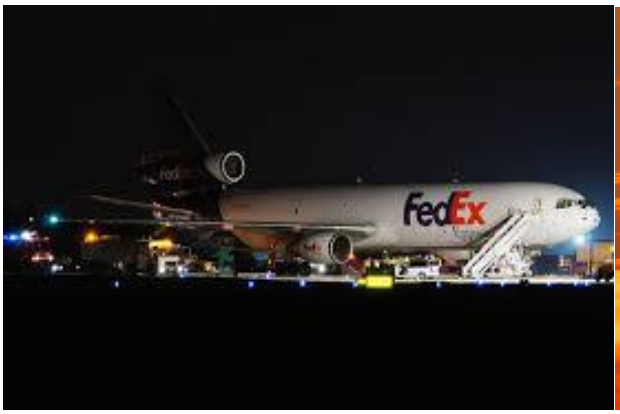

# Response to Department for Transport

# Night Flying Restrictions

# Stage 2 Consultation

Stop Stansted Expansion ('SSE') was established in 2002 in response to Government proposals for major expansion at Stansted Airport. We have some 7,500 members and registered online supporters including 150 parish and town councils and local residents' groups and national and local environmental organisations. Our objective is to contain the development of Stansted Airport within tight limits that are truly sustainable and, in this way, to protect the quality of life of residents over wide areas of Cambridgeshire, Essex, Hertfordshire and Suffolk, to preserve our heritage and to protect the natural environment.

Stop Stansted Expansion
January 2014
www.stopstanstedexpansion.com

# SSE's response to the questions in the Night Flying Restrictions ('NFR') Stage 2 Consultation

***Q1: Do you agree with our preliminary view as to the new studies on health effects?***

A1: The Stage 2 Consultation Document states – at para 2.9 – that the Airports Commission Noise Discussion Paper published in July 2013

> *'... did not identify any relevant new research which was not already covered in the Civil Aviation Authority's (CAA) review 'Aircraft Noise, Sleep Disturbance and Health Effects'* [1]*, published in January alongside the first stage night noise consultation.'*

In SSE's response to the Airports Commission Noise Discussion Paper, we pointed out that the Commission had omitted to mention the PARTNER Project Final Report[2] of a literature review of the health effects of aircraft noise. Furthermore we also pointed this out in our response to the Stage 1 Consultation[3] where we said in answer to Question 55:

> *'In the CAA literature review in ERCD Report 1208, it appears that the PARTNER Project 19 Final Report has not been included'.*

This PARTNER report is both recent and well documented and the accumulated data from both the PARTNER report and the ERCD 1208 report suggest that sleep disturbance may well have an effect on cardiovascular health in relation to such conditions as hypertension and ischaemic heart disease. A meta-analysis carried out by Babisch[4], as well as the HYENA study[5], found an increased likelihood of hypertension following exposure to night noise.

The ERCD 1208 report stresses the World Health Organisation ('WHO') recommendation that the adverse effects of noise on sleep occurs at an aircraft noise level of 32dB LAmax, indoors. Furthermore the effect of noise on endocrine disturbances resulting in obesity and diabetes does not seem to have been mentioned. Studies have shown an increased risk of obesity in those having shorter and fragmented sleep.[6]

In addition, the European Network on Noise and Health ('ENNAH') brought together a total of 33 European research centres from 16 countries to establish future research directions and policy needs for noise and health in Europe. ENNAH focused on the study of environmental noise sources, in particular transport noise, and issued its final report in 2013.[7] This is a very comprehensive report and, in addition to identifying gaps in current knowledge of noise and health, it suggests topics for future study and research. SSE wishes to see this work included in further research into the night flying noise effects on health and sleep disturbance amongst communities who live around airports and under flight paths.

