YOUR LONDON AIRPORT Gatwick

Response to Discussion Paper 01 on Aviation Demand Forecasting

Submission by Gatwick Airport Ltd

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Summary

London Gatwick believes that the DfT forecasts at the UK level provide an appropriate starting point for the Airport Commission's considerations and agree with many of the high level assumptions, methodologies and sources of independent forecasts used by the DfT in their modelling efforts. We do however have a number of questions and concerns which we believe require further review, analysis and refinement in order for the DfT modelling and results to provide the information required by the Commission to conduct its deliberations and develop sound recommendations regarding future airport capacity needs across the UK. Gatwick is preparing its own forecasts and we would expect the Commission to have regard to these once they are available.

Preamble

Gatwick is pleased that the Airports Commission is closely examining how best to determine the "nature, scale and timing" of additional airport capacity needs in the UK, and we agree completely that forecasts of future aviation demand are critically important to coming to a reasoned determination of these issues. Gatwick also appreciates being given the opportunity to comment on the forecasting issues identified by the Airports Commission. We have reviewed the Discussion Paper prepared by the Airports Commission and have also examined the DfT's most recent UK Aviation Forecasts published in January 2013.

There are areas where Gatwick agrees with and supports the modelling framework utilised by the DfT -

- We consider that the segregation of passenger demand into various categories such as UK resident, non-resident; business and leisure (with demand broken down into distinct destination regions) is fully appropriate for the modelling framework;
- We agree also with the independent variables used to forecast future growth in various segments of demand - income and fares - with sub-variables such as UK GDP and consumption, foreign GDP, imports/exports, fuel prices, non-fuel airline costs, Air Passenger Duty and future carbon costs. Income and fares are generally considered to be primary drivers of air passenger demand and the DfT model captures these variables effectively in its overall national forecast approach;
- We are comfortable also with the sources and methods which the DfT has used to derive forecasts of future values for these key independent variables;
- We further agree with the DfT assessment that the historic decline in real air fare levels which has driven a significant proportion of the recent growth in UK air travel demand, will not play such an important role in the future. Instead, future growth in air travel demand will be based largely on the growth in GDP or income, in both the UK and various international regions;
- We agree also with the concept that the future sensitivity or elasticity of air travel demand with respect to growth in income will be lower than observed historically - a characteristic of market maturity. The DfT has incorporated this element into the National Air Passenger Demand Model, and cites the impact of these maturing elasticities as lowering demand by approximately 7% in 2030 and 21% in 2050 in its Central Case. While the precise impact

of these changes is uncertain, we believe that the DfT has reflected this consideration appropriately into the National UK demand forecasts.

- There are, however, several areas where Gatwick has questions, issues, and serious concerns with the DfT modeling framework and assumptions, and with the airport level traffic forecasts that the model has produced. These concerns are set out below in our responses to the specific questions raised by the Airports Commission in Sections 6.4 and 6.5 of its Discussion Paper on Aviation Demand Forecasting.

The main area of concern is that the DfT's methodologies do not reflect the competitive dynamic that has been introduced as a result of the break-up of the South East airports monopoly. A model that is based on "Heathrow preference" was probably sufficient for forecasting in the days of common ownership. We do not believe that this model can properly forecast the effects of competition between the London airports. Competition will lead airports to seek to change the traffic at the London airports in a way that common ownership would not have allowed.

A demonstration of the effect of this approach to allocation of demand to airports can be seen in a cursory review of the 2003 White Paper forecasts[1]. What is striking about this forecast, based on the DfT model of the day, is that while it correctly forecasts the maximum throughput of Gatwick, around 45mppa, it misses the growth of low cost airlines. In fact, the forecasts show LCCs as *de minimis* at Gatwick.

Even the most sophisticated air traffic forecasting models have limitations. In its Discussion Paper, the Airports Commission illustrates that the DfT forecasts have been materially adjusted to account for the economic and air traffic downturns that have occurred since 2007 (Figure 3.6). Gatwick is concerned that the DfT model may be unable to capture the new competitive dynamic between the London airports that has emerged since the break-up of the Southeast airports monopoly. Previous DfT modelling relied upon in the 2003 White Paper forecasts did not foresee the exceptionally strong growth in Low Cost Carrier services that has occurred at Gatwick, and we are quite concerned that the current DfT forecasts will similarly miss Gatwick's development into a second major long-haul airport for the London region that provides strong and credible competition to Heathrow.

