

## **A SHIFT TOWARDS REGULATION? – THE CASE OF NEW ZEALAND**

### **Background**

New Zealand's three principal airports at Auckland, Christchurch and Wellington were partially privatised in 1998. At the time, no system of price regulation was put into place, but the government announced that the question of whether or not price regulation should be introduced would be the subject of a public Inquiry by the Commerce Commission. The process for such Inquiries in New Zealand consists of a period of consultation, during which interim submissions may be made to the Commission, culminating in a Conference, following which the Commission issues a report.

It was originally intended that the Conference would take place in 1999, but it was subsequently decided to defer this until 2001, so as to be able to take advantage of new disclosure of information legislation.

The Transport Research Laboratory (TRL) was retained by Air New Zealand to assist in the preparation of its case for the Inquiry. Air New Zealand was particularly concerned about the levels of aeronautical charges at Auckland, its principal base, which it regarded as being excessive. TRL was asked in particular to use its long-standing methodology used in producing aeronautical charge comparisons in its publication *Review of Airport Charges*, together with its wider airport benchmarking work used in its publication *Airport Performance Indicators*, to establish an accurate assessment of the comparative position of Auckland.

This work began early in 1999 and continued until mid-2001, by which time Air New Zealand was facing severe financial problems which culminated in the New Zealand government taking control of the company. As a result of this situation, Air New Zealand played only a minor part in the Inquiry, which took place in the first half of September 2001, with its case being made by the New Zealand Board of Airline Representatives.

In July 2001, the Minister of Commerce withdrew the original request made to the Commerce Commission and issued a new request under the Commerce Amendment Act 2001, requiring the Commission to address three key issues:

- (i) to assess whether competition is limited or likely to be lessened in markets in which airfield activities are supplied;
- (ii) to assess whether control is necessary or desirable in the interests of acquirers of airfield activities. To address this question the Commission examined the pricing behaviour of the airport companies, and compared this to what it considered to be appropriate pricing principles;
- (iii) to make a recommendation on whether market conditions were such that the Minister should recommend control.

This paper begins by outlining the work carried out by TRL in assisting Air New Zealand. This included:

- (i) a discussion of general issues relating to airport charging;
- (ii) a discussion of different systems of airport price regulation;
- (iii) a case study on Manchester airport;
- (iv) factors specific to Auckland, Christchurch and Wellington.

The paper goes on to outline the findings of the Commission, as expressed in its Final Report of August 2002. It concludes by considering whether the relative differences in levels of profitability of airports and airlines constitute a *prima facie* case for airport price regulation.

### **General issues relating to airport charging**

This part of the work dealt with four key areas, namely:

- (i) the pricing principles defined by ICAO;
- (ii) the views of the two leading industry stakeholders;
- (iii) patterns and trends in the setting of charges;
- (iv) observed difficulties in adhering to pricing principles.

### ***Advice from ICAO***

As the international body providing overall guidance on most matters relating to civil aviation, the International Civil Aviation Organisation (ICAO) has periodically issued statements in which it has defined guidelines for the setting of airport charges. Its views on the ways in which aeronautical charges should be set by airports are expressed in its publication *Statements by the Council to Contracting States on Charges for Airports and Air Navigation Charges*, known as Document 9082. This provides a number of broad points of principle, such as that users should ultimately bear their full and fair share of the cost of providing the airport, and that charges should be simple and suitable for general application at international airports. It states that “Any charging system should, so far as possible, be simple and suitable for general application at international airports”; and that “Charges should not be imposed in such a way as to discourage the use of facilities and services necessary for safety”.

While Document 9082 is comprehensive in its coverage, in a number of ways it does little more than present a series of generalisations about the subject, which do not constitute particularly clear guidance. The recommendation above that charges should be “simple and suitable” is not accompanied by a definition of what ICAO regards as either simple or suitable in this context. A reference to the possibility of varying the landing charge scale at a certain level or levels of weight “if considered necessary” is not accompanied by examples of situations which could render such variations necessary.

