# AIRLINE INVOLVEMENT

## COMMISSION FOR AVIATION REGULATION (IRELAND)

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## IMPORTANT NOTICE

# 1. INTRODUCTION

This paper extends our thinking on the role and level of airline involvement in the airport investment decision and describes the existing models observed with case studies describing their application and outcomes. It is structured as follows:

- a brief summary of the historical context for airport/ airline engagement;
- a description of the different approaches that have been taken with case studies from around the world;

  The models considered are:

  - airline consultation;
  - airline financial commitment;
  - airline specific investment; and
  - vertical integration.
- Summary and conclusions.

## 2. CONTEXT

In the early days of commercial air travel, airports were almost exclusively state owned and developed and, together with a country's national airline carrier, were considered to be strategic national assets with spillover benefits for tourism and economic development. They also served as potent symbols of modernity and technological progress making them attractive propositions for politicians eager to be seen embracing the modern age.

Throughout the 1960s and 1970s there was significant worldwide investment in airports leaving many airports with excess capacity. This investment plateaued in the 1980s as many countries restructured and rationalised their public sectors. Many national air carriers were privatised as were a number of airports. Those that were not privatised were commercialised with governments withdrawing their funding and requiring airports to be operated as commercial corporate entities. As governments became less inclined to cross-subsidise airport activities, a 'user pays' model was increasingly adopted with airports charges levied to meet the full cost of operating the airport.

The next major development was the emergence of low cost carriers (LCCs) as significant players in the aviation market, which saw increased attention paid to airport charges as airlines increasingly competed on price. The "no frills" airline (and airport) model was refined and non-core air travel services aggressively pruned to allow lower cost structures to be implemented by airlines such as Southwest in the US and Ryanair and EasyJet in Europe. The LCCs were largely responsible for the significant growth in passenger numbers witnessed throughout the 1990s and into the current decade. The previously excess capacity at secondary airports and converted air bases were quickly exhausted and in recent years there has been a wave of airport investment.

Recognising that the traditional full service, "hubbed" airport model was inconsistent with their business model, the LCCs have urged airport owners to offer differential levels of quality and to reflect this in their proposed expansions. In an increasingly competitive airport market in continental Europe, many airports have actively welcomed and sought airline engagement as a mechanism for ensuring future airport growth, and supporting their ability to raise capital to develop facilities.

## 3. AIRLINE INVOLVEMENT

The active involvement of airlines in airport activities and, in particular, in airport investment, can broadly speaking be characterised as falling into four escalating categories:

- airline consultation;
- airline financial commitment;
- airline investment in specific projects; and
- vertical integration.

The key distinguishing feature between these categories is the degree of additional incremental risk the airline is willing to take on board. This ranges from the airline consultation (where virtually no additional risk is transferred to airlines); through to vertical integration (where the airline becomes an equity holder in the airport company and is exposed to a significant degree of additional risk).

It is the *additional* risk taken on board at each stage that is relevant to the discussion since effectively airlines are the bearers of any residual risk – even in normal circumstances, airlines face the risk arising from the regulatory regime as the price is reset at the next determination. However, even within a price control period, should the airport find itself in severe financial distress the most likely outcome is the regulator allowing prices to rise such that revenues enable the company to trade its way out of distress (for example, the CAA acceptance that NATS could increase its charges in the aftermath of the demand shock to Trans-Atlantic flights after 9/11). The alternative of allowing the airport to go into administration seems highly unlikely given the nature of sunk investment in airport infrastructure and their perceived strategic value to national economies and interests.

### 3.1. Airline consultation

At the low end of the risk spectrum, as far as the airline is concerned, is the airport engaging airlines in consultation prior to commissioning the investment. This is the very minimum that might be expected in a commercial environment with a service provider seeking to at least gain tacit high level endorsement for its plans from key customers.

*Heathrow*

As part of the Q5 review of airport charges at the BAA owned London airports, the UK regulator, the Civil Aviation Authority (CAA), initiated a process it described as "constructive engagement" encouraging the airport owner and users to reach agreement on key areas and limiting the regulators input to specific well defined areas where agreement cannot be reached. This process was established after many of the key T5 related construction decisions had already been made. However, the future of Heathrow East including Terminal 2 is currently being consulted on with both the airlines and the airport having expressed broad satisfaction with the progress made in most areas from engagement - including broad agreement on the capital investment programme. BAA

have expressed a desire to consult further on the plan, particularly with Star Alliance and Virgin the hoped-for occupants of Heathrow East.

*Stansted*

BAA and airlines using Stansted generally agreed that the CAA promoted engagement process at Stansted has been less satisfactory. Indeed little has been agreed and with regard to BAA's intended capex plans at Stansted, engagement between the airport and Ryanair (responsible for over 60% of traffic movements at Stansted) all but broke down late in 2005. The source of the dispute relates to the costs of delivering a second runway at Stansted with Ryanair claiming that a) the costs are too great and b) the service levels being sought are excessive for an airport currently serving a largely LCC market.

