

April 2005



Building for the future

Paying for the airports of tomorrow



www.aci-europe.org



Building for the future

Paying for the airports of tomorrow

Airports Council International (ACI) is the only worldwide professional association of airport operators. ACI EUROPE represents some 450 airports in 45 European countries. Member airports handle 90% of commercial air traffic in Europe, welcoming over a billion passengers each year.

- **For more information on the issues raised by this research, please contact Stefano Baronci, Policy Manager, ACI EUROPE, via e-mail: stefano.baronci@aci-europe.org or tel: +32 (0)2 552 09 73.**
- **For media-related enquiries, please contact Ronan Anderson, Communications Manager, ACI EUROPE, via e-mail: ronan.anderson@aci-europe.org or tel: +32 (0)2 552 09 82.**

www.aci-europe.org

Executive summary

Airport capacity – the clock is ticking

The European aviation industry is facing a major challenge. With passenger traffic set to double by 2020, Europe's airports look set to become the main bottleneck in the air transport chain beyond 2005. Airport operators must be able to build the terminals and runways to accommodate future demand otherwise air travellers will soon face widespread delays as massive congestion and poor service standards cause chaos at Europe's main airports. Without capacity, there will be less competition, less choice and higher air fares. Policy makers and national legislators must recognise these pressures and give the social and economic benefits delivered by Europe's air transport industry their rightful weight in the debate on sustainable growth.

The European Commission's White Paper 'European Transport policy for 2010: time to decide' states that: "In response to the growth in traffic, it is time to rethink how airports operate in order to make optimum use of existing capacity. However, this will not be enough and Europe will not be able to cope without new infrastructure, including in the candidate countries, few of which have sufficient capacity to cope with the traffic growth which enlargement will inevitably bring."

The next bottleneck

Across Europe, airports fall broadly into two categories: those with insufficient traffic and those with insufficient capacity. It is at Europe's larger airports where the 'capacity crunch' will hit first. And it will hit hard. We are already witnessing the first signs of this. EUROCONTROL¹ has predicted that in 2000, 23% of delays occurred at airports versus 77% of delays attributable to the en-route phase of a flight. This ratio has increased dramatically so that in 2003, 46% of delays occurred at airports while delays attributable to en-route went down to 54%. This trend leads to the conclusion that airports will become the main bottleneck beyond 2005.

"It is at Europe's larger airports where the 'capacity crunch' will hit first. And it will hit hard."

EUROCONTROL has forecast that by 2010, over twenty European airports will have a capacity shortage if the demand evolution for air transport follows their high growth scenario. Assuming an average growth of 4.3% per annum, using 2003 as the base year, air traffic would grow 2.5 times by 2025. Consequently, by 2025, despite a 60% capacity increase in the European airport network, over 60 European airports will be congested, with the top 20 airports being saturated at least 8 to 10 hours of the day. This would leave Europe's airports unable to accommodate 17.6% of the total demand for air transport.²

The demand is clearly there. According to the ACI World Forecasts³, global airport passenger traffic will grow by over 4% annually up to 2020 to some 7 billion passengers. Growth in Freight will increase by 5.1% per year to 170 million tonnes in 2020. This growth is unmatched by any other means of transport. Other sources, such as ICAO⁴ and IATA⁵, are even more optimistic indicating that European air traffic is now expected to increase at the rate of 5% to 6% per annum - doubling by 2020.

"Over 60 European airports will be congested, with the top 20 airports being saturated at least 8-10 hours per day"

The licence to grow

While there are no easy solutions, there is scope for efficiency improvements in the way infrastructure is being used at both underutilised and congested airports. However, regardless of how far you squeeze the most out of existing airport capacity, the reality is that new runways and terminals are the only way to accommodate future demand. The reward for meeting the capacity challenge will be ensuring that airports continue to boost regional accessibility by bringing communities closer together,⁶ drive tourism and serve as national and regional economic motors. For every million air passengers, each

¹EUROCONTROL - The European Organisation for the Safety of Air Navigation

²EUROCONTROL REPORT - Challenges to growth 2004

³The Airfinance Journal/ACI Forecasting Conference in Vienna on 8 February 2005

⁴ICAO - International Civil Aviation Organization

⁵IATA - International Air Transport Association

⁶The social and economic impact of airports in Europe, ACI EUROPE and York Aviation study (2004). Available at www.aci-europe.org

Executive summary

European airport supports around 3,000 jobs nationally of which some 50% are generated in the immediate vicinity of the airport.

“We need to harness technological progress to address noise and climate change”

Yet building new airports or expanding current facilities has become an increasingly difficult and lengthy task, subject to the basic conditions of getting permission and paying for the investment. To get the permission to grow, the aviation industry needs to take on the environmental challenge. Even though airport operators are not the main polluters in the air transport sector, the industry must take these responsibilities seriously. The benefits of technological progress must be harnessed to address noise and climate change. The noise footprint of each aircraft movement must continue to be reduced over time. Global warming must be tackled through market mechanisms - notably the establishment of an open emissions trading system - and ways to address other gaseous emissions must be researched. Sustainable development is the key to future growth.

Who will build for the future?

Assuming that the aviation industry can meet the environmental challenge, Europe's airport operators must also be in a position to finance the infrastructure of tomorrow. Governments throughout Europe have taken the view that airports should be viable businesses in their own right, able to fund their own developments without any exchequer support. Airport operators have to make decisions about long-term investment. Airport planning cycles are upwards of ten, twenty or even thirty years. Airlines, however, have much shorter planning perspectives and may not even be around by the time an airport's plans are implemented, or if they are - they may well have changed their own strategies a number of times during that period.

These infrastructure projects are largely funded by airport charges which, throughout Europe, are regulated in one form or another and tend to be low, often too low for sustainable long-term development. Moreover, most airports operate under a single till regime. This means that the non-aeronautical revenues (airport retail income streams, revenue from car parks) subsidise the aeronautical expenditures. An ACI World paper⁷ highlights how an average of 44% of an airport's expenses is devoted to depreciation and debt servicing interest. This leaves only 56% for operational expenses, a major portion of which is now spent on additional security costs and insurance.

The reality is that airport charges are a relatively small proportion of airline costs. ICAO, IATA and AEA⁸ have recognised that airport charges have remained at about 4% of airline operating costs worldwide for almost 30 years despite the changing economic climate. While this is an average that can vary by airline and by airport, airport charges are not a root cause of the airlines' current financial predicament, nor can reducing charges be seen as a panacea for the long-standing problems of the airline industry. Indeed, it is a misplaced and self-serving criticism to target airport costs as a significant factor in the ailing airlines' balance sheets - especially when labour and fuel generally make up almost 50% of airlines' operating costs.

“Airport charges have remained at about 4% of airline operating costs worldwide for almost 30 years”

In a competitive environment, the level and structure of airport charges should be related to the full economic costs of investment programmes and airport operations. An airport charging system has to be flexible and robust enough to deal with such diverse features as cost recovery, investment plans, congestion, environmental impacts and enhanced security.

With the interests of airlines and airports so clearly divided on the matter of airport charges, the challenge for efficient and professional airport management, whether in the public or private sector, is to ensure that a rational balance is maintained. It is imperative that processes and procedures used to set airport charges be recognised and understood by all parties. Only in this way will the airport industry have a clear vision on how to build for the future of European aviation.

⁷Airport finances: coping with declining traffic in an industry crisis - ACI WORLD publication www.aci.aero
⁸AEA - Association of European Airlines press briefing - 29 January 2004

Contents

Executive summary	3
Section 1	6
The changing face of the airport industry	7
Section 2	8
Charges must reflect costs	9
Section 3	10
Financing major airport investments	11
Section 4	12
Airports' operating expenditure	13
Section 5	14
Airport charges are regulated	15
Section 6	16
The air transport value chain	17
Section 7	21
General principles for charging systems	22
Full cost recovery	22
Flexibility to run the business.....	23
Regional airports.....	24
The need for new capacity - developed sustainably	24
Environmental constraints	24
Improving the system	25
Transparency is key	26
Setting charges - the consultative process	27
Pre-financing of airport capital expenditures.....	28
Marginal cost pricing	28
The system approach	28
Section 8	30
Conclusion.....	31
Annex 1 - Major European airport projects underway	33
Annex 2 - Major European airport projects recently completed	34
Annex 3 - Airport charging systems in Europe	35

Section 1 ►

The changing face of the airport industry



The changing face of the airport industry

Good quality transport is recognised by the European Union as crucial for economic competitiveness and as an important indicator of quality of life.⁹

Faced with a changing competitive air transport market and with growing air traffic demand, the airport sector has transformed itself. Over recent years, there has been a trend towards greater diversity in the ownership of airports. In a number of cases, partial or complete privatisations have taken place or are planned in the future¹⁰, although there is no single winning formula applicable to the whole airport industry. For many years, airlines have claimed that privatising airports is the most effective way to ensure better management and efficiency. Yet, the same airlines seem to believe that airports should be deprived of the right to function as businesses and should, in fact, subsidise airline operations.

At an operational level, airport facilities have expanded and improved in order to meet the increasing and different demands by users and to adapt to different segments of the aviation market. For example, provision of services for low-cost carriers, infrastructure modifications for new security systems and stands for the Airbus A380 have been introduced.

The increase in low-cost traffic is one of the major factors driving and changing the industry today. Airports, and especially regional airports, are faced with adapting their business models to meet new demands from this still rapidly growing market segment.

Meeting passengers' needs

Improving the availability of air travel does not only mean reducing airline fares but also the provision of an efficient infrastructure, able to meet future demand. The UK Air Transport Users Council stated in connection with the UK's air transport White Paper¹¹ that; *"We urged the Government to provide airport capacity that met consumers' increasing demand for air travel... We accepted that consumers would pay for the extra capacity through higher fares. The cost to passengers of failing to provide extra capacity would be far greater in the longer term"*.

"The cost to passengers of failing to provide extra capacity would be far greater in the longer term" – UK Air Transport Users Council"

Flexible framework

A framework where airport ownership structures vary widely, and where the level of competitiveness amongst airports also varies, means that any regulation at international level needs to adhere to broad principles and to be flexible.