There is a noticeable lack of reference to or definition of what could be regarded as acceptable levels of costs for the operation of an airport. Overall, the document reveals the fact that it was first drafted a good number of years ago, with only perfunctory attention having been given to updating it: for example, there are no references to pricing arrangements at airports which have been partially or wholly privatised.

### *The ACI view*

In industry debates on the issue, the Airports Council International (ACI) often takes the stance that airport charges constitute only a small percentage of airlines' total costs – it has quoted the figures of 4.5% and 4.3% respectively for 1995 and 1996. While this may be true at a global level, it is also true to say that for short-haul airlines, airport charges can represent considerably larger proportions of total operating costs on a route: for the British short-haul airlines British European and KLM UK they represented 7.3% and 5.9% respectively in 2001.

The ACI produces its own guidance to airport operators on the setting of airport charges. It believes that charges should be related to all the costs of operating an airport, including a “reasonable” rate of return and other financial costs, but, like ICAO, it makes no attempt to define a reasonable rate of return. It suggests that airport operators may offset aeronautical revenues with proceeds from non-aeronautical activities, but that they are under no obligation to do so. This appears to ignore the fact that airport operators would normally be expected to have a duty to their shareholders to maximise the return on their assets, while also assuring growth in the business and a good level of service to airline users and passengers.

A somewhat uncompromising line emerges in the ACI's views on consultations between airport operators and airlines on proposed charge increases. Its view is that consultation implies discussion of proposed charges, which should be notified a minimum of two months before the increase is due to take effect. It is not a negotiation; if there is a failure to reach an agreement, airport operators are free to impose the charges at the level they deem necessary. The ACI's position comes across as being somewhat confrontational, and as being a negotiating stance, although it could be said that the IATA view (see below) forces it to take this position.

### *The IATA view*

IATA's views are based on a clear belief that airports are natural monopolies, and that their pricing policies often reflect this. It believes that there is a clear need for the economic regulation of such monopolies, and that particular attention needs to be paid

to productivity improvements and cost control. It supports the principle of single till pricing by airports, under which all airport revenues are used to offset operating costs. It also takes the view that airlines, on the whole, need far more airport infrastructure than they are provided with, and it supports moves towards airport privatisation since this is seen as a means of hastening both greater cost consciousness on the part of airports and airport infrastructure investment.

IATA believes that airlines should be involved in the commercialisation evaluation process accompanying airport privatisations, and it has produced a list of conditions to which airport pricing should comply:

- (i) Charges should be determined on the basis of transparent, fair and reasonable costs (but again no attempt is made to define the term “reasonable”);
- (ii) Charges should be in conformity with international agreements and obligations of the State, and in line with ICAO’s policies on user charges;
- (iii) Charges should be subject to a regulatory process, ideally through an independent regulatory body;
- (iv) Charges should be fairly allocated between different categories of users, without discrimination or cross-subsidisation;
- (v) There should be gradualism in any significant change in an airport’s charging structure;
- (vi) If facilities are to be sold, the proceeds should be used to eliminate any existing debt for the airport;
- (vii) Revenue, cost, balance sheet, capital expenditure and traffic data must be available and must be transparent.

It could be said that there is a reasonable degree of common ground in the views of ACI and IATA. Both advocate adherence to the principles laid down by ICAO,

although it might be argued that this reflects a vagueness in Document 9082 which enables both parties to use it to support their own positions. Both parties agree that there should be a clear relationship between charges and costs, and the principle point of divergence seems to be IATA's use of the term "reasonable" in relation to costs. Since IATA does not offer its own definition of reasonableness in this context, the situation seems to be one in which confrontation may be difficult to avoid; this is further complicated by IATA's calls for more infrastructure which, of course, implies additional costs. Overall, we are left with a situation in which intervention by an independent arbitrator or regulator becomes almost inevitable.

