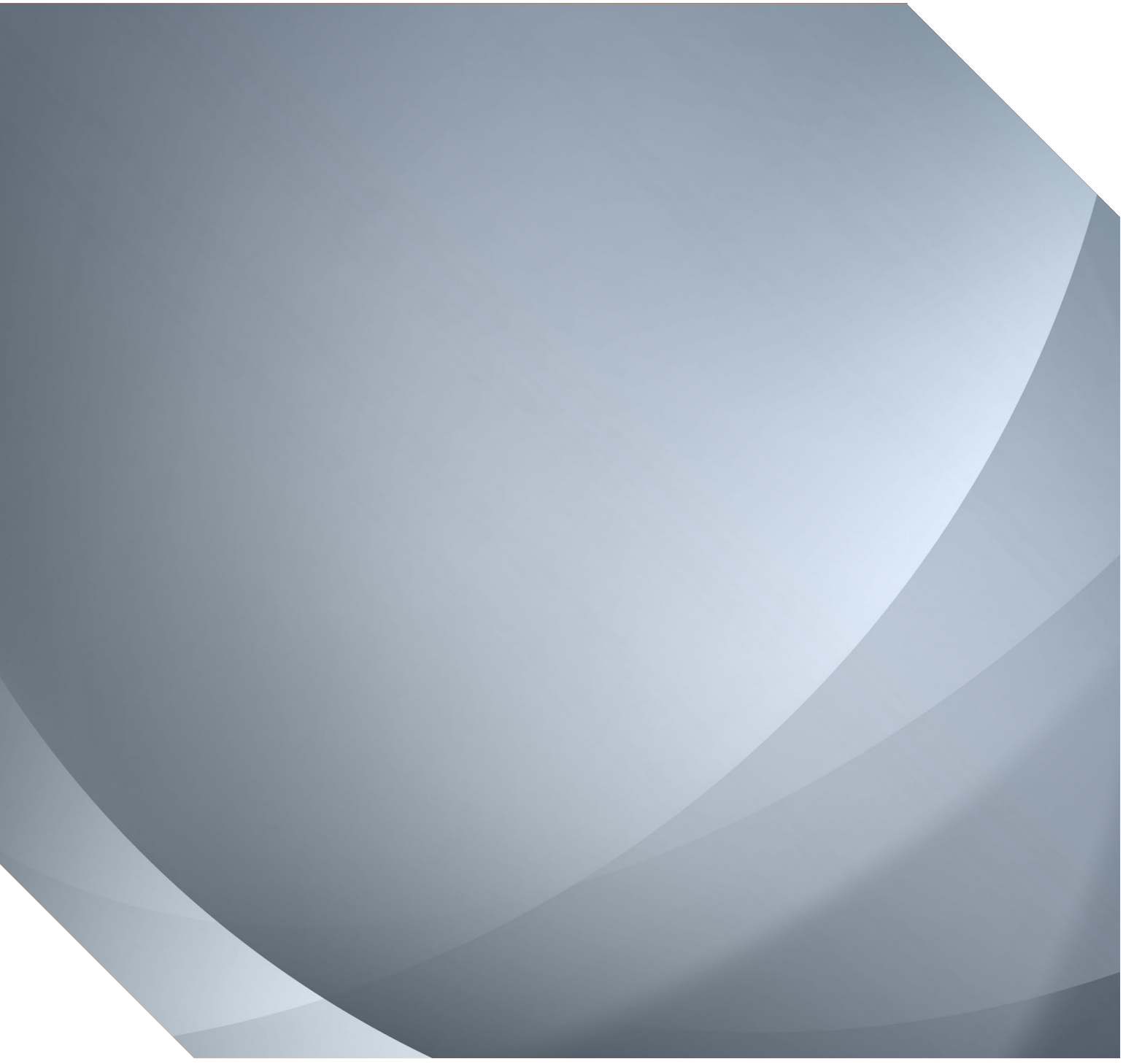
Civil Aviation Authority

CAA Response to the Airports Commission discussion paper on airport operating models

CAP 1080



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SECTION 1

Introductory remarks

1.1 The CAA welcomes the Airports Commission's discussion paper on airport operating models.

1.2 As the UK's specialist aviation regulator, the CAA has significant relevant expertise. The CAA collects a broad range of statistics and survey data, and has drawn on these resources to provide analysis to the Airports Commission in order to inform some elements of the discussion paper.

1.3 The annexes to this document contain the analysis that was prepared for the Airports Commission secretariat.

SECTION 2

Response to consultation questions

Q1. Do you consider that the analysis supports the case for increasing either hub capacity or non-hub capacity in the UK? Is there any additional evidence that you consider should be taken into account?

2.1 As the CAA has already set in its response to the Airports Commission's discussion papers on demand forecasting and aviation connectivity, the CAA judges that there is a strong case for additional aviation capacity in the UK in order to protect consumer choice and value.

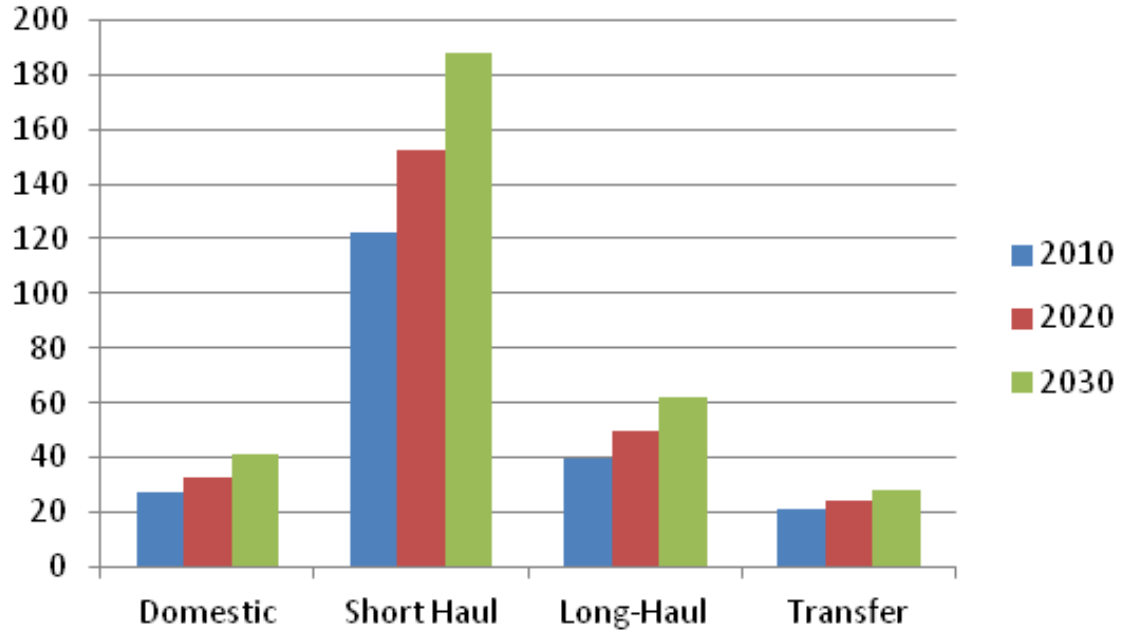
2.2 Capacity constraints have the potential to harm consumers by:

- restricting competition and route choice,
- affecting value through higher fares, and
- affecting service quality as a result of resilience issues.

2.3 Consideration of the appropriate 'capacity mix' should start also from an understanding of the preferences and priorities of aviation consumers.

2.4 Analysis of CAA survey data highlights that aviation consumers are a diverse population and that preferences and priorities vary, even within standard category groupings (such as business vs leisure vs VFR or outbound vs inbound vs transfer). Accordingly, it is difficult to make strict generalisations. However, examining the detail of DfT's most recent demand forecasts offers some interesting insights.

Figure 1: Forecast Passenger Growth 2010-30



Source: CAA calculations based on DfT Passenger Demand Forecasts, 2013

2.5 These demand forecasts indicate that, in absolute terms, the majority of growth will be in short-haul markets, which are primarily served by point-to-point services. Passenger growth on the long-haul routes that are most likely to depend on feed from transfer traffic is forecast to total approximately 20 million additional passengers per annum by 2030.

2.6 While it is forecast that demand growth on long-haul routes to emerging markets will be faster than the overall average, these routes start from a very low base and will still account for a small share of demand in 2030.

2.7 In its response to the demand forecasting paper, the CAA raised a concern that, for some regions and in particular emerging markets, the DfT aggregated over too wide a geographic area. Accordingly, it is possible that the DfT forecasts may underplay some of the future long haul growth in these markets. However, the overall conclusion on the likely geographical distribution of future demand at UK airports is supported by global market forecasts by Airbus and Boeing.

2.8 Given the forecast split of demand growth between short and long-haul routes, there would appear to be a case for additional capacity to support a mix of both point-to-point and hub-and-spoke operations.

Q2. To what extent do the three potential futures outlined in Chapter 2 present a credible picture of the ways in which the aviation sector may develop? Are there other futures that should be considered?

Q3. How are the trends discussed in Chapter 2 (e.g. liberalisation, growth of low-cost carriers, consolidation of alliances, and technological changes) likely to shape the future of the aviation sector? Do they strengthen or weaken the case for developing hub versus non-hub capacity?

2.9 As the CAA set out in its response to the discussion paper on demand forecasting, attempts to predict the future are, by their very nature, subject to uncertainty. Indeed, history suggests that forecasts are typically wrong.

2.10 For example, the majority of the forecasts made before 1975 over-forecast in the long term, as they did not predict the shift in demand caused by the oil crisis of the early 1970s. The same is true for late 1970s forecasts, which follow a similar trend whilst starting from a lower base. By contrast, long term forecasts from the 1980s tend to underestimate the strength of demand growth, and are all under-forecasting by the mid-1990s. Similarly, forecasts from the 1990s somewhat underestimated the growth potential that would be stimulated by low-cost carriers, although these forecasts are generally more accurate.

2.11 These examples demonstrate the problems in predicting both the path of external drivers of aviation demand and any structural impact that such changes will have on the sector.

2.12 For this reason, the CAA recommends that an appropriate approach to dealing with uncertainty is to adopt policy choices which are not overly dependent on a specific forecast future state but which perform well across a range of potential future states, accepting that such choices may appear sub-optimal in hindsight. The CAA agrees with the principle that the Airports Commission set out in its demand paper, namely that any proposed solution should be robust to a range of different scenarios.

Q4. What are the impacts on airlines and passengers of the fact that the wave system at Heathrow operates under capacity constraints?

2.13 The smoothing of the service pattern at Heathrow throughout the day, particularly that of the home-based alliance OneWorld, is just one consequence of capacity constraints at Heathrow.

2.14 Network airlines organise flights in 'waves' of arrivals followed by 'waves' of departures in order to maximise the number of potential connections that can be offered within a reasonable time window, thus offering both choice and convenience for connecting passengers and increasing the attractiveness of the hub network.

2.15 'Smoothing', or 'flattening' the waves means that fewer potential connections can be made from any given arriving flight within a given time period. This is likely to reduce choice and convenience for connecting passengers. However, on the thickest high-frequency routes, origin-and-destination consumers may benefit from the availability of flights closer to their desired departure time rather than being limited to the main waves.

2.16 Overall, it is likely that some of the other consequences of capacity constraints such as the impact on punctuality and resilience are likely to cause greater consumer detriment. Heathrow has a higher share of origin-destination passengers than many major hubs and the direct effects of wave smoothing are limited to connecting passengers. In contrast, delays and disruption affects all airport users.

Q5. How does increasing size and scale affect the operation of a focal airport? Is there a limit to the viable scale of an airport of this kind?

2.17 There are three major potential benefits that might be expected to arise from increasing the scale of a focal, or hub airport:

- Increased scope of the route network;
- Enhanced performance;
- More effective competition.

2.18 Increased capacity could create headroom in order to facilitate growth in the scope of the network, with additional routes added to the network and additional frequencies added to the thickest existing routes.

2.19 The high-level analysis of DfT demand forecasts set out in Figure 1 gives an indication of the potential scale of growth in demand for long-haul routes.

2.20 Capacity headroom could also enable improved performance by facilitating improved punctuality and resilience to disruption as well as enabling airlines to schedule services into tighter arrival and departure waves.

2.21 Finally, additional capacity headroom might be expected to lower entry barriers for airlines looking to start or expand services. This would be expected to increase competition, with consequent consumer benefits.