[1] SERAS Stage Two: Appraisal Findings Report, DTLR, 2002

Table 8.4: Gatwick Option: Current Land Use Planning System

		2000	2005	2010	2015	2020	2025	2030
Passengers, mppa								
Scheduled	Domestic	1	1	2	2	2	2	2
	Short haul	12	12	14	14	14	16	14
	USA	5	6	7	8	10	12	14
	Long haul	2	2	2	3	3	4	5
	Total	20	21	25	27	29	34	35
Charter		12	12	10	9	9	9	9
Low cost		1	**	**	**	**	**	**
Total		32	**34**	**34**	**36**	**39**	**43**	**45**
ATMs, '000								
Scheduled	Domestic	38	32	27	27	28	29	29
	Short haul	133	137	144	147	136	146	125
	USA	19	21	14	30	35	40	45
	Long haul	10	11	11	15	17	19	23
	Total	200	201	207	219	216	234	222
Charter		50	52	44	38	36	35	35
Low cost		6	**	**	**	**	**	**
Total		256	**256**	**252**	**258**	**253**	**269**	**258**
Passengers/PATM								
Scheduled		100	107	116	124	136	144	158
Charter		230	231	231	241	253	259	269
Low cost		99	78	83	93	**	**	**
Average		125	132	136	142	153	159	174

*Note: Figures in **bold** are capacity-constrained forecasts*

'Other' categories, not shown, are included in totals. Totals may not sum due to rounding

*** = less than 0.5 mppa or less than 500 ATMs*

Responding to the Commission's questions

We now turn to the questions put by the Commission in paragraphs 6.4 and 6.5 of its discussion paper.

1 To what extent do you consider that the DfT forecasts support or challenge the argument that additional capacity is needed?

1.1 Gatwick believes that the DfT forecasts support fully the need for additional capacity, specifically in the London region. The need for additional capacity in London is demonstrated by comparing the forecast levels of future unconstrained and constrained passenger demand across London's six airports. In 2030, the DfT forecasts that the London airports would handle a combined 198 million terminal passengers without capacity

constraints, but this number will fall by 12.6 million passengers, or 6.4%, due to capacity limitations. The impact of capacity constraints in London is far more severe in 2050, when London's airports would be unable to accommodate 94 million passengers, or 32% of unconstrained demand, due to insufficient airport capacity (see DfT UK Aviation Forecasts, 29 January 2013, Annex tables D.8 and E.2, Central Case).

2 What impact do you consider capacity constraints will have on the frequency and number of destinations served by the UK?

2.1 Based on the projected differences in airport passengers, capacity constraints at the London airports will clearly reduce the future frequency of flights and, to a lesser extent, the number of nonstop destinations served from the London region. While we expect strong passenger growth from UK regional airports, as they continue a process of developing new direct services, we do question whether passengers who are not accommodated at the London airports due to insufficient capacity would actually migrate to other UK airports outside of the London region to the extent shown in the DfT constrained forecasts.

3 How effectively do the DfT forecasts capture the effect on UK aviation demand of trends in international aviation?

3.1 Among the trends in international aviation that we expect to have an impact on future UK aviation demand are the following:

- The emergence of new airline hubs such as the Emirates hub in Dubai and Turkish Airlines at Istanbul will provide growing competition and are likely to reduce the reliance of international transfer passengers on Heathrow and the primary continental European hubs (Frankfurt, Paris, Amsterdam), particularly for European traffic flowing to markets such as China, India and Southeast Asia.
- The development of new technology aircraft such as the Boeing 787 and the Airbus A-350 effectively lowers the passenger threshold required to support direct, long-haul services. These aircraft will accelerate the development of direct international services at medium-sized cities in the UK, Europe, and elsewhere, and allow a greater proportion of their international demand to be served without relying on transfers at Heathrow or competing European hubs.
- Low cost carriers in other world regions are increasingly developing interline and code share relationships with long-haul international airlines. We believe this trend has the potential to increase transfer traffic levels at airports such as Gatwick, which is already attracting new long-haul services and where low cost carriers and regional airlines offer an extensive network of potential connecting destinations.