### ***Patterns and trends in the setting of charges***

There are a number of patterns and trends in the way that airport charges are set. These are:

- (i) Annual or periodic increases not subject to a defined regulatory structure;
- (ii) Annual changes subject to a defined regulatory structure;
- (iv) Price freezes;
- (v) Discount schemes;
- (vi) The introduction of environmental charges;
- (vii) The separate identification of terminal navigation charges.

Although the regulation of airport charges is generally associated with airports which have been privatised, formal price regulation has existed for many years at the public sector US airports. In most but not all cases of airport privatisation, price regulation has been introduced at the same time as the privatisation took place.

There are a number of identifiable trends in airport pricing over the past ten years which are not necessarily associated with privatisation. These include the introduction of price freezes or discount schemes; the introduction of environmental charges; and the separate identification of terminal navigation (air traffic control) charges.

### ***Observed difficulties in adhering to pricing principles***

ICAO calls for the production of full Accounts by airports, to ensure transparency. There are many cases where this is either not done, or only done on an irregular or untimely basis.

ICAO calls for charges to be “simple and suitable”. In many cases, charging structures are complex, particularly in relation to the calculation of noise charges. The principle of using weight-based charges is intended to be simple, but in practice it is not, since a fixed charge per tonne will tend to discriminate against operators of either large or small aircraft. The matter is complicated further by different airports using four different definitions of aircraft weight.

### **Systems of airport price regulation**

#### ***Types of price regulation***

There are three types of price regulation which may be imposed on monopolies or semi-monopolies, namely direct tariff regulation, dividend regulation and price cap regulation. Direct tariff regulation is in use in the US, while most privatised airports, including those in the UK and Australia, operate under some form of price cap regulation.

#### ***The UK experience of airport regulation***

Price cap regulation was introduced in the UK with the privatisation of BAA in 1987. It is also used at Manchester. It is applied by means of a  $CPI - x$  formula. Charges are reviewed every five years and set for the following five years.

The system has resulted in charges being steadily reduced at Heathrow and Gatwick, where they now represent good value. However, it has recently become the subject of a certain amount of criticism. There are three main criticisms. The first is that the system is reducing the cost of using Heathrow and Gatwick which are both heavily congested, whereas the working of a normal market price mechanism would increase

charges in order to reduce demand. The second points to the high cost of the process, which amounted to around NZ\$20 million (US\$9.4 million) the last time that BAA underwent its review. The third suggests that while a CPI – x system may be an appropriate means to protect the interests of users of public utilities, it may be less appropriate in the regulation of airport charges.

Overall, it appears reasonable that the UK system was put into place at the time of BAA's privatisation, so as to allay the fears of airlines and consumer groups that there was a risk of monopolistic pricing. However, there may now be a case to suggest that the process has served its purpose, and that a less formal system might serve the industry better.

### *Airport price regulation elsewhere in the world*

There are a number of other formal systems of airport price regulation in place elsewhere in the world. Most of these apply to privatised or semi-privatised airports. The most significant formula-based system apart from that in the UK was put in place in Australia when the first tranche of airports privatisations took place there in 1998. The situation there is described in detail by Peter Forsyth's paper, and will not be repeated here.

The system in the US reflects a fundamentally different philosophy of the role of airports. Charges are generally not allowed to generate revenues in excess of the difference between commercial revenues and operating costs. This reflects a general (though diminishing) belief that airports are public utilities which should not be run as businesses.

### *The future for the economic regulation of transport services*

There is a range of regulatory frameworks in the field of transport operations. The international airline industry has seen a gradual trend towards deregulation, though this is still some way off in a number of markets. This relaxation largely reflects the fact that the competitive nature of the industry makes price and entry (as opposed to safety) regulation superfluous. A similar situation applies in many national bus

industries. In contrast, the privatised UK rail operators are tightly regulated, both in respect of price and quality of service.

In the case of the main UK airports which are subject to price regulation, the regulatory authority, the Civil Aviation Authority, began a review of the present system of regulation during 2000, in preparation for the setting of charge limits for the next regulatory quinquennium which begins in April 2003. The CAA has indicated a preference for the abandonment of the single till principle in favour of a price cap based solely on aeronautical revenues, coupled with some level of reliance on benchmarking as a tool in the regulatory process, but the situation in the UK is unlikely to be finally decided until early 2003.

