

MEMORANDUM

To: Roger Harborough **Date:** 30 October 2006

From: Richard Holt **CC:** Chris Smith

Subject: Response to Your Letter Dated 5 October 2006

Dear Roger

Your letter of 5 October asks us to respond to various comments made by the Airlines Consultative Committee (ACC) to members of the Development Control Committee, as well as answering a number of other questions from members of the public attending the Development Control Committee on 16 August. We address the questions raised in your letter as well as the additional questions arising in turn below. In particular, we also comment on the ACC's suggestion of "...unexplained discrepancies between SH&E's February and July reports...".

Context of our Work

However, before giving these responses, I think it is important to emphasize that our clear brief, and hence the focus of both reports, was to review documentation produced by other organisations. In the February report we were commenting on BAA's forecasts and in the August report primarily on the Stansted ACC's report but also briefly on BAA's Environmental Statement. At no point in our work did our brief include assessing the business case for any aspects of potential capex development at Stansted. As a result our comments on particular subjects have to be considered in the context in which they were made.

Suggestions of Unexplained Discrepancies

"Earlier acknowledgement that an increase in prices at Stansted could have a material effect on traffic, which is subsequently refuted."

We have reviewed both of our reports and fail to see how this comment set out above can be justified. In our February report the discussion of airport charges focuses primarily on the relative charges at Stansted and Luton and any potential changes in traffic should the relative charges change. The comment that we make in the February report was that an increase in charges at Stansted to the level implied by BAA of removing all discounts "...would remove Stansted's price advantage over Luton and some impact in terms of a slightly lower growth rate could be anticipated...". This statement does not acknowledge that there could be "...a material effect on traffic...", quite the contrary.

In the July report our comments on airport charges were primarily responding to a number of issues raised by York Aviation, which was advising the ACC, on BAA's traffic forecasts for Stansted. The main contention made by York was that future levels of traffic at Stansted are going to be highly dependant on the level of airport charges. In our report we questioned whether the impacts would be as large as those claimed by York. We also pointed out that in the past when air fares have increased as a result of the introduction of the Air Passenger Duty (APD) or the imposition of the passenger related element of airport charges as a "tax" on tickets that there had not been a significant long-term impact on demand for air travel.

We would, therefore, argue that in the two reports we were commenting on different aspects of the impact of increases in airport charges. In one we were considering the impact of an increase in airport charges on the distribution of passenger traffic between two closely located and competing airports whilst in the second we were commenting on the impact of additional costs to passengers on overall demand for air travel.

We are firmly of the opinion that there is nothing inconsistent about our comments. The comments are made in very different contexts. In the February report, we were considering the short term impact on traffic distribution between two airports, while in the July report we were assessing the long term impact of demand on air travel which experience has shown to be negligible if applied generally to all airports.

“Earlier acknowledgement that their prediction of high long-haul growth at Stansted is based on the assumption that mixed-mode is not introduced at Heathrow and is, in itself, tactical advice to the Council in terms of the potential noise impact of such traffic, the former of which is subsequently contradicted and the second indicates a bias in the report which is not robust.”

In our February report we set out in some detail reasons why we believe the BAA's forecast of long-haul traffic at Stansted could be too low. We made this comment on the basis of a number of assertions. Of these the key view we expressed was that it is unrealistic to expect that the future growth in long-haul traffic in the London market can all be accommodated at Heathrow. As a result we believe that long-haul will have to develop at other London airports with Stansted being well placed to attract such traffic. This is partly because at present Stansted has the most spare runway capacity. Gatwick's single runway is almost as busy as those at Heathrow whilst Luton's runway is too short for the large majority of long-haul routes. Stansted, in part by virtue of its greater distance from Heathrow and Gatwick, also has a distinct catchment area.

With regard to the introduction of mixed-mode operations at Heathrow we acknowledge that this could have an impact on long-haul traffic Stansted. However, we clearly state that we believe the most significant loser of long-haul traffic would be Gatwick. This assertion is based on an assumption that the introduction of mixed-mode operations at Heathrow would be timed to coincide with the implementation of an "Open Skies" agreement between the US and the EU.

