AIRPORTS COMMISSION DISCUSSION PAPER 05:AVIATION NOISE

Response by the Campaign to Protect Rural England to the consultation

Introduction

1. The Campaign to Protect Rural England (CPRE) welcomes the opportunity to comment on the Airports Commission's consultation on its Aviation Noise paper. CPRE fights for a better future for the English countryside. We work locally and nationally to protect, shape and enhance a beautiful, thriving countryside for everyone to value and enjoy.

2. Our comments on the discussion paper are focused largely on the issue of tranquillity, which the paper raises in chapter 2. Although we answer some of the consultation questions at the end of this response, we have set out further information about tranquillity beforehand as this does not easily fit into any of the consultation questions.

Background

3. Tranquillity is a highly valued characteristic of the English countryside and one of the most important indicators of its quality. CPRE has championed research to define, map, protect and enhance tranquillity since the early 1990s. During 2005-2006 we worked closely with Natural England and the Universities of Northumbria and Newcastle to define and quantify tranquillity and map England on a spectrum of tranquillity from least to most tranquil. CPRE published this new tranquillity map of England in 2006.

Key tranquillity issues

4. We very much welcome the recognition given to the value of tranquillity in Chapter Two as a resource associated with well-being and quality of life. We also welcome references to the Environmental Noise Directive (END) and the National Planning Policy Framework (NPPF) which seek to protect areas where noise quality is already regarded as 'good'.

5. We would like to encourage the Airports Commission to extend its analysis of tranquillity and areas of tranquillity beyond the relatively brief mention in this section. In this respect there are a number of areas which should be addressed to strengthen the analysis and these are set out below.

6. There is no reference to the value of tranquillity as part of the quality of the wider countryside and notably designated landscape areas such as AONBs and National Parks. This was acknowledged by Government as far back as the Rural White Paper *Our Countryside: the Future – a fair deal for rural England* in November 2000. This recognises tranquillity as an intrinsic part of the character of the countryside, and an aspect of the countryside that contributes to people's enjoyment of the countryside; people's physical and mental health; and to the local rural economy, particularly through rural tourism.

7. Analysis in chapter 2 focuses mainly on the impact of noise on areas where people live and work. Apart from Figure 2.6, little attention is given to the loss of amenity, health and well-being benefits derived from quiet enjoyment of the countryside, nor impact on visits and tourism from aviation noise and its expansion. Accordingly, the analysis in chapter 2 relates mainly to noise impacts on the population *in situ* – either at home, work or school - but not the population enjoying the countryside. Natural England estimates 2.85 billion visits to the natural environment between March 2012 and February 2013 in England and 47 per cent of these to the countryside.[1] . The analysis should be extended to consider the growing importance of the impact of aviation upon tranquillity as was recognised by the Civil Aviation Authority (CAA) in their *Future Airspace Strategy* [2011, paragraph 33][2]: 'degradation of tranquillity is an important issue and should be given due consideration'.

8. Chapter 3 considers various noise metrics. We agree as set out in paragraph 3.11 that it is important to consider the question of what to assess noise against. In particular, understanding noise levels with reference to back ground levels is essential for assessing the impact on tranquillity of aircraft noise in areas of relatively low background noise levels, as is likely to be the case in relatively tranquil areas of wider countryside. In this respect high altitude aircraft may also be significantly intrusive in areas of tranquillity, particularly those with high landscape and recreational value, because of particularly low ambient noise levels. Although paragraph 2.35 refers to 'the benefits associated with the absence of noise', it is important for consideration to be given also to the therapeutic value of natural soundscapes – birdsong, the sea, running water – that can be masked by aircraft noise. In addition, and as is also recognised by the CAA, the definition of tranquillity applied by research and mapping done for CPRE includes visual and aural factors. The interplay of the visual and aural intrusion of aircraft in making noise levels more salient particularly against background levels warrants further investigation – there have been suggestions that where a noise source can be seen, it is perceived as louder than it would be if it could not be seen. Indeed all of these issues merit further research.

