Can a city operate with two hub airports?

Michael Schabas considers the question while overleaf Jo Valentine says the aviation review must look at all options

At a recent forum organised by the Independent Transport Commission[1], BAA Chief Executive Colin Matthews repeated his claim that "you can't have two hubs"[2]. The implication, of course, is that further expansion of Heathrow is the only practical way for London to retain its position as the world's best-connected city. Some supporters of BAA's position have cited Montreal, Milan and Berlin as evidence, three cities they say that tried and failed to have 'split' hubs.

Alas, these examples don't have much relevance to London. Montreal did indeed try to operate a "split hub" strategy from 1975, with long haul flights forced to use the new Mirabel airport, 60km north of the city, while short haul flights remained at Dorval, 15 minutes from the city centre. In 1997 Mirabel was abandoned, and long haul flights returned to Dorval. The passenger volumes at the two airports together never exceed 10 million per year, about the same as Luton, and less than a tenth the total London market, currently 135 million.

Milan and Berlin actually never tried to operate "split hubs". Milan developed Malpensa as its main airport because Linate, close to the city centre, is just too small, with a capacity of about 8 million. Malpensa has struggled, because Alitalia has been teetering on the edge of bankruptcy while the Italian government blocked new international carriers in a vain attempt to protect its main hub in Rome. Malpensa is now doing pretty well, with about 20 million passengers per year. Linate's role is more like London City, popular for short haul business travel.

Berlin has a total air market of only 22 million, less than Milan. Its two airports are a legacy of the city's post-war history. About 15 million passengers use the "West Berlin" airport at Tegel, only 10km from the city centre, and seven million using the more remote "East Berlin" airport at Schoenefeld. The Berlin burghers think they deserve an airport "appropriate" to a capital city, and are unhappy that trips to Washington or Beijing require a transfer through Frankfurt or London. So they are building a large new terminal at Schoenefeld, to be renamed Brandenburg.

To give it the best chance of becoming a hub, they are closing Tegel, mindful no doubt of the Montreal experience. With a regional population of less than 4 million, it remains to be seen whether they will attract additional long haul carriers. They may just make Berlin a bit less convenient for short haul business travellers.

Michael Schabas was Vice President Transport for Canary Wharf Developments.

Split Hubs versus Two Hubs

Clearly, "split hubs" don't work. But that's not the same as having two hubs, serving a single city. It just depends on how big the market is. London attracts 135 million passengers per year; comparisons with Milan, Berlin or Montreal are pretty spurious.

In fact, there are several cities with two thriving hub airports, each attracting a good mix of point-to-point and interlining/hub traffic. The hubs operate independently - nobody sees any serious potential to link geographically separate airports and hope that people will interline through them. Generally, they are on opposite sides of a big city; both serving the city centre but with different regional catchments.

Newark Airport has developed as New York's second hub, with 34 million passengers. It is now "global gateway" for United, the country's largest airline, which has shifted most of its flights there from Kennedy.

As it happens, New York, Washington and Moscow each have similar airport "geographies:" two major "hubs" serving short and long haul flights, and a third smaller airport, closer to the city centre and serving mostly short-haul flights.

New York's J F Kennedy has 48 million passengers, while Newark attracts 34 million. BA actually flies to both. While JFK is of course the biggest transatlantic gateway into the US, United, the largest airline, has developed Newark as its "Global Gateway". United now carries more than 10 million passengers each year through Newark. La Guardia is closer to Manhattan and, like Linate and London City, limited to short haul flights. Yet it still serves 24 million passengers per year, apparently without threatening the viability of Kennedy or Newark. All three airports are operated by the Port Authority, a not-for profit public agency, but the terminals are mostly owned and developed by the airlines which are fiercely competitive.

Washington Dulles was built about the same time as Mirabel, and initially struggled because the airlines refused to abandon National, which is only a ten minute taxi ride from the Capitol. Dulles now attracts a respectable 23 million passengers per year, and competed with Baltimore-Washington (BWI), on the other side of the city, with 22 million passengers. BA flies to both. National, now called "Ronald Reagan National", has been rebuilt and now attracts about 18 million. All three airports seem to be doing pretty well.

Moscow's two hub airports, Sheremetyevo to the north and Domodedovo to the south are each attracts about 20 million passengers. Aeroflot serves Sheremetyevo while BA uses Domodedovo. Sheremetyevo, Domodedovo, and the smaller Vnukovo are owned by competing private companies. There is some irony that Moscow probably has the most competitive airport market in the world.

Tokyo has two main airports. The Japanese government tried to make Narita the international/long haul airport, with Haneda serving domestic and regional traffic. This was a dumb policy which it eventually abandoned. Each airport now has a mix of traffic. Narita has 32 million passengers per year, while Haneda, much closer to the city centre, has 64 million.

Shanghai has yet to learn the lesson of Tokyo. Long haul flights go to Pudong, while domestic flights go to Hongqiao. The result is that interlining passengers travel through Hong Kong or Beijing. Yes Baroness Valentine, split hubs DON'T work.

