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## **STANSTED AIRPORT NOISE ACTION PLAN** ***Guidance for Responding to BAA's Consultation***

BAA is currently consulting on the draft Noise Action Plan ('NAP') for Stansted, as required by law. This sets out its proposals for managing the airport's noise impacts over the next five years.

Stop Stansted Expansion ('SSE') is urging all members of the community – from individuals to parish, town, district and county councils to special interest groups – to respond to BAA's consultation questionnaire by the closing date of 2 October.

To help you to respond quickly and easily, we are attaching a step-by-step guide which sets out our noise team's advice on completing the BAA questionnaire which we hope will be helpful to you in formulating your own response.

Additional background briefing is also attached which we hope will be helpful in bringing you up to speed with what can be a rather daunting subject for those who have limited technical knowledge of noise issues but who would like to know more.

BAA's draft NAP is mostly a list of what is already being done and for the airport operator to put this forward as the basis for 'future action' is clearly inadequate given the thousands of people who *currently* suffer the impacts of noise from overflying aircraft and operations at ground level and who face the prospect of increased overflying in the future.

In practice, very few of BAA's proposals would actually reduce the effects of noise as envisaged by the European Environmental Noise Directive (2002) which precipitated production of the NAP:

- ❖ BAA's main reliance appears to be on hopes for the introduction of less noisy aircraft over time which, while welcome in some ways, would not in practice offset the noise impacts of the increased number of aircraft foreseen by BAA's expansion plans on the existing runway (264,000 aircraft movements at 35 million passengers a year, compared with the current actual level of 160,000 aircraft and 20 million passengers). Nor are these hopes of less noisy aircraft properly quantified: scarcely any figures are provided for the actual levels of noise reduction that would be achieved by the draft action plan. And, while the Environmental Noise Directive requires the plan to contain estimates of the reduction of the number of people affected by noise, such as through sleep disturbance, this has been ignored by BAA which has failed to provide such estimates in its consultation. Definite timescales are lacking in many cases, too – something which is especially significant in the context of BAA's proposals for major expansion at Stansted, even on the existing runway.
- ❖ BAA's draft NAP also lacks a step-by-step plan to reduce noise annoyance to meet the Government's stated intention to meet the World Health Organisation Guidelines

*Patron: Terry Waite CBE*

*Stop Stansted Expansion is a working group of the North West Essex and East Herts Preservation Association*

for Community Noise in the longer term. Nor does BAA propose any sanctions if it fails to deliver on any of the targets it has set itself.

- ❖ We are concerned that the numbers given in the consultation for people and households affected by aircraft using Stansted are inconsistent with and less than those shown in the noise mapping results produced by the Civil Aviation Authority. This is an issue which SSE is addressing separately through Government channels.

We very much hope that you will respond to the consultation and that our guidance will help you to do this quickly and easily. Should you need further information or advice, please contact our campaign office so that we can put you in touch with SSE's noise team who will be able to help.

Peter Sanders  
Chairman



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## **BAA - STANSTED AIRPORT NOISE ACTION PLAN**

### ***Stop Stansted Expansion's step-by-step guide to responding***

Stop Stansted Expansion is urging all members of the community with an interest in aircraft noise issues to respond to BAA's Noise Action Plan ('NAP') consultation questionnaire by the closing date of 2 October. This will ensure that the views of those who most directly suffer noise impacts from the airport's operations can be fully taken into account.

To help you to respond quickly and easily, the step-by-step guide below sets out our noise team's advice on completing the NAP consultation questionnaire, with an analysis of the consultation which will be helpful to you in formulating your own response. Please contact our campaign office if you have any queries.

### **STEP 1:**

#### **OBTAIN THE CONSULTATION DOCUMENTS AND QUESTIONNAIRE**

The consultation documents and questionnaire are available as follows:

- Electronically - for online completion or download at [www.stanstedairport.com/noise](http://www.stanstedairport.com/noise)
- In hard copy form - from BAA's Consultation Hotline at 01279 662 800 or email [stanstednoiseline@baa.com](mailto:stanstednoiseline@baa.com)

**SSE recommendation:** you might also find it useful to read through our separate background document on the action plan (enclosed with this document) which provides further information on responding to the questionnaire, if you choose to go into more depth.

