Aviation Policy Framework
Department for Transport,
Great Minster House (1/24),
76 Marsham Street,
London.
SW1P 4DR

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By email only: aviation.policyframework@dft.gov.uk

Dear Sir/Madam

Developing a sustainable framework for UK aviation: Scoping document

We welcome the opportunity for members of the Association of Noise Consultants (ANC) to contribute to the development of a sustainable framework for UK aviation.

The ANC has represented Acoustics Consultancies since 1973 and has over one hundred member companies representing nearly eight hundred individual consultants. In preparing this response all member companies have been advised of its existence and any comments received by them have then been consolidated.

We have responded to a selected number of your questions in the attached pages, concentrating on those matters that relate either directly or indirectly to noise.

Yours sincerely

Robert Osborne
ANC Secretariat

Questions

The Aviation Sector

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?

In the short to medium term the aviation sector will see the growing presence of new aircraft types that are both more fuel efficient and quieter than those in operation today, for example the Boeing 737Max, Boeing 787, Airbus A320NEO, and Airbus A350. We would also expect the rapid growth in the Far East, in particular in China and India, to continue. In the longer term as the benefits of the ACARE program, new technology engines developed by Rolls Royce and others, are realised this will reduce the noise of individual aircraft further.

5.5 How, and within what constraints, can aviation growth occur as technological developments and improved operating procedures reduce CO2, pollutant emissions and noise impacts?

We feel it is important that all 3 are reduced together and not one, say engine efficiency, at the expense of another such as noise. For example open rotor engine designs may offer improved fuel efficiency but increased levels of noise.

5.6 How should decision-makers address trade-offs or competing interests, where these occur both (a) between different aviation objectives, e.g. CO2 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?

Taking the statement in your foreword 'the fact that climate change has become one of the gravest threats we face' would suggest it is given high priority. This has to balance however with the realisation that as climate change is a global issue the contribution of any UK aviation is very small.

International Connectivity and Hub Airports

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?

Regional airports are already taking some of the demand pressures and with the Government position on new runways in the south-east this is likely to continue. To facilitate this further there needs to be improved sustainable accessibility to regional airports to increase their attractiveness to travellers which will encourage airlines to use them further. There may also be the need for developments at the airports or changes to planning restrictions. For this a clear national planning policy would be of assistance, if each airport is to be considered locally it will be difficult to have a coordinated approach.

Making Better Use of Existing Capacity

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?

There is significant physical capacity at many UK airports, even Heathrow has some capacity if segregated mode was permitted, and the latest draft master plan for Gatwick shows significant additional capacity. Airspace capacity is also however a significant factor as is the local environmental impact which must be addressed before this capacity can be utilised.

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

Airspace design has significant role in generating additional capacity, particularly in the south-east, and also in reducing environment impacts. This can be by reducing the length of flights and the amount of time aircraft spend holding. Noise benefits can also arise by also by allowing departing aircraft to climb quicker to cruising altitude instead of being held at relatively low levels, and allowing arriving aircraft to begin their approaches from greater distances and so maximising the benefits of continuous descent.

Climate Change Impacts

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

The cost of fuel is already driving developments in aircraft design and propulsion. There is the potential for this to start to conflict with noise improvements and the absence of more stringent international noise standards than ICAO Chapter 4 means the emphasis on noise may reduced. As most new aircraft types already easily meet this standard a new more stringent international target is required now.

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 most significant benefit is jobs. For most airport the most significant negative impacts for local communities is likely to be noise from airborne aircraft. Measures to reduce and mitigate this include restrictions on the number and types of aircraft, hours of operation, and the routes flown and the procedures used, and sound insulation improvements for buildings.

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?

Airport Consultative Committees have a useful role to play in the monitoring of airport actions, for example those promulgated under their noise action plans.

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?

A number of airports already have a 'noise envelope' in terms of the areas of noise contours. These are however often accompanied by limits on the number of aircraft, this takes away from the prospect of reducing noise impacts per plane. If they could be agreed 'noise envelopes' would offer benefits to the airport in allowing future development to be planned, and presumably permission gained for it, but would almost certainly experience significant local opposition. Such envelopes would allow better land use planning in accordance with ICAO's balance approach objectives.

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?

With improved aircraft navigation this issue is likely to become more significant as the degree of dispersion that currently occurs will diminish. The two options break down as either concentrating the burden and then potentially providing mitigation and making allowances when planning further developments or dispersing it but then doing nothing.

As the policy to date has been to concentrate the burden, which hopefully has been allowed for in planning decisions, a change now is likely to cause problems. It might however be sensible to consider introducing an artificial degree of dispersion by have a few similar PR-NAV routes.

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?

This is not a simple question and will need a thorough assessment to allow an informed answer. We look forward to proposed consultation for three main south-east airports.

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?

At many of the airports that are open the distribution of flights during the night is not limited. At some measures limit those in the 23:30 – 06:00 hours period. A partial consequence of this is greater movements on the periods just outside it. Whilst this reduction in the middle of the night appears beneficial it is noted that one of the conclusions of the Department of Transport study published in 1992 on the topic of aircraft noise at night and sleep disturbance was that, once asleep, very few people living near airports are at risk of any sleep disturbance due to aircraft noise.

A related factor on this issue is the time difference between the UK and the much of Western Europe. This incentivises earlier departures from the UK to allow passengers to maximise their day upon arrival.

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.

It is noted that the Air Transport White Paper 2003 was the result of significant technical analysis and extensive consultation. It will be necessary for a similar level of technical information to be provided to gain public support for any sustainable aviation strategy. To make real progress it is hoped that the sustainable aviation framework will provide suitable clarity to enable decision on development.