4 How could the DfT model be strengthened, for example to improve its handling of the international passenger transfer market?

4.1 The impact of emerging industry trends

The DfT model could be strengthened through explicit recognition of the factors cited in 3. above, including increasing competition for transfer flows from emerging hub airports, and new aircraft technologies that will allow medium-sized cities to receive direct international service without requiring transfers at conventional hub airports. These factors suggest that natural market forces will constrain future transfer traffic potential at Heathrow in particular and London more generally, independent of its capacity limitations.

4.2 The effect of geographic factors on transfers

We also believe that the DfT model needs to consider geographic factors in estimating future transfer traffic potential at Heathrow in particular. This is especially important on routes to China and other Asian markets where London represents a geographically unattractive transfer location for European passengers due to its location at the westernmost end of Europe. For North America – Asia passengers, London is not a connecting/transfer option at all, since passengers traveling from North America to Asia fly westbound over the Pacific Ocean. We believe that the transfer traffic percentages at London vary significantly depending on the route or world region being served, and the DfT model should reflect these differences.

4.3 The nature of the transfer market at Heathrow

Further, as described in more detail below, we think that the DfT model should specifically recognise that while Heathrow is a hub and transfer location for British Airways and its alliance partners, it is not a hub or significant transfer market for the majority of airlines that operate there. In fact, many of the airlines operating long-haul flights into Heathrow and Gatwick fly from hub airports in their region of origin, and generate traffic support through passenger consolidation/transfers at the non-London end of their routes. For these airlines and routes, transfer traffic at London is not critical to the economic viability of the service. These distinctions need to be captured directly within the DfT model or, if that is not feasible, the Airports Commission needs to understand these factors and reflect that understanding into their deliberative process.

We attach as an annex to this submission a note explaining why we believe that the issue of Heathrow transfers, and specifically the argument that the economic viability of future UK services to emerging world markets depends on transfer traffic at London has been greatly exaggerated.

4.4 The DfT forecasts of transfer traffic at Gatwick

In future years under the constrained forecast, the DfT projects that Heathrow's transfer traffic ratio will decline modestly from its estimate of 35% in 2010 to 29% in both 2030 and 2050. In contrast, at Gatwick, the DfT forecasts that transfer traffic will initially rise from 10% in 2010 to approximately 12% in 2030, before declining sharply to less than 3% in 2050. The DfT report does not explain why the forecast transfer traffic percentage drops so much more steeply at Gatwick than at Heathrow. We find these results implausible and counter to our own commercial insights, and counter to the impact of competition as Gatwick seeks to capture an amount of this segment of the London market.

4.5 The role of low cost carriers in the transfer market

It also appears that the DfT modeling has not considered the possibility that low cost carriers and regional airlines at Gatwick will adopt interline agreements and, ultimately, full code share agreements with long-haul international carriers, as has occurred in other parts of the world. This development would certainly increase the level and percentage of transfer passenger traffic at Gatwick, and we request that the DfT and the Airports Commission consider how this might impact the airport traffic allocation results.

4.6 The impact of transfers on flight frequency

The treatment of transfer passengers in determining the level of flight frequency to individual destinations (or route group zone) provided from each UK airport is also unclear. The DfT model uses flight frequency to specific destination markets as a key driver in determining the allocation of UK origin and destination passengers across competing airports. We think it is therefore important to understand what role, if any, the projected

transfer passenger levels have in determining the number of destinations served and the frequency of flights to individual destinations, from the different UK airports.

4.7 *The effect on transfers of new direct services*
Just as the London airports are forecast to benefit from an increased number of nonstop international destinations over the forecast period, we would expect that other airports in the UK, continental Europe and elsewhere will also benefit from improved airlines services and additional nonstop destinations. This trend will be accelerated by new aircraft technologies that provide long-range international capability in lower capacity aircraft than previously available. This improved direct international connectivity from various airports in Europe and the UK would apparently decrease their future reliance on transfers at Heathrow or competing European hubs during the upcoming 40 years. How does the DfT model take this into account?

5 What approach should the Commission take on forecasting the UK's share of the international aviation market and how may this change in different scenarios?

5.1 The discussion and comments related to the issue of transfer traffic in our responses to Questions (3) and (4) are directly applicable to this question also.