### **Case study – Manchester airport**

The experience of regulation at Manchester points to some clear tangible benefits. Chief among these has been the effect on airport charges which have virtually been held static in absolute terms over the past twelve years, and which have fallen significantly when adjusted for inflation. The regulatory system has also provided the means for actions perceived to be against the public interest to be addressed. So far, this has been carried out by offering an incentive to the airport, in the form of a proffered relaxation in the pricing formula, to comply with the regulator's requirements relating to the provision of choice in ground handling services.

There are, however, some questions which could be raised as to the results and effectiveness of the regulatory regime at Manchester. Chief among these is the extent to which costs do not appear to have been contained. This may be due to the airport's public sector shareholders not regarding cost reduction as a major priority, particularly if it came as a result of cuts in staff costs. The answer may lie in the fact that Manchester has enjoyed a period of strong sustained traffic growth in recent years which has generally exceeded expectation. As its pricing formula is set in relation to airport charge revenues per passenger, profits can be maintained without particular attention being paid to costs as long as growth exceeds the levels anticipated at the time of the last regulatory review.

Broadly speaking, the more competitive an industry, the more likely a company is to be acutely cost conscious. Companies in industries which are not particularly competitive (and it is generally reasonable to include airports in this category) may not therefore be under pressure to reduce costs as long as profits which are regarded as satisfactory are being produced. This situation could therefore apply to regulated airports, unless the regulator was minded to impose an unusually draconian pricing formula.

Another question relates to the use of the regulatory regime to eliminate actions deemed to be against the public interest. Whilst the system in place at Manchester appears to have produced useful results, it is not clear that these could not have been achieved by a conventional consumer protection/competition commission. What is important is to have a structure which allows complaints to be referred to the competition body at the time that they are perceived to be a problem. The system at Manchester appears to have been less than ideal in this respect, as the complaints have only been addressed in detail at the five-yearly regulatory reviews.

Overall the experience at Manchester largely matches that which relates to the London airports. The regulatory system has produced some worthwhile results, and its introduction was necessary given the general level of Manchester's charges at the beginning of the period of regulation. For the future, though, a less cumbersome approach, but one which was able to deal quickly with complaints of actions thought to be against the public interest, might be more appropriate.

The relevance of the Manchester case to the situation in New Zealand lay largely in the fact that, as discussed below, charges at the New Zealand airports are relatively high in a regional context, as Manchester's were at the start of its period under regulation. Furthermore, the New Zealand airports' charges would be very high by international standards had the New Zealand Dollar not depreciated to the extent that it has in recent years. If a regulatory structure is ultimately considered in respect of Auckland it would need to provide a reasonable assurance that it would protect users against excessive pricing, while allowing the airport the ability to generate sufficient funds to allow it to provide additional capacity to meet future growth in demand. These aims appear to have been achieved satisfactorily at both Manchester and the

BAA London airports. There is no reason to suppose that a similar structure applied to Auckland would not produce similar results.

### **Factors specific to Auckland, Christchurch and Wellington (up to the time of the Conference)**

#### *Auckland*

There would seem to be little doubt that Auckland priced its aeronautical charges fairly aggressively during the period in the 1980s following its corporatisation. It is also probable that this period of emerging commercial awareness saw a trend towards cost containment which may not previously have been particularly apparent.

While there has been a period of relative price stability (at least with respect to larger aircraft) for around nine years up to 2001, this period has also seen significant traffic growth, up from 5.4 million passengers in 1993 to 8.4 million in 2000/01. While the pegging of prices over an extended period would normally have the effect of gradually reducing them in real terms, the past six years have seen only a modest level of domestic inflation in New Zealand. Over this period, during which passenger throughput has increased by about 56%, it would be normal to expect that economies of scale would have led to a reduction in unit costs. The profitability level now being achieved therefore reflects the fact that while unit charges are virtually unchanged, unit costs are likely to have fallen, while the significant increase in throughput means that the gap between income and expenses in absolute terms will have widened significantly.

