## **Environmental Health**

Tom Kealey, Head of Health and Wellbeing

Night Flights Consultation, Department for Transport, Great Minster House (1/25), Horseferry Road, London, SW1P 4DR

Our ref: 17/00837 Your ref: Night Flights Consultation Date: 31<sup>st</sup> January 2017.

Dear Sir / Madam,

## RE Night flight restrictions at Heathrow, Gatwick, and Stansted – Consultation Document.

Thank you for the opportunity to allow Reigate and Banstead Borough Council to comment on the above document. The comments and views below focus primarily on Gatwick Airport given its proximity to the borough, however some of the comments especially around health effects will be equally pertinent to Heathrow and Stansted.

Before answering the specific questions posed in the consultation document there are two key points that the authority would like to make:

i) Over the past 10 years the noise (QC) quota at Gatwick has had NO impact on incentivising airlines to use quieter aircraft, and thus a more stringent regime is essential in relation to the QC / noise quota limit if the DfT is to achieve its aim of '*encouraging the use of quieter aircraft...*'.

Any improvement seen in the average QC per aircraft movement in the past 10 years in the summer has been in spite of the regulations rather than as a consequence of them, with residents' total QC noise exposure higher in 2016 than 2009, while in winter 2015/16 the average QC per aircraft movement was no better than in 2005/6.

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Head of Service: Tom Kealey, Head of Health and Wellbeing Town Hall, Castlefield Road, Reigate, Surrey RH2 0SH ii) The heath impact assessment is likely to be a significant underestimate of the true heath costs. The report focuses on people / dwellings within the 48 dB L<sub>Aeq 6.5hr night</sub> contour. However, the WHO Night Noise Guidelines for Europe<sup>1</sup> when looking at the health effects of noise says that 40 dB L<sub>Aeq</sub> <sub>night</sub> is the lowest observed adverse effect level and '*can be considered a health based limit value for night noise guidelines'.* 

Therefore, the contours produced for this consultation and impact assessment should include the number of people / dwellings within the 42 dB  $L_{Aeq~6.5hr~night}$  contour when assessing the health impact on the local population and not the 48 dB  $L_{Aeq~6.5hr~night}$  contour.

It is also worth noting that the same WHO report also shows that sleep disturbance occurs below 45 dB  $L_{Amax}$  for a number of effects including *'changes in duration of various stages of sleep, sleep structure, and fragmentation of sleep'* which has a threshold of 35 dB  $L_{Amax}$ . This would suggest that in paragraph 3.7 of the consultation that the outdoor  $L_{Amax}$  value of 60 dB should in fact be 50 dB.

Now turning to your specific questions:

Q1a. How strongly do you agree or disagree with our proposed environmental objective for the next regime? **Agree.** 

Q1b. Do you have any additional comments on our proposed environmental objective for the next regime?

In terms of the proposed methods of measuring achievement of the objective the DfT may also wish to consider in addition to the  $L_{Aeg 6.5hr night}$  the use of a specific  $L_{max}$  value e.g. 60 dBA. Then contour the number of exceedances of this value, and combine this with the population data to give an indication of 'population disturbance' both now and at the end of the 5 year period in recognition of the fact 'average indicators are insufficient to fully predict sleep disturbance and sleep quality'<sup>2</sup>.

Q2a. How strongly do you agree or disagree with our proposal for the length of the next regime? Agree.

Q2b. Do you have any additional comments on our proposal for the length of the regime?

It would be far more useful to have a longer time frame for a given regime e.g. 10 years as this gives both industry and residents affected by noise greater certainty. It would also allow for more challenging noise quota limits to be set than over a five year period, as the airline industry would have sufficient time to plan and invest for such changes.

<sup>&</sup>lt;sup>1</sup> WHO (2009) Night Noise Guidelines for Europe ISBN 978 92 890 4173 7.

<sup>&</sup>lt;sup>2</sup> Page 26 2<sup>nd</sup> to last paragraph - Night Flight Restrictions at the designated airports 2017-2022 Impact Assessment DfT00370

Q3a. How strongly do you agree or disagree with our proposal to introduce a new QC/0.125 category for aircraft between 81 and 83.9 EPNdB? **Very strongly agree.** 

Q3b. How strongly do you agree or disagree with our proposal for all aircraft quieter than this to remain QC/0 but count towards the airports movement limit? Very strongly agree that all aircraft less than 81 EPNdB count towards the movement limit.

However strongly disagree that aircraft less than 81 EPNdB remain at QC/0. Any aircraft that has an outside  $L_{max}$  footprint greater than 45 dBA that intersects with a residential property should count towards the noise quota limit as it will cause sleep disturbance<sup>1</sup>.

Q3c. Do you have any additional comments on proposals for the Quota Count System?

See comment under 3b in relation to QC/0 aircraft.