Q6. Would expanding UK hub capacity (wherever located) bring materially different advantages and disadvantages of expanding non-hub capacity? You may wish to consider economic, social and environmental impacts of different airport operational models.

Q7. Do focal airports and non-focal airports bring different kinds of connectivity and, if so, which users benefit the most in each case?

2.22 The response to question 1 sets out the CAA's view that consideration of the appropriate capacity mix should start from consideration of consumer demand and preferences. On this basis, the CAA considers that there may be a case for additional capacity to support growth in both network and point-to-point models of airline operation.

2.23 In addition, the CAA would like to emphasise the considerable benefits that UK aviation consumers derive from choice and competition. Over 90% of UK aviation consumers live within 2 hours travel time of at least two international airports. In some parts of the country, in particular the South-East the degree of airport, and by extension airline, choice is even greater.

2.24 This choice and competition are strong attributes of the UK aviation 'system'. Accordingly, any solution that forced the closure of significant

volumes of existing capacity in order to create sufficient demand to be commercially viable would therefore be likely to cause detriment to many consumers.

2.25 As noted already, the majority of current and future demand will not need to be channeled through a hub airport (although if facilities there are sufficiently attractive, they may choose to use it).

Q8. What would be the competitive effects (both international and domestic) of a major expansion of hub capacity, and what are the associated benefits and risks?

2.26 The competitive effects of capacity expansion, whether primarily aimed at network or point-to-point services, would depend on a number of variables, including:

- Location - particularly in terms of catchment area and ability to attract specific consumer groups, but also whether at an existing airport location or not;
- Impact on other airports - the competitive dynamics may be very different if London's multiple airport 'system' is likely to remain in place than if it is expected that one or more airports will be forced to close for commercial or operational reasons.

2.27 For connecting passengers, the relevant geographic market is broader than for origin-destination passengers, as other airports offer an equivalent set of transfer connections. In its market power assessment for Heathrow, the CAA determined that the relevant market should be defined as the other European hubs. It is to be expected that these airports will continue in the market for at least the foreseeable future, whether or not additional airport capacity is delivered in the UK.

2.28 As set out already, the CAA believes that competition brings many benefits to both origin-destination and transfer passengers as well as cargo users in terms of choice and value as well as innovation and service quality. The CAA would recommend that the Airports Commission looks to preserve these consumer benefits when it makes its final recommendations.

Q9. To what extent do transfer passengers benefit UK airports and the UK economy?

Q10. Is there any evidence that the UK (or individual countries and regions within the UK) are disadvantaged by using overseas focal airports?

2.29 Transfer traffic is important for the UK for two primary reasons:

- Many consumers outside of London and South-East rely on indirect connectivity in order to access the majority of long-haul destinations that are not commercially viable on a point-to-point basis;
- By supporting marginal routes and frequencies, transfer passengers contribute to direct connectivity for those consumers in the catchment area of hub airports.

2.30 Where passengers fly indirectly, transferring via an intermediate airport, their route decision will tend to be based on the standard parameters such as route choice, frequency and journey time as well as affordability.

2.31 Overall journey time is made up of a combination of how direct the overall routeing is, as well as the stopover time at the transfer airport. The UK's geographical position on the North-West of Europe means that airlines operating at Heathrow can offer competitive journey times for connections to North America compared to other European hubs. Geography would suggest that other European airports might represent more convenient transfer points for routes to other world regions such as Asia, Africa and South America.

2.32 Connection times at a transfer airport are driven by a number of factors including airlines' ability to sequence flights into alternating inbound and outbound 'waves'. In the absence of capacity to optimise departures and arrivals, other determinants such as service frequency on the feeder leg will become more important, as this enables airlines to maximise the range of convenient connections.

Q11. What specific characteristics of the UK and its cities and regions should be considered? For example, does the size of the London origin and destination market and the density of route networks support or undermine the case for a dominant hub?

Q12. Could the UK support more than one focal airport? For example, could an airline or alliance establish a secondary hub outside London and the south east, for instance in Manchester or Birmingham?

2.33 The CAA provided advice on this question in order to inform the Airports Commission's discussion paper.

2.34 This analysis showed that a two-hub solution would not necessarily result in a reduction in the number of transfer passengers using London airports, as:

- Most connections at Heathrow are 'within the family' (i.e. alliance);
- An airline / alliance moving away from Heathrow could potentially supplement most lost routes through partnership with airlines operating at those airports.

2.35 However, as the Airports Commission itself notes, this latter scenario is based on some strong assumptions that are very unlikely to hold in reality.

2.36 Airport location is important for passengers that do not transfer. Carriers based at Heathrow enjoy a yield premium that derives from convenient access to the very prosperous catchment areas in West London. The CAA's Market Power Assessment for Heathrow showed very high switching costs for network carriers at Heathrow.

2.37 In addition, cooperation between network and low cost carriers (which could be necessary were alliances to move away from Heathrow and rely in part on the existing route network at other airports) has been limited to date.

2.38 More generally, there are no precedents in international aviation for two genuinely competing hub networks within the same city. New York and Tokyo are often given as potential examples, but neither are genuine competing hubs from either an airline or airport perspective.

2.39 However, there are a number of innovations such as via Milano and Gatwick's new 'Gatwick Connect' service that aim to facilitate self-connecting. It is therefore possible that a way could be found by which traffic from short-haul point-to-point services could feed long-haul routes.

2.40 Similarly, it is possible that surface transport improvements could improve the connectivity and attractiveness of some airports to high-yield catchment areas.

Q13. To what extent is it possible to operate a successful 'constrained' focal airport by focusing on routes where feeder traffic is critical and redirecting routes which are viable as point-to-point connections to other UK airports?

2.41 In a market-led sector, airlines are much better placed than the Government or the CAA to advise on this question. There are many layers of complexity that are relevant to network-planning decisions, some of which have been referenced elsewhere in this paper.

2.42 However, to a certain extent, the London aviation system may already be a reasonable proxy of the type of network that the Airports Commission describes.

2.43 For example, while the route networks from Paris Charles de Gaulle and Frankfurt airports are a third bigger than that operated from Heathrow in terms of the total number of destinations served, the difference is much smaller when one focuses on non-European routes.

2.44 Capacity constraints have therefore shaped the network configuration by reinforcing the trend towards focusing on the most profitable, high-yield routes. At Heathrow, this is likely to lead to further increases in slot productivity and specialisation on long-haul routes, in particular those serving North America for which Heathrow offers a geographical and economic advantage.

2.45 In turn, evidence from the CAA's Passenger Survey suggests that a very large proportion of services at Heathrow have a significant proportion of connecting passengers, including both those operated by home-based and inbound carriers. For example, connecting passengers account for at least of 10% of passengers for 75 of the 93 airlines operating

at Heathrow. This contrasts with the fact that connecting passengers account for less than 10% of total passengers at all other UK airports.

2.46 This trend towards specialisation on long-haul routes supported by feed traffic has, in part, been facilitated by the ability of airlines to use other London airports to serve different markets.

2.47 As capacity constraints spread to other London airports, particularly at peak times, airlines' ability to redistribute short-haul and domestic routes and services between airports may become more limited.

ANNEXES

CAA Analysis for the Airports Commission discussion paper on Airport Operating Models

Summary

These annexes summarise a series of pieces of analysis that the CAA carried out at the request of the Airports Commission in order to inform the Airports Commission's discussion paper on Airport Operating Models. They include:

- an overview of the London aviation market;
- the extent to which different routes, airlines and route or airline groups at Heathrow depend on connecting traffic to and from the other services at the airport;
- information about connecting passengers at Gatwick airport, including those that were 'self-hubbing';
- whether frequency limits imposed in bilateral Air Services Agreements were a binding constraint on UK connectivity, particularly with respect to the BRIC countries; and
- describe the various pieces of legislation which define and apply to the economic regulation of airports in the United Kingdom.

ANNEX A

An overview of the London aviation market

The Airports Commission asked the CAA for an overview of the London aviation market.

General context

A1 The London airport system handled nearly 1 million Air Transport Movements (ATMs) and almost 135m passengers in 2012.

Table 1: Summary of Activity at London airports, 2012

	ATMs (000)		Terminal Passengers (m)		Freight (000 tonnes)	
	Scheduled	Charter	Scheduled	Charter	Scheduled	Charter
Gatwick	217	23	29.39	4.83	91	6
Heathrow	469	2	69.92	0.06	1,427	38
London City	64	6	3.02	0.00	0	0
Luton	66	10	9.15	0.47	4	26
Southend	7	1	0.61	0.04	0	0
Stansted	119	14	16.83	0.64	76	138
Total	942	57	128.92	6.00	1,598	208

Source: CAA Airport Statistics, 2012

2.48 Taking these six airports together, London emerges as the best connected business city in the world, reinforcing and supporting London's status as a global business hub. Table 2 shows that the five London airports serve many more routes than any other European city.

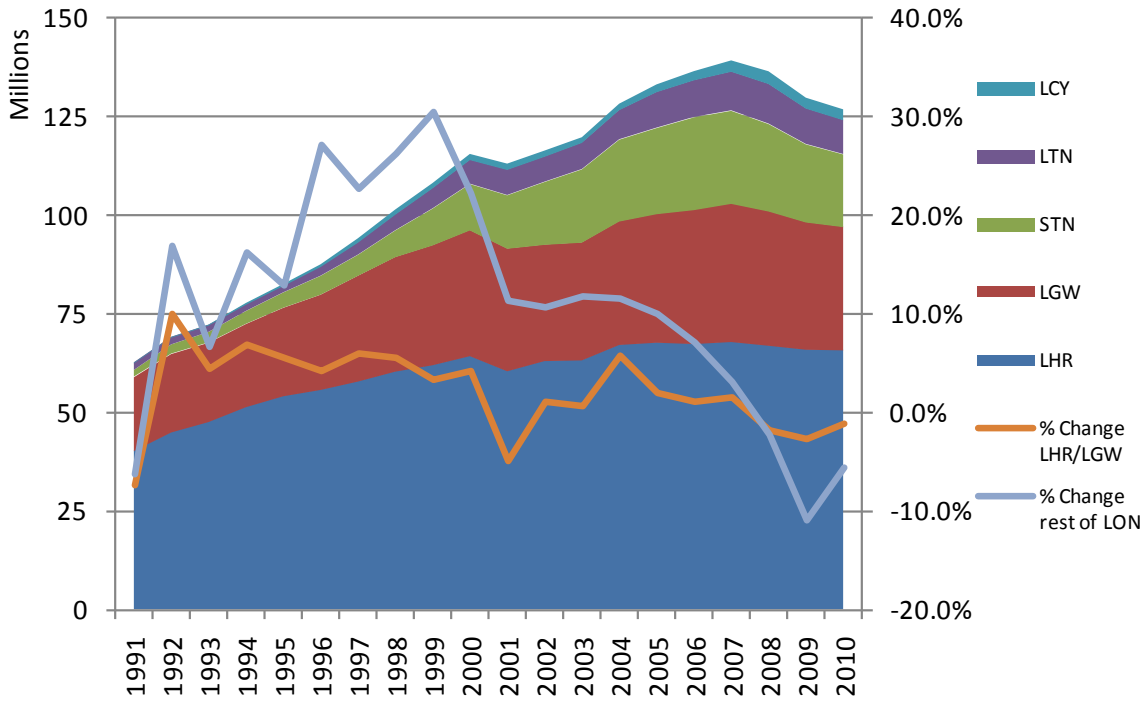
Table 2: Number of routes served from selected European Airports and Cities in 2010

Airport / City	Routes Served
Heathrow	154
London (5 airports)	322
Paris (Charles De Gaulle + Orly)	258
Frankfurt (Main)	212
Amsterdam (Schiphol)	193

Source: OAG and CAA Airport Statistics.
Note: A route is defined as an airport served non-stop by more than 100 scheduled departures in 2010

A2 Over the past 20 years, there have been significant differences between the growth figures of the London airports. Figure 1 shows the changes in passenger numbers over the last two decades at the five London airports[1].