It is particularly encouraging that the ENNAH final report highlighted three important areas. Firstly that children, because they are developmentally in a particularly sensitive phase, may be adversely affected by relatively minor sleep disturbances. Furthermore as children spend more time in bed and go to bed and get up during the busy night 'shoulder' periods, they should be considered in a risk group. Secondly, emphasis was placed on constructing noise maps for health study assessments. Cut off points for noise mapping should be lowered (to

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[1] ERCD Report 1208, Jan 2013.
[2] *'A Review of the Literature Related to Potential Health effects of Aircraft Noise'*, Hales Swift, July 2010, for FAA/NASA/Transport Canada.
[3] http://www.stopstanstedexpansion.com/documents/SSE_Response_to_DfT-Night_Flying_Restrictions_Final_website_version.pdf.
[4] *'Cardiovascular effects of noise'*, Babisch, Noise Health 2011;13:201-4.
[5] '*Hypertension and Exposure to Noise near Airports'*, Larup et al, 2007.
[6] *'Impact of insufficient sleep on total day energy expenditure, food intake and weight gain'*, Markwald et al, Proceeding of the National Academy of Sciences 2013 IIO 5695-5700.
[7] ENNAH Final Report EU Project no. 226442, FP-7-ENV-2008-1, 2013.

45dB Lden) and that individual levels rather than 5dB contour bands should be constructed. Thirdly the importance of ensuring that health impact assessments ('HIAs') are carried out independently of airport management was stressed.

SSE is encouraged that the adverse health impacts of night flights, including the associated road traffic noise, are now beginning to be more seriously considered. We look forward to contributing to the planned review of aviation noise and appraisal guidance.

***Q2: Do you have any further views on the costs and benefits, including health impacts, which we should take into account in our decision?***

A2: We note that the WebTAG appraisal guidance used by the Department for Transport ('DfT') is kept under constant review and updated periodically *'to take into account relevant, robust new evidence'*. We welcome the commitment to reflect health effects from aviation noise in appraisal guidance from 2014. Furthermore we welcome the aim to develop methods and values that allow the various impacts of aviation noise, including health effects, to be taken into account in economic appraisal alongside other costs and benefits of interventions.

Quantification of the economic, social and environmental costs of night flights needs to be undertaken in a systematic manner which reflects the true value of a proper night's sleep for individuals contributing to the wealth of the UK economy and the welfare of its citizens, and whose efficiency is impaired by interrupted sleep. There is also a social cost associated with adverse health impacts and educational impairment associated with poor quality sleep which has a further detrimental impact on the economic cost of aviation to the nation.

It is also worth reflecting that many people whose sleep is disturbed by aircraft at Stansted Airport would be up early the next morning to travel to high value jobs in the City of London or may have equally high-pressure jobs in, say, healthcare or teaching. A cost benefit analysis on night flights should be able to reflect these realities.

***Q3: Do you agree with the proposed environmental objectives?***

A3: As we said in our response to the Stage 1 Consultation, Stansted Airport has a greater proportion of departures at night than Heathrow and Gatwick, mainly comprising short-haul passenger services (42%) and cargo movements (45%).

Furthermore, aircraft noise complaints at Stansted Airport in 2012 for the night quota period represented some 20% of all complaints and were made from locations well outside the 48dB LAeq 6½ hour contour. There were 8,116 night quota period movements at Stansted in 2012 which was less than 6% of the total annual movements. This shows that a disproportionately large volume of complaints stemmed from night flights and reinforces the need to bear down on night noise disturbance around Stansted Airport.

The environmental and night objectives of the current NFR regime at Stansted provide far too much headroom and have been easily met with no concomitant benefits to the wellbeing of the local residents.

We are particularly concerned that the operation of Stansted – which, since its inception, has been known as *'the Airport in the Countryside'* – should be environmentally sustainable especially bearing in mind the largely rural location where local communities are otherwise able to enjoy a good quality of life, partly as a result of low ambient (background) noise levels.

There are no proposals in the Stage 2 Consultation for reviewing – far less, for improving – the method of noise assessment, which is still fundamentally based upon levels of average LAeq values. This is a major omission since many of the noise impacts are assessed on LAeq metrics. Moreover, this is a seeming contradiction to the fundamental operation of the NFR

regime which is based on movements and QC ratings. In other words, the regime operates as closely as possible to what people actually hear – the number of noise events and the noise level of each event, not to average levels of LAeqs.

It is misleading for industry stakeholders to claim that *'it would be possible to accommodate more flights without increasing overall average noise levels'.*[8] This statement relies solely on the averaging LAeq metric and does not accord with the recommendation in the Aviation Policy Framework ('APF') that '*average noise contours should not be the only measure used when airports seek to explain how locations under flight paths are affected by aircraft noise'.*[9] The industry stakeholders' claim is particularly misleading since '*none explicitly stated how many additional movements could be accommodated or asked for more movements'.*[10]

The Government needs to introduce an improved measurement system for aircraft noise, particularly at night, such as that described in the ANASE report. Moreover the evidence gathered in the course of the ANASE study clearly shows that the DfT is relying upon an out-of-date system for assessing aircraft noise impacts, based as it is on dose/response surveys in the early 1980s when the volume of air traffic movements was much less than today. A doubling of like-for-like aircraft movements would increase the LAeq measurement by only 3dB, which is not reflected in those surveys.

