

British Airways submission to the Airport Commission

Airport Operational Models

11 July 2013

The Airport Commission publication of May 2013: "Discussion Paper 04: Airport Operational Models" focuses on the nature of any additional airport capacity that might potentially be required in the UK. British Airways (BA) has considered this and has a number of comments to make in the context of the Commission's overarching objective to "maintain the UK's status as an international hub for aviation".

The Future of the Aviation Industry

Future 1 is achievable with new hub capacity...without new hub capacity its Future 2

BA's view is that the most likely scenario for the development of the aviation industry is a blend of Futures 1 & 2. Which of the two scenarios prevails in the UK will be wholly dependent on the provision of timely, affordable and attractive hub capacity to enable effective competition between airlines and alliances.

In the UK there will be a continuing focus on Heathrow for long-haul connections and the wider network provided by BA, with the larger regional airports providing critical transfer feed to the UK hub. Both large and small UK regional airports will be used as spokes for a limited range of short and long-services from foreign network airlines to get passenger feed for their 'focal' airports. LCC's will be based at and serve these regional point-to-point airports as well.

The rise of Middle East airlines and their focal airports does not represent the inevitable decline of European aviation. Rather it highlights the need for effective competition between Europe and the rest of the world. Without new hub capacity UK network airlines will be at a significant commercial disadvantage and UK customers will increasingly be dependent on a small number of foreign airlines. The UK will have effectively "out-sourced" control of its international connectivity.

Liberalisation, consolidation, stronger alliances, increasingly dominant global 'focal' airports, and the development of LCCs will continue regardless of UK policy. Increasing hub capacity in an affordable and timely manner, in a location that's right for passengers and airlines, will allow BA to continue to compete on the global stage from a 'focal' airport. Without new hub capacity the UK aviation industry declines without a fight in the competition for long-haul connectivity with Middle East and emerging economy airlines. Simply put, not providing increased hub capacity will make Future 2 a self-fulfilling prophecy.

Future 3's dispersed airports network model won't fly

BA rejects the scenario of Future 3. The ability of regional airports to act as 'hubs' will be restricted by competition from 'focal' airport network airlines using regional airports as spokes to feed their far stronger and more resilient hubs. Even if the UK

pursued a dispersed network model of regional it would face huge competition from dominant 'focal' airports across Europe and worldwide. Such a regional airport network based on a "hub-type" operation would be highly unlikely to withstand such competition.

The remainder of this response examines the benefits of focal airports, the limitations of a dispersed network model, and comments on the Commission's views of the UK airports sector.

Why is a focal airport essential for UK international connectivity?

BA agrees that it is network airlines that provide the connectivity that forms a hub, rather than hubs being a product of airports alone. We welcome the distinction the Commission makes with the focal airport term and agree that their ability to serve passenger demand depends on proximity to large urban areas, attractiveness to business passengers and well-functioning surface transport links. BA notes that simply because a focal airport hosts an airline's hub that does not mean that all airlines at the airport are hubbing – other base or visiting airlines may operate point-to-point routes alongside the hub of the network airline.

Long-haul connectivity depends on network airline hubs at focal airports

Many long-haul routes require feed from transfer passengers across the network. The combined effect of these transfer passengers is that they enable airlines operating a hub model at focal airports to add breadth (destinations) and depth (frequencies) to their network. Importantly transfer passengers allow network airlines to support routes such as [X], which have more variable or insufficient local O&D demand. Such long-haul routes are more orientated towards business passengers. On BA's long-haul network [X]% of all passengers were transfers from BA or other airline flights in the year to June 2013.

70% of long-haul passengers travelling to/from the UK use Heathrow. If this were adjusted to remove non-Heathrow long-haul charters and routes to foreign hubs this proportion would increase to 92%¹. This underlines the importance of transfer passengers at Heathrow in supporting the breadth and depth of long-haul connectivity from the UK market.

Supporting long-haul connectivity generates significant economic benefits

Expanding hub capacity and long-haul connectivity will attract more businesses and foreign direct investment to the UK. International businesses choose to locate where connectivity is high. For example in 2012 when China Aircraft Corporation chose a site for its European HQ it selected Paris citing its excellent international

¹ BA analysis using CAA Passenger Survey data. Long-haul routes excluded include charters from UK airports and routes from foreign hub airports to UK airports excluding Heathrow. Remaining long-haul routes from UK airports are solely based on UK local and transfer demand rather than being operated as a spoke from another hub with that route being supported by transfers passengers at a foreign hub.

connectivity². Research has also shown a strong correlation between inter-continental flights and investment in corporate HQ's³.

