Memorandum to the Airports Commission from [redacted] CTAIRA – February 2015

I am [redacted] a director of CTAIRA Limited which is a specialist consultancy for the airline and wider aviation industry. Before I established the business in 2002 I was an investment analyst in the City of London covering the aerospace and transport sectors with a particular focus on airlines and airports. I am a Fellow of the Royal Aeronautical Society and have been active in this sector for some 32 years.

Over the last year or so I have been engaged by Gatwick Airport to provide independent perspectives on a range of industry issues associated with the Commission's review of the options for the provision of additional runway capacity in the South East of England. I have attached the public versions of two of the reports that I have prepared for Gatwick. These examine how the supply side is developing and with what consequences as it will be the shape and structure of the industry at the time new runway capacity is available, rather than now, that will determine the requirements that need to be satisfied. In this respect developments on the supply side of the industry (i.e. those at individual airlines) are of fundamental importance. Against this background I believe that it is particularly important for the Commission to:

- Recognise of the nature and consequences of the changes that are occurring and will continue to occur in the structure of supply i) within Europe ii) beyond Europe over the period between now and new runway capacity becoming available which I believe will result in an industry that has a different shape from that of today and where for London point to point traffic is of greater importance and connecting traffic less so.
- Recognise that airlines act in the best interests of their shareholders and in a private sector airline industry this does not include flying unprofitable routes or attracting unprofitable traffic (whether connecting or point to point).
- Recognise the "importance of geography" for connecting traffic flows and that an increasing number of, what are often better, options already exist for passengers who in the past might have connected across London and this has resulted in a reduction in the supply of such traffic; furthermore London is not well located for "connecting emerging markets" .
- Recognise the importance of the direction of traffic flow and that over time it will be the inbound market that will be the source of the majority of the growth in passenger numbers; such passengers will view London as a destination.
- Take full account of the size of the fleets of new generation aircraft that will be in service by the time that the new runway capacity becomes available and recognise the impact that these aircraft will have on the structure industry and traffic flows between now and then.

It is fundamentally important that the Commission looks forward to what the structure of demand and supply in the wider London market is likely to be and base its decisions on this rather than taking a view on what it is now or indeed what it has been in the past. Whilst I have not been able to determine what weights the Commission has attached or will attach to its evaluation criteria, nor how these will be ranked, it is clear that the chosen solution must be able to; accommodate the requirements of the airlines delivering future traffic growth; be provided at the lowest possible incremental cost in absolute terms to the users and also ensure that the benefits arising from inter-airport competition, which the Commission has highlighted, are maintained.

# Supply Side Considerations

## Perspectives arising from the Airports Commission Interim Report

July 2014

# 1 Background

As part of the work associated with the issues arising from the December 2013 Interim Report of the Airports Commission, CTAIRA was asked to consider and give an independent view on:

- Developments on the aviation market supply side for both airlines and aircraft.
- The likely impacts of these developments on the profile and structure of future traffic demand in the London area.

Historic market trends and the current London market structure have been used as the starting point to consider the potential consequences for the London aviation market, supported by extensive analysis of airline, aircraft manufacturer and aviation market data.

# 2 Executive Summary

Forecasting the future is fraught with difficulty at the best of times. It is fundamentally important to dispel any myths related to aviation market growth which might get wrongly accepted as "conventional wisdom". It is critical to understand the underlying market dynamics, not just those of an economic nature but also the impact of technology and in particular the effect of new aircraft, to isolate some of the key factors that will actually deliver future aviation growth. In this respect, it will be the combined actions of a number of individual airlines, utilising a combination of existing and next generation aircraft that will deliver the expected growth (or not as the case might be).

Potential demand reflects a series of economic factors ranging from the level and rate of GDP growth to household income, which will drive leisure travel, and trade (both goods and services) between the UK and the country at the other end of the route. The extent to which this demand materialises as traffic is dependent upon the decisions of individual airline managements, principally in respect of the development and deployment of its aircraft fleet and the fare structures it is able to offer customers.

Whilst considerable attention has been focused on a range of traffic forecasts, little attention has been focused on how such potential growth might be translated into actual growth and with what consequences. How, and in what volumes the forecast traffic actually materialises between particular countries, or between individual city pairs, ultimately reflects the decisions taken by airline managers. These decisions should be based on the ability of the airline to make a satisfactory return from such operations. Fewer routes are now flown for "strategic reasons". Success of a route reflects both traffic volume and ticket sales on the revenue side combined with a cost effective operation utilising the most appropriate aircraft.

An analysis of the current fleet and route networks offered by the main airlines serving London provides a useful snapshot of the position today. However, it is these (and other) airlines' fleet plans, orders in place and the aircraft delivery schedules that hold the key to the likely future traffic pattern, at least for the foreseeable future.

- In this respect, it is not only the plans of the UK based airlines that are important but also those at the non-UK end of the route. This is particularly the case for those airlines in the rapid growth "ascendant economies" as it is widely accepted that these countries will provide the significant source of future long haul traffic growth into the UK and London markets.
- The majority of this traffic will be delivered by non-UK airlines where the financial attractiveness to this group of airlines of services to London, as a leading global city, will determine whether they fly the route or not.
- Decisions will be based on the strength of the demand arising from traffic in the home markets of these airlines, and beyond, where they may aggregate traffic across their gateway airport on services to London as a destination rather than a connecting point for traffic beyond London.
- Consequently London becomes a spoke in such a carrier's network. This is already the case for a number of ascendant market services, examples include[1]:
  - 38% of Air China passengers on its Beijing – London service have connected over Beijing but only 3% connect beyond London.
  - 62% of China Southern passengers on its Guangzhou – London service connect across Guangzhou but only 4% connect beyond London.

**London's current traffic structure is dominated by origin and destination**

[1] Source: ICF SH&E.

**passengers that either begin or end their journey at one of the London airports and these passengers account for some 86% of the total.**

- For airlines, London represents the largest and most valuable aviation market in the world. Origin and destination traffic will increasingly be the driver of market growth.
- Indeed, most forecasters appear to agree that it will be this direct traffic that will deliver the majority of future growth.
- Against this background, it is necessary to keep a sense of perspective in respect of the actual importance of connecting traffic, not least as there are likely to be a number of structural changes that will both reduce the need for, and the supply of, such traffic (at the necessary fare levels) across London.

**In global terms, London and the UK are now relatively poorly located for major future connecting traffic flows.** The main connecting traffic flows across London currently link North America with Europe, Africa, the Middle East and the Indian Sub-continent. The continuing increase in the number of North American cities served by airlines from the Gulf will act to divert some transfer traffic away from Europe and London. In particular, traffic between the Indian Sub-continent and North America will increasingly route through the Gulf where the main airlines in this region already have far greater coverage across the Sub-continent than any European airline. The inevitable impact of this supply side development will be to reduce the volume of this traffic transferring through London and other European hubs.

**Reductions in transfer flows will be reinforced by currently available new generation aircraft and, in particular, the Airbus A350 and the Boeing 787.** These aircraft offer a longer range and lower unit cost combination that is usually associated with much larger aircraft. As a result, they can be profitably operated on routes where the market is smaller and where there are routes which would traditionally have relied on aggregating passengers at a hub airport to fill a larger aircraft that would be required to provide the range to serve the route. The new generation aircraft will be able to profitably serve such “long thin routes” directly, effectively providing “hub-bypass” direct services.

- To date, almost 1,800 of these new generation aircraft have been ordered with the majority to be delivered to airlines operating outside Europe. Analysis by ICF SH&E for Gatwick Airport shows that all of the current top 50 transfer flows over Heathrow will be at risk, to some extent, from direct services operated by airlines at either end of the route which have ordered either the Airbus A350 or the Boeing 787 aircraft.
- Not only do these aircraft have particularly attractive operating costs, but they also present an opportunity to increase unit revenues, as their smaller size will also generally result in a better traffic mix, arising from more local passengers and fewer transfer passengers, compared to operating a larger aircraft.

**It is impossible to understate the importance that developments in aircraft technology have had on the shape and structure of the airline industry.** The majority of UK based airlines do not operate intensive “demand aggregator” or “hub and spoke airline” models in the way that these descriptions might be applied to, amongst others, Air France, KLM, Lufthansa or Emirates.

- These demand aggregator airlines operate with 60-70% of their traffic consisting of connecting traffic.
- The reduced need for connecting traffic that will result from operating more efficient new generation smaller aircraft will show through in a marked improvement in the financial performance of some long haul routes. It is also likely to show through in more point to point services being profitably

offered from London by UK based airlines.

- This is an outcome that is reinforced by the long haul fleet plans of both British Airways and Virgin Atlantic, both of which have a significant number of these aircraft on order.

**In terms of passenger numbers, the short haul market currently accounts for some two thirds of traffic in the London airport system. This share is expected to remain at least constant into the future.** Much of the debate around location of new London runway capacity has focused on long haul services, particularly serving "ascendant" (or emerging) markets. However, since the majority of growth will come from short haul demand, this fact must not be overlooked in the capacity debate. Consistent with the profile over the last decade or so, the main source of growth in the short haul market segment will be from what is known as the "low cost carrier (LCC) segment".

- For these airlines, maximising aircraft utilisation and, more generally, minimising the cost of operation are fundamental to the business model and are necessary conditions for success. As a group, these airlines have focused on, and are taking an increasing share of the business travel market. This reflects the coming together of a number of factors including a choice of airports served within a catchment area, attractive route structure, frequency of service and increasingly flexible fare structures.
- As a group, LCC airlines currently account for some 45% of short haul traffic across the London airport system. The fleet plans and orders in place for the short haul airlines that operate to/from London clearly show that it is the LCCs that are, and will continue to be, the "growth airlines". There is a reasonable expectation that their future share of the market will grow to more than 60%.
- Conversely for the "legacy" network airlines, their focus will continue to be on improving the financial performance of, rather than growing, their short haul networks.
- Against this background, it is essential that new capacity in the London airport system must be able to satisfy the requirements of all short haul airlines in terms of cost and operational efficiency. A failure to do so will result in a potentially significant shortfall in actual traffic compared with current forecasts.

# 3 Introduction

The underlying, and indeed the starting, presumption of the Airports Commission's Interim Report appears to be that London needs a hub. However what exactly is meant by that term is open to wide interpretation. There is little doubt that airline traffic will continue to grow and there will be an ongoing debate over the forecast rate of growth. However, an issue that we consider to be of equal if not greater importance, is the "shape" or structure of future traffic and, in particular, the extent to which the forecast is likely to be realised which, in turn, will depend upon decisions taken by airline managements. In other words, there is a not only a need to consider what the **demand side** models might show but also to consider, and take into account, how the various **supply side** factors (airline strategy and aircraft) will come together to deliver an outcome that is close to the one that has been forecast, or is expected, given the consequences that this will have for the provision of additional capacity.

It is inevitable that the future structure of both demand and supply will be different from today. A failure to either recognise this or take it into account when considering the options for additional capacity in the London area will result in an outcome where London, as an air transport market, fails to realise its full potential.

The short haul market currently accounts for some two thirds of London's total traffic with the share of the LCC airlines currently some 45%, from a small share some 15 years ago. In economic terms, short haul services link London with the UK's most significant trading partners. Europe accounted for 56% of the UK's exports in 2012, as well as providing access to the most important inbound tourist markets with almost three quarters of the foreign visitors to the UK in 2012. At a high level, there is little difference in view between the various forecasts that growth in short haul traffic will be the dominant element in total traffic growth both between now and 2025 and beyond. In the period to 2025, it is expected that the share of the LCC airlines will increase to more than 60% of the total short haul market. Not only will the LCCs take a greater share of the overall short haul market, but the increasing business model convergence that we have already seen in the short haul market will continue as the "gap" between the LCCs and the short haul operations of the legacy airlines continues to erode and the LCCs further increase their share of business travellers. Even the most cursory glance of the large number of short haul aircraft ordered by the major LCCs and the related delivery schedules and the smaller numbers of orders from the legacy airlines operating to/from London for short haul aircraft clearly demonstrates that future short haul market growth is fundamentally dependent upon the LCC airlines.

All airlines want to be able to operate to/from the most efficient airports. For airlines operating short haul routes, the key need is to maximise the number of hours of the operating day spent in the air which means not only minimising "ground time" but avoiding delays too. It is possible to break the "ground time" into two main elements:

- Airline determined – the time taken to turnaround the aircraft measured from when it reaches the gate to the time that it is ready to depart from the gate.
- Airport determined – taxi time and ground delays associated with, inter-alia, congestion.

All airlines want, and indeed demand, efficient airport operations and the lowest possible charges. The LCC model also needs to maximise the length of the operating day and is particularly sensitive to adverse changes in these areas.

Whilst long haul traffic will continue to grow, we believe that there will be a change in mix and in particular, at a London level, the already relatively low share of connecting traffic will further decline in respect of its share of the total market. This will not only reflect the outcomes of the actions of London based airlines, but also those of non-UK airlines that currently serve or are likely to serve London in the future.

London's traffic structure today is dominated by passengers that either begin or end their journey at one of the London airports and these account for some 86% of the total. Indeed, most forecasters also appear to agree that it will be this point to point traffic that will deliver the majority of growth in the future. Against this background, it is necessary to keep a sense of perspective in respect of the actual importance of connecting traffic, not least as there are likely to be a number of structural changes that will both reduce the need for, and supply of, such traffic (at the necessary fare levels) across London.

Forecasts are, in effect, estimates of potential demand and the extent to which they are realised depends upon airline managers recognising the same potential and that in financial terms, when compared to other opportunities, a route to/from London represents the best option. This is particularly important as most of the growth in long haul traffic will reflect the outcome of decisions taken by airline managers of non-UK airlines. These airlines will assess the value of London as a standalone destination market without the need for connecting traffic across London and only limited local UK connecting traffic.

Whilst the Commission's Interim Report touches on issues associated with airline models and the latest generation aircraft, we believe there is a need for a more detailed consideration of these issues and their consequences. This is not only for the period beyond 2025, but particularly covering the time between now and when new runway capacity could be available in the London area. The reason for this is that the needs of the airline industry (as the customers for airport capacity) serving London in 2025 and beyond, will be determined by how the airlines currently serving London, or are likely to serve London in the future, develop in the future.

It is almost impossible to understate the importance of aircraft developments and the impact that these will continue to have on traffic patterns, passenger flows, volumes and, consequently, airline performance. In particular, the availability now of smaller long haul aircraft[2] which offer long range and particularly attractive operating economics will have a material impact and on:

- Improving the economics of existing routes.
- Reducing the necessary threshold for traffic volumes to make routes viable and profitable.

These aircraft also have the potential to change the effective catchment areas for connecting flows. In particular, for the London market, such aircraft will have an impact both on the need for and also the sources of transfer traffic currently connecting across London. Whilst attention in this respect has been focused on the wide body Airbus A350 (A350) and Boeing 787 (B787) aircraft, it is also important to consider developments of narrow body aircraft and particularly the A320 NEO family and the Boeing 737 Max. These narrow body aircraft will provide more opportunity to serve thin or business only markets from London either on the east coast of the United States or into the Gulf which will have a further impact on the overall structure of the market. These are developments which would have a further impact on assumptions regarding connecting traffic and further reinforce London as, primarily, a point to point market.

We have already seen through the development of the presence of the Gulf based carriers and also increasingly Turkish Airlines, that London represents both an origin and destination market as well as a supply of passengers connecting across their home bases, primarily for destinations to the east of the UK. As a consequence, this increases overall long haul connectivity options for London and the UK. It is reasonable to expect further growth by these airlines in the London area through a combination of additional frequency and

[2] The Airbus A350 and Boeing 787 represent a step change in performance and also associated economics.

increasing aircraft size. We would also expect the presence of these airlines to continue to grow in the UK regions too. In this respect the UK, and the London market in particular, will remain important markets within the natural catchment area of this group of airlines.

We have identified three key issues that will have a fundamental bearing on the development of the London market, and the structure of traffic not only over the period to when new airport capacity is available, but beyond that too.

- Development of the LCC airlines as they will be the engine for growth for short haul traffic for London.
- New aircraft acquisition and the impact of new generation aircraft deployment particularly, but not only, the Airbus A350 and the Boeing 787, which are likely to result in a marked change in the structure of long haul traffic reinforcing London's position as a predominantly point to point market.
- The source and direction of flow of traffic on long haul routes, particularly between London and what might be best described as the emerging or "ascendant economies", which will also act to reinforce London as a point to point market

From the outset, it is necessary to recall that traffic reflects a range of characteristics and drivers. Furthermore, whilst traffic volume is fundamentally important to an airline, its ability to make a sufficient return from operating a route depends not only on the revenue that the traffic on a route will generate, but also its own cost of operation and deploying the most appropriate aircraft to maximise revenue and minimise cost.

**We believe that the fleet plans of the airlines and order books of today provide a very clear guide to how the industry will develop and, as a consequence, will also provide an indication of the nature of the additional airport infrastructure that will be required.** Against the background of the current market environment, we have considered a number of the key issues and their likely consequences on the structure of demand for air travel over the period between now and the early to middle part of the next decade, and the implications for additional airport capacity in the London area.

# 4 Key features of the London market

The majority of the traffic in the London market is point to point, with some 86% of passengers starting or ending their journey in London[3]. The trend has been for this share to increase over time and over the last decade in particular. The structure of capacity provided by the airlines in the future will be determined by the airlines currently operating, and likely to operate, in the London market which will result in the share of point to point traffic across the London airport system continuing to increase. This reflects not only the growth of short haul volumes, but also expected changes in the long haul market where the current need to connect across London (and indeed Europe) will further reduce, for traffic to/from North America and the Indian Sub-continent in particular.

Whilst there are a range of estimates for the current share of connecting passengers within the total, it is reasonable to conclude that, overall, these passengers account for some 14% of total London traffic in 2013[4].

We are firmly of the opinion that how the supply side develops over the next ten or so years will have a major bearing on the actual nature of future additional airport capacity required in the London area.

In the first instance, we have examined likely developments of the principal airlines currently operating to/from London. We have also reviewed the airline strategy statements in respect of their future development, analysed their aircraft orders and applied our judgement based upon experience to form a view of how the overall airline market is likely to develop.

Figure 1 shows the structure of supply in the London market in 2014 measured by the total number of seats to be offered by airlines.

[3] Source: ICF SH&E based on 2013 PaxIS data.
[4] Source: ICF SH&E analysis.

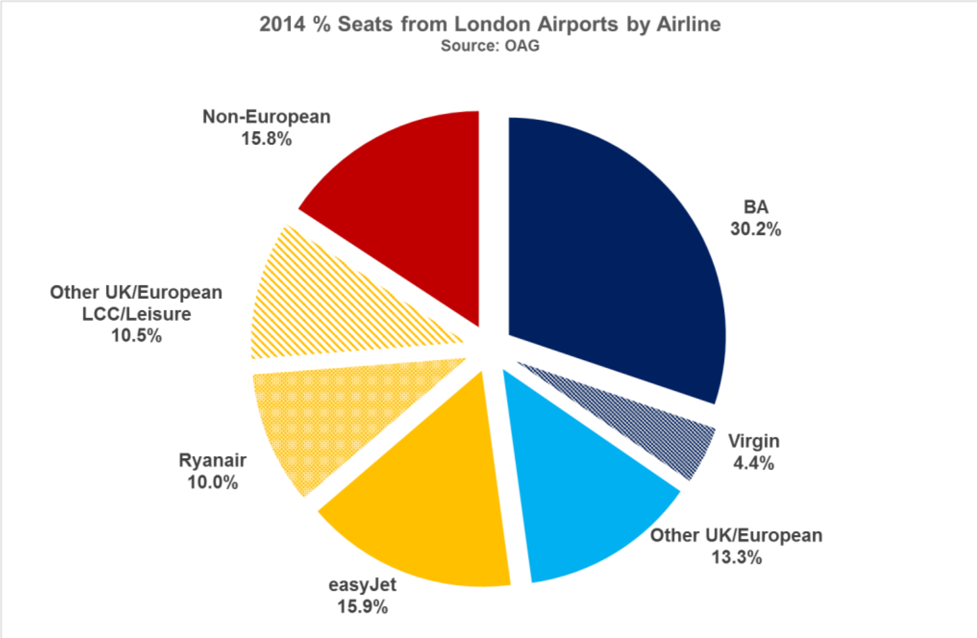


**Figure 1 – London airports structure of supply by seats offered in 2014 (Source: OAG)**

Unsurprisingly, the largest number of seats is offered by British Airways (BA) across its network from all of the London airports it serves. Whilst this analysis provides a high level snapshot of the seat share position today, what is of more interest and indeed importance is:

- What changes have occurred in seat share over the last few years?
- What fleet plans indicate for the future in terms of how the market is likely to develop and with what consequences for airport capacity?

Figure 2 shows the structure of supply at Gatwick and Heathrow combined. Whilst there is inevitably a high degree of similarity with overall London supply, the significant difference is the low share of Ryanair as its main presence in the London area is at Stansted.

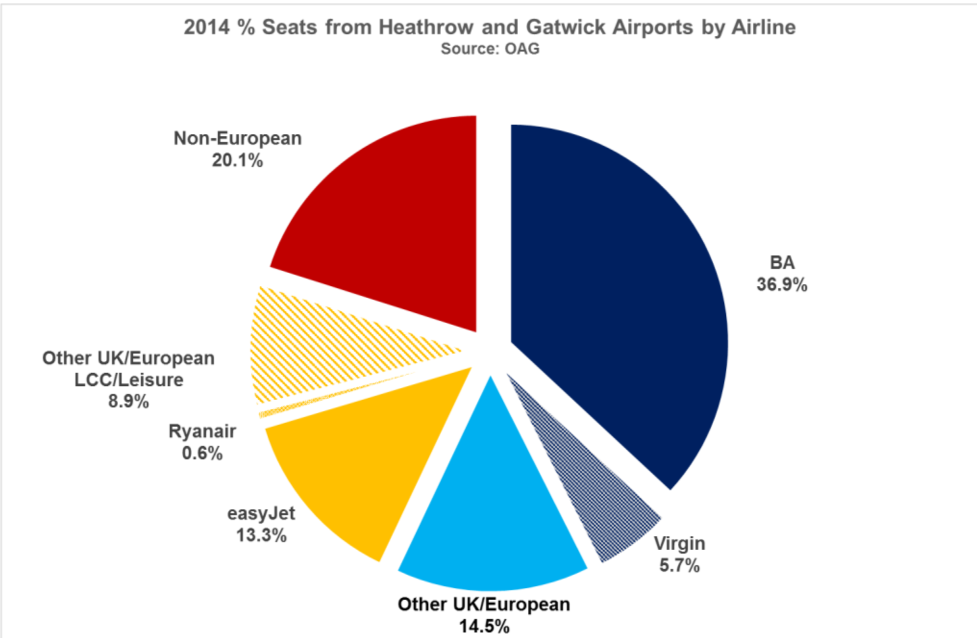

**Figure 2 – Heathrow and Gatwick airports structure of supply by seats offered 2014 (Source: OAG)**

We have further broken down the London area total airline seat supply into two groups: (i) "Non-European routes"[5] which we have used as a proxy for long haul and, (ii) European routes including domestic services.

Figure 3 shows the number of seats offered to Non-European destinations in 2014. This group includes services operated by easyJet, Ryanair and Thomson/TUI. Again British Airways has the largest share of the market.

[5] Defined here as services to points outside Europe using the DIIO SRS Analyser definition.

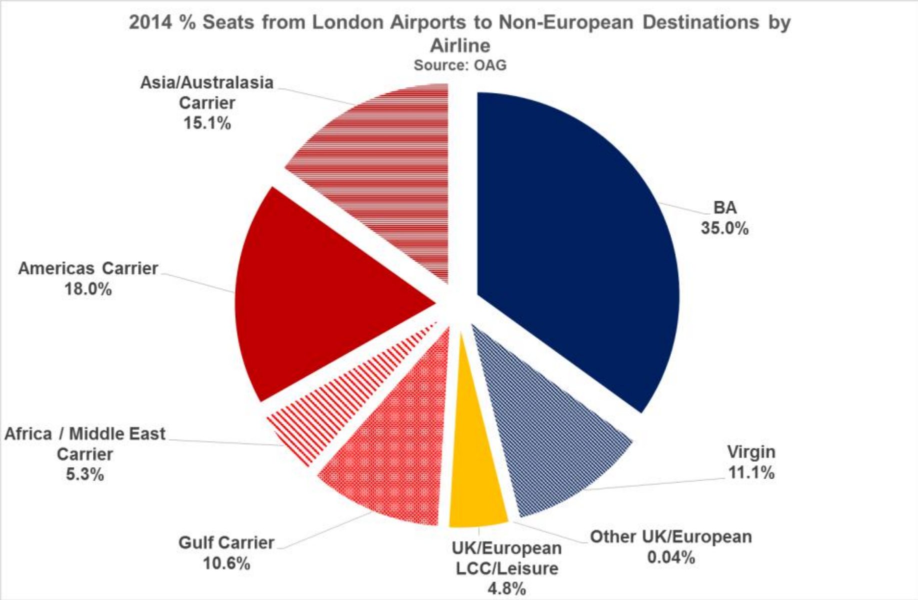


**Figure 3 – All London "non-Europe" seats 2014 (Source: OAG)**

Although Figure 3 provides a snapshot of the position today, it is the change since 2007, the last peak for the industry before the onset of the "great recession" that is of more interest. This provides a basis for evaluation of respective airline fleet plans which we consider gives a very clear indication of future intent at an individual airline level.