The DfT should take forward the work of ANASE as a matter of priority and develop a new framework for the measurement and control of aircraft noise impacts including supplementary metrics. This should also take full account of the recommendations set down in the WHO *Guidelines for Community Noise* and the WHO *Night Noise Guidelines for Europe.*

We would also take this opportunity to remind the DfT of the commitment it gave in July 2004:

> *'The* [WHO] *guideline values are very low. It would be very difficult, if not impossible, to achieve them in the short to medium term without draconian measures – but that is not what the WHO proposed. The recommendation was that the Guidelines for Community Noise should be adopted as long term targets for improving human health. This is also consistent with the advice above. The UK Government is committed to take account of this. In respect of aircraft noise at night, the 30 year time horizon of the White Paper, provides a suitable time parameter for 'longer term'.*[11]

In other words, that Government commitment, given some ten years ago, was to achieve compliance with the WHO *Guidelines for Community Noise* in the longer term, which was defined as being by 2030. The DfT is currently consulting on the night flying regime which will apply until October 2017 but there is no mention of the WHO *Guidelines for Community Noise.* Why not? At the very least we should expect to receive a progress report as well as targets and milestones for monitoring future progress towards achieving compliance with the WHO *Guidelines for Community Noise* by 2030.

Additionally, we are disappointed that the Government has failed to replace PPG24 with clear advice and guidance on planning and noise. The lack of this guidance is now a serious concern for the local community.

Following the publication of the APF in March 2013, the Government proposed a number of further work programmes to be taken forward by the DfT, its Aircraft Noise Management

[8] Stage 2 Consultation para 3.4.
[9] *'Aviation Policy Framework'*, DfT, Mar 2013, para 3.19.
[10] Ibid.
[11] '*Night Flying Restrictions at Heathrow, Gatwick and Stansted: Stage 1 of Consultation on Restrictions to apply from 30 October 2005'*, DfT, July 2004, para 3.12.

Advisory Committee, the Civil Aviation Authority and the Airports Commission. We very much support these work programmes and look forward to making a full contribution.

This work needs to be taken forward as soon as possible such that when assessing the noise impacts for the subsequent night flying regime starting in October 2017, the inadequacies of the current method of noise assessment are resolved as well as the introduction of improved operational procedures as outlined in A11 below.

The Airports Commission Interim Report[12] has recommended that an Independent Aviation Noise Authority be established. It was proposed that this independent body could, inter alia, conduct research into the best means of monitoring and reporting aircraft noise, as well as its association with annoyance and impacts upon human health and their possible mitigation.

SSE strongly supports the establishment of an Independent Aviation Noise Authority and looks forward to this body contributing to resolving the inadequacies of the current method of noise assessment. We expect the DfT to take this proposal forward as a matter of priority, without waiting for the Airport Commission's final report next year. We also expect the Independent Aviation Noise Authority to be given regulatory powers and not simply be a research and monitoring body.

***Q4: Do you agree that the next regime should last until October 2017?***

A4: It is acknowledged that the reason for this short regime is the Airports Commission's work and it is under these circumstances that we have no objection in principle. However, the aircraft movement and noise quota limits in the next regime must be reduced so as to alleviate the impacts of night flights on local communities. The DfT needs to demonstrate its sincerity in relation to the promises it has made in the past to bear down on night noise and to achieve compliance with the WHO Guidelines for Community Noise by 2030. The next regime must also provide a framework be used to progress and resolve two important issues:

- Up to date dose/response research and surveys for noise nuisance and health impacts; and
- An improved method for assessing noise impacts not solely based upon levels of average LAeq values.

In addition SSE welcomes the continued airport operational trials and other measures being studied to prevent and reduce aviation noise at night.

