REMEMBER THE GOOD OLD DAYS?
REMEMBER when aviation was extraordinarily glamorous. When airlines and airports were essentially arms of the State, fares/tariffs were set by IATA and every air route was subject to negotiations between national governments...and you had to buy your ticket at an airline office or from a travel agency.

Oh, how the times have changed.

How indeed. Air transport in Europe has evolved irrevocably over the last two decades. The liberalisation of the market by the European Union in the mid-nineties was the defining moment — the domino that fell with a massive ripple effect on airlines, airports, regions and people.

THE MOVE THAT MADE AVIATION REALLY FLY

Suddenly, any airline could fly from one EU airport to another. This liberalisation initiative by the EU ultimately reduced the cost of air travel, increased the connectivity of Europe’s regions and made air travel more accessible to all.

New airline business models quickly emerged, challenging ideas of what airline service is and how it operates and putting pressure on national carriers and airports. Around the same time, more governments reduced their interests in national airlines and airports, allowing a keen business mindset to emerge.

To top it off, the continent’s swift adoption of the internet and its ramifications on the leisure, tourism and travel industries empowered air passengers to initially research and ultimately buy their tickets online.

And while all of this enabled air traffic to grow substantially in Europe, an intensely competitive market environment for airlines and airports emerged.
HOW THE AIRPORT BUSINESS WORKS

While much of the glamour associated with air travel is associated with the airlines’ much promised pampering of the passenger (or low prices), there is no escaping the fact that every flight begins at the airport.

Back in the day, European airports were required to focus exclusively on the need of their national flag carrier, but now in the 21st century they are armed with market research data, route development incentives and marketing campaigns, aimed squarely at attracting as wide a variety of airlines to their airport, as possible.

The reasons for this are simple: Airports are fundamentally local businesses and key strategic assets for the communities they serve. They cannot move to a better location, all they can do is aim to make their geographical position better, more attractive and more competitive.

Due to their capital intensive nature, they face a large proportion of fixed costs: maintenance & replacement of infrastructure, extensive regulatory obligations in areas such as security, firefighting and airfield safety – none of these is cheap. And crucially, if an airline ceases operations at an airport, the airport cannot reduce its costs correspondingly. You cannot shut down half a runway or park a terminal in the desert.

And for every lost unit of traffic, not only does the airport miss out on the aeronautical revenues from airport charges – it also loses the non-aeronautical revenues from business areas such as shopping, food & beverage, car parking and so on. Non-aeronautical revenues account for almost half of airports’ income today.

These two consequences of lost revenues conspire to create intense competitive pressure. So a good volume of passengers travelling through an airport is vital to survival – a natural incentive for the airport to seek to enlarge its catchment area.

As with any business, you want to minimise exposure to revenue loss. What is the best way an airport can do that? Roll up its sleeves, get its regional economic data, traffic incentives, low airport charges and marketing team together, go out and get more clients.

And increasingly, European airports are finding that when they do, they are facing tough competition from their peers in what is now an expanded airport market. Competitive pressures within the air transport sector have been underlined by broader consumer empowerment thanks to the internet and better surface access links. This means that airports have a natural incentive to provide the best deal possible and most efficient infrastructure, if they want to attract passengers and airlines and avoid those painful traffic losses.

The reality today is that airports can and do lose customers, now that airlines and passengers have far more choice in a liberalised market. And when they lose a customer, the nature of airport economics ensures that the impact is extremely painful.
THE TIRED ACCUSATION OF ‘MONOPOLY’

Yet despite the enormous changes in the businesses that make air transport happen, in particular the very distinct and competitive nature of the airport business, regulators are still stuck in the past. They continue to treat airports like traditional infrastructure monopolists, like suppliers of water or electricity, and they are regulating based on this outdated assumption - something that airlines are only too happy to support.

That’s why Copenhagen Economics, with direction from former UK CAA Group Director of Economic Regulation Dr. Harry Bush, researched and produced a Study to **empirically assess the degree of airport competition in Europe, on the basis of quantitative evidence.**
Airports have become more corporatised and business focused, with new capacity being added and new entrants to the field. A survey of airport ownership in 2010 found that 80% of Europe’s airports are corporatised, with over 48% of European passengers travelling through airports with private shareholders.