The adverse experience of engagement at Stansted as opposed to Heathrow may be partly explained by a disconnect between the business model being sought by the airport and that of the airlines utilising the airport. In the Heathrow example both the airlines and the airport are seeking a full service, hubbed offering with the discussion focussing on how best to deliver this. At Stansted, however, it appears BAA has ambitions to develop the airport to be a second Heathrow with the ability to accommodate A380s and be used as a hub airport, whereas the existing LCC users are seeking a point to point facility with service quality (and associated charges) less than Heathrow. There are also some traditional, hub-based airlines using Stansted which further complicates the use of constructive engagement.

*Schiphol*

Prior to the opening of "Pier H", Schiphol's airport charges were amongst the highest in Europe. In recognition of the growing LCC market and in attempt to increase Schiphol's share of the market, the decision was made to develop a terminal specifically for the use of LCCs. Whilst the exact degree of airline consultation in the planning of Pier H is not known, from the no frills services offered at the terminal it can be assumed that LCC airline input was significant.

Designed as a standalone point to point terminal with little transfer traffic Pier H has an anticipated maximum capacity of eight million passengers per annum (mppa). Constructed in nine months for a total cost of €32 million, the terminal is farthest from Schiphol's check-in facilities and offers passengers the minimum in airport services. Devoid of shops, travelators and even toilets, Schiphol claims Pier H can turnaround planes in 25 minute and for an A320 Airbus offers handling charges 25% less than the traditional gates. To date, a number of LCC have signed up to use the terminal including EasyJet, Thomsonfly, BMI baby and Jet2.

### 3.2. Airline financial commitment

As in competitive commercial relationships, financial commitments or guarantees from airlines can be expected significantly to reduce the risk faced by an airport when investing in new assets with uncertain demand. Clearly they do not completely mitigate the risk

faced as the commitment is only valid whilst the airline making the commitment continues to operate from that airport. However, they provide some degree of certainty over future cashflows at least in the near future and should therefore help lower the cost of capital involved in financing the project.

*Singapore*

The Civil Aviation Authority of Singapore (CAAS), owner's of Changi airport, proactively sought to facilitate their growth in Southeast Asia by developing a no frills terminal as part of the Changi airport portfolio. This followed their observation of the rise of the LCC business model in Europe and the US.

In the absence of an established LCC model in the region, however, Changi sought and received a firm commitment from Tiger Airways (a Singaporean based LCC, which is 49% owned by Singapore Airlines) to develop a terminal customised for low cost carrier operations. Immediately following this, the government announced its intention to build a low cost terminal.

The result of this was "Budget Terminal" which came online in March 2006. A largely point to point terminal, it is situated two kilometres from the main body of Changi and consists of a check-in hall, transit lounge, 18 check-in counters, seven departure gates, 10 aircraft parking bays and three baggage claim belts with no travelators and aero-bridges. Delivered at a cost of SGD 45 million (approx €25 million) the absence of frills translates into cost savings on the passenger service charge of around 50 percent of the existing terminals with Budget Terminal charging SGD 7 here per passenger.

*Lübeck*

Ryanair and Lübeck airport entered into an arrangement whereby the airline paid a cut-price rate for using the airport as its alternative to Hamburg and, in exchange, guaranteed a minimum number of departing passengers (1 million in 2006 rising to 2.8 million departing passengers in year 10). As a result of this arrangement, in 2003, Ryanair paid only half the airport fees that were usual in Lübeck, totalling to a discount of approx. €1 million, much of which was subsidised by the municipality of Lübeck.

One casualty of the arrangement was Air Berlin's London – Hamburg service which was pulled when Air Berlin was unable to compete with the cheaper Ryanair fares. In protest Air Berlin brought a case against Lübeck in the German courts claiming the subsidy to be market distorting and illegal. Due to the court's landmark ruling in favour of Air Berlin the deal with Ryanair has been allowed to lapse. Lübeck is expected to lodge an appeal against the judgement.

### 3.3. Airline specific investment

This is a model long favoured in the US for its believed competition benefits. It is becoming more commonplace elsewhere as airlines seek to gain a greater degree of control over how assets are configured and what quality levels are offered. This approach reduces the combined risk as the airport's investment is reduced and the airline gains greater control and can be more responsive to changes in its business model.

*Munich*

The primary example of airline investment in a specific airport development in Europe is that of the joint venture construction of Terminal 2 at Munich Airport between the airport (60% ownership) and its main user Lufthansa (40% ownership). Terminal 2's opening in 2003 saw the airport double capacity to 50 mppa at a total cost of €1.6 billion of which €1.2 billion was contributed by the joint venture making Lufthansa's involvement €480 million.

