

Department for Transport consultation on Guidance to the Civil Aviation Authority on Environmental Objectives Relating to the Exercise of its Air Navigation Functions



Response from the Aviation Environment Federation **2.9.13**

The Aviation Environment Federation (AEF) is the principal UK NGO concerned exclusively with the environmental impacts of aviation. Supported by individuals and community groups affected by the UK's airports and airfields or concerned about aviation and climate change, we promote a sustainable future for aviation which fully recognises and takes account of all its environmental and amenity effects. As well as supporting our members with local issues, we have regular input into international, EU and UK policy discussions. In 2011 we acted as the sole community and environmental representative on the Government's South East Airports Taskforce, and in 2013 we were one of only two environmental organisations to take part in the Airports Commission's public evidence sessions. At the UN we are the lead representative of the environmental umbrella organisation ICSA, which is actively engaged in the current talks aimed at agreeing global climate measures for aviation.

We are pleased to have the opportunity to respond to this consultation though we have done so by way of general comments rather than attempting to answer the consultation questions in turn.

Emissions

One of the most significant changes in terms of environmental legislation since the previous guidelines were published has been the introduction of the Climate Change Act 2008, which requires that emissions from international aviation and shipping must be taken into account in the setting of carbon budgets with a view to their formal inclusion in the near future. In 2012 the Government decided to postpone a decision about this issue until it comes to set the fifth carbon budget, but stated that "Government reaffirms its overall commitment to the 2050 target and recognises that emissions from international aviation and shipping should be treated the same as emissions from all other sectors, in order to reach our long-term climate goals"¹. We consider this an important development that should be recognised in section 2 of the guidance notes.

Concentration, dispersal and respite

Respite through modified approaches to concentration

While we agree with the Government that that concentration is generally the right approach for noise management, we are also aware that the introduction of precision air traffic management systems has led to a situation in which in some cases a small number of people bear a very heavy burden in terms of noise impacts. Similarly, precision navigation has also created new possibilities: we are pleased to see Heathrow and NATS working with the local community to trial the

¹ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/65686/7334-int-aviation-shipping-emissions-carb-budg.pdf

introduction of new precision SIDs within existing NPRs to test whether there is any benefit in using alternation to create respite. We welcome the shift in Government policy, reflected in this guidance, to a slightly more nuanced approach to concentration, allowing flexibility to test alternative approaches, in response to local considerations.

In 2010, AEF was commissioned by HACAN to provide an analysis of the noise problems potentially associated with a simple policy of noise concentration, and of the opportunities for possible alternative approaches to noise management at Heathrow. The report, *Approach noise at Heathrow: concentrating the problem*², argued that there are some examples, particularly from Sydney, of concentration being successfully combined with various kinds of alternation in order to provide predictable respite. It also provided evidence, looking at Heathrow in particular, that an increased use of Continuous Descent Approach, generally presented as a noise benefit, has led to a greater concentration of arrivals over Southwark, Wandsworth, Lambeth and Greenwich boroughs, as a result of its tendency to lead to greater convergence on a single centreline. These are all areas that lay outside the 57 Leq contour for Heathrow for 2008 but in which significant community annoyance was apparent to us from residents' concerns. Possible alternatives include curved or advanced CDAs, which would allow greater flexibility with respect to avoiding densely populated areas, and the use of more than one CDA approach path, with varied entry points, for each runway. Finally, we argued that steeper approaches, with an initial descent undertaken at 2 degrees and then the final descent at between 3-4 degrees, may be feasible and could deliver noise benefits

We welcome the willingness of CAA and NATS to look at some of these approaches in the UK. The CAA has indicated that it is undertaking work to assess whether the very small increase in risk associated with steeper approaches is outweighed by the potential environmental benefit. Heathrow airport, meanwhile, has agreed with local community representatives to trial a system whereby a degree of alternation is provided by routing aircraft along alternative edges of the existing NPR, to test whether or not this provides any valuable respite from departure noise.

Respite through temporal concentration

Another approach to respite is to concentrate more flights at some times of day rather than others. Given the additional disturbance associated with night flights, many communities would probably accept more flights during the day if it meant fewer flights at night. The situation is less clear, however, when in order to introduce a period of respite in the middle of the night, more flights are pushed to the beginning and end of the night period. At Heathrow, no departures are scheduled during the night quota period of 23:30 till 06:00, and in addition the airport operates a voluntary curfew whereby no aircraft are scheduled either to arrive or take off between 23:30 and 04:30.