In the February report we acknowledge that some long-haul services could switch from Stansted to Heathrow in the event of mixed-mode operations being introduced there. However, our concluding comment on this key

issue was “Therefore, even assuming mixed-mode at Heathrow, we would consider BAA’s long-haul forecast for Stansted to be on the low side.” We consider this statement to be clear and unambiguous.

The comments that we made on the potential noise impact of a greater number of long-haul services were, we believe, an appropriate observation to make on the basis of the exercise we were undertaking. We had after all been asked to comment on BAA’s Environmental Statement. We would acknowledge that these comments were assertions as opposed to being based on a specific piece of technical work. However, we would also assert that to say that the larger aircraft used on long-haul services being noisier than aircraft used on short-haul services is a reasonable observation to make.

The comments that we make in our July report regarding long-haul traffic are simply a summarised version of what was set out in our February report. Given this, and the clear conclusion in our February report, we struggle to fully understand the point being made in the criticism that we are being inconsistent.

“Earlier acknowledgement that traditional top down models, based on past trends, have struggled to predict the rapid growth in low fare traffic, which contrasts with a reliance on a top down spill approach in their latest advice.”

We acknowledge that in our February report we did make comments that traditional top down models have failed to reasonably forecast the rapid growth in low fare traffic. This is primarily because the top down model approach tends to use historic patterns and trends in traffic to forecast future activity. The inability of this modelling approach to produce reasonable forecasts of low fare traffic is due, we would argue, primarily to the lack of history. However, these comments were made in the context of the Department for Transport’s SPASM forecasting model used to generate the 2003 Air Transport White Paper. In turn these forecasts were based upon survey data from 2000 and earlier and as a result the “history” of low fares airlines used was very limited.

The reality is that forecasting is not a perfect art with each approach/methodology having benefits and weaknesses. In making the comments highlighted above we were not suggesting that top down modelling is not an appropriate or sufficiently robust methodology but instead making the point in the specific case of forecasting low fare traffic it has not, at least in the period to 2003, been either a reliable approach or an approach that has been properly applied. The availability of significantly more “history” may have largely solved this weakness.

The fact that we acknowledged that top down methodologies had struggled to robustly forecast low fare traffic does not, in itself, mean that we do not consider it to be an appropriate approach for other aspects of forecasting long term demand.

Questions/comments on air traffic forecasts arising from members of the public attending Development Control Committee held on 16 August 2006

Q. SH&E's paragraph 3.54 concludes that BAA have understated South East passengers by 1 million in 2014. In para 3.55 you conclude that BAA may have over estimated surface access and parking from outside South East. Does this mean that demand for surface access from South east, especially London, is understated by 1million?

Paragraph 3.54 discusses the number of passengers at Stansted that have their origin or destination outside the South East of England. We suggest that in 2014 the figure forecast by BAA at Stansted is approximately 1 million too high. Our view is that the growth in the range of services at regional airports should result in fewer people needing to travel to London airports to catch flights. We are also of the view that for many passengers from outside the South east of England Stansted is the least accessible of the London airports. If these passengers do not use Stansted then it is possible that the capacity left unused by these passengers could be used from London and the South East and as a result increase the demand for surface access from these areas to the airport.

Q. Para 2.27 refers to CAA cap of £4.89 which "adjusted for inflation is likely to be slightly more than £5 next year". In fact £4.89 cap was for 2003/04 and indexed linked to RPI for 2004/05, 2005/06 and 2006/07. It increased to over £5 in 2004/05 and is now substantially more than £5.

If inflation had averaged 2% per annum since 2003/4 then the cap would be £5.19 per passenger in the current year 2006/7. Inflation at an average of 2.5% per annum would result in a figure of £5.27. Whether these figures are considered to be substantially more than £5 is perhaps semantics. The key issue is that the cap has not increased in real terms.

Q. How do you explain the different BAA projections for passengers per PATM, as follows:

- Heathrow +25% by 2014
- Gatwick + 15% by 2014
- Stansted +5% by 2014

especially when Stansted intends to substantially increase long-haul traffic.

This issue was addressed in a supplementary note tabled at the DCC meeting on 16 August. This note is attached at the end of this paper.

