Submission to the Airports Commission

Airport Operational Models

Stop Stansted Expansion ('SSE') was established in 2002 in response to Government proposals for major expansion at Stansted Airport. We have some 7,500 members and registered online supporters including 150 parish and town councils and local residents' groups and national and local environmental organisations. Our objective is to contain the development of Stansted Airport within tight limits that are truly sustainable and, in this way, to protect the quality of life of residents over wide areas of Cambridgeshire, Essex, Hertfordshire and Suffolk, to preserve our heritage and to protect the natural environment.

Stop Stansted Expansion
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www.stopstanstedexpansion.com

1. Introduction

1.*1 "Doing nothing is not an option."* These were the words of Secretary of State for Transport Alistair Darling on 23 July 2002 in a statement to the House of Commons announcing the launch of his consultation on *'The Future Development of Air Transport in the United Kingdom'.* He was to use the same phrase repeatedly during the consultation period and again when his White Paper, *'The Future of Air Transport in the United Kingdom'* ('ATWP') was finally published on 16 December 2003.

1.2 The 2003 ATWP called for the development of four new runways in the UK - at Stansted, Heathrow, Birmingham and Edinburgh[1]. This was the Government of the day's policy response to the Department for Transport ('DfT') forecasts at that time that the demand for air travel would grow from about 200mppa in 2003 to 500mppa by 2030[2]. Today, however, the DfT predicts that the demand for air travel will grow to 320mppa in 2030[3], an increase of 'just' 60% on the 2003 figure, compared to the 150% increase predicted at the time of the ATWP.

1.3 The drop of 180mppa in the DfT's demand forecast for 2030 is equivalent to more than the additional capacity that would have been provided if the four new runways supported by the ATWP had been built. Thus, it could be argued, 'doing nothing' is now the logical policy option, to be consistent with the analysis that underpinned the ATWP.

1.4 Alistair Darling also notably said that "governments do not build runways" - a phrase which perhaps provides the answer as to why the ATWP failed to deliver any of its main objectives. There is very little point in the Government setting down investment policy for private sector businesses unless that policy is aligned with commercial practicalities. As we stated in one of our earlier submissions, it is the market which will ultimately decide.

1.5 The same is true in relation to the airport operational models of the future, the subject of the Airport Commission's latest discussion paper. Will the future be point-to-point air travel or will it be hub-and-spoke? It will of course be a combination of the two and the relative importance of each will be dictated by the market - airlines and passengers - not by governments. We do however understand why the Commission is keen to have a clearer understanding of the market forces which will shape the future of air travel.

1.6 Many stakeholders are far closer to the market than we are but this also means that they tend to have a vested interest and may shape their evidence and arguments accordingly. For our part, we wish to engage fully with the work of the Commission and make a contribution to the debate. With that objective in mind, this response to the Commission's discussion paper on *'Airport Operational Models'* includes some original analysis which we hope will add to the Commission's understanding.

1.7 This response should be read in conjunction with our four earlier submissions.[4]

2. Four decades of policy failure?

2.1 The London Mayor, in his May 2013 submission to the Airports Commission on *'Proposals for making best use of existing capacity in the short and medium terms'* [5], said the following:

> *"The current aviation capacity crisis is the result of four decades of policy failure."*
>
> *...*

[1] The ATWP called for a second runway at Stansted to be built by 2011 or 2012 and a second runway at Birmingham to be built by around 2016. A third runway at Heathrow was expected to be built between 2015-2020, provided EU air quality limits could be met, and, if they could not be met, the alternative would be a second runway at Gatwick as soon as possible after 2019. A second runway at Edinburgh was expected to be needed around 2020.
[2] ATWP, DfT, Dec 2003, Annex A, para 10.
[3] '*UK Aviation Forecasts'*, DfT, Jan 2013, para 4.3.
[4] *'Criteria for Assessing Options'*, Mar 2013; *'Aviation Demand Forecasting'*, Mar 2013; *'Aviation Connectivity and the Economy'*, Apr 2013; and *'Aviation and Climate Change'*, May 2013. All of these submissions are available on the SSE website at http://www.stopstanstedexpansion.com/airports_commission.html.
[5] http://www.tfl.gov.uk/assets/downloads/corporate/airport-commission-short-and-medium-term-proposals-tfl-response.pdf

> *"Ever since the failure of plans to construct a new airport at Maplin Sands in the 1970s, the political challenge of developing new hub capacity has proven too great to overcome."*

2.2 Even allowing for the London Mayor's typical hyperbole, we take issue with his analysis of the situation. On what yardstick does he base his assertion that there has been a policy failure? London continues to be ranked - by some margin - as the best city in Europe for doing business, a position it has held for 22 consecutive years, since the start of the highly regarded Cushman & Wakefield ('C&W') annual business surveys in 1990.

2.3 Specifically on transport links, the most recently published C&W survey had this to say:

> *"Companies were asked which are the top three cities in terms of transport links with other cities and internationally. The top five cities again remain static, although the gap between London, the top ranked location and second placed Paris has widened further.* ***London was the only city in the top five to see its score improve, with perceptions of Paris, Frankfurt, Amsterdam and Brussels all weakening over the year."*** [our emphasis]

2.4 Regarding the reference to a 'capacity crisis', we would remind the Commission of the following points made in our earlier submissions on *'Aviation Demand Forecasting'* and *'Aviation Connectivity and the Economy'*:

(i) there were fewer ATMs at UK airports last year, and therefore less demand for runway capacity, than in 2001 despite a 22% growth in passenger numbers over the same period;

(ii) the number of business flights abroad by UK residents has fallen by a fifth in the past ten years and only one in every eight overseas flights by UK residents is now for business purposes;

(iii) the total capacity of the UK's airports is about three times the DfT's passenger demand forecast for 2030 and about twice its demand forecast for 2050; and

(iv) the UK has more runway capacity than Germany, France, Spain or Italy, and more even than Japan - also an island trading nation - which has twice our population and twice our GDP.