Despite Lufthansa's equity involvement, Munich Airport remains the formal owner and operator for all airport infrastructure facilities. As with other airports in Germany Munich Airport remains subject to cost-plus regulation and as a build, operate, transfer venture, ownership will transfer to the state upon the conclusion of the operating period. Thus it may questioned what Lufthansa's incentive to increase its level of exposure may have been. The airline has stated that the objectives for its equity investment were:

- optimal terminal layout to support hub operations;
- branding Terminal 2 as a premium transferring facility for Lufthansa and Star Alliance customers; and
- a competitive airport fee level to develop a second hub-and-spoke network.

For Munich Airport the incentives to enter into the joint venture were less opaque. The existing terminal was configured to meet predominantly point to point traffic and the airport owners wanted to transform the airport into a second German international hub. A firm commitment from Lufthansa to develop its services at Munich into a hub offering would significantly lessen the risk faced by the airport and, given the scope of the project, an equity contribution was best way of enshrining the commitment. Furthermore, the airport claims that the Terminal 2 infrastructure expansion provided the basis for a significant regional welfare gain.

*Frankfurt*

Lufthansa were among the first airlines to sign up for the new widebody A380 Airbus superjumbo with the intention of operating the aircraft from its home airport of Frankfurt Rhein-Main. The specifications of the A380 are such that existing airport infrastructure is unable to accommodate the widebody aircraft, requiring some airport reconfiguration and investment. Included in this investment is a new maintenance hangar to be built on the south side of the airport site. Since it is intended that the A380 will be used in air transportation irrespective of Frankfurt's proposed capacity expansion,

Fraport AG (the owners of Frankfurt airport) filed a separate zoning request for the construction of the new hangar and the associated facilities in January 2003.

The airport had initially intended for the site to be developed as a multi-storey carpark, however, following the successful negotiation of a land utilisation agreement between Fraport and Lufthansa running for a period of 65 years, on October 31 2005, Fraport handed over to Lufthansa the cleared development site where the airline will construct the new maintenance base for its future fleet of A380s. Lufthansa is investing approximately €150 million for the new A380 maintenance base, which will be the largest industrial hall in Germany.

In this instance the risk associated with the investment has been transferred to the party with greater information and best placed to manage it. For example, the delays in the introduction of A380s are unlikely to have influenced the capex plans of Fraport (as they haven't at Heathrow's T5), but are likely to have impacted on Lufthansa's capex timing, lowering the overall cost to the airline.

*JFK*

John F Kennedy Airport in New York currently has nine terminals (eight functioning) with each being developed, financed, operated and leased out by different organisations thus promoting competition within the airport. In most cases the terminal is developed and operated by an airline basing its activities there, however, these need not be the case. The redevelopment of Terminal 4, for example, was undertaken by a joint venture of Schiphol USA and Lehman Bros.

Airline involvement in the development of the terminals has been a key feature since the 1960s with the British Airways operated Terminal 7 opened in 1970. In April 1997, British Airways, together with the Port Authority of New York and New Jersey (owners of JFK) invested US$250 million in the complex, which included an additional building expansion with new retail outlets and concessions, new access roadways and improved parking facilities as well as three further wide-body gates for a total of 12 gates.

For all airline investment cases, particularly those covered by EU state aids and competition rules, consideration will always need to be given as to whether the arrangements are consistent with EU law.

### 3.4. Vertical integration

Airline involvement at its most entrenched is airlines becoming shareholders in the airport company. This is not always allowed by the competition authorities and is explicitly prohibited in Australia and some other countries due to competition concerns. The only obvious example in Europe is that of Lufthansa's stake in Fraport AG[1]. Here

[1] Common ownership of airport and airline by the public sector may be considered a form of vertical integration, however, we do not explore this option as it bears little resemblance to the purchaser-provider model adopted in Ireland.

the risks of investment are shared between the airport and the airline although as a non-core aspect of the airline's business it may be expected that airline be prepared to utilise its airport investment as an instrument for increasing profits in its main transportation business.

*Fraport*

When Frankfurt Airport was partially privatized in 2001, its public owners sold 29.4% of the airport's equity in an initial private offering. Prior to going public, ownership had been split between the federal government of Germany (25.9%), the federal state of Hessen (45.2%), and the city of Frankfurt (28.9%). In the last quarter of 2005, the federal government sold another 11.6% of its remaining shares via a private placement to institutional investors. In this second privatization tranche, Lufthansa acquired a 4.9% share in Frankfurt International Airport and has subsequently increased its stake to 9.1%[2].