***Q5: Do you have any views on the revised dispensations guidance?***

A5: No comment**.**

***Q6: Do you agree that we should maintain the existing movement and noise quota limits until October 2017? If not, please set out your preferred options and reasons – this could include the noise and economic impact of any alternatives.***

A6: We strongly disagree with the proposal to maintain the existing movement and noise quota limits for Stansted until October 2017. The current NFR regime at Stansted is based upon the previous Government's policy which supported and anticipated a second runway being operational at Stansted by 2012 and set its night flying limits based upon the associated anticipated level of movements balanced against noise disturbance. The restrictions currently in force at Stansted have considerable headroom in that, in the latest 2012/13 winter and 2013 summer seasons, only 74% of the permitted overall number of night flights actually took place. The baseline should be re-set based upon the knowledge that the Airports

[12] Airports Commission Interim Report, Dec 2013.

Commission Interim Report has ruled out a second runway at Stansted. The movements limit should then be progressively reduced over the period to October 2017.

Additionally, not only have the movement and noise quota point limits been frozen since 2011/12 when the current regime was extended until October 2014, the annual reduction of noise quota points was also discontinued in October 2012. This established method of an annual reduction of noise quota points is an effective method of encouraging the introduction of less noisy aircraft. It is wholly unacceptable to state in the Stage 2 Consultation, para 4.31 that *'Maintaining the existing noise quotas would ensure that the total noise which can be emitted in 2017 is no higher than what could have been emitted in 2011-12. However, we consider that maintaining the status quo until 2017 would have no adverse effects in practice'*.

Maintaining the status quo over a five year period is counter to the key objective of the Environmental Noise Directive 2002/49/EC to *'avoid, prevent or reduce the harmful effects, including annoyance, due to exposure to environmental noise'.* It is a 'do-nothing' approach and, contrary to the claim that *'it would have no adverse effects in practice',* it has no practical force in discouraging the operation of old noisy aircraft. The quota point limit already provides considerable headroom as demonstrated by the winter 2011/12 usage of 49% and the summer 2012 usage of 77%. The proposal to maintain the existing noise quota is therefore simply a licence to continue to increase noise pollution around Stansted Airport.

The APF makes clear that *'The Government recognises that noise is the primary concern of local communities near airports and we take its impact seriously'*.[13] The section on noise and other environmental impacts was the longest chapter in the consultative draft APF and *'noise was the most popular theme in responses to the consultation, the majority of which were from local residents expressing concern about the level of existing and/or future aircraft noise'.*[14] Furthermore the APF says under night noise *'The Government recognises that the costs on local communities are higher from aircraft noise during the night, particularly the health costs associated with sleep disturbance. Noise from aircraft at night is therefore widely regarded as the least acceptable aspect of aircraft operations'.*[15]

Stansted Airport is presently allowed 12,000 night flights a year, more than twice as many as presently allowed at Heathrow (5,800 p.a.) and far more than either needed or justified. The 12,000 cap was set in 2006 at a time when Stansted Airport was still expanding rapidly and it was anticipated that more night flights would be needed. Stansted handled 8,537 night flights in 2013 which is well below the cap. The Stansted movements limit should be reduced to 7,500 night flights annually from October 2014 and by 500 flights in each subsequent year.

We also note that British Airways World Cargo ('BAWC') has recently ended its contract with Global Supply Systems ('GSS') which for many years has been operating a fleet of three Boeing 747-8F cargo aircraft out of Stansted, in British Airways livery, on behalf of BAWC. With effect from the end of April 2014, these very large cargo aircraft will no longer be operating out of Stansted. We estimate that this will reduce night flights by at least 1,000 per annum. In these new circumstances, a cap of 7,500 night flights from October 2014 is easily achievable and would lead to no lost benefits.

Most importantly, there is also need to move to a position where 'night' actually means 'night', i.e. the full 8 hour period from 11.00pm until 7.00am and for all controls and restrictions to be applied on that basis. Many would in fact argue that aircraft noise causes greater disturbance during the shoulder periods 11.00pm to 11.30pm and 6.00am to 7.00am and therefore merits stricter regulation.

[13] *Aviation Policy Framework',* DfT Mar 2013, Executive Summary, DfT, para 16.
[14] *Draft Aviation Policy Framework consultation: Summary of responses'*, DfT, Mar 2013, para 22.
[15] *'Aviation Policy Framework'*, DfT, Mar 2013, para 3.34.