2.5 The London Mayor clearly believes that the 1972 policy to build a new London airport at Maplin Sands should have been implemented, but who is to say that such a policy, if it had been implemented, would have been successful either as a replacement for Heathrow or in competition with Heathrow. It may even have suffered the same fate as Montréal–Mirabel Airport. A government-inspired proposal, it was intended to be Canada's premier gateway airport and it was the largest airport site in the world when it was built in the 1970s. However, it was not what the market wanted and it turned out to be a dismal failure. It finally closed as a passenger airport in 2004 and now only handles cargo flights.

2.6 We submit that it would have been far more of a policy failure if the policies set down in the 2003 ATWP *had* been implemented. For example, the ATWP called for a second runway at Stansted *'... to be delivered as soon as possible ... we expect around 2011 or 2012'.* If that policy had been implemented about £3 billion would by now have been spent by Stansted Airport's shareholders and investors, irreversible environmental damage would have been inflicted on the local area, local communities destroyed and local residents displaced from their homes. And all for nothing because, if a second runway had been built at Stansted, the airport would today be operating at just a quarter of its capacity rather than at half capacity.

2.7 Governments ignore market and commercial realities at their peril and, whilst the idea of a new four-runway hub airport is undoubtedly a good platform for portraying oneself as bold and visionary, it is hard to see how such a proposal could actually be delivered. The starting point is not a blank sheet of paper but the legacy of existing airport and surface access infrastructure which will have been a major factor in the location decision for many businesses, their employees and their families. There is therefore another reality which governments need to recognise: we are where we are.

3. An evolving airport market

3.1 Whilst runway capacity at Heathrow is approaching the annual ATM limit set down in its planning conditions there is otherwise no shortage of runway capacity in the UK. And, even in the case of Heathrow, there is scope to handle an additional 20mppa by 2030, simply through a continuation of the trend towards larger aircraft and steadily improving load factors. Those who say that our aviation industry is being somehow ossified because of a shortage of airport capacity would have difficulty in providing supporting evidence.

3.2 On the contrary, there is considerable evidence to show that the UK airports market, and the wider UK aviation market, are both dynamic. As a result of the break-up of BAA, the UK airports market is more competitive than ever and it continues to grow and evolve to keep itself aligned with the changing demands of its customers. This is precisely how a well-functioning, competitive market should behave.

3.3 However, when commenting on the UK airports market - and on the UK aviation sector generally - there has been a tendency for politicians, the media and the industry itself to focus almost exclusively on London and the South East. As a result, the transformation that has taken place in the character of the UK's regional airports over the last 20 years has gone almost unnoticed.

3.4 The number of international routes provided by London's airports has increased by 54% over the past 20 years but this is a modest increase compared to what has happened at the UK's regional airports where the number of international routes has more than doubled, having increased by 114% over the same period.

Table 1 - International routes[6]

AIRPORT	***1992***	***1997***	***2002***	***2007***	***2012***
GATWICK	148	188	171	181	167
HEATHROW	160	167	161	166	161
LONDON CITY	6	17	19	29	35
LUTON	23	39	32	73	83
STANSTED	46	55	107	155	145
TOTAL LONDON	**383**	**466**	**490**	**604**	**591**
ABERDEEN	7	8	13	19	12
BELFAST INTERNATIONAL	18	15	18	31	21
BIRMINGHAM	52	56	74	83	85
BRISTOL	26	33	39	58	66
EAST MIDLANDS	25	30	31	59	57
EDINBURGH	19	23	24	42	66
GLASGOW	43	38	43	48	44
LEEDS BRADFORD	18	16	21	33	43
LIVERPOOL	3	14	19	50	40
MANCHESTER	83	102	119	146	138
NEWCASTLE	30	34	36	51	44
SOUTHAMPTON	2	4	10	26	21
OTHER REGIONAL	32	74	81	176	128
TOTAL REGIONAL	**358**	**447**	**528**	**822**	**765**
TOTAL UK	**741**	**913**	**1018**	**1426**	**1356**

Excludes Channel Islands, Isle of Man, international helicopter traffic (which is almost entirely to oil rigs) and international cargo routes.

[6] The definition of an international route and the methodology used for arriving at the numbers set out in this table (which are derived from CAA airport traffic statistics) is set out in full in Annex A.

3.5 Some examples are worth highlighting. Bristol grew from 26 international routes in 1992 to 66 in 2002; East Midlands from 25 to 57; Edinburgh from 6 to 66 and Liverpool from 3 to 40. (Note that if only scheduled international routes are considered, the regional growth figures are even more impressive. This would however create a misleading picture because there has been much conversion of charter traffic to scheduled traffic over the past 15-20 years with consumers arranging their own flights and accommodation instead of buying package holidays.)

3.6 In 1992, London's five main airports served more international routes (383) than the total served by all the other airports in the UK combined (358). By 2012, however, the UK's regional airports had a total of 765 international routes compared to 591 served by the London airports - see Figures 1(a) and 1(b) below.