⁹WHITE PAPER "European transport policy for 2010: time to decide" - (COM(2001)370) European Commission

¹⁰Europe has the highest concentration of privatised airports in the world, with several more due to join their ranks (ADP, Bratislava and Budapest)

¹¹The White Paper 'The Future of Air Transport' - 16 December 2003 - www.dft.gov.uk/stellent/groups/dft_aviation/documents/divisionhomepage/029650.hcsp

Section 2 ▶

Charges must reflect costs



Charges must reflect costs

Broadly speaking, aeronautical charges are levied for the provision and use of an airport's runway, apron and terminal facilities. As such, airport charges may be divided into two broad categories, namely: landing charges and passenger charges. Contrary to airlines' assertions that they have minimal involvement in discussions with airports and governments on charges, analysis of national legislation and regulation shows that there is ongoing interaction among all parties.

“Analysis of national legislation and regulation shows that there is ongoing interaction among all parties”

The level and structure of airport charges derive from the full economic costs of:

- **investment programmes;** and
- **airport operations,** which mainly stem from security and other passenger services and, to a more limited extent, from costs associated with aircraft noise.

Airport capital expenditure is one of the key drivers in determining the appropriate level of airport charges. It is driven mainly by the users' requirements and a growth in traffic which is unparalleled by any other form of transport. With European air traffic set to grow at the rate of 5% to 6% per annum - doubling by 2020 to 2 billion passengers - at this level of growth there will be serious congestion at many of our larger airports over the next few years¹².

Meeting this challenging demand means managing existing infrastructure and planning future infrastructure development **efficiently**. 'Efficiency' means legitimate investment but also optimal use of capacity¹³. Defining and estimating a measure of 'efficiency' is not straightforward, given the need to encourage timely investment in new facilities at airports to satisfy anticipated future demand by users.

Inadequate incentives to invest appropriately will result in economic inefficiencies. This is because the full costs of investments will not be recovered and the total net benefits in the long term will not be maximised. Furthermore, an appropriate level of airport charges is an incentive for efficient investment.

¹²EUROCONTROL REPORT - Challenges to growth 2004

¹³A proper and accurate evaluation of applications to construct additional airport capacity at European level should more generally embody several aspects of air transport such as pricing mechanism, slot allocation, access to airport capacity, express surface links and the impact of bilateral air service agreements.

Section 3 ▶

Financing major airport investments



Financing major airport investments

Despite the negative impact of 9/11, SARS and the war in Iraq, the aviation industry is reporting historic growth figures once again and there are a number of airport expansion projects underway or foreseen in the future. The challenge now for a number of Europe's airport operators is to provide the necessary investment in time to accommodate this growth.

“European airports will invest some USD 55 billion in new infrastructure and facilities by 2025”

According to data compiled by Momberger Airport Information, European airports plan to invest approximately some USD¹⁴ 55 billion¹⁵ in new infrastructure and facilities by 2025. These massive investments are planned at some of Europe's major hubs in order to accommodate future demand. At London Heathrow USD 9.2 billion will be invested in the new Terminal 5 together with improvements across the other four terminals. Other examples of airport investments include:

- USD 5.67 billion at Frankfurt – modernisation of terminal 1 and 2, fourth runway and terminal 3;
- USD 5.4 billion at Madrid Barajas – new passenger and cargo terminals and two new runways; and
- USD 3.0 billion at ADP airports – terminal and runway work.

Some USD 19 billion has been invested in major airport projects since 1998¹⁶. It is important to clarify that these two figures (USD 55 billion and USD 19 billion) include only investment by the major airports in Europe; the total amount, of planned and completed airport investments, is much higher. Furthermore, according to the latest ACI World data¹⁷, airports across Europe have increased their spending on infrastructure by 10.7%, investing a total amount of USD 12.4 billion in 2004 compared to a total amount of USD 11.2 billion in 2003.

“Airport charges alone do not adequately enable financing of future capacity projects”

Airport charges, in themselves, do not adequately enable financing of future capacity projects. Unfortunately, such projects can only be funded by using a part of the commercial (non-aeronautical) revenues. Other traditional sources of financing (such as bank loans) increase the debt burden of the airports. For example, Aena's¹⁸ debt for the year 2003 amounted to €2.8 billion. It is important to understand that taking on debts implies the need to pay interest and to repay those loans over time.

Airports in new EU Members States are also facing problems in financing the infrastructure development necessary to respond to the increase in traffic. In Latvia, for example, there is a lack of funding at Riga Airport for terminal and runway development. Riga Airport is today using bank loans, with a repayment schedule of 20-25 years, together with revenues from all airport activities to cover these costs.

¹⁴Historical dollar conversion rates

¹⁵Complete table in Annex 1. Based on confirmed figures/estimates from Momberger.com, December 2004 - only airport projects where investments exceed USD 500 million have been taken into account

¹⁶Complete table in Annex 2. Based on confirmed figures/estimates, December 2004 - only completed projects and only airport projects where investments exceed USD 400 million have been taken into account

¹⁷ACI Airport Economics Survey - 2004, December 2004

¹⁸Aena - Aeropuertos Espanoles y Navegación Aérea - www.aena.es

Section 4 ▶

Airports' operating expenditure



Airports' operating expenditure

Besides capital expenditure, airports have operating expenditure on the day-to-day running of their business: e.g. staff, utilities and day-to-day maintenance costs. A significant part of operating expenditure is incurred to meet safety, security and insurance requirements. Among these items, the increase in security charges, particularly post-9/11, has increased substantially the level of passenger charges. No other mode of transport has been subjected to additional costs of this scale.

Ultimately, the level of airport charges reflect the significant financial effort made by airports to provide modern and efficient infrastructure. According to the European Commission study on Civil Aviation Security Financing (December 2004), security related operational expenditure rose from €457 million to €743 million between 2000 and 2002 for a sample of 34 airports representing 43% of European air passenger throughput (**graph 1**).

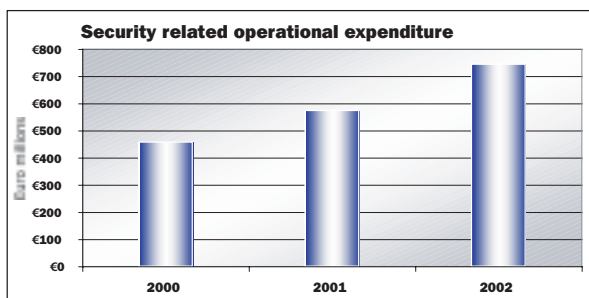
Furthermore, capital expenditure (19 airports providing financial information) on security related items has risen sharply since 2000, increasing approximately 5.6 times to €179 million in 2002 (**graph 2**).

As demonstrated in the European Commission study, the 2002 capital expenditure breakdown for security costs shows that the procurement of equipment accounted for 70% (€179 million) of airports' total capital expenditure. In comparison, terminal redevelopment accounted for 29%, while other investment only amounted to 1% of total security capital expenditure (**graph 3**).

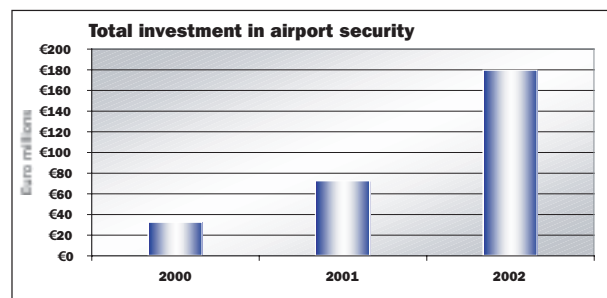
Equipment: expenditure related to the acquisition and installation of new security equipment including hold baggage screening devices, explosive detection systems (EDS), x-ray machines, CCTV equipment, biometric readers etc.

Terminal: expenditure on the modification or expansion of terminal facilities necessary to accommodate new security procedures and equipment e.g. baggage make-up areas, check-in halls etc.

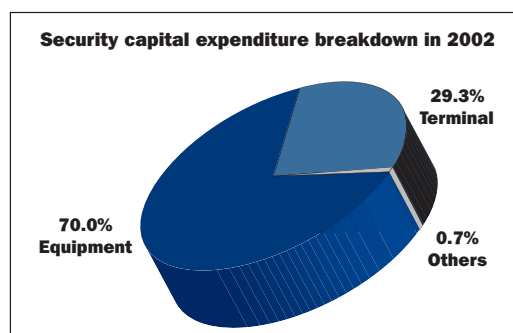
Other: any other security related investment that cannot be categorised under the other two groups. For example, some airports have tightened access control to restricted areas, other have reinforced perimeter fences etc.



Graph 1 - Security expenditure



Graph 2 - Security related capital expenditure



Graph 3 - Breakdown

Section 5 ▶

Airport charges are regulated



Airport charges are regulated

As clearly demonstrated by a 2003 ACI EUROPE study¹⁹ and explained in Annex 3 of this study, airport charging systems are already extensively regulated at national level and provide for consultation with stakeholders.

“All stakeholders are already largely involved in consultation with airports regarding the setting of charges”

Charging systems are, in most instances, imposed and regulated by national authorities. These authorities, irrespective of the public or private status of the airport, not only define the procedure that the airport has to follow for submitting proposals, but also have a final say on the amount that users are to be charged. Depending on national legislation, this control is

“Authorities not only define the procedure that the airport has to follow for submitting proposals, but also have a final say on the amount that users are to be charged”

exercised by the civil aviation authorities or the government, having considered and consulted on the question of an appropriate rate of return for the airport, based on the airport’s risk profile and the forecasted revenues and costs.

European Community competition law constitutes a further control over airport business activities. It can authorise intervention in relation to any anti-competitive behaviour by an airport, such as abuse of

dominant position. The European Commission’s decisions and the European Court of Justice’s judgements have thus enforced the principle of non-discrimination through the application of EU law.²⁰

The airport charges at virtually all European airports are subject to a significant level of review and control. Regulators and industry partners need to recognise the realities of the current airport charges systems and to understand that regulation at the appropriate level must take into account the complex and diversified nature of the airport industry, so as not to impair the efficient management of airport enterprises.