The second busiest airport in the world is now Beijing, with about 80 million passengers. With two enormous terminals and three runways, the Chinese government is now apparently planning a second airport on the opposite side of the city. The Chinese government is usually a fast learner and probably will not repeat the mistake of Shanghai.

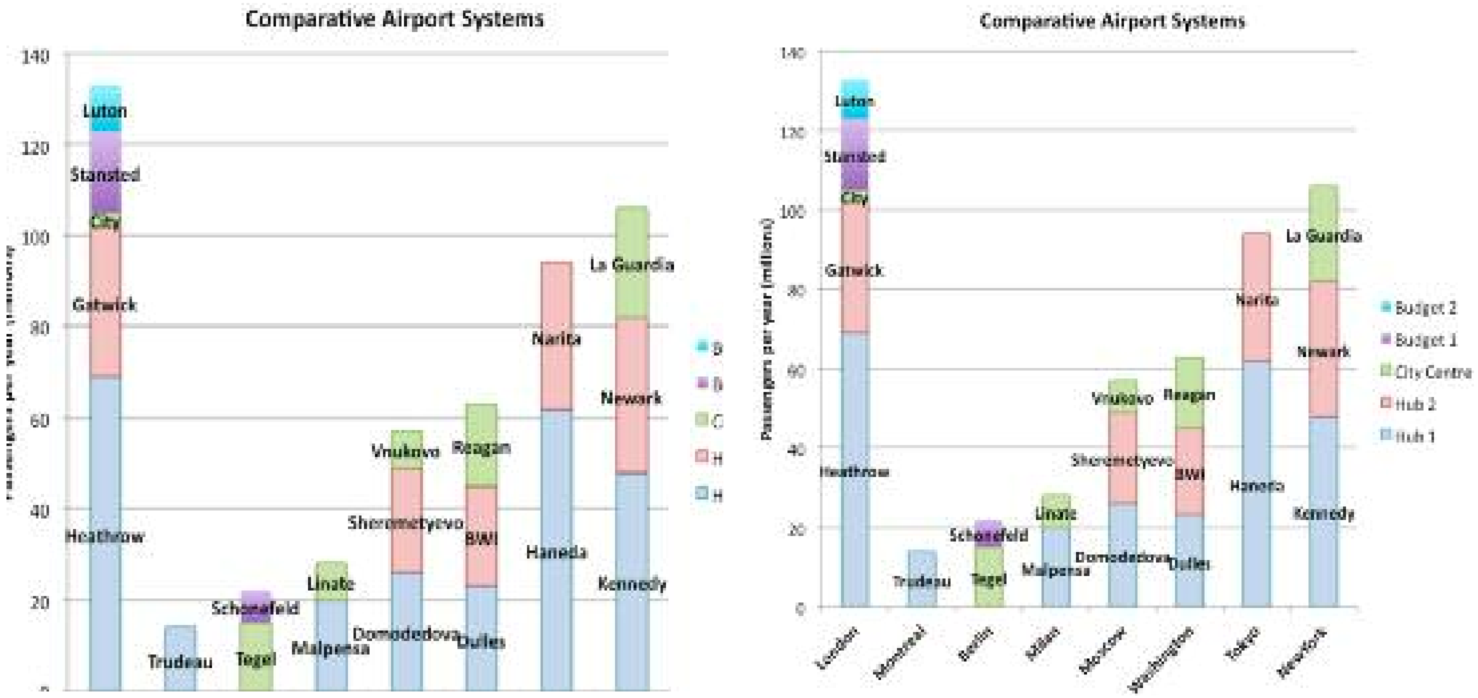
What lessons can London learn the lessons of these cities? Hub airports need a wide enough range of local and long-haul flights to provide a good range of interlining opportunities. They also need a sizeable local market. Long haul airlines depend on interlining to be profitable, but it is actually the local passengers who pay the highest fares. Montreal isn't big enough to support one hub, and Berlin and Milan are both borderline cases. But above about 50m passengers per year, many cities can support two hubs, as well as a "city centre" airport. But it helps to have 2 or more runways, with sufficient spare slots so airlines can build complementary feeder and long-haul flights.

There are also diminishing returns to airport size, at least to passengers. New York, Washington, and Moscow all seem better served with two hubs, one on each side of the city, than a single hub. East London, Essex and Kent struggle to attract international companies because long haul travel means a trek around the M25.

Clearly, with 135 million passengers, and growing, both Stansted and Gatwick could become hub airports. The new owners of Gatwick are clearly hoping to attract more premium and long-haul passengers, but with most slots already taken by Easyjet, and only one runway, this will not be easy(!). Any buyer of Stansted will face the same problem with Ryanair.

What then is the future of growth in London? Heathrow is fantastically profitable for BA and BAA, and they would have little interest in allowing the view to spread that a second hub might be viable and good for London.

As for an airport in the Thames Estuary, it could end up like Montreal's Mirabel. Even with a fast rail link, it will be remote from the passengers who might use it. The airlines would not willingly shift their flights there from Stansted or Gatwick, let along Heathrow. The architects and contractors might make money building it, but nobody else.