By developing 'focal' airport capacity to allow a network airline to operate a hub model the UK increases foreign direct investment, increases the agglomeration benefits that such international transport connectivity brings, and allows UK airlines and airports to increase employment, investment and earnings that directly benefit UK plc.

These economic benefits are much greater than those that can be achieved through solely developing point-to-point long-haul capacity or relying on foreign 'focal' airports and airlines. In this scenario the UK gives up long-haul hub benefits and competitor airlines and airports in foreign countries secure them instead - a double-whammy for the UK.

A focal airport provides greater connectivity benefits than a dispersed network

A dispersed network of regional point-to-point airports operating a "hub-type" model - with some passengers transferring between disparate long-haul and short-haul airlines - is advocated by some as an alternative to a focal airport.

This model will not work - hubs require a combination of strong local point-to-point demand and the combinatoric effects of a large range of connections to thrive. The model of large focal airports, network airlines and their hubs will continue to prosper in the rest of Europe and the world - the question is does the UK want its own focal airport or not?

Regional airports can't attract enough airlines to develop long-haul services today

Heathrow has been operating near full capacity since the early 2000s with short-haul slots being used for long-haul services, shrinking the domestic route network. These conditions should have been conducive to long-haul services to the regions growing significantly but this hasn't happened.

This isn't because of a lack of capacity, for instance new runway capacity has been provided in Manchester, but because airlines are not willing and do not see a viable business case to expand long-haul services in the UK regions or develop a secondary hub. Without an airline willing to develop long-haul routes or establish a hub these services and business models cannot happen.

A limited range of network and long-haul airlines fly into the UK regions

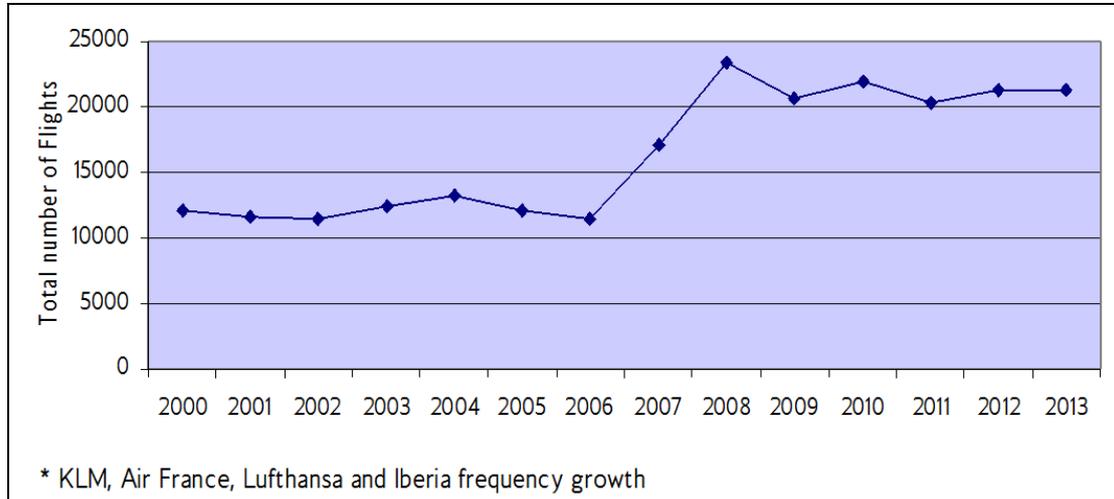
UK regional airports will attract airlines from nearby foreign 'focal' airports such as Air France, KLM and Lufthansa who use such routes to get transfer feed for their

² <http://www.standard.co.uk/news/transport/aircraft-giant-picks-paris-over-london-for-air-links-7770743.html>

³ Brueckner J.K. "Airline Traffic and Urban Economic Development". *Urban Studies*, 40:1455-1469. Bel, Garma and Xavier Fageda (2008), "Getting there fast: globalization, intercontinental flights and location of headquarters". *Journal of Economic Geography* 8 pp. 471-495;

