

# **Developing a sustainable framework for UK aviation: Scoping document**

## **Consultation by the Department for Transport**

### **Response from the British Air Transport Association (BATA)**

**October 2011**

## **Introduction**

The British Air Transport Association (BATA) welcomes the opportunity to submit evidence to the consultation entitled '*Developing a sustainable framework for UK aviation: Scoping document*' being undertaken by the Department for Transport.

BATA is the trade body for UK registered airlines. Our ten members cover all sectors of the airline industry – including freight, charter, low fare, regional operations and full service. In 2010, BATA members employed over 71,000 people, operated four-fifths of the UK commercial aircraft fleet and were responsible for some 96% of UK airline output, carrying 119 million passengers and 1 million tonnes of cargo<sup>1</sup>.

We recognise that this is the first stage in a lengthy consultation process, which has another two years to go and will continue to submit evidence and responses to DfT during the course of the exercise.

BATA is in a unique position in responding to this consultation given the breadth and range of UK airlines we represent, which each have differing roles and business models, interests and markets. Therefore, charter, cargo, long haul, scheduled, no-frills, outbound tourism, business, inbound tourism, cargo and visiting friends and relatives are all considered within the framework of our response.

## **Executive Summary**

Aviation plays a vital role in a modern, integrated transport system and is a critical component of the UK's transport infrastructure. As a sector, aviation represents around 3.6% of the UK economy measured in GDP and provides jobs directly and indirectly for almost a million people<sup>2</sup>. The UK is an island; a trading nation, plugged into the world's transport, travel, trade and tourism networks. Aviation plays an essential part in supporting the service sector and manufacturing, both of which require reliable and comprehensive access to global markets for people and goods. Aviation is vital for 'just in time', high value or perishable cargo such as microchips, mail and even flowers. Domestic aviation fulfils a crucial function in connecting remoter regions and destinations with each other where many routes either 'cross over water' or link regions of the UK that are unlikely to be part of any feasible high speed rail network. Analysis of CAA statistics show that over 80% of domestic routes, carrying 60% of passengers are either over water or involve locations that cannot or will not be served by High Speed Rail.<sup>3</sup>

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<sup>1</sup> Analysis of Tables 1.6, 1.11.2 and 1.14, 'UK Annual Airline Statistics 2010', CAA

<sup>2</sup> 'Economic Benefits from Air Transport in the UK', Oxford Economics, 2011

<sup>3</sup> Calculated from Table 12.2, Domestic Air Passenger Route Analysis, 'UK Annual Airport Statistics 2010', CAA

It is worth remembering that the UK consists of a collection of islands off the northwest coast of Europe with currently only one fixed surface link (the Channel Tunnel) to the Continent. Aviation is therefore clearly vital to the UK's future as a trading nation. The impact of the Icelandic ash cloud in April 2010 when flights were grounded for several days clearly showed the importance of aviation to everyday life, business and the public in the UK.

The Coalition Government has yet to adopt a positive aviation policy. Instead, it has abandoned the decision to expand Heathrow and issued a blanket ban on new runways at the three main existing London airports at significant risk to UK jobs and the UK economy. BATA believes this is wrong. A thriving primary hub airport is vital to the future prosperity of the UK and new airport capacity should be provided where it is required subject to appropriate environmental safeguards. There are limited options for modal shift from international aviation – and no realistic ones for maintaining and further developing links with the emerging BRIC economies which are significant distances away. Heathrow compares badly with our competitors in terms of access to these markets due to capacity constraints and has just three passenger routes to China – the same number as Helsinki<sup>4</sup>. By comparison, Frankfurt has seven<sup>5</sup> and is far better placed to benefit from future growth, new business opportunities and new jobs. The UK risks missing out on benefiting from growth in investment and tourism as well as the ability to export to places such as China.

Although the Coalition Government is embarking on a public consultation process with the aim of producing a policy within the next two years, many in the aviation industry are experiencing “consultation fatigue” given the number of similar consultations on the future of aviation that have been undertaken over the past ten years or more. Indeed debate about additional airport capacity in the South East of England can be traced back to the Roskill Commission held between 1968 and 1971 if not beyond. What we need now is a Government bold enough to take the tough decisions needed if Britain is to continue to compete in a global market, helping restore our economic prosperity.

Unlike other modes of transport or indeed other industries, aviation does not receive a subsidy from the UK taxpayer. The industry pays for its own infrastructure, creates and supports high skilled jobs, contributes to the Treasury and enables the UK to trade with the rest of the world.

Reducing aviation's impact on the environment has to be viewed and dealt with in a global context. Reducing emissions in the UK by restricting aviation growth while the rest of the world continues to build more airports and add new runways will serve only to damage the UK's economic interests and do nothing for the environment.

- **Aviation is a significant contributor to the UK economy: a driver of the wider economy; and a benefit to society**
- **We recognise that while aviation can have an adverse impact on the lives of the those living around airports and under flight paths, it can also bring many benefits to local and regional economies in terms of inward investment and jobs**
- **The aviation industry is committed to reducing its local and global environmental impact. Substantial progress has already been made and more is in the pipeline.**
- **Airport expansion is, where required, vital for the UK.**

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<sup>4</sup> Heathrow and Helsinki airport online timetables, October 2011 (Destinations are: Beijing, Shanghai and Hong Kong)

<sup>5</sup> Frankfurt airport online timetable, October 2011 (Destinations are: Beijing, Guangzhou, Hangzhou, Hong Kong, Nanking, Shanghai and Shenyang)

## The Aviation Sector

### **5.1 How does the aviation sector as a whole benefit the UK? Please consider the whole range of aviation activities including, for example, air freight, General Aviation and aerospace.**

A report produced by Oxford Economics<sup>6</sup> earlier this year included the following material:

#### **Economic Contribution**

The aviation sector contributes £49.6 bn (3.6%) to UK GDP. This total comprises:

£21.3 bn directly contributed through the output of the aviation sector (airlines, airports and ground services, aerospace);

£16.3 bn indirectly contributed through the aviation sector's supply chain; and

£12 bn contributed through the spending by employees of the aviation sector and its supply chain.

In addition there are £20.7 bn in 'catalytic' benefits through tourism.

#### **Jobs**

The aviation sector supports 921,000 jobs in the UK. This total comprises:

326,000 jobs directly supported by the aviation sector;

346,000 jobs indirectly supported through the aviation sector's supply chain; and

249,000 jobs supported through the spending by employees of the aviation sector and its supply chain.

In addition there are a further 519,000 people employed through the 'catalytic' (tourism) effects of aviation.

The average air transport services employee generates £66,178 in Gross Value Added (GVA) annually, which is over two times more productive than the average in the UK. The jobs lost to other countries by restricting the ability of UK aviation to grow are high value, exactly the types of job the Government says it wants to encourage.

#### **Tax**

In 2009, the aviation sector paid nearly £7.9 bn in tax. Taxes paid by aviation firms and employees, contributed around £6 bn and APD a further £1.9 bn (a figure that has since risen to £2.15 bn in 2010-11<sup>7</sup> and is expected to increase to £3.6bn by 2015/16<sup>8</sup>). It is estimated that an additional £5.9 bn of government revenue is raised via the aviation sector's supply chain and £4.3 bn through taxation of the activities supported by the employees of both the aviation sector and its supply chain.

According to a DfT study in 2008<sup>9</sup>, APD revenues alone more than covered the climate change costs of aviation – and given the increases in rates of duty in November 2009 and November 2010 along with the downturn in air traffic and emissions in recent years, this can only have increased to create an even larger APD 'surplus' in relation to aviation's climate change costs.

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<sup>6</sup> 'Economic Benefits from Air Transport in the UK', Oxford Economics, 2011

<sup>7</sup> 'Air Passenger Duty Bulletin', National Statistics/HMRC, September 2011

<sup>8</sup> Table C.3, page 92, 'Budget 2011', HM Treasury, March 2011

<sup>9</sup> 'Aviation Emissions Cost Assessment', DfT, 2008

## **Aerospace Contribution**

In addition to the benefits generated by air travel, the UK has the world's second largest aviation manufacturing sector, generating £10.3 bn direct, £7.6 bn indirect and £4.6 bn induced benefit to GDP.

Aerospace manufacturers directly employ 105,000 people. The supply chain supports another 159,000 jobs, with a further 97,000 of induced employment.