6 How well do you consider that the DfT's aviation model replicates current patterns of demand? How could it be improved?

6.1 We believe that the DfT model produces a reasonably realistic representation of current patterns of UK passenger demand. However, as previously discussed, we have several suggestions and recommendations for how the DfT model might be improved so as to better replicate current demand patterns:

- Already, as noted by the Commission, long-haul routes to emerging markets are being attracted to Gatwick. Gatwick already receives service to both Hanoi and Ho Chi Minh City in Vietnam. The Commission should ensure that the DfT model is reflecting the development of new long-haul services to emerging markets from Gatwick.
- We consider the estimated transfer traffic percentage at Heathrow to be overstated, which would indicate a corresponding understatement of London-area origin destination passenger demand. We believe this issue should be further investigated, and the modelling inputs adjusted as appropriate.
- We have also recommended that the DfT model incorporate differing rates of transfer demand at Heathrow, depending on the destination region of individual routes.
- International airlines operating to Heathrow and Gatwick can generate significant transfer traffic at a hub airport in their country of origin. The DfT model should incorporate this factor, particularly when determining the passenger threshold required to support long-haul international routes.
- If possible, the DfT modelling inputs should reflect differing rates of transfer passenger demand at Heathrow for different airlines or airline groupings. It is clear that the Heathrow transfer percentage is material for British Airways and its alliance partners, but is not material for many of the other carriers that operate there. We believe this factor should be reflected in the modelling process. If that is not feasible, we believe that the Airports Commission should recognise this limitation and consider how best to incorporate this factor in their evaluation process.

7 Do you agree with the source of the input data and assumptions underpinning the DfT model?

7.1 As stated on the opening two pages of this response, Gatwick agrees largely with the sources of input data and assumptions that underpin the DfT model. Areas where we have exceptions have been identified above.

8 Do you agree with the choice of outputs modelled?

8.1 Gatwick agrees with the outputs modelled by the DfT. There are however areas where we would like more visibility and detail than is provided in the published model results. For example, we would be interested in seeing what new routes are forecast to be provided from the individual London airports in 2030/2050 under the unconstrained forecast. We would also like to see which routes that the DfT model projects would be lost, or shifted to another London area airport, under the constrained set of forecasts. We believe that providing more visibility into the model outputs will enable the Commission and other parties to evaluate better the overall reasonableness of the forecast results.

9 Do you consider that the DfT modelling approach presents an accurate picture of current and future demand for air travel? If not, how could it be improved?

9.1 We believe that the DfT forecasts of future demand at the UK level are reasonable. In terms of the allocation of this future demand to individual UK airports, under both the unconstrained and constrained forecast scenarios, we have several concerns which we believe suggest the need for additional analysis and potential modeling refinements and/or sensitivity analyses on the part of the DfT. Some of our most important comments and areas suggested for additional analysis are discussed below.

9.2 We have serious concerns that under the DfT unconstrained forecast scenario, Gatwick's forecast passenger traffic would increase by only 54% between 2011 and 2050, while passengers at Heathrow grow by 145%, or nearly 3 times as fast (DfT Annex D.8). The absolute increase in unconstrained passenger traffic between 2011 and 2050 is even more imbalanced, with Heathrow traffic growing by more than 100 million passengers while Gatwick increases by only 18 million. Gatwick is also forecast to grow far more slowly than Stansted (110% increase between 2011 and 2050) and Luton (118%). We consider these unconstrained forecast results to be counter-intuitive and highly improbable, and believe that they warrant close review by the Airports Commission and, ultimately, revision by the DfT.

9.3 These forecasts of unconstrained airport passenger traffic give rise to the results shown in Table 4.2 of the Commission's Discussion Paper 01, which shows the implied loss of international routes by airport, due to capacity constraints. It is clear that the model's allocation of passenger traffic to the individual London area airports – and specifically the unconstrained projection that Heathrow will grow by more than 100 million annual passengers – explains why Heathrow is shown to lose 72 international routes under the constrained forecast in 2050. We would expect these estimates to change materially with a revised forecast of unconstrained traffic levels at the London area airports.