¹⁹Airport charges in Europe - ACI EUROPE study 2003 available in the “Documentation/Economics” section of www.aci-europe.org

²⁰Judgement of the Court (Sixth Chamber) of 29 March 2001. Portuguese Republic v European Commission (Case C-163/99). Judgment of the Court (Sixth Chamber) of 6 February 2003 in Case C-92/01.

Section 6 ▶

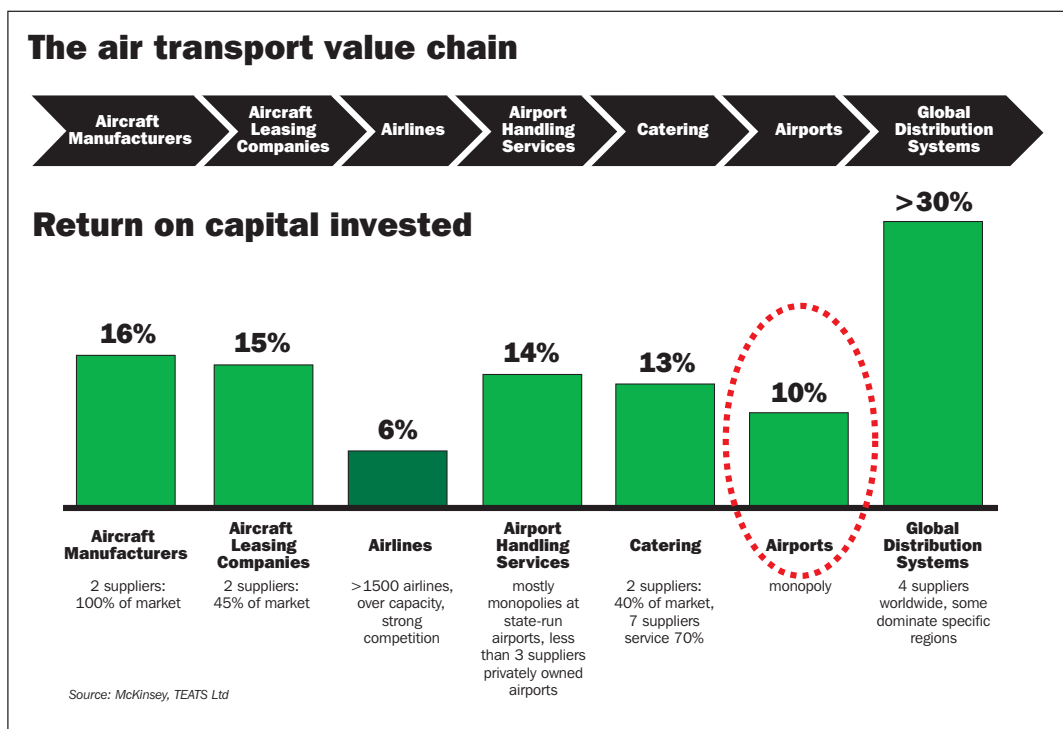
The air transport value chain



The air transport value chain

It is commonly acknowledged that benchmarking airport operators' performance is a complex task. It is hard to find indicators sensitive enough to reflect adequately the different operating profile at each airport: variations in airport size, the nature of traffic, financing/accounting methods, ownership, regulations and activities performed (ATC, security, passenger and ramp handling, fire services etc.)²¹. Return on investment - i.e. the ratio that compares a project's net benefits with its total costs - is the most appropriate financial indicator, and also the most commonly used ratio within the airport industry, as it measures how effectively the airport uses its capital to generate profit.

Benchmarking the different industries operating in the aviation sector makes it even harder to get accurate and valid results. As far as the European market is concerned, the 'value chain' in air transport as defined by the Association of European Airlines (AEA)²², shows that ATS providers, aircraft manufacturers, catering companies and aircraft leasing companies reported a higher return on capital invested than the return reported by airport operators.

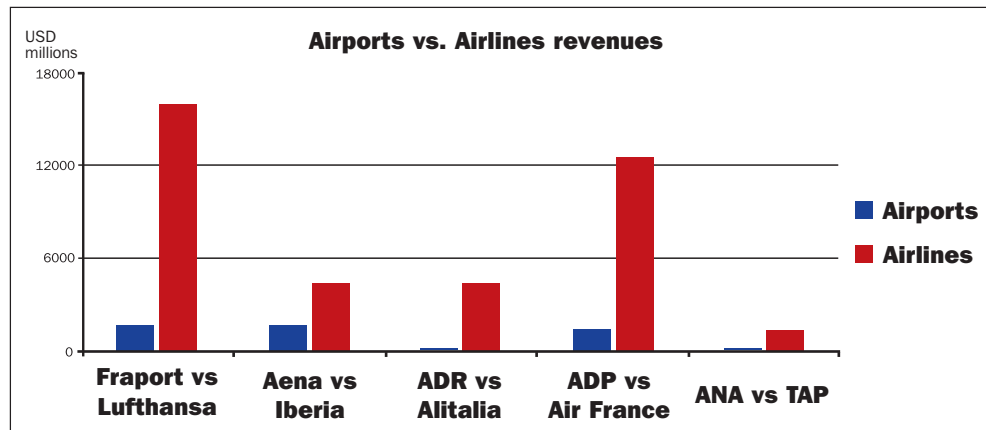


²¹As a consequence, the range of values for aeronautical revenue as a percentage of total revenue and for commercial revenue as a percentage of total revenue differs considerably from airport to airport.

²²AEA - Association of European Airlines presentation, Le Bourget - 14 October 2004

The air transport value chain

Before focusing on the margins made by the airport operators in comparison with carriers, it is first necessary to refer to the levels of business managed by these two different industries. The comparison of airports' versus airlines' 2002 revenues clearly shows how much larger the relative size of the business managed by network carriers is²³:



Strategic planning cycles

Airports and airlines have very different business dynamics:

- Airports are largely fixed-cost businesses by nature, while airlines have a high proportion of variable costs. Airports are businesses with long-term investment needs, inextricably and inflexibly linked to the service which they provide. Airport assets are depreciated over long time periods (20-50 years and even 100, as in the case of BAA runways), and such assets are often held at historic values in the company books²⁴.

“Airports are businesses with mainly long-term investments”
- In contrast, airlines have relatively short-term investment cycles and can adapt quickly to changing market conditions. The ability of airlines to move resources (aircraft and cabin crew) to take advantage of new market opportunities or to exit underperforming markets is not shared by airports, which may, in the event of a market downturn or airline relocation, be left with stranded assets. For example, at Stockholm Arlanda Airport, the main carrier was catered for in a new terminal tailored to its needs and requirements for only two years before deciding to go back to the older terminal, leaving the airport to deal with the financial consequences. Some other examples of airports suffering from stranded assets as a result of the differing nature of airport/airline planning cycles include:
 - Zurich, 5th expansion phase with new terminal and other facilities – failure of the home carrier;
 - EuroAirport Basel-Mulhouse-Freiburg, new terminal to handle “Eurocross” – withdrawal of air carrier; and
 - Brussels, new terminal infrastructure – failure of the home carrier.

²³ACI EUROPE survey - 2002

²⁴A recent survey by ACI World showed that at world level 44% of airport costs cover debt service, depreciation and amortisation of assets. This indicates the extent to which airports have invested in capacity to support the beneficial growth of air service connections to the regions that they serve.

The air transport value chain

Airports:

- ✓ Long-term planning
- ✓ Specific communities
- ✓ Fixed assets

Airlines:

- ✓ Short-term planning
- ✓ Any community
- ✓ Mobile assets

Comparisons are sometimes made between airports and network carriers. However, the strong performance of the European low-cost model in recent times has demonstrated that some air carriers can generate profits even during business downturns and particularly during the exceptional period following the events of 9/11. The most profitable European low-cost carrier, Ryanair, made profit margins in excess of 20% post-9/11, despite the fact that its costs from airport charges constitute, in percentage terms, more than those borne by network carriers.

The success of European no-frills airlines is not simply built around lower costs, but also on a simpler and more market-focused pricing model. Over recent years some airlines have faced substantial structural problems, which they have not yet tackled, e.g. rising labour costs and over-reliance on governmental support. Thus, even if it were reasonable to compare the financial parameters of airports and airlines, any such comparison made against only network carriers can be seriously misleading.

This can be simply illustrated by considering the case of BAA²⁵. If a comparison is made with British Airways only, the outcome does not reflect the situation at BAA's airports, given Ryanair's strength in that airport network. An expanded ratio comparison table including two other UK based airlines (Ryanair and EasyJet) is reproduced below and illustrates how significant the choice for comparison can be.

	Operating profit % on revenue				Return on capital employed % (ROCE)			
	Ending March:							
	2000	2001	2002	2003	2000	2001	2002	2003
BAA	22,6%	25,9%	18,6%	31,7%	8,2%	9,2%	5,8%	9,4%
BA	0,9%	4,1%	-1,3%	3,8%	0,0%	4,6%	-1,3%	3,4%
Ryanair	22,7%	23,4%	26,1%	31,3%	39,7%	25,3%	24,7%	25,8%
EasyJet	10,9%	10,7%	11,1%	4,2%	16,7%	24,5%	16,5%	7,9%

A main conclusion of the ACI EUROPE study on Airport charges in Europe²⁶ was that at most airports, aeronautical charges do not cover aeronautical costs. Airports have to subsidise aeronautical charges with commercial (non-aeronautical) revenues.

“At most European airports, aeronautical charges do not cover aeronautical costs”

²⁵BAA - Owner of seven UK airports, including the world's busiest international airport, Heathrow (<http://www.baa.com/>)

²⁶Airport charges in Europe - ACI EUROPE study 2003 available in the Documentation > Economics section of www.aci-europe.org

The air transport value chain

When referring to the successful operating margins that airports have achieved, some airlines overlook the fact that some of these revenues do not originate from charges paid by airlines but from commercial activities which airports have developed at the terminal or airport area or abroad. For airports, non-aeronautical revenues currently represent on average some 43% of their total income. The entrepreneurial ability of airports to generate profits allows them to respond to the increasing user demand for further capacity and improved facilities. According to the ACI Airport Economics Survey 2001, Europe's airports strived to satisfy the demand of airlines by spending 44.8% more on infrastructure in 2001 than in 1998.