Figure 1: Passengers at Heathrow, Gatwick, Stansted, Luton and London City



Source: CAA Airport Statistics

1 London Southend airport is not included in this analysis as it only resumed scheduled operations in 2012.

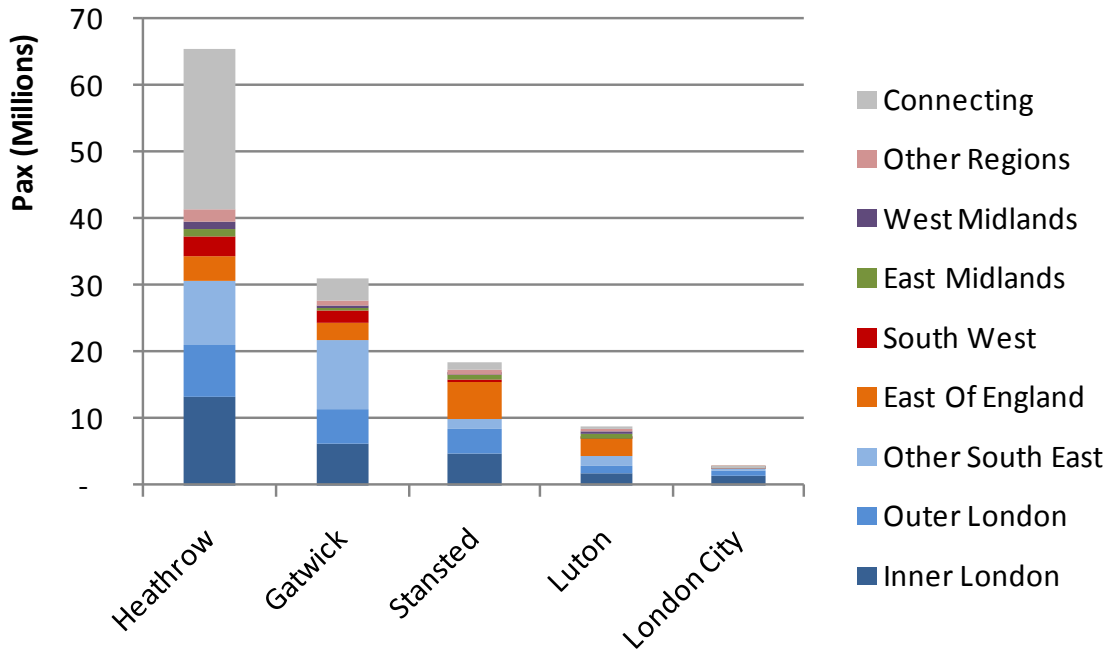
A3 Over the whole period, the smaller London airports (Stansted, Luton and London City airports) showed significantly stronger growth rates than the two largest airports Heathrow and Gatwick. Particularly Stansted, but also Luton and Gatwick, were more strongly affected by the recession since 2007 than Heathrow and London City.

A4 This has also significantly affected the relative share of passengers using Heathrow and Gatwick compared to the other London airports. While in 1990 only 6% of London passengers used Stansted, Luton or London City airports, their combined passenger share increased to 24% of all London passengers in 2010. It seems likely that one explanatory factor for this pattern of growth is the availability of capacity at the respective airports.

Passenger Characteristics

A5 Figure 2 below illustrates the mix of passengers' origins for the five major London airports.

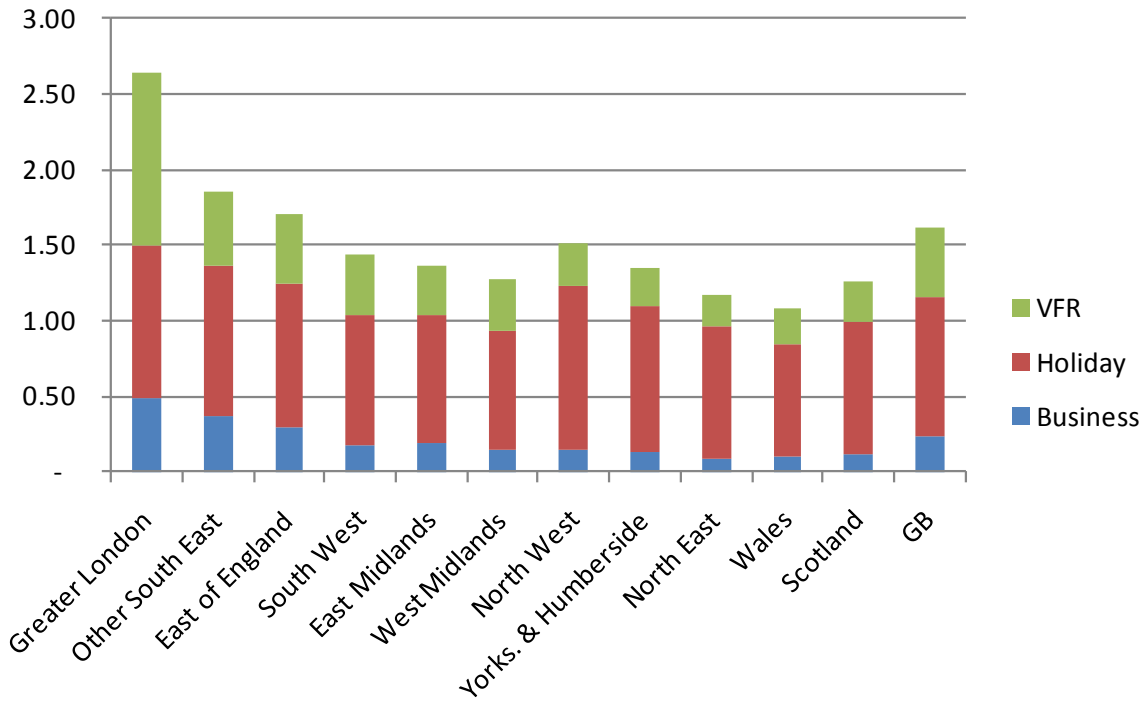
Figure 2: Origin of Passengers at London Airports



Source: CAA Passenger Survey 2010

A6 Figure 3 shows that residents of London have by far the highest propensity to fly (with more than 2.5 flights per head), followed by residents in the East and the South East of England (both having just under two flights per head). It appears that London's higher overall propensity to fly is mainly explained by a much higher propensity to fly for VFR purposes, and by a higher propensity to fly for business. This again might reflect the high concentration of business and residents with overseas family connections in Greater London compared to the rest of the UK.

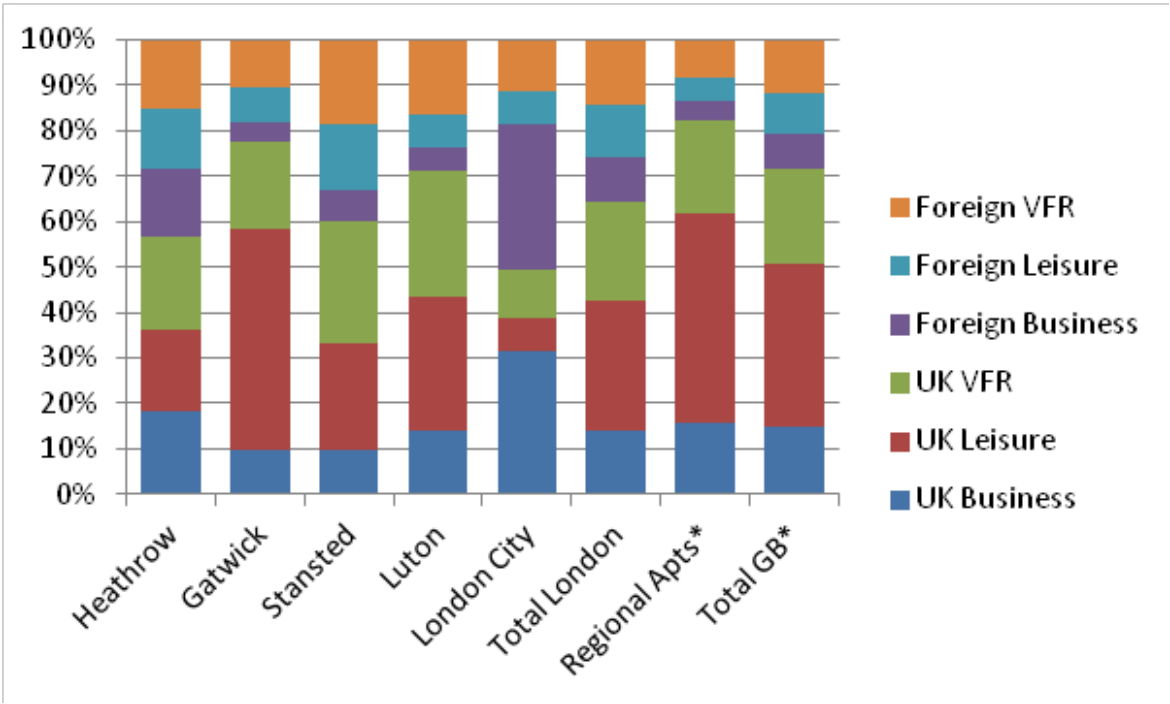
Figure 3: GB resident international air passengers, per head of the population



Sources: CAA Passenger Survey (several years weighted to 2010 levels) and ONS 2009 population statistics

A7 Figure 4 provides journey purpose splits for each of the major London airports that were operational in 2010,

Figure 4: UK Airport Passengers by Consumer Group



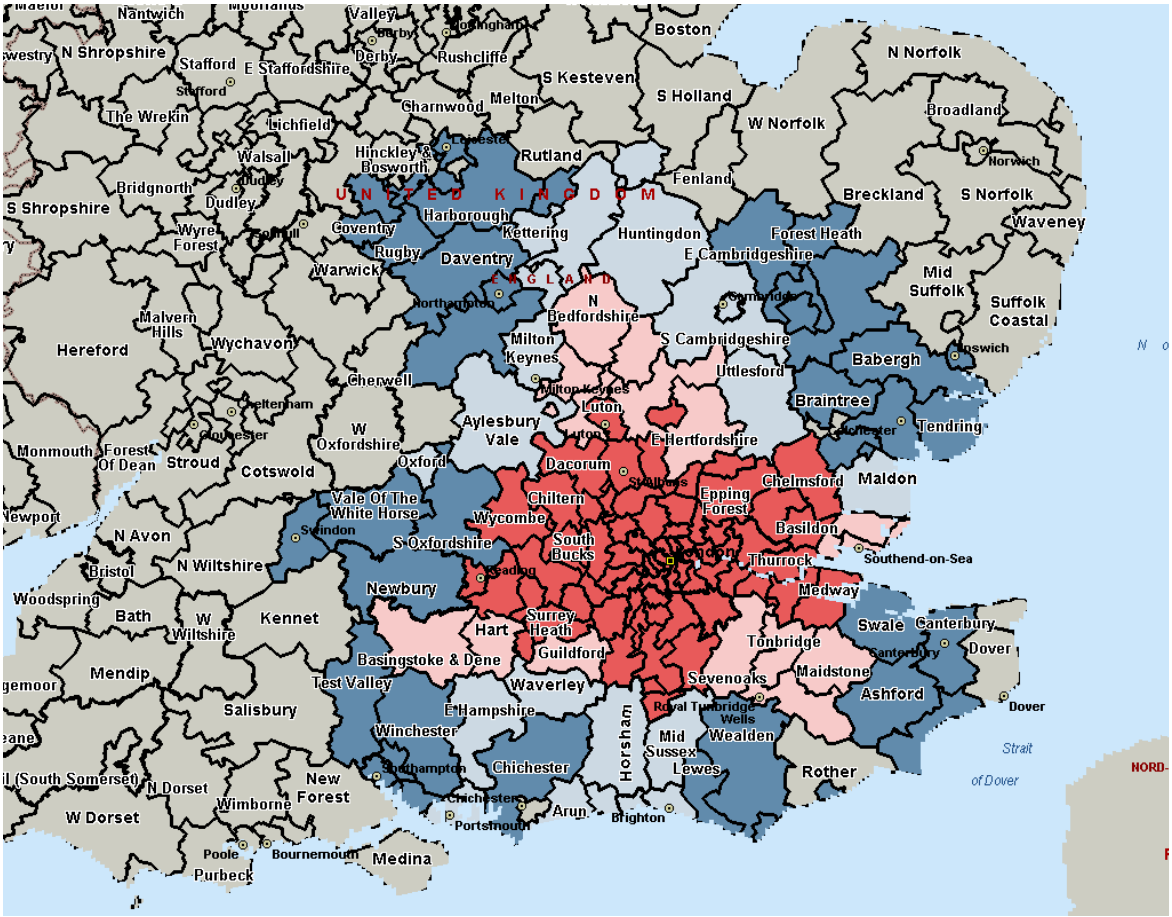
Source: CAA Passenger Survey. Excludes connecting passengers.