9.4 One of the variables cited by the DfT in the Airport Choice model is an "airport preference" factor (see DfT UK Aviation Forecasts, January 2013, point 2.30, p. 23). This preference factor is apparently not related to airport access time or costs, or to the schedule of airline flights offered at the airport. The nature of, and basis for, the preference factors applied to

individual UK airports, and specifically to the airports serving the Southeast region, are unclear, as is their impact. We believe it is important to understand how these airport preference factors influence the allocation of passenger demand between competing airports, how these preference factors might change in the future, and how such a change would influence the future levels of forecast passenger demand at the individual Southeast airports. For example, if the preference factors for Gatwick and Heathrow were set to be equal[2], what would be the resulting allocation of future (e.g., 2030/2050) unconstrained demand at the two airports?

9.5 Since taking ownership of the airport in 2009, Gatwick Airport Limited has invested more than £1 billion in enhancing our customer service and airport facilities. This investment has substantially upgraded the passenger experience at Gatwick, and we believe that these and our ongoing investment is greatly enhancing the public perception, passenger appeal, and competitiveness of Gatwick relative to its London airport competitors. We would suggest that the future airport preference factor for Gatwick will be impacted in a significantly positive manner from these initiatives, and request that the DfT be asked to review this aspect amongst the other airport preference factors to determine how such an improvement would impact the future allocation of unconstrained passenger demand between the London area airports.

10 Is the DfT model suitable to underpin an assessment of the UK's aviation connectivity and capacity needs?

10.1 We think that the DfT model can play a valuable role in this assessment. However, in our responses, we have suggested a number of areas where we believe modifications to the model are warranted. If these modifications are not feasible, then we think that analyses will need to be conducted outside of the model framework to arrive at sound and well-reasoned decisions.

10.2 In regard to UK connectivity, Table 4.2 in the Airports Commission report highlights the forecast difference in the number of international destinations served from major UK airports, and for the London airport system as a whole, under the unconstrained and constrained forecast scenarios. According to these projections, the London airports system in 2050 will suffer a loss of 15 total international routes, dropping from 245 unique international destinations served under the unconstrained forecasts to 230 international destinations under the constrained scenario. Gatwick has several questions related to these DfT forecasts.

10.3 First, we think it is important to know the specific international destinations that are forecast to be added between 2010 and 2030/2050 from the individual London area airports (unconstrained forecasts) and which international routes are projected to be lost as a result of airport capacity limitations under the constrained forecasts. Of the routes forecast to be lost from Heathrow in the constrained scenario, how many and which of these routes are forecast to instead be served from one of the other London area airports? We believe that this information will be useful both in assessing the reasonableness of the model results, and in understanding the impacts on UK connectivity of the predicted changes in international routes served.

[2] If the airport preference factors were set to be equal, this should mean that a passenger traveling to a destination with the same number of flights from both airports, and whose ground origin was equidistant (and equal time and cost) from the two airports would be equally likely to choose either of the two airports to initiate his or her trip.

10.4 The number of international destinations served from individual UK airports is based on a calibration to observed 2011 airline service patterns. The DfT report presents data that illustrates the model does a good job of replicating the number of routes served at individual airports in the base year. However, Gatwick has strong reservations about the model's outputs at this level. We believe the Commission should assess whether the modeled predictions of nonstop international destinations under the unconstrained and constrained forecasts will predict the addition of new nonstop routes on a similarly accurate basis.

10.5 For example, Gatwick has gained long-haul international services to emerging markets such as Vietnam Airlines service to Hanoi and Ho Chi Minh City, and recently announced service to Jakarta, Indonesia by Garuda to begin later this year. Gatwick also receives complementary services in markets served from Heathrow such as Emirates service to Dubai and Air China service to Beijing. Is this type of Gatwick long-haul service reflected in the DfT modeling results?

11 What alternative or complementary approaches could be used to assess the impact of international competition?

11.1 From our reading of the Airports Commission Discussion Paper, we interpret this question as pertaining to international competition for transfer passengers. As stated in our responses to Questions (3) and (4), we believe that international competition from emerging hubs such as Dubai and Istanbul is already attracting transfer passengers in markets that might otherwise have connected at Heathrow or other European hub airports. The level of competition from foreign hubs and airlines is likely to increase over the forecast horizon and could be especially important for passengers traveling between Europe and emerging markets in China, India and Asia.