Taking all these channels into account, aerospace supports 360,000 jobs and contributes over £22.6 bn in UK GDP.

Furthermore, aviation generates and supports 'invisible exports' which have a wider, multiplier effect.

Government policies affect the realisation of further potential benefits. For instance, the Tourism Alliance calculates that if Air Passenger Duty (APD) was removed, the UK's inbound tourism earnings would increase by 6% (£1.1bn per annum) and create almost 25,000 additional jobs. While APD remains, for every potential inbound visitor who is deterred, the UK economy loses around £500 of income and the Treasury loses around £130 in tax<sup>10</sup>.

Aviation facilitates services such as overnight post, the delivery of fresh fruit and vegetables and the supply of high value, small items for industry on a 'just-in time' basis. The impact of the Icelandic ash cloud in April 2010 when flights were grounded for several days clearly showed the importance of aviation to everyday life, business and the public in the UK.

The aviation sector is an important provider and supporter of economic growth, tax revenues and highly skilled, productive jobs. It facilitates connectivity, both domestically and internationally. It also facilitates inbound tourism and investment as well as the movement of freight and cargo. Most important for many people, it allows them to quickly, cheaply and easily reach their overseas holiday destination. Aviation underpins skills and training, the development of technology and allows the UK to compete globally as it supports manufacturing and service sectors. It is vital to the UK's trade and travel with the BRIC countries (Brazil, Russia, India, China) and other key but geographically distant world economies such as the USA, Japan, Canada, Australia, South Korea, Turkey, Saudi Arabia, Singapore and the UAE.

### **5.2 What do you consider to be the aviation sector's most important contributions to economic growth and social well-being?**

1. Connectivity and links with the rest of the world allowing economic growth, trade and investment.
2. Aviation allows people in the UK to maintain ties with family and friends. The population of London is estimated to comprise over 33% who were born overseas<sup>11</sup>. Across the UK as a whole, the percentage is 11% or seven million people<sup>12</sup>. Air travel is therefore vital to supporting the UK's historic, language and cultural ties with people and countries across the globe, including places such as India, Bangladesh, Pakistan, Australia, Canada, New Zealand, South Africa, Kenya, Nigeria, Ghana, Sri Lanka, Jamaica, Cyprus, Hong Kong and the USA. Immigration from recent member states of the enlarged EU such as Poland, Lithuania, Latvia (joined the EU in 2004) Bulgaria and Romania (joined

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<sup>10</sup> 'Tourism for Growth', Tourism Alliance, 2011

<sup>11</sup> 'An Evidence Base on Migration & Integration in London', University of Oxford & Mayor of London, September 2010

<sup>12</sup> 'Social Trends 41 – Population', ONS, April 2011

the EU in 2007) has also created new demand for air connections and links between those states and the UK.

Domestic aviation also allows easier travel within the UK and British Isles, e.g. for the 5.3 million passengers who travelled between Northern Ireland and the mainland last year by air<sup>13</sup>.

3. Air travel also allows UK residents to more easily take holidays and breaks in resorts and destinations of their choosing, contributing to personal wellbeing, health and happiness. International travel helps broaden individual understanding of different cultures and should be accessible to all rather than a wealthy minority. Surveys consistently find that an annual holiday, rather than being a luxury, is now so important for many people that it is one of the things that is often protected in family budgets, even during the current downturn.

4. Many developing countries depend on the UK market for tourism and trade to support their economies (countries such as Kenya, the Cape Verde islands, Dominican Republic and the Caribbean islands.) Aviation can therefore be seen as supporting and enhancing the Government's international development policies.

5. There is significant domestic expenditure related to outbound tourism, estimated at around £27 bn a year<sup>14</sup>. This expenditure is in places such as travel agencies and clothes shops as well as with passenger transport providers, supports jobs and businesses in the UK.

### **5.3 Are some sub-sectors of aviation more important than others? If so, which and why?**

It should be apparent that there will be different views from different stakeholders in response to this question. BATA feels that all sub-sectors have their own particular but commensurate value and should be treated equally.

### **5.4 How do you think the global aviation sector will evolve in the medium and long term (twenty to fifty years)? What do you expect to be the most significant changes?**

We expect that aircraft will continue to become even quieter and more fuel efficient, that there will be significantly increased use of sustainable bio-fuels as well as technological innovations in airframes and engines. We expect that Sustainable Aviation and others will provide further detail on these areas in their submissions.

Undoubtedly, the rise of China and India along with other economies such as Turkey, Indonesia, Brazil, South Africa, each with an increasingly affluent middle-class will drive increased demand for global air transport – something that will occur whatever unilateral policy decisions the UK takes. Some of these countries are already planning and developing the infrastructure to deliver this, for example in China, where nearly 100 new airports are to be constructed over the next 10 years and 56 new airports by 2015 alone<sup>15</sup>. Other developed countries such as the USA and some of our European neighbours are also planning to meet this increased demand.

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<sup>13</sup> Calculated from Table 12.2, Domestic Air Passenger Route Analysis, 'UK Annual Airport Statistics 2010', CAA

<sup>14</sup> 'The Economic Importance of Tourism - Tourism Satellite Account for 2008', ONS, May 2011

<sup>15</sup> China Daily.com, 27<sup>th</sup> January 2008 and People's Daily Online, 18<sup>th</sup> May 2011

**5.5 How, and within what constraints, can aviation growth occur as technological developments and improved operating procedures reduce CO<sub>2</sub>, pollutant emissions and noise impacts?**

Aspects of this have been clearly illustrated by the Sustainable Aviation (SA) initiative, of which BATA is a part, in its 'CO<sub>2</sub> Roadmap' first published in 2008<sup>16</sup>. The Roadmap set out the future scenario of UK emissions from aviation to 2050. Following in-depth discussion, the UK Government set the industry a target to reduce its emissions to 2005 levels by 2050 and asked the Committee on Climate Change (CCC) to investigate whether the industry could meet this target. The conclusion of the CCC, based on relatively conservative assumptions, was that air travel in the UK could grow by 60% and still meet the 2050 target<sup>17</sup>.

Aviation has a demonstrable and well-documented track record in improving its environmental performance and there is strong evidence that the UK industry is at the forefront of developing solutions to ensure we can meet the 2050 target without the need for demand growth to be artificially constrained.

The CCC has indicated its recommendations will be regularly reviewed against technological progress and SA will continue to liaise with the CCC. SA is reviewing its Roadmap in light of the Government's recently published demand forecasts and will engage with policy makers concerning the results of its review in due course.

The aviation industry has taken huge strides in reducing noise over the last thirty years or so and far fewer people who live near airports are exposed to significant noise.

Regarding noise, it is important to recognise that a one-size-fits-all policy is not appropriate. Different airports have different types of noise impacts depending on the types of flights operated, the density of housing near the airport and local awareness and perceptions of noise.

An important principle is that as technology and operational procedures deliver improvements in noise impacts, aviation should be permitted to grow. A noise envelope may be the most suitable way of monitoring and managing the noise impacts of increased flights, with the number of flights being limited if there are any concerns that noise envelope cannot be met. Conversely, as technology and operational procedures deliver improved noise impacts, the number of flights should be permitted to increase. We discuss this issue further in our response to question 5.43.

Air quality is not an issue at most UK airports, with the exception of Heathrow. Studies show that the influence of nitrogen dioxide (NO<sub>x</sub>) emissions from airport activities falls rapidly with distance from the airport boundary. Road traffic remains the main problem with regard to NO<sub>x</sub> in the UK.

The recently introduced EU limits on nitrogen dioxides (NO<sub>x</sub>) are legally enforceable and we believe this provides an adequate constraint in terms of aviation growth. Aircraft are getting cleaner and Government focus should be on reducing road traffic to and from airports, rather than creating additional and unnecessary regulation on aviation-related NO<sub>x</sub> emissions.

As this consultation has a UK only remit, we are assuming the question relates to the UK only - but the reality is that aviation is a global industry and needs to be viewed in that context. Some emissions that may be saved in the UK by unilateral demand management measures and restrictions

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<sup>16</sup> See Sustainable Aviation website at: [www.sustainableaviation.co.uk](http://www.sustainableaviation.co.uk)

<sup>17</sup> 'Meeting The UK Aviation Target – Options For Reducing Emissions To 2050', Committee on Climate Change, December 2009

on capacity and growth would simply 'transfer' to Continental and Middle Eastern hubs. Any saving in the UK would be minute compared with the growth experienced in the rest of the world over the coming years.

