

Virgin Atlantic Airways response to the Airports Commission Discussion

Paper 02: Aviation Connectivity and the Economy

Virgin Atlantic is pleased to submit evidence to the Airports Commission. Over 28 years we have grown from a start-up airline to the UK's second largest global airline. We carried 5.28 million passengers and 210,000 tonnes of cargo in 2011.¹ We employ 9,000 people and operate 40 wide-bodied aircraft, serving 30 destinations across four continents from four UK airports.

Nature of Connectivity and its drivers

Do you agree with the definition of connectivity of definition presented in the paper?

We agree with the broad definition of aviation connectivity. Aviation connectivity can be crudely defined as a combination of number of destinations served and frequency of flights, but the value of connectivity is affected by other factors, including the geographical spread of destinations, affordability, convenience, reliability, journey time, and accessibility.

For example, if every single airport in the UK offered expensive flights at inconvenient times to every single airport in Europe but no other international destination, the UK would rank fairly highly in relation to many countries based on number of destinations and frequencies. However, it would be hard to argue that the UK would have strong aviation connectivity if there were no direct flights to the four other continents.

Do you agree with the assessment we have made of the UK's current aviation connectivity?

The analysis is generally sound. While the UK currently enjoys a high level of connectivity, particularly to Europe, North America and other established routes (i.e. Hong Kong), connectivity is less strong to Asia and the Far East and Africa and relatively weak to South America. There are also a number of warning signs which suggest that the severe capacity constraints at Heathrow are starting to bite. We would particularly highlight the following findings.

- The total number of destinations served daily from UK airports has declined since 2007.
- The majority of the best served destinations are short-haul with leisure appeal or to well-established destinations like the USA.
- The UK currently serves a large number of international transfer passengers that make a wider range of routes viable.
- Heathrow plays a unique role in supporting both London's and the UK's connectivity (e.g. serves 70% of all long-haul passengers).
- Although London has five airports, Paris serves the same number of destinations in Asia and many more destinations Africa and Frankfurt serves more destinations in Asia.
- Frankfurt serves more destinations in the BRIC economies than Heathrow and the frequency of Heathrow's BRIC connections has recently declined.

Furthermore, the CAA has noted in a recent paper that progress in agreeing further liberalisation and opening up of new routes to the new UK is being made more difficult by a lack of available capacity at Heathrow. They note that: *this suggests that the perceived lack of access to slots at Heathrow is limiting the UK Government's efforts to liberalise*².

Finally, this discussion paper (echoing the Government's Aviation Policy Framework) points to Gatwick's ability to attract new long-haul services. Whilst Gatwick is currently attracting some airlines serving long-haul routes, we question their long term viability and expect airlines to move to Heathrow when they are able to secure scarce Heathrow slots. The paper (and the Policy Framework) does not point out that Gatwick has recently lost long-haul services to Heathrow. For example, Delta dropped its Gatwick-Atlanta route in 2012, the carrier's last route from the airport, and started an additional

¹ www.caa.co.uk/docs/80/airline_data/2010Annual/Table_0_1_6_All_Services_2010.pdf

² http://www.caa.co.uk/docs/589/CAA_InsightNote1_Aviation_Policy_For_The_Consumer.pdf

Heathrow-Atlanta frequency.³ In March 2013, US Airways was awarded operating slots for a daily direct service between Heathrow and Charlotte and dropped its Gatwick-Charlotte service.⁴ The Commission should consider whether airlines like Air China have been forced to choose a sub-optimal outcome because Heathrow is full rather than making a positive choice of Gatwick due to competition.

What factors do you think contribute to the fact that the UK is directly better connected to some regions of the world than others?

Aviation connectivity is driven by demand: routes are served where enough passengers wish to fly. It is undoubtedly true that historic and cultural factors have partially determined demand patterns in the UK aviation market. Strong connectivity to Hong Kong, India and New York and many Commonwealth countries provides clear evidence. A similar pattern can be seen at some of the European hub airports (e.g. Madrid's links to Latin America and links to Africa from Paris). It is also true that the UK's position at the western edge of Europe has meant that the UK has attracted strong traffic to routes in North America.