The latest edition of the ACI Airports Economics Survey²⁷ reported a significant increase in capital expenditure at European airports. Therefore, it is evident that airports still are spending heavily on infrastructure to meet the anticipated doubling of passenger traffic over the next fifteen years.

Most major airlines already receive the benefit of the commercial operations of airports through subsidised airport charges. In contrast, the majority of small airports where commercial activities cannot be adequately developed often require State subsidies in order to avoid having to levy high airport charges. Local authorities recognise the social and economic impact that an airport has on the community it serves in terms of improving regional accessibility and social expansion, stimulating tourism development, attracting investment and creating jobs.

Airports must be able to collect sufficient revenues to carry out their functions efficiently, responding to airlines' and passengers' needs and to support the economic interest of the surrounding communities.

²⁷ACI Airport Economics Survey - 2004, December 2004

Section 7 ▶

General principles for charging systems

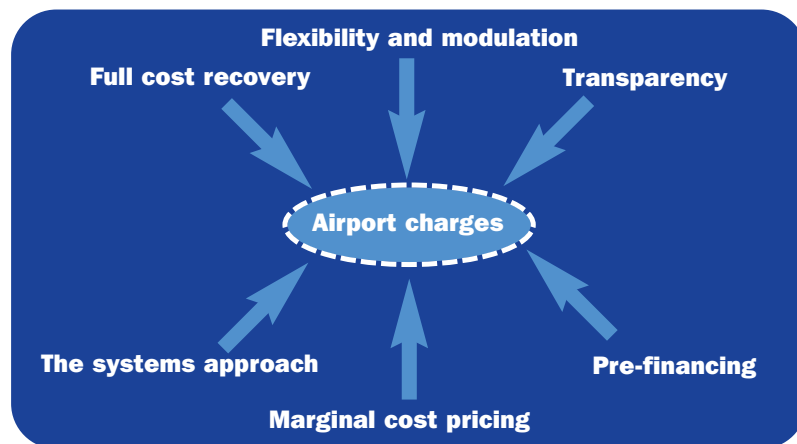


General principles for charging systems

A detailed and well-considered analysis of airport charges in Europe involves defining some general principles for charging systems. ICAO guidelines²⁸ and European Commission initiatives²⁹ have already provided a financial and economic roadmap for aviation service providers, which has been, or should be, applied at local level. These include:

- non-discrimination in the application of charges;
- no overcharging or other anti-competitive practices or abuse of dominant position; and
- transparency is required to determine the basis for charges

An airport charging system has to be flexible and robust enough to deal with such diverse issues as cost recovery, investment plans, congestion, environmental impacts, level of services, enhanced security and cross-subsidies. ACI EUROPE draws attention to the following key principles:



Full cost recovery

In its 1997 proposal for a Directive on airport charges³⁰, the European Commission recognised the fundamental right of the airport operator to cover all its costs after deduction of public subsidies and to provide a reasonable return on the capital invested.

However, as mentioned in the previous chapter, airport charges do not cover all aeronautical costs at most major airports. Therefore, commercial revenues serve to subsidise aeronautical charges. While airlines may benefit from such an approach, the benefits are seldom passed onto consumers through lower air fares.

A pure 'single till' approach obliging the airport to deduct all its commercial net income from aeronautical charges is counterproductive, and a disincentive to airports to maximise efficiency and to invest. It is also out of line with the IATA/ACI common interpretation of ICAO document 9082/6, and with the Commission's White Paper on European Transport Policy³¹ which advocates the user pays principle and the internalisation of external costs³².

“A single till approach is a disincentive to airports to maximise efficiency”

²⁸Document 9082/6, "ICAO's Policies on Charges for Airports and Air Navigation Services". See also IATA/ACI common interpretation of ICAO document 9082, Spring 2000

²⁹Commission proposal COM (97) 154 final (Official Journal C 257, 22.08.1997), amended by proposal COM(98) 509 final (Official Journal C 319, 16.10.1998) and the White Paper on Transport Policy (COM(2001) 370 final of 12.9.2001)

³⁰Commission proposal COM (97) 154 final (Official Journal C 257, 22.08.1997), amended by proposal COM (98) 509 final (Official Journal C 319, 16.10.1998). European Parliament, First Reading (Official Journal C 138, 04.05.1998). Economic and Social Committee Opinion (Official Journal C 73, 09.03.1998)

³¹White Paper on European Transport Policy for 2010: time to decide (COM (2001)370, adopted on 12 September 2001).

³²Already presented in the 1998 White Paper on "Fair taxes for using road transport infrastructure", in itself the principle is very clear: make the user pay all of the costs he creates when using any particular mode of transport.

General principles for charging systems

“It may be appropriate for airports to retain non-aeronautical revenues rather than use such revenues to defray charges - ICAO ANSConf 2000”

The argument that airports should subsidise airlines could theoretically be extended to all activities benefiting from the aviation business. Taking this line of thinking to its logical conclusion, it could be argued that all hotels or other enterprises both at the airport and in the region should also contribute to lower airport charges. Passengers are neither obliged to buy in the airport's retail outlets, nor to spend a night in a hotel around the airport. It is just a matter of opportunity and comfort.

Subsidising airport charges with commercial revenues undermines the ‘user pays’ principle. It could also lead to distortion of competition compared to other modes of transport. Therefore, it may be appropriate for airports to retain non-aeronautical revenues rather than use such revenues to defray charges³³.

Moreover, part of the non-aeronautical income stream of several airports, such as Dublin Airport Authority (DAA), ADP, Fraport and BAA comes from the activities that these airports manage abroad. Even ICAO principles recognise that non-aeronautical revenues, which serve to lower charges, should not include revenues accrued off-airport or from activities undertaken in full competition with other suppliers. The airlines' argument that airports should subsidise airlines from their non-aeronautical revenues is therefore not sustainable. When one takes into consideration the continuing liberalisation of the air transport market and the process of privatisation underway at many European airports, it is clearly not the role of airports to replace public subsidies previously administered by the State.

A model where aeronautical and commercial revenues are separated is increasingly gaining popularity among experts as the most rational approach to setting airport charges.³⁴ In the US and Australia there are examples of major airports which have a dual-till approach focusing only on airside cost recovery. Ultimately, the airport operator should have the choice of applying the approach that it deems most appropriate to ensure a reasonable rate of return on capital employed, based on local market conditions.

Flexibility to run the business

Airports operate in an increasingly competitive environment. Different kinds of competition among airports can be identified, such as competition to attract new airline services, passengers and freight, competition among airports with overlapping hinterlands, competition for a role as a hub airport and for transfer traffic between hubs, competition for the provision of services at airports and competition between transport modes.

However, the attempt by airlines to compare levels of airline and airport competition may have the virtue of simplicity, as it overlooks the fact that an airport is price regulated. Regulation therefore replaces competition in situations where an open market does not deliver an economically efficient outcome.

In a competitive environment, a decision to develop airport strategies aimed at attracting airlines through charges lower than the aeronautical costs should be the unique prerogative of the airport operator.

The price of airport services is only one of several factors affecting the airport user's choice which also depends on the quality of the service, the availability of slots, the availability of traffic rights, the potential traffic and the yield at each end of the route etc.

“In a competitive environment, airport strategies aimed at attracting airlines should be the unique prerogative of the airport operator”

³³The Conference on the Economics of Airports and Air Navigation Services (ANSConf 2000), held in Montreal in June 2000 (Doc 9764- ANSConf 2000)

³⁴“Determining the Regulatory Domain The ‘Single Till’ and the ‘Dual Till’ Approach to the Price Regulation of Airports - Response by BAA plc” March 2001

General principles for charging systems

Regional airports

In many respects, airlines are in a position of power. As far as regional airports are concerned, the European Commission in its recent Decision on the Charleroi case³⁵ stated that: *“the number of regional airports looking to develop is significant in Europe, while the number of airlines willing to run the risk of opening new routes is relatively small. The airlines concerned are therefore in a favourable position in comparison with regional airports.”*

In this regard, as stated in the Community guidelines on financing of airports and start-up aid to airlines departing from regional airports: *“regional airports face a different equation from that faced by the major European hubs, since they do not have any large reference airline that concentrates its operations on that airport in order to offer passengers the maximum number of links and profit from the large scale savings that the structure would allow them”*. However, economic and social benefits and combating air traffic congestion justify, under certain conditions, public financial support and time-limited discounts to encourage the development of air services. In this respect, the general principles on competition law laid down in the EC Treaty must be applied in order to ensure a level playing field within the airport industry.

The need for new capacity – developed sustainably

When determining airport charges, the pricing structure must ensure not only the efficient allocation of actual resources, but it must also reflect the need to develop new capacity. As the time required to recover the investment is usually quite long, the charging system should allow for price variations during the investment period with the aim of adjusting costs and revenue generation.

“The pricing structure must reflect the need to develop new capacity”

Charging policy mechanisms are one of the many tools to relieve congestion at airports which do not have the permission to expand capacity by undertaking new infrastructure development. In principle, the charging structure needs to be flexible and must warrant variations which reflects differences in marginal costs between peak and off-peak periods, in accordance with the number of movements handled by the airport. Modulation can also be used as an incentive to reduce the number of aircraft movements by encouraging the operation of larger or quieter aircraft during peak-periods.

Environmental constraints

A large number of airports are faced with capacity problems due to environmental constraints. As for other modes of transport, noise and emissions can be deemed external costs³⁶, which are not always borne by those who cause them, according to the ‘polluter pays principle’. The internalisation of these costs help airports to grow sustainably. Airports should have the right to modulate the level of airport charges according to the noise or emissions produced by an aircraft, or to introduce specific noise or emissions charges, according to local needs.

