to passenger access to terminals is to provide some form of price control or scrutiny over at least one access mode. The Commission suggests taxis since they are widely used and available as a transport mode for all passengers. This is discussed in some detail in chapter 8 of the Commission's first submission to the PC.

New Investment

In general an unregulated monopolist will tend to under-invest in the long run relative to the socially optimal level of investment. This is because monopolists have incentives to set prices higher than competitive, or efficient, prices. Unless they perfectly price discriminate (which as discussed above is an unlikely outcome in an aviation context) output will also be lower than competitive levels. In turn this results in lower capacity requirements and sub-optimal investment levels. Similarly investment by downstream users (airlines, and companies reliant on airline travel, such as hotel operators etc) would be sub-optimal.

These 'dynamic efficiency' losses are one of the reasons for regulating. A well-designed regulatory framework can address the risk of under-investment. As noted by the PC price caps can achieve this: "Price caps can be devised that could, in principle, and at least over time, deliver efficient prices and investment"²¹.

The Commission agrees with the PC that one of the key elements of a well designed framework is clarity and transparency: "where price caps are implemented, the approach adopted for investment should be spelled out clearly and transparently to all relevant parties in order to reduce the risk of inefficient outcomes and excessive gaming"²². More specifically the Commission suggests that:

- the investment amounts included in the price cap parameters should be made transparent;
- the airport operators spending against the investment allowance should be transparent; and
- the circumstances in which operators can pass through the costs of new investment should be clearly spelt out.

The Commission considers that the 'hybrid' model proposed in its submission meets these requirements.

²¹ Productivity Commission, *Price Regulation of Airports*, Draft Report, Melbourne, August 2001, page 258.

²² Productivity Commission, *Price Regulation of Airports*, Draft Report, Melbourne, August 2001, page 259.

The hybrid model adjusts the ‘X’ value or starting point prices to compensate the airport operator for ongoing smaller investments²³. This approach would minimise regulatory involvement in investment decisions. At the same time the hybrid model allows the airport operator to increase prices to recover the costs of major new investments such as a new runway or major terminal expansions²⁴. The Commission suggests that the distinction between projects that would and would not be eligible for such a pass through could be made on the basis of ‘major development projects’ as defined in the *Airports Act 1996*. The pass through provision should not distinguish between ‘replacement’ and ‘new’ investments. In other words the pass through provision should be available for investments irrespective of whether they replace existing assets or add to capacity or quality.

One of the criteria set by the PC in its report is that aeronautical prices should be efficient in that they “encourage appropriate investment”²⁵. The hybrid model can be designed to achieve this. The requirement is that the *additional* revenues and profits from the hybrid model compensate the airport operator for the costs (including a rate of return) of investments undertaking over the regulatory period²⁶.

Airport congestion and land values

In its option A (“modified status quo”) the PC recommends that Sydney Airport should be treated differently from the other airports. It argues that the regulatory arrangements should be set such that they “allow aeronautical prices that reflect opportunity costs incurred by airlines and their passengers of using the facility rather than costs of production incurred by the airport”²⁷. The PC argues that this approach would result in higher prices which in turn would provide signals for more efficient use of airport capacity.

NECG has provided a detailed and systematic assessment of the PC’s analysis (the report is at attachment A). It concludes the following:

²³ On page 257 the PC misrepresents the Commission’s position on starting point prices. The Commission considers that an allowance for the smaller new investments could be factored in either through adjustment to the ‘X’ value or starting point prices.

²⁴ The pass through provision should not distinguish between ‘replacement’ and ‘new’ investments. In other words the pass through provision should be available for investments irrespective of whether they replace existing assets or add to capacity or quality.

²⁵ Productivity Commission, *Price Regulation of Airports*, Draft Report, Melbourne, August 2001, page 258.

²⁶ It should be noted that prices for existing assets are not relevant to investment incentives provided that prices for services flowing from existing assets are high enough to cover the ongoing incremental costs of providing those services. The PC’s report repeatedly confuses this issue by linking the forward-looking increment to prices needed to provide incentives for new investment with prices on existing assets.

²⁷ Productivity Commission, *Price Regulation of Airports*, Draft Report, Melbourne, August 2001, page 308.

“In summary, our view is that the PC’s Draft Report and its conclusions about the issues analysed here are flawed in a number of important respects.