The Commission should consider three other factors that may have driven existing demands patterns or may influence future demand patterns:

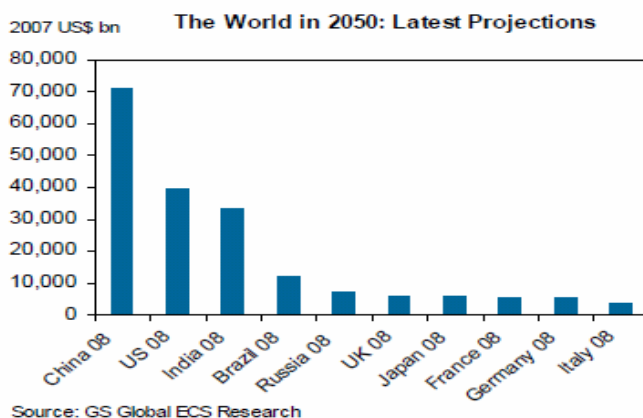
- the banding structure and rates of Air Passenger Duty;
- the various restrictions contained in different bilateral air service agreements; and
- visa policy.

Given connectivity trends in the UK versus other European countries, how much scope is there for the route network available to UK residents to radically change over the coming years?

If no changes are made to capacity in the South East we would expect the squeezing out of domestic and thin routes and the consolidation of thicker routes at Heathrow to continue. The introduction of more efficient aircraft like the 787 may have the potential to open up new long-haul destinations from airports other than Heathrow in theory, but we do not expect the importance of transfer traffic in making long-haul routes viable to diminish in practice. High fuel prices will continue to act as a barrier to entry to many carriers. This will also affect ticket prices and therefore UK outbound demand.

This does not mean that route network will not change. The shifting balance in the global economy from West to East will result in changing and growing demand for air travel. Significant changes are forecast to the distribution of global wealth, growth and trade between today and 2050.

China and India will contribute a far greater share of global trade and wealth.⁵

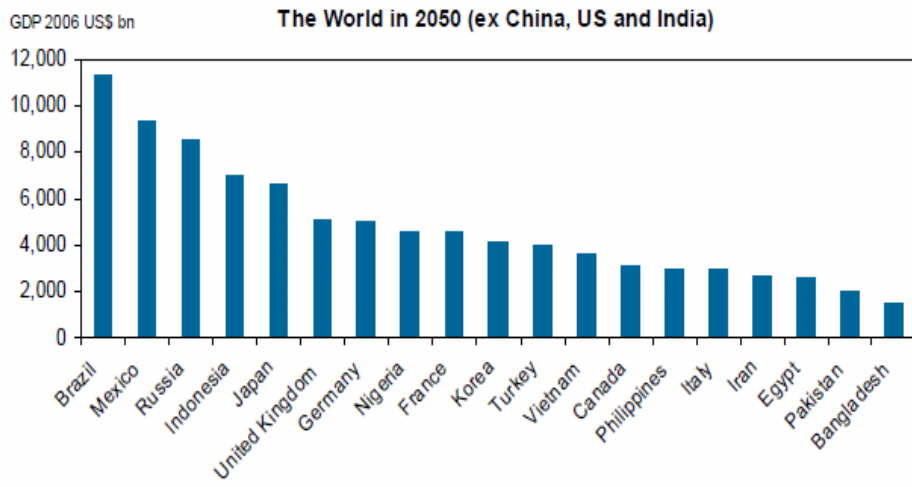


³ <http://www.buinessstraveller.com/news/delta-drops-heathrow-miami-route>

⁴ <http://routes-news.com/news/803-us-airways-to-switch-charlotte-london-service-from-gatwick-to-heathrow>

⁵ Both graphs taken from, Department for Business, Innovation and Skills, *Global context – how has world trade and investment developed, what's next?* Trade and Investment Analytical Papers, February 2011. Original Source Goldman Sachs, 2009

China and India are not alone. Other emerging and developing countries will also contribute a far greater share of global trade and wealth.⁶



An increase in hub capacity would enable the UK to add new connections to the existing network. In the absence of new capacity, the UK will have to replace existing connections with new connections. Virgin Atlantic believes that increasing the UK's overall connectivity is clearly preferable.

To what extent do you consider indirect connectivity to be an important part of presenting an accurate picture of the UK's nature of connectivity?