Figure 4 shows the changes over this period, by main airline, in excess of 50,000 seats a year[6]. The changes in non-European capacity since 2007 have been spread over a number of airlines where by no means all are based at Heathrow[7].

[6] 50,000 seats a year is equivalent to 136 a day or 68 each way on a round trip.

[7] There is a need to recognise that the changes at a number of airlines including for example TUI/Thomson (TOM) is in large part due to the migration of previous charter services to be operated on a scheduled basis.

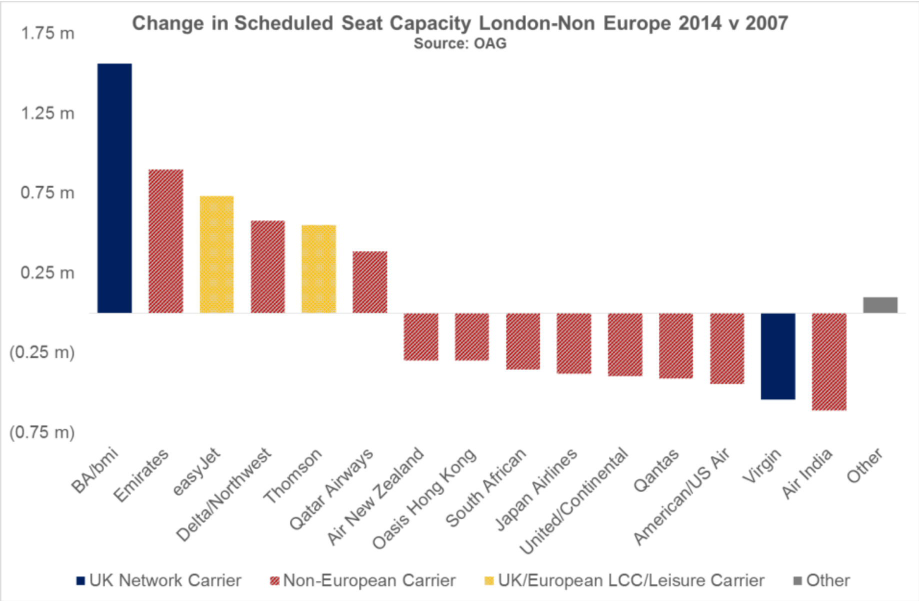


**Figure 4 – Change in number of all London "non-Europe" seats 2007-2014 (Source: OAG)**

When examined at a carrier segment level, it is clear that the majority of net non-Europe capacity has been added by LCC/Leisure carriers and Gulf carriers. The respective increases for the Gulf carriers and reduction by Asia/Australasia carriers also in part reflects the underlying trend of connecting traffic being increasingly concentrated over the Gulf.

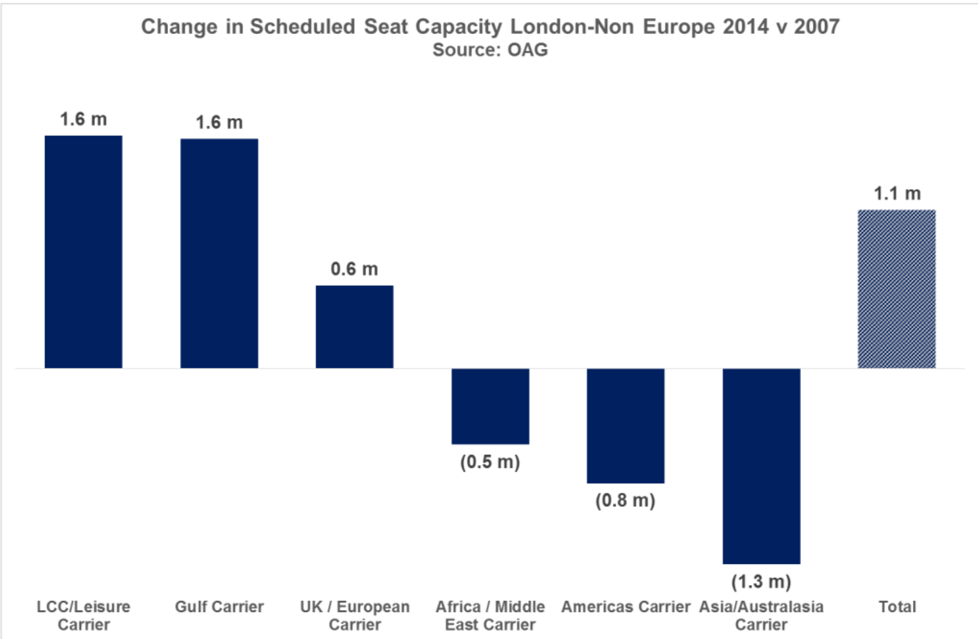


**Figure 5 – Change in number of all London "non-Europe" seats 2007-2014 (Source: OAG)**

For the short haul market, Figure 6 shows the number of seats offered in 2014, by main airline, on European and UK domestic routes to/from London.

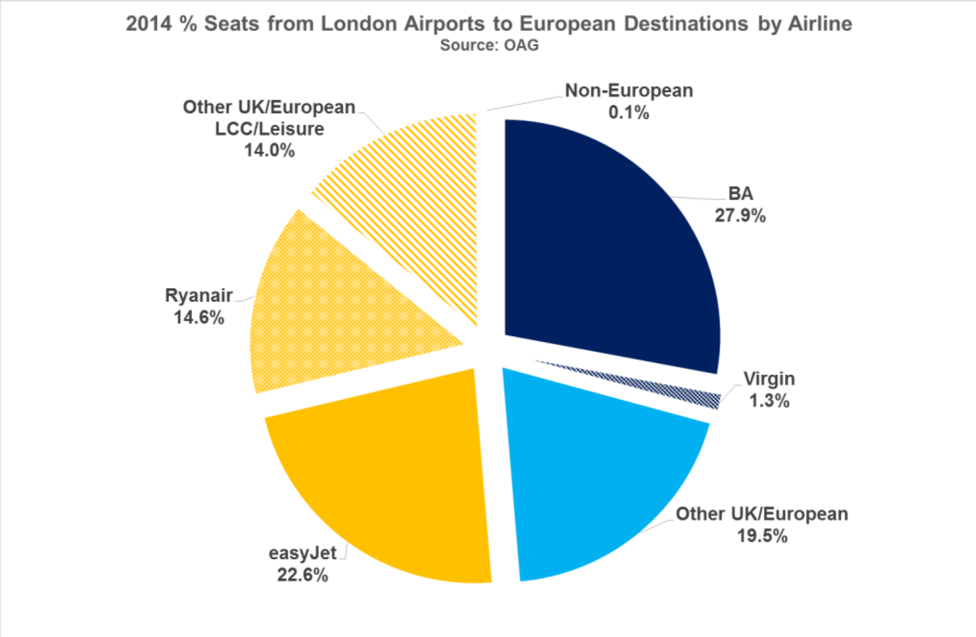


**Figure 6 – All London - European and domestic short haul capacity 2014 (Source: OAG)**

Whilst British Airways offers the largest number of seats on European and domestic routes to/from London, the importance of the LCC airlines is particularly evident.

There is a need to be clear about the nature of the changes that have occurred in the London market (and indeed other European short haul markets) over the last few years. In the late 1990s and into the early part of the first decade of the current century, the so-called LCCs occupied a more defined market space offering low fares in exchange for basic levels of service, primarily serving secondary airports. Their focus and indeed their offer has continued to evolve and is now increasingly indistinguishable from the group of what were known as flag carriers or "full service airlines".

The established full service carrier (FSC) airlines, and in the case of London, British Airways in particular, still benefit to a greater degree from significant penetration of their local corporate travel market, and still offer a premium cabin on many short haul services. However, the so-called LCC airlines are increasingly focused on the higher yielding, generally more time sensitive business passenger. Indeed, the vast majority of passengers travelling for business purposes on short haul routes do not travel in the "premium" cabin. From the perspective of the traveller, and also the travel buyer, LCCs are increasingly offering the same attributes in terms of timing, frequency and city pairs at a more attractive fare.[8] This is the case whether in respect of standalone airlines in this group (easyJet and Norwegian for example) or members of a larger group (Vueling which is now part of IAG, and Germanwings which is part of the Lufthansa Group). It is this group of airlines that will provide the main sources of growth for short haul traffic across Europe more generally, but in particular for the London market.

Despite the significant presence of FSC airlines in the short haul market across Europe and their representation in the London market, few if any of these airlines envisage much growth over the foreseeable future.

It is reasonable to expect that the market convergence between FSC and LCC airlines in the short haul segment will continue, and that LCCs will increase their presence providing the engine for short haul traffic growth, not just for the London market but elsewhere too.

[8] Although late in making the change, Ryanair is now also following this path.

Just as in the case of our review of capacity on "non-European" routes, whilst the "snapshot" for 2014 in Figure 6 is interesting, it is the nature and extent of the changes in capacity offered since 2007 that are perhaps more important.

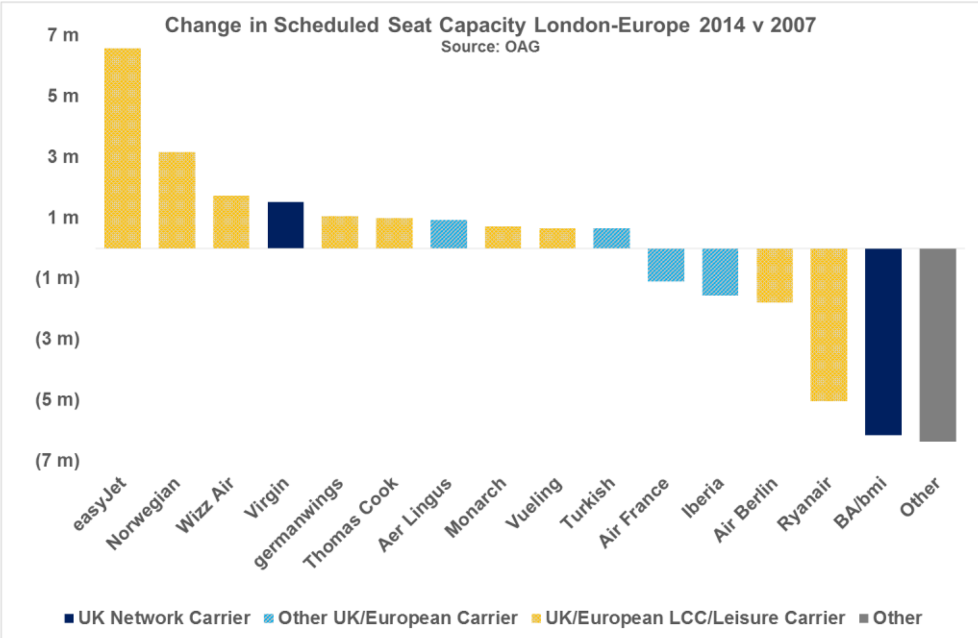


Figure 7 – Changes in all London European and domestic short haul capacity 2014 (Source: OAG)

Figure 7 illustrates that easyJet has increased its capacity most, although both it and British Airways made acquisitions in this period. What is also clear is the impact of other LCCs including Norwegian and Wizz Air. Conversely, Ryanair's London capacity has significantly reduced over the period with airline management citing both high airport charges and the UK's economic position and outlook as the underlying causes for its actions.

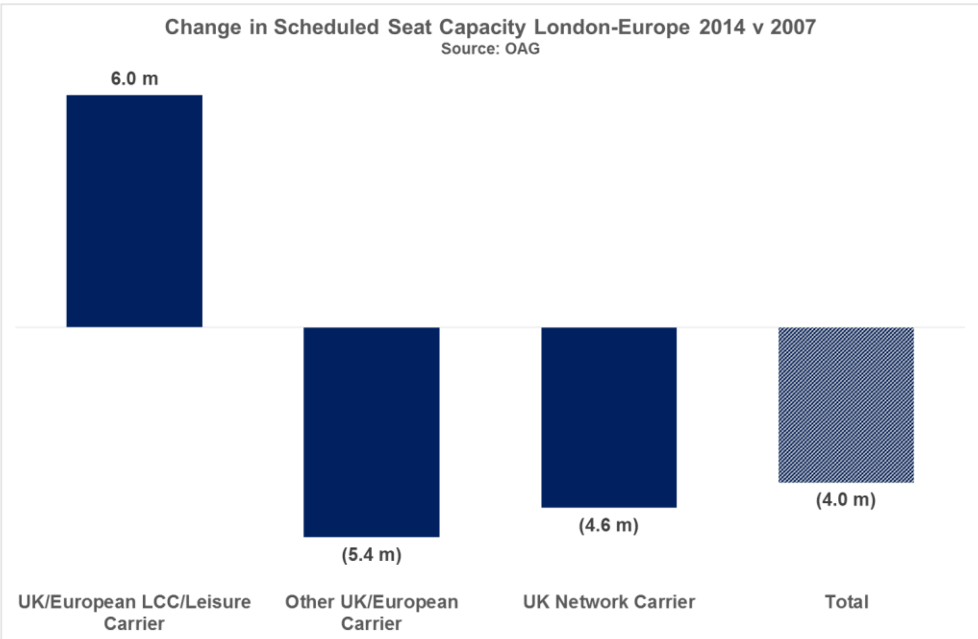


Figure 8 – Changes in all London European capacity 2007 to 2014 (Source: OAG)

Figure 8 clearly shows that all of the short haul capacity addition has come from the LCC and Leisure airlines. These carriers have added 6.0m seats in the period at the same time as other UK and European carriers have shed 10.0m seats. This clearly supports the conclusion that LCCs will be the drivers of future growth for the critical short haul segment.

Figure 9 shows the changes in short haul capacity at Gatwick and Heathrow measured by seats offered. Over this period, the number for British Airways includes the impact of its acquisition of BMI which increased its total. For easyJet, its acquisition of GB Airways which operated flights as a British Airways franchisee, also acts to reduce the British Airways total over this period.

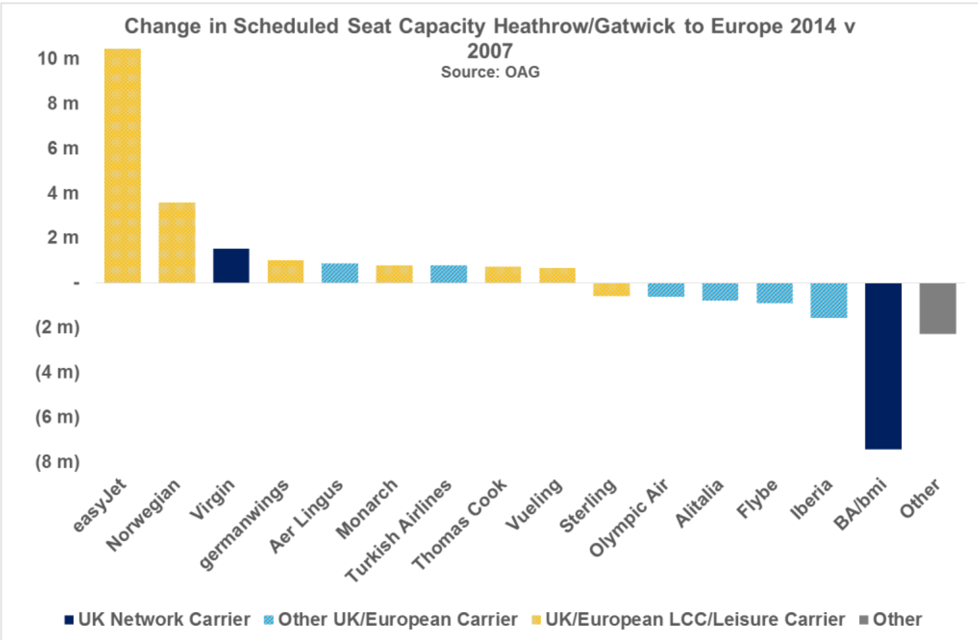


**Figure 9 – Change in capacity on European and domestic routes at Gatwick and Heathrow 2007-2014 (Source: OAG)**

The picture at Heathrow and Gatwick in Figures 9 and 10 reflects the overall London market with LCCs being the drivers of short haul capacity growth between 2007 and 2014.

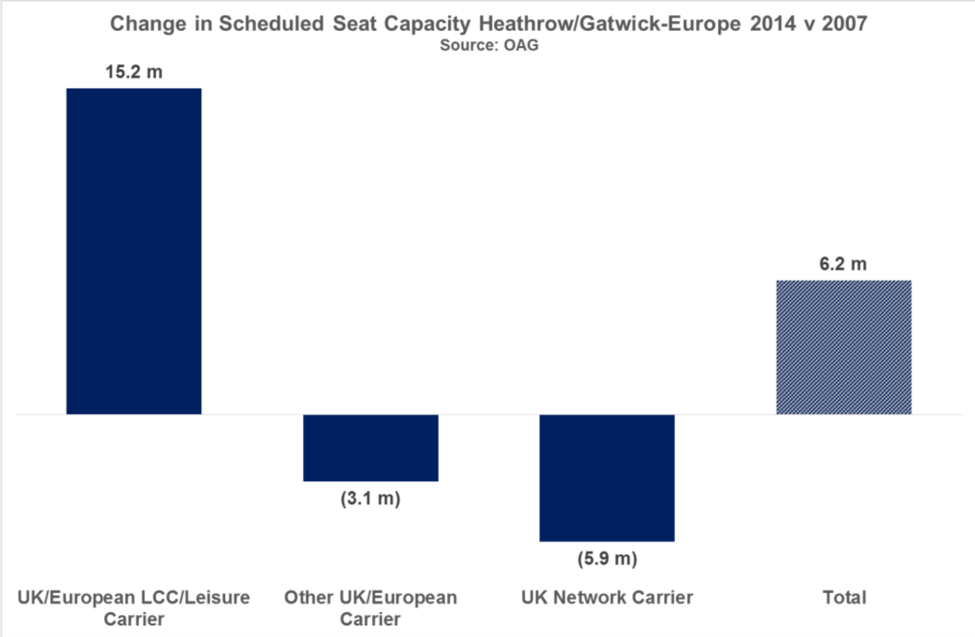


**Figure 10 – Change in capacity on European and domestic routes at Gatwick and Heathrow 2007-2014 (Source: OAG)**

Clearly the outcome for London, and in particular for the individual airports in the London system, to 2025 and beyond, will depend upon the decisions of individual airline managements, the aircraft they currently operate, have on order or plan to order. Whilst we consider this in more detail in the next section, suffice to say for now that the current fleets and orders already in place give a reasonably clear indication of intentions regarding future focus and growth.

As we showed in Figure 3, the London long haul market is dominated by British Airways. As the home based carrier, it is reasonable that this would be the case, not least for historical reasons as the home carrier(s) at any airport will tend to have the greatest traffic share. Furthermore British Airways' long haul fleet plans provide a very clear statement of its intent to continue to increase the size of its fleet, although the acquisition of the A350 and B787 as replacements for the B767 and B747 fleets and to provide for growth will reduce the average size of the aircraft in its long haul fleet.

It is also important to set these developments against a background where the majority of growth in the UK long haul market will be generated by demand at the non-UK end of the route, from airlines that view London as a destination market. We have no disagreement with the view that the greatest growth is likely to arise from what is currently known as emerging or developing Asia or perhaps better described as the ascendant economies. Whilst in the nearer term this is likely to result from new/additional frequencies from the more traditional airlines, these too are likely to see London as the destination rather than Heathrow[9].

At an overall level this is not a new phenomenon as Figure 11 shows, with a significant increase in foreign passengers in 2012 compared to 2003. Similarly in the case of the short haul market, growth will also be increasingly inbound although, in this case it will reflect inter-alia decisions taken by the management of easyJet and other UK based

[9] Whilst long haul low cost is developing in the Australasia region as a market segment with inter-alia Air AsiaX, Jetstar and Scoot, the main focus of these airlines both now and over the nearer term will continue to be on intra-regional markets. However as these airlines and indeed others take deliveries of the newest generation and more appropriate aircraft, it is reasonable to expect that London as a destination will come within profitable range.

LCCs and the further development of their inbound networks.

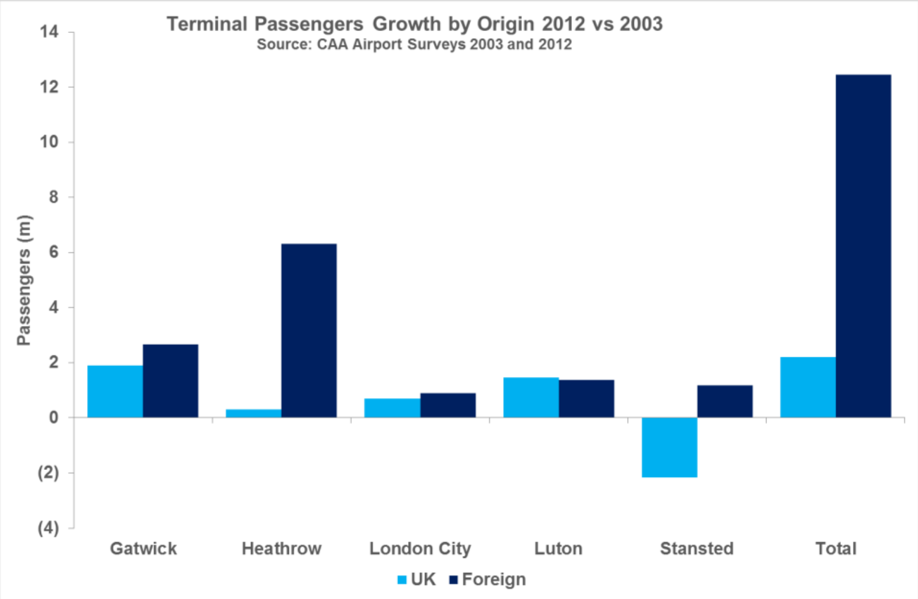


**Figure 11 – Terminal passengers' growth by origin 2003 -2012 (Source: CAA Airport Surveys 2003 and 2012)**

## 4.1 Conclusions

As we suggested earlier, the structure of traffic at an airport is a direct reflection of the business models and the focus of the airlines operating there which reflects past developments, in particular the acquisition and utilisation of aircraft. In this respect, the London market is no different from anywhere else. There are clearly differences between the operating models and focus of airlines at each of the airports in the London airport system. The figures we have presented showing the current market position as well as changes over the last few years provide the starting point for how the industry might develop in the future.

It will be the underlying dynamics of the market against a background of continuing economic and technological change that will determine the future outcome. In this respect, it is important that traffic forecasting assumptions reflect the current and likely future reality rather than being only based on past experiences. In particular:

- Short haul growth will be driven by LCCs which are perhaps best described as the "momentum airlines". This growth will be a combination of continuing to attract higher yielding passengers from the FSCs, as well as further increasing the number of inbound routes to London from their European bases.
- The advent of new longer range narrow body aircraft compatible with their core fleets will enable LCCs to add longer distance (medium haul) routes to their networks adding additional sources of growth. These latter routes are more likely to depend on the attractions of London as an origin rather than a destination market.
- Long haul growth will increasingly depend upon decisions taken by airline managements at the "other end" of the route driven by:
  - Strength of the outbound market for these non-UK airlines where London is the destination, and where there is little or no need for connecting traffic beyond London that will primarily determine the potential for such services[10].

[10] For the "demand aggregators" inter-alia; the Gulf airlines, Turkish Airlines and Singapore Airlines, London

- London, being one of a number of competing opportunities that these airlines, operating from what are considered to be future growth markets for air travel to/from the UK, will have. Whilst London as a destination might be at the top of our agenda, and indeed is recognised as a leading "global city", non-UK airlines may not share the same view for very good traffic, operational and financial reasons. It is the combination of volume and traffic mix that will allow the route to succeed.
- Airlines that want to address the London market, and are not prepared to pay the high entry price associated with obtaining slots to gain access to Heathrow. These airlines may not be prepared to wait (and take a chance) that Heathrow might be expanded, and are likely to use other London airports given that it is London as a city which is the destination for their passenger.

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will continue to represent an origin and destination market. This is also likely to be the case, over time, for a number of airlines from mainland China which are beginning to develop traffic beyond their home airports.

# 5 Airline Strategies and fleet plans

To form a view on how the market is likely to develop between now when additional London runway capacity is likely to become available, requires an informed view on the likely shape, size, structure and focus of the airlines serving London at that time. This will be more important in determining the long term capacity needs of the London market than the shape, size and structure of the current market.

It is an inescapable fact that the ability of an airline to operate its network depends upon the aircraft that it has in its fleet. It is also particularly clear that over time new aircraft have, perhaps inevitably, provided catalysts for major change in the airline industry.

The latest generation of aircraft from Airbus (A350) and Boeing (B787) offer at least the same, if not perhaps a greater, potential for catalytic change than the introduction of the Boeing 777 a generation ago. These new generation aircraft offer fewer seats but similar range and seat mile costs as much larger aircraft and, as a consequence, they provide the opportunity to profitably operate so called longer range "thinner routes". In terms of the traffic and route economics, operating appropriate but smaller aircraft with a need for fewer passengers will, almost by definition, increase average fares for the airline. This will produce a step change in the financial performance of a route compared to its operation with a larger current generation aircraft which typically may require large numbers of lower contribution connecting passengers.