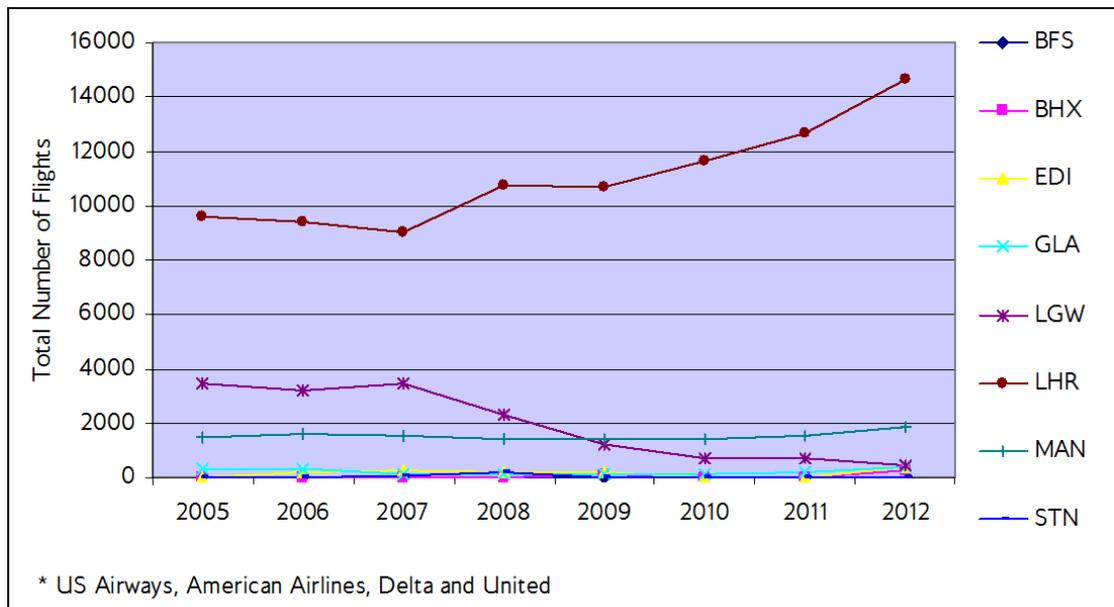
hubs and their long-haul alliance partners flights that operate from there. These airlines have expanded their presence in the UK regions as Heathrow has become increasingly constrained and less able to serve domestic routes as shown in Figure 1.

Figure 1 – 2000-2013 frequency growth in the UK regions by EU network airlines*



Source: BA analysis of OAG data

Figure 2 – 2000-2013 US airline* frequency by UK airport



Source: BA analysis of OAG data

Likewise Middle East airlines such as Emirates can also sustain such routes into the UK regions as well. Beyond this long-haul routes in the UK are limited to niche leisure (e.g. [✂]) or VFR (e.g. [✂]) routes. The dispersed network model would need long-haul connectivity with far greater breadth (range of destinations) and depth (daily frequencies) than the UK regions currently has.

International long-haul airlines prefer to fly the thickest routes possible. In the UK the behaviour of American based carriers post-Open Skies clearly demonstrates the

desirability of Heathrow (with its transfer traffic) over any other UK regional option as shown in Figure 2 above.

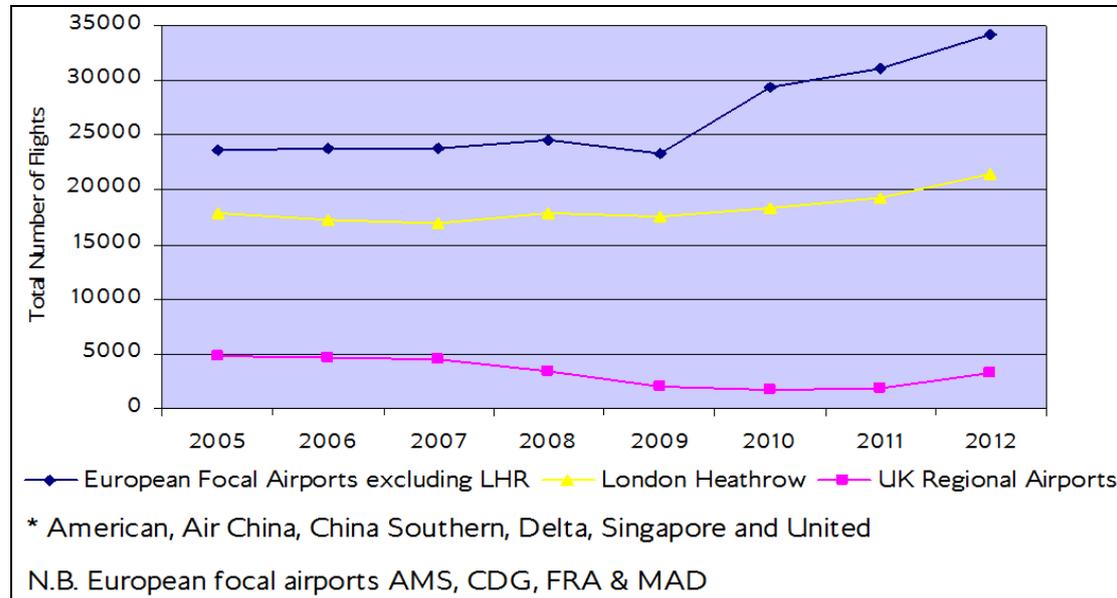
Long-haul airlines and their alliances will serve the UK regions via focal airports