The concentrated presence of individual airlines or airline alliances at individual airports has created significant Buyer Power for these airlines.

Competition between airlines was introduced by the liberalisation of the European airline industry in the 1990s. This competition allowed new powerful airlines business models to emerge, and imposed new cost pressures on all airlines and their suppliers.

Airports could no longer assume continued business as airlines now engage in dynamic network management, searching for the most profitable deployment of their aircraft – airlines are able to switch to another airport if the offer is not right or the route is unprofitable.

Improved ground transport infrastructure such as High-Speed Rail, expanded connectivity and the prevalence of the internet have given European passengers more choice, as well as empowering them to make informed choices.

Destination airports are now considered substitutable by passengers with airports located in similar destinations – for example airports within a wide range of sun holiday regions.

New aircraft technology, such as the B787 and upcoming A350 has expanded the number and type of airports available to airlines, increasing their choice of airports.

Looking Ahead

Summary Graphic

The key market trends that have contributed to the emergence of strong competitive pressures on airports are numerous;

- Competition between airlines was introduced by the liberalisation of the European airline industry in the 1990s.
- This competition allowed new powerful airlines business models to emerge, and imposed new cost pressures on all airlines and their suppliers.
- The concentrated presence of individual airlines or airline alliances at individual airports has created significant Buyer Power for these airlines.
- Airports could no longer assume continued business as airlines now engage in dynamic network management, searching for the most profitable deployment of their aircraft – airlines are able to switch to another airport if the offer is not right or the route is unprofitable.
- Improved ground transport infrastructure such as High-Speed Rail, expanded connectivity and the prevalence of the internet have given European passengers more choice, as well as empowering them to make informed choices.
- Destination airports are now considered substitutable by passengers with airports located in similar destinations – for example airports within a wide range of sun holiday regions.
- New aircraft technology, such as the B787 and upcoming A350 has expanded the number and type of airports available to airlines, increasing their choice of airports.
Based on the key trends above, the competitive pressures on airports were analysed and quantified in three broad areas:

- **AIRLINE BEHAVIOUR**
- **PASSENGER BEHAVIOUR**
- **AIRPORT RESPONSE**

The economic rationale for focusing upon these areas is simple:

If airlines and passengers have a reasonable choice of alternative airports, then the possibility of these customers switching will force airports to respond to maintain the custom of these customers. This is the essence of competition. Airports will be further pressured if airlines have significant levels of buyer power. If this is the case, there should be evidence of airline and passenger switching, airline buyer power, and airports responding to these pressures (which in turn will further increase competitive constraints).

In its detailed analysis, the Competition Study shows just the different types airports, from the economic challenges they face (e.g. small airports below 5 million passengers, major hubs) to the different competitive constraints.

Based on a broad data set of the 250 largest European airports, the Study concludes that airports of all sizes are subject to competition in the market.
THE AIR TRANSPORT MARKET IN EUROPE IN 2012

402 EU airports with scheduled flights.

253 commercial airlines in the EU.

Top 10 airlines transport 52.9% of Europe’s passengers each year.

Top 10 airports welcome 31% of Europe’s passengers each year.

Sources:
- ATAG
- Airline Business
THE MOVEABLE FEAST

20% of Europe’s active air routes are subject to regular route churn by airlines opening and closing routes each year.

63% of European citizens live within 2 hrs of at least 2 airports.

68% of airports have less than 50% of local market share.

84% of airports have a dominant airline customer with more than 40% capacity.

In 2011, airlines launched 2,491 new routes but dropped existing 1,936 routes.
MEET THE AIRLINE

Point-to-Point or Multi-Hub Network Carrier.

Corporate entities & in some cases, privatised.

Mobile assets which can be redeployed elsewhere if needed.

Often times part of a wider alliance grouping.

Business focus on strong short term planning.

LIKES
High yields (at the expense of capacity).

Low airport charges & strong incentives.

Efficient operations on the ground.

DISLIKES
Paying for the infrastructure they use.

Increases in oil prices.

Committing for long periods of time.