Against this background, we consider that the fleet plans of the principal airlines currently serving the London market, and Heathrow and Gatwick in particular, will give a useful guide in respect of their intended positions in the early to mid-part of the next decade[11].

We believe that even a relatively high level examination of the fleet plans of this group of airlines, and related strategy statements, will give a sufficiently clear view of how they are likely to develop over the next decade or so. From this analysis, it will be possible to take a view on the contribution that they are likely to make to traffic growth in the London area[12].

## 5.1 British Airways

At the most recent International Airlines Group (IAG) Capital Markets Day, British Airways' management set out its future fleet plans to 2018[13][14]. For the short haul fleet, this comprises a net increase of 3 aircraft over the period and these would appear to be deployed at London City Airport. Elsewhere, between 2014 and 2015, the airline will increase the number of short haul seats offered by some 6% by changing the seat density on its fleet.

Although beyond this period British Airways has no further outstanding orders for short haul aircraft, it has some 70 outstanding A320 options which will primarily be used for replacement of older aircraft already in the fleet, with a further 15 options for the Embraer E190 aircraft.

The long haul fleet plan shows that the number of aircraft will increase by 13 from 129 to 142 over the 2013-2018 period.

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[11] Appendix 1 lists the top 20 airlines by seats offered in the total London market in 2014 with long with seats at Gatwick and Heathrow.

[12] It is also important to consider those airlines outside the "top 20" which are demonstrating momentum and where London as a destination is likely to be of greater importance to them in the future than it is now.

[13] IAG Capital Markets Day, November 2013.

[14] We have included the relevant charts from this presentation in Appendix 2.

As shown in Table 1, beyond 2018, British Airways has outstanding firm orders for a further 17 Boeing 787s and 14 A350s. Whilst a number of these aircraft will be for replacement of the ageing B747 and B767 fleets, they also represent incremental growth aircraft[15] .

[15] Source: Ascend.

| British Airways Aircraft Deliveries | | |
|---|---|---|
| **Delivery Year** | **Boeing 787** | **A350** |
| 2019 | 5 | 4 |
| 2020 | 5 | 5 |
| 2021 | 6 | 5 |
| 2022 | 1 | |
| | **17** | **14** |
| *Source: Ascend* | | |

**Table 1 – British Airways long haul aircraft deliveries beyond 2018 (Source: Ascend)**

In addition, the airline has stated that it has 16 options for the B787, 18 options for the A350 and 7 options for the larger A380[16]. Over the near term, the average number of seats per aircraft in the long haul fleet will decrease. However as we consider in more detail later, the effect of new generation B787 and A350 aircraft fundamentally changes the attractiveness of new routes making thinner and longer routes viable. They will also improve the economics of some current routes by operating a more appropriately sized aircraft with markedly better seat mile and trip costs and also enabling better average revenue per passenger. An example of this is the recently launched service to Austin in the US, as well as the use of the aircraft on services to Hyderabad and Chennai where, in the past, the airline used B767 or B777 aircraft. Similarly, the recently launched service to Chengdu, which appears to depend on inbound traffic to London is now operated with a B787 instead of the larger B777 as originally used and is now operated 5 times a week as opposed to 3 times with the larger B777.

As a result of the changes in the aircraft fleet, we consider that this provides British Airways with the opportunity to profitably increase the number of long haul destinations that it operates from London. The strategy statements from the airline indicate that some short haul slots at Heathrow will be used to grow long haul routes and frequencies.

Elsewhere the focus of attention of British Airways within the oneWorld alliance would appear to be to develop deeper bilateral relationships under the heading of Joint Business Arrangements and, in particular, for the partner at the non-London end of the route to feed and de-feed traffic from British Airways' long haul flight to the destination and beyond. This provides greater network reach out of London and, in terms of economics, as British Airways flies the long haul sector, a positive impact on revenues and contribution for the airline.

## 5.2 easyJet

The announcement in June 2013 by easyJet's management of a new order for 100 firm and 100 options for the A320 and also the conversion of a further 35 options already in place, gave a very clear indication of the airline's future plans. Whilst 85 of the 135 firm aircraft are current fleet replacements, the remaining 50 aircraft from the new order are for growth.

Against this background of firm orders and options, easyJet's base case fleet plan increases from the 226[17] aircraft in the current financial year to 282 by 2022. There is also scope to grow the fleet further to a maximum of 302 aircraft.

Over the next 8 years, an increasing proportion of easyJet's fleet will be comprised of the 180 seat A320 aircraft, providing a 15% seat capacity increase compared to the current core aircraft in the fleet; the 156 seat A319. On current plans[18], by 2022, the A319 will account for some 25% of the aircraft in the fleet compared with 68% now. This means that in addition to increasing the fleet size over this period, the average aircraft size will

[16] Source British Airways Annual Report 2013 at http://www.iagshares.com/phoenix.zhtml?c=240949&p=irol-reportsannual

[17] See Appendix 3 for delivery schedule

[18] easyJet conference call transcript 18th June 2013

also increase[19]. easyJet is a pan-European airline where London represents a key and profitable part of its network. In our view, there is considerable potential to increase the number of inbound services to London from its European bases.

Furthermore, we would expect easyJet to continue to increase its focus on the time sensitive business passenger, resulting in further market convergence between them (and indeed other airlines currently classed as LCCs) and the legacy/full service airlines. In addition to developing its network, frequencies and timings to appeal to business passengers, easyJet has also made significant, and necessary changes, in respect of how it reaches the business market and we would expect other LCCs to take similar steps in the future.

## 5.3 Norwegian

Norwegian is not only continuing to develop its pan-European presence in the short haul market, but also through the acquisition of the B787 is developing long haul services from a number of points across Europe to the United States and Thailand. An indication of management ambition is clearly evident from the aircraft orders in place. These include a firm order for 152 B737 aircraft plus 100 options, an order for 100 A320s plus 50 options, and up to 10 Boeing 787s. Norwegian has also clearly stated its intentions to grow its London presence from its Gatwick base including launching New York, Los Angeles and Fort Lauderdale services in July 2014.

## 5.4 Vueling

Vueling, which became part of IAG (which includes British Airways and Iberia) in 2013, operates a fleet comprising 4 A319s and 73 A320s. It has 63 A320s on order plus a further 62 options and between 2015 and 2019 Vueling will take delivery of at least 10 new aircraft a year[20]. Although it is possible to describe Vueling as "an airline within an airline" in the same way that Germanwings is part of the larger Lufthansa group, what is clear is that Vueling will remain independent and that it will not be used as a substitution airline in the same way that Lufthansa has switched services to Germanwings as a lower cost airline.

## 5.5 Virgin Atlantic

The main focus in terms of new orders, is for Virgin Atlantic to grow the B787 fleet to replace the A340 fleet with firm delivery dates between 2014 and 2018 with 17 firm orders and 4 options. Although the airline has larger A380s on order, primarily to replace its high capacity B747-400s, the delivery dates for these aircraft remain uncertain.

Strategically it is inevitable that having acquired a 49% stake in Virgin Atlantic, Delta Airlines will seek to maximise the opportunity that Virgin offers to further develop its market position across the North Atlantic. On a number of United States routes, it is likely to result in a change to the direction of flow and increase the value of the traffic for both Virgin and Delta.

## 5.6 Other airlines

For the other airlines within the current top 20 carriers, only Emirates is likely to further expand in the London region to any degree by adding additional frequencies out of Gatwick to match those out of Heathrow and also to operate all services with the larger seat capacity A380 aircraft.

Elsewhere, the European airlines within the top 20 carriers providing services to/from their home airports to London, are focused on their own issues and challenges. Whilst they are unlikely to reduce their presence in London, they are also unlikely to add significant capacity other than, in some cases, on a seasonal basis.

[19] "The new framework arrangements we've announced today are entirely consistent with our stated strategy of growing capacity by 3% to 5% per year. 3% to 5% capacity growth over the period until 2022 equates to approximately 19 million to 35 million seats and we believe that between 2% and 4% of this capacity growth will come from new routes or increased frequencies on existing routes in the markets we are in and around 1% from flying larger A320 aircraft on existing flights"; op cit p 5.

[20] 2015: 10 ; 2016: 10 ; 2017: 14; 2018: 12; 2019: 10; 2020: 6 Source: Ascend.

Furthermore, at least in the medium term, we would consider that the focus of the US airlines on their transatlantic routes will be on maximising the value of the services operated now rather adding services.

It is always important to recall that for the most part and certainly in the case of British Airways, easyJet and, indeed, the majority of other airlines, route decisions will be taken for "the greater good" of the individual company rather than to meet any economic objectives for the UK, or for London.

## 5.7 Conclusions

We consider that the majority of growth for the London market over the medium and longer term will result from inbound services satisfying the demands of intending passengers at the non-London end of the route. As an origin and destination market for non-UK based airlines, London can fulfil at least two objectives:

- As a point to point market for inbound airlines where there is no need for connecting traffic beyond London for those airlines:
  - Already serving London.
  - New to London.
- As a source or destination market for traffic which has been aggregated over their own home base:
  - Benefit from the richness of the London catchment area.
  - Benefit from the attractiveness of London as a destination for business and leisure travellers.

We also believe that our analysis clearly demonstrates that the LCCs will provide the majority of the traffic growth in the near, medium and indeed longer term where London represents both an origin and a destination.

Elsewhere, there should be little doubt that the majority of the growth in long haul traffic will be the result of decisions taken by non-UK airline managements at the other end of the route and will be based primarily on the attractions of London as a destination market to them, and the ability that they have to make a profit from its operation and not on what benefits such services might bring to the UK.

# 6 New generation aircraft and their impact

The Airports Commission notes that new generation aircraft will have an effect on the industry, and also on London traffic flows. We believe that the significant potential impact that these aircraft are likely to have and, in particular, their role as "game changers" requires further and more detailed consideration.

As we suggested earlier, the traffic structure of an airport is a direct reflection of the business models and the focus of the airlines operating at that particular airport. To this end, the strategies and fleet plans of the principal airlines operating at Heathrow and Gatwick will reinforce the importance of London as a point to point market, issues that we have considered earlier in this paper.

There is a widely held, and well founded, view that the introduction of the Boeing 787 and the A350 has the potential to change not only the operating economics of the airlines that use these aircraft but to have an impact on existing traffic flows too. This is expected to be similar to the way in which previous aircraft introductions have acted as the agents for catalytic change in the airline industry, whether the Boeing 747 or Boeing 777 aircraft.

We believe that the A350 and B787 will have a similarly significant impact. Variants of both families of aircraft have a range capability that matches, if not exceeds, the longest range of large aircraft currently in service. These existing aircraft are significantly larger in terms of seat capacity than either the B787 or the A350. However, the all-important seat mile costs of the A350 and B787 at least match those of the larger aircraft, with the result that trip costs of the A350 and the B787 are markedly lower. Consequently, with a need for fewer passengers for each flight, demand will be more concentrated amongst passengers flying directly and willing to pay a higher fare than lower contributing connecting passengers, resulting in higher average fares per flight.

In terms of the operating economics, this will mean that an airline will be able to profitably serve smaller passenger loads. This has a number of consequences including:

- "Thinner routes" become more viable.
- A reduced need for connecting traffic to make up a load.

Given the consequential increased share of higher value point to point traffic, the result for airlines is an increase in unit revenues widening the gap between the cost of the flight and the revenue generated.

The combination of a small(er) aircraft, but with comparable cargo capacity, as well as the range and seat mile costs normally associated with a significantly larger aircraft, represents what is best described as a "game changer". Although marketed as "hub busters" or "hub bypass" aircraft, these aircraft can also be used to increase the catchment areas of an airline operating a demand aggregating model to a greater range of smaller markets and secondary cities.

The main effects of these aircraft on the London market are likely to be:

- Increased potential for more point to point services given the improvement in the economics of thinner routes.
- Reduced need for connecting traffic in the London market.
- Reduced supply of connecting traffic as airlines in current catchment areas for connecting traffic over London for example, Indian Sub-continent and Europe to the US, introduce the aircraft to offer direct services.

Table 2 compares the passenger seats and cargo tonnage capacity and ranges of a number of long range aircraft currently in service or due to enter service over the next few years. What is clear from the table is that the new generation aircraft, and particularly the A350 and B787 will combine the range offered by the larger aircraft but with far fewer seats.

These new aircraft provide the opportunity for an airline to profitably operate long range routes with fewer passengers, an outcome which also has implications for the need for and supply of connecting traffic, particularly where an airline operates in a strong origin and destination market like London, and where its core operating model is as a point to point airline rather than that of a demand aggregator.

| | Typical seating (passengers) 3 Class | 2 Class | Max cargo capacity (m3) | Max range (nm) |
|---|---|---|---|---|
| **Airbus** | | | | |
| A380 | 525 | | 184.0 | 8,500 |
| A330-200 | | 246 | 136.0 | 7,250 |
| A330-300 | | 300 | 163.0 | 6,100 |
| A350-800 | 276 | | 136.6 | 8,250 |
| A350-900 | 315 | | 172.4 | 7,750 |
| A350-1000 | 369 | | 208.2 | 8,000 |
| **Boeing** | | | | |
| B747-400 | 416 | 524 | 170.5 | 7,260 |
| B747-400ER | 416 | 524 | 158.6 | 7,670 |
| B747-8 | 467 | | 161.5 | 8,000 |
| B777-200 | 305 | 400 | 151.0 | 5,240 |
| B777-200ER | 301 | 400 | 151.0 | 7,725 |
| B777-200LR | 301 | 400 | 150.9 | 9,395 |
| B777-300 | 368 | 451 | 202.0 | 6,005 |
| B777-300ER | 386 | 451 | 201.6 | 7,825 |
| B787-8 | | 242 | 127.0 | 7,850 |
| B787-9 | | 280 | 153.0 | 8,185 |
| B787-10 | | 323 | 175.0 | 7,000 |

**Table 2 – Comparative aircraft performance** (Source: Airbus and Boeing company reports)

The operating economics of the new aircraft are also particularly compelling as Figure 12 demonstrates. The seat mile costs are projected to at least equal if not markedly better those of larger aircraft (cost per mile divided by number of available seats). Whilst seeking to minimise seat cost is a fundamental requirement, the smaller aircraft will have markedly lower trip costs (cost per seat mile multiplied by the number of seats and the distance flown).

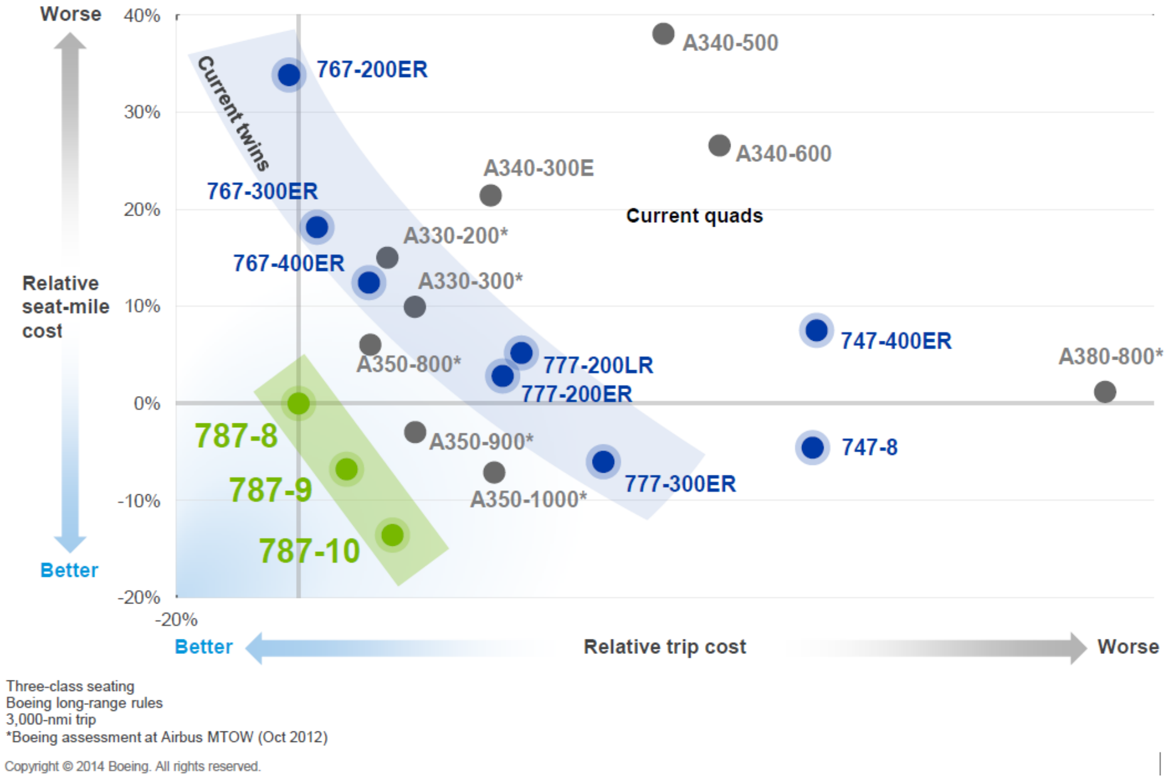



Figure 12 – Projected aircraft relative seat mile cost and relative trip cost (Source: Boeing)

At the simplest level, these new generation long haul aircraft have the potential to change the viability of routes in the following ways:

- Reduce the volume of traffic required to justify operating the route with a concomitant benefit on average fares as a result of increased proportion of local traffic.
- Reduce the need for transfer traffic.
- Improve the financial performance on current routes that may be financially marginal.

As a starting point for the evaluation of the potential impact that the new aircraft could have in terms of routes and reach, we have compared and contrasted a number of range charts centred on number of different origins or destinations[21].

The clear conclusion from this analysis, where London is the origin, is that all of the destinations currently reached by the B777 can be reached by different members of the smaller B787 family (with at least 100 fewer seats than the 777-300ER). In addition, the B787-9 will be able to reach Perth from London which is seen as a real game changer[22] in terms of direct service capability. Range charts are included in Appendix 4.

From the perspective of additional point to point services, it is clear that the new generation aircraft provide the means to open new routes with a lower traffic threshold of passengers that will be required than is the case now. We believe that there is a clear need to seriously re-evaluate some of the views that have been expressed in respect of the future importance of connecting traffic across London.

[21] We have used information provided by Boeing to compare range of the B777 as the current generation base line aircraft to the B787. We have presented these range charts in Appendix 4.

[22] If used on this route, the B787-9 would reduce the current 18-20 hour journey time by 3-5 hours.

## 6.1 Conclusions

The new generation aircraft from Airbus (A350) and Boeing (B787) offer a particularly attractive combination of range (long), size (small) and operating economics that provide the potential for a marked change in the structure of long haul traffic in the London market.

London is already predominantly a point to point market. These new aircraft will reinforce this trend in the long haul segment by reducing the need for connecting traffic, which will have a further positive outcome on the operating economics by increasing airline unit revenue.

The combination of new generation aircraft and strength of the London point to point market will also transform the financial performance of routes where current aircraft do not offer sufficiently attractive economics for airlines to profitably operate the route. Over the medium and longer term, this will also result in an increase in the number of point to point services particularly to, but also from, London.

# 7 The issue of connecting traffic

Much has been made in the Interim Report of the Airports Commission of the role of connecting traffic across London. It is, however, particularly necessary to keep a sense of perspective not least in respect of the importance of the value of traffic rather than just the volume, issues which have a significant bearing on the associated economics of connecting traffic.

There is also a need to distinguish between airlines that pursue a demand aggregation model, where some 60-70% of their traffic is connecting traffic, and those airlines which predominantly serve point to point traffic benefiting from a strong local market.

Demand aggregation, or "hub and spoke", is an airline business model that has enabled the development of a bigger business than might be supported by the size of the local market and with better aircraft utilisation than would be the case if dependent on the local market alone. In this respect inter alia: Emirates at Dubai, Air France at Paris, KLM at Amsterdam and Lufthansa at both Frankfurt and Munich would be within this category with high levels of transfer share of total traffic.

The London market has a relatively low level of transfers at just 14% in 2013[23] and British Airways as the main network carrier serving London has a lower share of transfer passengers (around 30%[24]) than the principal airlines serving the airports that we mentioned in the paragraph above. These carriers are dependent upon demand aggregation rather than the size and strength of a local market such as London

[23] Source: ICF SH&E analysis of PaxIS data.

[24] Source: International Airlines Group (IAG) CEO Willie Walsh, speaking at CAPA's Airlines in Transition conference in Dublin, (10 April 2014) stated that 70% of British Airways' traffic at London Heathrow is local traffic with the remaining 30% connecting.

The ability of an airline to develop and succeed with a demand aggregation model depends upon a number of factors not least, and indeed perhaps in particular, the location of its home base relative to the markets that it is seeking to connect and how this relates to other options that are open to intending passengers.

Connecting passengers tend to prefer to follow a "single direction of flow" without back tracking or a circuitous route from origin to destination and this broadly involves following a great circle route, particularly where the connecting flows involve long or medium haul sectors. As a result, there is a need for the connecting airport to be located between the two areas to be connected and where volumes are either insufficient for profitable point to point services, or technical limitations of aircraft mean that at least a technical stop or connection is necessary to reach the final destination.

A passenger may have a number of airline and airport options to reach their final destination, with any time penalty associated with taking a connecting service compensated in the form of cheaper fare or more convenient flight times.

A successful demand aggregation model is also a function of what the airline pursuing that model can deliver in terms of market reach and penetration and, ultimately, that the routing that it offers results in a shorter elapsed time than competitors for this traffic. As suggested, for the most part, passengers that use connecting services tend to have options which ultimately show through in the form of price competition versus point to point services (where these are available).

For London, the key flows of international to international connecting traffic are to/from North America and Europe and North America and the Indian Sub-continent. Whilst most forecasts suggest that connecting traffic will continue to be a feature of the London market, we consider that it is likely that future volumes and the associated value will decline in relative terms and make it a less attractive source of traffic.

Clearly there will still be the opportunity for airlines to connect city pairs across London where it is commercially attractive. In this particular case, clearly not all transfer traffic is equal. In the first instance, there is a need to distinguish between traffic with a domestic origin or destination connecting over London and "international to international" both of which, we believe, are likely to diminish in importance in the future as a result of:

- The geographic position of London as a connecting point being likely to continue to reduce in importance relative to future global traffic flows.
- Natural market growth resulting in higher value local traffic displacing lower value connecting traffic.
- New generation aircraft which will reduce both the need for, and indeed the supply of, connecting traffic reinforcing the position of London as a predominantly point to point market.
- More direct services from the UK regions.

Clearly there are a number of individual routes where transfer traffic is an important element. However, this needs to be kept in context as overall for the London market it accounts for some 14% of total traffic. Appendix 5 includes tables which set out the main passenger transfer flows over London for domestic to international routes and international to international routes in 2013, as well as analysis of individual routes where transfer traffic represents more than 30% of total traffic where we identified 42 routes out of a total of 414[25] London routes. This reflects the relatively few London routes that have a significant share of connecting traffic.

Domestic connections across London which are predominantly, although not exclusively, westbound represent significant connecting traffic flows with between 31% (Edinburgh) and 60%[26] (Manchester) of traffic on domestic routes connecting at Heathrow. For these passengers, there are numerous other connecting options which, we consider, will be developed further over the period to 2025.

Geographically, London is well placed to connect traffic between Europe and North America and North America and the Indian Sub-continent. However, apart from providing traffic that enables a route to operate that would not otherwise operate, the direct economic benefits for the UK from international to international connections are difficult to both identify and quantify.

In various presentations, references have been made to the London-Mexico City route and the importance of transfer traffic[27]. We have reproduced the latest version of the graphic in Figure 13 below.

[25] Source DIIO SRS Analyser

[26] Share of Manchester transfer traffic has increased over time due to reduction in total traffic as result of high speed train services to London.

[27] Most recently by Heathrow Airport in a presentation at the Runways UK conference where the aircraft flying the service was a Boeing 747-400.