It does not seem unreasonable to say that Auckland's current financial strength owes much to a level of aeronautical charges which was established some time ago. In a commercial situation where neither competitive nor regulatory pressures were placed on any business in these circumstances, it would not be surprising to see price levels maintained: price maintenance in these circumstances allows the enterprise to enjoy sustained profits growth, while appearing relatively benign through the absence of price increases. If Auckland was in a more competitive situation – as is the case in the European, South-east Asian and US airport markets – then its ability to maintain

prices at their current levels might have been less. Regulation is, of course, often used as a means of moderating prices in markets with a relative lack of competition, although it has not so far been used in this way with the New Zealand airports.

### ***Christchurch***

Of the three New Zealand airports, Christchurch is the least reliant on its aeronautical charge revenues to cover its costs. However, its charges are still higher than those of Auckland and are certainly high by regional standards, as is demonstrated by a comparison with Perth's charges: this showed the cost of a turnround for a Boeing 747-400 to be around 85% higher than at the Australian airport. Because it has low costs (airline operation of the domestic terminal is again a factor) it achieves a high level of profitability, albeit lower in percentage terms than Auckland's. The same absence of regulatory and competitive pressures to reduce charges, as discussed in the case of Auckland, is likely to be a factor in the level of Christchurch's charges.

### ***Wellington***

Of the three airports, Wellington (on the basis of our two years' analyses) is the most reliant on aeronautical revenues, and it is the airport with the highest charges. At the same time it is the least profitable, although in comparative terms its profitability is in the top one-third of a sample of world airports. Since it also has a very low level of costs, the more modest level of profitability cannot be due to a lack of cost control, and it is probably due more to the relatively undeveloped nature of the retail facilities, coupled with small numbers of passengers per aircraft. In theory at least the terminal expansion and its associated increase in retail activity will go some way to remedying this situation, leading to an improvement in profitability, in which case Wellington's overall position will become more similar to that at Auckland than at present.

## **The Commission's Final Report**

The Commission produced its final report in August 2002. This recommended that price control should be introduced in the case of Auckland, where it considered that there was limited market competition and that it would be necessary or desirable for airfield services to

be controlled in the interests of acquirers. However, it noted that “other less intrusive, and lower cost, forms of control than price cap regulation, which was used as a means of estimating the costs of control, are likely to be available”. In the cases of Christchurch and Wellington it was not thought that price control was necessary.

The Commission considered that there would be both direct and indirect costs associated with price control. The direct costs would consist of the compliance costs to regulated entities in terms of staff and management time, coupled with the administrative costs of the regulatory body. The indirect costs would be the “distortion to behaviour caused by poor or uncertain regulatory decision making”. The Commission estimated that the direct costs of price control for a single airport would be NZ\$1.1 – 2.2 million in a review year and NZ\$0.5 - \$1.1 million in other years.

As far as we are aware, there is no specified date by which the Minister of Commerce will accept the report or request further work to be done.

### **Financial performance results at Auckland**

The financial analysis which TRL provided to Air New Zealand was based on results for the three years to f/y 1999/2000. Data are now available for a further two financial years. Given the Commission’s view that price control should be introduced in the case of Auckland, it is instructive to look at the financial performance of that airport. Table 1 below shows operating profit and Earnings before Interest, Tax, Depreciation and Amortisation (EBITDA) (both expressed as a percentage of turnover) for the five financial years 1997/98 – 2001/02.

**Table 1: Financial performance at Auckland airport, 1997/98 – 2001/02**

<b>Y/e June</b>	<b>Operating Profit (%)</b>	<b>EBITDA (%)</b>
<b>1998</b>	49.5	71.5
<b>1999</b>	52.1	72.6
<b>2000</b>	56.1	75.0
<b>2001</b>	56.5	74.1
<b>2002</b>	61.0	78.2

These results are unquestionably high by world standards in the airport industry. Auckland has for several years been at or close to the top of the rankings in these measures in TRL's publication *Airport Performance Indicators*. Auckland's exceptional performance is illustrated by the following results extracted from the most recent edition of the publication, relating to data for calendar year 2000 or f/y 2001.