Q4a. How strongly do you agree or disagree with the proposal for movement limits to remain unchanged at Heathrow? **No comment.** 

Q4b. Do you have any additional comments on our proposal for Heathrow's movement limit? No comment.

Q5a. How strongly do you agree or disagree with the proposal for movement limits to remain unchanged at Gatwick?

Agree – however in any future work we would expect the movement limit to be reduced for movements that have the potential to cause sleep disturbance.

Q5b. Do you have any additional comments on our proposal for Gatwick's movement *limit*?

At Gatwick the distribution of flights within the summer period should also be monitored by the DfT given its variability, to ensure that the number of flights in a given night does not exceed the average for the summer period by more than 50 %.

In addition to give residents certainty there should be no carry over of quotas between the summer and winter periods, given the limited variability in the length of the summer season (Table 1) of no more than 7 days (3.3%).

Year	Summer Season Length (days)
2018	218
2019	211
2020	211
2021	218
2022	218

Table 1: Length of Summer Seasons during the proposed Night Noise Regime (2018-2022).

Q6a. How strongly do you agree or disagree with the proposal to raise Stansted's movement limits to reflect the current number of exempt aircraft in operation? **No comment.** 

Q6b. Do you have any additional comments on our proposal for Stansted's movement limit? No comment.

Q7a. How strongly do you agree or disagree with our proposals to encourage the use of quieter aircraft at Heathrow? **No comment.** 

Q7b. Do you have any additional comments on how you feel noise quotas can best be set in order to encourage the use of quieter aircraft at Heathrow? **No comment.** 

Q8a. How strongly do you agree or disagree with our proposals to encourage the use of quieter aircraft at Gatwick?

Very strongly agree including to a 20 % reduction by year 5 in the night noise quota.

Unless the QC limit is reduced with time there will be no reduction in the number of people exposed to elevated noise over the 5 year period as shown in tables 7 and 8 compared to table 10 of the consultation document.

Thus to actively incentivise the use of quieter aircraft the average QC per aircraft movement has to be reduced year on year, otherwise any improvements that do occur are likely to be technology following, and as the movement limit has now been reached these improvements are likely to be offset by the substitution of larger and noisier aircraft.

Q8b. Do you have any additional comments on how you feel noise quotas can best be set in order to encourage the use of quieter aircraft at Gatwick? Given previous night flight regimes have progressively banned the noisiest aircraft from operating in the night quota period the proposed regime should consider:

- an operational ban on QC/4 during the night quota period,
- introducing a rule that prevents the scheduling of QC/2 aircraft in the night quota period.

The purpose of these suggestions is to lock in the noise improvements to date, and prevent the substitution of QC/2 aircraft which would be possible were the QC limit to be frozen for the next 5 years given the headroom created by the introduction of the A320 neos at Gatwick.

Q9a. How strongly do you agree or disagree with our proposals to encourage the use of quieter aircraft at Stansted? **No comment.** 

Q9b. Do you have any additional comments on how you feel noise quotas can best be set in order to encourage the use of quieter aircraft at Stansted? **No comment.** 

Q10. Do you have any further views on our proposals, or their potential impact on the Government's ability to fulfil the requirements of the Public Sector Equality Duty? The final comments relate to the impact assessment and the questions in appendix G.

As stated at the start of the letter under point ii) the current impact assessment from a heath perspective is likely to under estimate the true health impact (benefit) of any of the proposals. This is especially true in relation to option 4b and the reduction in the QC limit, given that:

- a) health impacts are seen at levels below that at which the affected population contour has been set,
- b) the evidence base on sleep disturbance and health is continually expanding, with recent developments focusing on how a lack of sleep may increase the risk of Alzheimer's<sup>3</sup>.

While a) can potentially be corrected in the calculation, with b) this cannot be monetised at present and so indicates that any current value will be an underestimate of the true benefit of the measure.

In terms of the impact on flights we would also question that the introduction of a 20 % reduction in the QC quota over 5 years (policy option 4b) would necessarily lead to a reduction in flight numbers, given the comments in the impact assessment<sup>4</sup> that the DfT model suggests negligible A320 neo use at Gatwick, while in practice up to a third of EasyJet's fleet could be A320 neos based on their current order book.

We hope that the above comments prove to be of help, and if you have any technical questions relating to our comments please contact Leon Hibbs in the Environmental Health section.

Yours faithfully,

Cllr. J.E. Durrant Executive Member for Enforcement Cllr. E. Humphreys Executive Member for Economy & Jobs

Cllr. A. Horwood Reigate & Banstead GATCOM Representative

<sup>&</sup>lt;sup>3</sup> http://www.npr.org/sections/health-shots/2016/01/04/460620606/lack-of-deep-sleep-may-set-the-stage-for-

alzheimers <sup>4</sup> Page 33 para 2 - Night Flight Restrictions at the designated airports 2017-2022 IA DfT00370