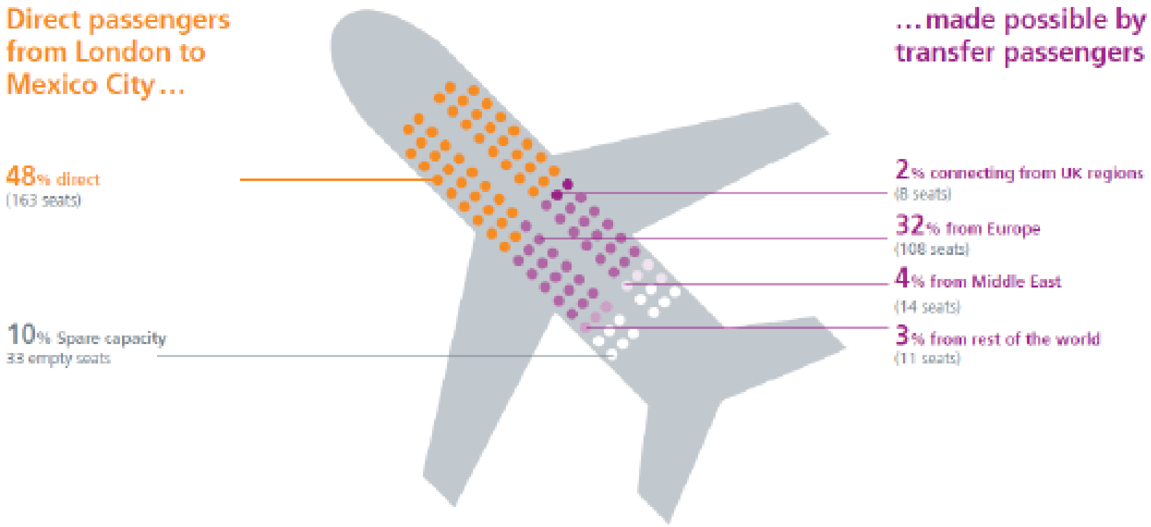



**Figure 13 –Illustrative example of connecting traffic (Source Heathrow Airport Runways UK Conference 2014)**

According to research undertaken for Gatwick Airport by ICF SH&E, some 54% of the traffic on the Heathrow – Mexico City route in 2013 was transfer traffic. We have presented some of the data at a route level in terms of passenger numbers in Figure 14. What is clear from this data is the extent of the connecting passenger flows. Even the thickest connecting flow (Tel Aviv – London – Mexico City) represents fewer than 8 passengers each way per day.

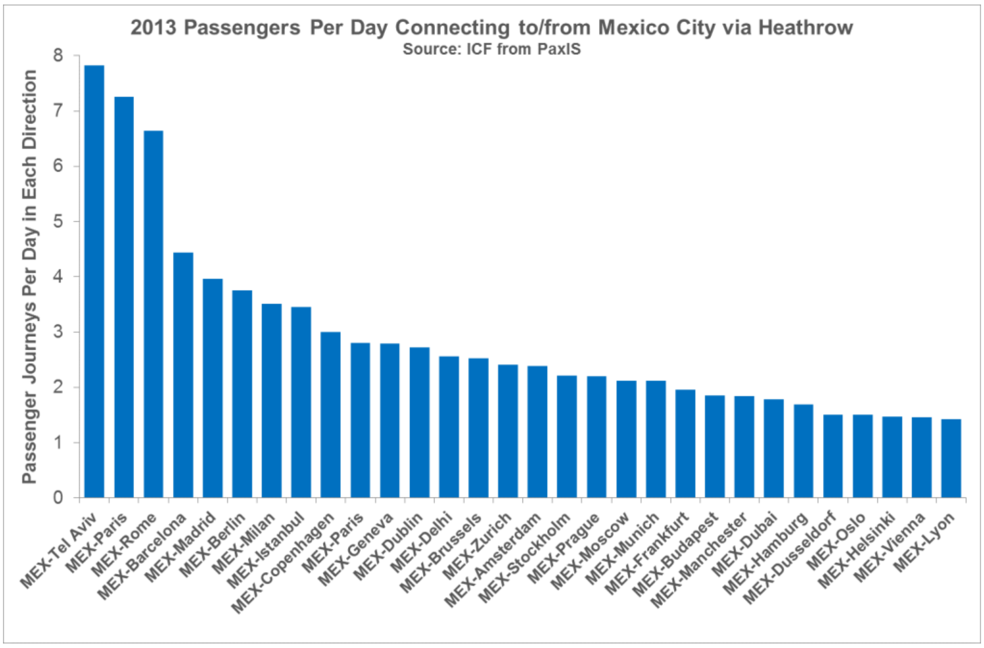



**Figure 14 – Connecting traffic across London to/from Mexico City (Source: ICF SH&E from PaxIS)**

What is also evident is that passengers travelling between their origin and, in this case, Mexico City as their final destination have a range of potential route options which inevitably results in pricing pressures. Indeed, when we compared the options for passengers flying between Tel Aviv and Mexico City, whilst connecting over Heathrow is relatively highly ranked amongst the other alternatives, London in terms of elapsed time is clearly not the best option. Table 3 below illustrates that it is some two hours quicker to travel via Paris Charles de Gaulle on Air France, a reflection of airline network and scheduling decisions.

| Airline | Flight | Conx Point | Kilometers | Elapsed Time (Minutes) |
|---|---|---|---|---|
| AF-AF | 1321/438 | CDG | 12,501 | 1,085 |
| HV-KL | 724/685 | AMS | 12,534 | 1,100 |
| LY-AM | 7/403 | JFK | 12,500 | 1,124 |
| LY-4O | 1/2993 | JFK | 12,500 | 1,130 |
| AF-AM | 1621/4 | CDG | 12,501 | 1,145 |
| DL-4O | 469/2993 | JFK | 12,500 | 1,155 |
| IZ-AM | 2743/4 | CDG | 12,501 | 1,165 |
| LY-AM | 325/4 | CDG | 12,501 | 1,185 |
| **BA-BA** | **162/243** | **LHR** | **12,509** | **1,195** |
| LY-AF | 319/438 | CDG | 12,501 | 1,215 |
| LY-LH | 357/498 | FRA | 12,522 | 1,215 |
| LY-UA | 27/1063 | EWR | 12,501 | 1,220 |
| IB-IB | 3319/6403 | MAD | 12,632 | 1,230 |
| LY-AS | 5/250 | LAX | 14,687 | 1,230 |
| LY-DL | 1/481 | JFK | 12,500 | 1,238 |
| LY-IB | 395/6403 | MAD | 12,632 | 1,240 |
| LY-AM | 1/405 | JFK | 12,500 | 1,248 |
| LY-IB | 397/6405 | MAD | 12,632 | 1,250 |
| DL-DL | 469/481 | JFK | 12,500 | 1,263 |
| IB-IB | 3315/6405 | MAD | 12,632 | 1,265 |
| DL-AM | 469/405 | JFK | 12,500 | 1,273 |
| LH-DL | 681/131 (ATL) | MUC | 12,517 | 1,334 |
| IB-AM | 3319/2 | MAD | 12,632 | 1,355 |
| LY-AM | 5/645 | LAX | 14,687 | 1,370 |
| DL-UA | 469 (JFK)/821 | SFO | 14,970 | 1,618 |
| DL-AM | 469 (JFK)/669 | SFO | 14,970 | 1,683 |
| US-AM | 797 (PHL)/647 | LAX | 14,687 | 1,708 |

**Source: DIIO SRS Analyser**

Table 3 – Connection options Tel Aviv – Mexico City April 2014 (Source: DIIO SRS Analyser)

For an airline, over the medium and longer term, it is the contribution that such traffic will make that is the most important issue given that once a flight has reached break-even, then 90-95% of any incremental revenue drops through to profit and free cash flow. The nature of revenue allocation of connecting traffic will also tend to have a negative impact on the financial performance of the short haul sector. There will inevitably come a time when marginal contribution from short haul connecting passengers is no longer offset by the benefit to the long haul business.

To illustrate the economics of transfer traffic, we have considered some of the fares offered across London to Mexico City and derived the yields to compare with the point to point yields (Table 4). The focus of the initial comparison is on how the yields for connecting passengers on each leg are significantly lower than the point to point yields.

| Tel Aviv-Mexico City via Heathrow on BA outbound 1st June 2014, inbound 22nd June 2014 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Return | | | | One Way | | One way per RPK |
| | | Fare | Tax | Total | Tax% | kms | miles | pence |
| TLV-MEX | Y | £457 | £363 | £820 | 44.3% | 12,509 | 7,775 | 1.8 |
| TLV-MEX | J | £2,555 | £411 | £2,966 | 13.9% | 12,509 | 7,775 | 10.2 |
| TLV-LHR | Y | £401 | £180 | £581 | 31.0% | 3,593 | 2,233 | 5.6 |
| TLV-LHR | J | £973 | £258 | £1,232 | 21.0% | 3,593 | 2,233 | 13.5 |
| LHR-MEX | Y | £476 | £404 | £880 | 45.9% | 8,916 | 5,542 | 2.7 |
| LHR-MEX | J | £4,276 | £609 | £4,885 | 12.5% | 8,916 | 5,542 | 24.0 |
| **Munich-Mexico City via Heathrow on BA outbound 1st June 2014 inbound 22nd June 2014** | | | | | | | | |
| | | Return | | | | One Way | | One way per RPK |
| | | Fare | Tax | Total | Tax% | kms | miles | pence |
| MUC-MEX | Y | £503 | £277 | £780 | 35.6% | 9,910 | 6,163 | 2.5 |
| MUC-MEX | J | £3,956 | £427 | £4,383 | 9.7% | 9,910 | 6,163 | 20.0 |
| MUC-LHR | Y | £171 | £114 | £285 | 40.1% | 994 | 621 | 8.6 |
| MUC-LHR | J | £350 | £134 | £484 | 27.6% | 994 | 621 | 17.6 |
| LHR-MEX | Y | £476 | £404 | £880 | 45.9% | 8,916 | 5,542 | 2.7 |
| LHR-MEX | J | £4,276 | £609 | £4,885 | 12.5% | 8,916 | 5,542 | 24.0 |

**Table 4 –Illustrative fares and yields to Mexico City over London** (Source: BA.com and airrouting)

As we demonstrated earlier, the latest generation aircraft from Airbus and Boeing offer significant operating cost advantages over current generation aircraft[28]. In broad terms, the 10-20% reduction in seat mile cost that the new generation aircraft offer over a B747 translates into a trip cost saving of between 50% and 60%.

Recent research by ICF SH&E for Gatwick Airport[29] suggests that if a Boeing 787 was used on the London Heathrow – Mexico City route when compared with a B747, unit revenues at an aircraft level would increase by some 11% with unit revenues in the premium cabins increasing by 28% and by some 9% in the economy cabins.

Turning now to consider the market between North America and the Indian Sub-continent. The data in Appendix 5 shows that in 2012, three of the top five routes in terms of their volume of connecting traffic across Heathrow were to/from Indian cities[30]. Most recently however, on two of these routes (Hyderabad and Chennai), British Airways has changed the aircraft operating the service to a Boeing 787 providing the opportunity to fundamentally improve the route economics and replacing services operated by both the Boeing 767 and Boeing 777.

If we consider the route to Mumbai (BOM) as an example of a key transfer market, where some 27% of the traffic is connecting, the key beyond London routes are shown in Figure 15. Mumbai is the commercial centre of India and over time it is reasonable to expect that the number of direct services will increase, a trend that will be both accelerated and accentuated by the introduction of the new aircraft.

[28] It recently been announced that Aeromexico will be deploying a B787 on its Mexico City – London service; previously a B767 was used on this route.
[29] "The Impact of Hub-Buster aircraft" on London; June 2014.
[30] These were Hyderabad (85%); Chennai (76%) and Bangalore 71%.

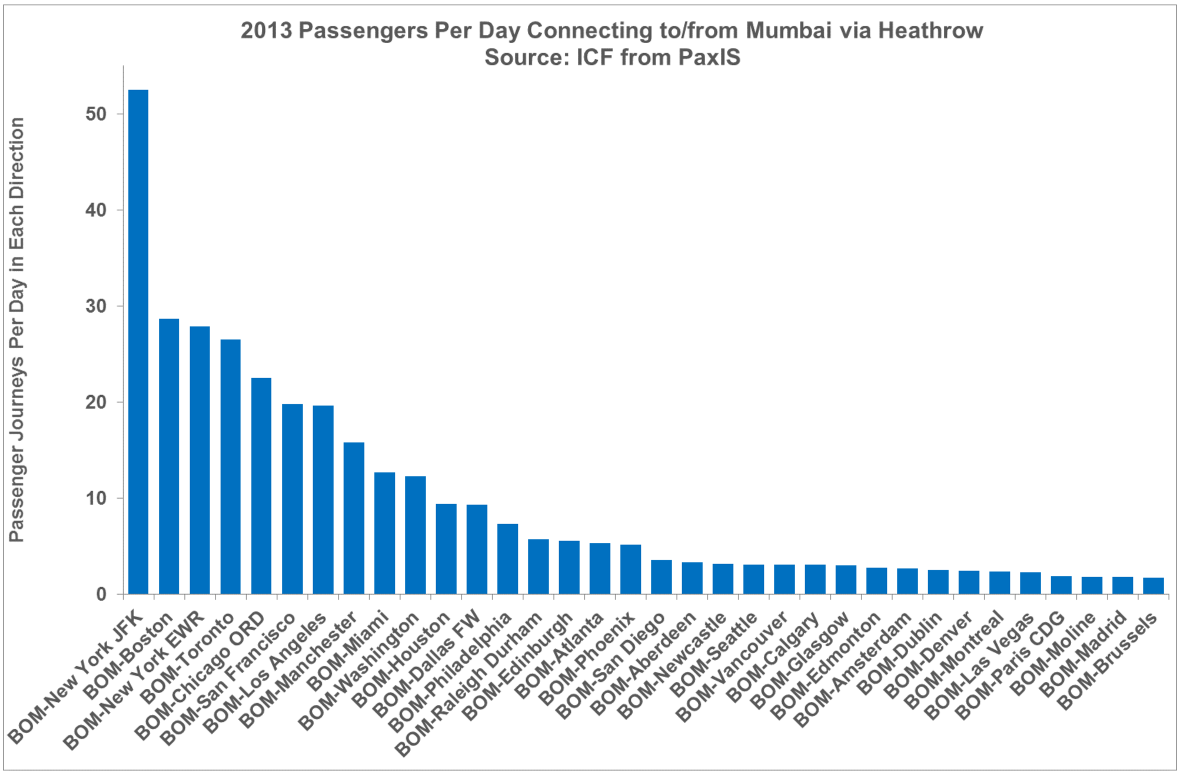



**Figure 15 – Key flows connecting across London to Mumbai 2013 – accounting for 85% of the connecting traffic (Source: PaxIS)**

It is our view that connecting traffic is likely to reduce for all European airlines, not just across London, between North America and the Indian Sub-continent. Firstly as the North American airlines[31] take delivery of their Boeing 787s[32] and A350s (as shown in Table 5 below) and secondly as Emirates, other Gulf carriers and Turkish Airlines increase their presence in the North American market.

A graphic illustration is Emirates which has expanded into the main North American markets. Appendix 7 shows the dramatic change in network between 2000 when no North American routes were served to 2014 when many of the main North and South American cities have been added to the network from Dubai. Three new destinations have been added since 2012 including services to Boston and Chicago which, as Figure 15 shows, are important sources for connecting traffic across London to Mumbai.

[31] Air Canada has already stated that it will operate its Boeing 787s to India.
[32] We have included the range charts for the Boeing 787 based on both New York and also Mumbai in Appendix 6.

| North American Airlines orders February 2014 | | | | | |
|---|---|---|---|---|---|
| | **Airbus A330** | **Airbus A350** | **Airbus A 380** | **Boeing 777** | **Boeing 787** |
| Air Canada | | | | | 37 |
| American Airlines | | | | 10 | 42 |
| Delta Airlines | 10 | | | | 18 |
| United Airlines | | 35 | | | 56 |
| | **10** | **35** | **0** | **10** | **153** |
| Source: Ascend | | | | | |

Table 5 – Orders in place for North American airlines as at February 2014 (Source: Ascend)

## 7.1 Conclusions

New generation aircraft, in particular the Airbus A350 and the Boeing 787 will have a significant impact on connecting traffic flows across London, reducing both the need for such traffic and its supply.

The remaining key long haul to long haul connecting markets over London (North America to the Indian Sub-continent will also be negatively impacted by the continuing increased penetration of the North American market by the Gulf airlines[33].

For an airline operating at London, the strength of the local origin and destination market is clearly advantageous and offers the opportunity to break even on lower traffic volumes than in markets where transfer traffic is a higher component of total traffic.

Over time, the natural dynamics of the market will result in local point to point traffic, at both ends of the route,  increasing and the share of connecting traffic reducing which (all other things remaining equal) will have a positive impact on average yields for airlines.

This conclusion is entirely consistent with traffic forecasts for London showing connecting share reducing over time.

[33] We have included a summary of the development of the Gulf Airlines and Turkish and their impact on London connecting traffic in Appendix 7.

# 8 Conclusions

Forecasting the future is fraught with difficulty at the best of times. It is fundamentally important to dispel any myths related to aviation market growth which might get wrongly accepted as “conventional wisdom”.

It is critical to understand the underlying market dynamics, not just those of an economic nature but also the impact of technology and in particular the effect of new aircraft to isolate some of the key factors that will actually deliver future aviation growth.

Potential demand reflects a series of economic factors ranging from the level and rate of GDP growth to household income, which will drive leisure travel, and trade (both goods and services) between the UK and the country at the other end of the route.

The extent to which this demand materialises as traffic is dependent upon the decisions of individual airline managements, principally in respect of the development and deployment of its aircraft fleet and the fare structures it is able to offer customers.

These decisions should also be based on the ability of the airline to make a satisfactory return from such operations. Fewer routes are now flown for “strategic reasons”. Success of a route reflects both traffic volume and ticket sales on the revenue side combined with a cost effective operation utilising the most appropriate aircraft.

We consider that the fleet plans, orders in place, and the aircraft delivery schedules for not only airlines currently serving London but for other airlines too, hold the key to the likely future traffic pattern, at least for the foreseeable future.

In this respect, it is not only the plans of the UK based airlines that are important but also those at the non-UK end of the route.

The majority of growth in long haul traffic will be delivered by non-UK airlines where the attractiveness to this group of airlines of services to London, as a leading global city, will determine whether they fly the route or not.

This will particularly be the case for those airlines in the rapid growth “ascendant economies” as it is widely accepted that these countries will provide a significant source of future long haul traffic growth into the UK and London markets.

Decisions will be based on the strength of the demand arising from traffic in the home markets of these airlines, and beyond, where they may aggregate traffic across their gateway airport on services to London as a destination rather than as a connecting point for traffic beyond London. Consequently London becomes a spoke in such a carrier’s network. This is already the case for a number of ascendant market services

For airlines, London represents the largest and most valuable aviation market in the world. Origin and destination traffic will increasingly be the driver of market growth.

London’s current traffic structure is dominated by origin and destination passengers that either begin or end their journey at one of the London airports and these passengers account for some 86% of the total and most forecasters appear to agree that it will be this direct traffic that will deliver the majority of future growth.

Accordingly it is necessary to keep a sense of perspective in respect of the actual importance of connecting traffic, not least as there are likely to be a number of structural changes that will both reduce the need for, and the supply of, such traffic (at necessary fare levels) across London.

In global terms London and the UK are now relatively poorly located for major future connecting traffic flows. The main connecting traffic flows across London currently link North America with Europe, Africa, the Middle East and the Indian Sub-continent.

The continuing increase in the number of North American cities served by airlines from the Gulf will act to divert some transfer traffic away from Europe and London. The inevitable impact of this supply side development will be to reduce the volume of this traffic transferring through London and other legacy European hubs.

Reductions in transfer flows will be reinforced by currently available new generation aircraft and, in particular, the Airbus A350 and the Boeing 787. These aircraft offer a longer range and lower unit cost combination that is usually associated with much larger aircraft. As a result they can be profitably operated on routes where the market is smaller and which traditionally would have relied on aggregating passengers at a hub airport to fill a larger aircraft, which provided the range, to serve the route. The new generation aircraft will be able to profitably serve these “long thin routes” directly, effectively providing “hub-bypass” direct services.

Indeed, all of the current top 50 transfer flows over Heathrow will be at risk, to some degree, from direct services operated by airlines at either end of the route which have ordered either the Airbus A350 or the Boeing 787.

Not only do these aircraft have particularly attractive operating costs, but they also present an opportunity to increase unit revenues, as their smaller size will also generally result in a better traffic mix, arising from more local passengers and fewer transfer passengers, compared to operating a larger aircraft.

The majority of UK based airlines do not operate intensive “demand aggregator” or “hub and spoke airline” models in the way that these descriptions might be applied to, amongst others, Air France, KLM, Lufthansa or Emirates which operate with 60-70% of their traffic consisting of connecting traffic.

The reduced need for connecting traffic that will result from operating more efficient new generation smaller aircraft will show through in a marked improvement in the financial performance of some long haul routes. It is also likely to result in more point to point services being profitably offered from London by UK based airlines.

This is an outcome that is reinforced by the long haul fleet plans of British Airways and Virgin Atlantic, both of which have a significant number of these aircraft on order.

In terms of passenger numbers, the short haul market currently accounts for some two thirds of traffic in the London airport system. This share is expected to remain at least constant into the future. Since the majority of future growth will come from short haul demand, this fact must not be overlooked in the capacity debate.

Consistent with the profile over the last decade or so, the main source of growth in the short haul market segment will be from what is known as the “low cost carrier (LCC) segment”.

As a group, these airlines have focused on, and are taking an increasing share of the business travel market. This reflects the coming together of a number of factors including a choice of airports served within a catchment area, attractive route structure, frequency of service and increasingly flexible fare structures.

As a group, LCC airlines currently account for some 45% of short haul traffic across the London airport system. The fleet plans and orders in place for the short haul airlines that operate to/from London clearly show that it is the LCCs that are the “growth airlines”.

Conversely for the legacy network airlines, their focus will continue to be on improving the financial performance of, rather than growing, their short haul networks.

There is a reasonable expectation that the future share of the market accounted for by the LCC airlines will grow to more than 60%. Against this background, it is essential that new capacity in the London airport system must be able to satisfy the requirements of all short haul airlines in terms of cost and operational efficiency.

A failure to do so will result in a potentially significant shortfall in actual traffic compared with current forecasts.

# 9 Appendix 1

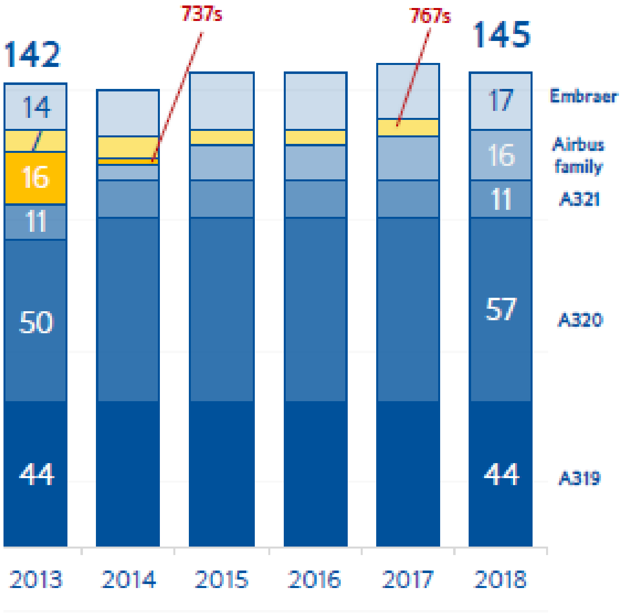
| | Seats offered (m) |
|---|---|
| British Airways | 55.6 |
| easyJet | 27.9 |
| Ryanair | 22.2 |
| Virgin Atlantic | 7.7 |
| Aer Lingus | 4.1 |
| TUI (Thomson) | 3.9 |
| Wizz | 3.7 |
| Norwegian | 3.5 |
| Monarch | 3.4 |
| Lufthansa | 3.2 |
| Emirates | 2.7 |
| American | 2.6 |
| United | 2.6 |
| Swiss | 2.2 |
| SAS | 2.0 |
| Air Canada | 1.9 |
| My Travel | 1.8 |
| Delta | 1.7 |
| Germanwings | 1.6 |
| Air France | 1.4 |
| | |
| Total this group | 155.9 |

**Table 6 – London area airports seats offered by airline 2014 (Source: DIIO SRS Analyser)**

| | Seats offered (m) |
|---|---|
| British Airways | 52.7 |
| easyJet | 18.3 |
| Virgin Atlantic | 6.2 |
| Aer Lingus | 5.6 |
| Norwegian | 3.4 |
| TUI (Thomson) | 3.0 |
| Lufthansa | 3.0 |
| Emirates | 2.7 |
| American | 2.6 |
| United | 2.6 |
| Monarch | 2.4 |
| SAS | 2.0 |
| Air Canada | 1.9 |
| Delta | 1.7 |
| Swiss | 1.5 |
| My Travel | 1.5 |
| Iberia | 1.2 |
| Jet Airways | 1.1 |
| Germanwings | 1.1 |
| Cathay Pacific | 1.1 |
| | |
| Total this group | 115.5 |

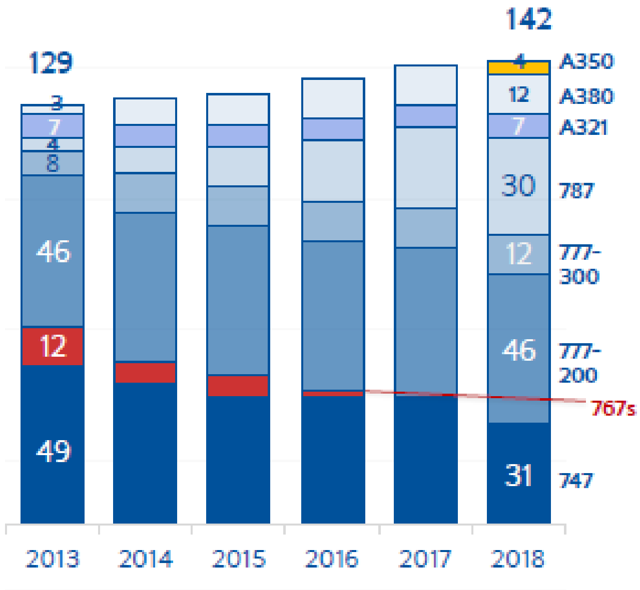
**Table 7 – Seats offered by airline at Heathrow and Gatwick 2014 (Source: DIIO SRS Analyser)**

