

Questions

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.

The aerospace industry, which is important to the East Midlands, represents part of the high value manufacturing sector, which needs to grow in order to help rebalance the UK economy. The air freight sector is a significant employer in the local area and is valued by businesses, particularly in regard to express delivery services both inwards and outwards, thereby helping to support the wider economy. Furthermore, the ability to gain efficient access to overseas markets by air is important to UK businesses, as is the support aviation provides to the UK tourism industry, both nationally and locally, in terms of facilitating inward travel from overseas.

5.2

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

(see answer to 5.1)

5.3

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

(see answer to 5.1)

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?

Although there would appear to be significant potential for growth in Asia and China, it is considered that growth in global aviation will proceed at a significantly slower pace than previously anticipated, owing to the rising cost and declining global stock of oil. This, combined with the economic recession and declining spending power in the short term, should form the basis for the downward revision of growth forecasts for UK aviation.

5.5

How, and within what constraints, can aviation growth occur as technological developments and improved operating procedures reduce carbon, pollutant emissions and noise impacts?

In light of the need for an overall downward revision in aviation growth forecasts, as referred to in 5.4, continuing technical advancements and improvements to operational practices, it is considered that in overall terms, aviation noise and air quality impacts should not be permitted to rise above current actual levels in the UK even where higher permitted levels are in place (see answer to 5.4.3). This would allow aviation to grow at a moderate pace whilst maintaining or reducing negative environmental impacts.

5.6

How should decision-makers address trade-offs or competing interests, where these occur both (a) between different aviation objectives, e.g. carbon 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?

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?

It is considered that the airports in the South East will continue to play an important strategic role as growth in demand for air transport will continue to be greatest in this region.

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 cost of regulating night flights to the sector must be balanced against the environmental noise pollution on the ground.

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?

Frequent and direct long and medium distance flight connections to a wide range of destinations are important to both the national and regional economies. However, there may be significant potential for the transfer of domestic and near European passenger flights from air to rail through the development of the proposed national high speed rail network (See also answer to 5.1).

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?

The presence of hub airports for passengers and freight in the UK facilitates efficient connectivity to/from a wide range of points around the globe, thus benefiting the national economy.

5.11

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

Direct connections to destinations in developed and emerging economies are of most importance as they offer the greatest opportunities to UK businesses. Connections to popular tourist destinations and countries with which Britain has close cultural ties are also important. The development of a UK and continental high speed rail network would reduce the importance of direct passenger flight connections to near European destinations.

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)?

It can be assumed that connections to the BRIC countries (Brazil, Russia, India and China) will grow in relative importance in coming years as the UK seeks to exploit business opportunities in these rapidly growing economies. Connectivity may be constrained by the rising cost and diminishing stocks of oil.

5.13

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

(see answer to question 5.10)

5.14

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

Transfer and transit passengers bring benefits to businesses selling goods and services at the airports they pass through. There are also benefits to UK-based airlines in offering services to passengers whose points of embarkation and ultimate destinations lie outside the UK.

5.15

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

Positive aspects of hub model :

- Fewer flight routes are required to serve a given number of origins and destinations e.g. in a system with ten destinations, only 9 routes are required to connect them all, whereas the point-to-point model would need 45 routes to connect them all. However, some point-to-point routes would be unable to attract the critical mass of demand needed to ensure viability and thus would not be provided at all.
- More efficient use can be made of transport resources as fewer aircraft are required.

Negative aspects of hub model:

- Lack of flexibility and vulnerability to a single point of failure e.g. bad weather at the hub airport can disrupt all direct and connecting flights.
- Journeys take longer due to the need for passenger and freight transfer and fewer direct routes.

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?

The proposed expansion of the high speed rail network would be the most effective means by which to facilitate efficient transfers between the South East and the West Midlands, offering potential for Birmingham Airport to absorb a degree of excess demand from Heathrow, thereby acting as part of a "virtual" hub. Any growth in air traffic at

Birmingham Airport would need to be consistent with the protection of the health and amenity of those living nearby.

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?

As well as absorbing some demand pressure from Heathrow Airport, Birmingham Airport could help relieve pressure on the remaining South East airports following the establishment of a high speed rail link (see answer to question 5.16, above). However, it is considered that, for sustainability and economic reasons, air transport should be provided as close to the point of demand as possible, minimising the length of surface journeys. An enhanced role for regional airports would be facilitated by improved and effective noise controls, particularly at night.

5.18

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

The development of a national high speed rail network and improvements to the existing network could provide a viable alternative to domestic air travel, particularly if it were to incorporate a direct connection to Heathrow Airport, as currently proposed for HS2 Phase 2, thus precluding the need for connecting flights. Connections to Crossrail and the use of rolling stock capable of utilising both high speed and conventional rail infrastructure, also proposed, would help to maximise the scope for substituting rail for domestic air travel.