### **STEP 2:**

#### **CHOOSE HOW YOU WILL COMPLETE THE QUESTIONNAIRE**

BAA requires completion of a pro-forma questionnaire which can be returned by post or electronically or completed online.

**SSE recommendation:** we suggest you send your response by post or email and copy it to your MP at the House of Commons, Palace of Westminster, London SW1A 0AA so that he is aware of your concerns and can take them into account when making his own representations. Completing the form online does not enable you to do this.

### **STEP 3:**

#### **UNDERSTAND THE RULES OF THE CONSULTATION 'GAME'**

BAA advises that the questionnaire 'should only' take 10-15 minutes to complete. This indicates that the tick box answers are the focus.

**SSE recommendation:** we strongly recommend that you make additional comments as these will be of great value in communicating your concerns more fully, rather than relying on a statistical analysis of tick box results. If you need to insert additional pages to continue your answers, do so in order that you can answer as fully as you need.

**Note:** even if you provide extensive comments you **MUST** still tick a box for each question you answer otherwise the agency processing the forms will mark a box on your behalf with its interpretation of your comments.

## **STEP 4: FILL IN THE BOXES**

Our advice on completing the questionnaire appears in this section. There are nine questions.

As well as ticking the relevant box in answer to each question, we recommend you also provide comments in your own words to give as full a response as possible.

**QUESTION 1: To what extent do you think that Stansted's noise strategies outlined in the draft noise action plan are targeting the most important problems in relation to aircraft noise?**

**TICK BOX - SSE recommendation:** Tick either **Not very** or **Not at all**

**ADD COMMENTS - SSE recommendation:**

- The region is mostly rural and relatively tranquil. Aircraft are intrinsically noisy and cause annoyance and sleep disturbance and have adverse effects on health and education.
- The draft plan does not target the most important problem – to reduce noise annoyance close to the airport and under the associated flight paths.
- Noise abatement should be prioritized over emissions out to 20 miles from the airport.
- The draft plan does not include measures to stabilise noise, let alone reduce it as the number of aircraft movements increases.
- There are no incentives to encourage the introduction of less noisy aircraft.
- There are inadequate sanctions (fines) to discourage off-track and noisy aircraft.
- There is no attempt to reduce noise nuisance at night.
- There is no mention of any plans to reduce helicopter noise.

**QUESTION 2: To what extent do you think that the draft noise action plan provides a suitable framework to manage aircraft noise?**

**TICK BOX - SSE recommendation:** Tick either **Not very** or **Not at all**

**ADD COMMENTS - SSE recommendation:**

- The draft plan is mostly a list of measures that already exist. These are seen as inadequate by many of those affected.

- The draft plan does not provide a step-by-step programme to avoid, prevent or reduce noise to meet the WHO Guidelines for Community Noise.
- There are insufficient noise limit values provided to determine whether the European requirements can be met.
- The noise indices used to measure annoyance do not adequately represent the harms caused.
- The numbers for population and households affected are inconsistent with the noise mapping results, shedding doubt on the accuracy of the draft plan.
- There are no sanctions proposed if BAA fails to deliver the targets set in its draft plan.
- It is unacceptable that the airport operator and DfT are solely responsible for deciding what constitutes an acceptable NAP.

**QUESTION 3: The draft noise action plan proposes a number of performance indicators to measure progress in implementing the action plan. To what extent do you think that these performance indicators are sufficient?**

**TICK BOX - SSE recommendation:** Tick **Not very**

**ADD COMMENTS - SSE recommendation:**

- The performance indicators proposed by BAA for aircraft movements only record what happens (e.g. track the number of noise infringements). There are no indicators proposed that actually establish noise reduction targets and measure progress.
- Where there is a performance indicator proposed by BAA for aircraft movements (e.g. level of fines) the only commitment is to review the fining levels as a target.
- Where there are some suggestions for actual noise reduction (e.g. phasing out of noisier aircraft), none of the associated performance indicators proposed by BAA involve any measurable action. The only commitments are to 'consult', or 'track', or 'review' the issue.
- The performance indicators proposed by BAA for supporting actions (e.g. to improve communication with the public) will have no effect on noise.
- Estimates of the reduction of the number of people affected (annoyed, sleep disturbed, or other) are not provided.
- There is a lack of definite timescales