Q. SH&E's assessment tests the reasonableness of BAA forecasts for passengers per PATM by 2014. Can you express a view on the potential for increased passengers per PATM in 2021 and 2030 bearing in mind Ryanair and Easyjet fleets will probably be upsized again within that timeframe. New larger aircraft e.g. Boeing Dreamliner Airbus 350 will be coming on stream. Some Japanese airports are already achieving an average of over 200 passengers per PATM. Is it not reasonable to consider Stansted capable of this by 2021 (15 years from now) or 2030 (24 years from now)? Higher oil prices are likely to increase pressure for larger, more efficient aircraft.

Our brief from Uttlesford District Council was to review BAA's traffic forecasts for Stansted that accompanied its Generation 1 planning application. This covered the increase of passengers to 35 mppa which effectively means the period to 2014. This is the year in which BAA's forecasts indicate that passenger traffic at Stansted will reach 35 mppa. We have, therefore, not considered the period after 2014 within our work carried out to date.

Q. SH&E's figure of 124 passenger's per Stansted ATM in 2005 is based on all ATMs. The actual figure per PATM was 132.

Both of the numbers quoted are correct. We focussed on the passengers per ATM figure because although the BAA forecasts separately identified cargo ATMs there is the potential for these movements to be replaced by passenger ATMs.

Q. In assessing the estimate of transfer passengers, what consideration has been given to the rapid growth in services from regional airports, creating more opportunities for people to fly direct from Edinburgh, Bristol, East Midlands etc point to point to/ from their destination without transferring at a London airport.

We were not provided with information on the origin/destination of transfer passengers by BAA. The premise behind the question is correct in that we would expect more passengers to take direct flights from regional airports in the future as the network of routes from these airports increases. However, as Stansted develops a range of long-haul services these may attract transfer passengers from regional airports. Long-haul flights may also attract more passengers transferring to international destinations.

Q. What is SH&E's estimate of the maximum mppa for Stansted in 2014 on one runway? (both theoretical and likely)

The maximum number of passengers that can be handled on a runway is determined by a number of factors including:

- The hourly declared capacity of the runway in terms of the number of aircraft movements (slots) per hour;
- The utilisation of these slots by airlines;
- The average numbers of passengers per ATM;
- The number of cargo ATMs as opposed to the number of passenger ATMs; and

- The seasonality of traffic at the airport.

In our July report (paragraph 3.23) we comment on the distribution of traffic during a busy day in 2014. Data provided by BAA shows a very even utilisation of slots during the day indicating that the airport is operating at close to capacity. Utilisation of the remaining unused slots and a further increase in average numbers of passengers per ATM would allow a further increase in passengers in future years but such growth would be likely to be very modest.

Q. Why is it that BAA's forecasts for Stansted have been much poorer than its forecasts for Heathrow and Gatwick? Could it be that there has been an under estimation of the "generative" effect or the low fares offering? If so, is it possible that the "degenerative" effect of removing this has also been under-estimated?

There are two main factors that we consider help to explain the relative poor performance of forecasts for Stansted as opposed to Heathrow and Gatwick. The first is that it is generally easier to forecast traffic at airports that are operating at close to capacity as the key variables determining traffic are more stable. In particular the ability to introduce a large number of new routes and frequencies is very limited due to the lack of available slots. Linked to this point, is the fact that much traffic 'cascades' through the London airport system, with Heathrow 'filling' first, then Gatwick, with the remainder being shared between other airports. This means that all the error in the overall London forecast tends to be seen at the lower ranking airports, so magnifying the apparent variation from forecast at Stansted. The combination of an error in total London traffic with the relative low historic traffic volumes at Stansted has magnified the proportional inaccuracy in Stansted's forecasts. The second reason has been the poor performance of forecasting models to robustly generate projections of low fares traffic. In the past this has been largely due to the lack of historical data on the growth and development of low fares traffic. However, we would argue that there is now a much better availability of such historic data and we would expect future forecast performance to be much improved.

In terms of the "degenerative" effect of removing the low fares offering from Stansted the response has to be that if one airline decided to withdraw then there are now many other airlines that might replace them. It might take a period of time for such services to be replaced but we would expect the length of such a period to be relatively short, perhaps two years at most.