Figure 1(a) - Number of international routes

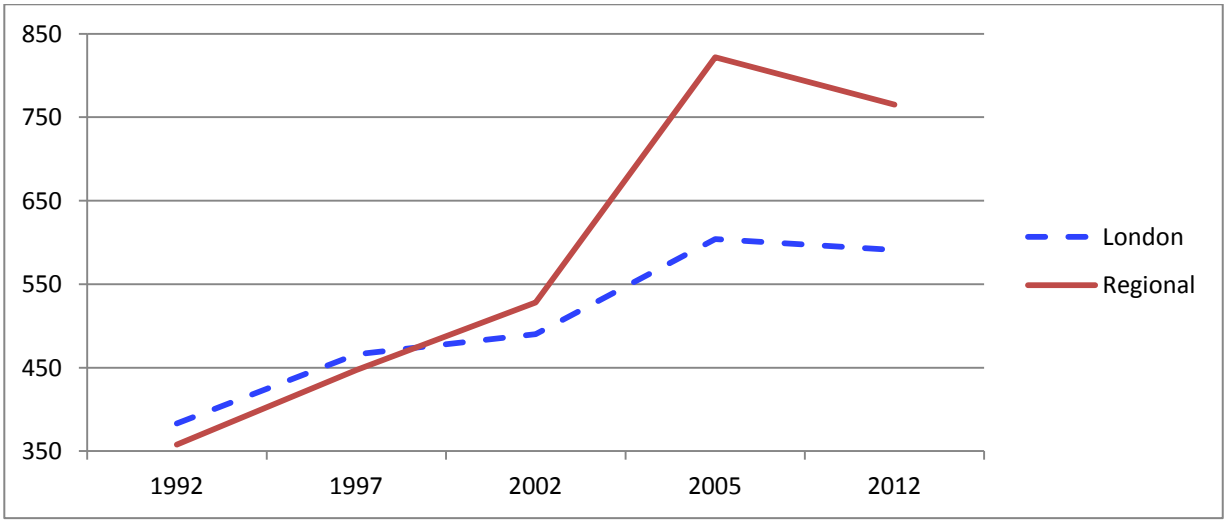
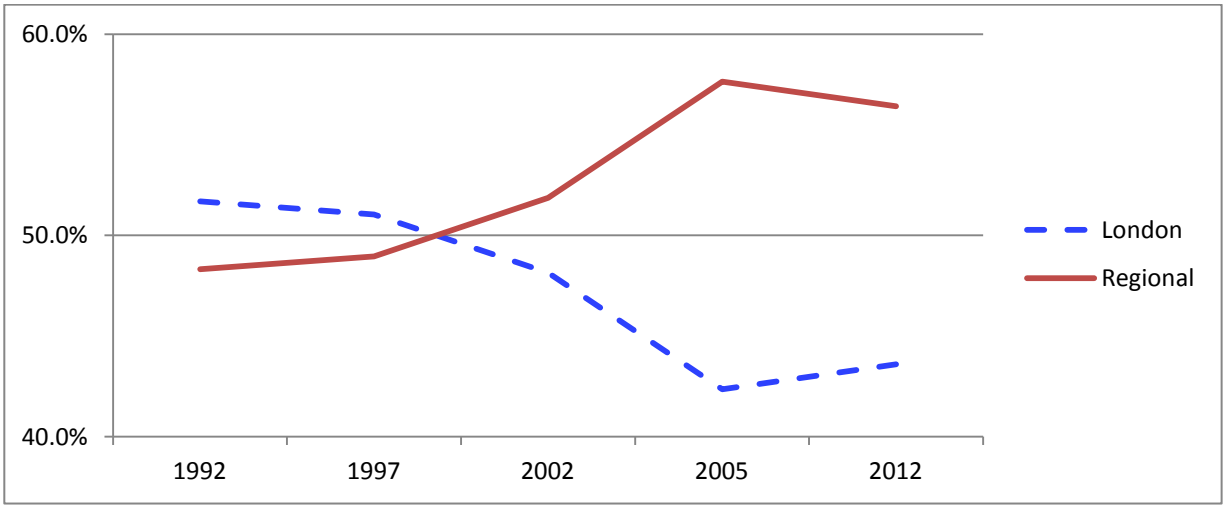


Figure 1(b) - Share of international routes (%)



3.7 With regard to the number of international passengers handled, a similar picture emerges when looking at the relative performance of the London airports and the regional airports over the past 20 years. London's airports handled twice as many international passengers in 2012 as in 1992 but the regional airports handled almost three times as many as they did in 1992.

Table 2 - International passengers

AIRPORT	*1992*	*1997*	*2002*	*2007*	*2012*
GATWICK	18.7	24.3	26.0	31.1	30.3
HEATHROW	38.3	50.6	56.4	62.1	65.3
LONDON CITY	0.2	1.1	1.2	2.2	2.4
LUTON	1.6	2.4	4.7	8.4	8.6
STANSTED	2.0	3.7	13.5	21.2	16.2
TOTAL LONDON	**60.8**	**82.1**	**101.7**	**125.1**	**122.9**
ABERDEEN	0.2	0.4	0.5	1.0	0.9
BELFAST INTERNATIONAL	0.5	0.6	0.8	1.8	1.5
BIRMINGHAM	2.9	4.8	6.7	7.6	7.8
BRISTOL	0.9	1.2	2.5	4.6	4.8
EAST MIDLANDS	1.0	1.5	2.7	4.7	3.7
EDINBURGH	0.5	0.9	1.8	3.4	4.7
GLASGOW	2.3	2.8	3.4	4.1	3.6
LEEDS BRADFORD	0.3	0.8	1.0	2.2	2.7
LIVERPOOL	0.2	0.3	2.1	4.6	3.7
MANCHESTER	9.7	13.2	15.8	18.7	17.3
NEWCASTLE	1.3	1.7	2.2	3.9	3.2
SOUTHAMPTON	0.1	0.1	0.2	0.8	0.6
OTHER REGIONAL	1.0	4.1	4.5	8.6	4.9
TOTAL REGIONAL	**20.9**	**32.4**	**44.2**	**66.1**	**59.3**
TOTAL UK	**81.7**	**114.5**	**145.9**	**191.2**	**182.2**

Source: CAA Airport Statistics, Table 12.1. Excludes Channel Islands, Isle of Man, international helicopter traffic (which is almost entirely to oil rigs) and international cargo routes.

3.8 It is clear from looking at Table 2 above - and also at Table 1 earlier - that the economic downturn of the last few years has dampened the rapid progress regional airports were making in improving their international connectivity, whether measured in terms of the number of international routes or the number of international passengers.

3.9 Nevertheless, regional airports have made up a great deal of ground on the main London airports over the past 20 years in terms of their international connectivity with a consequent reduction in the degree of over-concentration of air travel in the South East.