Lufthansa had several objectives in the acquisition of this minority equity stake:

- More direct influence on the airport's strategic and investment decisions via a seat on the supervisory board
- A higher degree of operational and process quality, based on a shared understanding of each company's processes and objectives
- Stronger control on the airport's cost development

[2] Fuhr and Beckers (2006)

## 4. ADDITIONAL ISSUES

We have presented a number of case studies on different types and degrees of airline involvement in the development of airport infrastructure. From these there are a number of points to note, including:

- the incentives for airlines and airports to develop closer relations;
- differential treatment of airlines; and
- ringfencing of contractual arrangements

### 4.1. Incentives

In presenting the case studies we have not directly addressed the issue of what motivates each party to enter into what amounts to a significantly closer relationship. We do so here.

For airlines, the relevant incentive is clearly the opportunity to exert some control over the risks they face as a consequence of capital investment. As we identified earlier, airlines are ultimately the residual risk holders of any risks created by an airport through capital expenditure. Involvement in the decision-making process, therefore, either directly through financing or indirectly by signing up to long term contracts, allows them to exert significant influence over and better management of the risks they ultimately bear. However, there may in some circumstances be incentives to try to use such investment for anti-competitive behaviour against other airlines.

For airports the incentive is, *prima facie,* less obvious. If their risk is capped through airlines being the ultimate risk bearers, why should they engage in joint involvement with airlines? Indeed, they are many examples of airports paying little or no heed to airline wishes when developing new infrastructure[3]. The answer appears to be access to funds. Those airports operating in an environment where funds are limited have sought to enter into relationships with airlines enabling i) access to the airlines own funds; or ii) greater access to debt markets through a lower overall risk profile. In addition, associating with a successful airline may improve the reputation and competitive position of the airport.

### 4.2. Differential treatment

In most cases airports provide landing services for multiple airlines. As such entering into a closer financial relationship with a single airline may raise concern amongst the remaining airlines of a competitor receiving differential and preferential treatment. Specifically this may take the form of:

[3] Toronto's Pearson Airport is considered one of the leading examples of this. What many observers have described as a "no expense spared" development has received considerable criticism from all quarters. By all accounts the airport is somewhat lavish and been likened to a modern art gallery. Costing approx €3bn landing charges for Boeing 747's have, according to the Air Transport Research Society, exceeded those at Osaka's Kansai Airport making it the most expensive airport in the world and over twice as much to land at as New York's LaGuardia Airport (the next highest landing charge in North America).

- unfair advantage; and
- risk management.

*Unfair advantage*

Airlines operating on the same routes may choose to compete on two fronts: i) price; and ii) quality of service. These product differentiating features of air travel have become increasingly entrenched in recent years as carriers have chosen to position themselves as being either "full service" or LCC.

Defining those airlines that are party to a form airline involvement as "insiders" and those who are not as "outsiders", differential treatment of insider could give rise to an unfair advantage if it impinges upon an outsider's ability to fully compete on its chosen front. For example, an LCC relying on fast aircraft turnaround times will struggle to maximise revenues in a terminal configured to maximise retail expenditures. Similarly, a full service carrier will find its point of differentiation significantly eroded if it is unable to offer a level of service quality consistent with its business model.

These issues become particularly acute when airlines with differing business models are required to share the same terminal.

*Risk management*

Another potential issue relates to residual risk. As discussed this ultimately sits with the airlines through their exposure to landing charges. Should an airline enter into an arrangement with the airport operator enabling it to limit these risks then, to some degree, all airlines stand to benefit. However, it is the outsiders who bear the risk should an insider simply "get it wrong" or cease to operate for whatever reason despite not having been in a position to manage and minimise these risks in the first instance.

One potential way around this problem is for airlines to enter into dialogue with each other and jointly negotiate with the airport operator. This has particular appeal where the airlines involved, or elements of the airlines' businesses, share the same business model such as is the case with Ryanair and Aer Lingus at Dublin Airport. The risk in such arrangements is that new entrants or airlines with a relatively small share of airport usage are excluded from the process.

### 4.3. Ringfencing

Giving airlines a greater degree of control over the specificity of capital investment decisions raises some interesting issues with regards the treatment of additions to the Regulatory Asset Base (RAB). Should an airport and an airline enter into a bilateral arrangement, for example, for the development and use of a terminal, it seems reasonable that the price charged for using that terminal should be different from that charged at other terminals. This is because it can be expected that the service levels offered will be customised (either up or down) to meet the specific requirements of the airline.

One potentially appealing approach would be to adopt a charging structure with layered charges; the components of which would be separate prices for, say, the use of the runway, terminal and shared services. This would most likely require the development of multiple RABs and the need for strict ring-fencing of costs and RAB additions. Such an approach would place substantially increased importance on the regulator having in place effective rules regarding cost attribution and allocation to avoid regulatory gaming or arbitrage.