“Airports should have the right to modulate the level of airport charges according to the noise emissions produced by an aircraft”

Regarding addressing the impact of gaseous emissions and climate change, blunt instruments such as capacity constraints, taxes and charges should not be applied as they could impose greater costs on aviation and would result in little or no

³⁵Commission Decision of 12.2.2004, Official Journal L137 of 30.4.2004

³⁶As stated in the ATAG study External Costs of corridors - A comparison between air road and rail available at www.atag.org: “Air transport is the most efficient transport mode, as soon as minimal distances are exceeded. In fact the positive environmental effects of the railways are overtaken if time costs and state subsidies for the provision of infrastructure are considered. A specific treatment of the railways compared to air transport is therefore only justified for the improvement of short distance and economically viable high speed links. This approach points in the direction of an intermodal strategy at a European scale (considering the principle of seamless transport).”

General principles for charging systems



benefit to the environment. A comprehensive action plan based on emissions trading should be supported in this regard.³⁷

When comparing the situation with other transport modes, the EC Directive 2001/14³⁸ on the allocation of railway infrastructure capacity and the levying of charges for the use of railway infrastructure and safety certification states that charges may take into account the scarcity of capacity and the cost of environmental effects.

Airports should be allowed to set different prices to different users/categories of users, as long as this is carried out in a relevant, objective, non-discriminatory and transparent manner. The cost system of airports requires that an efficient pricing system may be adjusted in line with congestion and environmental considerations.

Discriminatory practices should be dealt with under national law and EU competition law. The pricing structure can, in some cases, also be considered as a public interest question (involving Public Service Obligations). Discounts should also comply with the general guidelines set at EU level.

“Discriminatory practices should be dealt with through competition law”

Improving the system

A possible way of combining the application of an airport charging system with an efficient allocation of capacity at congested airports may consist of applying, jointly with the charging system, local rules to improve the efficiency of slot allocation e.g. a slot reservation fee. A recent ACI EUROPE study³⁹ highlights the shortcomings of the current slot allocation mechanism and suggested possible methods for improvement.

According to the EC Directive 2001/14, performance schemes and reservation charges may be levied as incentives for efficient use of capacity.

Airport charges are relevant to slot ownership, valuation and slot trading. Where airports are congested and where demand exceeds supply, runway slots quickly acquire a value. This value will be increased if airport charges are held at artificially low levels by regulatory pricing controls. In such circumstances, the value of slots, within the current slot ownership and allocation regimes, accrues to the users rather than to the airports that created the capacity in the first place. As a consequence, airlines have seen their assets grow as a direct result of their own ‘monopoly’ enjoyment of the slot at an airport, whereas other stakeholders have not.

“Performance schemes and reservation charges could be levied as incentives for efficient use of capacity”

³⁷ACI EUROPE Position on Climate Change (www.aci-europe.org)

³⁸Official Journal L075 of 15.03.2001

³⁹ACI EUROPE, Study on the use of airport capacity, May 2004 available in the Documentation > Airport capacity section of www.aci-europe.org

General principles for charging systems



Transparency is key

ACI EUROPE welcomes further cooperation between airports and users. A consultation based on a clear airport proposal that might be improved through a dialogue through users' is the key for a fruitful partnership.

Transparent accounts, published on a regular basis, recording cost, revenues and subsidies, (where appropriate) are helping to provide an aggregate financial picture of the provision of airport services. With regard to projects and investments, users need to understand both the expectation for services and the financial implications for airport charges. In this way cost/benefit can be assessed and appropriate feedback can be provided to the airport operator. Consultation and disclosure of relevant information, however, are subject to certain limitations, such as the disciplines imposed on quoted companies by stock exchange rules⁴⁰.

Difficulties are sometimes encountered by airports when airlines, involved in new development plans, are reluctant to hand over the information and data required by airports; both for commercial reasons and because their corporate strategies are subject to change. The reverse can also happen when airports are being run as businesses subject to the rules of private business law. The provision of certain information could be prejudicial to the confidentiality required by good business management. An increasing willingness for both parties to share relevant information is needed. Minimum requirements covering the nature and the scope of the information could be required by the regulator.

Regardless of how the cost level is established, it is incumbent on the national regulator to ensure that it is done in a transparent manner. Once the development plans have been clearly understood, in the case where consultations do not lead to consensus, the current ICAO guidelines⁴¹ giving airports full authority to revise charges, with airlines having an advisory role, should prevail.

Airlines usually benefit from a **right of appeal** at administrative level, consistent with the regulatory regime of the State concerned and may take legal action in front of national courts. Airlines are therefore involved in all steps of the process and may influence the level of the airport charges.

“Europe's airports support the current ICAO guidelines giving airports full authority to revise charges”

⁴⁰These limitations relate to the disclosure of price sensitive information, most notably earnings forecast, unless they have been through extensive verification and are published to all investors at the same time.

⁴¹Document 9082/6 and 9082/7, "ICAO's Policies on Charges for Airports and Air Navigation Services". See also IATA/ACI common interpretation of ICAO document 9082, Spring 2000

General principles for charging systems

There is evidence of several close airline-airport partnerships, e.g. the three year agreement reached between Copenhagen Airport and its users regarding level of airport charges and the five year agreement at Frankfurt Airport which includes some risk-sharing elements.⁴² It is, however, worth bearing in mind that despite the voluntary nature of these agreements, airlines are already complaining about the charging levels they fully and freely agreed to several months previously.

Setting charges - the consultative process

In general, airports establish task forces and undertake consultation with users in order to provide key input data for future development plans. These plans may include long-term programmes as well as individual schemes. The participation of

“An 'appropriate level of consultation' between the airport operator and its users is key to the success of both”

users may encourage timely investment, especially in runway and terminal capacity, while continuing to boost efficiency. However, investment by airport operators is substantially a business decision, closely allied to the overall strategy of the company. An ‘appropriate level of consultation’ (providing details of cost, capacity enhancement, service quality implications, retail returns etc.) between the airport operator and its users is key to the success of both. It is the responsibility of the airport to consult with its users and to attempt to convince them, as best as is possible, of the merits of any particular decision, programme or scheme. Expansion can also be coordinated among airports, airlines and public authorities, as is the case in Germany⁴³.

It must be remembered, however, that the interests and time horizons of airports and their users will not always be identical and that some decisions will not be reached on the basis of agreement. Consultation with users does not make the users the airport owners nor does it give them the ‘right of veto’ against any proposals.

The fact that airports and airlines have vastly different planning timeframes is well illustrated by the case of Manchester Airport’s Terminal 3, constructed mainly for the UK’s largest carrier in 1997. During the construction process, the main user constantly demanded that more airbridge-served stands be provided over and above the number original proposed by the airport. As a result, Manchester airport agreed to provide more airbridges - and indeed three more were paid for by the main user. Yet, only seven years after completion, because of changes in the main user’s business strategy, which have involved a significant downsizing of aircraft used by the carrier, it is now apparent that the terminal now has too many airbridges which cannot be used by the regional jets which form the bulk of the carrier’s fleet operating from Manchester today.

Airlines, in particular, have the incentive to demand investment which may not be economically justified, in as much as:

- the investment may benefit that airline individually, whilst the cost is shared amongst all users; and
- except for some specific cases, individual airlines do not manage complex airport projects, following the principles of sustainable development.

Airports frame their business plans within this context, taking a long-term view (up to 30 years) of the overall impact that the airport has on the surrounding region.

⁴²Annex 3 provides details of these two cases.

⁴³The master plan envisages the demand-oriented planning for airport infrastructure based on forecasts predicting that German airports will handle 256 million passengers by 2015, an increase of 74% over 2003. The master plan focuses on the Frankfurt, Munich hubs and airports in Hamburg, Hanover, Berlin, Düsseldorf, Cologne/Bonn and Stuttgart.

General principles for charging systems

Pre-financing of airport capital expenditures

In order to avoid abrupt increases in the level of charges when new facilities are made available, the gradual inclusion of the cost of infrastructure yet to be built should be permitted. Financial transparency and full consultation with airlines should be granted. Pre-financing leads not only to a smoother increase in the level of charges but also a lower level since it allows airports to face their banking constraints at an earlier stage in the process. Users benefit, not merely because of an equivalent reduction in the airport's rate bases when the infrastructure comes into service, but also from a reduction in the overall cost of raising capital.

“Pre-financing leads to a lower level of charges since it allows airports to face their banking constraints at an earlier stage in the process”

In line with this principle, ICAO Doc 9082/6 acknowledges that: *“pre-financing carries the added benefits to both airports and their users of reducing the airport operator's reliance on external sources of funding, keeping debt service payments to a reasonable level, and safe-guarding the airports' credit rating.”*

Furthermore, EC Directive 2001/14 acknowledges that an airport may set higher charges on the basis of long-term costs of specific investment projects if these increase efficiency and cost-effectiveness. Such a charging arrangement may also incorporate agreements on the sharing of the risk associated with new investment.

Marginal cost pricing

Economic theory states that if the price is equal to the marginal cost of output, an efficient allocation of resources among users is being obtained. However, for airports with excess capacity the marginal cost is very low and pricing at this level will not produce enough revenues to cover total costs. In this case, the application of a pure marginal cost pricing would inevitably lead to financial losses.

According to ICAO guidelines⁴⁴ *“airport operators should be free to adopt pricing policies that take into account local circumstances. Flexibility in using economic principles in pricing is deemed fundamental and might include, depending on the case, some aspects of marginal pricing, such as peak period charges, where appropriate, as useful tools for managing capacity, where justified.”*

The system approach

Regional airports have an essential economic role and significant social impact across Europe, as has been recognised by the European Community⁴⁵. Inside a network⁴⁶, however, airports' economic and social benefits would be jeopardised if most of the smallest airport operators were not to be adequately supported by the State, regional or local administrations, or sometimes by the larger airports in the same network.

Airports can be managed on an individual basis, as airport systems or as airport networks. Each of these models can provide efficient and cost-effective services for users. Airport networks, when prudently managed, can achieve substantial economies of scale, promote regional growth, enhance smooth functioning hub-and-spoke operations and permit rapid adoption of 'best practices'.