# 10 Appendix 2




- Refleet Gatwick – transit to A319/A320
- Exit 767s at Heathrow
- 3 Embraer 190s for London City
- Increased density on Airbus (c6% spread over 2014 and 2015)
- Maintain point-to-point versus transfer % at Heathrow
- ASK growth 2014: c2%, 2015 c6%

**Figure 16 – British Airways short haul fleet plans 2013-2018 (Source: IAG)**




- 787 and A380 unlocks opportunities
- Retirement of long-haul 767s
- c3% increase in average seats per aircraft over next three years
- Right-size First on new aircraft types
- c3% p.a. average long-haul growth over five years: c7% 2014, c2% 2015
- Accelerated retirement gives flexibility to eliminate growth if required

**Figure 17 – British Airways long haul fleet plans 2013-2018 (Source: IAG)**

# 11 Appendix 3

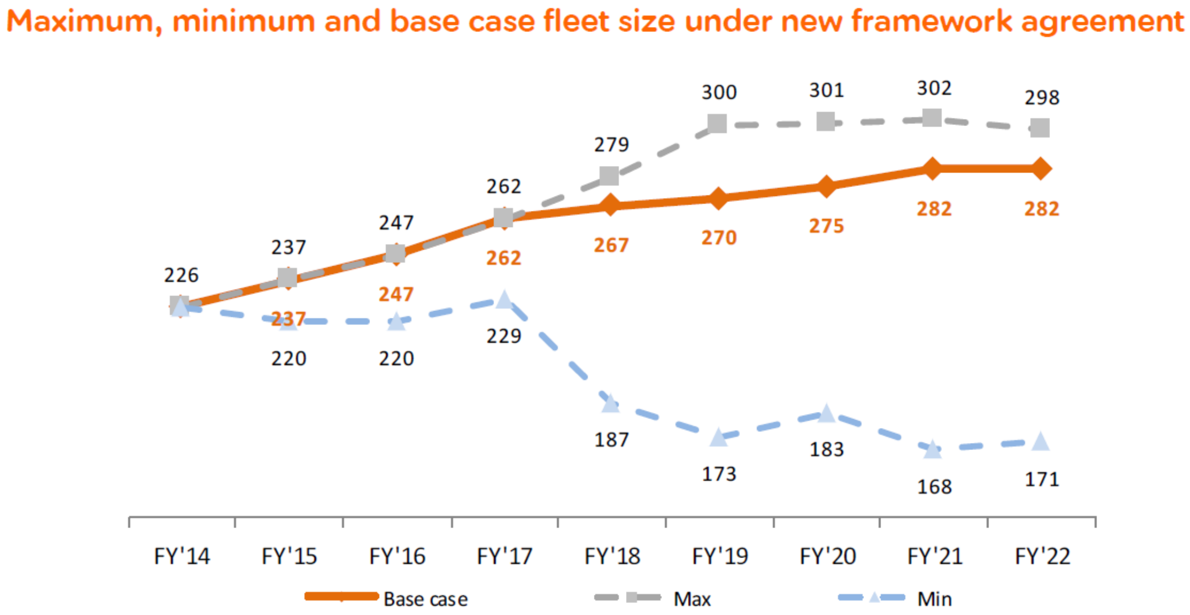



Figure 18 – easyJet fleet plans (Source: easyJet)

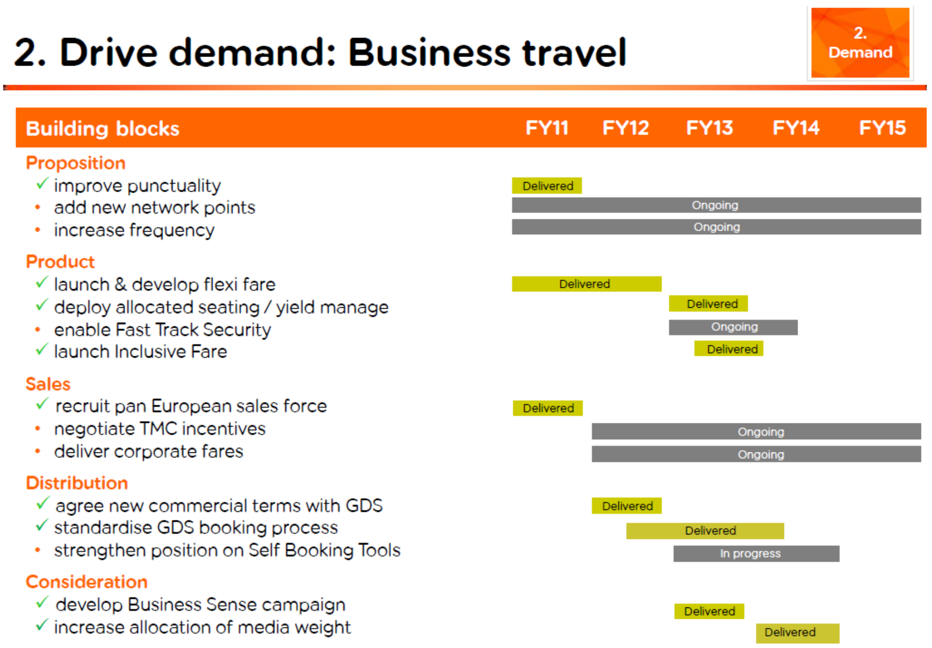



Figure 19 – easyJet – accelerating market convergence (Source: easyJet)

# 12 Appendix 4

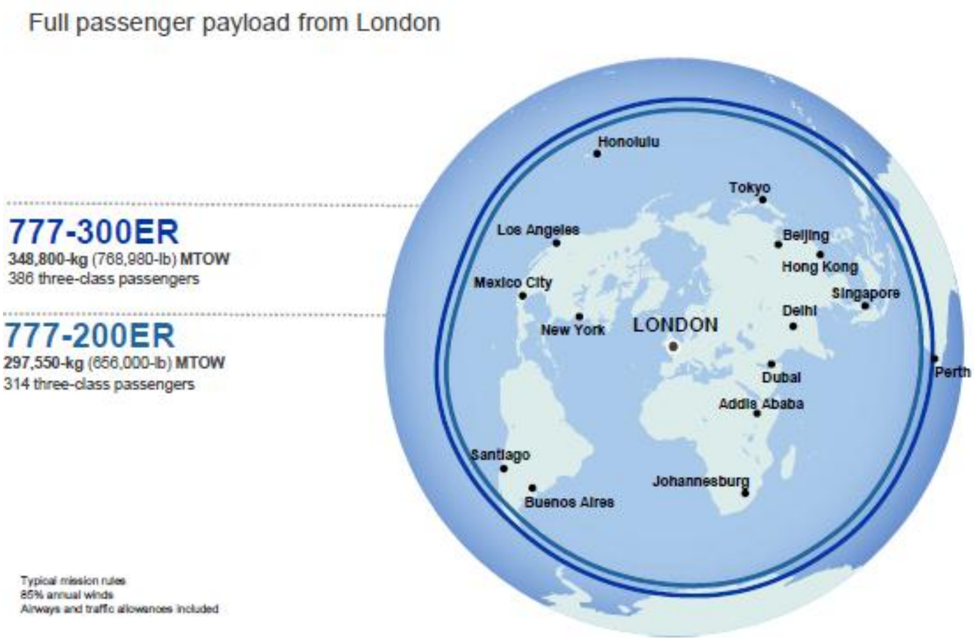



Figure 20 – Range chart for Boeing 777-200ER and -300ER (Source: Boeing Commercial Aircraft)

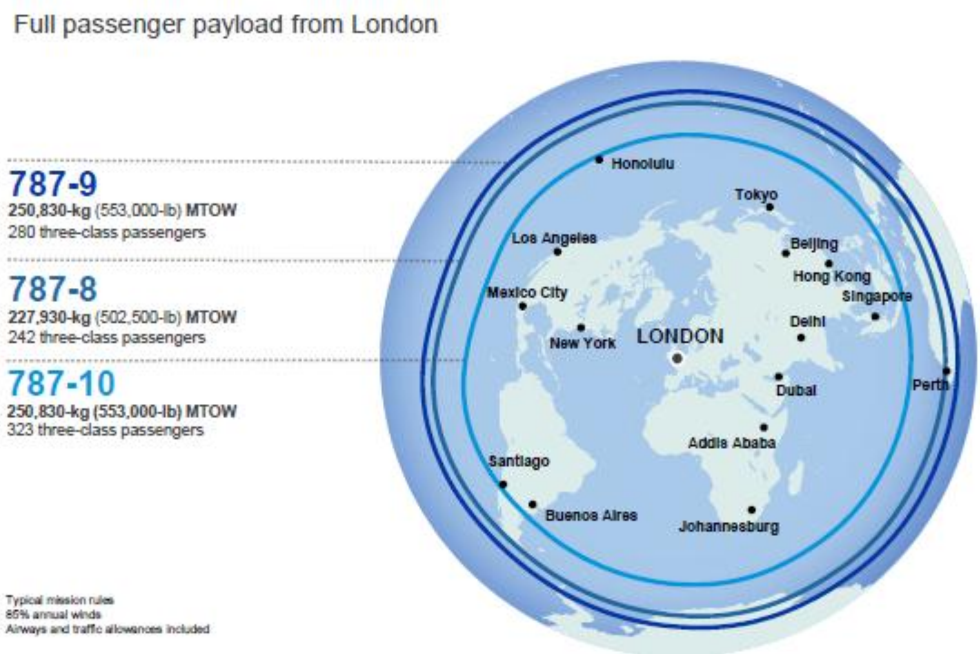



Figure 21 – Range Chart for Boeing 787 family (Source: Boeing Commercial Aircraft)

# 13 Appendix 5

| Market | Transfer_Pax |
|---|---|
| JFK-MAN | 32,116 |
| LAX-MAN | 24,250 |
| ABZ-IAH | 24,187 |
| HKG-MAN | 21,605 |
| MAN-SFO | 19,462 |
| GLA-JFK | 19,064 |
| JFK-NCL | 18,805 |
| BOS-MAN | 16,856 |
| EDI-JFK | 16,403 |
| MAN-MIA | 15,587 |
| EDI-NRT | 13,641 |
| EDI-HKG | 12,993 |
| ABZ-DXB | 12,210 |
| BOM-MAN | 11,553 |
| GLA-MCO | 11,098 |
| EDI-SFO | 10,888 |
| MAN-YVR | 9,920 |
| EDI-LAX | 9,469 |
| JNB-MAN | 9,432 |
| IAH-MAN | 9,332 |
| EDI-MCO | 9,302 |
| MAN-PVG | 9,156 |
| BOS-EDI | 8,883 |
| GLA-LAX | 8,755 |
| EDI-YYZ | 8,518 |
| MAN-YYZ | 8,237 |
| EWR-MAN | 7,981 |
| ABZ-LAD | 7,936 |
| EDI-MIA | 7,719 |
| ABZ-JFK | 7,506 |

**Table 8 – Top 30 domestic to International transfers across London 2013 (Source: PaxIS)**

| Market | Transfer_Pax |
|---|---|
| DEL-YYZ | 42,735 |
| BOM-JFK | 38,343 |
| CPH-LAX | 36,622 |
| JFK-TLV | 36,299 |
| DEL-JFK | 33,878 |
| FCO-JFK | 30,610 |
| DUB-SFO | 29,458 |
| DUB-MCO | 28,559 |
| DEL-EWR | 23,165 |
| ARN-LAX | 23,102 |
| CPH-JFK | 21,054 |
| BOM-BOS | 20,927 |
| BCN-NRT | 20,818 |
| CPH-MIA | 20,516 |
| BOM-EWR | 20,365 |
| JFK-LIN | 20,333 |
| BRU-JFK | 19,858 |
| BOM-YYZ | 19,343 |
| BLQ-JFK | 18,825 |
| ATH-JFK | 18,504 |
| JFK-PRG | 17,957 |
| FCO-LAX | 17,578 |
| CDG-JFK | 17,467 |
| GVA-JFK | 17,059 |
| ARN-JFK | 16,854 |
| CMB-YYZ | 16,735 |
| MAD-NRT | 16,630 |
| LAX-LIN | 16,612 |
| BOM-ORD | 16,437 |
| DUB-LAS | 16,242 |

**Table 9 – Top 30 International to International connecting flows across Europe (Source: PaxIS)**

| Route | Flow over LON | Total | Transfer at LHR |
|---|---|---|---|
| HYD | 82,687 | **96,991** | **85%** |
| MAA | 83,287 | **110,183** | **76%** |
| YEG | 70,366 | **99,277** | **71%** |
| BLR | 113,251 | **165,521** | **68%** |
| MAN | 465,411 | **779,677** | **60%** |
| EZE | 95,447 | **170,635** | **56%** |
| YYC | 149,576 | **268,749** | **56%** |
| MEX | 59,873 | **111,080** | **54%** |
| YUL | 169,927 | **320,379** | **53%** |
| PHX | 90,157 | **171,026** | **53%** |
| YVR | 256,445 | **489,050** | **52%** |
| YHZ | 47,592 | **92,222** | **52%** |
| YOW | 56,827 | **111,051** | **51%** |
| NCL | 228,742 | **456,056** | **50%** |
| YYZ | 431,261 | **901,507** | **48%** |
| SAN | 65,559 | **138,390** | **47%** |
| LYS | 97,020 | **208,236** | **47%** |
| PSA | 34,100 | **81,113** | **42%** |
| BEY | 82,053 | **203,698** | **40%** |
| GOT | 100,806 | **255,087** | **40%** |
| TLS | 79,949 | **203,496** | **39%** |
| SEA | 75,333 | **199,942** | **38%** |
| LAS | 81,622 | **218,229** | **37%** |
| BRU | 207,426 | **555,864** | **37%** |
| MEL | 69,770 | **190,177** | **37%** |
| LAX | 488,896 | **1,341,136** | **36%** |
| NAS | 18,375 | **50,883** | **36%** |
| GIG | 57,838 | **161,895** | **36%** |
| ABZ | 230,266 | **645,593** | **36%** |
| SYD | 164,070 | **466,582** | **35%** |
| MIA | 354,422 | **1,009,432** | **35%** |
| GLA | 264,607 | **760,983** | **35%** |
| BWI | 36,673 | **109,014** | **34%** |
| VCE | 27,214 | **80,999** | **34%** |
| DEN | 61,308 | **183,930** | **33%** |
| SFO | 302,991 | **934,094** | **32%** |
| CPT | 149,542 | **468,275** | **32%** |
| BAH | 109,569 | **348,056** | **31%** |
| GRU | 120,941 | **387,079** | **31%** |
| ORK | 114,452 | **367,735** | **31%** |
| EDI | 381,906 | **1,231,332** | **31%** |
| DFW | 173,921 | **569,634** | **31%** |

**Table 10 – London Routes where more than 30% of traffic is connecting traffic at London Heathrow (Source: PaxIS)**

# 14 Appendix 6

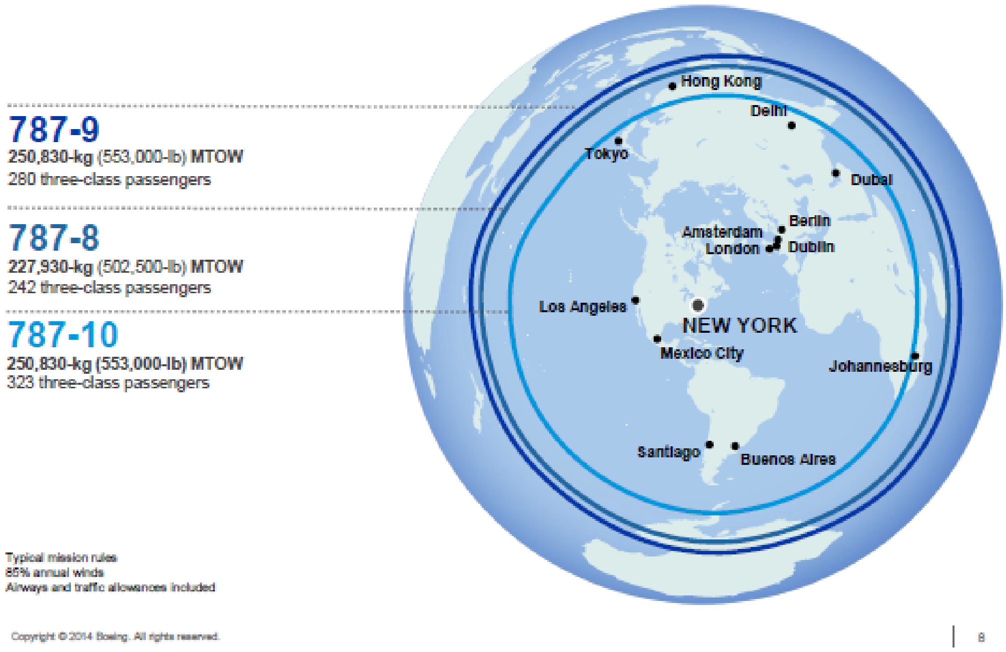



Figure 22 – Boeing 787 based on New York (Source: Boeing Commercial Aircraft)

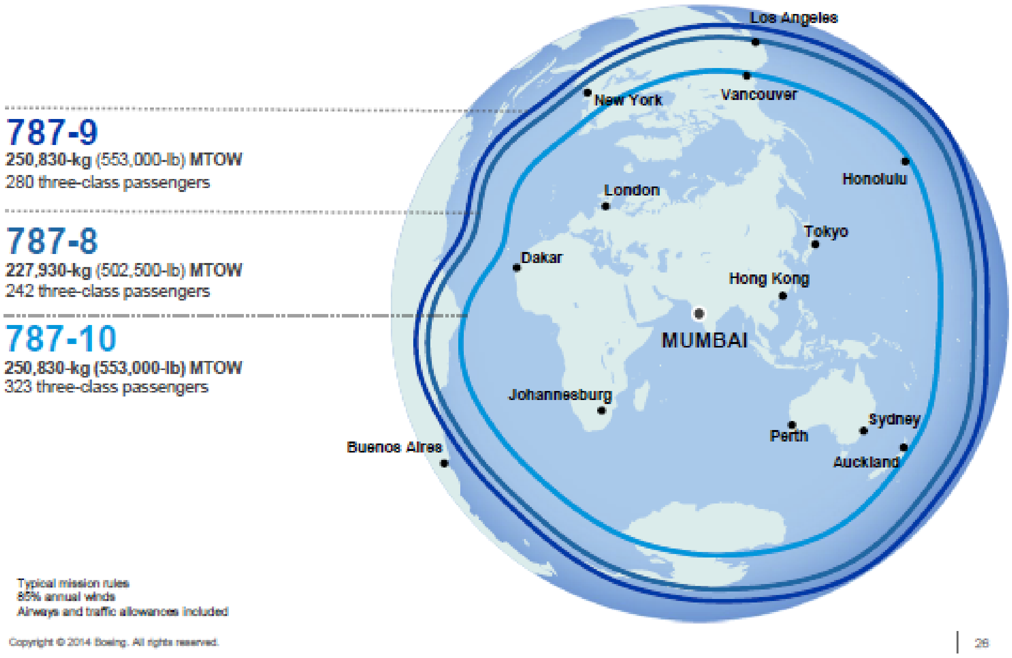



Figure 23 – Boeing 787 based on Mumbai (Source: Boeing Commercial Aircraft)

# 15 Appendix 7

## 15.1 Development of the Gulf airlines

Much has been made of made of the position of the Gulf airlines and also Turkish and the impact that they have had, and are likely to continue to have, on the distribution of traffic in key international markets. As we suggested earlier, for an airline pursuing a demand aggregation strategy, location is fundamentally important for success. In this respect, these airlines are well located for the main Northwest to Southeast and Northeast to Southwest traffic flows.

We also were clear that aircraft have the potential to have a catalytic effect on an airline or group of airlines and, as a result, the industry. Against this background, Figure 24 shows the network of Emirates in 2000 when it operated a fleet of 35 aircraft and carried 5.7 million passengers

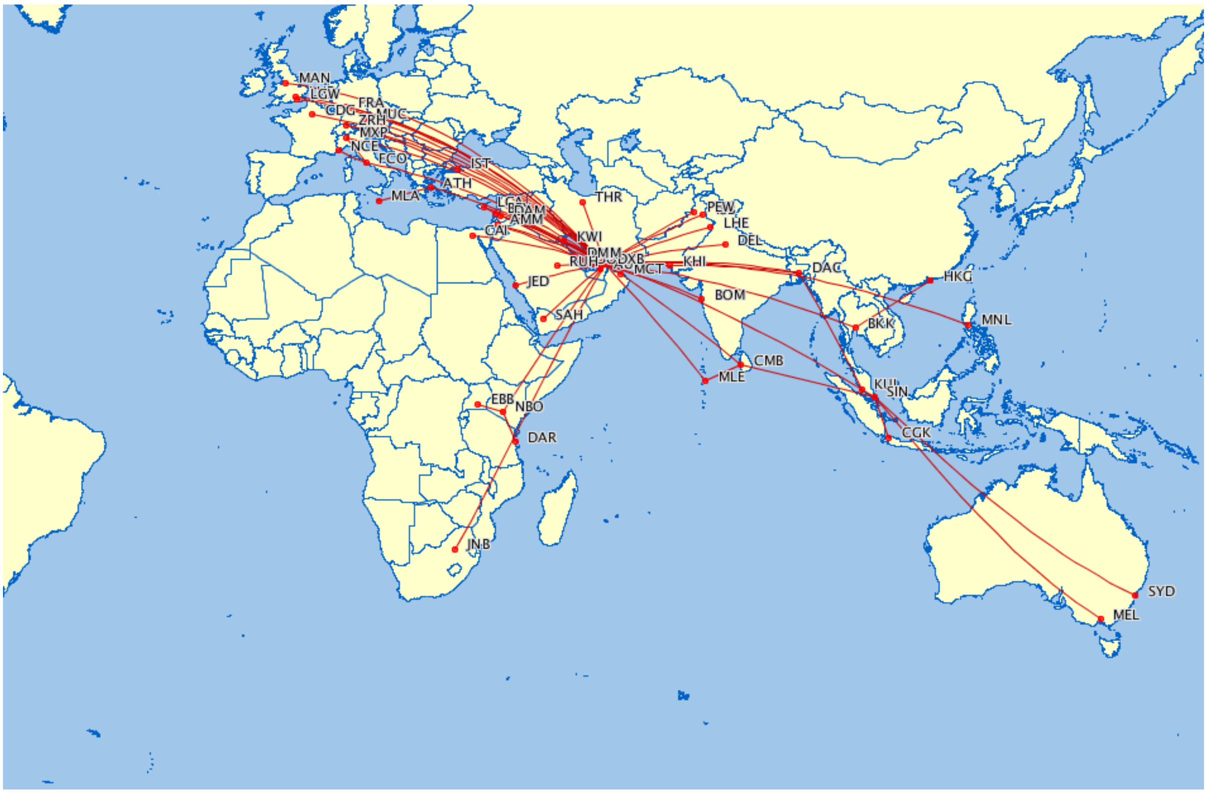



Figure 24 – Emirates network 2000 (Source DIIO SRS)

The change in aircraft capability with, in particular, the development of the Boeing 777 and more recently the A380, have enabled Emirates to significantly and rapidly expand its network to the position reached in 2014 which is shown in Figure 25.

Emirates current fleet comprises 218 aircraft with orders for 225 aircraft and a further 100 aircraft options. The combination of geography, strategy and affordable finance will ensure that Emirates, and indeed the other Gulf airlines, will continue to grow. The extent to which they increase their presence in North America in particular will further reduce transfer traffic across London from North America to/from the Indian Sub-continent and further south eastwards too.


**Figure 25 – Emirates network 2014 (Source DIIO SRS)**

# IMPORTANT NOTICE

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# Supply side issues and the London market

## Reviewing recent and continuing developments

January 2015

# 1. Background

As part of a continuing assignment for Gatwick Airport, and following the publication of the July 2014 report entitled "Supply side considerations – Perspectives arising from the Airports Commission Interim Report"[1], CTAIRA has been asked to keep a watching brief on supply side issues and to produce a commentary for the management of Gatwick Airport on any significant announcements or developments.

This report provides a review of the events and other industry developments with, where appropriate, observations and commentary against the background of the main themes that were developed in the July 2014 paper.

This report covers the period between July 2014 and the first week of January 2015.

[1] Click on the link to see this report https://www.gatwickairport.com/PublicationFiles/business_and_community/all_public_publications/Second_runway/Future_of_aviation_report_July14.pdf

# 2. Executive Summary

**Low Cost Carriers remain the industry's "momentum airlines" growing at twice the rate of others.**

- Growth reported by Low Cost Carriers (LCCs) in Europe has continued to be significantly faster (at least twice the rate) than that of their full service competitors, resulting in further market share gains for LCCs[2].
- The focus of LCCs is not only on growth but on taking a greater share of the business market where they are clearly achieving success. Ryanair has followed easyJet in restructuring its products and service offering to appeal to business passengers as well as adding more primary airports to its network.
- LCCs remain the industry's *"momentum airlines"* and will continue to drive growth in the UK market – they will continue to have huge significance in where future flexible and affordable capacity is needed.