....important options are not analysed fully or even at all and, at times it is by no means clear quite what assumptions the Draft Report is making. Little empirical evidence is presented on the matters being considered, even though some of the Draft Report’s conclusions rest on what are ultimately empirical issues. Given the relatively high stakes involved, it would seem desirable to proceed to a more systematic and comprehensive analysis in the PC’s final report.”²⁸

Dr Colin Gannon (former Director of the Bureau of Transport Economics and Lead Economist in Transport with the World Bank) also addresses the question of land valuation (see attachment B). Dr Gannon comments:

“The opportunity cost principles for land valuation is widely accepted, for example, by the Commission, the NZCC, SACL, and BARA, although views differ substantially on its interpretation.

But there are also formidable methodological difficulties in *practical empirical application* of the principle to estimation of the value of the total land at a major capital city airport site. Unfortunately, these practical difficulties are not discussed in the PC-ADC [the PC’s draft report]. It simply recommends the use of “*current (land) value*”, without suggesting how this should be estimated for the KSA site. Notwithstanding the attention given to land values in the PC report, perhaps the question of implementation was judged outside the PC’s TOR. Whatever the reason, valuation of aeronautical land is a core component in the pricing of airport services and in the shaping of their location. It should not be side-stepped. Without a satisfactory empirical methodology for estimating opportunity cost, alternative bases of valuation (such as indexed historical cost) are obliged to be adopted by default. ...A constructive empirical design strategy is need to progress this matter.”²⁹

The Commission sought advice from Dr Rohan Pitchford to assist in its consideration of SACL’s land valuation proposals. Dr Pitchford concluded that:

“This note presents a sceptical view of the valuation methodology used in the Pricing Proposal. Valuation at surrounding land prices is appropriate for a decision about whether or not to move the airport, but not for regulatory value”³⁰.

²⁸ Network Economics Consulting Group, *Productive Commission draft report on price regulation of airport services: Comments on land valuation and congestion issues*, September 2001, pages 31-32.

²⁹ Dr Colin Gannon, *Selected Comments on “Price Regulation of Airport Services” (Draft Report by the Productivity Commission, August 2001)*, October 2001, pages 1-2.

³⁰ Dr Rohan Pitchford, *Sydney Airport Land Valuation – An Assessment*, March 2000, page 8.

NECG, Dr Gannon and Dr Pitchford are three of Australia's leading independent experts in this area. In each case their analysis suggests that the PC's analysis does not adequately address the complex issues of airport congestion and land valuation.

Drawing on the independent advice this submission makes some general comments about congestion and land valuation issues relevant to the PC's report.

Land valuation and congestion should be considered separately

The PC's report links the issue of land valuation and congestion. This approach would make sense if congestion arose from land constraints at the airport. This is far from clear. The cap of 80 aircraft movements per hour, the curfew and the protection of regional services are the primary causes of congestion. If these constraints were removed it is unlikely that congestion would be a problem for the foreseeable future. Indeed given the aircraft movement cap it is unclear that additional land would in any way alleviate congestion.

If (as is likely) land constraints are not the primary reason for congestion at Sydney Airport the two issues should be considered independently.

New investment and congestion

Given the existence of binding noise and regional aircraft constraints on capacity the best way of addressing congestion at Sydney Airport may well be through new investment. Capacity could be augmented by relatively small investments at alternative airports or airport sites.

The relevant decision-maker in considering whether to undertake such investments is the Commonwealth Government. In considering whether to make such investments it faces a range of issues including noise, other environmental issues, additional infrastructure requirements (eg transport links) etc. Airport pricing matters may or may not be material in the Government's considerations. Nevertheless the Commission considers that it is important that prices send signals which encourage efficient investment in new infrastructure. This was an explicit objective in the Commission's Sydney Airport pricing decision.

The PC recommends allowing the airport operator to capture congestion rents. This approach would send the wrong signals for investment. It would provide incentives for the owner of Sydney Airport to create or maintain congestion rather than relieve it.

Managing congestion

There are a number of possible mechanisms for managing congestion. These include:

- quantity controls such as the current slot allocation arrangements;
- market clearing approaches such as auctioning slots or slot trading; and
- pricing approaches such as peak period pricing.

Many factors are relevant to the choice of demand management instruments. The PC has recommended a pricing approach, but without considering the alternatives or the merits of those alternatives.

One of the disadvantages of the approach to congestion pricing recommended by the PC is the substantial information required to set efficient prices. This is not a trivial issue. To the contrary it is central to establishing workable regulatory arrangements. Furthermore the potential efficiency losses of getting prices wrong could be substantial.

Market clearing based solutions can effectively address the information and potential efficiency problems associated with the approach proposed by the PC. In fact existing arrangements may already provide a reasonably effective mechanism for managing congestion given the possibility of secondary trading in slots. The Commission encourages the PC to provide an assessment of market clearing mechanisms and the other options for managing congestion.