Many long distance carriers from the US or Far East are increasingly serving the UK regions from their alliance partners nearby focal airport rather than directly. The main exception to this is the Gulf Carriers who have not developed extensive partner links with network airlines in Europe yet and benefit from large well placed focal airports of their own. These long distance carriers:

- Fly on thick routes to 'focal' airports where their local alliance partners are based.
- Take transfer feed off the short-haul flights of their alliance partner who operates the hub at the 'focal' airport.
- Use your other long-haul aircraft to fly to other 'focal' airports and thick point-to-point routes where the returns are better.

Figure 3 shows how long-haul airlines such as American, Air China, China Southern, Delta, Singapore and United have focused frequency growth on other European 'focal' airports whilst reducing their UK regional operations. The large growth in frequencies at 'focal' airports including Heathrow (yellow line) and Frankfurt, Paris, Amsterdam and Madrid (blue line), contrasts with the UK regions (purple line).

Figure 3 – 2005-2012 Long-haul airline frequency growth in the UK and Europe*



Source: BA analysis of OAG data

These long-haul airlines are then able to pick up passengers transferring off their alliance partner airlines who operate short-haul routes to the UK regions at their focal airport hubs, as previously shown in Figure 1.

This model is a logical outcome of industry liberalisation and consolidation. Regardless of UK airport policy network long-haul airlines will not fly to the UK

regions when they can pick up the same passengers from Amsterdam, Paris and Frankfurt. The UK needs a single 'focal' airport with strong links to the UK regions to offer those passengers the maximum level of competition and choice.

New point-to-point airport business model alternatives are limited

UK point-to-point airports that seek to provide an alternative option for hub and long-haul connectivity have had limited success in doing so. Whilst Gatwick has had some limited recent success attracting long-haul airlines others such as Birmingham and Manchester who have capacity have been unable to do so. Even with significant capacity constraints at the focal airport airlines are unable to make long-haul work at point-to-point airports in the absence of the transfer passenger feed provided by a hub.

When capacity does become available at Heathrow it is notable that long-haul airlines show a clear preference for growing capacity there instead of at Gatwick. For example between 2005 and 2012 Ethiopian, Etihad and Qatar all shrunk and exited their Gatwick operations as they grew their presence at Heathrow as shown in Figure 4.

Figure 4 – 2005-2013 long-haul airline frequency growth at Heathrow & Gatwick

Airline	Airport	2005	2006	2007	2008	2009	2010	2011	2012	2013
Ethiopian	LGW	39	102							
	LHR	201	196	292	309	310	313	313	310	312
Etihad	LGW	345	364	214						
	LHR	489	570	751	953	1095	1095	1095	1100	1095
Qatar	LGW	365	365	365	366	365	365	152		
	LHR	730	1005	1094	1375	1454	1460	1459	1747	1781

Source: BA analysis of OAG data

In the same period numerous airlines have started and stopped long-haul flying at Gatwick including Hong Kong Airlines, Oasis Hong Kong Airlines, Oman Airlines and Korean Air.

New models such as airport facilitated transfers (Malpensa's ViaMilano product) or the possibility of LCC and full-service airline integration leading to a "hub"-type model or facilitating more "self-connects" for passengers are unproven and will face significant competition from focal airports in Europe and elsewhere.