**QUESTION 4: As part of its objective to limit and where possible reduce the impacts of aircraft noise, Stansted has set a benchmark goal to be in the top fifth of airport companies for best practice in international airport noise management on comparable sites. To what extent do you think that this goal is sufficiently challenging?**

**TICK BOX - SSE recommendation:** Tick **Not at all challenging**

**ADD COMMENTS - SSE recommendation:**

- The objective should be to avoid, prevent or reduce on a prioritized basis the harmful effects, including annoyance, due to exposure to environmental noise. This is the objective explicitly laid down by the European Noise Directive.
- International benchmarking is a vague and imprecise concept and it would be virtually impossible for members of the public to check any such claims made by BAA.

**QUESTION 5: Do you have any other comments on Stansted Airport's draft noise action plan?**

Please complete as appropriate.

**QUESTION 6 to QUESTION 9 inclusive**

Please complete as appropriate.

**STEP 5:  
POST OR EMAIL YOUR REPLY**

**SSE recommendation: post or email your reply back as instructed on the questionnaire, and send a copy to your MP (see STEP 2) for his information.**



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## **BAA - STANSTED AIRPORT NOISE ACTION PLAN**

### ***Background on the plan and SSE commentary***

## **INTRODUCTION**

A Noise Action Plan ('NAP') is required for Stansted Airport under the terms of the European Noise Directive 2002/49/EC ('END') for the assessment and management of environmental noise, now transposed into UK law. The objective of this Directive is to define a common approach across EU Member States to avoid, prevent or reduce on a prioritized basis the harmful effects, including annoyance, due to exposure to environmental noise.

Under the terms of the Directive, BAA is required to produce noise maps and a noise action plan for Stansted Airport. The noise maps were produced for 2006, showing the numbers of population and households affected within defined noise level contours. The draft NAP on which BAA is currently consulting is supposed to manage noise issues and effects, including noise reductions, during the period 2010 until 2015 and is based upon the noise maps and set criteria for assessing and managing noise issues and effects.

## **HOW NOISE IS ASSESSED**

Aircraft noise has distinct characteristics. Aircraft are intrinsically noisy machines which have distinct tonal and low frequency components that can increase the annoyance caused. The region around Stansted Airport is mostly rural and relatively tranquil so that aircraft are heard as a series of loud events above low background noise levels.

However, the NAP noise contour maps are not produced by taking actual noise measurements around the airport. Instead, they are modeled and calculated from average traffic figures, mean flight paths and average speeds and thrust figures for the dominant aircraft types. The resulting NAP noise contour maps are then produced using another averaging method whereby the large number of varying noise events are translated into equivalent steady sound levels over specific periods of time. However, this averaging method used to calculate the noise contours masks the annoyance caused by a discrete number of loud noise events. People do not hear average noise levels; they hear each aircraft as it flies over and the annoyance is worsened by increasing the numbers of aircraft.

The Government and airports have previously used an average 57 decibel Leq contour level to calculate the number of people and households affected by aircraft noise close to the airport. This is a method of showing averaged noise exposure across the community throughout a specific period of time based on daytime readings.

Under the END, airport noise maps now must use a new method of calculating the noise contours which takes into account the more sensitive evening and night periods and more adequately reflects the noise nuisance through a system of 'weighting' the additional impact that noise has during these times. This method uses an average 55 decibel Lden (day, evening and night) contour and this shows that 10,000 people are seriously affected by noise from Stansted's operations – more than twice as many as previously calculated by the equivalent 57 decibel Leq contour method. When plotted on a map, the area affected at the 55 decibel level appears as a sausage-shaped contour around the airport with an area of 44.9 km<sup>2</sup>. Its width averages about 1½ miles (across the runway) and (from the ends of the

runway) stretches from Gilston, south west of Sawbridgeworth, to Great Sampford, increasing in width to 2½ miles around the Hallingburys.