Indirect connectivity should be considered. As domestic services at Heathrow have diminished due to capacity constraints, airports outside the South East are increasingly linked to the rest of the world via European and Middle Eastern hub airports. While passengers have benefitted from this new connectivity, other beneficiaries also include overseas airlines, airports and national economies.

The evidence suggests that direct flights are considered to provide significantly better connectivity, and offer a higher utility to passengers, than indirect services. For example, Frontier economics find that UK businesses trade 20 times as much with emerging market countries that have a direct daily flight to the UK compared to those countries that do not.⁷ In addition, the CAA finds that time sensitive passengers have a clear preference for direct services.⁸

Economic importance of connectivity

The evidence for aviation's vital role in supporting economic growth is overwhelming. There are direct and indirect benefits to the UK economy. The most recent analysis of the direct contribution to the UK economy found that UK aviation:⁹

- contributes £49.6 billion (3.6%) to GDP;
- supports 921,000 UK jobs; and
- pays over £7.9 billion in tax.

⁶ Ibid

⁷ Frontier Economics, *Connecting for Growth*, September 2011

⁸ http://www.caa.co.uk/docs/5/Connecting_Passengers_at_UK_Airports.pdf

⁹ Oxford Economics, *Economic benefits from air transport in the UK*, 2011, p.4

Moreover, aviation drives wider economic growth by:

- connecting British businesses to new customers, investment and opportunities and opening up foreign markets to UK exports;
- encouraging inward investment from foreign firms which require strong international transport links;
- lowering transport times and costs, helping to increase competition because suppliers can service a wider area; and
- supporting the adoption of new business practices, such as just-in-time-inventory management, that rely on quick and reliable delivery of essential supplies.

Many businesses depend on international air travel. British residents made 6.85 million overseas business visits by air in 2011.¹⁰ In the same year overseas residents made 5.4 million business visits by air to the UK. Those visitors spent £3.92 billion pounds in Britain.¹¹

Air freight represents less than 1% of UK trade products by tonnage, but 30% of exports by value.¹² A BIS study looking at sources of future economic growth found that specialised and knowledge-intensive service and manufacturing sectors are likely to contribute strongly, building on the UK's relative specialisation in finance, business services, communications, and computer and information services.¹³ These are all sectors that rely on air freight services, so we expect air freight to grow in importance.

Recent analysis by PwC on Air Passenger duty looked at the link between the aviation sector and the economy and found a strong positive link. The key feature that drove this result are the strong links between the airline sector and the rest of the economy. The airline sector has been inherently linked to economic growth over the past 20 years, not just in the UK but, across Europe. The productivity assumptions used in the report reflected this relationship. In light of the increasing importance of emerging economies and the need for businesses to develop and exploit export markets, we believe this relationship is only likely to become stronger.

PwC's main analysis related to the impact on the economy and Government tax revenues if APD were abolished at the 2013 Budget. The modelling suggests that the links between aviation and the economy is so strong that abolishing APD could:¹⁴

- boost UK GDP by 0.45% in the first year, followed by smaller but permanent GDP gain through to 2020;
- increase investment by 6% and exports (including earnings from foreign tourism) by 5% between 2013-15 (the volume of net foreign inbound tourism passengers would be 7% higher by 2020);
- pay for itself, with increased business growth leading to higher tax receipts from other sources, outweighing the lost APD revenue; and
- lead to the creation of up to 60,000 jobs between now and 2020 as a result of the rise in output it would generate.

Finally, aviation is also vital to meet the Prime Minister's inbound tourism objectives of generating four million additional overseas visitors over the next four years and making the UK one of the top five visitor destinations in the world.¹⁵ 73% of all inbound visitors to the UK arrived by air in 2011 and their share of inbound visitor spend was 84%.¹⁶ That is 7.95 million holiday visits to the UK, contributing £5.5 billion spend in the economy.¹⁷

¹⁰ ONS, Travel Trends 2011, 26 July 2012, Table 3.03

¹¹ ONS, Travel Trends 2011, 26 July 2012, Table 4.01

¹² www.fta.co.uk/policy_and_compliance/air/air_freight.html

¹³ Department for Business, Innovation and Skills, *Sources of Economic Growth*, Trade and Investment Analytical Papers, February 2011