5.19

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

Direct high speed rail links to the HS1 line, Heathrow and major population centres in the Midlands, the North and Scotland will be essential as a means of encouraging modal transfer of passengers from domestic and near European flights to high speed rail, relieving some demand pressure from congested airports. The proposed station near Birmingham Airport could potentially enable that airport to absorb some excess demand from Heathrow and the South East.

5.20

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

It is recognised that regional airports and related businesses, such as air freight operators, make a valuable contribution to regional economies, in terms of direct employment generation and the attraction of investment and inward tourism. In economic terms, it is desirable that flights be provided as close as possible to the point of demand thus reducing the need for surface travel, although hub airports will always provide connectivity to a wider range of destinations. Regional airports should therefore generally seek only to meet demand arising from their immediate hinterland, whilst recognising that Heathrow will continue to perform a national role. However, there may be scope for Birmingham Airport to accept some passenger overspill demand from Heathrow, acting as part of a virtual hub connected by high speed rail. This could

increase the number of global destinations directly accessible by air from the Midlands, with economic benefits for the region.

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 customer experience can be optimised by providing flights from airports as close to the point of demand as possible, whilst recognising that some destinations will continue to only be served by Heathrow and other larger airports. High speed rail could potentially substitute for short haul domestic and near European flights, thereby releasing some airport capacity, improving resilience to disruptive events and/or presenting opportunities to serve a wider range of medium and long range destinations. Regional access to Heathrow Airport would also be improved and there may be potential for Birmingham Airport to take some overspill demand from Heathrow Airport, providing better international connectivity for customers in the Midlands (see answer to 5.20).

5.22

Can we extract more capacity out of the UK's existing airport infrastructure? Can we do this in a way which is environmentally acceptable? To what extent might demand management measures help achieve this?

The establishment of a high speed rail network would allow a substantial reduction in domestic and near European aviation, releasing airport capacity and reducing environmental impacts (see question 5.21). There may also be potential for Birmingham Airport to take overspill passenger demand from Heathrow (see question 5.20). This could preclude the need for physical expansion of airports to provide additional capacity, although the reallocation of flight slots from short haul to longer distance flights could result in greater carbon emissions. Any demand management measures should be European or global in scope to avoid the distortion of the market to the economic disadvantage of the UK.

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?

See answers to questions 5.20, 5.21 and 5.22.

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 to reduce delays is highly important to maximise economic benefits and minimise passenger inconvenience. High speed rail could assist in achieving this insofar as it could substitute for domestic and near European flights, thereby freeing capacity. It could also facilitate the use of Birmingham Airport to accommodate some overspill demand from Heathrow Airport, providing flexibility by reducing vulnerability to single points of failure. Airports should have adequate facilities and procedures to minimise any disruption to operations during adverse weather conditions.

5.25

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

Resilience would be less likely to be a problem at regional airports, as these tend to use the point-to-point flight model which is less vulnerable to single points of failure. However, if remaining capacity at regional airports were to be taken up, resilience would be reduced as a busy flight schedule takes longer to recover following an incident than does a quieter one.

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?

5.27

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

For sustainability and economic reasons, regional airports should be encouraged to serve their hinterlands as fully as possible. However, access to Heathrow and other larger airports will still be necessary for trips to destinations less well served by the regional airports. High speed rail could potentially substitute for many regional connecting flights to congested airports, thereby freeing some capacity, and pressure arising from regional demand for flights from Heathrow could be partially addressed by allowing Birmingham Airport to take accept some overspill demand (see answers to questions 5.20, 5.21 and 5.22).

5.28

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

Where possible, cargo should be directed to airports most conveniently situated in relation to its ultimate origin/destination, thereby minimising the length of surface journeys and limiting highway congestion and carbon emissions.

It should be noted that many cargo operators, particularly in the express freight sector, prefer night flights to maximise opportunities for twenty four hour delivery. Since relatively few passenger flights take place at night, it should be possible to accommodate cargo flights at airports without conflict, although this may give rise to unacceptable amenity and health concerns for those living nearby unless strictly controlled and mitigated.

5.29

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

Climate change impacts**5.30**

What do you consider to be the most significant impacts of aviation, including its non-carbon emissions, on climate change? How can these impacts best be addressed?

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?

Globally, it should be required to make a proportionate contribution to the reduction of such emissions.

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?

It is considered that the UK should not consider unilateral measures as this would distort competition and place the UK at a competitive disadvantage.

5.33

What is the best way to define and quantify the UK's share of the carbon emissions generated from international aviation?

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?

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?