Several cities have multi-airport systems with two viable "hubs", each attracting a profitable mix of short and long-haul traffic. But comparisons with Montreal, Berlin and Milan are spurious, because they are such small markets. ***[same graphic in different colour schemes]***

1 ITC, 19 April 2012. See http://www.theitc.org.uk/53_ITC_launches_new_Aviation_stud.html
2 BAA Chief Executive Colin Matthews quoted in Rail Professional, March 2012 available at http://www.railpro.co.uk/magazine/?idArticles=1302

Michael Schabas was Vice President Transport for Canary Wharf Developments 1988-1991, where he was involved in development and promotion of the Jubilee Line Extension and upgrading of the DLR. From 1992 he has been advising a wide range of clients including: BAA on the Heathrow Express; British Rail on the Channel Tunnel Rail Link; the Docklands Development Corporation and several east London boroughs on the London Overground; the Department for Transport on Crossrail and ways to improve access to London Airports. He was a founder and Director of GB Railways (1996-2003) which operated train services from East Anglia into Liverpool Street..

The aviation review must look at all options

To be credible the aviation review must look at all options, says Jo Valentine.

Baroness Jo Valentine is chief executive of London First

London's openness to do business with the rest of the world is one of its greatest assets. Critical to business, high quality air travel is key to its continued success. But a lack of spare capacity at our only hub airport, Heathrow, means we have no space for the extra international flights that business needs to be able to tap into growth and emerging markets in Latin America, Asia and the Far East.

Heathrow's recent slip from fourth to seventh place in international hub airport rankings should sound a warning - ranked by the number of destinations served by non-stop flights, the figures show Heathrow is increasingly "cut off" from the rest of the world compared with its major European rivals.

Because other hubs have room for growth, they are able to build links to growing markets. London has fewer weekly flights than any European rivals to half of the emerging market economies. We have no direct air links to the emerging economies of Chile, Colombia, Peru, Venezuela, Indonesia and the Philippines – links that other European cities possess. And, there are already 1,000 more flights a year to China's three largest cities from Paris and Frankfurt than from Heathrow.

And, worryingly, we are turning away opportunities. Airlines serving growing economies wishing to locate at Heathrow and unable to gain the slots they wanted have instead based themselves at Brussels, Paris and Amsterdam. Gatwick has helped stem the flow, attracting Asian airlines and establishing new routes. But of course it too is nearly full at peak times and will require greater flexibility to grow and meet demand.

So the Government's upcoming aviation strategy review is, understandably, a hot topic. For business, these flights are vital. Our ability to win new markets relies heavily on getting this right. There of course is no easy option. But, in the next five years, there is only one option for increasing our hub capacity: more flexibility at Heathrow, which could increase runway capacity there by 10 – 15 per cent if the airport was able to use its runways for both take-off and landing concurrently. We MUST use some of this capacity for resilience.

In the medium term, building an additional runway or runways serving London is essential. There are a number of options - a split hub, linking Heathrow with another site; a new hub airport; or expanding Heathrow. Whilst the idea of developing a split hub at Heathrow by linking it capacity elsewhere seems appealing, in reality it would be difficult to make work and would require significant improvements in transport links between sites to enable passengers to connect. If Heathrow needs to achieve a minimum connection time of around 45 minutes to compete with its European rivals, how then could a split hub – involving a complete additional journey for both passenger and baggage – come anywhere close to this standard?

We could of course look to build a new hub airport, which offers the prospect of a modern airport with the scale to meet London's long-term needs against the most stretching forecasts of growing demand. And it represents the sort of long-term infrastructure planning that the UK so seldom does. But realistically, perhaps optimistically, it would take between 20 and 30 years to build. And that would be assuming we have the political and financial capital to hand. Besides the massive costs of building the airport and new road and rail connections, airlines have shown no interest in splitting their operations over two sites. The alternative would see Heathrow shrink radically or close altogether, threatening the livelihoods of the 85,000 or so employed at the airport (and their families) in a move that would arguably be the largest piece of social and economic engineering ever undertaken in the UK.

Finally, there is the option of expanding Heathrow. Of all the options, a third runway at Heathrow is the only one with a planning application, financing and funding in place. Partly for that reason – it is an actual, specific proposal - it is the most controversial. But it would give us a reasonable shot at keeping up with demand, and it could be delivered within the next decade. The extra flights supported by this runway, and with a further runway at a point to point airport in London, would enable London to remain competitive and connected to at least 2050, even by the most stretching forecasts of demand. And of course this growth would be compatible the ambitious carbon limits we have set ourselves as a nation.

At a local level, noise will inevitably be an issue for residents, and it is for this reason that permission to build a third runway at Heathrow should be accompanied by credible limits on noise levels, monitored by an independent regulator, and robust measures put in place to minimise and compensate for the impact. In this way trust can be strengthened, and the cost of noise be better weighed against the wider economic benefits of a world class hub airport.

Meeting the need for extra hub capacity will always be difficult, but to be credible the aviation review must look at all options. And we must be realistic about the potential obstacles for each. But whatever happens, the time for Government to just sit on its hands is long past.