One thing that is clear is that prices increases without price restructuring is a very blunt instrument for addressing congestion, is relatively ineffective, and can result in significant welfare losses. Congestion management should aim to allocate scarce peak period slots to users who value them most. While across the board higher prices may deter some users from using peak period slots they may also deter off-peak users resulting in welfare losses.

Congestion management should also encourage airlines to use larger aircraft – thereby maximising passenger throughput. Across the board price increases may be counter-productive in achieving this objective. At the moment landing charges for domestic aircraft are tonnage based. Since the tonne/passenger ratio is typically higher the larger the aircraft, an increase in charges would increase the cost disadvantage faced by larger aircraft. In turn this could encourage use of smaller aircraft.

The price caps proposed by the Commission in its submission to the PC allow airport operators to restructure charges. In its decision on aeronautical charges at Sydney Airport the Commission encouraged Sydney Airport to restructure charges to promote more efficient use of scarce capacity.

The decision also considered the interaction between price levels and price structure. The Commission sought advice from NECG on whether price restructuring would provide strong enough signals for effective demand management without further price increases. Based on this advice it commented:

“NECG argues that the congestion problem faced by Sydney Airport is primarily a peak-load pricing problem. In this regard, to show that the allowable revenue under alternative land valuation approaches is too low to manage congestion, SACL would need to demonstrate that even when off-peak prices were zero, peak prices could not be high enough to manage demand without breaching the allowable revenue. Even if this were established, an

efficient peak-load pricing scheme could be implemented under which some formula for the distribution of the congestion rents was established”.³¹

The PC has not considered this issue and has not shown that further price increases are required to effectively manage demand.

Land valuation

The PC’s report argues that land at Sydney Airport should be valued at opportunity cost. The Commission agrees with this principle. It formed the starting point for the Commission’s consideration of the proposals and the starting point for the public consultation process.

In his report to the Commission Dr Gannon stresses the importance for economic efficiency of the opportunity cost to society of the highly accessible land at the existing KSA airport site being reflected in charges for its use as an airport. Dr Gannon also stresses that since alternative sites for a major airport in the Sydney region do exist, the underlying opportunity cost of KSA land prevails, whether or not the outcome of a social cost benefit analysis and political determination would demonstrate that KSA-Mascot is at present the superior airport location.

The challenge in using an opportunity cost methodology is to apply it in practice. In this regard, Dr Gannon urges that a more robust empirical estimation method be developed.

One thing is clear: Sydney Airport did not use an opportunity cost valuation. Instead Sydney Airport adopted a DORC (depreciated optimised replacement cost) methodology. The approach factored in over \$200 million in holding costs – the hypothetical costs of holding the land while a hypothetical airport was constructed at the site. This may be appropriate for a DORC valuation but has nothing to do with opportunity cost. Similarly the proposals did not factor in the cost of converting the site to the housing and industrial uses the valuation was based on.

In its report the PC repeatedly asserts that the opportunity cost of land is greater than the land valuation adopted by the Commission. This assertion is not tested. Applying Dr Gannon’s approach to measuring opportunity cost suggests the reverse may well be the case – ie that the Commission’s land valuation is higher than the opportunity cost measure³².

The consultancy advice provided to the Commission, Sydney Airport and the airlines all point to the difficulty of tying down an opportunity cost valuation. Given the limited time available to it in making its decision, the Commission considered the

³¹ Australian Competition and Consumer Commission, *Sydney Airports Corporation Limited Aeronautical Pricing Proposal*, Decision, May 2001, page 149.

³² This estimate uses SACL’s valuation but subtracts the ‘holding costs’ and the costs of converting the site to its alternative use.

alternative of a historic cost based measure. One advantage of this approach is data availability.

The PC argues that the approach adopted by the Commission “provides an ‘arbitrated’ solution to land values”³³. This implies that the approach was not based on economic principles. This conclusion is incorrect.

The Commission and NECG conducted a detailed assessment of the signals that the historic cost valuation would send for efficiency. The analysis found that the methodology has a number of desirable properties. It would provide incentives for Sydney Airport to purchase new land if needed, and at the same time would fund the operating costs associated with aeronautical uses of land already purchased. The analysis also found that the historic cost approach would yield economic efficiency outcomes which were no worse than SACL’s proposals.

In its paper on the PC’s approach to congestion and land valuation NECG concludes that the PC’s approach to land valuation is “both implausible and very likely inefficient”³⁴.

³³ Productivity Commission, *Price Regulation of Airports*, Draft Report, Melbourne, August 2001, page 214.

³⁴ Network Economics Consulting Group, *Comments on Productive Commission draft report on price regulation of airport services: Comments on land valuation and congestion issues*, September 2001, page 24.