The noise quota should also be reduced and the annual reduction of these quota points should be re-introduced. This is particularly relevant for large cargo aircraft using Stansted and, as pointed out above BAWC is to cease operations at Stansted at the end of April. This will take the nightly operations of three large Boeing 747-8F aircraft out of the equation. In addition, B747-400 and MD-11 cargo aircraft flown by other dedicated cargo/express parcels operators at Stansted are gradually being replaced by less noisy aircraft. The noise quota should be reduced to reflect this, and so that it is meaningful and challenging, and thereby an incentive for airlines to continue to have an interest in operating less noisy aircraft.

The draft Impact Assessment states that *'…the industry must continue to reduce and mitigate noise as airport capacity grows'.*[16] We do not consider that this objective would be achieved at Stansted in the proposed three-year regime if the existing movement and quota points limits were simply extended. Clearly, even using the inadequate measure of average LAeq contour, far more people than today would be adversely affected by night noise if the present limits at Stansted were used to the full.

In short, there is so much headroom in the present Stansted limits that it is a contradiction in terms even to describe them as 'limits'. This simply brings discredit upon the whole concept of having 'Night Flying Restrictions' and so it needs to be addressed. The movements and noise quota limits need to be meaningful and challenging if they are to have any worth at all.

The movements limit at Stansted should be reduced in the three-year regime to '*reduce and mitigate noise'*. Not only is there adequate headroom in both movements and quota points to allow this to be achieved (see also our Answer 1 to the Impact Assessment questions), it would be a positive signal that the Government intends to bear down on night noise. More specifically:

- the movements limit should be reduced to 7,500 night flights p.a. from October 2014 and by 500 flights in each subsequent year;
- the annual quota points limit should be sharply reduced so that it begins to have some practical effect and the annual reduction of noise quota points should be re-introduced; and
- there should be an immediate ban on aircraft using reverse thrust when landing at night, except in emergencies.

And in the longer term, we wish to see a total ban on night flights, except in emergencies.

The arithmetic we propose for a total ban on night flights is straightforward and reasonable – a limit of 7,500 night flights in the year commencing 1 October 2014, to be reduced by 500 night flights p.a. such that over a 15 year period night flights would be phased out. This would be consistent with achieving compliance with the WHO *Guidelines for Community Noise* by 2030.

***Q7: Do you have any comments on our forecasts to October 2017?***

A7: The forecasts to October 2017 of areas, population and households affected, given in Annex B, are based upon levels of average LAeq values. They are also only given for the 6½ hour night quota period. As stated in A3 above, SSE has fundamental criticisms of this averaging method for assessing the impacts of noise nuisance and harms on the local communities around the airport and under flight paths. Noise complaints around Stansted during 2012 for the night quota period represented some 20% of all complaints (and about 30% when the shoulder periods are included) and a large proportion of these were made from locations well outside the 48dB LAeq 6½ hour contour.

[16] Stage 2 Consultation, Impact Assessment, Section 1, third para.

This 20% proportion of night noise complaints should be compared with the fact that aircraft movements during the night quota period account for less than 6% of Stansted Airport's total movements. This reinforces the need to bear down on night noise around Stansted.

The Government must use the intervening period between now and October 2017 to resolve this inadequate method of noise assessment and, as recommended in the APF, '*average noise contours should not be the only measure used when airports seek to explain how locations under flight paths are affected by aircraft noise'.*[17]

***Q8: Do you have any views on how the benefits of quieter aircraft can be shared in future between communities living close to the airport and the aviation industry?***

A8: The Airports Commission Discussion Paper on Aviation Noise acknowledges at the outset that *'aircraft noise is a significant concern*' and that '*these concerns have appeared to have deepened, even as aircraft have become progressively quieter'.*[18]

Firstly, it would be more correct to use the description 'aircraft have become progressively *less noisy*'. Secondly, we would emphasise that it is not so much the absolute aircraft noise impact that matters, but its relative impact, compared to the ambient noise level. Thus, if you live and work next to a busy road or an otherwise noisy environment you will, in all likelihood, be less disturbed by aircraft noise than if you live and work in a rural and otherwise peaceful environment. Clearly this is an extremely important issue in the case of Stansted.