However, many people living outside this 55 decibel contour are annoyed by aircraft noise because the averaging system does not indicate the full extent of the problem and the 'real' impacts on people. Evidence of this is to be found in the fact that Stansted Airport regularly receives aircraft noise complaints from people living over 30 miles away.

The World Health Organisation ('WHO') Guidelines for Community Noise give average noise levels for moderate and serious annoyance as 50 and 55 decibels respectively during the day and evening periods. At night, the WHO average noise level for sleep disturbance is identified as 45 decibels. Additionally, the Government's study and report on Attitudes to Noise from Aviation Sources in England (ANASE) November 2007 showed that people are now more annoyed about all levels of aircraft noise than they were at the time of the last major study in 1982. ANASE showed that the Government's 57 decibel level for the onset of significant annoyance is too high and that 50 decibels is more appropriate. While the new 55 Lden noise level is welcomed as a move in the right direction, it clearly falls short of what is required to protect the community from the harms caused by aircraft noise.

## **INCONSISTENCIES IN BAA'S NOISE MAPPING INFORMATION**

BAA's draft NAP states that it provides the results of the 2006 noise mapping – one of the primary information sources for the proposals. In fact, the estimated number of affected people and dwellings given in the draft plan are not the results of the 2006 noise mapping at all and SSE is concerned at the misrepresentation of the real picture by BAA in its consultation as we explain below.

The 2006 noise mapping, together with the figures for affected people and dwellings, was officially carried out by the Civil Aviation Authority (CAA). However, the figures for affected people and dwellings provided in BAA's draft plan are from Defra and differ from the official CAA results in the following key areas:

- The CAA figures were all published in 5 decibel contour bands for the five different noise indices in compliance with the END.
- Defra published its figures as cumulative totals in steps of 3 decibels for four out of the five different noise indices. This is a totally different method and not compliant with the END.
- The significance of this is that it is impossible to reconcile four out of the five sets of Defra figures given in the draft plan with CAA figures that should have been used.
- In the only case where it is possible to reconcile these two different sets of figures, the Defra figures understate the affected population and dwellings by 600 (6%) and 350 (8%) respectively. It is impossible to know what the discrepancies are for the other four sets of noise indices.
- Where Defra says in the draft plan that the number of people affected is 9,400, the CAA figure is 10,000. While this discrepancy would not necessarily invalidate the action plan process, it sheds doubt on its accuracy.

Additionally Stansted Airport has been given permission to expand to 35 million passengers per annum (mppa) and to 264,000 aircraft movements per annum (ATMs). This compares with approximately 20 mppa and 160,000 ATMs forecast for 2009. Any future proposed changes to flight paths, while not part of this consultation, would have a noise impact on larger numbers of people. The 2008 NATS' airspace change proposal, if it remains largely unchanged, would also increase the numbers of aircraft over this area from other London airports, adding to the burden on the community.

## COMMENTARY ON THE NOISE ACTION PLAN'S DETAILED PROPOSALS

In Section 9 ('*Our Approach to Managing Noise*') of the draft NAP, BAA sets out its thinking and proposals on a number of key areas. SSE's concerns on these are given below with the same paragraph numbering maintained.

### "Paragraph 1a. Quietest fleet practicable"

- BAA does not state how Chapter 4 aircraft will be prioritized, nor does it indicate the noise reduction that will result.
- Voluntary phasing out of Chapter 3 high aircraft is welcomed but it is not stated how airlines will be incentivised to comply and what noise reduction will result. It is insufficient just to review landing fee differentials. Figures of widening differentials should be stated and what noise reduction would result. Chapter 3 high aircraft landing fees should be at least 100% more than for Chapter 3 aircraft. Chapter 3 minus and Chapter 4 aircraft landing fees should be no more than 50% of Chapter 3 aircraft fees.
- Airline League Tables for noise and emissions rankings are welcomed; however without incentives to reward airlines which reduce noise impacts, or disincentives to penalise airlines which do not, these league tables will not improve the noise environment.