**5.6 How should decision-makers address trade-offs or competing interests, where these occur both (a) between different aviation objectives, e.g. CO<sub>2</sub> emissions versus local noise reduction, and (b) between aviation and other sectors, e.g. airspace use versus renewable energy objectives, or the use of land for maintaining a viable network of smaller airfields versus housing development?**

This is ultimately a matter for politicians, policy makers and decision makers. Although Sustainable Aviation has undertaken work which considers some aspects of trade-offs we would argue that the industry can only point out the various trade-offs and highlight the decisions that need to be made.

A key part of SA's activity is to try and achieve a balance of noise with impacts on climate and local air quality requirements. Interdependencies between noise, NO<sub>x</sub> and CO<sub>2</sub> emissions are complex and require careful evaluation prior to regulatory, operational or design decisions. As regulations become more stringent, the relevant trade-offs become more difficult to address. Many of the trade-offs involve decisions taken by more than one section of the industry, making it essential that the various stakeholders work closely together to identify and promote good practice.

Recent work on interdependencies between noise, NO<sub>x</sub> and CO<sub>2</sub> will assist SA's efforts to engage with policymakers to develop pragmatic, effective and environmentally sound mechanisms for mitigating aviation's total environmental impact.

Regular dialogue between regulators and industry stakeholders will be essential in ensuring that the complexities of the topic, and the delicate balances required, are adequately accounted for in the decision-making process.

**5.7 Should some aspects of UK aviation be considered to be of strategic national interest (e.g. certain airports, air traffic control)? If so, based on what criteria?**

Yes. Air traffic control is obviously of strategic national interest. Certain airports are also of national importance with Heathrow as the prime example being the UK's only hub, although we are confident that the devolved governments and assemblies of Wales (Cardiff), Scotland (Glasgow and Edinburgh) and Northern Ireland (Belfast) will view their main gateway airports as crucial elements of their infrastructure and important both for their national interest and future economic development. In addition, an airport such as East Midlands, which supports the provision of significant express and freight services across the UK could also be deemed to be of major importance.

**5.8 How might the cost of regulation to the aviation sector be reduced, while achieving the Government's objectives of promoting sustainable aviation, improving the passenger experience at airports and maintaining high standards of safety and security for passengers and freight?**

The UK aviation sector is already one of the most competitive and consumer focused aviation sectors in the world and as such there is less of a need to ensure and enforce fair and open competition amongst airlines through regulatory measures. Attention and consideration of regulatory measures should instead be focused upon monopoly providers, such as airports.

## International Connectivity And Hub Airports

### **5.9 How important are air transport connections – both international and domestic – to the UK at both national and regional levels?**

Air transport connections are very important to the UK given the facts of our geography, historical and cultural legacy of and the requirements of business and the economy.

Domestic air links allow fast and easy connectivity for Northern Ireland, the Isle of Man, Channel Islands and Scottish islands with the main island of the UK. Air transport connects the regions and nations of the UK with each other – for instance services linking Cardiff with Edinburgh and Belfast and routes such as Exeter in the South West to Newcastle in the North East. These services directly connect regions and nations, providing an alternative for passengers who may otherwise have to change between two London airports and are also in many cases quicker and more convenient than travelling by road or rail.

Services also provide a vital function in connecting remoter and less accessible destinations such as Inverness, Newquay and Anglesey to the national and international transport network. No other form of transport is currently able to offer the connectivity, speed and value for money that air travel does for these communities.

Analysis of CAA statistics show that 80% of domestic routes, carrying 60% of total domestic passengers are either over water or involve locations that cannot or will not be served by High Speed Rail<sup>18</sup>. Routes from regional airports, including connections to London, are supported and valued by individuals and businesses in the regions – something clearly illustrated whenever routes are threatened with being cut.

International connections are essential as the world becomes even more globalised and interconnected. In a competitive global market, the wider the range, greater the diversity and larger the number of international air service, the more beneficial these are to the economy and travelling public. As an example, only one UK airport, Heathrow, currently has direct services to China and serves two cities there (three if Hong Kong is included)<sup>19</sup>. This is the same as Helsinki – although Helsinki is actually increasing to four destinations from summer 2012<sup>20</sup>. Amsterdam, Paris and Frankfurt all serve more destinations in China and Paris and Frankfurt already boast 1000 more annual flights to the three largest cities in China than Heathrow<sup>21</sup>.

With a lack of capacity the UK is missing out on potential trade with China and is hampered in fully maximising its inbound tourism potential in other emerging economies and markets. There are 21 emerging market destinations with daily flights from other European hub airports that are not served from Heathrow. Worse still, Heathrow is losing routes due to capacity constraints and now serves only approximately 180 destinations compared to over 220 in the early 1990s. All this loss has been picked up by our European competitors at Frankfurt, Paris and Amsterdam, each of which serves between 220 and 260 destinations in total.

In short, air transport provides the choice and convenience demanded by travellers and business.

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<sup>18</sup> Calculated from Table 12.2, Domestic Air Passenger Route Analysis, 'UK Annual Airport Statistics 2010', CAA

<sup>19</sup> Heathrow airport online timetable, October 2011

<sup>20</sup> 'Finnair to open new route to Chongqing in China' Helsinki Airport website press release, 5<sup>th</sup> July 2011

<sup>21</sup> 'Connecting Britain for Growth: The Role of Britain's Hub Airport In Economic Recovery', Frontier Economics, September 2011

**5.10 As long as people and goods can easily reach their desired destination from the UK, does it matter if they use a foreign rather than a UK hub airport?**

Hub and spoke networks are not only a benefit to some airline; passengers benefit too. Passengers who want to fly to or from a hub airport enjoy better connectivity, because many routes and service levels would not be viable if other passengers were not transferring through the hub. As a result, passengers enjoy a wider range of routes and greater frequency on existing routes. They also enjoy lower fares because sharing their services with ‘spoke’ passengers spreads cost over a larger number of passengers and results in lower average fares.

A UK hub helps ensure the UK is at the heart of the air transport network rather than being on the periphery, meaning in the medium to long term there is more ability to retain and control route development as well as greater choice, quicker travel times and reduced cost for the travelling public and businesses.

If the UK surrendered its hub airport, either through a deliberate or misguided course of action, it is fair to say that it would result in the loss of many jobs, including highly skilled ones such as engineers and pilots. As far as we are aware, there is no evidence that these valuable jobs will continue in the UK if the country loses its hub airport.

The shipment of freight and express services – both inbound and outbound – via these alternative ‘foreign’ hub airports would be slower, more expensive and result in more emissions and potentially more congestion as some of it may be transported by road rather than by air.

There is a demand for greater connectivity and viable air transport services, but the UK does not have the capacity to fulfil this demand, so continental and other hubs are establishing their own feeder services from the UK. For instance, Amsterdam serves 23 UK routes (including the 5 London airports)<sup>22</sup> with many of the services being promoted as providing a connection at Amsterdam to onward long-haul destinations. The following table sets out the UK destinations served by Amsterdam Schiphol compared with London Heathrow and the other London airports:

**UK destinations served from Amsterdam Schiphol<sup>23</sup>**

Belfast (City and International)  
Aberdeen  
Edinburgh  
Glasgow  
Inverness  
Cardiff  
Birmingham  
Bristol  
Durham  
East Midlands  
Exeter  
Humberside  
Leeds Bradford  
Liverpool  
Newcastle

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<sup>22</sup> Flight Information, Schiphol Amsterdam Airport website, October 2011

<sup>23</sup> *ibid*

Manchester  
Norwich  
Southampton

London (Heathrow, Gatwick, Stansted, City, Luton and Southend will be added to this list from April 2012)

**UK routes served from London Heathrow<sup>24</sup>**

Belfast (City)  
Aberdeen  
Edinburgh  
Glasgow (International)  
Manchester  
Newcastle

**UK routes served from other London airports (Stansted, City, Gatwick, Luton)<sup>25</sup>**

Belfast (City & International)  
Derry  
Aberdeen  
Dundee  
Edinburgh  
Glasgow (International & Prestwick)  
Inverness  
Manchester  
Newquay  
Guernsey\*  
Isle of Man\*  
Jersey\*

\*Although not formally part of the UK, we are counting these routes as 'domestic' given the relationship and links the UK has with them.