The market for low fares services is now very well developed with many airlines operating in the sector. Each will have its own particular business model. However, the attractiveness of London as a market remains strong and as such it will always be both an origin and a destination that airlines will want to serve. Even if airport charges at Stansted increase, as indicated by BAA, we do not believe that this low fares market will disappear. As indicated in our July report we are sceptical about the very high sensitivity/elasticity of demand at Stansted to the level of airport charges that has been suggested by the airlines through the Airlines Consultative Committee.

Q. What are the major risks that could undermine the assumptions at Stansted?

One of the key features of traffic forecasts for the London airports is that demand is generally expected to be greater than the availability of airport capacity. This means that whilst changes in some of the key demand factors such as GDP, the level of air fares etc. may result in lower overall demand than forecast, this may well still produce traffic volumes that are greater than available airport capacity.

Traffic at Stansted, and indeed at the other London airports, will also be dependant on the available capacity at other airports in the London area. If capacity at these airports were to be higher than assumed in the forecasts then this could have a negative impact on traffic volumes at Stansted. However, we would judge the potential for higher than assumed capacity at other London airports to be a relatively low risk. It would appear that the potential for a replacement runway at Luton is diminishing, with consequently a lower than once anticipated future capacity at that airport. At Heathrow the current view is that mixed-mode might not be introduced until 2012.

Perhaps the most likely risk to the traffic assumptions at Stansted is that the DfT has underestimated the impact of measures to combat climate change, both those imposed by government and any changes in behaviour of the travelling public made of their own volition.

Q. If Stansted traffic is driven to a great extent by system errors in forecasting all accumulating to the airport, how can this approach be relied on when errors are compounded in this way?

We have indicated in responses to earlier questions that we consider the failure of previous forecasts to robustly forecast traffic at Stansted to have been due to the lack of history and data on the development of low fares services. However, we believe that there is a much larger body of data, and greater understanding and experience of the Low Cost segment now exists that means that future forecasts should be far more robust. It is also important to recognise that Stansted is now a major airport, with a passenger throughput which is much closer to that at Gatwick.

Conclusions

I hope that these comments satisfactorily address the points raised in your letter, but please let me know if anything remains unclear.

To: Roger Harborough

Date: 11 August 2006

From: Richard Holt

CC:

Subject: Supplementary questions

In your e-mail dated 3 August you identified two further issues on which you asked us to comment, these being the BAA's estimates of transfer traffic for Stansted and Stop Stansted Expansion's (SSE's) comments on the projected number of passengers per ATM and assumed load factors.

Transfer traffic

1.1 Data that we have received from BAA suggests that in 2004 13% of Stansted's passenger traffic was transferring flights at the airport. These passengers arrive and depart the airport by aircraft and do not leave the airport. The percentage of transfer traffic at Stansted has increased from approximately 5% in 2000. For comparison 35% of Heathrow's traffic in 2004 was transferring flights.

1.2 In the 35 mppa scenario BAA is forecasting that transfer traffic will increase to 17% of the total whilst in the 25 mppa case the forecasts is for 9% of traffic to be transfers.

1.3 The airlines that operate from Stansted, and in particular Ryanair and easyJet, do not directly offer passengers the ability to transfer flights at the airport. Instead passengers construct their own transfers at Stansted by booking two sets of tickets, one for the flight to Stansted and the second for the flight onward from Stansted. On such transfers passengers cannot check their baggage through from their original to their final destination but instead have to reclaim any hold baggage at Stansted and then check in again at Stansted. The fact that this activity takes place in such large numbers primarily reflects the wide-range of destinations served from Stansted, many of which are not served from other London airports or other airports in the UK.

1.4 Given that significant transfer traffic is already handled at Stansted we consider it reasonable to forecast that it should continue in the future. As further destinations are added from Stansted, including long-haul flights, we do consider it reasonable that the proportion of transfer traffic could increase albeit only moderately. In this context BAA's forecast of transfer traffic increasing from 13% to 17% does not appear to be unreasonable. We have not seen any data that indicates the origin and final destination of transfer traffic at Stansted but we would expect a significant proportion to originate at UK and Irish airports served from Stansted.