There is considerable research, some of which is referenced in the Airports Commission Discussion Paper, which shows that aircraft noise is more annoying now than in the past. For instance, in November 2009, the European Commission published a paper which said:

> *'... aircraft noise has become more annoying for European citizens in recent years, according to new research. The research found that annoyance with road traffic noise had not increased, suggesting attitudes to aircraft noise have changed. The researchers call for changes to the standard procedure used in the EU to predict aircraft noise annoyance'.*[19]

In searching for reasons, a 2009 Omega study concluded:

> *'... it seems plausible that, for reasons which are presently unknown, people may be noticing or otherwise paying attention to a higher proportion of aircraft sound events than in the past. If true, this could be because of the general increase in traffic, meaning that event frequencies have increased in recent years, or it could be because of changes in the character or sound quality of the sound (which is not necessarily the same thing as differences in sound level measured in dBA or EPNdB), or it could be simply because people's expectations and tolerance levels have changed'*.[20]

In SSE's view there is a simple explanation for the apparent enigma of why noise concerns have deepened, even as aircraft have become progressively less noisy. As set out in A3 above, the present method of assessing aircraft noise is inadequate; based as it is on an averaging metric, taking no account of background noise levels and failing to give proper recognition to the increasing numbers of flights. This is particularly the case for night noise.

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[17] *'Aviation Policy Framework'*, DfT, Mar 2013, para 3.19.
[18] *'Discussion Paper 05: Aviation Noise'*, Airports Commission, Jul 2013, para 1.1.
[19] European Commission, Science for Environment Policy paper, Nov 2009 - http://ec.europa.eu/environment/integration/research/newsalert/pdf/173na1.pdf.
[20] *'Advanced open rotors- balancing noise costs against reduced carbon emissions for future aircraft'*, Gamah and Self, Technical Report, Omega, Feb 2009 - see http://www.cate.mmu.ac.uk/wp-content/uploads/2012/06/36-Final-Report-AOR1.pdf.

While the benefits of less noisy aircraft are welcomed, SSE believes that the historic major reduction curve in cumulative certified aircraft noise levels is now clearly flattening out and becoming asymptotic to zero. There are no grounds to expect the intrinsic noise performance of aircraft to improve much further. SSE believes that a combination of improved operational procedures (see A11 below) together with a reduction in the number of flights holds out the best prospect for improving the noise climate at night.

***Q9(a): Do you agree with extending the operational ban of QC/8 and QC/16 aircraft to the entire night period (23:00 – 07:00)?***

A9(a): Yes.

***Q9(b): Do you agree with our assessment of the costs and benefits in the draft IA?***

A9(B): See our Answer 1 under Impact Assessment Questions.

***Q10: Are there any other changes to the regime which we should consider?***

A10: See our Answer 1 under Impact Assessment Questions

***Q11: Do you have any further comments on the scope for trialling new operational procedures which have potential noise reduction benefits in the period up to 2017?***

A11: Stansted is currently trialling RNP1 RTF departures on the Clacton 22 and Dover 04 Noise Preferential Routes in a CAA programme with an increasing number of airline users and different aircraft types. Initial results are encouraging with track accuracies to a higher order of magnitude than previously achieved by RNAV. SSE welcomes this programme of work. In response to the Stage 1 Consultation, we listed a number of suggested improved operational procedures for Stansted, the early introduction of which would bring benefits to local residents and users alike and these are repeated in full here:

1. **Airspace change**
   The most important airspace change needed for Stansted Airport is the implementation of Continuous Descent Approach ('CDA') for runway 04. This would reduce noise exposure from arriving aircraft over Hertfordshire and particularly in the vicinity of Ware. Stansted is the only designated airport without the benefit of CDA on all runway directions.

   The intention to retain Noise Preferential Routes ('NPRs') and improve them where necessary is welcomed. This should include ensuring all NPRs are to 4,000ft minimum but preferably cleared for fast climb to above 5,000ft.

   Reducing the swathe size of NPRs should also be considered. The accurate track keeping capability of modern aircraft means that the current 3km wide swathe could be reduced with aircraft keeping to the centre line, or to a line which is tailored to avoid settlements. However the impact of concentrating all traffic on one line rather than dispersing it across an NPR may make this unacceptable (the 'concentration versus dispersion' argument) unless a clear benefit can be realised with less people being exposed to noise under the route. Trials at Stansted have already demonstrated this potential for accurate track keeping. Alternatively, respite is valuable for communities close to the airport and the potential for more than one concentrated route within an NPR should be considered on an individual basis.