**The new 'Low Cost Long-Haul' market continues to grow.**

- We consider that it is inevitable that "low cost long-haul" airlines will continue to increase their presence in the market place.
- The Boeing 787 Dreamliner has already allowed Norwegian to launch low cost long-haul services from Gatwick to New York and Los Angeles.
- Ryanair has again indicated plans to start low-cost long-haul services using new generation long-haul aircraft.
- Lufthansa has announced two low-cost long-haul initiatives to address low-fare point-to-point demand in its home market.
- Orders now being placed by well-established "low-cost long-haul" airlines in Asia for both all new and also the latest generation aircraft already in service will enable them to profitably serve Europe and London within the next 5-10 years.

**Game-changing new aircraft continue to feature in airlines' future fleet plans.**

- It is no surprise that new generation aircraft dominate manufacturers' order books; In the widebody segment the latest figures show that there are outstanding deliveries of some 1,600 Airbus A350 (778) and Boeing 787 (855) to more than 70 different airlines and customers worldwide.
- We have also seen the launch of new variants of existing aircraft; In particular the Airbus A330Neo which offers better fuel consumption and a greater range than the current A330 and what is considered to be a lower ownership cost[3] was launched at the Farnborough Airshow in July 2014.
- The latest generation of narrow body aircraft, with increased range and improved economics, also provides an opportunity for airlines of all types to profitably operate longer and thinner

[2] Passenger numbers for airlines that are members of the Association of European Airlines (AEA) are reported to have increased by some 2.7% on short haul routes in 2014 (source AEA press release 5th January 2015); this compares with passenger growth of 6-7% reported by easyJet and Ryanair.

[3] Launched at the time of the Farnborough Airshow; see also comments Flightglobal article 28th August 2014.

routes and are also considered to be "game-changers"[4].

**New route development by the Gulf airlines continues to reduce the potential supply of transfer traffic for London.**

- A number of the new routes announced by the Gulf airlines during the period under review will inevitably act to reduce the supply of connecting or 'hub' traffic across London.
- In particular the number of North American destinations that are served by Gulf carriers continues to increase (with Etihad announcing new services for its Winter 2014 schedules); at the same time capacity has been increased on a number of existing routes; Between 2004 and 2014 the number of round trips between this region and the Gulf has grown from 759 to some 11,000.
- Given the importance of "direction of flow" for connecting traffic, when compared to the Gulf, London and the UK are increasingly poorly located for major connecting traffic flows; this is the result of both geography and the impact of new generation aircraft that offer an appropriate combination of capacity, range and attractive operating economics. As a consequence we consider that London will continue to see a decline in connecting traffic from and to the origins and destinations where in the past (mainly due to aircraft limitations) it has had an advantage. It is also important to take into account the value of traffic as well as its volume and there are good reasons for airlines not to engage "in a race to the bottom" just to fill aircraft.

**London's continuing strength as a destination will ensure that its status as the World's best connected city is maintained through additional point-to-point routes from all world regions.**

- The increase in middle classes in emerging or 'ascendant' Asian economies, where Airbus is forecasting a tripling in size of this group from 1.41bn today to 4.45bn by 2033, will drive significant demand for air travel.
- The majority of the demand for travel that will arise from this group will be met by local long haul carriers from China, Vietnam, Indonesia and other "ascendant economies".
- For the vast majority of the inbound passengers from these countries, London will be their final destination. Furthermore, given the importance of "direction of flow" the geographic position of London limits the number of "beyond points" for traffic originating in this region.

[4] Indeed the CEO of Ryanair used this term in respect of the Boeing 737Max-200 order; Source Ryanair press release 28th November 2014

# 3. Foreword

A characteristic of the airline industry is the regular flow of news across all areas whether; traffic and financial performance, new approaches to business or announcements relating to new aircraft orders.

In this respect the period since the publication of the July report has been no different and the main thrust of the news has been to reinforce the points that were made in the July report.

Since the publication of that report there have been two "results seasons". The "results season" for the April-June quarter provided the platform for a raft of announcements not only relating to the historic financial performance, and near term outlook, but also in respect of some key strategic developments. The "results season" for the July-September was one where the announcements from most "legacy airlines" tended to focus on a continuing deterioration in the operating environment, a reflection of what was considered to be overcapacity[5] - or perhaps more accurately the consequences of competitors with lower cost bases adding capacity and taking market share.

**Within Europe not only have we seen Low Cost Carriers (LCCs) continuing to grow capacity at more than twice the rate of their Full Service Carriers (FSCs) competitors but we have also seen more evidence of market convergence as the LCCs increase their focus on the more valuable segments of the market by increasing the range of attributes that they offer.**

- At the same time as announcing the results for the April-June quarter the managements of Air France – KLM and Lufthansa also unveiled some details of their plans to accelerate their "in-house" LCC activities to provide a means to compete more effectively across a broader market. Whilst these announcements recognise the nature of the changes in the industry and how it will continue to develop in the future, in our opinion, none of the proposed actions in fact address the fundamental issues that these airlines face in their core short haul businesses.
- For Air France the industrial action that followed the announcement of its plans for Transavia resulted in management significantly scaling back its objectives. The result of this is that something that was always going to be "sub-scale" will now be even smaller[6] [7][8].

[5] For some airlines there were also the effects of strikes and other disruption that impacted upon the reported financial outcomes.

[6] This is a reflection of the difficulties associated with implementing change at the majority of legacy airlines rather than any change in the view of the management of Air France on how they believe that the short haul market in Europe will develop and what they need to do to be able to compete with at least part of their business; the reality is that the inability of "FSCs" to compete will result in an even greater share of the market being taken by the established "LCCs".

[7] There was also a recognition by Air France-KLM management that Transavia will be "playing in a different league" and a (re)-emergence of the idea that partnering with a low cost carrier might represent "a very efficient option" for Air France; Flightglobal 29th October 2014 quoting Pierre-Francois Riolacci CFO of Air France – KLM.

[8] In December 2014 it was announced that by 2017 the Transavia fleet would comprise 60 aircraft – some 40 fewer than envisaged in the original plan; Source Air France Press Release 18th December 2014.

- In the case of Lufthansa, although there have now been clear statements in respect of its proposed "Wings" operation, which in the short haul segment will bring together Eurowings and Germanwings, there remain a number of outstanding issues, not least about getting the costs of its existing low cost operation right given the admission by the Lufthansa Chairman that the cost structure of Germanwings is "too high" to compete with what are described as "*the thoroughbred budget carriers",* easyJet, Ryanair and Vueling[9].
- The responses by the managements of Air France-KLM and Lufthansa provide a very clear demonstration of the nature of the structural change that has already occurred in the short haul segment in Europe and which will clearly continue.
- However what is also clear is that in the case of the core short haul activities of the European "FSC" airlines the focus of attention is on improving the financial performance rather than on growth. Not only will the "LCC" airlines grow at a significantly faster rate but continuing "market convergence" will also result in the "LCC" airlines increasing their share of higher value traffic too. Indeed the difficulties being encountered by a number of the "FSC" airlines create an environment for a further acceleration by the "LCCs" in the same way that we saw in the early part of the last decade.

**In the long haul market, not only have we seen the launch by Norwegian of low cost services to the United States[10], but also a series of announcements from Lufthansa concerning its plans to launch a long haul low-cost airline.**

- In July 2014 Lufthansa's management also announced its plans to address the low fare/ long haul market out of Germany. Its approach comprises two elements; establishing a new airline under the "Wings" brand, which will in fact be operated by Sun Express Deutschland, initially with 3 aircraft and by reconfiguring and increasing the capacity of 14 of its 19 A340-300s which will be flown on leisure routes under the Lufthansa brand again starting with three aircraft. Although seen by some as significant the impact is unlikely to be material.
- Elsewhere the news that Ryanair is again considering entry into this market segment with new generation widebody aircraft provides further interest. Against this background the launch of a US website by Ryanair[11] will act to increase market awareness in what would be the destination market.

**We remain firmly of the opinion that the airlines in the "ascendant" economies will provide the majority of the growth in long haul traffic for the London market over the medium and long term.**

- This view is reinforced by the latest Global Market Forecast published by Airbus in September 2014. Amongst other things it noted that "emerging market economies share of international tourism has become increasingly important as shown by the share of passenger tickets issues in

[9] Carsten Sphor quoted in an interview with Flightglobal 31st October 2014
[10] Services between Gatwick and New York will move to daily frequency from summer 2015.

[11] Ryanair press release 23rd December 2014

emerging economies growing from 25% in 2002 to 35% in 2013"[12].

- Growth in tourist demand will represent the largest element and this will be, amongst other things, driven by increases in the size of the middle class. Here Airbus is forecasting that over the period to 2033 the size of the middle class in emerging economies will grow from 1.41bn people now to some 4.45bn at the end of the current forecast period; within this the number in the Asia-Pacific region will increase from 967m to 3.7bn. Conversely in Europe and the CIS the size of this group is forecast to decline from 679m in 2013 to 673m by 2033[13]. Against this background there is a clear recognition that the fastest growing traffic flows will be within and **from** the emerging markets[14].
- Comments from the management at AirAsia X when it announced an order for the A330-Neo at the Farnborough Airshow (July 2014)[15] and also from Spring Airlines that they are both considering services to Europe (and in the case of AirAsia X, specifically London) also act to highlight not only this more general point in respect of traffic origin but also that the well-established Asia based long-haul low cost airlines will play a growing role here too.
- Furthermore it is clear that the passengers will be flying to London as a destination rather than to any particular airport or seeking to connect beyond London.

**Over the summer of 2014 there were also a number of announcements from the managements of airlines based in the Gulf in respect of additional destinations in North America, and particularly the United States, as well as increasing capacity on their existing services to this region.**

- These developments will inevitably have a negative impact in terms of the available future volume, and the associated value, of traffic connecting over London or Europe between the USA and the Indian sub-continent in particular.
- Furthermore, albeit against a longer time horizon, the announcement by Dubai Airports of its plans for Dubai World Central (DWC) also ensures that the plans of Emirates, as the home airline, will be supported with adequate infrastructure.[16].
- We consider that these examples also provide a clear demonstration that it is the strategy of the home/largest airline, and implementation of the strategy, that will determine the nature and quantum of traffic flows at any airport.

[12] Source: Airbus Global Market Forecast 2014 p 40

[13] Source: Airbus Global Market Forecast 2014 p 17

[14] See Appendix 1.

[15] The main focus of attention at the Farnborough Airshow in terms of orders was in the short haul segment and where there were some 395 firm orders placed for narrow bodied aircraft with the majority from lessors; In the widebody segment there were 74 firm orders with another 193 aircraft covered by letters of intent. Appendix 2 sets out the current order and delivery status for widebody aircraft which shows the strength of the backlogs for the Airbus A350 and Boeing 787 programmes.

[16] Elsewhere in the region the new airport at Doha opened in June 2014 and at Abu Dhabi the new midfield terminal, able to accommodate some 27 million passengers, will open in 2017.

**We believe that a focus on what individual airlines, and more broadly airline groups, are likely to do in the future, and in particular those which we described in the July paper as the "momentum airlines", is of fundamental importance when taking the view of how the future might develop, particularly in the all important period until additional runway capacity in the London area is operational.**

- This need is very neatly described by Airbus in its 2014 Global Market Forecast: *"Historically a large part of the network evolution can be attributed to newer airlines that have greater ambition in the markets and a desire to grow their presence. Two groups have contributed significantly to past network growth, namely the low cost carriers and the dynamic airlines from the Middle East. It is no surprise that many of these airlines have continued to look for new growth opportunities, as underlined by their current order backlogs, preparing for more growth in capacity and new route opportunities in the coming years. One result will no doubt be increased competition[17]".*

- It has often been said that the only constant in the airline industry is change and against this background it is fundamentally important to recognise that the future structure of both demand and supply will be different from that of today. To this end that history might only provide, at best, a partial guide to the future is recognised in the Airbus long term forecast when it suggest that "*it is highly unlikely that the industry will continue its growth in new routes at or above the historical trend, with new passengers and traffic largely focused on the existing routes .....*"[18].

- We highlighted in our July 2014 report that focusing on the past, rather than looking and taking into account what is currently happening in the market, when considering the options for additional capacity in the London area, will result in an outcome where London, as an air transport market, fails to realise its full potential.

[17] Source: Airbus Global Market Forecast 2014 p 45

[18] Source: Airbus Global Market Forecast 2014 p 49

# 4. Summary of the July 2014 report

It is perhaps worthwhile repeating the main conclusions of the July 2014 report here:

**Airlines' fleet plans hold the key to future traffic patterns**

- Airlines' fleet plans, orders in place and delivery schedules hold the key to traffic patterns for at least the foreseeable future. Here it is not just the plans of the UK airlines that are important but also those at the other end of the route and particularly those in the rapid growth "ascendant economies" given the widely accepted view that it will be these countries that will provide the significant source of future long haul growth into the UK and in particular the London market.

**London will remain as a destination rather than a connecting point for onward traffic**

- The majority of long haul traffic growth will be delivered by non-UK airlines and decisions will be based primarily and particularly on the strength of the demand arising in the home market or aggregated over the home airport of these airlines and where they will also see London as a destination rather than a connecting point for onward traffic.
- London will continue to be dominated by origin and destination (point to point) traffic and against this background it remains particularly important to keep a sense of perspective as regards the actual importance of connecting traffic which accounts for some 14% of the London system traffic.

**Connecting hub traffic will continue to decline due to further growth in the Gulf**

- London and the UK are now relatively poorly located for major connecting flows. For London the key flows currently link North America with Europe, Africa, the Middle East and the Indian sub-continent. The continuing increase in the number of North American cities served by the airlines from the Gulf will act to further divert connecting traffic away from London and Europe not least given the far greater coverage of the Indian sub-continent that is offered by the Gulf airlines.

**New generation aircraft will reinforce a decline in transfer traffic**

- This reduction in transfer traffic will be further reinforced by the introduction of increasing numbers of the Airbus A350 and the Boeing 787 offering a combination of range and operating cost normally associated with much larger aircraft which increase the opportunity for more direct services. These aircraft can be operated profitably on so called "long thin" routes and also providing the opportunity to by-pass hubs and offer more attractive direct services; the reduced need for and dependence on transfer traffic also improves the traffic and revenue mix. Some 50 of the top transfer flows over Heathrow are at risk from direct services that could be operated by airlines at either end of the route and which have ordered the A350 or the B787.
- Due to the strength of the London point to point market none of the UK based

airlines operates an intensive “demand aggregation” or “hub and spoke” airline model of the type evident at Air France, KLM, Lufthansa or Emirates and its competitors in the Gulf, where some 60-70% of the traffic for these airlines is connecting traffic.

- For UK airlines the operation of the smaller new generation long haul aircraft not only reduces the need for connecting traffic but will also result in a marked improvement in the performance of a number of routes as well as making new routes viable on lower traffic volumes.

**Short haul traffic and low cost carriers will continue to dominate**

- Short haul traffic accounts for two thirds of the passenger numbers in the London system; a share that is expected to remain at least constant into the future. Against this background the so-called LCCs which currently deliver some 45% of this total are expected to increase their share to closer to 60% and at the same time increase their share of the business market.

# 5. Summary of recent news and industry developments

Since the publication of the July 2014 report there has been a steady flow of news reporting particular events or industry developments which underline many of the principal conclusions that were contained in that paper. We have summarised some of what we consider to be the more significant ones here and consider these in more detail in the next part of the paper.

**1. Developments impacting on London's transfer traffic**

There is no disagreement that the principal connecting flows across London link North America with Europe, Africa, the Middle East and the Indian Sub-Continent. Against this background the continuing and seemingly inexorable increase in the number of North American destinations served, and the capacity offered on these routes, by the Gulf carriers is already having an impact on connecting flows across Europe and London. Since the July report we have seen; the start of new services and frequencies including:

- Qatar Airways: a service between Dallas/Fort Worth and Doha
- Etihad Airlines: a daily service between San Francisco and Abu Dhabi (using a Jet Airways aircraft[19]), which started in November and also to/from Dallas/Fort Worth which started in December, initially with 3 services a week but will increase to a daily service in April 2015[20].
- Emirates: A fourth daily New York – Dubai service from March 2015[21] and one of three that will be operated with an A380

There have also been capacity increases on other routes, most notably by Emirates on: the Boston to Dubai route which only began operating in March 2014 but where a larger aircraft was used from July with some 40% more seats in economy; also on the San Francisco and Houston routes to Dubai where from December 2014 the services were operated with an Airbus A380 rather than a Boeing 777.

All of these developments will inevitably have an impact on catchment area for transfer traffic across London, and more widely Europe, in terms of the competitive dynamics and in particular an impact on the available volumes at necessary fare levels.

We have also seen in the September 2014 CBI report *"Boosting capacity where it matters most – the nub is the hub"*[22] what appears to be a tendency to confuse correlation with causality against a backward rather than forward looking perspective and an apparent failure to recognise; how the air transport market has already changed, including ignoring the impact of the Gulf carriers on

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[19] Etihad has a 24% shareholding in Jet

[20] Even before the service started it was announced that from April 16th 2015 the frequency will be increased to become daily; "*The increased frequency will lead to enhanced travel connections between the United States and key markets worldwide including the GCC region and 12 cities served by Etihad and its partner Jet Airways across India....*": Source Etihad press release 23rd October 2014.

[21] Emirates press release 8th November 2014; this also highlights the potential for connections from the jetBlue network covering 86 cities and also "*Johannesburg. Nairobi, India and many cities on Emirates' Middle East network*"

[22] The British Chambers of Commerce report (15th October 2014) appears to neglect the same issues

transfer flows and the role that individual airlines, and the supply side generally, will play in delivering high level traffic forecasts and the resulting consequences.

It should now be beyond any reasonable doubt that historic, particularly high level, relationships are likely to be far less useful, given the nature and pace of change that is occurring and as a result they should be given reduced weight in the future. This is because of the nature of the structural changes that have occurred, and continue to occur, in relation to airline models as well as changes that are occurring in the locus of future air travel demand. The notion that London will be a significant transfer point for traffic connecting to the "ascendant economies" in the future is misplaced for a number of reasons, not least to do with geography, direction of traffic flow, the capabilities of new generation aircraft and the objectives and requirements of individual airlines both in the UK but perhaps particularly elsewhere too.

It is important to be clear about the conditions that need to exist for profitable connecting traffic against the reasonable assumption that an airline operating a particular route does so as it is at least expected to produce an adequate financial return at a route or network level[23]. An argument that requires closer examination, and challenge, is the one that suggests that services from London to many of the destinations in the "ascendant economies" will need connecting traffic to make them viable; in particular the question of where such connecting traffic will come from or go to beyond London is particularly pertinent as geography is against London acting as a transfer point for these traffic flows.

In large part this has to do with the location of London, the direction of traffic flows and that the shortest distances between the initial origins and final destinations are on great circle routes where other cities/airports offer far better options. The networks that the Gulf airlines have already established (and continue to develop) reinforce this point.

If we take China as an example, in terms of direction of flow, the natural flow of traffic across Europe and London would be to/from North and South America. However one feature of the last few months has been a stream of announcements regarding new direct services between US cities and those in China; most recently an announcement of services by American Airlines between Dallas-Fort Worth and Beijing, Hong Kong and Shanghai, which will also provide significant opportunities for connecting traffic beyond the US cities and into and from Latin America.

Similarly Aeromexico, which will have a fleet of, in the first instance, 19 Boeing 787s will inevitably offer more opportunities to connect Asia from Latin America beyond the services it currently offers to Shanghai and Tokyo.

Moving further south, although there are currently a limited number of options for travellers from parts of South America to/from China via Europe, the reality is that the connections across the Gulf may offer a shorter routing. For example Rio de Janeiro (GIG) to Hong Kong (HKG) is some 1,000km shorter via the Gulf than via London; conversely Rio de Janeiro to Beijing (PEK) is 300km shorter via London than over Dubai – a distance and consequent time difference that is less material. The actual and relative

[23] A fact that is recognised in the paper "Expanding Airport Capacity Competition and Connectivity" prepared for the Airports Commission; pp11 and 19.

advantage that a connecting point has is, of course, dependent on the original origin and ultimate destination of the passenger. In the case of Buenos Aires, for example, there is little difference in the distance to Beijing (PEK) whether the routing is via Europe, New York or the Gulf.

Given the extensive networks in place between the US and large parts of Latin America, traffic to/from this region is well placed to connect via US cities to/from an increasing number of destinations not only in China but also in other “ascendant economies” in the wider region.

**2. The emergence of low cost long haul**

The July report was published at the same time that Norwegian launched its new low cost long haul services from Gatwick to New York, Los Angeles and Fort Lauderdale, which were widely acknowledged as a ‘ground breaking’ within the industry. Since that time managements at a number of other airlines have either alluded to (Ryanair), or set out (Lufthansa), their plans for low cost long haul services.

The response announced by Lufthansa’s management provides a clear recognition of where it considers a significant element of future growth will arise from it its home market (low fare leisure) and that to participate in this segment they will need to be able to operate with markedly lower costs. Despite the attention given to the announcements the proposed developments are actually very small scale and unlikely to have a material impact on Lufthansa’s financial performance[24].

Elsewhere at the time of the announcement of the airline’s order for the A330Neo[25] the management of AirAsiaX stated that this aircraft would enable their return to Europe and to London in particular. The emerging long-haul low-cost model is, for a number of reasons, quite different from that followed by airlines that might have been put into this category in the past. Whilst there will inevitably be challenges, and indeed airline failures, this new group, is already providing, and will continue to provide, a new source of traffic growth which will also result in lower fares across the market place.

**3. Continued growth of short haul and low cost carriers**

In our July 2014 report, we described the LCC airlines as the “momentum” airlines, a position which we believe that they will continue to occupy. Indeed the growth reported by the LCCs in Europe has continued at a significantly faster pace than that of their full service competitors, at least twice the rate, resulting in further market share gains for the LCCs[26]. The Association of European Airlines, which comprises the majority of European legacy carriers, recently announced that short haul passenger numbers for its members overall increased by 2.7%[27] in 2014;

[24] In the presentation accompanying its third Quarter results management suggested that it would achieved a 20% reduction in the costs of 14 A340s’ in the high density configuration that will be used for leisure routes under the Lufthansa brand (the “Jump” concept”): Q1-Q3 2014 Results – Press and Analysts’ Conference 30th October 2014 slide 10

[25] Farnborough Airshow July 2014

[26] A clear indication of the momentum in the near term is given by the increases that Ryanair has made to its passenger forecasts with an increase from 84.6m to 89m passengers for the current year and from 89m to 95m in the its next financial year to 31st March 2016; Source Ryanair press release 3rd November 2014.

[27] AEA press release: 5th January 2015.

this compares with growth in passengers at easyJet and Ryanair in the 6-7% range.

Furthermore the announcements relating to recent orders, from amongst others Ryanair, act to underline the view that this group of airlines will continue to increase their presence in the market not only in terms of volume but also by taking a growing share of higher value business traffic.

Clear evidence of the rapidly changing and dynamic LCC segment is also provided by the changes that have been made to the forecasts for Ryanair's FY 2015 net profit outcome which management has increased from an initial expectation of €580-620m in May 2014 to the latest forecast of €810-830m in December 2014. The new focus on customer service, targeting business passengers and an increasing presence at primary airports, would appear to be the key to this dramatic change in the expected financial outcome for the year.

The continuing weak economic background combined with an inward looking focus of many of the European FSCs provides an ideal environment for the so-called low cost airlines to accelerate their growth in the same way as they did a decade or so ago.

## 4. The July and October "results seasons" for the "full service carriers"

The recurring message from the managements at the European full service airlines as they announced their results for the April - June quarter in July and August, was one of an operating environment that was still challenging, characterised by varying degrees of "excess capacity" and which as a consequence had resulted in a generalised reduction in growth expectations. A key area of management focus at that time was on taking additional steps to improve the performance of the business, including in some cases plans to accelerate and expand "airlines within airlines".

The messages accompanying the results for the July-September quarter that were released in October and November by the "legacy airlines" were even more downbeat on the operating environment; in most cases the results were also accompanied by a reduction in expectations for the rest of the financial year and into 2015 too, although the fall in the fuel price should provide some relief. Beyond this Air France-KLM further reduced expectations in December. The one notable exception is IAG where the expectations for the 2014 and 2015 outcomes have been increased with a generally positive outlook supported by strength in the lucrative North American market and an improved cost performance at both British Airways and Iberia.

# 6. An in-depth look - recent news and industry developments

**1. Transfer traffic developments**

In the July report we highlighted that none of the UK airlines operated a "demand aggregation" or "hub and spoke" model in the way that Air France, KLM, Lufthansa or any of the Gulf airlines do This is a point that is evident from a comment made at the time of the IAG second quarter results: "*one of the advantages that British Airways has over some of our competitors is that it is not as heavily dependent upon transfer traffic....We can turn it on or off and we are very conscious of the yields associated with that"*[28].