3.10 Despite the increase in regional connectivity, London's five main airports still account for two thirds of all international passengers to and from the UK, whereas London and the South East together account for only about one third of the Country's population.[7] As can be seen from Figures 2(a) and 2(b) below, there is still quite some way to go in terms of achieving a better balance between London and the regions.

[7] Based on the following population estimates from the 2011 Census: UK = 63.2m; London = 8.2m; the South East = 8.6m; and the East of England (Norfolk, Suffolk, Cambs, Beds, Herts and Essex) = 5.8m.

Figure 2(a) Number of international passengers

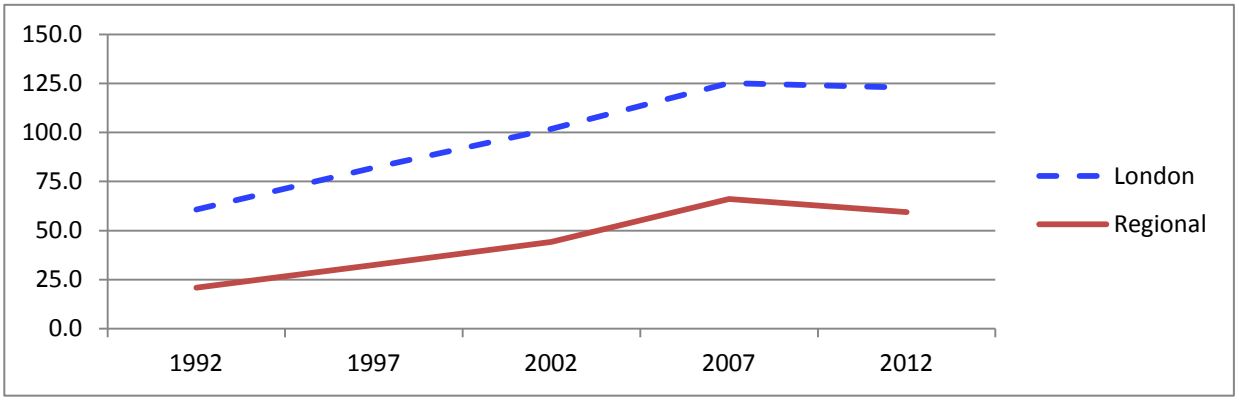
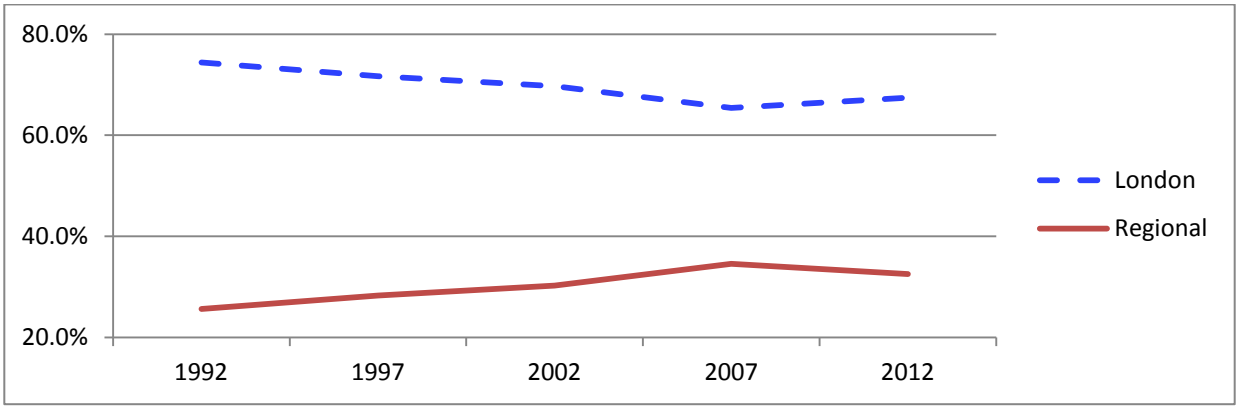


Figure 2(b) - Share of international passengers (%)



3.11 Whilst we are reluctant to be drawn into the 'hub-and-spoke' versus 'point-to-point' debate, we agree with the statement in the Commission's discussion paper that:

> *"... more fuel-efficient, smaller aircraft that are capable of flying to mid- and long-haul destinations by both Airbus (A350) and Boeing (Boeing 787) are reducing the scale of passenger demand needed to make a long-haul route viable. Such developments may encourage airlines to by-pass hub airports and serve direct connections."* [8]

It appears to us self-evident that such developments will also make it more viable for airlines to provide international long-haul services from the UK's main regional airports.

3.12 At present just 57 of the 765 international routes served by regional airports are long-haul[9] whereas 129 out of the 591 international routes served by the London airports are long-haul.[10] On the face of it, therefore, there would appear to be considerable potential for the UK's main regional airports to expand their long-haul services, bearing in mind that two thirds of the UK population lives outside the South East. This will not, of course, all be point-to-point traffic. Some of the routes will be to hub airports in the Middle East, the USA and elsewhere.

4. Capacity

4.1 In our submission on *'Aviation Demand Forecasting',* we pointed out that the UK had more than enough airport capacity to meet the DfT demand forecasts to 2030, and well beyond, whilst at the same time acknowledging that there is a particular runway capacity problem at Heathrow.

[8] *'Discussion Paper 04: Airport Operational Models'* Airports Commission, May 2013, para 2.13.
[9] Based on the CAA's definition of long haul, i.e. destinations outside geographical Europe and North Africa (Morocco, Algeria, Tunisia, Libya and Egypt) but where, for convenience, all destinations in both Russia and Turkey are defined as short haul, noting that the great majority of air services from the UK to Russia are to destinations west of the Urals and likewise the great majority of flights to Turkey are to Istanbul or destinations on the Mediterranean coast.
[10] Source = CAA Airport Statistics 2012, Table 12.1.