AIRLINE ABILITY TO SWITCH
& AIRLINE BUYER POWER

In the liberalised aviation market, airlines have complete freedom to base an aircraft in any country or fly between any two airports in EU. As a result, new airlines business models have emerged, fully reaping the benefits of a single aviation market. These so-called ‘Point-to-Point Carriers’ offer direct connections between two cities, whereas traditional ‘network carriers’ primarily operate in a hub-and-spoke system.

One key feature of Point-to-Point Carriers such as Ryanair, easyJet or Norwegian is their flexibility to open and close new routes. If the conditions at one airport are not satisfactory to the airline or if the route is unprofitable, it may flexibly redeploy their aircraft (often at short notice) to another airport with a better offer. It should be noted that also network carriers such as
Lufthansa or Air France increasingly offer point-to-point operations from secondary airports, such as Marseille, Lyon, Nantes, Hamburg, Dusseldorf and others.

As a result of this market development, Point-to-Point operations represent a very substantial share of the traffic at European airports. At airports with traffic of less than 10 million passengers a year, these carriers even represent the majority of traffic. This has important repercussions on the competitive constraints on the airports – the ability (or the threat) to close a route or to switch to another airport puts the airline in a dominant position in its relationship with the airport. In the case of network carriers, the threat of de-hubbing (i.e. to close a hub or to shift capacity to another hub of the same airline group) constitutes an equally strong competitive constraint for hub airports.

The detailed findings of Copenhagen Economics’ Study *Airport Competition in Europe* highlight the ability to switch of airlines and the nature of their market power:

<table>
<thead>
<tr>
<th>COMPETITION STUDY FINDINGS</th>
<th>KEY SUPPORTING FACTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is a significant amount of airline switching in the market, across different airline business models.</td>
<td>Route openings and closings (i.e. airline switching) respectively account for circa 20% and 15% of the market. In 2011 alone, 2500 new routes were opened, while 2000 routes were closed.</td>
</tr>
<tr>
<td>This includes route cancellations, changes to service frequency and capacity and reallocation of capacity between bases and hubs.</td>
<td></td>
</tr>
<tr>
<td>Airports often have one airline as their main customer. In addition, they are dependent upon individual airlines for the majority of routes, which considerably increases airline buyer power.</td>
<td>Across all airports with more than 1m passengers, 84% of airports cater for an airline which comprises more than 40% of the airport’s capacity. In total, 74% of intra-European routes are served by single carriers.</td>
</tr>
<tr>
<td>Route closure by an airline has a significant medium-term negative impact on airports, which airports will strive to avoid.</td>
<td>On average, after the closure of a unique route (i.e. a route served by 1 airline) only 47% of the original capacity returns after 3 years. More than 90% of closed unique routes are not operated in the year following the closure.</td>
</tr>
<tr>
<td>De-hubbing is a credible threat which airports take very seriously.</td>
<td>15 cases of de-hubbing have occurred in Europe, since 2000.</td>
</tr>
</tbody>
</table>
CONCLUSIONS

The Competition Study cites considerable evidence of airlines’ buyer power and ability to switch airports. Airlines may switch airports via route cancelations, frequency and capacity changes, de-hubbing, and the reallocation of capacity between bases and hubs. Route closures have a significant negative medium-term impact upon airports, making even the threat of route cuts a powerful bargaining chip in negotiations. The prevalence of single-carrier routes exacerbates this risk. All of which points to the prevalence of airline buyer power across Europe.

And if the hard data isn’t enough, even some of the airport industry’s fiercest critics acknowledge the intense airport competition in the market and the buyer power that airlines enjoy:

“Ryanair will always meet with airports that are interested in bringing Ryanair’s low fares to their market. However, we are currently in discussions with over 50 airports, so competition for Ryanair growth is fierce. We talk to many airports -- but that does not mean we will fly there — However, we always keep the door open, and the best way is by meeting them.”

Ryanair, October 2012

“We are going to be very, very tough on routes that aren’t working.”

Carolyn McCall, CEO easyJet
MEET THE PASSENGER

Travelling for business or leisure with different requirements.
Travelling directly or transferring at a hub airport.
Majority living within 2 hours of at least 2 airports.
Increasingly empowered with information on travel options.
Increasingly ready to use rail and/or air together.