Passenger Choice and Catchment Areas

A8 Figure 5 shows the overlaps of the surface travel time catchment areas for the four major London airports[2] based on a 90 minutes threshold. A substantial number of districts (those coloured in red) including inner London and districts on its outskirts can be seen to be located where the catchment areas of all four London airports overlap. Several other districts are covered by the catchment areas of two or three airports, particularly to the north and south west London. This suggests that passengers across Greater London have significant levels of choice between airports.

2 London City and Stansted are excluded from the catchment area analysis

Figure 5: Overlap of districts within 90 minutes travel time of London airports



Source: CAA analysis of DfT surface access data
Blue: 1 airport; Light blue: 2 airports; Light red: 3 airports; Red: 4 airports

Connecting Passengers

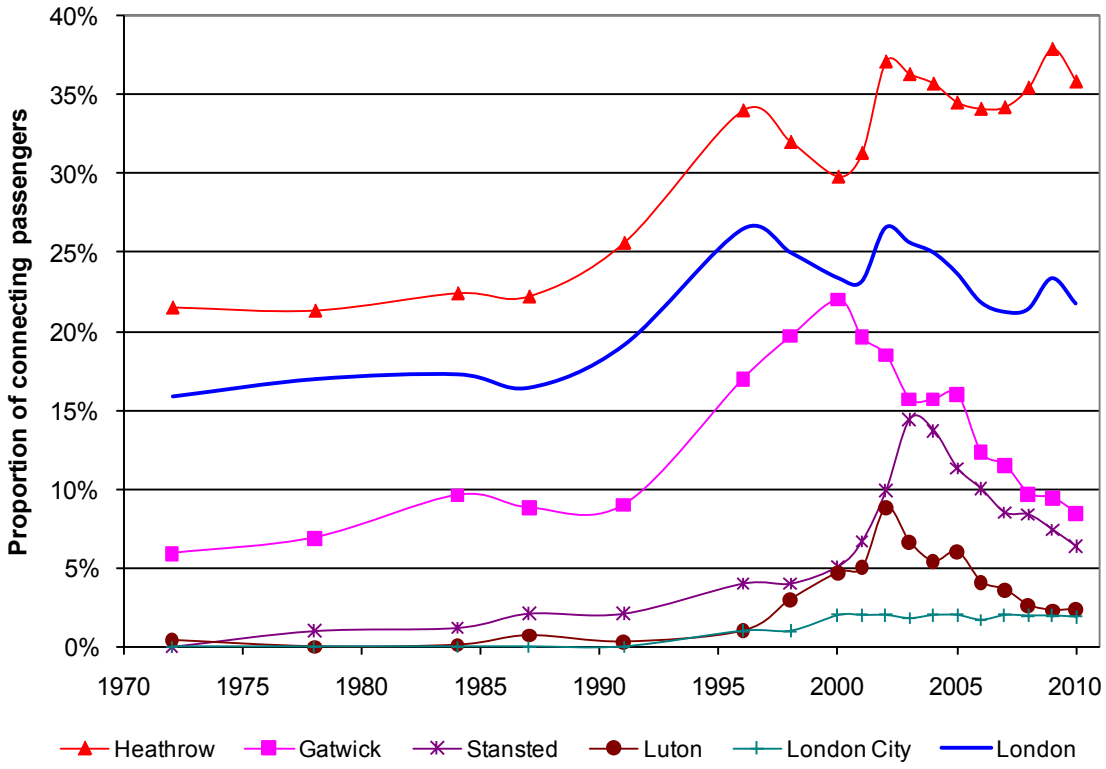
A9 Of all the London airports, only Heathrow has a significant share of connecting passengers (36%). Most of these passengers are intra-/interlining passengers, using the networks of the three major global airline alliances: Oneworld, Star Alliance and SkyTeam. Heathrow is the home hub airport of its largest customer, British Airways (BA), which provides the majority of intra-/interlining passengers.

A10 Only 8.5% of Gatwick's passengers connect between flights at the airport, the second largest share after Heathrow. At Stansted, only 6% of passengers connect between flights and, given the prevalence of LCCs at the airport (which do not offer intra-/interlining services), it is likely that most of these passengers self-connect.

A11 The shares of connecting passengers have changed markedly over the last 20 years, which is shown in Figure 6. Until the early 1990s the share of transfer passengers at all London airports was broadly flat, before rising substantially, first at Heathrow and Gatwick. About 5-10 years later, the share of transfer passengers also briefly spiked at Luton and Stansted between 2000 and 2005.

A12 While the transfer passenger share at Heathrow has been oscillating around 35% over the last ten years, Gatwick's share of transfer passengers decreased very sharply after 2000, from over 20% to under 10% in 2010. The move of transatlantic flights to Heathrow following the liberalisation of the EU-US air services market, the abandonment of BA's dual hub strategy and the growth of LCCs at Gatwick have all contributed to this development.

Figure 6: Trends in connecting passengers at London airports, 1972-2010[3]



Source: CAA Passenger Survey

3 Note: Some numbers have been interpolated for Stansted, London City and Luton airports and the data exclude passengers connecting between flights at different airports

A13 Table 3 shows that the size of Heathrow's hinterland supports a much higher volume of direct passengers than at other European hub airports, and that its traffic comprises a much lower share of connecting passengers than Frankfurt and Schiphol airports.

Table 3: Comparison of direct and connecting passengers at selected European airports in 2007

	Total Passengers (millions)	Connecting Passengers (millions)	Terminating Passengers (millions)	% Connecting Passengers	LUZ Population 2004 (m)
London Heathrow	68	24	44	35%	11.9
Frankfurt Main	53	29	24	54%	2.5
Amsterdam Schiphol	46	19	27	42%	1.4
Paris Charles de Gaulle	57	18	39	32%	11.1

Sources: London First report 'Imagine a world class Heathrow' and Urban Audit

Note: LUZ = Larger Urban Zone

ANNEX B

Static Hub economics model

The Airports Commission asked the CAA to consider the extent to which different routes, airlines and route or airline groups at Heathrow depend on connecting traffic to and from the other services at the airport. After discussion with the Airports Commission, it was agreed to focus on the major global airline alliances, Virgin Atlantic and the other non-aligned carriers.

The initial model - assumptions

B1 Based on 2011 data (latest non-provisional CAA survey data) of Heathrow routes and, therefore, on the 2011 Heathrow alliance structure (so bmi considered part of Star[4]).

B2 Alliances only consist of full alliance partners, not candidates, nor non-aligned airlines with significant code-share agreements (eg Aer Lingus and BA).

B3 Only considers the effect on transfer traffic of separating airline groups from the other services at Heathrow. Additionally, looks at whether the existing networks at other London airports or within the airline group itself could substitute for the lost transfer traffic. (The Airports Commission requested that the model be 'geographically neutral' – that is, where airlines are modelled as moving between London airports, it is assumed that they attract the same level of direct passengers at the new airport than at the old.)

B4 A route is assumed to be 'served' by a carrier if there are more than 50 departures reported in the OAG data for the calendar year 2011.

4 Domestic services at Heathrow were changing - BA had purchased bmi and the competition authorities had required it to make slots available for competitors to start new domestic services. However, it was decided to use alliance structures that were in place at the time that the survey was undertaken.

Q: How much does each alliance at Heathrow depend on feed from other carriers?

B5 For each airline group (= oneworld, Star, SkyTeam, Virgin, and, collectively, all other non-aligned carriers), demand is split into:

i) Direct

ii) Connecting from same group

iii) Connecting from carrier outside group (destination served by group)[5]

iv) Connecting from carrier outside group (destination not served by group)

B6 Only type iv) is considered to be feed which is dependent on routes and airlines outside the group, since type i) is not dependent on feed traffic at all, type ii) is dependent only on routes operated by the group and type iii) is assumed to be substitutable between the connecting service used and that operated by the group.[6]

Outputs

2.49 At Heathrow, these different airline groups have these characteristics:

Passengers (m)	oneworld		Star		SkyTeam	
Direct	17.44	53%	11.64	75%	4.19	90%
Con. Same Alliance	13.86	42%	2.04	13%	0.05	1%
Con. Different Alliances - overlap	0.94	3%	0.62	4%	0.05	1%
Con. Different Alliances - no overlap	0.69	2%	1.16	7%	0.38	8%
Total Con. Pax	15.48	47%	3.81	25%	0.48	10%
Total Pax	32.93	100%	15.45	100%	4.67	100%

5 For example, a passenger that arrived at Heathrow on a Continental flight from New York and transfers onto a Virgin Atlantic flight to Mumbai - both destinations are served by Virgin Atlantic. Routes are considered as city pairs, so whether the inbound flight was from New York Newark or New York JFK does not affect the result.

6 Although it is acknowledged that in some instances, it may be that the connection outside the group provided a more convenient time or option for the consumer, so there would be some disbenefit involved in using the service operated by the group instead.

Passengers (m)	Virgin		Other Unaligned	
Direct	2.70	79%	8.27	79%
Con. Same Alliance	0.18	5%	0.26	2%
Con. Different Alliances - overlap	0.13	4%	0.22	2%
Con. Different Alliances - no overlap	0.41	12%	1.70	16%
Total Con. Pax	0.72	21%	2.19	21%
Total Pax	3.41	100%	10.45	100%

B7 For each of the three main alliances, less than 10% of their traffic connects from routes which are not currently served by the alliance (Con. Different alliances – no overlap). For Virgin, it is 12%.

Q: And how much of this feed could be provided by other London airports?

B8 For this question, the only assumption on viability of moving to other airport compares the destinations in the fourth type above against the existing network at the airport. So the alliance is assumed to 'keep' all the traffic above plus that in type iv) which is on a route served at the 'target' airport in 2011.

Outputs

B9 Thus, under the assumptions above, at least 90% of all traffic would be preserved under the scenario of 'transplanting' the alliance to a different London airport, ignoring any existing routes at the airport which would support the alliance. The full results are are:

Passengers (m)	oneworld		Star		SkyTeam	
Total at Heathrow	32.93		15.45		4.67	
Gatwick option	32.73	99.4%	14.68	95.0%	4.50	96.4%
Luton option	32.55	98.9%	14.43	93.4%	4.38	93.8%
Stansted option	32.69	99.3%	14.54	94.1%	4.41	94.5%

Passengers (m)	Virgin		Other Unaligned	
Total at Heathrow	3.41		10.45	
Gatwick option	3.33	97.6%	9.46	90.5%
Luton option	3.21	94.1%	9.01	86.2%
Stansted option	3.25	95.2%	9.08	86.8%

Caveats

B10 Clearly the above analysis is not sufficient to conclude that alliances would find it possible nor profitable to move to other London airports. However, it does indicate that access to connecting traffic is unlikely to be a major hurdle.

B11 Factors which have not been considered, but which may have a significant bearing on a decision by an alliance or carrier to locate in a different hub are:

- The ability of airline groups to either increase or lose direct passengers (type i) if they moved to a different London airport.
- The ability of airline groups to either increase or lose revenue (on all passenger types) if they moved to a different London airport.
- The ability and likelihood of the airline group or the incumbent carriers to set up new routes to compensate for connections which fall into type iv).
- The ability and likelihood of airlines remaining at Heathrow to use the capacity freed up to set up new or more frequent routes.
- Any capacity constraints at the other London airport, which may mean that the airline group cannot be accommodated whilst retaining the existing range of routes offered.

Q: How much do other carriers depend on feed traffic from an alliance (or any other set of routes) at Heathrow?

Method

B12 Each route / carrier combination served at Heathrow in 2011 was examined to calculate its connecting passengers split by alliance and by world area[7].

B13 Each scenario selects a subset of existing routes to be 'removed' from the hub.

B14 Based on the proportion of traffic in each of the connecting categories that is removed from the hub (eg VS services represent 85% of the non-aligned N American traffic) the volume of connecting passengers on each of the remaining routes is reduced.

B15 The effect on the total passengers on each of the remaining routes can then be assessed.

Revenue

B16 Fares have been modelled using 2011 survey data, but responses are relatively sparse since not all interviewees were asked or answered the fares question in the CAA survey. Average fares by carrier, by world area and by residency / purpose have been calculated (ie UK business, UK leisure, Foreign business, Foreign leisure).

B17 Different fares for connecting and direct passengers have been derived based on (i) the different mix of residency/purpose on the route and (ii) factors to represent the discount typically experienced for connecting passengers (currently set at -10% for within-alliance connections and 0% otherwise).

B18 The passenger results above can then been weighted according to the average fares.

Outputs

B19 Four scenarios have been investigated, each with an airline group assumed to exit the hub airport: oneworld, Star, SkyTeam and Virgin.