4.2 We submit that the solution to the Heathrow problem is not for the Government to promote the development of one or more runways at Heathrow or anywhere else but to allow the market to evolve. We would expect this to lead to a dispersal of demand to regional airports. In fact, rather than using the term 'dispersal', it would be more accurate to describe this as a repatriation of regional demand, bearing in mind that those living in the regions are, at present, often forced to use a London airport, particularly Heathrow, for their international travel needs.

4.3 We would also submit that a modest level of Government intervention could be justified in order to encourage the process of demand repatriation to regional airports. An example of modest Government intervention would be the introduction of differential rates of Air Passenger Duty ('APD') in order to to shift demand away from congested airports in the South East, to airports where the Government wanted to see greater utilisation.[11] Such a tax policy could be justified on the grounds of boosting economic growth and employment in the regions, a long-established and legitimate objective of governments, and of making better use of existing infrastructure.

4.4 The December 2009 aviation report by the Committee on Climate Change ('CCC')[12] included two informative tables showing actual and projected UK runway capacity and actual runway utilisation in 2005. We have updated the capacity estimates provided in these CCC tables with our own estimates of projected airport capacity in 2030, which have regard to the most recent airport master plans and planning consents and the airport capacity estimates provided by the DfT alongside its most recent aviation forecasts.[13] We have also updated the actual usage data from 2005 to 2012.[14]

Table 3 - Estimated capacity of UK airports in 2030 (no new runways)

AIRPORT	Capacity in 2030 (ATMs, 000s)	Usage in 2012 (ATMs, 000s)	Spare Capacity (ATMs, 000s)	Spare Capacity (%)
GATWICK	290	240	50	17%
HEATHROW	480	471	9	2%
LONDON CITY	120	64	56	47%
LUTON	157	72	85	54%
STANSTED	280	131	149	53%
TOTAL LONDON	**1,327**	**978**	**349**	**26%**
ABERDEEN	150	99	51	34%
BELFAST INTERNATIONAL	260	39	221	85%
BIRMINGHAM	240	84	156	65%
BRISTOL	226	51	175	77%
EAST MIDLANDS	264	55	209	79%
EDINBURGH	226	103	123	54%
GLASGOW	226	72	154	68%
LEEDS BRADFORD	150	30	120	80%
LIVERPOOL	213	36	177	83%
MANCHESTER	480	160	320	67%
NEWCASTLE	226	44	182	81%
SOUTHAMPTON	150	39	111	74%
OTHER REGIONAL	2,600	213	2,387	92%
TOTAL REGIONAL	**5,411**	**1,025**	**4,386**	**81%**
TOTAL UK	**6,738**	**2,003**	**4,735**	**70%**

Sources - see para 4.4 above.

[11] *'Aviation Demand Forecasting'*, SSE, Mar 2013, sets out the case for differential rates of APD in more detail.
[12] *'Meeting the UK aviation target – options for reducing emissions to 2050'*, Committee on Climate Change, Dec 2009, Table ES.2A, p.27 and Table ES,2B, p.28.
[13] *'UK Aviation Forecasts'*. Jan 2013, Table 3.10, p.58.
[14] http://www.caa.co.uk/docs/80/airport_data/2012Annual/Table_05_Air_Transport_Movements_2012.pdf.

4.5 The total UK capacity of 6.7m ATMs in 2030 compares to 2.0m ATMs handled last year and is about three times the number of ATMs needed to cater for the DfT's unconstrained demand forecast of 320mppa in 2030.[15] It is can also be seen from the above table that the bulk of the UK's spare airport capacity is in the regions. Only a fifth of the capacity that regional airports will have available in 2030 (without new runways) is currently being used whereas three quarters of the capacity that London's airports will have available in 2030 (without new runways) is currently being used.

4.6 We referred earlier to the increased potential for airlines to provide mid-haul and long-haul services from regional airports with the introduction of new aircraft types such as the B787 and A350. With ample capacity available at regional airports and runway capacity being tight at Heathrow[16], we would expect market forces to point decisively towards further dispersal - most of which would be repatriation - of demand to regional airports in the coming years.

5. Concluding points

5.1 Successive UK governments have for many years sought to re-balance the UK economy by boosting regional economic growth and jobs. Consistent with that policy objective, it is entirely reasonable to place greater emphasis on improving the international connectivity of our regional airports than on improving connectivity in London and the South East.

5.2 Moreover, government - and the Commission - should be alive to the risk of stifling the opportunity for our regional airports to acquire more international services, including mid-haul and long-haul services, and to thereby make the UK's regions more self-sufficient in terms of international connectivity.

5.3 We are aware that some of the more remote regions of the UK take the view that a direct Heathrow link is vital for their economic wellbeing but we believe that the market is capable of providing a more localised solution and that this would happen quite quickly once the present state of uncertainty comes to an end and the Government makes it clear that it will not intervene in the market to sanction additional runway capacity.

5.4 We therefore submit that the best way to encourage further internationalisation of the UK's regional airports is for government to resist the temptation to intervene in the current debate about the adequacy or otherwise of airport capacity in London and the South East. It might also be argued that if there was overwhelming market demand for more runway capacity at a particular location, the commercial benefits should be sufficiently large for there to be no need for central government intervention.

5.5 In conclusion, we return to the words of Alistair Darling, quoted at the start of this paper: *"Doing nothing is not an option."* We disagree. We submit that non-intervention is actually the best policy option for the Government. Such a policy would provide the clarity that the aviation industry has long been asking for. The industry would then plan accordingly and develop in a way which is better for consumers, better for all the regions of the UK and less destructive to the environment.

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[15] *'Aviation Demand Forecasting'*, SSE, Mar 2013, especially para 2.4 and paras 7.1 - 7.3.
[16] Although runway capacity at Heathrow is tight, with larger aircraft, it could handle about 20mppa more than today.