⁴⁴Document 9082/6, "ICAO's Policies on Charges for Airports and Air Navigation Services". See also IATA/ACI common interpretation of ICAO document 9082, Spring 2000

⁴⁵Commission proposal COM (97) 154 final (Official Journal C 257, 22.08.1997), Commission Decision of 12.02.2004 concerning advantages granted by the Wallon Region and Brussels South Charleroi Airport to the airline Ryanair in connection with the establishment at Charleroi and Community Guidelines on financing of airports and start-up aids departing from regional airports

⁴⁶Network structure - i.e. more airports under the management of one organisation

General principles for charging systems

Many businesses cross-subsidise between different services. For example, airlines cross-subsidise marginal routes with revenue accrued from profitable routes. Any debate on cross-subsidies requires a clear understanding of cost and charges.

The 1997 European Commission Proposal for a Directive on airport charges acknowledges as valid the practice of cross-subsidisation among airports of the same group, functioning as an airport system managed by the same airport operator (e.g. Milan Airports managed by SEA) or as an airport network covering airports of various sizes within all or parts of a country and managed by one entity (as is the case in Portugal, Spain, Norway and to a certain extent in Sweden).

Airport networks do not necessarily have to raise aeronautical charges at the major airports to support the deficits of small airports that generate marginal traffic as this marginal traffic may not generate additional costs for the major airports. The managing body of an airport network can choose to bear the deficits at the small airports through a lower return on capital invested for strategic, regional or social reasons. Developing the hub-and-spoke system and promoting regional areas are related objectives. It is up to the owner to accept a lower return on capital invested as a measure of promotion or support.

The level of aeronautical charges per passenger applied by airport groups, such as Aena or ANA⁴⁷, is below the average reported by many other airport operators. When aeronautical charges do not cover all the aeronautical costs, aeronautical cross-subsidisation obviously cannot take place.

“An airport operator can choose to bear the deficits at its small airports through a lower return on capital invested for strategic, regional or social reasons”

⁴⁷ANA - Aeroportos de Portugal SA (www.ana-aeroportos.pt/ANAInglês/HomePageAna.htm)

Section 8 ▶

Conclusion



Conclusion

Despite recent economic and geopolitical crises, air passenger traffic is bouncing back strongly and is set to double across Europe by 2020. In the face of this, airports look set to become the major bottleneck in the air transport value chain. The question remains: if airport charges are further constrained, how can airports build for the future? How can they meet the airlines' demands for new infrastructure and facilities? And if airports are not in a position to build for the future - who will?

Thus far, the financial independence of Europe's airports has been critical in allowing airport operators to develop the capacity (runways, terminals) to meet the demand for air transport and to allow airports to deliver massive social and economic benefits to the communities they serve. To ensure that airports are able to continue to grow into the future, it is important that any proposals on airport charges reflect the realities of the aviation business and that any legislative initiative at EU level does no more than lay down the principles and a framework for

charging. It must be left to individual countries to decide how best to implement these provisions thus giving airports the essential commercial freedom consistent with the internationally recognised principles of transparency, non-discrimination and cost-relatedness. The fact is that airport charges are already subject to regulation, complying with these principles. In accordance with its own national law, it is for each country to ensure the involvement of the three prime parties with a direct interest in establishing airport charges: the airport operator, the regulatory power and the airlines.

“To ensure that airports are able to continue to grow into the future, it is important that any proposals on airport charges reflect the realities of the aviation business”

ICAO guidelines 'ICAO's Policies on Charges for Airports and Air Navigation Services' currently provide the basis for setting airport charges. Their purpose is to avoid overcharging or other anti-competitive practices, including stipulations for transparency and access to all financial data used to set airport charges. This procedure allows for full consultation before any change to the amounts levied or to the process through which charges are determined.

It is crucial that airports and airlines work together for the development of the aviation sector and for the benefit of the economy and society as a whole. In doing so, both parties must engage in a constructive way to ensure that appropriate facilities are put in place to meet the current and future needs of air passengers. This is the only way to ensure a fair and rational framework for airport charges, built upon both airline and airport operating commercial and customer-focused business models. It is important that decisions made now are balanced and reasonable, not only for today's passengers but because the consequences of such decisions will ultimately be a legacy to the passengers of the future.

“The fact is that airport charges are already subject to regulation and control, complying with the internationally recognised principles of transparency and non-discrimination”

Annexes



Annex 1

Major European airport projects underway

Airport/Terminal	Planned investment	Opening date/ major projects
London-Heathrow	USD 9.2 billion (incl. USD 6.6 billion for T5)	terminal 5 - first stage not expected to open before 2008; improvements at the other four terminals
Madrid-Barajas	USD 5.4 billion	new pax + cargo terminals, two new runways
Frankfurt	USD 5.67 billion	modernisation of terminal 1 and 2, fourth runway and terminal 3
Paris (third airport)	USD 4.0 billion	new airport after 2015
Paris (CDG + Orly)	USD 3.0 billion	terminal & runway work until 2006
Barcelona	USD 2.7 billion	third runway, new pax & cargo terminals
Berlin-Schönefeld	USD 2.64 billion	first-phase expansion into BBI until 2010
Lisbon	USD 2.4 billion	Completely new airport at Ota not before 2010 - project on hold
Lublin/Poland	USD 2.3 billion	completely new airport planned in eastern Poland
Moscow-Sheremetyevo	USD 2 billion	new Terminal 3, general upgrade
Amsterdam-Schiphol	USD 1.466 billion	terminal, baggage and airside investments - 2005-2009
Don Quijote Airport/Spain	USD 1.36 billion	completely new airport near Ciudad Real
Manchester	USD 1.35 billion	planned capital investments until 2010
Moscow-Vnukovo	USD 1.3 billion	complete overhaul of all facilities
London-Stansted	USD 1.26 billion	improving ground access, and the extension of terminal and airfield facilities
Copenhagen	USD 1.2 billion	new pax & cargo terminals, road & rail access
Düsseldorf	USD 1.1 billion	new terminals, rail station, runway extension
Rome (FCO + CIA)	USD 1.001 billion	investments foreseen in the 2000-2010 infrastructural development plan
Vienna	USD 880 million	new Terminal 3, apron, tower, office park
New Crete airport	USD 715 million	planned airport west of Chania, near Kastelli
Thessaloniki 'Makedonia Airport'	USD 715 million	runway extension, new passenger terminal
Lyon-Satolas	USD 700 million	doubling of capacity
Zagreb	USD 600 million	Master Plan projects
Prague	USD 585 million	major terminal expansion, new runway
Lisbon	USD 530 million	improvements at the existing Portela Airport
Nantes	USD 526 million	new airport at Notre Dames des Landes by 2010
Hamburg	USD 500 million	new terminal & satellites, new apron

Note: Historical dollar conversion rates

Source: Momberger Airport Information 2004, www.Momberger.com

Annex 2

Major European airport projects recently completed

Airport/Terminal	Investment	Opening date
Leipzig/Halle	USD 1 billion	new terminal with rail station, new runway completed 30 June 2003
Munich	USD 1.1 billion	second terminal opened on 29 June 2003
Istanbul-Sabiha Gökçen	USD 700 million	New airport opened on 8 April 2001
Athens-Spata	USD 2.3 billion	new airport opened on 28 March 2001
Oslo-Gardermoen/Norway	USD 2.9 billion	on 8 Oct. 1998 - new airport
London-LHR "Heathrow Express"	USD 735 million	rail service started in June 1998
Munich International/Germany	USD 5.67 billion	opened 17 May 1992
Zürich	USD 1.6 billion	'Project 2000' Fifth Expansion Phase, with staged opening in 2003 and 2004
Funchal/Madeira	USD 550 million	runway, apron extension & terminal upgrade
Cologne/Bonn	USD 610 million	new terminal with rail link & station (completed)
Stockholm-Arlanda	USD 720 million	third runway & capacity increase (completed)
Stuttgart	USD 800 million	third terminal (completed); second runway, mainline rail station

Note: Historical dollar conversion rates
Compiled by Mombberger Airport Information; based on confirmed figures/estimates December 2004

Annex 3

Airport charging systems in Europe

Country	User consultation	Approval	Cost-relatedness (do aeronautical charges cover aeronautical costs?)	Charges regulation
Austria Vienna (VIE)	YES Consultation with the users and IATA, on invitation of the Austrian CAA.	Austrian CAA's approval by law. There is no scope for airport users to appeal against such an approval.	YES	A new price cap formula was set in December 2001, for a five-year period from November 2001 to December 2006. This price cap formula means in detail If traffic growth =0 or <0 than L=I If traffic >0 than L = -0,35*T+I Parameter: I= last published CPI in year n-1 T=traffic growth in tons MTOW for the landing- parking and infrastructure airside tariff and traffic growth passengers for the passenger service charge and the infrastructure landside tariff $T = (\text{actual } n-2 + \text{forecast } n-1 + \text{plan } n) / 3$ L= tariff change in %
Denmark Copenhagen (CPH)	YES Mandatory consultations with users (6-7 months). The negotiations may include issue on the supply and quality of services and differentiation of charges. If the agreement is entered into by the parties, the Ministry of Transport (MoT) shall base its consideration of CPH's application for changes to the charges on such agreement unless it is contrary to	The MoT is responsible for defining the guidelines for setting charges. The price-cap is basically fixed through negotiations between the airport operator and the airlines or with organisations representing them. If the parties do not reach an agreement, the MoT uses a price-cap to the charges level after hearing CPH and the airlines. In addition to the above mentioned adjustment, the MoT shall, upon specific assessment, and only after prior application	NO Narrow coverage of expenses today. The Danish Government believes in separating aeronautical and non-aeronautical revenues (dual till system).	The Air Navigation Act specifies that for the use of public airports charges can be imposed in accordance with the rules set out by the Ministry of Transport. The Transport Ministry has stated that the airport should be allowed to make a reasonable profit. The model for adjustments of traffic charges at CPH is set out in section 71 of the Danish Air Traffic Act. Under the present MoT-model a ceiling is fixed in advance for changes to the traffic charges level for three years (starting from 1st January 2003-2005 and 2006-2008). The ceiling is determined through negotiations between the airport operator and the airlines, or - if the parties cannot reach an agreement - by MoT according to the price - cap mentioned under "Approval".