Likewise, Emirates and Etihad have increased frequencies and developed new routes from the UK to their hubs in the UAE (Glasgow, Newcastle, Manchester, Birmingham as well as London are now feeding traffic into the Dubai hub of Emirates and London and Manchester are connected by Etihad to Abu Dhabi). The Government of Dubai adopted a proactive policy on developing and fostering growth in air transport, especially in recognising the importance and potential of transfer passengers and the beneficial economic effects can be seen. In doing so, they have followed in the paths of other governments such as Singapore and the Netherlands who over the last few decades have understood the role of hub airports and transfer traffic and facilitated the necessary infrastructure and support to allow Changi and Schiphol airports to fulfil their potential.

The question encourages a comparison with the approach taken by Government to other industries and the highly controversial debate as to whether it matters for the long term prospects of the UK if such a relaxed approach is taken to the future of national assets, industries and infrastructure and the resulting impact on the country's skills base, employment, tax receipts and prospects for rebalancing the economy away from over-reliance on financial services.

**5.11 Are direct connections from the UK to some international destinations more important than others? If so, which and why?**

In an internationally competitive market, such as that of aviation, airports and airlines need to offer a wide variety of routes and services to cater for all markets and business models. We do not believe therefore that it is particularly helpful or useful to try to 'measure' the importance or value of individual routes. A judgement on the relative importance of destinations would ultimately be up to the market to decide and for each airline or airport to react to the market demands, depending on

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<sup>24</sup> Flight Timetable, Heathrow Airport website, October 2011

<sup>25</sup> Flight Timetables, Stansted, City, Gatwick & Luton Airport website, October 2011

their business model. However, we are aware that due to capacity constraints, the UK is missing out on further growing its international air connections – for instance the 21 emerging market destinations with daily flights from other European hub airports that are not served from Heathrow.<sup>26</sup>

**5.12 How will the UK's connectivity needs change in the light of global developments in the medium and long term (twenty to fifty years)?**

The UK will need to remain connected and plugged into the world network, probably even more so than at present if we are to foster economic growth, attract foreign direct investment and develop our inbound tourism industry in an even more globalised and competitive environment. Links to destinations in the growing economies such as China, Brazil and India will undoubtedly become even more crucial.

**5.13 What are the benefits of maintaining a hub airport in the UK?**

A hub airport provides a wider selection of routes, facilitates growth in inbound tourism, business and trade and makes the UK a more attractive place to invest. A thorough and definitive study by the British Chambers of Commerce, in 2009, entitled 'The Economic Impacts of Hub Airports' said:

- The key benefit of a hub airport is that it can sustain a comprehensive and far wider network at a higher frequency of service than would be possible at a point-to-point airport.
- Transfer passengers make direct routes to many destinations sustainable, a pattern found across all major international hubs.
- Because of Heathrow's transferring passengers, UK residents have access to more direct destinations, at higher frequencies and lower priced fares.
- By adding flight capacity at a hub, the connectivity impact is magnified compared to adding point-to-point capacity. Hub airports offer a better service, more destinations and greater frequencies, than would otherwise be offered if that airport were only meeting local demand.

Many foreign governments have recognised these benefits for their countries as they support the development of their own hub airports, for instance in Singapore, Dubai, Frankfurt and Amsterdam.

**5.14 How important are transfer and transit passengers to the UK economy?**

For many airlines, transfer and transit passengers are very important and help maintain the viability of routes. Without these passengers, the routes would not exist to the detriment of UK connectivity. The reality is thus far removed from the tired cliché promoted by opponents of aviation that such passengers "only contribute the price of a cup of coffee at the airport" to the economy.

The potential value of transfer and transit passengers can also be demonstrated by the experience of airports such as Amsterdam, Singapore and Dubai which have focused on developing their appeal as global transfer hubs, in the process becoming destinations in their own right and playing major part in the vitality of the local tourism and business sectors.

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<sup>26</sup> 'Connecting Britain for Growth: The Role of Britain's Hub Airport In Economic Recovery', Frontier Economics, September 2011

These passengers also allow and facilitate the expansion of UK rather than foreign airlines and airports, with a resultant increase in high value jobs.

**5.15 What are the relative merits of a hub versus a point-to-point airport?**

Each has its own merits. The global aviation industry is based on hub and spoke for intercontinental and long haul routes, but point to point has its place and some carriers operate this model very effectively. In short, this depends on the business model and level of demand and it should be left to the market to decide.

**5.16 Would it be possible to establish a new 'virtual' hub airport in the UK with better connectivity between existing London and/or major regional airports? Could another UK airport take on a limited hub role? What would be the benefits and other impacts?**

We are unaware of an example of such a proposed 'virtual' hub operating successfully for passengers anywhere else in the world. Incorporating a regional airport such as Birmingham in a virtual hub, even with the use of High Speed Rail, would mean minimum connecting times between airports of 45 minutes to 1 hour. Connecting London airports together with new fast surface access infrastructure would be unfeasible, meaning that connection times would remain too too long and passengers would not choose to connect through London.

Dealing with large waves of passengers at certain times of day (such as early in the morning when flights from the Far East arrive) would pose significant challenges to the operation of a 'virtual hub' as would the reliance on one mode of transport (eg HSR) to provide connectivity over long distances with could not be replicated quickly or easily by other modes (coach or car) if needed due to problems caused by industrial action, severe weather or engineering faults.

Much of the demand for Heathrow services is generated by its geographical location and proximity to London. Many industries have located themselves west of London because of the proximity of Heathrow. Statistics show that many of the passengers arriving or departing Heathrow airport are from the London and South East area (72.8% in 2009<sup>27</sup>) and that many of the people flying into Heathrow from overseas (who are terminal or non-transfer passengers), especially tourists, will be visiting London. Developing a regional 'hub' would mean developing an airport in area of the UK that many passengers would not be planning on visiting and therefore require onward transportation to their ultimate destination, resulting in greater travel times, cost, emissions, risk of disruption and conversely less convenience and a reduction in competitiveness.

In theory of course, much is possible, but we would contend that the UK could only support one hub airport, mainly due to a lack of both critical mass and the demand from passengers. Unsuccessful attempts have been previously been made to develop hub operations at other UK airports, notably by British Airways (and before it British Caledonian) who invested considerable resources into trying to develop Gatwick.

With their recently acquired Finnish regional interests Flybe are now building connectivity on the continent, alongside British Airways and Iberia of International Airlines Group at Madrid Barajas and bmi as part of the Lufthansa group. If the capacity is not available within the UK to meet business needs for growth, airlines will look elsewhere.

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<sup>27</sup> Table 4.3a, 'Passenger Survey Report 2009', CAA, October 2010

All the evidence points to two facts; i) the UK can only support one hub airport and ii) to be a successful hub requires a minimum (and significant) base level of demand.

## **Regional Connectivity And Regional Airports**

### ***5.17 Can regional airports absorb some of the demand pressures from constrained airports in the south-east? What conditions would facilitate this?***

Passengers want to use their local airport, even if only to connect via a hub and some are willing to pay a significant price premium to do so if necessary. There is a clear role for regional airports serving local demand, but passengers from Guildford will not travel to Manchester or even Birmingham. The UK is a market economy and should not be in the business of telling consumers how they should travel.

As much of the demand originates in the South East, there is a limit to how much regional airports can assist in absorbing excess demand. Our comments in response to question 5.16 are also applicable.

Figures for 2009 (the latest available) produced by the CAA show that at Gatwick, the South East region (including London) was the origin or destination of 79% of terminating passengers, with the next largest regions being the East of England responsible for 9.1% and the South West 5.2%. The figures for Heathrow were similar, with 72.8% of terminating passengers starting or ending their journey in the South East, 9.4% in the East of England and 6.9% in the South West<sup>28</sup>. The definition of a terminating passenger is 'a passenger who arrives at or departs from an airport by surface modes of transport.'