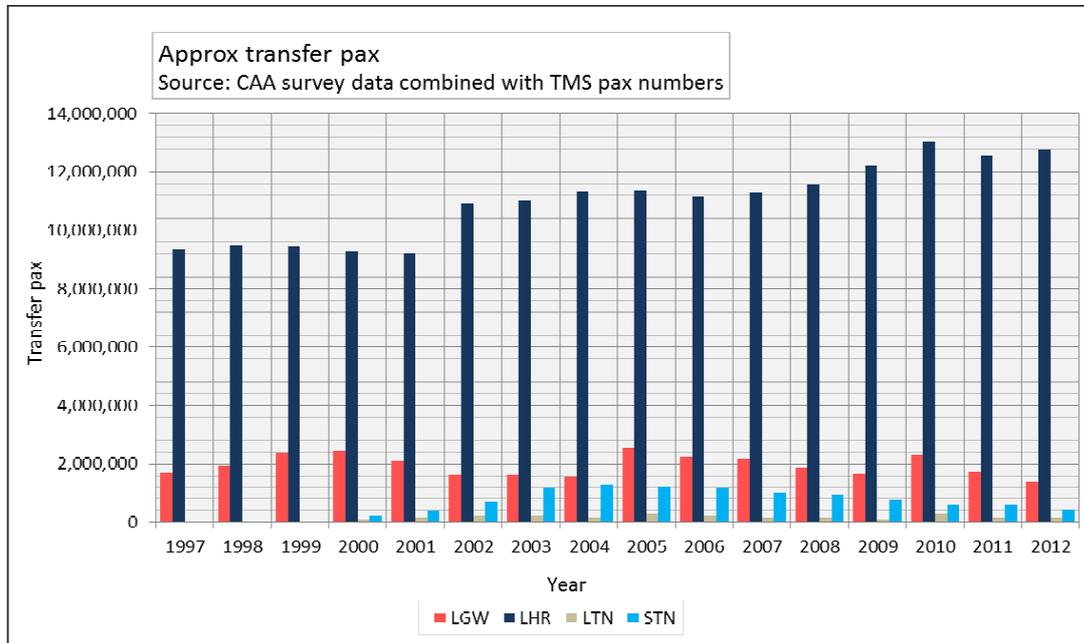
The scope for "self-connects" is limited versus airlines operating a hub model

The statistical significance of self-connecting transfer passenger numbers at Stansted and Luton during the early to mid 2000's is overstated. The increase in the proportion of self-connects at these airports may be down to the rapid expansion of LCCs at this time.

Figure 5 below shows the absolute number of transfer passengers at the London airports between 1997 and 2012 and clearly demonstrates that self-connecting

passengers at Stansted and Luton – in excess of 1 million pa at peak - were very small compared to Heathrow which was handling between 11-13 million pa.

Figure 5 – 1997-2012 London airport transfer passenger numbers



This is important in relation to other proposed hub models as it shows that even if some passengers choose to self-connect the vast majority prefer to connect on a network airline at a 'focal' airport, and increasingly do so within alliance structures.

New long-haul aircraft types won't by-pass focal airport and network airline hubs

Advocates of the dispersed network model argue that new B787 and A350 aircraft will by-pass the hub model and make long-haul routes viable from point-to-point and regional airports for smaller passenger loads. BA's response to Discussion Paper 2 detailed our view that foreign airlines using these aircraft will continue to operate hubs from focal airports and the scope for new long-haul routes to London and the UK regions was very limited. Our view has not changed.

The advantage of a focal airport versus a dispersed network of airports

A 'focal' airport offers the best balance of costs and benefits to the UK. A dispersed network of airports would increase costs - duplication of airport and surface access infrastructure plus multiple over-lapping airline route networks at a number of airports – and will generate less connectivity than a focal airport can, particularly for long-haul.

Don't confuse a constrained Heathrow with a normal focal airport

The dispersed network model is, in part, a reaction from the UK regions to reduced links to Heathrow. It is important not to mistake the current lower levels of

domestic routes served by the London hub as the norm. The “crowding out” of domestic routes at the ‘focal’ airport is a direct result of [✂] a lack of hub capacity.