Annex 3

Airport charging systems in Europe

Country	User consultation	Approval	Cost-relatedness (do aeronautical charges cover aeronautical costs?)	Charges regulation
Denmark Continued	important interests in society or general traffic considerations.	from CPH, be in a position to approve a separate increase in charges beyond the ceiling fixed, in the event that CPH incurs substantial cost increases as a result of new specific requirements imposed on the airport by the authorities.		The model does not preclude increased differentiation of traffic charges. In January and February 2002, CPH and the Danish airlines negotiated for a prolonged airport charges agreement. In March 2002 CPH negotiated with IATA (representative for foreign airlines). In each of the years 2003, 2004 and 2005, the airport charges shall be increased by 2.75 % of the charges applicable at the end of the preceding year.
France ADP Nice (NCE)	YES Users are consulted by means of 2 committees: 1) UCP with the IATA representatives (their comments may lead to amendments). 2) the Economical consultative committee (ECC) with the representatives of the main airlines operating in Paris and the representatives of Air Transport Unions. If approved by ECC, the project is submitted to the ADP Board for decision.	Proposal by the managing body of the airport (ADP) to the Ministry of Transport and Ministry of Finance. Consultation with UCP and the IATA representatives and with the ECC. The ADP Board decision is submitted to the two Ministries for approval within the following month; if no answer, the project is considered approved If one of the two Ministries does not approve the Board decision, the Ministries have to arbitrate by deciding charges modification themselves or organising new consultation with users.	NO Airport charges do not fully cover costs. Extra aeronautical charges subsidise aeronautical charges.	According to the new dispositions of the art. R 224-2 of the Civil Aviation Code. A modification of airport charges regulation is under study and it may entry into force in the coming years, in order to introduce an economic regulation of airport charges (applying a dual-till approach).

Annex 3

Airport charging systems in Europe

Country	User consultation	Approval	Cost-relatedness (do aeronautical charges cover aeronautical costs?)	Charges regulation
France Continued	If not approved by ECC, a new project may be submitted to ECC again, in order to get the agreement, or the refused project may be submitted to the ADP Board for decision.			
Germany Frankfurt (FRA)	YES Consultation with users takes place 4-5 months prior to the approval of charges, and task force meetings precede the official dialogue. After consultation users also get a warning letter in advance as required by ICAO. The investment and operational costs from capacity expansion do not fall under the agreement concluded between airlines and the airport.	Approval by the local authority office on behalf of the Federal Ministry responsible for air transport. The level and the split of charges are approved by the so called "Airport Charges Review Board" (regulator, the airline organisations and the airport). The structure of charges is to the discretion of the airport who tries to set them taking in mind the different interests of the parties employed.	NO Aeronautical charges not fully cover costs. Other revenues subsidise aeronautical charges. In 2001 total revenues increased by 6% vs. an increase of total costs by 13.1% In 2003 total costs were covered for 86,5% by total revenues.	Charges are formally approved according to German Air Law, § 43 LuftVZO. Current regulation on equity (§ 315 BGB) and EU law are likewise consulted. Five-year-agreement (2002-2006) signed between Fraport and the airlines. Charges rise by 2% annually, if the passenger traffic forecast ratio is met. The ratio multiplied by the number of departing passengers defines the maximum allowable income from airport charges. If the resulting income is higher due to traffic growth, the extra-income goes to the airlines by one-third. Two-thirds remain for Fraport. Lower traffic resulting in lower incomes has to be compensated by the airlines on the same pro-rata basis.
Greece Athens International Airport	YES Setting aeronautical charges through consultation with IATA User Charges Panel and with the major home-based carriers. Setting the	Airport charges are regulated by the Airport Development Agreement which have been signed between the Government and the managing body of the airport.	NO Aeronautical charges currently cover approximately 60% of corresponding costs (despite the dual-till system,	According to the Airport Development Agreement the managing body of the airport determines charges "on its own absolute discretion and without further approval, permission or licence", with the Hellenic CAA's ensuring that the overall "Air Activities Profit Cap" is not exceeded.

Annex 3

Airport charging systems in Europe

Country	User consultation	Approval	Cost-relatedness (do aeronautical charges cover aeronautical costs?)	Charges regulation
Greece Continued	centralised ground handling infrastructure charges through consultations with the Airport Users Committee.		for the time being part of the commercial revenues subsidise aeronautical charges).	
Ireland Dublin Airport Authority PLC	YES Bilateral and multilateral discussions with handlers and airlines have traditionally been held. The Dublin Airport Authority consults with airline groups including IATA and charter and cargo carriers about its airport charges proposals. It has also made submissions on this issue to the independent regulator - the Commission for Aviation Regulation.	Up to 2001, the regulator for airport charges was the Minister for Public Enterprise. Under the Aviation Regulation Act 2001 the Commission for Aviation Regulation assumed the role of independent regulator for airport charges. According to the Act, the Commission had to specify the maximum levels of airport charges that can be levied by the managing body of the airports with more than one million passengers (Dublin, Shannon and Cork airports). Following the enactment of the State Airports Act, 2004, Shannon and Cork airports were removed from direct regulation. The Act also amended the Commission for Aviation Regulation's objectives. The Italian CAA	NO Currently airport charges are subsidised by commercial revenues through a single till mechanism.	On August 26th 2001, the Commission for Aviation Regulation issued its determination in respect of the maximum levels of airport charges that may be levied by Aer Rianta in respect of Dublin, Shannon and Cork Airports in accordance with Section 32 of the Aviation Regulation Act 2001. Prior to this, there had been no increase in airport charges since 1987. Overall, the Commission used a standard version of the CPI-X regulation (price cap on the maximum revenue yield per passenger). The Commission determination was effective from 24th September 2001. On February 9th 2002, the Commission issued a varied determination after the original Determination was referred back to it by the Aviation Appeal Panel. On 24th March 2004, the Commission issued an Interim Review of the Determination. The Commission for Aviation Regulation is currently engaged on developing a new Determination on the maximum allowed levels of airport charges at Dublin. By statute, the new Determination must be completed by 1st October 2005.

Annex 3

Airport charging systems in Europe

Country	User consultation	Approval	Cost-relatedness (do aeronautical charges cover aeronautical costs?)	Charges regulation
Italy Milan airports (MXL/LIN) Rome airports (FCO/CIA)	<p>A special consultative commission ("Sangalli"), managed by the Minister of Transportation, has been operative until 1998.</p> <p>The users Committee meeting is called at least once a year to discuss issues related to regulated charges.</p>	<p>(ENAC) is in charge of monitoring the process of aeronautical charges regulation according to a new regulatory formula defined by CIPE in 2000.</p> <p>At the moment charges have been set up by Ministerial Decrees</p>	<p>NO</p> <p>Costs of infrastructure are not covered by the current level of charges (still in average lower than EU level).</p>	<p>A new regulatory formula, defined by CIPE in August 2000 on a dual till cost recovery basis, took into account traffic levels, the level of costs/investments, quality service, environmental aspects, productivity efficiency and European benchmarking.</p> <p>The implementation of this new methodology has been largely discussed by ENAC and airports. Currently Italian airports are negotiating for the definition of the regulatory framework setting airport charges for 5 years period with ENAC and the Ministry of Transport.</p> <p>This process will lead to the planning agreement with ENAC to be approved by Ministerial Decree.</p> <p>The current level of airport charges became effective in February 2001 without any adjustment since then.</p>
Netherlands Schiphol Group	<p>YES</p> <p>Schiphol consults its users (airlines, BARIN, IATA, SAOC, General Aviation operators) during the airport charges consultation meeting and makes its proposal to the Minister of Transport.</p>	<p>The Minister advises the Crown, who approves it through Royal Decree. After publication of the Royal Decree and scheduled moment the adjustment of the airport charges the new airport charges regulation (Havengeldregeling) is applicable.</p>	<p>YES</p> <p>A dual till system is applicable, thus airport charges are cost-oriented on an overall level and based on all aviation costs including financing costs.</p>	<p>The approval process is currently based on art.36 Airport Act. Under the recently planned Aviation Act, the Netherlands Antitrust Authority will shortly take over responsibility for the supervision of airport charges.</p> <p>Decision has been taken by the cabinet in 2004, discussion in Parliament probably in spring 2005.</p>
Norway Avinor (51 airports)	<p>YES</p> <p>Mandatory formal hearings before charges are set. Meetings with IATA</p>	<p>Airport charges are included in a formal regulation laid down by the Ministry of Transport and</p>	<p>NO</p> <p>Aeronautical charges do not fully cover aeronautical costs</p>	<p>The charges regulation is set by the Ministry of Transport and Communications based on the Air Navigation Act of 11 June 1993. The regulation covers charges for aviation</p>

Annex 3

Airport charging systems in Europe

Country	User consultation	Approval	Cost-relatedness (do aeronautical charges cover aeronautical costs?)	Charges regulation
Norway Continued	and local airlines	Communications. Charges are allowed to increase according to the Consumer Price Index (CPI) and for 2003 and 2004 in addition also to cover security costs.	and commercial revenues are necessary (single-till system).	facilities and services placed at the disposal of aircraft owners and operators. The charges are Take-off charge, terminal (passenger) charge, air navigation facility charge and de-icing charge. As from 1 June 2004 a separate security charge is introduced. The first three charges may on average increase only according to the CPI. The other two are set separately based on costs.
Poland Warsaw International Airport	YES Mandatory gathering opinions of constant users of the airport or their representative organisation (1 month) before presenting the projected charging system to the Polish CAA	YES CAA approves the charging system. The charging system (and its changes) has to be sent to the CAA three months before the planned entry into force. For approval the system has to specify standards and additional charges, rebates, discounts and how the charge have been calculated. The CAA may refuse to approve a charge or change it in case the charge does not comply with the rules set out in the aviation law or international requirements.	YES	Polish Aviation act (art. 77) states that airport operators can collect airport charges for services connected with take-offs, landing, parking, handling of aircraft, passengers and cargo, aircraft and their crew. Minister of transport (today: Infrastructure) has a special delegation to issue decree on specific requirements on setting and approving airport charges. The decree states how the charges have to be calculated and defines the cost basis for the calculation.
Portugal ANA	YES Within 30 days from the possible reform in amounts of charges, consultation of the	Approval by the Portuguese CAA within 45 days following the receiving of the proposal. If the airport operator	NO Single-till system	ANA charging regime is regulated by law: -Decree Law n° 404/98, which establishes the rules for the permission of private use of aeronautical public property goods