Likewise, figures from the ONS demonstrate that London had by the largest number of visits from overseas residents in 2010 – nearly 50% all of visits to the UK involved the capital while nearly 65% of visits by overseas residents were to the wider South East region, including London<sup>29</sup>. As 72% of all visits by overseas residents to the UK in 2010 were made by air compared with 15% and 13% by sea and the Channel Tunnel respectively<sup>30</sup>, it is apparent that a significant number of these visits to London and the South East were undertaken by air.

### ***5.18 What more can be done – and by whom – to encourage a switch from domestic air travel to rail?***

Only a small proportion of domestic air travel can be 'switched' to rail. Aviation should be viewed and considered as party of wider transport policy rather than in isolation. Rather than being an alternative or substitute, it is complementary and supplementary to domestic rail travel.

Unarguably, some shift from air to rail is occurring, notably on the London to Manchester route but we believe both modes can co-exist and work together. It must be kept in mind that people want to travel not just from city centre to city centre as usually is the case with rail, but region to region as air more easily allows. Travellers may also want to transfer at an airport for an onward flight. Cost may also be an issue for some travellers; as the former Secretary of State for Transport said on 13<sup>th</sup> September, "Uncomfortable fact perhaps No. 1 is that the railway is already relatively a rich man's

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<sup>28</sup> ibid

<sup>29</sup> Table 4.2, 'Travel Trends 2010', ONS, July 2011

<sup>30</sup> Table 4.10, 'Travel Trends 2010', ONS, July 2011

toy-the whole railway”<sup>31</sup>, seeing annual increases of upto 13% for some regulated fares from January 2012 alone, while domestic airfares reflect the efficiency, competitiveness and low margins of the sector and rail is highly subsidised (to the sum of £4 bn in 2010-11<sup>32</sup>). Convenience and speed also count in the favour of domestic air travel, certainly for cross country, inter-regional routes such as Exeter to Newcastle, Cardiff to Edinburgh or London to Aberdeen or Inverness. One of the reasons for modal shift is a lack of airport capacity, especially at Heathrow.

It should not automatically be assumed that rail is always more efficient – it may be city to city journeys, but is not on ‘thinner’ point to point routes.

In short, there are a myriad of different reasons and decisions for people’s travel choices and each journey taken is unique. An extensive high speed rail network that covers the majority of the country would, to our mind, be required in order to attract significant numbers of domestic air passengers to replace their journeys with rail travel (though of course Northern Ireland, the Highlands & Islands, Channel Islands, Isle of Man and perhaps the Devon and Cornwall and Wales would be unlikely to be plugged into HSR).

In countries with extensive High Speed Rail networks, domestic aviation is still an important transport mode and it is misleading to claim otherwise. In Germany, Berlin and Frankfurt each have more air links to other German cities (14 and 15 respectively<sup>33</sup>) than Heathrow has to UK cities and the two Paris airports serve 30 domestic French destinations between them<sup>34</sup>, while Madrid Barajas also offers flights to 30 other Spanish airports, of which 20 are in mainland Spain<sup>35</sup>.

#### **5.19 How could the benefits from any future high speed rail network be maximised for aviation?**

Heathrow and maybe other airports should be directly connected to the proposed High Speed Rail network.

The UK is different from countries on mainland Europe with HSR in that we are an island and there is a physical restriction in capacity of rail services to the continent in the form of the one existing Channel Tunnel. We believe that it is unrealistic to claim that this one rail link will support the necessary rail services to accommodate all the passengers currently flown from UK airports, or indeed just Heathrow, to short haul destinations, in order to “free up” capacity at those airports for longer haul services. Indeed, as we have seen in recent years, when the Tunnel or the services that use it experience disruption due to weather, industrial action, engineering problems or incidents such as fires, our High Speed Rail link with the rest of Europe effectively ‘seizes up’.

#### **5.20 How can regional airports and the aviation sector as a whole support the rebalancing of the economy across the UK?**

They can only respond to the market and as previously stated, as commercial operators they have to ensure that they do not make a loss and provide services that are economically viable. There are no significant barriers to expansion by regional airports, which usually have strong local support. The only problem is lack of demand and Governments shouldn’t seek to generate demand artificially.

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<sup>31</sup> High Speed Rail Oral Evidence Session, Uncorrected Evidence, House of Commons Transport Select Committee, 13<sup>th</sup> September 2011

<sup>32</sup> Table 6.2a, ‘National Rail Trends Yearbook 2010-11’, ORR, July 2011

<sup>33</sup> Flight Information & Timetables, Berlin and Frankfurt Airport websites, October 2011

<sup>34</sup> Flight Information & timetables, Paris Airports website, October 2011

<sup>35</sup> Destinations, Madrid-Barajas Airport website, October 2011

## **Making Better Use Of Existing Capacity**

### ***5.21 To what extent do UK airports meet the needs of their customers? How might those needs be more effectively met within existing capacity? What is the right balance between competition and regulation?***

The needs of ‘customers’ (we assume that the consultation document is defining these as passengers rather airlines) are being met by airports in the UK regions. The situation at Heathrow is less clear cut as most of Heathrow’s problems stem from a shortage of capacity.

Regarding the balance between competition and regulation, we believe that there is less of a case for economic regulation in the airline sector, where there is a very vigorous and competitive market with significant amounts of choice. However, there is a place for an appropriate regulatory approach in a situation where there is a monopolistic provider, such as an airport.

We do wish to make the point that BATA believes that airlines are important customers of airports and thus act as the representatives of passengers. We continue to express our belief that the forthcoming Economic Regulation of Airports Bill should acknowledge and incorporate this definition.

### ***5.22 How can we extract more capacity out of the UK’s airport infrastructure? Can we do this in a way which is environmentally acceptable? To what extent might demand management measures achieve this?***

On a macro level, the report by the Committee on Climate Change found that UK aviation could grow sustainably by up to 60% over the next 40 years without impacting the UK’s climate change commitments<sup>36</sup>. Sustainable Aviation and the UK aviation industry is committed to improving and minimising the environmental impact of aviation and will continue to identify opportunities and promote best practice within the industry.

We do not believe that this question properly addresses the regional variations in the UK aviation industry, which are driven by passenger demand and the market. Capacity is restricted in the South East, where demand for air transport services is greatest and therefore there is less ability to extract more capacity out of the existing infrastructure. Heathrow continues to operate at near 100% capacity even with continuing reductions in domestic services.

In a global and highly competitive industry, any demand management measures implemented by the UK government could have far reaching and disastrous consequences for the economy, jobs and our connectivity with the rest of the world.

### ***5.23 How can we support Heathrow’s hub status within the constraints of its existing capacity? Can we do this in a way which is environmentally acceptable?***

Instead of a ban on increasing capacity as is the case at the moment, Government should set the aviation industry a challenge to cap CO<sub>2</sub> and noise and if agreed targets are met, then growth would be allowed.

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<sup>36</sup> ‘Meeting The UK Aviation Target – Options For Reducing Emissions To 2050’, Committee on Climate Change, December 2009

**5.24 How important is increased resilience at the UK's major airports to reduce delays? How best could resilience be improved with existing capacity, e.g. how might trade-offs between existing capacity and resilience play a role in this?**

Increased resilience is always welcome at busy and congested airports. The recently published South East Airports Taskforce report and associated ministerial statements go some way to increasing resilience at Heathrow, with trial periods for greater operational freedoms at Heathrow, but there will be a limit on progress as long as Heathrow's capacity is restricted.

**5.25 Could resilience become an issue at regional airports? If so, how might this be avoided?**

Resilience could become an issue at regional airports in the future and such problems will be best avoided by ensuring that these airports have sufficient capacity, although this situation is unlikely to occur for some time given the spare capacity currently available. Government needs to permit airports to grow if unmet demand than can be accommodated within environmental limits.

**5.26 Could existing airport capacity be more efficiently used by changing the slot allocation process, for example, if the European Commission were to alter grandfather rights? If so, what process of slot allocation should replace it?**

We do not believe that this is a practical proposal. However, we would welcome the proper enforcement of the process throughout the rest of the EU. The underlying problem however, capacity shortage, should be addressed at source by increasing capacity, not indirectly by an inappropriate means which would probably produce negative side-effects.

**5.27 What provision, if any, should be made for regional access into congested airports?**

We do not believe that there should be any ringfenced slots or other regulatory measures to ensure regional access into congested airports and nor should there be any punitive measures taken to limit or reduce regional services into such airports. In order to accommodate demand for regional services, congested airports should simply be allowed to grow. The market will decide the optimum use of scarce capacity and at congested airports capacity is always likely to be scarce.