¹⁴ <http://corporate.easyjet.com/~media/Files/E/Easyjet-Plc-V2/pdf/content/APD-study-Abridged.pdf>

¹⁵ www.number10.gov.uk/news/pms-speech-on-tourism/

¹⁶ <http://www.visitbritain.org/insightsandstatistics/inboundtourismfacts/index.aspx>

¹⁷ ONS, *Travel Trends 2010*, July 2011, p.45

A recent study by ABTA demonstrates that the outbound tourism sector also makes a significant contribution to the UK economy.¹⁸ The so-called 'tourism deficit' was considered in depth by the Government in its Aviation Policy Framework. The Government concluded: *'The evidence available to us does not show that a decrease in the number of UK residents flying abroad for their holidays would have an overall benefit for the UK economy.'*¹⁹

Are there any other relevant factors which should be taken into account?

The Commission should consider the link between airline competition, connectivity and economic growth. We believe that effective airline competition supports economic growth by driving down prices and improving the quality of service. Lower prices and better service stimulates additional business and leisure demand, ultimately leading to economic growth. Capacity constraints at Heathrow place a limit on competition either by preventing airlines from entering markets or offering a competitive level of frequencies.

To what degree can causality between connectivity and economic growth be established?

A number of studies have identified a direct positive relationship between air connectivity and economic productivity.²⁰

Study	Relationship Found
Aviation Economic Benefits, 2007	A 10% rise in air connectivity, relative to GDP will boost productivity and hence GDP, by 0.07%
Economic Contribution of the Aviation Industry in the UK, 2006	A 10% rise in air connectivity, relative to GDP, will boost productivity and hence GDP, by 0.6%
Airline Network Benefits, 2006	A 10% rise in air connectivity, relative to GDP will increase investment by 0.6% and boost productivity by 0.9%, with a total increase in GDP of 1.2%
The Economic Catalytic Effects of Air Transport in Europe, 2005	A 10% rise in air connectivity, relative to GDP, will increase investment by 1.6% and boost productivity by 1.3%, with a total increase in GDP of 1.9%

A recent report by PwC details a number of other academic papers and economic studies that find a strong positive link between aviation and the economy (for example, the impact of business travel on innovation levels is discussed in "International Business Travel: An Engine of Innovation?" Keller and Hovhannisyan (August, 2012)).²¹

What the UK's objectives for future aviation connectivity should be

What is the best approach to measuring the UK's aviation connectivity?

In assessing the UK's connectivity it is important to consider it both in a dynamic way and in relation to the international context:

- Whilst the UK currently scores relatively well on measures of connectivity, the number of routes served has fallen in recent years so it is important to consider the pattern and how links develop over time.
- It is also important to consider the international context. If UK connectivity only grows by a limited amount, whilst connectivity at competing hubs grows faster this will damage the competitiveness of both the UK aviation sector and wider UK economy.

¹⁸ http://67d8396e010decf37f33-5facf23e658215b1771a91c2df41e9fe.r14.cf3.rackcdn.com/publications/Full_report_Economic_Growth.pdf

¹⁹ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/153776/aviation-policy-framework.pdf p.19

²⁰ British Chambers of Commerce, *Economic Impacts of Hub Airports*, 2009

²¹ <http://corporate.easyjet.com/~media/Files/E/Easyjet-Plc-V2/pdf/content/APD-study-full.pdf>

Connectivity depends on a number of factors, such as number and frequency of flights and time and cost of travelling to passengers. Do you consider any of these factors to be of particular relevance to facilitating any of (1)-(5)?

Each factor is incredibly important. We would highlight evidence that suggests that direct flights are considered to provide significantly better connectivity than indirect services. A report by Frontier Economics found that UK businesses trade 20 times as much with emerging market countries that have a direct daily flight to the UK compared to those countries that do not.²² In addition, the CAA finds that time sensitive passenger (often passengers that are travelling on business) have a clear preference for direct services.²³

What kinds of impact do you consider capacity constraints to have on the frequency and number of destinations served by the UK? And, if any, are any particular kinds of routes or destinations likely to be more affected than others?