Annex A

Methodology for estimating the number of international routes

A.1 There are no reliable historic data on the number of international routes served by each UK airport. From time to time airport operators make claims about the number of international destinations served by their airport but there is no consistent definition as to what constitutes an international route (e.g. in terms of service frequency or route density) and there are no standardised or regularised reporting arrangements for all UK airports. Moreover, some destinations are seasonal and so the number of routes varies from summer to winter.

A.2 In seeking to identify the trend over the past 20 years, we examined the traffic figures, by route, for the UK's:

- 5 London airports, individually;
- 12 main regional airports, individually; and
- all other UK airports, in aggregate.

at 5-year intervals, i.e. for 1992, 1997, 2002, 2007 and 2012.

A.3 For each of these (90) datasets we calculated the average number of passengers per international PATM using CAA airport traffic statistics (Table 5 and Table 12.1). We excluded the Channel Islands, Isle of Man and also helicopter traffic (Table 19), virtually all of which was to oil rigs. Where there were gaps in the published CAA data, we asked the CAA to assist by providing the missing data and they kindly did so - promptly and free of charge.

A.4 We next calculated a qualification threshold for an international route for each of the 90 datasets. The threshold we selected was an average of one return flight per week to a given destination. This was the definition we used for an international route.

A.5 We ran a sensitivity test with double the threshold (i.e. two return flights per week). This trimmed the number of international routes but only by 6-8% and the level of trim was fairly even across all airports and so applying this higher threshold would have made no significant difference to the trend over the period we looked at, or to our underlying conclusions.

A.6 Finally, in relation to our methodology, we should explain that we first carried out the above analysis in respect of scheduled international routes only (i.e. excluding charter). This showed a five-fold expansion of international routes at regional airports between 1992 and 2012. However this was a misleading statistic because the advent of internet bookings and budget carriers has led to 'DIY' flight and accommodation bookings and thereby a significant move away from package tours and charter flights to scheduled flights. This change has also led to some blurring of the distinction between the two sectors. We therefore believe it is more meaningful to consider the two sectors combined. This approach shows that the real increase in scheduled international routes at regional airports over the period 1992-2012 has been 114%, an average CAGR[17] of 3.9%.

[17] Compound Annual Growth Rate.

Annex A - cont'd

AIRPORT	1992				
	International Pax (m)	International PATMs ('000)	Pax per PATM	Threshold (pax per annum)*	International routes served
GATWICK	18.7	149.1	125.2	13,019	148
HEATHROW	38.3	303.1	126.2	13,124	160
LONDON CITY	0.2	9.9	18.7	1,940	6
LUTON	1.6	13.0	125.4	13,039	23
STANSTED	2.0	31.5	64.9	6,752	46
TOTAL LONDON	**60.8**	**506.6**	**120.0**	**N/A**	**383**
ABERDEEN	0.2	3.1	73.5	7,648	7
BELFAST INTERNATIONAL	0.5	6.5	76.8	7,991	18
BIRMINGHAM	2.9	42.5	67.7	7,039	52
BRISTOL	0.9	14.3	61.7	6,422	26
EAST MIDLANDS	1.0	10.2	93.8	9,752	25
EDINBURGH	0.5	11.4	43.6	4,539	19
GLASGOW	2.3	24.5	95.2	9,898	43
LEEDS BRADFORD	0.3	7.9	43.9	4,569	18
LIVERPOOL	0.2	3.0	71.5	7,436	3
MANCHESTER	9.7	85.9	112.7	11,722	83
NEWCASTLE	1.3	15.0	90.1	9,370	30
SOUTHAMPTON	0.1	3.7	19.0	1,976	2
OTHER REGIONAL	1.0	22.2	45.2	8,705	32
TOTAL REGIONAL	**20.9**	**250.1**	**83.7**	**N/A**	**358**
TOTAL UK	**81.7**	**756.7**	**108.0**	**N/A**	**741**

Excludes Channel Islands, Isle of Man and helicopter traffic.

**Threshold has been calculated by multiplying 'Pax per annum' by 104, i.e. one return PATM per week.*

Annex A - cont'd

AIRPORT	1997				
	International Pax (m)	International PATMs ('000)	Pax per PATM	Threshold (pax per annum)*	International routes served
GATWICK	24.3	187.8	129.5	13,468	188
HEATHROW	50.6	358.0	141.4	14,704	167
LONDON CITY	1.1	30.3	35.3	3,668	17
LUTON	2.4	25.3	96.7	10,058	39
STANSTED	3.7	53.9	68.5	7,126	55
TOTAL LONDON	**82.1**	**655.2**	**125.4**	**N/A**	**466**
ABERDEEN	0.4	7.5	52.8	5,487	8
BELFAST INTERNATIONAL	0.6	4.6	135.9	14,139	15
BIRMINGHAM	4.8	55.1	87.2	9,064	56
BRISTOL	1.2	16.1	76.9	7,998	33
EAST MIDLANDS	1.5	14.4	104.0	10,817	30
EDINBURGH	0.9	15.3	57.8	6,013	23
GLASGOW	2.8	22.8	120.7	12,551	38
LEEDS BRADFORD	0.8	10.7	70.4	7,323	16
LIVERPOOL	0.3	3.3	95.0	9,885	14
MANCHESTER	13.2	103.5	127.6	13,267	102
NEWCASTLE	1.7	18.9	91.9	9,554	34
SOUTHAMPTON	0.1	6.7	20.4	2,126	4
OTHER REGIONAL	4.1	37.4	108.9	11,328	74
TOTAL REGIONAL	**32.4**	**316.6**	**102.5**	**N/A**	**447**
TOTAL UK	**114.5**	**971.7**	**117.9**	**N/A**	**913**

Excludes Channel Islands, Isle of Man and helicopter traffic.