**5.28 What provision, if any, should be made for General and Business Aviation access into congested airports?**

The current slot allocation process takes care of this issue and the current mechanism works when there is spare capacity. If the airport is operating at or near capacity then there should be no special provision made for General and Business Aviation as there are plenty of small airfields available that can be easily used by these services instead.

**5.29 What is the role of airspace design and air traffic management in making better use of existing capacity?**

All governments across the EU have a key role in ensuring efficient design and use of airspace and that initiatives such as the Single European Sky are progressed. Current airspace and air traffic architecture in Europe results in significant unnecessary fuel burn, emissions and cost. A less parochial approach and more determined effort by national governments would benefit the environment, industry and the travelling public. Governments should aim to ensure there is sufficient airspace, efficiently controlled, to meet demand.

## Climate Change Impacts

### 5.30 What do you consider to be the most significant impacts of aviation, including its non-CO<sub>2</sub> emissions, on climate change? How can these impacts best be addressed?

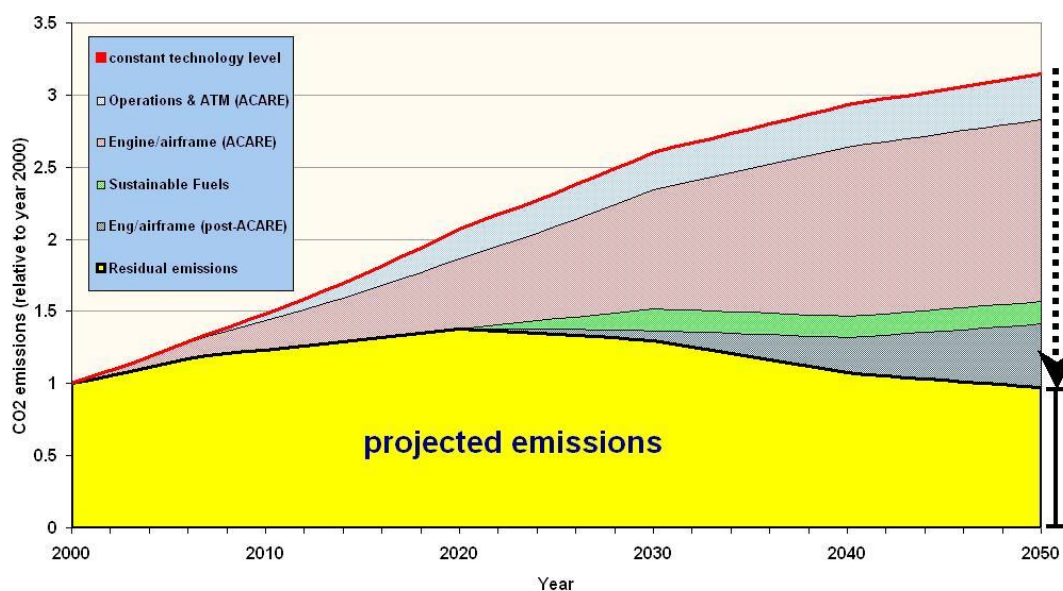
Aviation's climate change impact is relatively small but growing. It is responsible for around 6% of the UK's total CO<sub>2</sub> emissions<sup>37</sup> and 3% of the total man-made contribution to climate change<sup>38</sup>.

Aviation also has non-CO<sub>2</sub> impacts. The main non-CO<sub>2</sub> impacts associated with aviation are related to oxides of nitrogen (NO<sub>x</sub>), condensation tails (contrails) and cirrus cloud formation. The science around aviation's non-CO<sub>2</sub> impacts is less certain than that for carbon. Without further research there is always the risk that action to restrict these non-CO<sub>2</sub> emissions will actually do more harm than good. Governments, international bodies, regulators and industry need to proceed carefully.

The Intergovernmental Panel on Climate Change (IPCC) estimates that aviation will account for 5% of man-made climate change in 2050, including aviation's non-CO<sub>2</sub> impacts. BATA, as a member of Sustainable Aviation, subscribes to the position that the aviation industry will reduce its actual carbon emissions through a combination of the following:

- Technology
- Sustainable alternative fuels
- Operational improvements

While it may take time to deliver technological and alternative fuel solutions, we can deliver net reductions in carbon through emissions trading in the shorter-term. SA fully supports the inclusion of aviation in the EU ETS as a first step to aviation being incorporated into a robust global policy framework. However, Government must ensure that EU airlines are not discriminated against.



*Sustainable Aviation CO<sub>2</sub> Roadmap (from: Sustainable Aviation, "Sustainable Aviation CO<sub>2</sub> Roadmap")*

<sup>37</sup> 'Air Transport Statistics', House of Commons Library Standard Note, July 2011

<sup>38</sup> International Air Transport Association

The figure above illustrates SA's current view of probable future emissions from the UK aviation industry. Whilst absolute emissions from aviation will not be cut before 2020, there will be net reductions elsewhere as a result of emissions trading.

The road map quantifies the combined impact that the implementation of a range of operational measures and practices will have on emissions from UK aviation. It projects that it is entirely possible for UK aviation to get its net emissions down to 2000 levels by 2050. SA is currently updating the roadmap to reflect the most up-to-date passenger demand and CO<sub>2</sub> forecasts.

SA is currently engaged, through Professor Piers Forster, in identifying ways in which the industry can help develop fuller understanding of the non-CO<sub>2</sub> atmospheric effects of aviation. In the meantime, the impacts of NO<sub>x</sub> and contrails should be considered separately from the impact of CO<sub>2</sub> rather than being treated as equivalent CO<sub>2</sub> emissions.

SA supports an approach that addresses all the climate change impacts of air transport based on robust science and sound economics. The ongoing development of non-CO<sub>2</sub> climate science is a necessary step in guiding the aviation industry in the right direction to find genuinely sustainable solutions for the future.

**5.31 What role should aviation play relative to other sectors of the economy in reducing greenhouse gas emissions in the medium and long term?**

BATA members and the wider aviation industry recognise that they have to continue playing their part in reducing aviation's climate change impact. With SA, we are firmly committed to working collaboratively to deliver net and actual reductions in emissions.

Kerosene does of course remain a core requirement for the aviation industry, but we take this opportunity to point out that according to the 'Aviation Emissions Cost Assessment' exercise undertaken by DfT in 2008, aviation more than meets its climate change costs<sup>39</sup> (and that was calculated using the lower 2007 levels of APD and higher emissions than today).

We welcome the CCC's recognition that a combination of technology, alternative fuels and operational improvements will help reduce emissions from UK aviation over time. We also welcome the Committee's recommendation that aviation could grow by 60% upto 2050 without risking the UK's climate change targets. We note that the Committee's recommendation was made on relatively conservative assumptions and we believe the industry can deliver above and beyond those expectations.

**5.32 How effective do you believe the EU ETS will be in addressing the climate impacts of aviation? Should the UK consider unilateral measures in addition to the EU ETS? If so, what?**

BATA supports the introduction of a world-wide Global Deal. This is the responsibility of the world's governments.

We believe the EU ETS could do a considerable amount to address the CO<sub>2</sub> impacts of all industries including aviation. However, Government must ensure that EU airlines are not discriminated against or face competitive disadvantage from non-EU airlines through the operation of the scheme.

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<sup>39</sup> 'Aviation Emissions Cost Assessment', DfT, 2008

UK airlines already pay the highest taxes on flying in the EU. Consequently, APD should be phased out from 2012 and other unilateral measures should not be implemented; we do not believe that unilateral measures are effective or efficient tools in the context of a globalised air transport network and pose the risk of competitive distortion and unforeseen consequences. Aviation should pay its fair share of taxation, but should not be aggressively penalised or UK jobs and businesses will pay the price.

The ETS should be applicable to all airlines flying within, into and out of the EU; meaning a level playing field with no 'equivalent measures' offered as a compensatory mechanism by non-EU states.

**5.33 What is the best way to define and quantify the UK's share of the CO<sub>2</sub> emissions generated from international aviation?**

The best approach is to treat the industry as a global sector with its own carbon budget. However, in the absence of such a system, the best way to calculate emissions should be based on the amount of fuel burnt by international flights departing UK airports.

