Airports Commission – Discussion Paper 05 - Noise

Response to the consultation from Bristol Airport

Introduction

1. Bristol Airport is pleased to provide evidence and views to the Airports Commission in response to Discussion Paper 05 and aviation noise.

2. Bristol Airport is the major regional airport for the South West of England and South Wales, serving a catchment area with a population of between seven and eight million people within a two hour drive time. Currently handing 6 million passengers per annum (mppa), Bristol Airport is the ninth largest airport in the United Kingdom and the fifth largest outside the South East of England. Flights are available from the Airport to over 100 destinations across 30 countries, including 82 destinations served by scheduled services. Planning permission was secured in 2011 for the development of the Airport to handle 10 mppa.

3. In our May 2013 submission to the Airports Commission, we provided evidence and ideas on how Bristol Airport could contribute to the delivery of airport capacity in the short and medium terms on the basis of making the best use of existing runway capacity. We are now pleased to have the opportunity to consider aviation noise further and respond to the issues raised in Discussion Paper 05.

General points

4. We are pleased to see that the Discussion Paper recognises the 'noise efficiency' of Bristol Airport in Chapter 3 and table 3.5 on page 25. However we would question whether it is appropriate to use total aircraft movements when assessing the number of aircraft movements as this introduces a few anomalies into the table. In our experience, the effect of general aviation on noise impact is low and therefore we believe it would be better to assess noise efficiency using air transport movements. When the noise efficiency is assessed on this basis Bristol Airport is the third best performing airport in the UK on both the passenger and movements metrics, behind Stansted and Gatwick[1].

5. Our planning application for development to handle 10 mppa was accompanied by a comprehensive assessment of the effects of air, ground, road and construction noise on the local community. The use of the LAeq 16 hour noise metric allowed a detailed assessment to be made of the effects of increased noise by location and population. We would question whether any other metric considered in the Discussion Paper could achieve this.

6. The 10mppa noise assessment also included 90dB(A) SEL contours so that an understanding of the impacts of individual aircraft movements could be understood, particularly for night time movements where the 16 hour LAeq contours are not applicable. This allowed the effects of changes in fleet mix and the effectiveness of noise insulation to be considered.

[1] We note that there are errors in the 2006 movements recorded against some airports in table 3.5, for example, Gatwick. The noise efficiency metrics appear to have been calculated correctly.

7. A combination of the Environmental Noise Directive noise action planning and planning conditions and obligations agreed with the local planning authority has resulted in a wide range of noise mitigation measures being implemented at Bristol Airport, including operational improvements to reduce noise (for example, related to continuous descent operations), operational restrictions on night flying and the use of aircraft stands and a limit on the area of the 57dB LAeq noise contour.

8. In common with many airports in the UK, night flying at Bristol Airport is controlled through a night noise quota system modelled on the system in place at the London airports. The Discussion Paper discusses the use of the Quota Count (QC) system in the context of mitigation and operating restrictions. However, it also provides a proxy measure for the assessment of night time noise impact and a comparison of night time noise climate between airports. We believe that Bristol Airport's planning permission provides one of the most stringent controls on night flying in place at any UK airports, including limits on night time aircraft movements and movements during the shoulder periods.

9. Residents around Bristol Airport have benefitted from an extensive noise insulation grant scheme which was defined by the 90dB(A) SEL contours of the Boeing 737-300 and 757-200 aircraft. As a result, noise insulation has been provided to some properties in the past which now lie outside the current 57dB LAeq noise contour. The previous arrangements have now been supplemented with non-specific provisions for noise insulation through a £100,000 a year Local Community Fund. This allows grants to be awarded for noise insulation at the discretion of a joint Bristol Airport/North Somerset Council management committee.

Responses to the Discussion Paper questions

10. What is the most appropriate methodology to assess and compare different airport noise footprints? For example:

    - What metrics or assessment methods would an appropriate 'scorecard' be based on?
        - A distinction needs to be made between metrics that are more appropriate for environmental monitoring and to inform and assess the effectiveness of noise action plans, and metrics which can be used to assess the impacts of future airport development. In our experience the LAeq 16 hour metric provides the most effective way of accurately quantifying the noise impact from future development.
        - The 'noise efficiency' metrics referred to in the Discussion Paper are useful metrics for comparing noise impacts between airports and to identify those airports that might have the environmental capacity to accommodate increased traffic. However they cannot be used to assess the impacts of increased traffic on individual properties. Table 3.5 confirms what is intuitively obvious; airports in rural areas have lower noise impacts than airports in or next to urban conurbations.
        - The composite Lden parameter is useful for characterising existing air noise levels but its calculation relies on detailed annual flight movement

data, flight profiles and fleet mix data. We do not think it is suitable for use as a predictive tool.