5.36

Which technologies (e.g. for aircraft and air traffic management) have the most potential to help reduce aviation's carbon emissions (noting potential trade-offs with local environmental impacts)?

5.37

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

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)?

Through the Sustainable Access Strategy, set challenging targets for access to the airport by sustainable transport modes both for passengers and staff. Prepare and implement a plan of action to achieve these targets. Through the airport Master Plan, seek to achieve carbon neutrality in all on-site ground operations. East Midlands Airport is an example of an aerodrome that is doing much to reduce carbon emissions from its ground operations through the introduction of renewable energy sources, including wind power and biomass. Sustainable transport should be provided between the proposed HS2 East Midlands station, whose location is still to be determined, and East Midlands Airport.

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)?

The establishment of a national high speed rail network would provide an attractive and less carbon intensive alternative to domestic and near European flights. In regard to demand management, see answer to question 5.22.

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?

The presence of an airport can be beneficial to local economies in terms of attracting business investment and tourism as well as being a significant employer in its own right. Conversely, it can have significant negative impacts for those living nearby in terms of noise, air pollution and highway congestion. The application of more stringent night-time noise limits, and expanding the availability of household noise mitigation grant funding, could assist in mitigating these impacts. The World Health Organisation has investigated the health impacts of noise at night and has concluded that the population should not be exposed to night noise levels greater than 40 dB of $L_{\text{night, outside}}$ during the part of the night when most people are in bed (“Night Noise Guidelines for Europe”, World Health Organisation, 2009). The Council strongly advocates that the Government take effective steps to implement this target (See also response to question 5.5).

An effective Surface Access Strategy can help address highway congestion problems.

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?

In general, in the case of East Midlands Airport, current arrangements for local engagement on aviation issues are considered to have helped to make progress, although the concerns of communities relating to existing and planned night time noise levels have not been fully met.

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?

Current arrangements for promoting sustainable surface access to and from East Midlands Airport have proven very effective and it is hoped that progress to date can be built upon to encourage a higher proportion of travel to and from the site by non-car modes.

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?

The value of a noise envelope is dependent upon the maximum size of the area contained within it. A tightly drawn envelope can encourage the early introduction of less noisy aircraft, the adoption of quieter operational practices and restrictions on flight numbers. Therefore tightly drawn noise envelopes, especially for night flights, would be supported. East Midlands Airport Master Plan seeks to limit the size of the 57 dBLAEQ 8h noise contour footprint to that reached at its previous peak in 1996. Since that year, although the number of Air Traffic Movements has grown, noise levels have fallen as a consequence of the withdrawal of noisier aircraft and the adoption of quieter operational practices (although it should be noted that there has been a marked reduction in the number of air traffic movements since 2008). However, the Airport Master Plan anticipates that the number of Air Traffic Movements will continue to grow, to the extent that 1996 noise levels will be reached once again by 2016. Noise levels during 1996 were unacceptably high and the Council considers that, rather than being allowed to grow back to its previous maximum extent, the noise footprint should be limited to its current actual size. This position is further supported by the fact that growth in air traffic movements has been much slower than anticipated in the Airport Master Plan, 1996, based on forecasts set out in the 2003 Air Transport White Paper, suggesting that the forecast should be revised downwards (see answer to question 5.4).

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?

Noise preferential routes minimise the number of properties affected and allow for their clear identification, thus allowing mitigation measures, such as domestic noise insulation grant funding, to be effectively targeted. They are therefore supported and should be continued where they exist.

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?

The setting of progressively more challenging aircraft noise emission targets by the International Civil Aviation Organisation, the identification of early dates for the withdrawal from service of noisier aircraft and the setting of stringent maximum noise and air pollution limits at airports would incentivise the introduction of new technology to reduce emissions.

5.46

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

At East Midlands Airport, a large proportion of unrestricted total night flights is accounted for by express freight services, including mail, which require overnight inward and outward delivery. These services are important to local employers in their own right and their presence is valued by businesses, thus helping to support the regional economy. However, it is considered that these economic benefits should not be achieved at the expense of the health and amenity of local residents, who should be better protected against noise from night time flights (see response to questions 5.43 and 5.47).

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?

In the East Midlands Airport Master Plan, the Sound Insulation Grant Scheme includes all dwellings within the 55 dB Laeq 8 hour contour. It is considered that this should be lowered in line with the recommendations of the World Health Organisation ("Night Noise Guidelines for Europe", World Health Organisation 2009) to protect all residents against noise exceeding 40 dB of $L_{\text{night, outside}}$ (see answer to question 5.40). In addition, there should be no further growth in the size of the 57 dBLAEQ 8h noise contour above current levels (see answer to question 5.43).

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?

This is not considered to be an effective solution to the problem of night noise.

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.