7 World areas are Short, Africa, North America, Latin / Caribbean, Middle East, Indian Subcontinent and Far East.

For each scenario, the effect on the remaining carriers' traffic has been assessed in line with the assumptions above.

B20 No account is taken of new routes which may be initiated by the remaining airlines to take advantage of any extra capacity available or the services which are no longer offered.

B21 No effect on passenger demand is assumed for remaining routes serving the same destinations as removed routes (ie routes when removed are assumed to compete to the same extent as when they were present).

B22 For each scenario, there is one charts and two tables.

B23 The chart shows the volume of passengers that have been 'lost' and 'remaining' after the removal of the airline group.

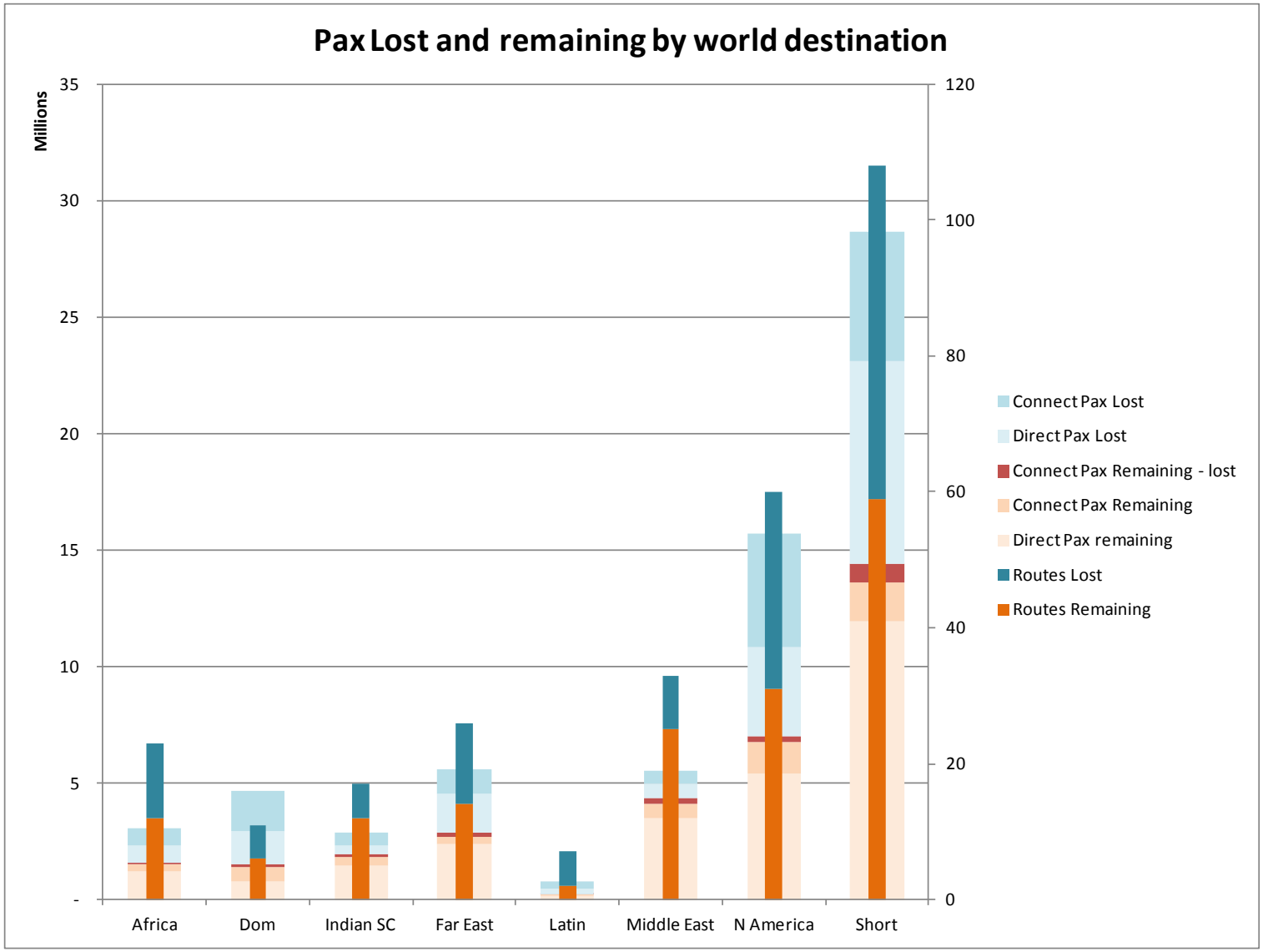
B24 Lost direct and lost connecting passengers (light blue wide bars) are those on the routes which have been removed.

B25 Remaining direct and remaining connect passengers (orange wide bars) are those on routes that remain which are still present at the airport.

B26 Remaining connecting – lost passengers (red wide bars) are those on routes that remain, but are lost since they connect to/from routes which have been removed.

B27 The first table gives the data from the chart and the second table shows how individual alliance and world area routes respectively which remain have been affected. They are grouped into categories for which there has been no effect, those which saw a less than 5% reduction in passengers, those with a 5 to 10% reduction, etc.

Oneworld


Pax Lost and remaining by world destination
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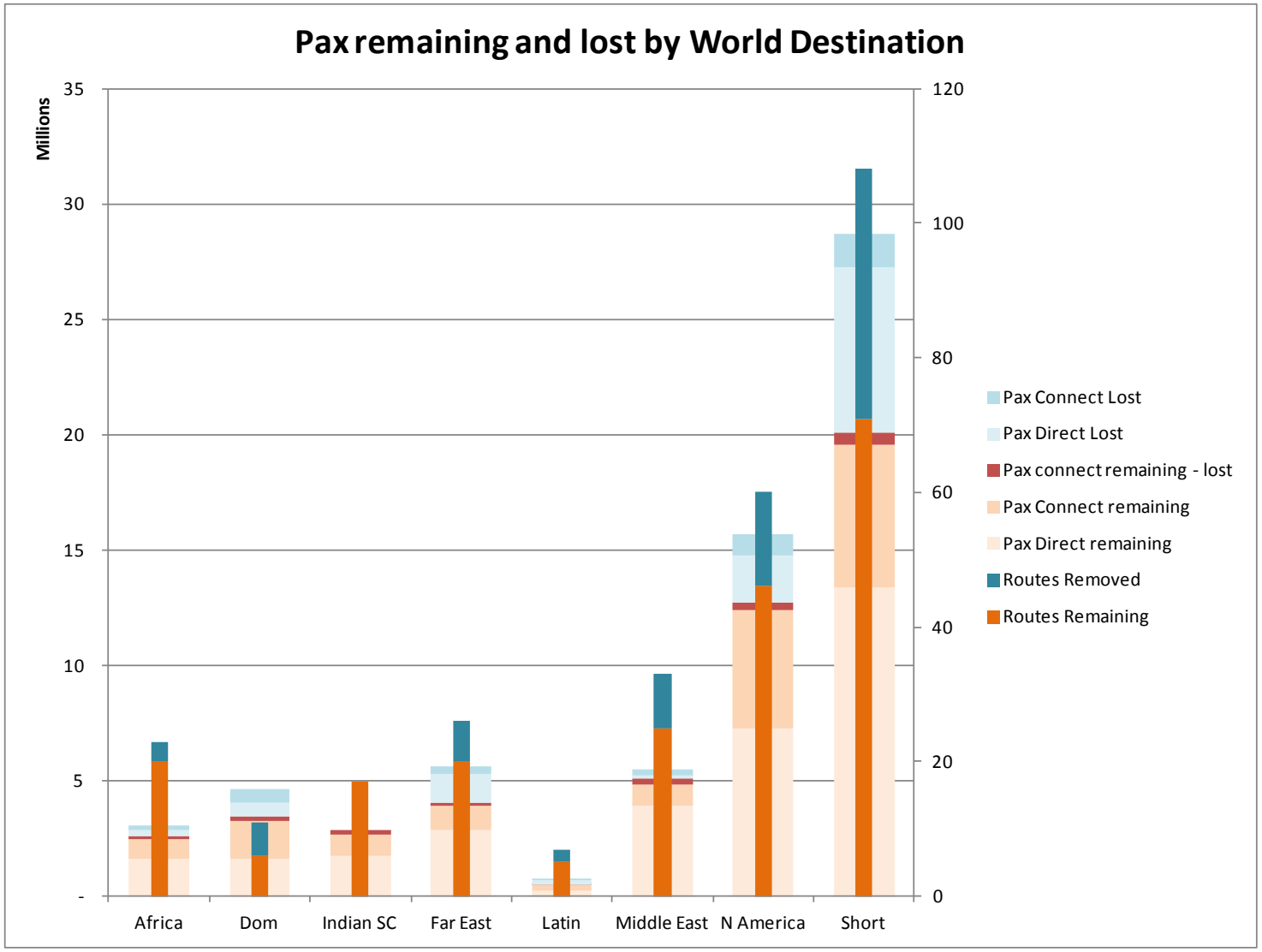
Short
Connect Pax Lost
Direct Pax Lost
Connect Pax Remaining - lost
Connect Pax Remaining
Direct Pax remaining
Routes Lost
Routes Remaining

Data

		Africa	Dom	Indian SC	Far East	Latin	Middle East	N America	Short
Routes	Y	11	5	5	12	5	8	29	49
	N	12	6	12	14	2	25	31	59
Direct	Y	728,704	1,416,427	348,505	1,669,890	214,591	571,895	3,840,699	8,650,587
	N	1,185,157	787,040	1,427,301	2,397,719	179,918	3,490,489	5,421,379	11,910,186
Connect.	Y	753,114	1,732,766	607,406	1,079,190	315,038	553,652	4,851,534	5,591,043
	N	305,417	622,189	368,008	267,829	48,079	626,342	1,332,815	1,708,213
	N - lost	110,503	114,041	146,421	179,028	22,404	265,677	257,756	813,897

	OW	Sky	Star	Un-aligned	Africa	Dom	Indian SC	Far East	Latin	Middle East	N America	Short
35% to 40%	0	0	0	1	0	0	0	0	0	1	0	0
30% to 35%	0	0	0	1	0	0	0	0	0	0	0	1
25% to 30%	0	0	1	3	1	0	0	1	0	0	0	2
20% to 25%	0	0	1	3	0	0	1	0	0	0	2	1
15% To 20%	0	0	1	2	0	0	1	0	0	0	0	2
10% to 15%	0	1	14	3	2	2	1	2	1	4	3	3
5% to 10%	0	4	7	12	3	0	3	3	0	3	7	4
0% to 5%	0	13	39	25	5	3	3	4	0	11	13	38
No Loss	0	1	12	17	1	1	3	4	1	6	6	8