LIKES
Choice, Comfort, Value.

Efficient, punctual travel.

PASSENGER SWITCHING

In addition to more footloose airlines, passenger switching exerts considerable competitive constraints on airports. In today’s market, passengers have easy access to travel options and pricing and an increased choice when planning a flight journey: There are more airports available to travelers – almost 2/3 of Europeans live within a 2 hour drive of at least 2 airports. And there is increasing evidence these competing airports are serving the same destinations – meaning even more choice for passengers.

In addition, there are also more travel options available for transfer passengers. And last but not least, high-speed rail often represents a good alternative to the plans on short distance. The passenger has the choice!

The detailed findings of the study on passenger switching are the following:
<table>
<thead>
<tr>
<th><strong>COMPETITION STUDY FINDINGS</strong></th>
<th><strong>KEY SUPPORTING FACTS</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Passengers in Europe have a significant choice of airports.</td>
<td>63% of European citizens live within a 2 hour drive of at least 2 airports. 38% live near 3 or more airports.</td>
</tr>
<tr>
<td>Passengers have an increased choice of routes at these alternative airports.</td>
<td>Around 50% of all local departing passengers have a choice of more than one reasonable flight option at a different airport in their region.</td>
</tr>
<tr>
<td>Passengers transferring through Europe also have significant choice of airports.</td>
<td>In 2011 the share of transfer passengers with realistic alternative hubs to transfer through was 62%.</td>
</tr>
<tr>
<td>Where other transport modes are available, they offer alternatives choices to passengers, and present significant competition to airports.</td>
<td>Rail typically captures 50% of the market when air routes compete with rail journeys of less than 4 hours.</td>
</tr>
<tr>
<td>Passengers are becoming more price-sensitive and less time-sensitive, meaning that they will travel further to find the best deal. This is partially related to the increased proportion of leisure passengers, as well as the increased online availability of information and choice.</td>
<td>A selection of European airports show an increase in the proportion of leisure passengers.</td>
</tr>
<tr>
<td></td>
<td>A separate study found that the price elasticity of passengers (responsiveness to a price change) has increased by 8% between 1999 and 2008.</td>
</tr>
</tbody>
</table>

**CONCLUSIONS**

The Competition Study finds considerable evidence of passenger’s ability to switch airports. The majority of passengers have a choice of readily accessible airports. There is significant overlap of routes serviced by neighbouring airports. Transfer passengers can also pick and choose their transfer hub. Different modes of transport also offer alternatives to passengers. With this choice, passengers are now more price sensitive than before.
AIRPORTS’ RESPONSE

MEET THE AIRPORT

Hub or Point-to-Point Airport.

Corporate entities & in some cases, privatised.

Fixed asset with high fixed costs & capital intensive requirements.

Strongly committed to local communities.

Business focus on strong medium-to-long term planning.

LIKES
Maintaining a balanced mix of traffic divided evenly between low cost, network carriers, charter and cargo.

Efficient operations on the ground.

Welcoming high volumes of passengers.

DISLIKES
Airlines cutting services.

Passengers using alternate airports.

Dealing with the ‘double-effect’ financial consequences of lost traffic.

With the flexibility enjoyed by today’s airlines and passengers, airports have to work hard at attracting both airlines and passengers in a highly competitive environment. As a result, European airports have invested in improving both operational efficiency and service quality over the last years. Airport marketing activities and budgets have increased substantially in the past decade, as has a focus on cost-efficiency and competitive airport charges for their airline customers.

The detailed findings of the Competition Study on the airports’ response are the following:
COMPETITION STUDY FINDINGS

Airports are pricing more competitively in response to these same pressures.

Almost 70% of airports decreased or froze their charges in 2010. The average ranking of European airport charges in a global study has dropped relative to global peers between 2008 and 2011.

Airline and passenger aeronautical charges underrecover against operating costs by almost €4 billion annually.

Airports are improving the quality of their product in response to competitive pressures.

Average European Airport Service Quality results have increased by 8% between 2006 and 2011.

Average passenger transfer times in European hub airports decreased by 10 minutes between 2002 and 2011.

Airports must promote their product against rival airports, to remain their market position.

96% of European airports actively market themselves to airlines.