A further view was given at IAG's Capital Market's day in November where the CEO noted that: "*we're very pleased with the 787s that we have ordered. You saw Keith talked about the opportunity that it gives us in places like India where the operating cost(s) of the airline are fantastic and the size of the aircraft is perfect for us. So it will release or reduce the reliance that we have on transfer traffic"*[29]

This acts to reinforce the view that London is predominantly a point to point market and also the importance of local traffic which by definition is more valuable to an airline than connecting traffic[30]. IAG management is also very clear that maximising unit revenues rather than passenger numbers is a key business objective[31].

We also drew attention to the increasing presence of the Gulf airlines in key origin and destination markets for traffic transferring across London and the impact that this will inevitably have on a route by route basis. In this context, Emirates, which started its Boston-Dubai route in March 2014, announced after just three months that it would increase the size of the aircraft and increase the number of economy seats by 40%. Although there has been no quantification in terms of the passenger numbers carried by Emirates on the route, the press release announcing the news of the capacity increase is very clear in terms of the attraction of the route: *"With more than 50 New England companies operating in the UAE, the Boston route has proved popular among corporate travellers journeying to Emirates' home and hub in Dubai. In addition the service has also proven to be popular for travellers heading beyond Dubai to India, Bangladesh, Singapore and China, some of the Boston route's most popular destinations"*[32].

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[28] Source: IAG Earnings Call 1st August 2014 p 17

[29] Source : IAG Capital Markets Day 7th November 2014, Transcript p44

[30] It is also very revealing that when Virgin Atlantic announced the end of its "Little Red" services that it stated that "the demand for Little Red services has been mainly from point-to-point rather than connecting passengers – whereas the company had hoped for a high level of connections to Virgin Atlantic's long-haul network" – Flightglobal 6th October 2014. Furthermore the changes to routes jointly announced in September by Virgin and Delta, which has a 49% stake in Virgin, refocused capacity on the North Atlantic and away from other markets

[31] *"We are not going to get into disruptive discounting just to fill an aircraft"* and *"We can do a hell of a lot better financially with a lower seat count...with better unit revenue"* IAG Investor Day 7th November 2014 Transcript p 40 and p 49

[32] Emirates press release 10th June 2014

**Table 1 Transfer flows across London from Boston to Indian destinations 2013**

| Market | Lon_Conn_Apt | Passenger Journeys |
|---|---|---|
| BOM-BOS | LHR | 20,927 |
| BOS-DEL | LHR | 15,173 |
| BLR-BOS | LHR | 12,551 |
| BOS-HYD | LHR | 10,836 |
| BOS-MAA | LHR | 8,081 |

Source PaXiS

Table 1 shows the transfer flows between Boston to a number of destinations in India which connected across London in 2013; to calculate the passenger numbers involved it is necessary to double the figure for journeys as each passenger takes two flights.

Emirates had also announced in June that it will begin to operate an A380 on its San Francisco and Houston routes from December 2014; in each case this represented an increase in capacity of some 38% overall and some 80% in the premium cabins[33].

In terms of services and routes that have a potential impact on London, Emirates has also announced a fourth daily service from New York to Dubai which will start in March 2015 and a third daily service from Birmingham which will start in August 2015.

Elsewhere since July Etihad has begun new routes and increased capacity on others, actions which all have a potential impact on London connecting traffic. Management has also a made a very clear statement of intent as regards the North American market and in particular its intentions to grow further in the US.

In terms of routes:

- From November 2014 it began a service to San Francisco, its 6th destination in the US, using Jet Airways aircraft;
- In December 2014[34] it began a service to Dallas/Fort Worth as a 3 times a week service and announced an increase in frequency to a daily service in April 2015[35].
- Etihad will also fly from Edinburgh starting in summer 2015[36]

In terms of a statement of intent the announcement of the appointment of a *"seasoned federal and international government affairs leader with more than a decade of experience to the newly created Senior Manager of Public Affairs post in Washington DC"* couldn't be any clearer. This is underlined by a definition of the job role which is to engage *"with key stakeholders including US policy makers about Etihad Airways and the benefits that the carrier's growing presence brings to the US economy and American consumers."*[37]

Still within the Gulf region Qatar began operating its new route to Dallas Forth Worth on July 2nd which is its 7th US destination.

Looking to Africa, which is another connecting market for traffic across Europe and London, Emirates also announced its plan to increase its "operations by 40% over the next decade; it already serves 22 destinations: *"We will add*

[33] Source Emirates press release 19th June 2014; also states that *" our flagship A380 will allow us to connect even more people and facilitate trade between these important US cities and the Middle East, India, Africa and beyond".*

[34] Announced 14th July 2014; destinations ranked by timing of announcement

[35] Source Etihad press release 23rd October 2014; "To meet the needs of travellers flying into and out of Texas, we will increase our frequency sooner than expected on the route, with daily flights commencing from April 2015."

[36] Announced July 10th 2014

[37] Etihad Press Release 19th August 2014

*around 10 destinations in the next decade and will continue our investment and commitment to introduce more frequencies to our existing points to provide critical links to emerging markets from Asia, the Middle East and Australia. Africa is still an underserved market and Emirates will continue to channel traffic through the Dubai hub, which has already become a key gateway for the African continent.........Dubai's geographical location makes it possible for African* travellers to experience shorter travel times, which have been historically routed through European hubs like London, Paris and Frankfurt"[38]

**Observations and conclusions**

These developments focus attention on the wider issue of changing transfer flows and the increased presence not only the three Gulf airlines but also of Turkish Airlines in the North American market. In 2004 there were some 759 round trips operated by these airlines between their home bases and North America; for 2014 the figure is close to 11,000 or in terms of seats offered an increase from 0.46m to 7.55m; the increase in seats offered between 2013 and 2014 is some 1.95m[39]. These are changes which have already had an impact on connecting traffic flows[40].

The travel options for passengers in one of the key origin and destination markets for traffic currently connecting across London (North America and the Indian Sub-continent), will clearly increase as the Gulf airlines continue to expand their collective presence in the North American market and connect traffic to/from their well-established networks serving the Indian Sub-continent. These developments will further change the nature of these traffic flows and inevitably result not only in lower traffic volumes to connect across London but also traffic which will become less attractive from a financial perspective.

Against this background, given the underlying strength of London as a market in its own right, the introduction into service of initially the B787 (and in due course the A350) on routes to and from London reduces the need for transfer traffic, improves the financial performance on some existing routes and makes it possible to profitably open new routes with lower traffic volumes than might have been the case in the past. In 2013 the number of flights to/from Heathrow that were operated by a Boeing 787 was 2,132 a total which increased to just under 9,600 in 2014 rising to 12,000 in 2015[41] reflecting the increasing number of aircraft entering service particularly at British Airways..

**2. Long Haul Low Cost Developments**

Since the publication of the July report there have been a number of developments in what might be described as the "long-haul low-cost" market; all of these have also attracted a considerable amount of press attention. We consider some of the main developments and the likely consequences here.

**AirAsia X**

AirAsia X became one of the launch customers for the A330Neo; this is an aircraft which according to Airbus offers a 14% per seat

[38] Source: Emirates press release 2nd October 2014

[39] Source: DIIO SRS Analyser

[40] "You have to watch them closely and understand that they're a force to be reckoned with in the future if they keep expanding at those kind of rates" Doug Parker CEO American Airlines referring to the Gulf airlines in an interview with Flightglobal 6th October 2014.

[41] Source: DIIO SRS Analyser and CTAIRA estimate for 2015.

improvement in fuel burn and an additional 400nm of range[42]. In the case of AirAsiaX the announcement provided the background for an indication that the airline will return to serving European routes including London[43]; however, given the delivery schedule this is unlikely to be until 2018/19.

**Lufthansa**

Although the initial announcement by Lufthansa's Chairman Carsten Spohr on 9th July relating to launching a low cost long haul airline attracted considerable attention, it was not a new idea as it had been previously raised in March 2013[44].

In December 2014 the Supervisory Board approved the so-called "Wings Concept" which in the case of the long haul market segment involves the establishment of a new airline. Although the Board gave approval to lease in up to 7 A330-200 aircraft for this airline, which will be operated by Sun Express Deutschland, it will commence operations with only 3 aircraft in the winter 2015 season from Cologne; there has been no indication of how quickly the fleet will build up to 7 aircraft or what the longer term plans beyond this might be[45].

At the same time the first routes for the newly configured A340s were announced (Cancun, Male and Mauritius); although this so-called "Jump" concept has attracted considerable attention the reality is that what Lufthansa is doing is little different from steps that many of their competitors have taken to more closely match supply with demand in terms of aircraft configuration; indeed Lufthansa already has a number of differently configured A340-300s offering a range of seating capacity and class mixes;[46].

**Norwegian**

Here the most significant developments have been the start of services to the US from Gatwick (on the 2nd and 3rd July 2014) and the announcement of Gatwick as a long haul base[47]. Additionally from May 2015 it will increase frequencies on the route to New York to six times a week from the current three. This will also provide a significant increase in cargo capacity on the route, an important component of the Norwegian business and more generally for all long haul airlines.

Elsewhere it is clear from a range of comments on the Skytrax website how important the Boeing 787 has been for Norwegian in terms of customer perception; it

[42] Airbus press release 14th July 2014

[43] "I am pleased that they are offering this choice and bringing us the aircraft we truly need to develop further our low cost long haul model. We are 100% sure that the A330neo will be quite unbeatable in its size category and we look forward to enabling more people to fly further more often aboard this great aircraft" Tony Fernandes AirAsia Group CEO: AirAsia X press release 15th July 2014

[44] Source; Bloomberg 26th March 2013 "Lufthansa may form an intercontinental subsidiary similar to its Germanwings short haul unit" with the objective of helping to "sustain its market share on routes to Asia as rival operators siphon more and more traffic through hubs in the Gulf"

[45] "*The Eurowings long haul fleet should then be gradually expanded up to seven A330-200s over the next few years*"; Lufthansa press release December 3rd 2014

[46] Highlighted in a presentation by Lufthansa's CEO to an expert panel on 10th July 2014 - presentation at this address:http://investor-relations.lufthansagroup.com/en/veranstaltungen/conferences-roadshows/presentation-072014.html

[47] Press release 22nd August 2014

also provided some insights into actual prices paid as well as highlighting the potential that there was for brand damage when Norwegian had used chartered in services on its routes. Furthermore it is also clear from these comments where Norwegian has focused its attention - on the economy and premium economy segments of the market[48].

The most recent results for Norwegian to the quarter ending September 30th 2014[49] reflect additional costs associated with delays in receiving US approvals as well as those resulting from "technical difficulties" with the Boeing 787.

**Ryanair**

At various times in the past Ryanair's management has been reported to be considering entering the long-haul low cost market using narrow body aircraft and inter alia serving the US east coast from Ireland. Indeed Michael O'Leary outlined the idea and necessary conditions at the World Low Cost Congress in September 2013 where at the time the plan was to start with 7 aircraft and serve 3 US and 3 European destinations and then add seven aircraft a year for seven years to serve 10 destinations on either side of the Atlantic; one of the issues stated to be holding back the implementation then was the need for *"more efficient and lower cost aircraft"*[50].

More recently[51] it has been reported that *"The Irish carrier which is developing plans for a low cost service between Europe and America, said it would fly either Airbus A350s or Boeing 787 Dreamliners".* Unsurprisingly it is reported that such services, which are dependent upon Ryanair acquiring the aircraft, would feature "premium seating"[52].

**Spring Airlines**

Although recognising the challenges associated with low-cost long haul, the Shanghai based airline is not only reported to be planning to launch long haul operations but that this is something that has been under consideration *"for a number of years"* and that "*it is logical" for the carrier to make such a move"...."The airline has identified Europe and the United States as possible long haul operations"*[53].

**WestJet**

The Canadian low cost airline began its seasonal Toronto-Dublin (via St John's Newfoundland service) with a Boeing 737-700 in June 2014 extending the season to 25th November 2014. The airline has announced that this service will start again on June 14th 2015[54] and that it will also operate a Halifax-Glasgow service during summer 2015.

In July 2014 the management announced that the airline would be leasing four Boeing 767-300ER aircraft to operate long haul services[55]. In the first instance, in 2015, it will take over

[48] Source: www.airlinequality.com/Forum/norwegian.htm
[49] Published 23rd October 2014
[50] Source : Aviation Week 17th September 2013
[51] Source: Sunday Times 31st August 2014

[52] *"Ryanair still wants to launch a low-fare, transatlantic carrier with either Airbus or Boeing wide bodies, but only if it can take delivery of 40 to 50 newly-acquired aircraft within a two-year period at opportunistic prices, says chief executive Michael O'Leary" and "envisions a separate operation with routes connecting the top markets between the USA and Europe. It hopes to avoid the example of the former People Express, which attempted to transform a short-haul low-fare carrier into a transatlantic carrier in the mid-1980s."* Flightglobal 8th September 2014
[53] Source: Flightglobal 27th August 2014
[54] Source: www.westjet.com
[55] WestJet press release 7th July 2014

the services that Thomas Cook operates on its behalf to Hawaii. Subsequently management has given a clear indication not only that they will use the widebody aircraft on its European routes from 2016 but that in time it expects to place an order for new widebody aircraft[56] .

**WOW**

The announcement (22nd October 2014) by the Icelandic low cost airline that it is to fly summer season services from Reykjavik to the US east coast (which its competitor Icelandair already does), included news that it is offering connecting flights from Gatwick to Boston and Washington-Baltimore. Although the journey will take some two hours longer than a direct service, it is reported that the fare is at least half that of a direct service[57].

**Observations and Conclusions**

In considering the likely future position and role of long haul low-cost airlines it is important to recognise that the models and concepts of today have moved on substantially from earlier generally unsuccessful examples which failed for a variety of reasons; indeed today's models will continue to evolve further too. The key factors for success for the future will be; brand; market reach (which is in effect a virtuous circle where network, frequency and timing increase the ability to reach higher value passengers), best practice application of the revenue management system; and best in class asset management model (primarily acquiring the "right aircraft" at the lowest cost); and a business which has sufficient financial resources.

Although most attention has been focused on how the economics of the Airbus A330Neo, the A350 and the Boeing 787 are "game changing" it is also important to recognise that the latest generation narrow body aircraft, the A320 Neo family and the Boeing 737 Max, should also be classed as "game changers" given the increase in range and improvement in operating economics that they offer[58]. Indeed Norwegian has already stated that it plans to operate its Boeing 737 Max fleet on transatlantic routes as a means to increase frequency [59] ; Norwegian is scheduled to take delivery of its first aircraft of this type in 2017.

Most recently attention has focused on whether Airbus will launch an extended range version of the A321Neo offering a range of c3900nm, some 400nm greater than proposed for the current A321Neo; in terms of range and passenger capacity this aircraft would be a closer replacement for the now out of production Boeing 757. Such an aircraft would have the potential to connect London with inter alia Chicago, St. Louis, Pittsburgh, Mumbai, Nairobi and Kinshasa.

We believe that it is inevitable that long-haul low cost airlines will continue to increase their

[56] Source : Flightglobal 6th November 2014
[57]Source: http://www.mirror.co.uk/lifestyle/travel/usa-long-haul/budget-airline-launches-flights-just-4489368

[58] Whilst it is not new for narrow body aircraft to be used on long thin routes for example amongst many examples: the Boeing 757 is used by a number of US airlines for transatlantic services; British Airways uses a business only A318 between London City and New York; Qatar Airways an A319 in a business configuration between Doha and London; Turkish Airlines uses B737-900 ERs on sectors up to 5200kms, for example Istanbul-Kinshasa; Norwegian flies B737-800s between the Scandinavian capitals and Dubai (a range of between 4800 and 5200kms).
[59] Source; Flightglobal July 4th 2014

presence in the market place and that over time, as they take delivery of the new versions of existing aircraft or of new generation aircraft, London will be served, as a point to point destination, from an increasing number of distant origins and particularly, but not only, from Asia where "low cost long haul" is already well established. The main focus of attention will be on the leisure market which represents the key growth segment in terms of traffic.

**3. Short haul and Low Cost Carriers**

In our July 2014 report we described the LCC airlines as the "momentum airlines" which is a position that we believe they will continue to occupy. The chart included at Appendix 3 from a recent Ryanair results' presentation shows the current structure of the European short haul market and the presence that this group of airlines occupies. Indeed the growth reported by the LCCs in Europe has continued at a significantly faster pace than that of their full service competitors, at least twice the rate, resulting in further market share gains for the LCC[60]s. Furthermore the continuing, and indeed accelerating, focus on higher value traffic[61] will have a disproportionate impact on revenue shares. We have also seen announcements for significant additional aircraft orders from this group of airlines over the last few months too.

The position was succinctly described by Lufthansa at the time of its results for the second quarter:

*"The two major low cost carriers Ryanair and easyJet hold around 40% of the still highly fragmented (European short haul) market. There is an increasing convergence between the systems of network and low cost carriers. Ryanair for example is pressing ahead with adapting its business model. Among other things by accessing primary airports and entering into partnerships with Global Distribution Systems, it is now looking to extend its appeal to a more discerning customer base.....Low cost airlines grew disproportionately fast in Europe in the first half of 2014 which in particular put structural pressure on transfer traffic in the Passenger Airline Group hubs"* [62]

At the time of their results for the April – June quarter the management teams at Air France – KLM and Lufthansa made major statements in respect of their latest intentions for the low cost segment.

Following the announcement of its results in August 2014, Air France management then used its Investor Day on 11th September to set out its plans for Transavia (its low cost business) and in particular how it would become a pan-European airline.

Although industrial action, in the form of a two week strike by pilots at Air France in protest at the management's plans, resulted in losses, initially estimated at some €500m[63], and much reduced ambitions for Transavia, comments by management at the height of

[60] See Appendix 4 for comparative growth rates for capacity compiled by Vueling management which suggests a greater differential between the growth rates in the future

[61] easyJet management stated that some 20% of the airline's passengers were travelling for the purpose of business: Source Interim Management Report Presentation 24th July 2014 and Ryanair stated that in their case the share was 25% Source Ryanair Press release 27th August 2014.

[62] Source: Lufthansa 2nd Interim Report January-June 2014 p.11

[63] In the results for the July-September quarter the profit impact was reported to be €330m

the dispute are particularly clear in respect of the changes that it sees in the wider market in Europe and also in respect of what it considers that Air France needs to do both to protect its core business as well as to be able to "tap into" the growing part of the short haul market.

*"To remain in the race in Europe, we have no alternative than to rapidly expand Transavia. We are now taking every measure to explain and accelerate its growth out of France. The Air France-KLM Group is reaffirming its aim of reaching a fleet of more than 100 Transavia aircraft by 2017," said Alexandre de Juniac. Frédéric Gagey continued: "These decisions must enable us to restore calm within the company and end the strike that has lasted too long for Air France, its customers and its staff[64]."*

However two days after this robust statement from management the original plan was scrapped [65]; the latest plan which was announced in December 2014 anticipates a fleet of 60 aircraft for Transavia by 2017[66]; although a recognition and reflection of how the market has changed and what the future looks like the consensus is that in the case of Air France-KLM it is too little too late – even before the costs of disruption have been factored in.

It is perhaps no coincidence that at its Investor Day on 18th September 2014 easyJet used France as its case study to show both what it had achieved and also the potential of the market[67].

**easyJet**

Since the July 2014 report easyJet management has:

Announced that a new base at Amsterdam (with 3 aircraft initially) is to be established in Spring 2015 (coinciding with the start of Summer 2015 timetable); easyJet already "night stops" an aircraft here for the early morning inbound service to London Gatwick and benefit from the business traffic mix; the press release also stated that some 30% of easyJet's traffic to/from Amsterdam is travelling for the purpose of business.[68]

Published an interim management statement which covered the April-June quarter where:

- Capacity had grown, primarily driven by a 16% increase at Gatwick mainly due to the purchase of the Flybe slots and 7% growth at Rome Fiumicino[69].
- Business passenger numbers had increased by 7% in the quarter with some 20% of all traffic now travelling for the purpose of business, up 1% on the position at the end of the last financial year.

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[64] Air France –KLM press release 22nd September 2014

[65] *"Last night, on the strike's tenth day, the French flag carrier not only offered to scrap the "Transavia Europe" project but proposed further development of Transavia France, albeit "in competitive economic conditions and accompanied by the safeguards as discussed in the negotiations so far".........With the scrapping of the international plan the airline would seek to preserve what it terms a "made-in-France solution" for Transavia "to face the competition from foreign low-cost carriers and conquer this rapidly expanding market".* Source Flightglobal article 24th September 2014

[66] Air France-KLM press release 11th December 2014

[67] EasyJet Investor Day Presentation 15th September 2014 slides 27-37.

[68] Source: easyJet press release 17th July 2014

[69] Source: Interim Management Statement 24th July 2014

Held an investor day in September where one of the very clear messages was[70] the extent of the potential that exists for profitable growth against a background where the “LCCs” will also increase their share of the business traveller market.

Announced its full year results in November where:

- Pre tax profits at £581m were in line with what were recently upgraded expectations and some £103m higher than the previous year; indeed easyJet’s performance exceeded initial expectations throughout the year.
- Against the background of a more competitive market, growth in current financial year will be 5% and loaded to the second half of the year;
- Over the medium term capacity growth of between 5% and 8% should be expected

**Norwegian**

Although traffic grew faster than capacity, Norwegian’s revenues lagged costs due in large part to the costs associated with the introduction of the Boeing 787. This and other factors had an impact in the third quarter too.

Since it launched its long haul services at Gatwick, management announced that it will establish a long haul base at the airport.

Whilst the main focus of attention is on the further development of the long haul business the airline will also take delivery of a net 23 short haul aircraft over the 2014-2016 period including in 2016 the first of 100 A320Neos that have been ordered by the airline.

[70] 18th September 2014

**Ryanair**

Management reported better than expected results both for the first quarter and again at the time of the half year results for the year to 31st March 2015 were announced[71]. Unsurprisingly the forecasts for the full year outcome have been increased as the year has progressed. The latest forecasts are for a net profit in the range of €810-830m which compares with an expectation at the start of the financial year of an outcome in the €580-620m range.

The forecasts for traffic have also been increased from 84.6m passengers made at the start of the year to 89m passengers now[72] and also for subsequent years too as we show in table 2.

**Table 2 Ryanair changes in forecast passenger numbers FY2015-FY2019**

| Year to 31st March | 2015 | 2016 | 2017 | 2018 | 2019 |
|---|---|---|---|---|---|
| | Pax (m) | Pax (m) | Pax (m) | Pax (m) | Pax (m) |
| November 2014 forecast | 89.0 | 95.0 | 100.0 | 106.0 | 114.0 |
| July 2014 Forecast | 86.0 | 90.0 | 96.0 | 104.0 | 112.0 |
| May 2014 Forecast | 84.6 | 89.0 | 96.0 | 104.0 | 112.0 |

Source: Ryanair press releases

The focus on higher value passengers has continued to gain momentum as the year has progressed in particular with the launch of the airline’s “Business Plus” offer in August 2014[73]. Management also announced a significant new order for aircraft which will provide the basis for growth for next ten years.

[71] Issued 3rd November 2014
[72] Sources Ryanair press releases;
[73] Source Ryanair press release 27th August 2014

The main points emerging from the results statements, presentations and the subsequent announcements may be summarised as:

- A continued re-focusing in terms of the offer and market access/reach[74] [75] and in particular through the "Business Plus" product; at the time it was launched it was stated that some 25% of its passengers already travel for the purpose of business[76]. The new "Business Plus" product is considered to offer the main attributes desired by business travellers[77].

- Increasing the airline's presence at principal airports where attention has also focused on operating "business friendly frequencies" at Dublin and Stansted[78]; most recently it has been announced that Ryanair will establish a base at Copenhagen in March 2015 and base 4 aircraft there[79]. It also began services from Glasgow (GLA) in October[80]. Indeed Ryanair has re-entered the UK's two biggest domestic routes; Edinburgh and Glasgow to London.

- There has been a restatement of its longer term plans with a target of some 40% growth in passenger numbers from 81.7m in FY2014 to 114m in FY2019 (see table2) and an increase in the fleet from 304 aircraft now to 426 by summer 2018[81].
- For the period beyond FY2019, the order initially announced on 8th September[82] (and approved by shareholders in November 2014), for up to 200 Boeing 737 Max 200 aircraft (100 as a firm order and a further 100 options), provides the opportunity to grow the fleet to 520 aircraft by FY2024 and passenger numbers to 150m.

**Vueling**

Despite being part of a larger group (IAG), Vueling should be viewed as a "stand-alone" Pan European LCC. Given this the amount of disclosure in respect of Vueling has reduced however in the IAG Interim Management Statements for the periods to June 30th (Q2) and September 30th (Q3) it was reported that:

- Capacity in Q2 2014 was some 23.6% up on the corresponding period a year earlier with traffic some 27.1% higher.
- In Q3 capacity was 28.1% higher and traffic up by 25.5%

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[74] Lufthansa's management describes the change of focus in a particularly succinct way: "*Ryanair, for example, is pressing ahead with adapting its business model. Among other things by accessing primary airports and entering into partnerships with global distribution systems, it is now looking to extend its appeal to a more discerning customer base*": Lufthansa Second Interim Report January-June 2014

[75] Ryanair appears to have followed a similar path to that of easyJet to improve corporate market penetration

[76] Ryanair Press Release "European Businesses to save millions with Ryanair Business Plus": 27th August 2014

[77] These include; Flexible ticket, allocated premium seat, baggage allowance, priority boarding and fast track security at "selected airports".