Annex 3

Airport charging systems in Europe

Country	User consultation	Approval	Cost-relatedness (do aeronautical charges cover aeronautical costs?)	Charges regulation
Portugal Continued	<p>Airport Users Committees (and RENA) by the airport operator (ANA) which makes a proposal to the Portuguese CAA (INAC).</p>	<p>does not agree with it, it may appeal to the Minister of Transports (Minister of Social Equipment). Traffic charges are published by decree by the Government; (handling and rental fees only need the approval of the CAA; other commercial charges are set by the managing body of the airport).</p>		<p>and for the activities developed on public airports or aerodromes; -Decree Law nº 12/99, which classifies and define traffic, handling and rental charges; -Decree Law nº 280/99, which establishes the changes regarding new charges definitions and the annual update of charges level. Traffic charges are subject to approval by the Portuguese Government in an annual basis. ANA´s seven airports are considered as a system. Therefore, a global cost basis, not segmented by airport, is applied. Although ANA airports are not subject to any specific pricing formula, the aviation business is being financed by non-aviation revenues. The capital cost is calculated based on a reasonable rate of return to be applied over the capital invested in aviation activities. WACC (Weighted Average Capital Cost), based on CAPM (Capital Asset Price Model) methodology is used. Cost recovery takes into account a productivity improvement projection.</p>
Spain AENA	<p>YES Annual meetings with airlines, 4 months before the approval of Aena's proposal.</p>	<p>Government approval (Ministry of Public Works) by law.</p>	<p>NO Costs in 2002 were covered for 85% by aeronautical charges.</p>	<p>Article 49 of AENA's Statute, regulated by Royal Decree 95/1991 states that "the operating budget will be in accordance with the cost effectiveness principle, so that the operating revenues should cover all the operating costs and provide a reasonable return on fixed assets". Profits are used to finance user investments (Law 25/1998, article 11)</p>

Annex 3

Airport charging systems in Europe

Country	User consultation	Approval	Cost-relatedness (do aeronautical charges cover aeronautical costs?)	Charges regulation
Spain Continued				All airport charges are regulated by law. Increases in airport charges are submitted to Government decision.
Sweden Luftfartsverket (LFV) is the Swedish airport authority and operates 19 airports in Sweden	YES Twice yearly and 60 day before price adjustments.	Airports charges are regulated by LFV with a price ceiling set by the government.	NO Cost-recovery on aeronautical charges is 81%.	Increases are in traffic charges cannot, on average, increase more than the net price index. Therefore, lost volume cannot be offset by price hikes. LFV sets airline charges according to the single-till approach. Proceeds from non aeronautical activities are only 35-40% of total revenues. LFV structures its airport charges so as to achieve long term profitability at an after-tax rate of at least 8% on invested capital. Airport charges are designed to reflect external costs, on a user-pay principle and are set according to ICAO principles.
Switzerland Zurich Airport Operated by Unique	YES The airport operator is obliged to “ensure safe and proper operation and provide the necessary infrastructure for this purpose” and “it is empowered to levy charges” (Article 10, VIL). Any proposed increase in airport charges has to be subject to a consultation process, which	FOCA supervises the specification and use of airport charges, based on the provisions of the Pricing Control Act (1985, Article 33 VIL).	NO Cost-recovery on aeronautical charges is 80%. The objective is to establish a dual-till system.	In Switzerland airport charges are regulated in the Ordinance on Civil Aviation Infrastructure (VIL; SR 748.131.1 Articles 32-35), which is based on the Civil Aviation Act. The only legal framework today is set up the Swiss price surveyor demanding market comparability and reasonable profits. The airport operator planned to adjust its charges with effect from the 2003 Summer time table. FOCA has, however, postponed this date to September 2003. The idea is to refinance new high quality infrastructure on the basis of the “user pays” principle. In order to ensure that passengers are not made to bear the burden of the grounding

Annex 3

Airport charging systems in Europe

Country	User consultation	Approval	Cost-relatedness (do aeronautical charges cover aeronautical costs?)	Charges regulation
Switzerland Continued	lasts two months. Here, the airport operator is required to report its proposed adjustments to charges to its business partners and to the Swiss CAA (Article 35 VIL).			of Swissair, Unique is prepared to accept a reduced profitability on the aviation operations, ensuring that charges are in line with those of other airports across the world.
UK "Designated airports" (Gatwick, Heathrow, Stansted, Manchester). All the other airports are free to set their own charges (subject to notification to the CAA before they take effect). The CAA deals with complaints against airport operators by interested parties in cases where airports are exploitative, discriminatory or predatory. The BAA's Scottish airports have a voluntary cap on charges increases.	YES According to the Airports Act, - the Civil Aviation Authority (CAA) refers the "designated airports" to the Competition Commission (formerly the Monopoly and Mergers Commission), who undertakes the major part of the investigation (6 months), and recommend a price formula to the CAA. The CAA typically consults the industry and users on the issues to be referred to the Competition Commission and holds generally further consultations over the whole process,	Approval by the CAA. The Airports Act 1986 enables the CAA to investigate and regulate anti-competitive behaviour by airports (see section 18-19 of the Act), including in particular conduct which is unreasonably discriminatory against a particular user or class of users or amounts to predatory pricing in respect of airport charges.	NO (charges are set under the single-till principle)	The Airports Act of 1986 establishes a system of economic regulation whereby the principal airports must obtain permission in order to levy airport charges. Economic regulation of designated airports is a combination of price-cap and rate-of-return regulation. The price cap, which is similar to the price-caps applied to other regulated industries in the UK, encompasses a RPI-X formula applied in the form of an average revenue yield per passenger. Through the intensive review process by the CAA, the charges-cap is set every 5 years, applying a single-till approach. In 2003 the CAA finalised its price-cap review for the period 2003-2008. In its advice to the Competition Commission, the CAA recommended an end to the "single-till" approach to regulation where profits from airport retail activities are used to reduce airport charges. It considered that the "single-till" approach involves excessive regulation and fails to promote effective airport operation and development, especially at the capacity constrained Heathrow and

Annex 3

Airport charging systems in Europe

Country	User consultation	Approval	Cost-relatedness (do aeronautical charges cover aeronautical costs?)	Charges regulation
	<p>which takes about 15 months. Currently, there are many airline consultation groups at the designated airports which discuss issues relating to airport charges. Information disclosure and consultation requirements on the airports have been enhanced following the last regulatory review.</p>			<p>Gatwick airports. It proposed that regulation should focus just on the services in which the airport operator has clear monopoly power. Higher prices at congested airports, as a consequence of the dual-till system, would increase the prospect that available capacity was utilised as well as possible.</p> <p>In February 2003, following the Competition Commission opinion, the CAA backed down from its initial position by setting the price-cap consistent with a single-till approach. The CAA recognised that its duties included the encouragement of investment, and noted the substantial investment programmes required at the three London airports. They therefore set price caps which were intended to allow BAA to fund this significant investment, despite airline calls for lower price caps given their difficult financial positions at the time. Prices for 2003/04 to 2007/08 are allowed to rise at Heathrow by 6.5% per annum in addition to inflation (to boost investment, particularly for Terminal Five) while prices at Stansted and Gatwick will be maintained in real terms.</p> <p>The UK charging regime also includes a ground-breaking rebate element on their airport charges where BAA will pay users if certain service quality standards are not met. Allied to this, the CAA will introduce an airfield congestion element to the rebate scheme for both arrival and departures in 2005. The maximum level of rebate will reach 3% of charges revenue.</p>

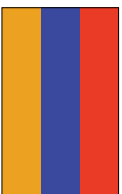
Airports Council International

European Council International

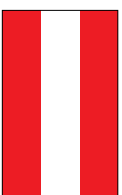
Serving airports in 45 countries



Albania



Armenia



Austria



Azerbaijan



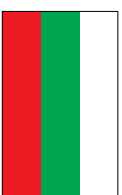
Belarus



Belgium



Bosnia and
Herzegovina



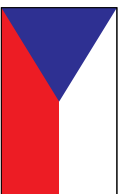
Bulgaria



Croatia



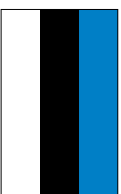
Cyprus



Czech Republic



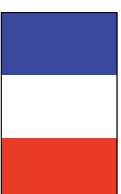
Denmark



Estonia



Finland



France



Georgia



Germany



Greece



Hungary



Iceland



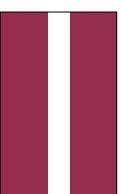
Ireland



Israel



Italy



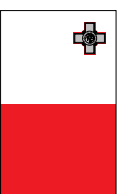
Latvia



Lithuania



Luxembourg



Malta



Moldova



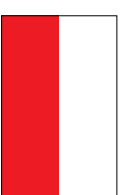
Monaco



Netherlands



Norway



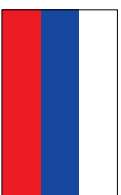
Poland



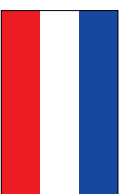
Portugal



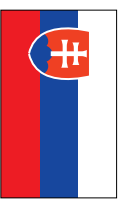
Romania



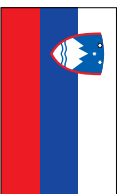
Russian Federation



Serbia and Montenegro



Slovakia



Slovenia



Spain



Sweden



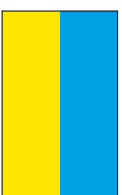
Switzerland



The Former Yugoslav
Republic of Macedonia



Turkey



Ukraine



United Kingdom