11.2 The DfT modelling framework should be used to test these developments by applying discrete transfer traffic ratios on routes to different world regions, and by reducing the transfer ratios for routes that are potentially most impacted.

11.3 Alternatively, airline network planning models have the capability of modelling traffic flows between different world regions, and could potentially be applied to test the impact of increased future service offerings over competitive hub routings. However, these models require substantial levels of current and forecast input data (including passenger traffic flows by origin-destination market and current and assumed future airline schedules), as well as careful calibration, and may not be practical within the constraints of the Commission's evaluation process.

12 What factors, if any, are missing from the DfT's modelling approach? How can these be more effectively analysed?

12.1 In our responses to previous questions, Gatwick has identified a series of factors that we believe should be reflected in the modelling process, or in sensitivity analyses to supplement the DfT approach.

12.2 In addition to the issues previously addressed, airport access time and cost is a primary driver in the allocation of forecast passengers to the individual UK airports and we think it is important that the DfT model incorporates specific access improvements that are programmed or proposed for our airport. Gatwick will see significant future improvements to its already extensive rail network that will improve its attractiveness relative to other

London airports. The Thameslink timetable proposal will provide additional capacity to London destinations. It will also allow further direct services to destinations such as Cambridge, Peterborough and King's Lynn. Great Western rail services will add additional frequency from Gatwick to Reading. In addition, Gatwick is strongly supporting improvements to the Gatwick Express to retain it as a direct, non-stop service to Victoria Station but with improved rolling stock and appropriate accommodation for passenger luggage to better meet the needs of airport passengers. With these enhancements, we would expect Gatwick's natural catchment for rail passengers to increase significantly. We request that sensitivity analysis be performed using the DfT model to estimate the impact of improved Gatwick rail service on the unconstrained airport traffic forecasts.

13 Is the DfT model granular enough to underpin the Commission's assessment of future demand?

13.1 We have requested that the DfT consider a more granular approach in certain areas, such as the development of distinct transfer traffic ratios for specific routes (or geographic route groupings), and reflection of differences between airlines based on their generation of transfer traffic and whether these transfers occur at London or at the other end of a route. We recognise that there are limitations with any model, and expect that analyses will need to be performed outside of the model framework in order to arrive at well-informed decisions. In our previous responses, we have identified a number of issues that might require this type of analysis.

13.2 In addition, we have asked that certain of the model outputs that have been provided in summarised format be made available with more specific detail, so that the model results can be better understood and interpreted, and potential weaknesses can be identified and addressed.

14 Does the DfT approach to demand uncertainty capture a reasonable range of uncertainty? Could the approach be improved? Would a probability based approach to dealing with uncertainty help the Commission to test the robustness of the model's outputs?

14.1 Uncertainty is a characteristic of all forecasts and the Airports Commission has rightly made this a point of emphasis in its Discussion Paper. Gatwick is in full agreement with the Commission that this uncertainty should be explicitly recognised and dealt with in its deliberation process. We agree also with the development of alternative future growth scenarios, as reflected in the DfT forecast process, and consider the range of future growth assumptions for underlying UK aviation demand - ranging between approximately 1 and 3 percent growth per annum, to be sufficiently wide to capture the likely future range of UK aviation demand over the forecast period. The concept of attaching probabilities to this forecast range is appealing, but it is unclear and uncertain whether these probabilities could be drawn with a reasonably high degree of predictive assurance.

15 We have reviewed four alternative forecasts. Do you consider that there are others we should be looking at and why?

15.1 Gatwick believes that the forecasts reviewed by the Commission are adequate for this process and, at the overall UK level, we believe that the DfT forecasts provide an acceptable starting point for the evaluation.

16 Conclusion

16.1 In closing, Gatwick Airport Limited appreciates the work being done by the Airports Commission, and the opportunity to offer our perspective and input on these important issues. We anticipate and commit to being an active and engaged participant in future stages of the Commission's evaluation process.

Gatwick Airport Ltd
15th March 2013

Appendix: The importance of transfer passengers

A1 Gatwick consider that the issue of Heathrow transfers, and specifically the argument that the economic viability of future UK services to emerging world markets depends on transfer traffic at London has been greatly exaggerated. There are several reasons for this.