European airports have become increasingly commercialized and profit oriented, both further driving and responding to the industry competitive dynamic.

Nearly ½ of all European passengers depart through an airport with private shareholders. 80% of European airports are corporatized, with publicly owned airports operated as commercial businesses at arm’s length from government.

The competitive dynamic has increased supply, via new entrants and expansion of existing capacity.

Between 1996 and 2008, 81 additional airports were offering commercial jet services.

CONCLUSIONS

The study finds considerable evidence of airports’ responses to the competitive forces.

The quality of airport products has improved while prices have become more competitive. Airport ownership structures are shifting to best suit new market conditions. Marketing has become an integral part of the airport business. New entrants are being attracted into the market, further increasing competitive pressures.
HOW AIRPORTS ARE SEEKING PASSENGER LOYALTY

In a concerted effort to attract and retain passengers, airports of all sizes are doing their utmost to build a meaningful rapport with the passenger. Retail & parking promotions, family friendly facilities, efficient security checkpoints and premium passenger services all provide ample evidence of how widespread this part of the airport competition equation has become.

In particular, European airports have adopted social media in a big way, allowing them to forge a relationship with the passenger hitherto unavailable. Airports use social media channels for customer service (e.g. informing passengers of traffic jam on the roads) commercial promotion (e.g. promoting their airline clients’ new routes), informal engagement and corporation communication. It has also become a primary channel for keeping passengers and would-be passengers informed during crises, extreme weather and other such circumstances.

77% of European passengers travel through airports active on social media (Facebook, Twitter, Instagram, Pinterest and more).

98.7% of airports offer wireless internet, with more than half offering some form of free internet access.

56% of airports over 10 million passengers a year have a dedicated smartphone ‘App’ or are in the process of developing one.

Source: the ACI EUROPE Digital Report 2012
EVER-INCREASING AIRPORT COMPETITION

The evidence revealed by the Competition Study shows that airports of all sizes are exposed to a variety of competitive constraints in a liberalised market. With such freedom of choice for passengers and airlines, airports have to more actively provide the right product at the right price, if custom is to be maintained. This is particularly important in light of the cost and revenue structure of airports.

As previously mentioned, the diverging costs and revenue trends when an airport loses business means that they will always be hungry to grow and expand their customer base. Alongside this some airlines are well placed to exploit an airport’s need to – at the very least – avoid traffic losses, and this gives these airlines a significant edge in negotiations with airports.

Based on the findings above, the level of competition at the different types of airports can be assessed with five different indicators, applied to the largest 250 European airports. Overall, the analysis shows that all airports are affected by at least one of these constraints, and in many cases by several competitive constraints, severely reducing the market power of these airports.

THE FINDINGS ARE:

- **LOCAL DEPARTURE MARKET SHARE**
  A high number of European airports of all sizes have less than half of the market share of all local departing passengers for a specific destination within their catchment area. This means that passengers often have an alternative to reach their destination from another airport in the same catchment area.

- **TRANSFER MARKET SHARE**
  A majority of European hubs have less than 40% of the market share of possible transfer passengers. Equally to the indicator ‘local departure market share’, this results confirms that transfer hubs are faced with increasing competition from other hubs due to the availability of other travel options.

- **HOSTING MULTI-HUB AIRLINES**
  A majority of large European hub airports host an airline which has multiple airport hubs to choose from, and can therefore switch capacity more readily. This increases the competitive pressure on hub airports hosting a hub-airline with several hubs (e.g. the Lufthansa Group with hubs in Frankfurt, Munich, Zurich, Vienna and Brussels).

- **BUYER POWER OF LARGEST CARRIER**
  A majority of European airports (large and small) are heavily dependent upon a single airline customer which represents more than 40% of their business. This puts the dominant carrier in a very strong market position vis-à-vis the airport.
**INBOUND LEISURE SHARE**
Smaller airports (below 10 million passengers per annum) are more likely to be exposed to a large share of inbound leisure traffic. Given the higher price elasticity of these passengers and their potential willingness to change their travel plans to another similar destination (e.g. alternative summer destination, city break), these airports are confronted with a potentially high volatility of passengers.

The results of the analysis are shown in the following table.