**Threshold has been calculated by multiplying 'Pax per annum' by 104, i.e. one return PATM per week.*

Annex A - cont'd

AIRPORT	2002				
	International Pax (m)	International PATMs ('000)	Pax per PATM	Threshold (pax per annum)*	International routes served
GATWICK	26.0	185.1	140.5	14,617	171
HEATHROW	56.4	396.7	142.0	14,772	161
LONDON CITY	1.2	36.2	32.9	3,420	19
LUTON	4.7	37.4	125.6	13,066	32
STANSTED	13.5	116.4	115.8	12,046	107
TOTAL LONDON	**101.7**	**771.8**	**131.8**	**N/A**	**490**
ABERDEEN	0.5	9.1	56.3	5,859	13
BELFAST INTERNATIONAL	0.8	5.6	149.3	15,530	18
BIRMINGHAM	6.7	83.2	80.1	8,329	74
BRISTOL	2.5	25.7	96.7	10,060	39
EAST MIDLANDS	2.7	22.4	118.5	12,328	31
EDINBURGH	1.8	24.4	73.2	7,615	24
GLASGOW	3.4	26.1	131.6	13,683	43
LEEDS BRADFORD	1.0	13.7	75.4	7,838	21
LIVERPOOL	2.1	16.4	126.3	13,132	19
MANCHESTER	15.8	126.9	124.6	12,961	119
NEWCASTLE	2.2	22.3	98.5	10,247	36
SOUTHAMPTON	0.2	7.8	28.7	2,983	10
OTHER REGIONAL	4.5	35.9	125.2	13,025	81
TOTAL REGIONAL	**44.2**	**419.5**	**105.4**	**N/A**	**528**
TOTAL UK	**145.9**	**1,191.3**	**122.5**	**N/A**	**1,018**

Excludes Channel Islands, Isle of Man and helicopter traffic.

**Threshold has been calculated by multiplying 'Pax per annum' by 104, i.e. one return PATM per week.*

Annex A - cont'd

AIRPORT	2007				
	International Pax (m)	International PATMs ('000)	Pax per PATM	Threshold (pax per annum)*	International routes served
GATWICK	31.1	209.7	148.5	15,441	181
HEATHROW	62.1	413.3	150.2	15,625	166
LONDON CITY	2.2	57.0	38.9	4,048	29
LUTON	8.4	67.1	125.4	13,046	73
STANSTED	21.2	157.0	135.0	14,043	155
TOTAL LONDON	**125.1**	**904.2**	**138.3**	**N/A**	**604**
ABERDEEN	1.0	16.3	58.7	6,108	19
BELFAST INTERNATIONAL	1.8	12.9	139.0	14,455	31
BIRMINGHAM	7.6	73.9	102.7	10,677	83
BRISTOL	4.6	37.9	122.3	12,719	58
EAST MIDLANDS	4.7	33.2	141.7	14,740	59
EDINBURGH	3.4	34.7	98.4	10,238	42
GLASGOW	4.1	26.6	155.3	16,149	48
LEEDS BRADFORD	2.2	20.8	107.4	11,167	33
LIVERPOOL	4.6	34.0	136.4	14,184	50
MANCHESTER	18.7	139.5	133.7	13,908	146
NEWCASTLE	3.9	32.1	123.0	12,797	51
SOUTHAMPTON	0.8	16.9	45.5	4,727	26
OTHER REGIONAL	8.6	83.5	103.3	10,747	176
TOTAL REGIONAL	**66.1**	**562.3**	**117.5**	**N/A**	**822**
TOTAL UK	**191.2**	**1,466.5**	**130.4**	**N/A**	**1,426**

Excludes Channel Islands, Isle of Man and helicopter traffic.

**Threshold has been calculated by multiplying 'Pax per annum' by 104, i.e. one return PATM per week.*

Annex A - cont'd

AIRPORT	2012				
	International Pax (m)	International PATMs ('000)	Pax per PATM	Threshold (pax per annum)*	International routes served
GATWICK	30.3	195.7	155.0	16,120	167
HEATHROW	65.3	423.9	154.0	16,012	161
LONDON CITY	2.4	51.3	47.6	4,945	35
LUTON	8.6	60.8	141.1	14,670	83
STANSTED	16.2	111.2	146.1	15,194	145
TOTAL LONDON	**122.9**	**842.8**	**145.8**	**N/A**	**591**
ABERDEEN	0.9	16.3	57.6	5,986	12
BELFAST INTERNATIONAL	1.5	10.7	141.0	14,660	21
BIRMINGHAM	7.8	63.4	122.3	12,721	85
BRISTOL	4.8	38.2	126.2	13,122	66
EAST MIDLANDS	3.7	26.7	137.2	14,269	57
EDINBURGH	4.7	40.8	114.5	11,903	66
GLASGOW	3.6	24.7	144.8	15,058	44
LEEDS BRADFORD	2.7	21.1	127.1	13,214	43
LIVERPOOL	3.7	27.0	135.8	14,124	40
MANCHESTER	17.3	118.1	146.8	15,272	138
NEWCASTLE	3.2	24.7	128.8	13,392	44
SOUTHAMPTON	0.6	11.8	54.1	5,628	21
OTHER REGIONAL	4.9	44.5	109.7	11,407	128
TOTAL REGIONAL	**59.3**	**468.1**	**126.8**	**N/A**	**765**
TOTAL UK	**182.2**	**1,311.0**	**139.0**	**N/A**	**1,356**

Excludes Channel Islands, Isle of Man and helicopter traffic.