Star


Pax remaining and lost by World Destination
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Far East
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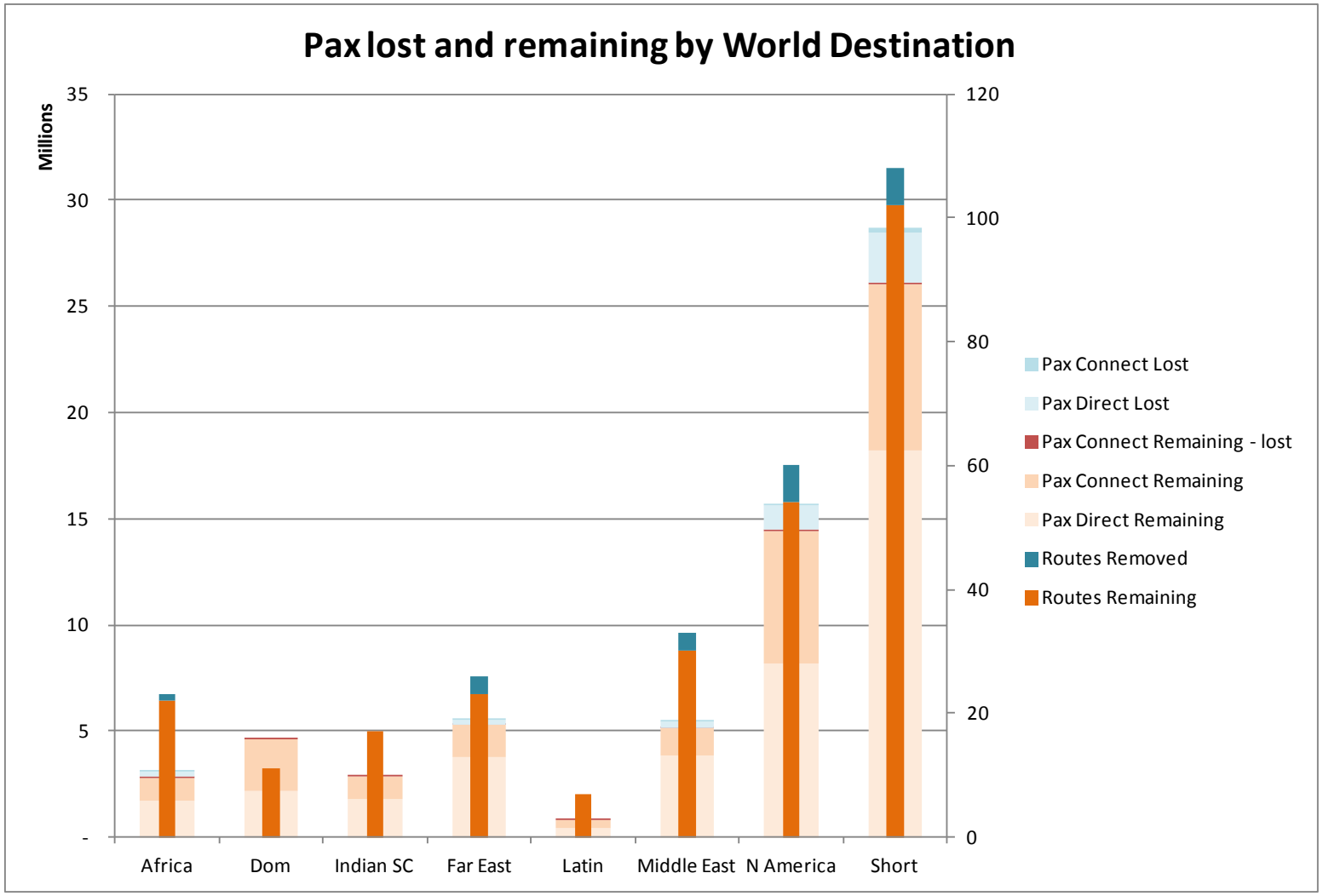
Short
Pax Connect Lost
Pax Direct Lost
Pax connect remaining - lost
Pax Connect remaining
Pax Direct remaining
Routes Removed
Routes Remaining

Data

		Africa	Dom	Indian SC	Far East	Latin	Middle East	N America	Short
Routes	Y	3	5	0	6	2	8	14	37
	N	20	6	17	20	5	25	46	71
Direct	Y	297,594	599,381	-	1,227,752	179,918	157,797	2,017,773	7,161,092
	N	1,616,267	1,604,086	1,775,806	2,839,857	214,591	3,904,586	7,244,305	13,399,681
Connect.	Y	185,933	636,904	-	286,981	70,484	257,498	935,993	1,437,134
	N	887,157	1,681,721	891,422	1,103,155	311,245	906,545	5,173,496	6,181,544
	N - lost	95,944	150,371	230,413	135,910	3,792	281,627	332,616	494,475

	OW	Sky	Star	Un-aligned	Africa	Dom	Indian SC	Far East	Latin	Middle East	N America	Short
35% to 40%	0	0	0	0	0	0	0	0	0	0	0	0
30% to 35%	0	0	0	0	0	0	0	0	0	0	0	0
25% to 30%	0	0	0	1	0	0	1	0	0	0	0	0
20% to 25%	0	1	0	1	0	0	0	1	0	0	1	0
15% To 20%	0	0	0	3	0	0	2	0	0	1	0	0
10% to 15%	0	2	0	10	1	0	2	1	0	3	2	3
5% to 10%	4	3	0	10	4	3	1	1	0	2	1	5
0% to 5%	94	12	0	20	11	3	8	9	4	13	29	49
No Loss	26	1	0	22	4	0	3	8	1	6	13	14

SkyTeam


Pax lost and remaining by World Destination
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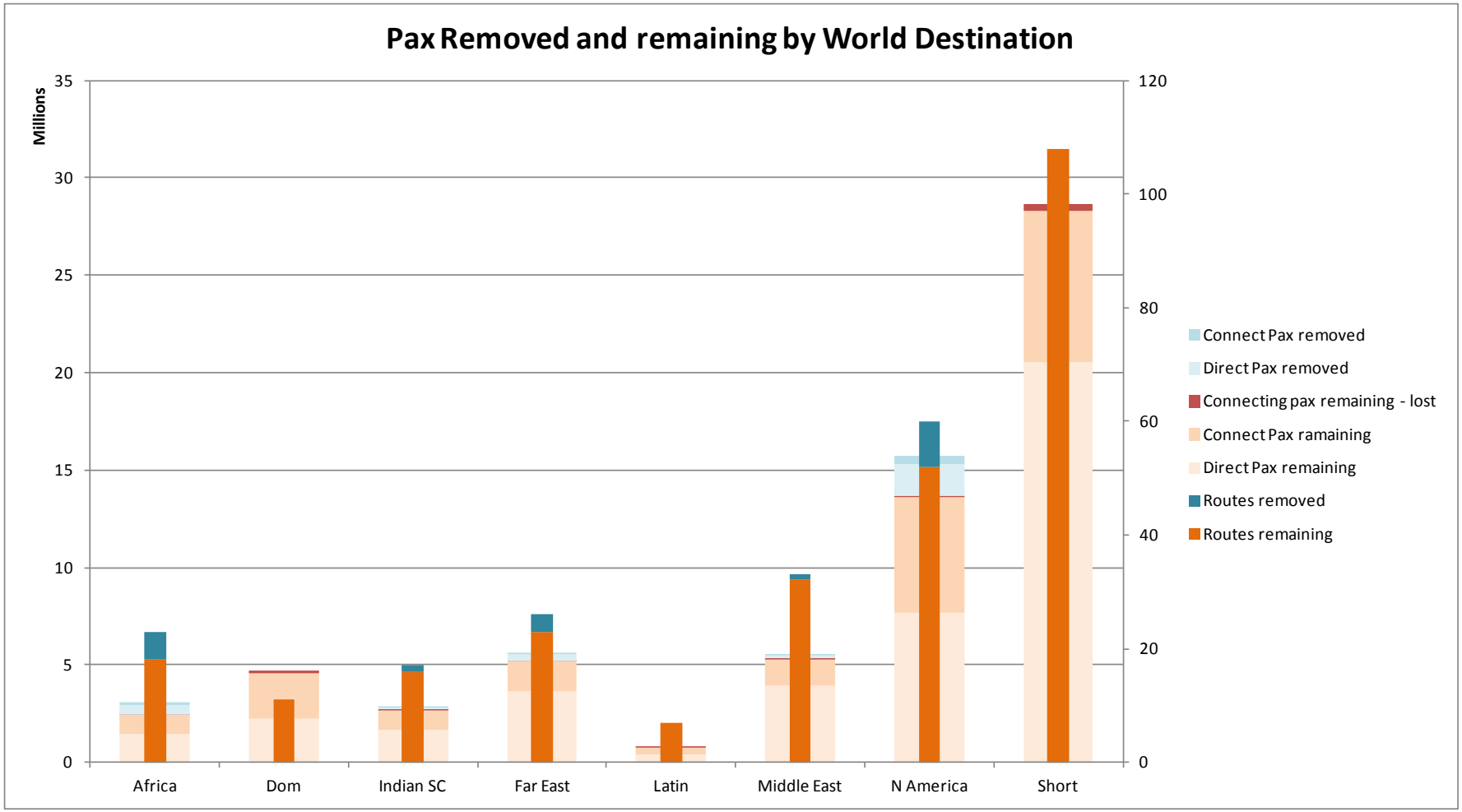
Middle East
N America
Short
Pax Connect Lost
Pax Direct Lost
Pax Connect Remaining - lost
Pax Connect Remaining
Pax Direct Remaining
Routes Removed
Routes Remaining

Data

		Africa	Dom	Indian SC	Far East	Latin	Middle East	N America	Short
Routes	Y	1	0	0	3	0	3	6	6
	N	22	11	17	23	7	30	54	102
Direct	Y	208,938	-	-	268,609	-	253,297	1,101,098	2,362,345
	N	1,704,923	2,203,466	1,775,806	3,799,000	394,509	3,809,086	8,160,981	18,198,428
Connect.	Y	34,910	-	-	56,144	-	95,309	90,394	198,651
	N	1,105,692	2,421,139	1,118,308	1,459,725	384,963	1,343,951	6,249,968	7,854,807
	N - lost	28,433	47,857	3,527	10,177	559	6,412	101,744	59,696

	OW	Sky	Star	Un-aligned	Africa	Dom	Indian SC	Far East	Latin	Middle East	N America	Short
35% to 40%	0	0	0	0	0	0	0	0	0	0	0	0
30% to 35%	0	0	0	0	0	0	0	0	0	0	0	0
25% to 30%	0	0	0	0	0	0	0	0	0	0	0	0
20% to 25%	0	0	0	0	0	0	0	0	0	0	0	0
15% To 20%	0	0	0	0	0	0	0	0	0	0	0	0
10% to 15%	0	0	0	1	1	0	0	0	0	0	0	0
5% to 10%	0	0	2	1	0	0	0	0	0	0	3	0
0% to 5%	65	0	38	26	10	11	5	9	3	14	24	53
No Loss	59	0	35	39	11	0	12	14	4	16	27	49

Virgin


Pax Removed and remaining by World Destination
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Africa
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Indian SC
Far East
Latin
Middle East
N America
Short
Connect Pax removed
Direct Pax removed
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Direct Pax remaining
Routes removed
Routes remaining

Data

		Africa	Dom	Indian SC	Far East	Latin	Middle East	N America	Short
Routes	Y	5	0	1	3	0	1	8	0
	N	18	11	16	23	7	32	52	108
Direct	Y	451,595	0	83,534	398,263	0	158,247	1,606,708	0
	N	1,462,266	2,203,466	1,692,273	3,669,346	394,509	3,904,137	7,655,371	20,560,774
Connect.	Y	164,931	0	83,534	15,219	0	13,187	438,563	0
	N	989,964	2,374,435	996,502	1,505,787	384,810	1,359,859	5,946,479	7,745,971
	N - lost	14,139	94,562	41,800	5,041	711	72,625	57,063	367,183

	OW	Sky	Star	Un-aligned	Africa	Dom	Indian SC	Far East	Latin	Middle East	N America	Short
35% to 40%	0	0	0	0	0	0	0	0	0	0	0	0
30% to 35%	0	0	0	0	0	0	0	0	0	0	0	0
25% to 30%	0	0	0	0	0	0	0	0	0	0	0	0
20% to 25%	0	0	0	0	0	0	0	0	0	0	0	0
15% To 20%	1	0	1	0	0	0	0	0	0	0	0	2
10% to 15%	0	2	3	1	0	0	0	0	0	3	0	3
5% to 10%	2	0	5	3	0	2	1	0	0	2	1	4
0% to 5%	86	8	51	21	11	9	7	6	6	13	43	71
No Loss	35	9	15	24	7	0	8	17	1	14	8	28

ANNEX C

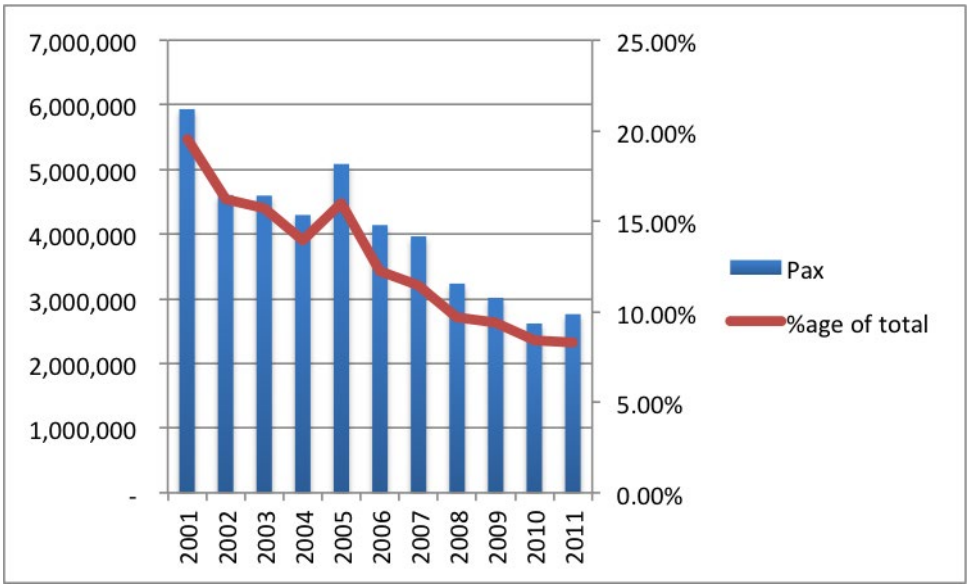
Connecting Passengers at Gatwick

The Airports Commission asked the CAA for extra information about connecting passengers at Gatwick airport, including those that were 'self-hubbing'.