### Number of airports with competitive constraints reducing market power, 2011

<table>
<thead>
<tr>
<th>ACI Airport Category</th>
<th>Local departure market share</th>
<th>Transfer market share</th>
<th>Hosting multi-hub airline*</th>
<th>Buyer power largest carrier</th>
<th>In-bound leisure share</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&lt;50%</td>
<td>&lt;40%</td>
<td>&lt;40%</td>
<td>&gt;50%</td>
<td>&gt;40%</td>
</tr>
<tr>
<td>Category 1 (10 airports)</td>
<td>40%</td>
<td>10%</td>
<td>86%</td>
<td>50%</td>
<td>90%</td>
</tr>
<tr>
<td></td>
<td>4 of 10 airports</td>
<td>1 of 10 airports</td>
<td>6 of 7 hub airports</td>
<td>5 of 10 airports</td>
<td>9 of 10 airports</td>
</tr>
<tr>
<td>Category 2 (20 airports)</td>
<td>45%</td>
<td>15%</td>
<td>100%</td>
<td>20%</td>
<td>65%</td>
</tr>
<tr>
<td></td>
<td>9 of 20 airports</td>
<td>3 of 20 airports</td>
<td>7 of 7 hub airports</td>
<td>4 of 20 airports</td>
<td>13 of 20 airports</td>
</tr>
<tr>
<td>Category 3 (32 airports)</td>
<td>69%</td>
<td>44%</td>
<td>100%</td>
<td>25%</td>
<td>38%</td>
</tr>
<tr>
<td></td>
<td>22 of 32 airports</td>
<td>14 of 32 airports</td>
<td>2 of 2 hub airports</td>
<td>8 of 32 airports</td>
<td>12 of 32 airports</td>
</tr>
<tr>
<td>Category 4 (188 airports)</td>
<td>72%</td>
<td>51%</td>
<td>Not relevant</td>
<td>43%</td>
<td>73%</td>
</tr>
<tr>
<td></td>
<td>135 of 188 airports</td>
<td>95 of 188 airports</td>
<td>Not relevant</td>
<td>81 of 188 airports</td>
<td>137 of 188 airports</td>
</tr>
</tbody>
</table>

Note: The analysis in this table covers the top 250 airports in Europe. In Chapter 3, we presented the buyer power indication for all European airports with traffic in the two years (close to 600 airports).

* 16 European hubs are analysed in detail

Source: Copenhagen Economics
THE REGULATORY ANGLE

The business transformation at European airports and the corresponding increase in airport competition over the last years, leads to a key question: To what extent is economic regulation in its current form still required for the European airport industry?

Not only does increased competition reduce the need for regulation, but regulation can in fact be harmful if applied where competition is already effective. Against this background, it may well be the case that the application of competitive law (ex-post) may provide a better outcome than the current sectoral economic regulation (ex-ante).

When it comes to changing the current regulatory regime for airports in Europe, the Competition Study’s findings make 2 clear recommendations:

- **AVOID REGULATION OF AIRPORTS IN AREAS WHERE COMPETITION IS ALREADY EFFECTIVE.**
- **RETHINK ECONOMIC REGULATION IN AREAS WHERE COMPETITION HAS YET TO DEVELOP.**

Some of the current airport regulation looks more appropriate to the now almost unrecognisable air transport sector of 1980s or early 1990s.
YES, WE HAVE REALLY COME THAT FAR.

The transformation of air transport in Europe has been so clearly achieved that the process has come full circle, to a point where airport regulation itself needs attention. It needs to be readjusted, transformed and recalibrated to catch up with all that has happened and to take into account the multitude of competitive constraints on airports in Europe.
In late 2011 and early 2012, Copenhagen Economics undertook the very first comprehensive, independent study of Airport Competition in Europe, with Dr Harry Bush (former economic regulator at the UK Civil Aviation Authority), acting as Steering Director on the project.

Their final report, entitled *Airport Competition in Europe* was released in June 2012, bringing fresh insights into the way that aviation liberalisation in the 1990’s and trends that followed have transformed air travel in Europe and put more buyer power in the hands of airlines.

*How Airports Compete* is intended to be a digest of the main conclusions of the independent study.