Capacity constraints at the UK's hub airport damages are already hampering UK connectivity and will continue to do so in the future if left unaddressed. Heathrow now serves fewer destinations than its three main EU competitors (Paris Charles de Gaulle, Frankfurt and Amsterdam Schiphol).²⁴

No. of routes	Heathrow	Amsterdam	Frankfurt	Paris	Madrid
Short-haul	46	67	74	78	63
Long-haul	82	64	75	77	32
TOTAL	128	131	149	155	95

Heathrow is also poorly connected to some of the world's fastest growing economies. There are no daily flights between Heathrow and Mexico, Indonesia, Venezuela, Colombia, Chile, Philippines, Pakistan, Peru, Ukraine and Vietnam.

Constrained hub capacity has resulted in thicker long-haul services squeezing out some short-haul services. This is not sustainable because most long-haul routes depend on the transfer passengers provided by short-haul services. As the figures for Amsterdam, Frankfurt and Paris show, successful hub airports have a mix of short-haul and long-haul services. The capacity crisis will not be solved by forcing airlines to move short-haul flights out of Heathrow to other London airports.

Constrained hub capacity limits the UK Government's ability to negotiate liberal bilateral air traffic agreements with other countries. Other countries are understandably reluctant to open up or extend access to their main airports for UK carriers, when the UK Government is unable to offer the same level of access to Heathrow. Pointing to spare capacity at Gatwick, Stansted or the regions has so far proven unpersuasive. This has been recently highlighted by the CAA, they note that: *this suggests that the perceived lack of access to slots at Heathrow is limiting the UK Government's efforts to liberalise*²⁵.

Constrained hub capacity restricts competition between airlines. One carrier at Heathrow operates around 50% of all slots. The lack of slots for every other carrier makes it difficult for competitors to launch new services or increase service frequencies.

Some people argue that the UK does not require more hub capacity because other airports have spare capacity. However, this is not backed up by commercial reality. If the UK is to maintain and increase long-haul services, particularly to the BRIC and emerging economies, this can only happen

²² Frontier Economics, *Connecting for Growth*, September 2011

²³ http://www.caa.co.uk/docs/5/Connecting_Passengers_at_UK_Airports.pdf

²⁴ Frontier Economics, *Connecting for growth: the role of Britain's hub airport in economic recovery*, September 2011

²⁵ http://www.caa.co.uk/docs/589/CAA_InsightNote1_Aviation_Policy_For_The_Consumer.pdf

at a hub airport with more capacity because most long-haul services are not viable from airports other than Heathrow.

Hub airports combine larger point-to-point demand with domestic and international connecting traffic to make many more routes viable. This is particularly important for long-haul routes where airlines have higher fixed costs and larger aircraft to fill. The CAA has estimated that two thirds of Heathrow destinations are supported by more than 20% of transfer passengers.

Our other airports perform an important but different role. With relatively smaller catchment areas and limited connecting services, no frills, charter and scheduled airlines operate direct point-to-point short-haul services from regional airports. The biggest other airports do support a limited number of long-haul leisure routes operated by UK airlines and business routes operated by overseas airlines feeding their home hub airport, but far fewer than Heathrow.

The following table demonstrates the scale of the difference between Heathrow and the UK's other biggest airports.²⁶

Airport	Total passengers (m)	Total passengers connecting	
		Number (m)	Share of all passengers
Heathrow	66.9	23.5	35%
Gatwick	34.5	4.5	13%
Stansted	23.6	2.2	9%
Manchester	21.6	0.6	3%
Birmingham	9	0.2	2%

To what extent do you consider that the need for additional connectivity may support the argument that additional capacity may be required?

Virgin Atlantic believes the economic and commercial evidence makes it clear that over the long-term, the lack of competitiveness of the UK aviation sector in a global context is damaging for the UK economy. Therefore, the failure to develop UK passenger routes will inhibit UK economic growth.

Whilst the UK's biggest trading partner is currently Europe, it is envisaged that a failure to foster long-haul links could be the most damaging aspect for the UK economy. If the UK is to maintain and increase long-haul services, particularly to the BRIC and emerging economies, this can only happen at a hub airport with more capacity because most long-haul services are not viable from airports other than Heathrow.

²⁶ www.caa.co.uk/docs/5/Connecting_Passengers_at_UK_Airports.pdf