[78] *"We are overrun with growth offers from primary European airports whose incumbent flag and regional carriers continue to cut capacity and traffic. These new airports along with our existing 69 bases offer Ryanair significant growth opportunities as the first of our new Boeing order delivers this September."* Q1 2015 Results (28th July) release page 1

[79] Ryanair Press Release 29th October 2014

[80] Ryanair Press Release 28th October 2014

[81] Given Ryanair's March year end this is mid way through FY2019

[82] Ryanair Press Release 8th September 2014

- It is planned that by summer 2015 Vueling will operate a fleet of 104 aircraft compared with 85 now[83].
- It was also announced that the number of BA/Vueling code-share routes is now 170; the airline also opened its fifth base in Italy at Genoa in September 2014.

When measured against its peer group Vueling offers the widest set of attributes but with unit costs that in 2013 were lower than those of easyJet[84].

The objectives for Vueling within IAG are particularly clear - to profitably deliver a high rate of growth where taking a greater share of the premium market is a key element[85].

**Wizz**

Management pulled the planned IPO against the background of more difficult market conditions[86] and in July there were denials that Air France and Wizz were engaged in "ongoing discussions" regarding Air France acquiring Wizz.

**Observations and conclusions**

The growth rate of the LCCs in Europe has been at least twice that of their full(er) service competitors' short haul operations. The future focus of LCC managements is not only on growth but also on taking a greater share of the business traveller market and here as the LCCs improve their offer (in all respects) and their approach to corporate travel buyers, they will inevitably succeed.

There should be no doubt, if indeed there was any, that the LCC airlines will continue to provide the growth in the short haul market in Europe and in a market where London is a key origin and destination. Furthermore one of the impacts that Lufthansa has seen in relation to its hub traffic resulting from the LCCs taking an increasing share of higher value business traffic on a greater number of point to point routes will inevitably occur in the London market.

Whilst on most LCC services passengers have to "self-connect", we believe that it is only a matter of time before an increasing number of LCC airlines (albeit for an additional charge) will offer connections and transfers representing further convergence in terms of the business models and markets of the LCCs and FSCs. Indeed passengers using Vueling are already able to seamlessly connect between its own services and those of other airlines and here it was announced most recently that passengers will be able to connect between Qatar Airlines and Vueling[87] .

**4. The "results seasons" for the "FSCs"**

The recurring message from the managements of most European full service airlines as they announced their periodic results during 2014 has been one of an increasingly challenging operating environment characterised by varying degrees of "excess capacity" resulting in a generalised reduction in growth expectations.

[83] See Appendix 4 for Vueling's capacity plans and those of its competitors

[84] Source: IAG Capital Markets Day Presentation 7th November 2014 slide 124.

[85] *"Ultimately, what is absolutely clear is that Vueling is IAG's high growth profitable tool....we're going to look for ways to address and capture a larger share of the premium customer, again, only if we can do it without increasing our cost."* Alex Cruz, Chairman Vueling, IAG Capital Markets Day 7th November 2014 p39.

[86] Flightglobal 16th June 2014

[87] Press release 19th September 2014; Vueling also has an interline agreement with LAN

Although there has been a wide variation in the actual reported results the predominant focus of the commentary has been on taking additional steps to improve the performance of the underlying business, including in some cases (as we have considered earlier in this paper) plans to accelerate and expand "airlines within airlines". We consider some of the main points made and issues arising in this section.

**Air France - KLM**

The results and the series of profit downgrades demonstrate the structural changes and challenges that the management of Air France – KLM continues to face.

- At the time the results for the April-June quarter were announced in July the operating environment was described as having *"growth opportunities – but tough competition"* - there was also a recognition that the airlines within the group needed to become more competitive and also "de-risked".
- A key element of management's future plans was an acceleration of the group's presence in the low cost segment. However the general view remains that such a development would not, and will not, address the issues facing the core short haul airline.
- At the time the results were announced the (then) plan set out an ambition to develop Transavia to become "one of Europe's main low cost carriers" [88] – Transavia France which at the time had 19 aircraft was forecast to grow to 29 aircraft by 2016 and when taken together with Transavia Netherlands, which currently operates 35 aircraft, would operate a combined fleet of 64 aircraft by summer 2016[89] ; at the subsequent Investor day presentation in September the fleet plan envisaged 100 aircraft by 2017.
- The key feature of the most recent results for the July-September period was the quantification of the financial damage resulting from the industrial action by the Air France pilots following the announcement of management's plans for Transavia. It was estimated that the impact was some €416m on revenues and some €330m on profit.
- Since then the expectations for the full year have been further downgraded; whereas the original target for the year was for an EBITDA of some €2.5bn it is now in a range of €1.5-1.7bn. Attention is now focused on the next round of cost and capital expenditure reductions.

**British Airways**

The management statements at the time of the results, for both the second and third quarters, have acted to reinforce the view that the focus at British Airways is on performance improvement and value maximisation.

- At the time of the 2nd quarter results when BA reported an operating result of £273m compared with £210 a year

[88] Source Flightglobal 25th July 2014 quoting Alexandre de Juniac CEO Air France-KLM

[89] *''This development will take place under the Transavia brand from the two existing airlines - Transavia France and Transavia the Netherlands - and new bases will be opened in other European countries. This project will strengthen the development of Transavia France and Transavia the Netherlands. The terms of these developments are the subject of consultations in both countries. The group is positioning itself as a major player in this rapidly growing market in Europe."* Air France-KLM Press release 4th September 2014

earlier, the near term outlook was reported to be for lower volume growth reflecting a reduction on previous plans[90] ; the reason for the change was said to be tactical i.e. reflecting lack of demand in the winter season[91].

- Comments made at the time of the second quarter results were particularly enlightening in respect of the performance of the Chengdu route[92]; in particular highlighting the inbound nature of the route and indeed the Chinese market overall as well as the challenges faced by non Chinese airlines in achieving a sufficient and profitable presence without a local partner airline; although changes to UK visas will help this will not act as a complete panacea.
- The reported operating profit in the third quarter was £484m compared with £407m in the corresponding period a year earlier.

Although British Airways long haul fleet will grow from 129 in 2013 to 142 aircraft by 2018, management states that it faces a "*hiatus in terms of aircraft coming in on long haul. On short haul, we've still got a steady flow - through of **replacement** A320s"* [93] reinforcing our view in the July report that there will be limited growth in the short haul segment and that any increase in passenger volumes will be the result of putting more seats on each aircraft. In terms of providing additional (near term growth) it is considered that the Boeing 747s currently in the fleet offer flexibility dependent on the retirement schedule.

**Lufthansa**

Lufthansa's half year and third quarter results were not only disappointing but also included a downgrade to the current and next year's expectations[94] [95] at an underlying level; this is also before the impact of the pilot strikes is taken in to account. Most forecasts for the full year have been reduced by some €1bn compared to the expectations before the announcement of the half year results.

- At the time of the half year results attention was also focused firstly on the announcement concerning management's plans for its short haul LCC operations; here Eurowings and Germanwings will be combined under a common "Wings" Group brand with a business objective to become the 3rd largest European LCC

[90] Source: IAG Earnings presentation 1st August 2014 p8

[91] *We're all the time looking at our short-haul fleet. In particular, where we have operating leased aircraft and some owned aircraft.....to ensure that we can remove aircraft from operating fleets quickly if we need to do that"; source op cit p14*

[92] *".....Chengdu not so well. Average seat factor is about 56%. We've definitely been hampered by the British policy on visas for Chinese tourists. That is holding back the development of the route, and certainly that's something that we will look at in the context of Chinese route opportunities. Interestingly, we are being compensated to some extent by very strong cargo out of Chengdu. We've seen a much stronger cargo position* out of Chengdu than we had expected , but the passenger situation has definitely been impacted by visa policies in the UK": Willie Walsh IAG CEO; Half Year earnings call (p8) 1st August 2014

[93] Source: IAG Half Year Earnings Call 1st August 2014 p14 (emphasis added)

[94] *"Reducing our planned capacity growth by half and respond(ing) clearly to the changed demand situation, particularly in the winter flight plan. The same applies to the planned capacity expansion for the year ahead":* Source Lufthansa 2nd interim report page 1

[95] Source Lufthansa 3rd Interim Report

behind Ryanair and easyJet[96]. Taken together it will have a combined fleet of 80 aircraft (Germanwings 57 and Eurowings 23)[97] – this is however smaller than Vueling which will already operate a fleet of some 104 aircraft by summer 2015. Attention was also focused on the part of the plan to address the long haul point to point leisure market[98] through the new standalone airline and by reconfiguring 14 of its A340-300s[99] (see section 6.2)

- This earnings release also contained a very realistic assessment of structural market changes which have implications for all European airlines[100].
- The most recent results for the third quarter clearly disappointed the market in a number of respects and whilst they contained an update on the new low(er) cost airline initiatives some significant issues remain to be addressed to improve the performance of the "mainline" airline[101].

**Observations and conclusions**

In the July report our view was that traffic growth in the European short haul segment of the market will be delivered by the LCC airlines whereas the full service or legacy airlines will continue to focus on performance improvement and maximising value rather than growth per-se.

The results for the financial year to date not only demonstrate this clearly but also set the scene for another period of accelerated growth by the European LCCs. The announcements by the management teams at Air France-KLM and Lufthansa, relating their proposed developments of low(er) cost "airlines within airlines", only act to reinforce this view.

Furthermore from the perspective of using existing or providing new airport capacity, to assist in achieving success these "airline within airline" LCCs will also need to avail themselves of the same operational and infrastructural efficiencies as the "standalone" LCCs. In addition they will require "reasonable" levels of charges given the inability of this increasing group of airlines to pass them on without damaging traffic volumes.

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[96] In terms of fleet size it is likely to start off in 5th position although there are plans to grow to a combined short haul and long haul fleet of 150 aircraft within an undefined time period.

[97] Eurowings current fleet of CRJs will be replaced by A320s over the 2015-2017 period

[98] *"We will turn Lufthansa Passenger Airline into a five-star airline. With top quality and strong partnerships in our key markets we will boost quality and service as well as profitability"* ; Source H1 2014 Interim Earnings statement p1

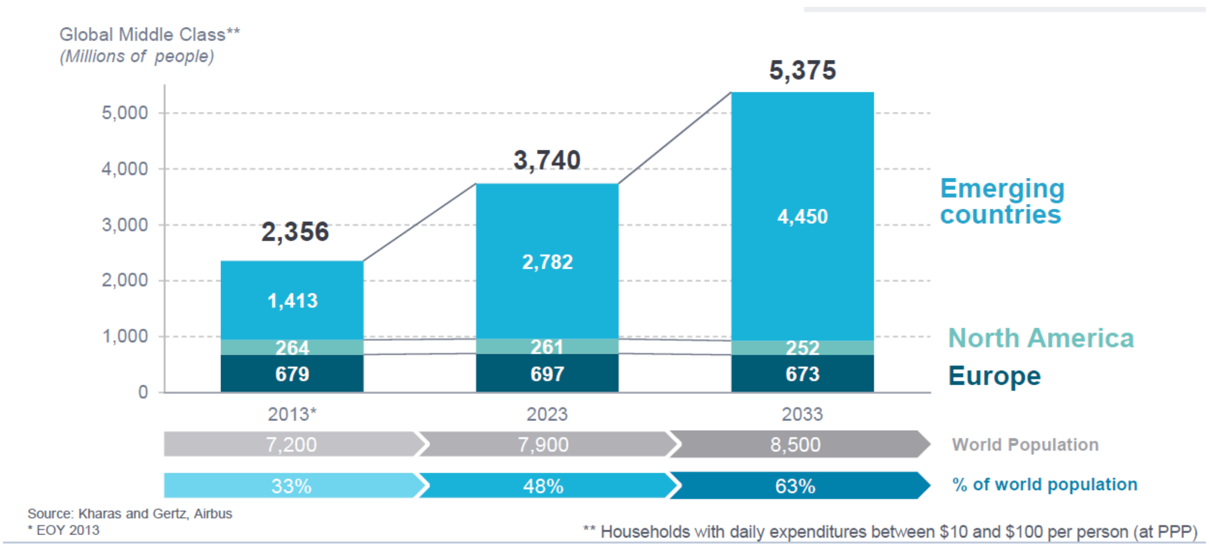
[99] Many other airlines have fleets that already offer different class of travel configurations

[100] *"As growth in this market is, however, becoming more difficult a key element of our strategy is to tap more into direct connections in the low-cost segment for the Lufthansa Group. This profitable fast growing segment will in the future be developed in parallel to the classic network carriers in the Passenger Airline Group. By this we aim to at serving the inner European as well as the long haul traffic from Germany"* ; Source; H1 2014 Interim Earnings statement p1

[101] Management has also raised the possibility of shrinking the core Lufthansa airline through earlier than plan retirements and also directing "expansion plans away from its mainline airline to other group airlines until management reaches a new labour agreement with the mainline pilots": Source Flightglobal 30th October 2014

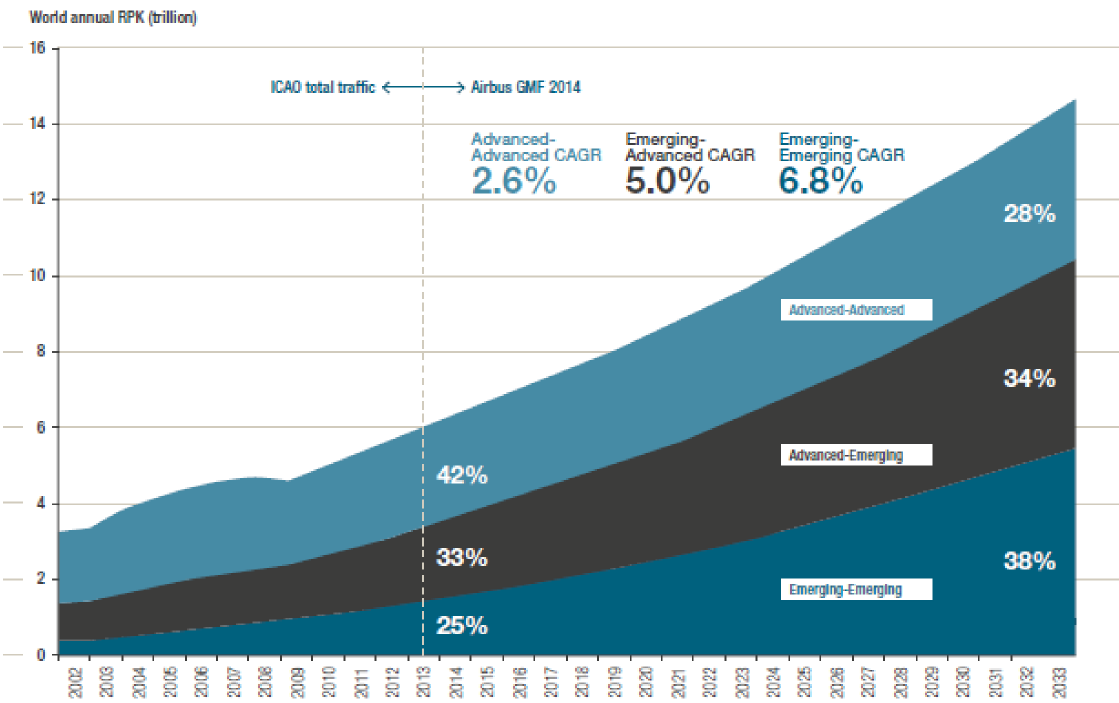
# Appendix 1 – Changing demand

**Figure 1 Change in size of middle class**




Source: Airbus presentation by John Leahy 25th September 2014

**Figure 2 Forecast growth rates by broad region**




Source: Airbus Global Market Forecast September 2014

# Appendix 2 – Widebody aircraft orders and deliveries

| At 30th November 2014 | Total Orders | Total Deliveries | Backlog |
|---|---|---|---|
| Airbus A330 | 1394 | 1123 | 271 |
| Airbus A350 | 778 | 0 | 778 |
| Airbus A380 | 318 | 147 | 171 |
| Boeing 777 | 1659 | 1106 | 553 |
| Boeing 787 | 1055 | 210 | 845 |

Source: Company reports

# Appendix 3 – Market structure

**Figure 3 European market structure selected European countries**

## Strong Market Positions

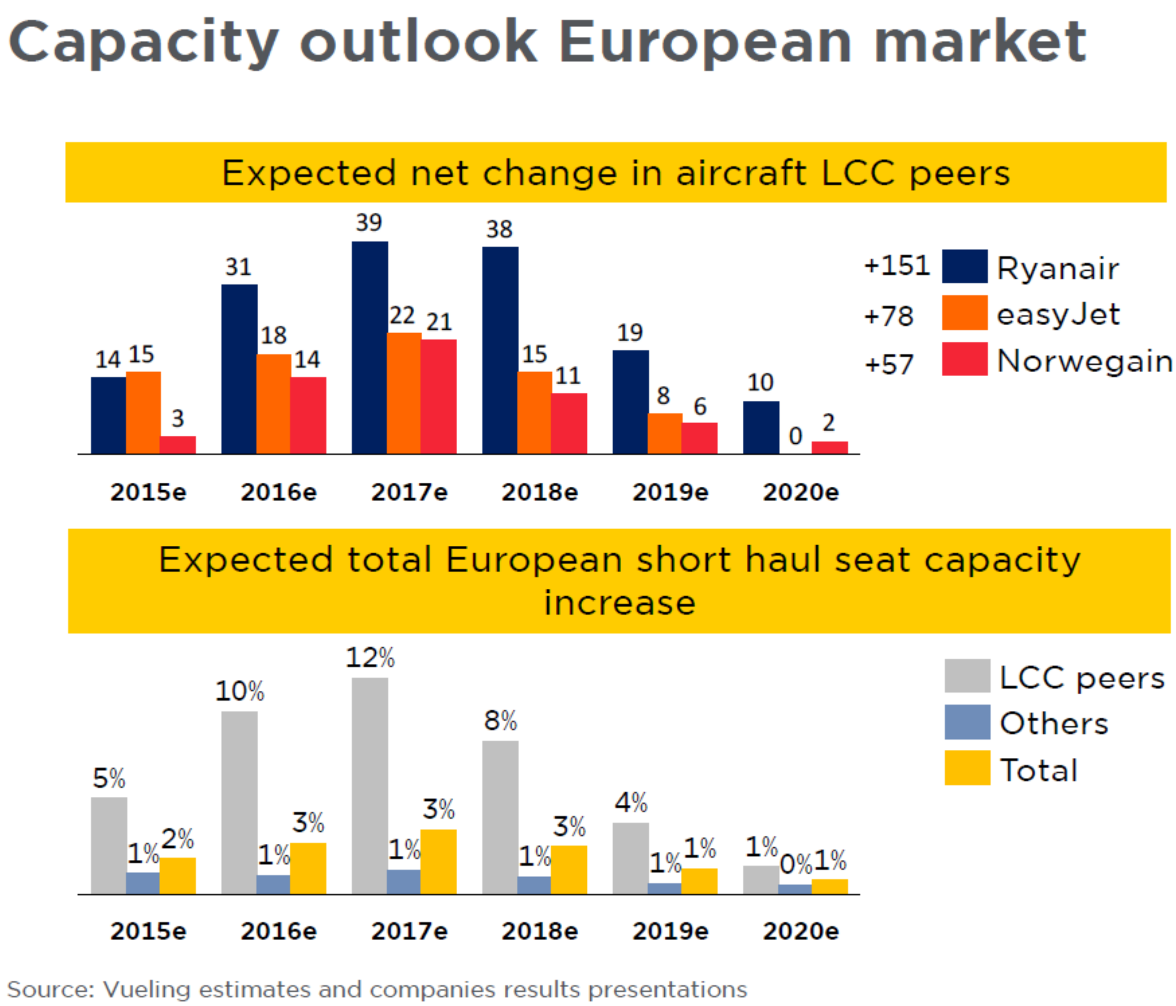
| Country (Cap m) | No. 1 | No. 2 | No. 3 | Share |
|---|---|---|---|---|
| UK (117) | easyjet | RYANAIR | BA | 16% |
| Germany (112) | Luft | Air Berlin | RYANAIR | 4% |
| Spain (105) | RYANAIR | Vueling | Iberia | 18% |
| Italy (85) | RYANAIR | Alitalia | easyJet | 25% |
| France (72) | AF- KLM | easyJet | RYANAIR | 7% |
| Portugal (19) | TAP | RYANAIR | easyJet | 17% |
| Belgium (15) | RYANAIR | SN Brussels | Jetairfly | 25% |
| Ireland (15) | RYANAIR | Aer Lingus | IAG | 46% |
| Poland (15) | RYANAIR | LOT | Wizz | 26% |
| Morocco (12) | RAM | RYANAIR | easyJet | 12% |

Source: Capstats 2014 dep. seats

RYANAIR
LOW FARES. MADE SIMPLE.

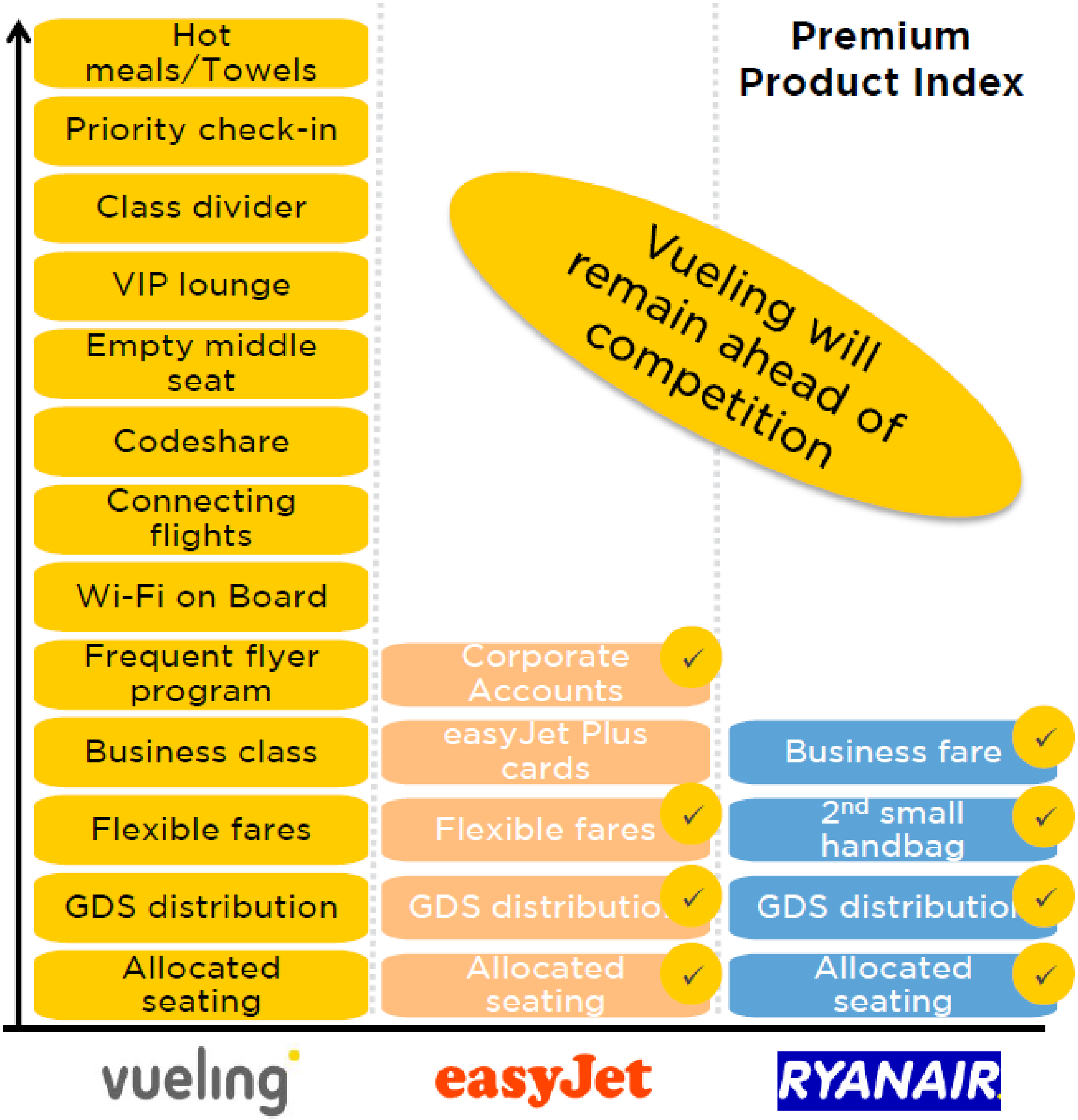
Source: Ryanair H1 2015 results presentation 3rd November 2014

# Appendix 4 – Capacity growth rates




Source: IAG Capital Markets Day 7th November 2014 p120

# Appendix 5 – Convergence and differentiation




Source: IAG Capital Markets Day 7th November 2014 p130

## IMPORTANT NOTICE

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