- Likewise it seems that the N70 approach may be more appropriate for environmental monitoring and reporting rather than as a tool to describe future noise levels.
- We would also note that the CAA's proposals for providing noise information for individual, postcode specific locations are related to publicising existing noise climates. We have reservations about whether the CAA have fully understood the complexities of their proposals and it is probably unrealistic to expect that such a tool can be used to assess the effects of future airport development. In any case the tool, as currently envisaged, will essentially need to interpret LAeq contours as part of its algorithm.

- To what extent is it appropriate to use multiple metrics, and would there be any issues of contradiction if this were to occur?
    - Multiple metrics can be used if chosen carefully. 90dB(A) SEL contours provide a useful metric for assessing the impact of night flights alongside LAeq contours for daytime noise.

- Are there additional relevant metrics to those discussed in Chapter 3 which the Commission should be aware of?
    - The QC system provides a useful tool for comparing the noise from individual aircraft and assessing the effects of changes in aircraft fleets.

- What baseline should any noise assessment be based on? Should an assessment be based on absolute noise levels, or on changes relative to the existing noise environment?
    - The baseline should be the 'no development' scenario.

- How should we characterise a noise environment currently unaffected by aircraft noise?
    - Bristol Airport is not in a position to comment on this.

11. How could the assessment methods described in Chapter 4 be improved to better reflect noise impacts and effects?

- The interpretation of the WHO guidelines are a particular source of controversy and the Airports Commission should consider developing improved guidance on how they should be applied.
- The withdrawal of Planning Policy Guidance PPG24 on noise has left a policy vacuum that is particularly challenging in the context of aircraft noise. As noted in the Sustainable Aviation Noise Road-map, a consistent national approach to planning and noise is essential in making policy and taking development decisions. The Airports Commission should take the opportunity to develop policy guidance to fill the vacuum left by the loss of PPG24.

12. Is monetising noise impacts and effects a sensible approach? If so, which monetisation methods described here hold the most credibility, or are most pertinent to noise and its various effects?

    - Monetising noise impacts seems to be fraught with difficulties.

13. Are there any specific thresholds that significantly alter the nature of any noise assessment, e.g. a level or intermittency of noise beyond which the impact or effect significantly changes in nature?

    - Bristol Airport is not in a position to comment on this.

14. To what extent does introducing noise at a previously unaffected area represent more or less of an impact than increasing noise in already affected areas?

    - Bristol Airport is not in a position to comment on this.

15. To what extent is the use of a noise envelope approach appropriate, and which metrics could be used effectively in this regard?

    - Bristol Airport has a noise envelope as a result of a planning condition relating to the area of the 57dB LAeq contour attached to the 2011 planning permission for development to 10mppa. It provides reassurance to the local community and provides a focus for noise action planning by airport management. It is likely to stimulate innovative approaches to operational noise mitigation that will enhance the environmental capacity of the airport.

16. To what extent should noise concentration and noise dispersal be used in the UK? Where and how could these techniques be deployed most effectively?

    - We support the approach set out by Department for Transport in their 'Consultation on Guidance to the Civil Aviation Authority on Environmental Objectives Relating to the Exercise of its Air Navigation Functions'.

17. What constitutes best practice for noise compensation schemes abroad and how do these compare to current UK practice? What noise assessments could be effectively utilised when constructing compensation arrangements?

    - Properties around Bristol Airport have benefitted from a noise insulation grant scheme based on the 90dB(A) SEL contour of the Boeing 737-300 and 757-200 aircraft. The scheme allowed for the funding of secondary glazing, acoustic glazing and standard double glazing (with the proviso that the resident signed a disclaimer relating to acoustic attenuation in the case of standard double glazing). The inclusion in the scheme of standard double glazing was made at the request of the local community suggesting that for some residents generalised compensation for living near an airport may be more important than noise attenuation.

    - The Bristol Airport noise insulation scheme was more generous than a scheme based on current 63dB LAeq contours and many properties outside the current 57dB LAeq have benefitted from noise insulation grants. We believe it compares

favourably with many of the schemes in other countries referred to in the Discussion Paper.

- The 2011 Bristol Airport planning permission includes provision for a £100,000 a year Airport Environmental Improvement Fund to be spent on projects for the benefit of the local community. This includes non-specific provisions for funding noise insulation alongside more general funding aims relating to transport, nature conservation and sustainability. The use of Community Funds as compensation for local communities affected by controversial developments is now commonplace.