9. In the development of further metrics and methodologies to assess different airport noise footprints [paragraph 3.55], we believe there is much scope to develop metrics to assess the impact of aircraft noise emissions on the tranquillity of the wider countryside and to extend this to impacts on the health and well-being benefits the public derives from it. We suggest that further research on tranquillity be considered within the context of the Aviation Commission but also the wider context of the increasing policy relevance of tranquillity for instance in the NPPF and the designation of quiet areas under the Environmental Noise Directive. This should take as a starting point the work undertaken by academics for CPRE to which the Noise paper refers. It would be beneficial if the Airports Commission were to support future modelling and mapping of tranquillity so that a broader consensus on the development of an enhanced tranquillity metric could be achieved. This would help to address the lack – according to the CAA – of a 'commonly agreed method for the measurement of tranquillity' (2011, paragraph 37).

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[1] Natural England, Monitor of Engagement with the Natural Environment: The national survey on people and the natural environment, July 2013 pages i-ii
http://publications.naturalengland.org.uk/publication/5331309618528256?category=47018

[2] CAA *Future Airspace Strategy for the United Kingdom 2011 to 2030*, June 2011
http://www.caa.co.uk/docs/2065/20110630FAS.pdf

Improving public understanding

10. Current noise maps are not always easy to use or understand. With the increased number of noise metrics available, this problem could potentially increase. As part of its campaigning on High Speed 2, CPRE has been considering ways that to help improve public understanding of environmental issues involved in major infrastructure. Our www.hs2maps.com website, launched in August 2013, has made use of a wide range of open data to seek to improve public understanding as well as the design of major infrastructure.

11. By showing construction impacts against population density and modelled noise contours against a tranquillity layer, for example, the maps help put impacts into context. Were the Commission to consider that further airport capacity would be appropriate – something that CPRE is not persuaded of - such a visual representation would make it easier for the public to understand different potential impacts of any proposals for further airport expansion. We would be very happy to demonstrate the website and discuss its approach further.

Consultation questions

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?

We welcome the recognition of the unsuitability of continuing to use LAeq and the 57dB contour. We agree that no single metric is suitable and that a range of metrics is needed to compare different noise footprints. At the very least these should cover daytime and night time noise exposure and areas subject to high noise events as well as perceptible noise events. There should also be consideration of noise impacts on quiet areas and areas of tranquillity, which may be some distance from an airport.

To what extent is it appropriate to use multiple metrics, and would there be any issues of contradiction if this were to occur?
We believe that it is highly desirable to use a range of metrics. We do not agree with the proposed airport efficiency metric combining aircraft movements and population affected as this oversimplifies the range of noise impacts.

Are there additional relevant metrics to those discussed in Chapter 3 which the Commission should be aware of?
As noted above, we believe further research is needed to develop new metrics in relation to tranquillity.

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?
Both absolute levels and relative changes are relevant and should be assessed.

How should we characterise a noise environment currently unaffected by aircraft noise?
Currently quiet areas and areas of tranquillity are used in other areas of policy (END and NPPF respectively) to characterise areas which are relatively undisturbed by noise. There is scope to better define these areas within policy, the criteria by which they can be assessed and designated and the relationship between them. As we would expect the relative presence or absence of aircraft noise to be a relevant factor within criteria used to assess such areas, this would be a better deployment of resource than to develop

further descriptions of areas unaffected by aircraft noise which might overlap or conflict with these.

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?
The Department for Transport's Web Transport Appraisal Guidance (WebTAG) already monetises noise. This only monetises high levels of noise, however, and low level noise, which may nonetheless have significant impacts in areas of tranquillity, is only considered in the landscape unit of WebTAG. CPRE believes that this distinction is an appropriate one. If noise impacts are to be monetised, then this needs to be done with the recognition that not all impacts of noise can be monetised and that the significance of these other impacts should not be downplayed as a result.

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?
This depends on a number of factors, in particular:

- the background level of noise;
- the use of an area – is it residential or recreational, for example;
- the characteristics of the change, in particular the number of noise events and how noisy they are.

To what extent is the use of a noise envelope approach appropriate, and which metrics could be used effectively in this regard?
We are not convinced by the merits of noise envelopes. Given our earlier answer in relation to the need for a range of metrics to be used, it is difficult to foresee how noise envelopes based on a single metric could be justified. On the other hand having a range of metrics used in an envelope would reduce the certainty for developers or local residents as to future limits on aircraft movements.

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