**Table 2: Levels of financial performance at airports worldwide**

	<b>Operating Profit (%)</b>	<b>EBITDA (%)</b>
<b>Highest</b>	Auckland 56.5%	Auckland 74.1%
<b>Lowest</b>	Miami 1.5%	Miami 21.9%
<b>Average of 45</b>	25.7%	47.1%
<i><b>Australasia</b></i>		
<b>Singapore</b>	41.8%	66.7%
<b>Sydney</b>	29.4%	54.8%
<i><b>Europe</b></i>		
<b>London Heathrow</b>	40.7%	54.6%
<b>Frankfurt</b>	33.8%	53.7%
<b>Amsterdam</b>	25.0%	44.0%
<b>Aéroports de Paris</b>	18.5%	41.2%

To give these figures further context, it is interesting to consider corresponding data for the airline sector in the same accounting period, extracted from TRL's publication *Airport Performance Indicators*.

**Table 3: Levels of financial performance at airlines worldwide**

	<b>Operating Profit (%)</b>	<b>Return on Capital Employed (%)</b>
<b>Highest</b>	Ryanair 22.7%	easyJet 25.7%
<b>Lowest</b>	Malaysian Airlines (14.8%)	Alitalia (22.9%)
<b>Average of 35</b>	4.6%	6.3%
<i><b>Australasia</b></i>		
<b>Singapore Airlines</b>	10.3%	6.6%
<b>Qantas</b>	9.4%	11.4%
<b>Air New Zealand</b>	3.0%	5.4%
<i><b>Europe</b></i>		
<b>Air France</b>	7.3%	9.3%
<b>Lufthansa</b>	6.6%	17.5%
<b>KLM</b>	1.5%	1.5%
<b>British Airways</b>	0.9%	0.8%

## **Comment**

A comparison of the performance of Auckland with that of its airport peers gives a very clear indication of the relatively high levels of financial performance which it achieves. A simple analysis would suggest that this has been brought about by a relatively high level of aeronautical charges being in place at the start of a period of sustained traffic growth.

A comparison of the performance of Auckland and Air New Zealand provides a stark contrast in profitability levels. Corresponding comparisons between the other airport/airline national pairs shows that the New Zealand case is not an isolated one. A qualification on this situation is that in the US it is usually the airlines which are more profitable, due to the nationwide policy of restraining airport incomes. The situation shown in the tables above is typical in the rest of the world, however.

While many factors combined to culminate in the financial collapse of Air New Zealand in the latter part of 2001, it would not be unreasonable to reach the conclusion that high and unregulated levels of charges at Auckland over an extended period played a part in this outcome.

While the Commerce Commission Inquiry in New Zealand scaled impressive heights of theoretical economic analysis of airport costs and their proper relationship with charges, its outcome so far hints at a situation in which the relationship between airport and airline profitability may not change significantly as a result of the Inquiry. This may have as much to do with a national psyche which shrinks from “heavy handed” regulation as with an objective of ensuring that airport pricing is not excessive.

While accepting that the long term stability of supply of aviation services to the travelling public may not be a primary objective in airport price regulation, it would surely be a desirable outcome. To passengers (and employees) who were inconvenienced by the withdrawal of services at the time of Air New Zealand’s financial crisis, the theoretical economist’s position that this was merely a case of wealth transfer would have carried little weight. New Zealand’s relative isolation and

lack of alternative means of travel only serve to underline the need for a financially healthy national airline.

The use of straightforward benchmarking as employed in this paper provides a simple to understand insight into the airport/airline relationship. Since airport price regulation is primarily intended to ensure that airlines are not the subject of monopolistic or excessive pricing, it seems relevant to be aware of that relationship.