C1 The shares of connecting passengers at London airports have changed markedly over the last 20 years. Until the early 1990s the share of transfer passengers at all London airports was broadly flat, before rising substantially, first at Heathrow and Gatwick. About 5-10 years later, the share of transfer passengers also briefly spiked at Luton and Stansted between 2000 and 2005.

C2 Only 8.5% of Gatwick's passengers connect between flights at the airport, the second largest share after Heathrow. Gatwick's share of transfer passengers decreased very sharply after 2000, from a peak of over 20% to under 10% by 2010, as shown in Figure 1.

Figure 1: Connecting Passengers at Gatwick, 2001-2011

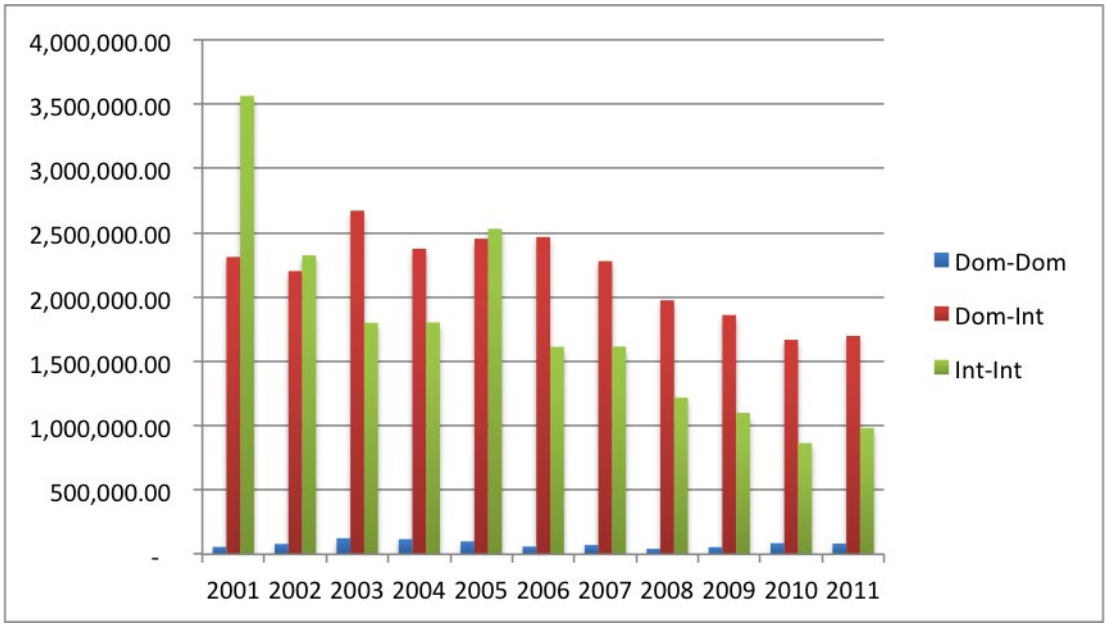


Source: CAA Passenger Survey

C3 The move of transatlantic flights to Heathrow following the liberalisation of the EU-US air services market, the abandonment of BA's dual hub strategy and the growth of LCCs at Gatwick have all contributed to

this development. This is reflected in the breakdown of connecting passengers by routeing as shown in Figure 2.

Figure 2: Connecting Passengers at Gatwick by routeing



Source: CAA Passenger Survey

C4 The number of international-to-international connectors fell from over 3.5 million in 2001 to less than 1 million in 2011, reflecting de-hubbing by BA and EU-US Open Skies. International-to-international connectors accounted for 35% of transfer passengers at Gatwick in 2011, down from 60% in 2001.

C5 In contrast, the reduction in domestic-to-international connectors has been much more moderate, and the number of domestic-to-domestic connectors was, in fact, higher in 2011 than in 2001. This is likely to reflect the fact that a number of domestic airports are served from Gatwick that are no longer served from Heathrow, for example Inverness, Newquay and Jersey.

C6 Table 1 shows that the main international-to-international connecting flows tend to be routeings for which Gatwick makes a logical connecting point in terms of geography, for example Ireland to Southern Europe. While Gatwick has lost many of its routes to primary airports in the United States it still serves a number of leisure destinations in the United States (Florida and Las Vegas) and the Caribbean. It is possible that some of these routes are relatively underserved from Italy, potentially explaining the number of passengers flying from Italy to these destinations via Gatwick.

Table 1: Main country flows for Gatwick international-international connectors, 2011

COUNTRY PAIR	PASSENGERS (000s)
IRISH REPUBLIC - USA	59
ITALY - USA	31
IRISH REPUBLIC - ITALY	30
IRISH REPUBLIC - TURKEY	27
CROATIA - USA	25
GREECE - IRISH REPUBLIC	22
IRISH REPUBLIC - SPAIN	20
ANTIGUA AND BARBUDA - ITALY	18
FRANCE - NETHERLANDS	18
POLAND – SPAIN (CANARY ISLANDS)	16
IRISH REPUBLIC - SWITZERLAND	15
NETHERLANDS - USA	15
CANADA - ITALY	14
BARBADOS - IRISH REPUBLIC	12
UNITED ARAB EMIRATES - USA	11
SPAIN - USA	10
DENMARK - SPAIN	10
ITALY - JAMAICA	10
FRANCE - SPAIN	10
ITALY - TRINIDAD AND TOBAGO	10
Others	599
Total	982

Source: CAA Passenger Survey, 2011

C7 Table 2 shows the main country flows for domestic connecting traffic through Gatwick in 2011. It is highly fragmented, with only routes to Italy and the United States accounting for more than 10% of domestic connectors, and only Spain, Greece and France accounting for more than 5%.

Table 2: Main country flows for Gatwick domestic connectors, 2011

COUNTRY PAIR	PASSENGERS (000s)
ITALY	260
USA	218
SPAIN	129
GREECE	93
FRANCE	93
UNITED KINGDOM	83
PORTUGAL (EXCLUDING MADEIRA)	69
BARBADOS	67
SPAIN (CANARY ISLANDS)	59
CANADA	47
UNITED ARAB EMIRATES	46
CYPRUS	34
NETHERLANDS	32
EGYPT	31
AUSTRIA	24
LATVIA	24
PORTUGAL (MADEIRA)	23
ST LUCIA	22
BULGARIA	21
TURKEY	21
Others	384
Total	1,782

Source: CAA Passenger Survey, 2011

C8 The number of domestic-to-domestic connectors is likely to reflect the fact that Gatwick serves points such as Jersey, Guernsey and Newquay that lie to the South and West of London. Accordingly, transfers on to destinations in northern England, Scotland and Northern Ireland make geographic sense.

C9 Table 3 shows the proportion of connectors using different airlines at the airport and compares this to the airlines' overall share of passengers at the airport.

Table 3: Connectors at Gatwick by airline, 2011

	Connecting Passengers		Within Airline / Alliance		Total Passengers	
Carrier/Alliance	000s	%	000s	% of conn	000s	%
easyJet	610	5%	244	40%	12,284	37%
Unaligned	357	6%	9	3%	6,469	19%
Charter	163	3%			5,317	16%
BA / Oneworld	983	20%	642	65%	4,980	15%
Virgin	151	11%			1,422	4%
Flybe	341	27%	42	12%	1,260	4%
Aer Lingus	109	14%			778	2%
Star	40	8%			496	1%
Sky	10	4%			268	1%
Total	2,764		936		33,273	

Source: CAA Passenger Survey, 2011

C10 BA has the largest overall number of connecting passengers, at nearly 1 million. This is consistent with its position as the network carrier with the largest presence at Gatwick, and its share of connecting passengers, at 20%, is slightly larger than its share of overall passengers at the airport. 65% of connecting passengers using BA / OneWorld services at Gatwick are connecting within the airline or alliance. This is lower than the 'within the family' share at Heathrow and is likely to reflect the smaller BA / OneWorld network at Gatwick.

C11 easyJet accounts for the second largest number of connecting passengers at Gatwick. In contrast to BA however, connecting passengers only account for 5% of overall easyJet traffic at Gatwick, where easyJet is the largest airline. This is consistent with easyJet's business model which does not facilitate transfer traffic. The fact that 40% of connectors on easyJet flights are connecting with another easyJet service suggests that these passengers are 'self-connecting' or 'self-hubbing'.

C12 Flybe is the third airline in terms of number of connecting passengers at Gatwick. 27% of Flybe passengers at Gatwick are connecting, a higher share than any of the other airlines in the sample. However, only 12% of Flybe connectors are connecting within the airline. This might reflect the fact that Flybe operates a number of domestic services to routes which are not served by Heathrow and which therefore may serve passengers that rely on connections via Gatwick in order to access services from other carriers to European and long-haul destinations.

ANNEX D

Bilateral Agreements and Aviation Connectivity

The Airports Commission asked the CAA whether frequency limits imposed in bilateral Air Services Agreements were a binding constraint on UK connectivity, particularly with respect to the BRIC countries.

D1 It has been argued that the lack of available capacity at Heathrow has already had a negative effect on the UK's ability to liberalise Air Services Agreements with some foreign states.

D2 Although London is served by multiple airports, most of which have available capacity at most times of the day, access to Heathrow is often singled out as a specific issue. In part, this is a natural response to the concentration of airlines' alliance partners at Heathrow as well as the fare premia which services from Heathrow can generate.

D3 However, it is also sometimes suggested that 'the world only knows one airport code for London – LHR'.

D4 Accordingly, capacity constraints at Heathrow are cited as a barrier to removing bilateral constraints which would open up routes into emerging markets. While the capacity constraints at Heathrow are clearly a reality, this note provides evidence that:

D5 Bilateral frequency limits are not binding on routes between London and three of the four BRIC countries;

D6 Where major liberalisation has taken place e.g. EU-US and UK-India, airline networks have adapted in order to take advantage of new opportunities.

Bilaterals and the BRICs

D7 Table 1 summarises traffic rights and service frequency on routes between London and the four BRIC countries (Brazil, Russia, India and China).

D8 In common with many bilateral relationships that have not been fully liberalised through an Open Skies agreement, the agreements relating to traffic rights are complex and vary from case to case. In addition to the 'headline' traffic rights there are also often 'doing business'

restrictions relating to such issues as airline designation, aircraft capacity, route-specific limits, codesharing, fifth-freedom rights etc.

D9 However, on the basis of service frequencies as specified by traffic rights only London-Russia routes are constrained:

Table 1: Bilateral Agreements and Aviation Connectivity: London – BRICs

Country	Destination	Traffic Rights Frequencies per week	Services per week UK	Services per week Foreign	At limit? UK	At limit? Foreign	Comment
Brazil	Sao Paulo	21 (35*)	7	7	Y	N	*Frequency cap to be raised subject to negotiation of a free-proicing article
	Rio de Janeiro		7	3			
Russia	Moscow	35	35*	35	Y	Y	*easyJet will operate 14spw from 15 April 2013
	St Petersburg	7	7	7	Y	Y	
India	Delhi	56	18	20	N	N	
	Mumbai		19	21			
	Bengaluru	14	7	0	N	N	
	Chennai	14	6	0	N	N	
	Hyderabad	7	5	0	N	N	
China	Beijing	31	7	11	N	N	
	Shanghai		12	4			
	Guangzhou		0	4			
	Chengdu		3*	0			*from September 2013

Sources: OAG schedule data

London – Brazil:

D10 British Airways currently operates 14 of the permitted 21 services per week (spw) as specified under the Air Services Agreement (ASA), as updated in 2008. The Brazilian airline TAM only operates 10 of the 14 frequencies available to Brazilian carriers;

London – Russia:

D11 Both UK (British Airways and easyJet) and Russian (Aeroflot and Transaero) operate the maximum number of frequencies permitted under the UK-Russia ASA on London-Moscow and London-St Petersburg. The Russian authorities have explicitly stated access to slots at Heathrow as a barrier to further liberalisation, including at the most recent set of bilateral talks in July 2012.