**5.34 What is the potential for increased use of sustainable biofuels in aviation and over what timeframe? What are the barriers to bringing this about?**

*and*

**5.35 What mechanisms could the Government use to increase the rate of uptake of sustainable biofuels in the aviation sector? In particular, how can we accelerate the successful development of second generation biofuels?**

Globally, the aviation industry burns over 200 million tonnes of fuel per year. This gives an idea of the scale of a potential market for sustainable jet fuels.

The development of alternative fuels for aviation has sped up in recent years. The main challenge now is for sustainable biofuels to become commercially and economically viable. In order to assist with this, a number of policy measures could be implemented. Firstly, some of the revenue generated for the Government by aviation's entry into the EU ETS could be ringfenced for cultivation, processing and refining capacity for such feedstock.

Secondly, the UK Government could reverse its decision not to let aviation on fuels be eligible for Renewable Transport Fuel Certificates. This puts the UK at a disadvantage compared with other EU member states that have taken a more forward thinking and enlightened view on this issue.

Government could also directly support research and development, perhaps through mechanisms such as loan guarantees.

**5.36 Which technologies (e.g. for aircraft and air traffic management) have the most potential to help reduce aviation's CO<sub>2</sub> emissions (noting potential trade-offs with local environmental impacts)?**

Aviation has a strong track record in delivering fuel-efficient technology. Today's aircraft are 70% more fuel efficient than 40 years ago<sup>40</sup>. The SA road map sets out how carbon emissions from aviation can be reduced through a combination of technology, operational improvements and sustainable biofuels.

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<sup>40</sup> International Air Transport Association

We are confident that we can meet with projected reductions in the roadmap. However, there is no single technological or operational silver bullet. Improved carbon efficiency will be delivered through a combination of incremental technological improvements – for example adding winglets to aircraft – and more radical step changes such as open rotors or blended wing technologies.

While technological improvements will see overall improvement in terms of carbon, noise and NOx performance, at the margin there are invariably a number of interdependences between optimising one environment effect over another. For example, future open rotor engines are likely to be quieter than today's turbofan but a trade-off exists between their fuel-burn advantages and the noise-reduction potential. At the moment, it is unclear which environment effect Government and policy makers would wish manufacturers to focus on.

**5.37 What more could be done to encourage the aviation industry to adopt new technology to reduce its climate change impacts?**

UK airlines have made enormous strides in reducing both fuel burn and emissions as well as improving their environmental impact. A vigorous, competitive industry will continue to seek out new technology and procedures in order to help reduce fuel burn. UK airlines will be among the first to use the new Boeing 787, with over 50 orders placed to date<sup>41</sup>. Government can assist by ensuring a level playing field and the removal of barriers demonstrating support for the industry rather than holding it back.

The cost of fuel is one of the biggest overheads an airline faces. This financial burden creates a strong economic incentive to invest in cleaner technology as soon as it becomes available. The inclusion of aviation in the EU ETS will add a further financial incentive from the start of 2012.

The UK has the advantage of a strong and competitive aerospace industry, which, through global exports, is able to influence aviation emissions world-wide. Aerospace is the UK's second largest export and the Government should consider increased support for research and development in recognition of the economic opportunities offered by the global reach of such industry.

**5.38 What more can the UK aviation industry do to reduce the climate change impact of its ground operations and surface access to and from the airport (which can also help reduce local environmental impacts)?**

Airlines employ operational procedures such as single engine taxiing to reduce fuel burn and have every incentive to improve efficiency. However, surface access is a primarily an issue for airport operators, local and national government and bodies like TfL, Network Rail and the Highways Agency as well as transport providers such as train operating companies and bus and coach companies.

As we have seen with changes by the Train Operating Company to timetabling, the introduction of stops and inappropriate rolling stock on London to Gatwick services, vital existing rail links to airports can be easily devalued, through no fault of the aviation industry.

Convenience and cost is the key requirement for many passengers when they make decisions about their surface transport to and from an airport. Therefore private car travel will often be the most attractive for many, such as families going on their annual summer holiday and needing to transport young children and significant luggage or those passengers travelling early in the morning or late at night when other forms of surface access tend to be more restricted and less frequent.

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<sup>41</sup> '787 Orders & Deliveries', Boeing, September 2011

**5.39 What scope is there to influence people and industry to make choices aimed at reducing aviation’s climate change impacts, e.g. modal shift, alternatives to travel, better information for passengers, fuller planes, airspace management (which can also help reduce local environmental impacts)?**

There is limited scope for modal shift or alternatives to travel as evidenced by the Committee on Climate Change in its 2009 Report on Aviation, which said:

“Modal shift can offer a useful contribution to meeting the 2050 target, particularly if a new UK high-speed line is built and the European network becomes more fully integrated. However, the potential emissions reduction is relatively small in the context of the overall aviation target, reflecting the relatively small share of domestic and short-haul aviation emissions in total UK aviation emissions.

It is unclear how videoconferencing will impact the demand for business travel. Based on current evidence, however, we cannot be confident that this effect will be significant. We reflect uncertainty over the potential impact of videoconferencing in a range of penetration from no net impact on business air travel demand (which models a world where there are rebound effects, and where videoconferencing is additional rather than a substitute for business travel) to a 30% reduction in business air travel demand in 2050, which is consistent with the high end estimated in the academic literature and current best practice (e.g. as achieved by BT and Vodafone).”

Regarding the question of further cope to encourage ‘fuller planes’, BATA is proud to report that the average load factor for UK airlines in 2010 was a record high of 82% up from around 76% in 2001<sup>42</sup>. In today’s industry, airlines will always respond to the pressures such as the cost of fuel and excess capacity if there is a decrease in demand, by working to increase load factor on the services they operate. An average of 82% of seats filled every day of the year means aircraft are effectively full.

In general, we do not believe that it is appropriate to use airspace management as a tool of government environmental objectives.

## **Local Impacts**

**5.40 What do you consider to be the most significant impacts – positive and negative – of aviation for local communities? Can more be done to enhance and/or mitigate those impacts? If so, what and by whom?**

Employment (both direct and indirect), economic prosperity as well as connectivity and access to transport networks for communities are significant positive impacts of aviation for local communities.

We recognise that noise is obviously an issue for some people near airports – and is an issue that can be particularly emotive and subjective. We would argue that much effort has been made by airports to mitigate local noise impacts and that manufacturers and airlines have worked together to ensure that engine noise has decreased over the years, resulting in much quieter aircraft.

However, many people choose to move near to airports or to locations under flight paths and some can often be from the very socio-economic groups that have the highest propensity to fly.

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<sup>42</sup> Calculations from ‘UK Annual Airline Statistics 2010’, CAA

Many local noise action groups have far fewer supporters than there are employees at the local airport. We assert that there is little evidence of property blight around Heathrow or under its flightpaths.

The aviation industry in the UK directly employs 326,000 people and airports tend to be major employers within their local economies. As many as one in ten people in employment in the five boroughs around Heathrow have a job at the airport and further 100,000 have jobs that depend on airport related-activity.

In addition to jobs and skills, many airports run community investment programmes. This can range from employees volunteering in local schools, to grant making schemes for local charities or projects. Section 106 agreements for airport developments are often significant amounts of money that provide funding and support for community development initiatives.

Through SA, BATA has a commitment to explore the social and economic value of the aviation industry, including the impact on the local communities, over the next twelve months. SA will be happy to share its findings with Government as this work progresses.

There are two main negative impacts for communities living close to airports – the effect of aircraft noise and emissions in local air quality.

SA has a goal to limit, and where possible, reduce the impact of aircraft noise and supports the ICAO balanced approach, which seeks to minimise the impact of aircraft noise through the following:

- Developing quieter aircraft
- Introducing quieter operating procedures
- Land use planning to avoid sensitive developments
- Where necessary introducing proportionate operating restrictions.

**5.41 Do you think that current arrangements for local engagement on aviation issues, e.g. through airport consultative committees and the development of airport master plans, are effective? Could more be done to improve community engagement on issues such as noise and air quality? If so, what and by whom?**

There is already a well-established and advanced system which operates perfectly well. We feel that representation on such local consultative committees should be restricted to local stakeholders and those who have a commercial interest in the operation of the airport.

