



Heathrow Noise Objectives and Airspace Design Principles

Heathrow Community Noise Forum

19th September 2018

Presented by the Community Noise Group (CNG)

Heathrow Noise Objectives and Airspace Design Principles

- On behalf of CNG representatives:

- Englefield Green Action Group
- Windsor & Maidenhead
- Richmond Heathrow Campaign
- Teddington Action Group
- Aircraft Noise 3 Villages
- Harmondsworth and Sipson Residents' Association
- Richings Park Residents' Association
- Ealing Aircraft Noise Action Group
- Iver Parish Council

Heathrow Noise Objectives and Airspace Design Principles

- The Government has changed its Air Navigation Guidance and the objective is now to minimise the adverse impacts of aviation noise.
- It follows that the effects on health and quality of life must now take the highest priority rather than a simplistic assessment of numbers of people affected and thresholds now shown to be out of date.
- The NPS was justified to Parliament on the basis of the wider benefits to society. It follows that the impacts should be shared on a fair and equitable basis. The approved NPS also contained a number of conditions and assurances in relation to health impacts, especially noise, accordingly the Airspace Design Principles need to deliver noise objectives.
- The shared approach to noise impacts was supported by the majority of the respondents to Heathrow's Airspace Design Principles consultation.

Existing Government Noise Objectives

High tier Noise Objectives are essential to establishing a set of Airspace Design Principles but are missing from Heathrow's Proposal on Principles.

The 3 existing Government national noise objectives are below. They have been re-affirmed by the CAA's Air Navigation Guidance October 2017 and the NPS 2018 confirms Objective 1, albeit with slightly different language.

- 1. To limit and, where possible, reduce the number of people in the UK significantly affected by adverse impacts from aircraft noise.**
- 2. Any benefits from future improvements in aircraft noise performance should be shared between the aviation industry and local communities.**
- 3. A fair balance should be sought between the negative impacts of noise and the positive economic impacts of flights.**

We recommend two further informative qualifications be introduced:

- a. Current and emerging WHO guidance on community noise be reflected in interpreting Objective 1.
- b. Objective 2 to include the phrase 'taking account of base year levels of noise and trends in noise reduction'

Proposed Additional Local Noise Objective

National Objective 1 implies directly a fourth Local Objective - particularly with regard to Heathrow's location in the middle of the densest population in Europe.

Additional Local Noise Objective 4.

Where there is a reduction in overall noise the benefit be distributed proportionately to those already most affected and where there is an increase in overall noise the disbenefit be distributed proportionately to those already least affected.

This objective should be adopted and given high priority in establishing Heathrow's Airspace Design Principles. We believe it is fair and rational way to share the adverse impact of aircraft noise.

Noise Objectives and Airspace Design

Objectives 1 and 4 should be the basis for airspace design (to be reflected in Gateway 1 of the ACP):

- The impact on those already exposed to noise should not be increased by additional flights or loss of respite.
- Additional noise should be distributed over areas not currently affected.

This should result in no community presently overflowed seeing any increase in noise from today using an appropriate set of noise metrics.

The Airspace Design Principle flowing from Objective 2 is:

- If an increase in ATM's is proposed over any community already impacted the Industry should demonstrate overall noise levels are reduced and improvements are being shared with communities on a reasonable basis vs a 2013 baseline using an appropriate set of noise metrics.

Airspace Design Principles

Safety is paramount

Enable application of ICAO balanced approach;

- Reduction of noise at source (fleet transition rate)
- Land-use, planning and management
- Noise Abatement - Operational procedures

Airspace Design Principles should include;

- Consideration of flight path concentration/dispersion,
- Respite levels,
- Night noise management,
- Separation of new flight paths,
- Altitude based noise priority heights,

All appropriate metrics to be used (including L_{DEN} , $N_{>}$ and single mode) and their weightings to be established with a robust evidence base.

Airspace Design Principles

Examples of Issues

PBN & Concentration

Until it can be demonstrated that PBN with concentration can be introduced without giving rise to adverse impacts on noise, health and wellbeing – it should not be applied in relation to redesigning airspace around Heathrow.

As noted previously international experience of PBN and concentration is overwhelmingly negative. A PBN paper was presented to HCNF on 16th May 2018 highlighting the issues and challenges but to date no response has been received.

Respite

Unless it can be demonstrated that different levels of Respite can be introduced without giving rise to adverse impacts on health and wellbeing – present Respite levels should not be reduced in relation to redesigning airspace around Heathrow.

Airspace Design Principles

Current gaps in the knowledge base

- There is no research or understanding of the current health impacts relating specifically to Heathrow or its proposed expansion. It is essential this is addressed as a priority as following from the Government's revised objectives it must guide airspace design. The Department of Health or Public Health England should lead on this.
- SoNA is unreliable and should be independently reviewed.
- WebTAG cannot be relied upon until its values and inputs are supported by fully independent medical and social research.
- The international experience of concentration and PBN is overwhelmingly negative – locally evidenced by the public backlash to the 2014 trials.
- In order to reach any acceptable outcome, respite will be of fundamental importance to airspace design. At present there is no concluded research or understanding about how much respite is needed to result in acceptable living conditions, how much separation is required between flight paths to achieve this and what in technical aviation terms will be possible.

Conclusion

- Until the noise objectives in this presentation are discussed and agreed a deferral of the CAA Gateway Process is required.
- Until the issues relating to design principles presented in this presentation are resolved a deferral of the CAA Gateway Process is required.
- CNG will be formally notifying Heathrow of this conclusion

Thank You