London – India:

D12 The UK-India market was substantially liberalised in the course of 2004 and 2005 (see the case study below). Neither UK nor Indian carriers currently operate at the frequency cap on any UK-India route.

London – China:

D13 The UK-China ASA was updated in 2011. Neither the services operated by UK carriers nor those operated by Chinese carriers operate are close to the frequency cap set out in the ASA.

UK – India

D14 The liberalisation of the UK – India ASA between late 2004 and mid-2005 provided an ideal case study for the examination of the effects of market liberalisation, as these agreements opened up a market that had remained substantially constrained for many years. In November 2006, the CAA published a report analysing these impacts in considerable detail[8]

D15 The capacity limit on airlines operating between India and the UK on the core routes between London and Delhi / Mumbai more than tripled between 2004 and 2006, and the permitted capacity on most other routes is such that these markets are de facto now almost unrestricted.

8 http://www.caa.co.uk/docs/589/ERG_EPIA_India_Liberalisation.pdf

This loosening of regulatory constraints triggered a rapid increase in the number of passengers carried by airlines of both sides, suggesting that demand had previously been significantly suppressed.

D16 Between October 2004 and October 2006, the number of direct services between India and the UK rose from 34 to 112 services per week (spw). The majority of new services operated from London Heathrow, equivalent to an increase of 77 services per week to and from Heathrow in spite of constraints at the airport.

D17 Table 2 summarises the key impacts of the liberalisation:

Table 2: UK – India Liberalisation – Summary of Key Impacts

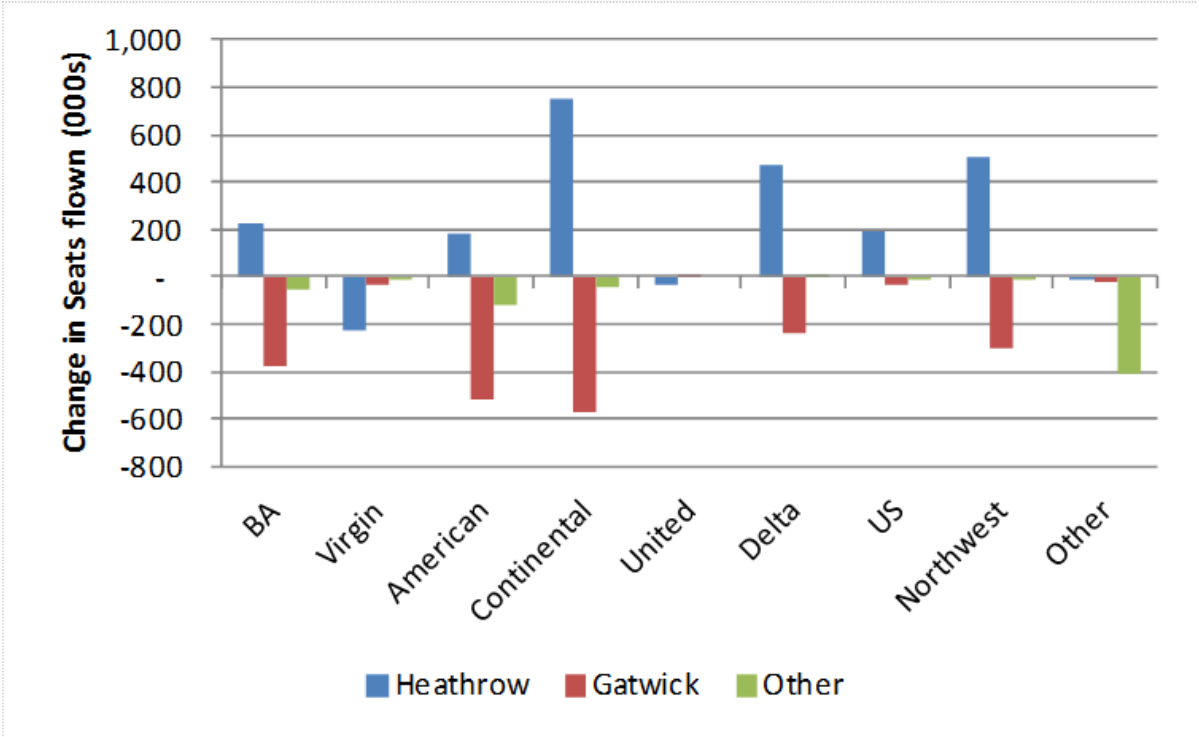
Indicator	Time period	Figures	Change
Monthly passengers travelling direct	Oct 2004 to Oct 2006	87,000 to 181,000	> 100 per cent
Direct services per week	Oct 2004 to Oct 2006	34 to 112	> 300 per cent
Carriers serving India direct	Oct 2004 to Oct 2006	3 to 5	+67 per cent
City-pairs served	Oct 2004 to Oct 2006	5 to 8	+60 per cent
Market share of direct carriers	2004 to 2005	50 to 60 per cent	+ 10 percentage points
Typical one-way fare paid by passengers travelling for leisure	2004 to 2005	£251 to £231	-17 per cent
Typical one-way fare paid by passengers travelling for business	2004 to 2005	£882 to £736	-8 per cent
Annual benefit to UK consumers	2004 to 2005	Estimated at £39 million	NA
Annual revenues for UK carriers	2004 to 2005	Increased by £30 million	NA
Annual profits for UK carriers	2004 to 2005	Decreased by £46 million	NA
Annual UK airport revenues	2004 to 2005	Increased by £65 million	NA
Annual UK airport profits	2004 to 2005	Increased by £11.7 million	NA
Growth in overall direct business traffic	2004 to 2005	Increase from 255,000 to 350,000	+ 37 per cent
Growth in overall direct leisure traffic	2004 to 2005	Increase from 406,000 to 600,000	+ 48 per cent

Sources: CAA data and internal modelling

EU – US Open Skies

D18 Experience following the EU-US Open Skies liberalisation in 2008 also suggests that airlines are able to meet sufficiently strong demand for new routes. Table 2 shows the change in capacity offered on routes between the UK and the US between 2008 and 2009, clearly demonstrating the shift from Gatwick to Heathrow. This period saw the price paid for take-off and landing slots at Heathrow reach their peak.

Figure 1: Change in capacity between 2008 (year to March) and 2009 (year to March) on routes to / from the US from Heathrow, Gatwick, and regional airports ('Other')



Source: CAA Airport Statistics

ANNEX E

Economic Regulation of Airports in the UK

The Airports Commission asked the CAA to describe the various pieces of legislation which define and apply to the economic regulation of airports in the United Kingdom.

E1 Specifically, the note covers:

- The role of the CAA;
- The provisions of the Airports Act 1986 which sets out the legislative framework for economic regulation;
- The Civil Aviation Act 2012, which will come into force in April 2014 and supersede the Airports Act. The Civil Aviation Act makes a number of significant changes to the scope, and potentially the nature, of economic regulation;
- The Airport Charges Regulations 2011, which implement European Directive 2009/12/EC on airport charges into UK law.

The role of the CAA

E2 The CAA is responsible for the economic regulation of airports in the United Kingdom.

E3 The primary focus of the CAA's economic regulation work is to ensure that the three designated airports, namely Heathrow, Gatwick and Stansted, do not exploit their significant market power to the detriment of users of the airport.

E4 The CAA uses its role as a specialist regulator through legislation and consultation, to control the charges that these airports levy on airlines wishing to use the airport. The CAA's work also covers ensuring that these airports meet the levels of service and standard expected by consumers - such as the setting of a minimum time for passengers to pass through airport security.

E5 The current legislative basis for economic regulation is the Airports Act 1986, which will be replaced by the Civil Aviation Act 2012.

Airports Act 1986

E6 The current framework for the economic regulation of UK airports is set out in Part IV of the Airports Act 1986. UK airports are subject to three tiers of regulatory intervention:

- no specific economic regulation of the smallest airports measured by turnover;
- the need to hold a "permission to levy airport charges" once an airport operator's business at the airport exceeds a certain level of turnover; and
- designation of certain airports for price control and other purposes.

E7 Economic regulation as per the "permission to levy airport charges" applies to airports at which annual turnover has exceeded £1 million in two of the last three financial years. Airports currently excluded from regulation under the Airports Act (or the Airports (Northern Ireland) Order) are those in the Isle of Man and the Channel Islands, those owned or managed by the CAA or a CAA subsidiary and those managed by the Government.

E8 Annual turnover is the aggregate of all sums received by the airport operator during the course of his business at the airport during the year including grants but excluding loans or capital receipts. A change of airport operator does not have any bearing on which years are taken into account. An airport becomes subject to economic regulation by the CAA nine months from the end of the financial year when it first meets the turnover qualification.

E9 The highest level of economic regulation applies at those airports that have been designated by the Secretary of State. In 1986, the Secretary of State designated Heathrow, Gatwick, Stansted and Manchester airports. Manchester airport was subsequently de-designated from 1 April 2009. No new airports have been designated since 1986. For the designated airports, the CAA sets maximum limits on airport charges for successive periods of five years. Relevant airport charges include runway charges, charges per passenger for the use of a terminal and aircraft parking charges.

E10 Before doing so it must make a reference to the Competition Commission (CC) unless directed by the Secretary of State not to make the reference in respect of the airport. The CAA must also impose

conditions to remedy any public interest findings made by the CC at each five-yearly review.

E11 In setting price controls at designated airports (and with all aspects of the economic regulation of airports) the CAA is required (under section 39 of the Airports Act) to perform its regulatory functions in a manner which it considers is best calculated:

- to further the reasonable interests of users of airports within the United Kingdom;
- to promote the efficient, economic and profitable operation of such airports;
- to encourage investment in new facilities at airports in time to satisfy anticipated demands by the users of such airports; and
- to impose the minimum restrictions that are consistent with the performance by the CAA of its regulatory functions.

E12 The CAA must also take into account such of the UK's international obligations as are notified to it by the Government. These include the Chicago Convention of 1944, the EU/US Open Skies agreement and other bilateral air services agreements between the UK and foreign governments as they affect the setting of airport charges.

Civil Aviation Act 2012

E13 The Civil Aviation Act modernises the economic regulatory framework for UK aviation and puts the passenger at the heart of regulation.

E14 Under the provisions of the Civil Aviation Bill, economic regulation of an airport operator can only be applied if it meets a statutory market power test. The decision as to which airport operators meet the market power test and will as a result, be required to hold a licence to levy airport charges, will rest solely with the CAA. The CAA will also have much more flexibility about how licenced airports are regulated.

E15 The CAA will licence any airport operators that it has found pass the market power test. The CAA will be able to modify the licence of an airport operator, including for issues that could also be considered under the CAA's concurrent powers.

E16 The market power test is found in section 6 of the Civil Aviation Act 2012, and consists of three parts:

E17 Test A that the airport operator has, or is likely to acquire, substantial market power in a market, either alone or taken with such other persons as the CAA considers appropriate;

E18 Test B that competition law does not provide sufficient protection against the risk that the airport operator may engage in conduct that amounts to an abuse of that market power; and

E19 Test C that, for users of air transport services, the benefits of regulating the airport operator by means of a licence are likely to outweigh the adverse effects.

The Airport Charges Regulations 2011

E20 The Regulations implement European Directive 2009/12/EC on airport charges into UK law. They establish a common framework by which airports consult their airline customers about airport charges, service level agreements and major infrastructure projects. The Regulations require airports to:

- consult airlines about airport charges annually
- give at least 4 months notice of proposed changes to airport charges (unless there are exceptional circumstances)
- provide specific information to airlines on how airport charges are calculated
- (if practicable) announce decisions on changes to airport charges at least 2 months before they come into effect
- consult airlines on major infrastructure projects.

E21 The Regulations also contain provisions about airlines providing information to airports, the basis for airports providing differentiated services and discrimination. The CAA can investigate complaints that an airport has not complied with the Regulations.

E22 The Regulations apply to airports with more than 5 million passengers in the year two years prior to the current year. Airports with more than 5 million passengers in 2011 are, therefore, covered by the Regulations in 2013, whilst airports with more than 5 million passengers in 2013 will be covered by the Regulations in 2014.

Table 1: UK airports covered by the Airport Charges Regulations

2013	2014
Heathrow	Heathrow
Gatwick	Gatwick
Manchester	Manchester
Stansted	Stansted
Luton	Luton
Edinburgh	Edinburgh
Birmingham	Birmingham
Glasgow	Glasgow
Bristol	Bristol
Liverpool	