In a well-functioning policy and planning environment new hub capacity would have been added before the ‘focal’ airport reached capacity and more domestic routes would be served than currently are. The acquisition of bmi by IAG, and BA’s operation of those slots shows what happens when new hub capacity is created. Heathrow now serves more domestic routes than it did at the time of the bmi purchase.

Competition between focal airports will best mitigate their substantial market power

Ideally there needs to be competition between multiple focal airports serving the UK regions including a London ‘focal’ airport. This ensures that passengers benefit from the greatest level of competition possible between these connectivity providers. In the absence of a UK focal airport then regional airports will become the spokes of foreign focal airports with substantial market power. These airports will charge a premium but with no recourse from the UK Government or regulator.

The UK can only secure its international long-haul connectivity with a focal airport

A dispersed network of airports will not be able to compete with other EU and global ‘focal’ airports. Without a focal airport and network the UK’s international connectivity would be effectively “out-sourced” to foreign airports and airlines. It is not a given that these airports and airlines will always choose to serve UK destinations. If better alternative routes become available they will stop flying.

The UK is not able to support two focal airports

BA has provided arguments as to why we do not believe there is significant scope for long-haul flights at point-to-point airports and in the UK regions. These flights would be essential to support a second focal airport.

The Air France-KLM dual-hub is not a model for the UK

Paris is 311 miles from Amsterdam and a car journey would take 4 hours and 50 minutes. This is further than the distance between London and Newcastle at 282 miles and a car journey of 4 hours and 40 minutes apart. The AF-KLM dual-hub is built upon these two previously separate and mature ‘focal’ airports with separate network airlines serving these two distinct markets.

This is a world away from either having a dual-hub serving one city (e.g. London) or building a new hub from scratch to compete with an existing mature ‘focal’ airport. Such a strategy would also require a network airline to operate this second hub. BA remains committed to serving the UK from London, primarily through our hub at Heathrow, and we do not see a case for a second hub in London or the UK regions operated by ourselves or any other airline.

New York demonstrates the importance of geographic location to airport success

Geographic location in relation to size and strength of passenger catchments and surface access links is critical to the success of an airport. The airport system in New York is different to London in that JFK, as the point-to-point airport, is best located and Newark, the 'focal' airport, is not as well-located. As a consequence JFK is New York's primary airport despite not operating a hub model.

The reverse is true in London where Heathrow, as the 'focal' airport, is also best located and Gatwick, the point-to-point airport, is in a secondary location. Heathrow's combined advantage of being the focal airport and being better located makes it even more difficult for a secondary hub to be established.

Splitting the oneworld alliance will substantially reduce connectivity

BA fully supports the Commission's conclusion that spreading one airline or alliances hub operation over multiple London airports would not be successful. BA's dual-hub strategy from the late 1990's bears this out.

BA agrees with the Commission's conclusion that the barriers to the oneworld alliance moving away from Heathrow to another airport are relatively high due to it being the largest alliance group at the airport and that it includes BA as Heathrow's key network airline.

BA supports the Commission's view of why airlines and alliances will not move from Heathrow to another London airport.

There is limited scope for a UK regional airport to be a secondary hub

The Commission wants to consider the case for a regional airport to develop into a secondary hub and highlights the example of German secondary hubs.

Germany's airports sector is structurally different to the UK's

Germany's demography, coupled with the size of Lufthansa and the relative lack of competition from domestic and foreign network airlines mean that it has been possible for secondary hubs to be established. In the UK domestic and foreign network and LCC airline competition is far more prevalent, and the demography is skewed significantly towards London and the South East. These conditions do not support the potential for a secondary regional hub.

The UK has capacity but no airline is able to make a secondary hub viable

Ultimately a secondary hub needs capacity and an airline to operate from there. It is notable that the largest UK regional airport outside London and the South East is Manchester, and it has added a second runway in the last 10 years. However despite providing the capacity no airline has taken the opportunity to establish a secondary hub – the conclusion being that in the UK there is no viable business case to do so.

The only choice is whether the UK has a single focal airport in London or not

The UK's best option is for a London 'focal' airport with excellent air links to the UK regions to be supported. From the UK regions perspective the choice passengers have is which 'focal' airport they travel through. London will either be one of those 'focal' airports or not depending on the development of new hub capacity. Having a UK 'focal' airport with a UK network airline based there brings security of connectivity, increases economic benefits for UK plc and encourages competition with foreign airlines and airports.