**Threshold has been calculated by multiplying 'Pax per annum' by 104, i.e. one return PATM per week.*

Annex A - cont'd

Number of International routes

	1992	*1997*	*2002*	*2005*	*2012*
LONDON	383	466	490	604	591
REGIONAL	358	447	528	822	765

International routes (% split London vs Regional)

	1992	*1997*	*2002*	*2005*	*2012*
LONDON	51.7%	51.0%	48.1%	42.4%	43.6%
REGIONAL	48.3%	49.0%	51.9%	57.6%	56.4%

International passengers (m)

	1992	*1997*	*2002*	*2007*	*2012*
LONDON	60.8	82.1	101.7	125.1	122.9
REGIONAL	20.9	32.4	44.2	66.1	59.3

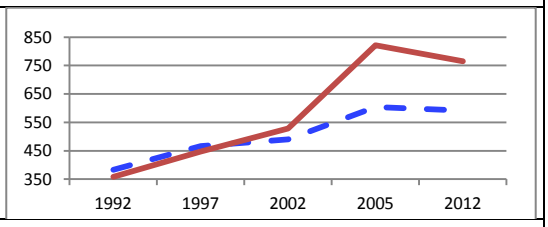
International passengers (% split London vs Regional)

	1992	*1997*	*2002*	*2007*	*2012*
LONDON	74.4%	71.7%	69.7%	65.4%	67.4%
REGIONAL	25.6%	28.3%	30.3%	34.6%	32.6%

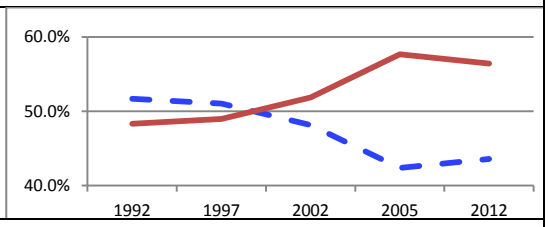
Increase in international traffic 2012 vs 1992

AIRPORT	*Routes*	*Pax (m)*
GATWICK	13%	62%
HEATHROW	1%	71%
LONDON CITY	483%	1224%
LUTON	261%	427%
STANSTED	215%	694%
TOTAL LONDON	**54%**	**102%**
ABERDEEN	71%	317%
BELFAST INTERNAT	17%	201%
BIRMINGHAM	63%	170%
BRISTOL	154%	447%
EAST MIDLANDS	128%	284%
EDINBURGH	247%	840%
GLASGOW	2%	53%
LEEDS BRADFORD	139%	676%
LIVERPOOL	1233%	1638%
MANCHESTER	66%	79%
NEWCASTLE	47%	136%
SOUTHAMPTON	950%	800%
OTHER REGIONAL	300%	386%
TOTAL REGIONAL	**114%**	**183%**
TOTAL UK	**83%**	**123%**

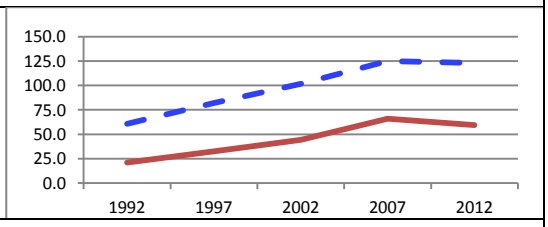
International routes (m)



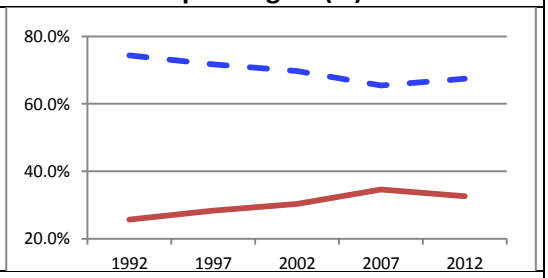
International routes (%)



International passengers (m)



International passengers (%)



Annex A - cont'd

Sensitivity Test	Thresholds = Two return flights per week				
	1992	***1997***	***2002***	***2007***	***2012***
GATWICK	26,039	26,937	29,234	30,882	32,241
HEATHROW	26,249	29,407	29,543	31,249	32,024
LONDON CITY	3,881	7,337	6,841	8,096	9,890
LUTON	26,078	20,116	26,131	26,091	29,340
STANSTED	13,504	14,252	24,093	28,085	30,389
ABERDEEN	15,297	10,974	11,717	12,216	11,972
BELFAST INTERNAT	15,981	28,277	31,061	28,910	29,320
BIRMINGHAM	14,078	18,128	16,659	21,354	25,442
BRISTOL	12,844	15,996	20,121	25,439	26,243
EAST MIDLANDS	19,504	21,635	24,657	29,480	28,538
EDINBURGH	9,077	12,025	15,231	20,477	23,806
GLASGOW	19,796	25,101	27,367	32,298	30,117
LEEDS BRADFORD	9,138	14,646	15,676	22,334	26,427
LIVERPOOL	14,873	19,770	26,265	28,368	28,248
MANCHESTER	23,443	26,534	25,921	27,816	30,544
NEWCASTLE	18,740	19,109	20,493	25,594	26,784
SOUTHAMPTON	3,951	4,252	5,966	9,455	11,257
OTHER REGIONAL	17,410	22,656	26,051	21,495	22,814

Sensitivity Test	Number of international routes				
	1992	***1997***	***2002***	***2007***	***2012***
GATWICK	121	155	141	159	151
HEATHROW	142	155	144	150	150
LONDON CITY	6	17	19	23	29
LUTON	16	25	25	56	74
STANSTED	35	47	93	143	129
TOTAL LONDON	**320**	**399**	**422**	**531**	**533**
ABERDEEN	3	6	7	13	10
BELFAST INTERNAT	10	9	9	23	14
BIRMINGHAM	38	46	66	64	63
BRISTOL	20	21	28	46	51
EAST MIDLANDS	17	17	27	45	37
EDINBURGH	14	13	15	23	55
GLASGOW	30	30	30	34	32
LEEDS BRADFORD	10	15	16	24	26
LIVERPOOL	1	7	13	43	28
MANCHESTER	65	78	92	124	113
NEWCASTLE	24	26	24	38	34
SOUTHAMPTON	2	4	8	22	16
OTHER REGIONAL	24	42	45	123	70
TOTAL REGIONAL	**258**	**314**	**380**	**622**	**549**