A2 First, it must be recognised and understood that London itself is the largest air travel market in the world, in terms of passengers for whom London is either the origin or destination of their air trip. As such, London is at or near the top of almost any airline's list for identifying long-haul destinations worldwide that are the most desirable candidates for new direct international services. The attractiveness of London as an international destination is not therefore dependent on the availability of transfer passengers.

A3 Second, we believe that the current average transfer passenger percentage at London Heathrow has been overstated. Our analysis indicates that the average transfer passenger percentage across all airlines at Heathrow is significantly lower than the current ratio assumed in the DfT model. This is discussed immediately below.

A4 The 2010 baseline airport traffic figures from the DfT report indicate that 35% of Heathrow's total passenger traffic was transfer passengers (23.5 million out of 67.1 million passengers). The corresponding transfer ratio at Gatwick was approximately 10%, or 3.2 million out of 31.5 million passengers (DfT UK Aviation Forecasts, Annex E.8). We understand that these transfer percentages were developed from the CAA Airport Passenger Surveys. Although the CAA surveys are the best available UK source for passenger trip purpose and the ground origin location of UK airport passengers, there are other available international sources for airline transfer passenger percentages, including IATA's PaxIS air passenger database that is based on air passenger routings developed from bank settlement plan data.

A5 The IATA data indicate that the transfer passenger percentage at London Heathrow is approximately 25% (significantly lower than the 35% figure used in the DfT baseline figures). This IATA data was apparently utilised by Frontier Economics in its report prepared for Heathrow Airport — "Connecting for Growth", September 2011. In this report, Frontier estimates that there are approximately 8 million passengers who transfer at Heathrow each year[3]. These 8 million transfer passengers translate into 16 million total Heathrow terminal passengers, since each transfer passenger disembarks from an arriving flight and subsequently embarks on a departing flight. The 16 million total Heathrow transfer passengers, from the Frontier Economics report, compares to the DfT figure of 23.5 million Heathrow transfers (Annex E.8), and illustrates the magnitude of this difference. Given these very different estimates of transfer traffic at Heathrow, we recommend that the Airports Commission further investigate this issue, consider other data sources, and possibly request direct information from individual Heathrow airlines.

[3] See "Connecting for Growth", Frontier Economics, September 2011, p. 14.

A6 We recognise that Heathrow is a major hub airport and a significant transfer location for British Airways, its alliance partners and, to a far lesser extent, for Virgin Atlantic. However, for the great majority of airlines operating at the airport, Heathrow does not represent a major transfer location. Many of these other carriers have transfer passenger feed at the other end of their routes and the availability of transfer passengers at London is not critical to the viability of their flights. This point is extremely important since it has been widely argued by Heathrow and others that transfer passengers at London are essential to the viability of new international routes.

A7 To illustrate this point, we have compiled route level statistics from the IATA database that detail the distribution of passenger traffic by airline on routes between Heathrow and Mainland China. As shown below in Table 1, for non-UK carriers such as China Eastern, Air China, and China Southern, the percentage of their total onboard passengers on these routes that transferred at Heathrow was less than 3%. Clearly, the economic viability of these routes is not dependent on transfer traffic at Heathrow (although it is evident that transfers are very important at the China end of the journey). Even for Virgin Atlantic, the Heathrow transfer percentage on its London – Shanghai route was less than 5%.

Table 1 Heathrow – mainland China non-stop segments (year ending September 2012)

Flights between:	Total passengers on segment	Transfer % at Chinese airport	Transfer % at Heathrow*
Heathrow and Shanghai			
Virgin Atlantic	148,796	1.1%	4.1%
British Airways	122,736	0.4%	29.8%
China Eastern	85,591	51.8%	1.8%
TOTAL	357,123	13.0%	12.4%
Heathrow and Beijing			
British Airways	156,642	0.7%	19.0%
Air China	137,856	35.9%	2.9%
TOTAL	294,498	17.2%	11.5%
Heathrow and Guangzhou			
China Southern	19,586	50.2%	2.6%
Heathrow and mainland China			
TOTAL	671,207	15.9%	11.7%

Source: IATA PaxIS year ended September 2012, (Carrier segments from OAG schedules, August 2012)

* includes a small % of passengers transferring at both ends of the flight.