Passengers per ATM

1.5 SSE has produced a lengthy document that sets out its response to the application submitted by BAA to vary the existing planning conditions that apply to Stansted in order to permit passenger throughput to rise to 35 mppa and ATMs to increase to 264,000.

1.6 One aspect of the BAA forecasts that SSE question is that relating to the number of passengers per ATM that are forecast for the period up to 2014. In particular SSE argues that BAA is under-estimating the number of passengers per ATM and as a result is over-estimating the number of Passenger ATMs (PATMs) in the Baseline forecast for 2014.

1.7 SSE's argument is based on its analysis of passenger and PATM growth in the period from 2000 to 2005. This analysis shows that the average number of passengers per ATM has increased from 90 in 2000 to 132 in 2005. This represents an increase of 8% per annum. This is a very rapid increase and we would argue that this was due to a number of exceptional circumstances. The most significant of these factors were the aircraft replacement programmes implemented by Ryanair and easyJet. In the case of Ryanair they now operate a fleet consisting entirely of 189 seat Boeing 737-800s. These replaced smaller 130 seat Boeing 737-200s in the period 2000-2005. easyJet are replacing 149 seat Boeing 737-300/700s with 156 seat Airbus A319s.

1.8 Ryanair currently account for 60% of airline seat capacity at Stansted with easyJet accounting for a further 20%. In the period to 2014 we consider it highly unlikely that either of these airlines will introduce larger aircraft than their current fleet. Both airlines have large outstanding orders for more of the same types of aircraft for delivery over the next few years.

1.9 Other short-haul airlines at Stansted, both scheduled and charter, tend to operate aircraft in the 150-189 seat category. The general industry view is that aircraft of this size will continue to dominate the short-haul fleets of airlines in Europe for many years. A number of airlines operating from Stansted, other than Ryanair and easyJet, have also recently completed fleet replacement programmes and as such we consider that they are unlikely to increase aircraft size in the period to 2014.

1.10 The fact that 80% of the seat capacity provided at Stansted is very unlikely to experience any increase in aircraft size will act as a major constraint and brake on any further increase in the average number of seats per PATM. The growth of long-haul traffic does offer the prospect of some increase but this will depend on the type of aircraft used on such services. Our expectation is that twin-engine aircraft such as the Boeing 757 and 767 200/300 will predominate although the larger Boeing 777 and Airbus A330 could also feature. In discussion with BAA they appear to hold similar views.

1.11 The limited existing long-haul services operating at Stansted comprise business-only services using 48 seat Boeing 757s and 102 seat Boeing 767-200s. Pakistan International is also due to start

twice-weekly services using 190 seat Airbus A310s. Such services are unlikely to contribute to any increase in passengers per PATM and indeed could actually reduce figures.

1.12 The nature of traffic forecasting is that it is not an exact science and as such outcomes may be different. However, the view that we have taken to date is that the forecasts of passengers per ATM produced by BAA are reasonable particularly in the light of the comments regarding the dominance of Ryanair and easyJet at the airport.

1.13 SSE correctly identify that in the forecast of the future mix of aircraft types at Stansted that were set out by BAA in its Environmental Statement an increase in the numbers of large aircraft such as the Boeing 747 and 777 is forecast. Our view is that aircraft such as the Boeing 747 are far more likely to be used on cargo services at Stansted as opposed to passenger services. A freighter version of the Boeing 777 is currently under development and we would, therefore, expect to see this aircraft operating at Stansted in both passenger and cargo configurations.

1.14 With regard to the assumed load factors on existing and future services from Stansted we have not been privy to the assumptions used in BAA's forecasting model. However, our view is that we would expect little change in current levels of load factors given that they already average 80% or thereabouts already.

1.15 Both Ryanair and easyJet issue monthly statistics that give the load factors achieved across their whole networks. For the twelve months ended July the average load factor for Ryanair was 83% and for easyJet 84.6%. However, it should be emphasised that these figures include seats that are sold but for which the passenger does not actually travel. The CAA Airline Statistics suggests that for easyJet the actual system-wide load factor in 2005 was 81.4% indicating that actual load factors are roughly 3 percentage points lower than the sold figures. If the same pattern was experienced at Ryanair their actual load factor would be 80%. Therefore, if BAA has used 80% load factors as its assumption we would consider this to be reasonable.