**5.42 Do you think that current arrangements for ensuring sustainable surface access to and from airports, e.g. Airport Transport Forums and airport surface access strategies, are effective? Could more be done to improve surface access and reduce its environmental impacts? If so, what and by whom?**

The key is the provision of cost effective surface transport access both for passengers, freight and aviation industry employees.

If regional airports are to provide the answer to demand and facilitate greater UK wide capacity, in accordance with Government policy, then Government needs to ensure and establish better surface access to regional airports. The current situation is very variable; for instance our members report that surface access to Southampton airport is good while surface access to Leeds/Bradford, Exeter, Cardiff, Inverness and Bristol airports is poor.

Encouraging greater use of public transport and modal shift from private vehicles is a worthy and laudable aim, but raises the question of who pays for new services and infrastructure. If costs are passed onto the travelling public or services are viewed as revenue raisers, then this will act as a barrier to further modal shift. As an illustration, the Heathrow Express, which is operated by BAA and provides a fast and efficient service between Central London and Heathrow, costs between £32 and £50 for a return ticket which when multiplied by 4 for family visiting the UK on holiday is a significant sum. Services also need to be attractive to prospective passengers in terms of rolling stock, timetabling and the number of stops and these are all issues affecting the current and future operation of the Gatwick Express and other Central London/Gatwick rail services.

We were disappointed that the long awaited Airtrack scheme, which would have further improved rail access to Heathrow, was withdrawn by BAA earlier this year and believe that Government could have done more to support it and work with BAA to overcome the issues about impact on road traffic and funding.

**5.43 What are your views on the idea of setting a ‘noise envelope’ within which aviation growth would be possible, as technology and operations reduce noise impacts per plane? What do you consider to be the advantages and disadvantages of such an approach?**

We support this approach if growth can still take place while keeping within the agreed ‘noise envelope’ and indeed would support a similar approach being applied to emissions. We are happy to engage with Government on exploring this issue in more detail and welcome the challenge posed by such a policy.

Establishing a noise envelope for individual airports is a sensible approach and there are already a number of examples of different ‘noise envelopes’ in place at UK airports, for example:

- Decibel contour limits
- Night time quota counts
- Movement caps

A basic principle for BATA and SA is that aviation should be allowed to grow within specified environmental limits on noise, without movement caps. If the industry is to be encouraged to research and deploy innovative approaches to environmental problems then it should be rewarded with access to growth. Alongside carbon, noise is a priority for the industry – we are confident that technology, operational practices and mitigation will allow us to grow within a noise envelope.

It is also important to avoid a ‘one size-fits-all’ approach on noise envelopes. While some airports have a major noise issue where a noise envelope might be helpful, others have managed to significantly reduce noise complaints through more effective community engagement.

**5.44 Is it better to minimise the total number of people affected by aircraft noise (e.g. through noise preferential routes) or to share the burden more evenly (e.g. through wider flight path dispersion) so that a greater number of people are affected by noise less frequently?**

As an airline trade association, BATA is not in a position to provide an authoritative response about the best interests of local residents at airports across the country, which all have different and unique circumstances when it comes to noise issues. However, minimising the total number of people exposed to aircraft noise has been a long-established policy at many of the UK’s airports and

the aviation industry has worked diligently to design, build and operate ever quieter and more efficient aircraft.

**5.45 What is the best way to encourage aircraft manufacturers and airlines to continue to strive to achieve further reductions in noise and air pollutant emissions (notably particulate matter and NOx) through the implementation of new technology?**

Competition and the market will create the optimal conditions and environment for the development and adoption of such technology. Airlines, as businesses, will always want to reduce fuel burn and will see individual competitive advantages in quieter, more fuel efficient and less polluting aircraft.

We do not believe that yet more regulation or legislation is required.

The aviation industry has set itself stretching goals to achieve reductions in noise and air pollutant emissions. Flightpath 2050 sets a goal for aircraft entering service in 2050 to deliver a 90% reduction in NOx and a reduction in perceived noise.

As indicated above, fuel costs remain the single biggest financial incentive to develop cleaner aircraft. However, noise is also a major constraint in terms of aviation growth in the UK and manufacturers respond accordingly.

Government support for research and development could also further incentivise new technologies. As discussed earlier in this submission, the UK has global reach through its aerospace technology. Supporting the development of cleaner and quieter aircraft technology is a real economic opportunity for the UK.

We would also encourage the Government to explore and understand the interdependencies that exist between noise, NOx and carbon improvements. While future engine technologies will see overall performance improvement across all three measures, interdependencies do exist and as regulations become more stringent, the relevant trade-offs become more difficult to address. We would recommend regular dialogue between Government and industry to improve understanding on this topic as environmental regulation is developed.

**5.46 What are the economic benefits of night flights? How should the economic benefits be assessed against social and environmental costs?**

The economic benefits of night flights have been thoroughly considered in a number of documents and studies published in recent years. Night flights allow the best use of scarce capacity and are an essential feature of cargo operators and mail services, which in turn support a wide range of manufacturing and services industries. Night flights are also crucial to airline operations including charter aircraft, where the high utilisation of aircraft means a departure or arrival during the night period. Such high utilisation of aircraft results in more economical fares and therefore more families able to take package holidays than would otherwise be the case. Scheduled services, both short-haul and long-haul, also have a requirement for night flights. Arriving flights, especially those from the Far East and those into Heathrow, cannot be rescheduled because of limitations at their points of departure and slot shortages at Heathrow. As we have already demonstrated, some passengers on these flights will be connecting at UK airports – primarily Heathrow – and contrary to some claims, they are extremely valuable as they facilitate and allow airlines to operate services on thinner routes which would be uneconomical without this transfer traffic. As Heathrow is at capacity, reducing night flights would effectively mean a reduction in the number of slots and services available.

It has been calculated a reduction in the current number of night flights between 2002 and 2022 would result in a cumulative reduction in UK GDP of £33billion. Night flights are essential for businesses in London to continue to trade, invest and export<sup>43</sup>.

As aircraft are now quieter than ever before, there is no argument to further increase night flight restrictions at Heathrow.

**5.47 *How can the night flying regime be improved to deliver better outcomes for residents living close to airports and other stakeholders, including businesses that use night flights?***

To avoid issues of competitive advantage, we believe that the best and most effective approach is the implementation and application of international noise standards on a phased and gradual basis rather than aiming to enforce outright bans or restrictions.

**5.48 *Should extended periods of respite from night noise be considered, even if this resulted in increased frequency of flights before or after those respite periods?***

No. We strongly support keeping the existing arrangement. Evidence from successive studies into sleep disturbance, shows that people are most disturbed by sudden loud noises, rather than steady rising and falling noise as generated by aircraft on approach or take off from airports. Furthermore, the requirements and restrictions on aircraft movements at UK airports created by the availability and timing of associated slots at overseas airports and airline schedules around the world, together with a lack of capacity would mean an extension of night noise respite resulting in major detrimental impacts for passengers, business and UK plc.

## **Any Other Comments**

**5.49 *If you have comments on any strategic issues not covered in this scoping document, which you consider to be relevant to the development of the aviation policy framework, please include them in your response.***

Well into the Coalition's term of government, we are only at the first stage of having any sort of aviation policy for Britain.

At a time when the UK is suffering arguably its worst ever economic recession and the highest levels of unemployment in seventeen years, we can ill afford continued indecision from Government on permitting private investment for the future of the public good.

We need firm action to rebalance the economy. By refusing permission to airports to construct new infrastructure where new capacity is urgently needed, the Government is putting at risk Britain's ability to win business with new emerging world economies because we do not have the air services with them that we so desperately need.

Approval of privately funded airport expansion would represent excellent value for UK plc especially where approval has already been given by the previous government following a long period of consultation where all the evidence for and against was fully considered. At a time of economic crisis, it's decisions we need, not further consultation. Successive Governments have been consulting

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<sup>43</sup> 'London Business: The Economic Benefits of Night Flights' London Chamber of Commerce and Industry, 2004

on the future of aviation and new runway capacity for decades. Instead we need a Government able to grasp the nettle and take a bold decision if we are not to damage permanently our economic prospects. We urge the new Secretary of State to recognise that further procrastination will cost Britain dearly in terms of lost business and jobs.

**British Air Transport Association**  
**October 2011**