While this arrangement may be effective at Heathrow, at other airports (notably Gatwick) there is a concern among communities about the possible creation of a curfew period in the middle of the night. If this resulted in an increase in flights either early in the night (when people are trying to get to sleep) or early in the morning (when they may be sleeping more lightly and be more vulnerable to being woken), this could in fact result in an increase in disturbance. More research may be required into whether people are more sensitive to noise during these times. Similarly, more research may be

² http://www.aef.org.uk/uploads/Approach_Noise_at_Heathrow_Concentrating_the_Problem.pdf

needed into whether light sleepers benefit from respite arrangements whereby, for example, there are no movements before 6 a.m. on one week but many on the next. Any trial of such a scheme relying only on complaints data would not provide a robust answer.

Management of helicopter noise

We are disappointed that the draft guidance fails to introduce any new advice in relation to helicopter noise, given that the draft Aviation Policy Framework (section 4.91) made a specific commitment to “consider how to address noise from helicopters” in the course of reviewing this guidance.

Helicopters generate a unique set of noise problems, often flying at low altitudes and being perceived as more intrusive and annoying than fixed wing aircraft due to their unique noise and tonal characteristics. In addition, heliports often make little if any provision for community consultation and engagement. Evidence in relation to each of these points was set out in a 2008 report by Defra³. The study made a number of recommendations based on research it commissioned into helicopter noise:

- 1) Academic research is required to better understand the human response to helicopter noise. In defining new approaches, the low incidence rate of most helicopter operations and the non-acoustic factors, also known as ‘virtual noise’, which encompasses community attitudes and fears towards the operations, should be considered.
- 2) Complaints should be collected and logged in a central database. This should embrace all sources including the CAA, the MOD, local authorities, operators and airfield managers. Attention should be paid to methods utilised in Australia where monthly reports on complaint statistics are provided to stakeholders.
- 3) Pilots should be made more aware of helicopter noise, perhaps during training for the Private Pilots Licence (PPL) or for military pilots. Such a scheme, the HAI’s ‘Fly neighbourly’ programme, is successfully operated in the US, Germany and other countries. This can be part of the best practical means of minimising noise complaints.
- 4) Applied research is required so that land use planning guidance, such as PPG24 in England, can be revised. Specific land use planning guidance needs to be developed for the assessment of noise from helicopter operations.
- 5) Developers need to be encouraged to enhance sound insulation in new / change-of-use builds near helicopter bases.

³ See, for example, Defra 2008 *NANR 235 - Research into the improvement of the Management of Helicopter Noise*
<http://archive.defra.gov.uk/environment/quality/noise/research/documents/nanr235-projectreport.pdf>

- 6) For accurate prediction of environmental noise from helicopter operations, and for noise maps, data on the source noise of civil helicopters needs to be obtained.

To our knowledge this work has never been taken forward. Having declined to undertake any review of this area itself prior to publication of these draft guidelines, we recommend that the DfT should at least make specific recommendations to the CAA to undertake an analysis of how helicopter noise might be better managed and what role the CAA, through its air traffic management duties, might be able to play. In their current form, the draft guidelines ask the CAA to “recognise the unique noise characteristics of helicopters” without giving any explanation of what these might be, or what implications this might have for the exercise in practice of the CAA’s duties. The need for better guidance is compounded by the withdrawal of PPG 24 that gave some advice to local planning authorities on assessing and controlling aircraft noise, including in relation to helicopters. Contrary to the Defra recommendation quoted above calling for better guidance in PPG24, we now have no guidance at all.

Altitude-based priorities, and advice relating to AONB and national parks

We are aware that the CAA and NATS have for some time operated the altitude-based system of priorities set out in this guidance and we thus understand that the main aim is to legitimise this system by making it part of official advice. We agree that for low altitudes, noise concerns should be prioritised, and consider 4,000 feet to be a reasonable benchmark for this. Clearly, however, noise can continue to be a problem at higher altitudes, particularly over AONB and National Parks noted for their tranquil characteristics, and we are mindful this context of the successful challenge to the TC North proposed airspace changes by the Dedham Vale Society. We therefore welcome the special consideration recommended for AONB and National Parks in respect of managing environmental impacts between 4000 and 7000 feet. We support the prioritisation of emissions above 7000 feet.