### "Paragraph 1b. Quietest practical aircraft operations balanced against emissions"

- Departure and arrival procedures should *prioritise* noise abatement over NO<sub>x</sub> and CO<sub>2</sub> emissions within 20 miles of the airport. (BAA says that it should be *balanced* against NO<sub>x</sub> and CO<sub>2</sub> emission.)
- The introduction of a tiered fining system for departure noise infringements in 2010 and subsequent reviews is welcomed. Fine levels for both noise and 1000ft height rule infringements at the fixed monitors 6.5km from start of roll should be raised from £500 to £5,000 for each event with monies raised going to the Stansted Community Trust.
- Fine levels for off-track noise preferential route (NPR) infringements should be raised from £500 to £5,000 for each event with monies raised going to the Stansted Community Trust
- By 2013, the vectoring height for the two Buzad NPRs should be raised from 3000ft to 4000ft during the day (0600-2330).
- By 2015, the vectoring height for all six NPRs should be raised to 5000ft during the day and night periods.
- Monitoring of adherence to Standard Instrument Departure routes (SIDs) should be introduced with the objective of requiring airlines to maintain good track keeping.
- Monitoring of adherence to Standard Arrival Routes (STARs) should be introduced with the objective of requiring airlines to maintain good track keeping.
- Continuous Descent Approach (CDA) should be introduced for arrivals to runway 04 earlier than 2015 and the resulting noise reduction stated.
- The final approach glide slope angle should be increased from 3 degrees to a specified target (e.g. a figure of 3.9 degrees being considered by the aviation industry) with the timescale and resulting noise reduction stated.
- Monitoring and reporting on aircraft that fly over the St Elizabeth's Centre (Much Hadham), and Bishop's Stortford, Sawbridgeworth and Stansted are welcomed. However airlines should be fined if this noise abatement procedure is infringed without good reason. The fine levels should be the same as for off-track infringements.

- A major omission in the draft NAP is that there is no attempt to reduce the noise nuisance at night. The current Department for Transport Night Flying Restrictions regime is in force until Winter 2011/12. There should be a commitment to use best endeavours to secure a total prohibition of movements, except in emergency, between 2330 and 0600 in a phased programme starting in 2012. Furthermore there should be a commitment to use best endeavours to further reduce the year-by-year total annual quota points starting in 2012.
- There are no actions provided to reduce exposure levels that can induce harmful effects on human health or adverse effects on cognitive ability and comprehension in schools. This should be addressed.
- There is no mention of helicopters in the draft plan. The END covers helicopter operations and the draft plan should include measures to reduce helicopter noise impacts. These measures should include monitoring and fining of track infringements, an increase of height minima outside the airport perimeter, especially over populated areas, and speed reduction. A reduction in speed of just 10 knots can have a significant noise reduction effect.
- Single engine taxiing should be employed for both departures and arrivals and the resulting ground noise reduction stated.

**“Paragraph 1c. Effective and credible noise mitigation schemes”**

- The continuance of home insulation and support schemes is welcomed. However they are existing schemes for properties using Leq noise levels and there are no plans provided to increase the scale of these schemes. The CAA noise maps now show more than double the number of population and households affected by noise using the END Lden noise levels and the schemes should be revised accordingly. There should be further revisions to more adequately reflect the lower average noise levels given in the WHO Guidance for Community Noise.

**“Paragraph 2. Engage with communities affected by noise”**

- The engagement programmes are welcomed; however the annual progress report of the NAP should be more widely published than by just reporting through the airport’s Noise and Track Keeping Working Group.

**“Paragraph 3. Influencing planning policy”**

- These initiatives are welcomed; however there are no initiatives to reduce noise or which investigate opportunities to protect quiet areas in general as required by Defra guidance. These initiatives should be included.

**“Paragraph 4. Organising to manage noise efficiently and effectively”**

- These initiatives are welcomed; however these are only internal management measures to manage noise. In themselves they are not actions which would reduce noise.

**“Paragraph 5. Achieving a full understanding of aircraft noise”**

- These initiatives are welcomed; however they are no more than would be expected. In themselves they are not actions which would reduce noise.