2. **Noise after take-off**
   Different noise limits could be set for different types of aircraft on take-off. It would be sensible not to have a proliferation of different limits, but perhaps two or maybe three depending on the traffic mix at each airport. At Stansted the vast majority of aircraft are

B737/A319 for which the departure QC is 0.5 (87 – 89.9 EPNdB) so it should be possible to introduce two sets of three limits, one for each of the day, night and night quota periods. That is to say a lower set for aircraft of QC 0.5 and below and a higher set for aircraft of QC 1 and above. The new sets of limits could be scaled from the existing limits.

**3. Gradient of Climb on Departure (jet aircraft)**

Currently a minimum gradient of 4 per cent is required up to 3,000 or 4,000ft. It is considered that with the ability to perform Continuous Climb Departures ('CCD') and the improved climb capability of more than 5 degrees of modern aircraft, this minimum gradient should be increased.

**4. Reverse Thrust**

Paragraph 4 of the Notes to the Stansted UK AIP states *'To minimise disturbance in areas adjacent to the aerodrome, commanders of aircraft are requested to avoid the use of reverse thrust after landing, consistent with the safe operation of the aircraft, from 2330 hours to 0600 hours (local time).'* This is considered inadequate wording to discourage the use of reverse thrust except when safety dictates. At other European international airports, the guidance is more prohibitive, for example:

- Frankfurt: *'Reverse thrust may not be used on the entire runway system of Frankfurt/Main Airport except for safety reasons in unavoidable cases. This does not apply to idle reverse thrust.'*
- Schiphol: *'During night-time 2200-0600 (2100-0500): After landing, reverse thrust above idle shall not be used on any runway, safety permitting.'*
- Copenhagen: *'Use of more than idle reverse thrust is allowed only for safety reasons.'*

To further encourage avoidance of unnecessary reverse thrust particularly at night, the UK AIP guidance notes should be strengthened to state that 'reverse thrust above idle shall not be used except for safety reasons'.

**5. Noise Abatement Departure Procedures ('NADP')**

There are two types of procedure, one that minimises noise close to an airport and the other which minimises noise further away. Depending upon which type of NADP is used, there is a small difference in fuel burn and a large change in the location of noise exposure on the ground. Close to the airport, noise reduction should take precedence over any fuel burn economies which are of marginal benefit in terms of fuel savings and emissions over the total duration of the flight.

**6. Joining point**

Under current rules, the joining point criteria for Stansted runway 04 varies between daytime and night-time. Daytime arrival rules reduce the likelihood that aircraft fly over the urban areas of Ware, Hertford and Hoddesdon. Trials have been conducted at Stansted whereby the night-time joining point is moved closer to the airport to investigate whether the resultant night noise exposure is reduced. SSE notes that the benefit of this revised procedure is referred to in the Stage 2 Consultation.

As an overall comment, modern aircraft are capable of vastly improved flight profiles and track keeping and this provides the opportunity to tailor flight paths to reduce noise nuisance. However the technical advance in on-board avionics now fitted to these modern aircraft are not being brought into operational use with sufficient urgency. If the technical advances are to help reduce adverse noise impacts the speed of operational implementation must be accelerated. SSE notes that the Airport Commission Interim Report has recommended the establishment of a Senior Delivery Group to drive forward the implementation of the Future Airspace Strategy and the delivery of the Commission's recommendations. The operational improvements listed above need to be driven forward as expeditiously as possible to reduce night noise harms. As well as operational improvements, a differential scheme for landing

charges is already proposed in the APF and this is strongly supported by SSE to encourage flights to move out of the night period into the day.

***Q12: Are there any other matters you think this consultation should cover?***

Consideration should be given to the more fundamental question of whether it is necessary for night flying at Stansted to be subject to DfT regulation. Our view is that it is unnecessary, and it would be consistent with the Government's localism agenda if the determination of the night flying regime at Stansted were to be devolved to the local planning authority, as is the case at every other UK airport with the exceptions of Heathrow and Gatwick.

We note that the CAA has recently removed Stansted from economic regulation, since it now regards Heathrow and Gatwick as the only two UK airports with a dominant market position. These same two airports, the UK's largest, are also the only ones which have been shortlisted by the Airports Commission for additional runway capacity.

Having regard to all the current circumstances, we submit that it is no longer either necessary or appropriate for the DfT to include Stansted alongside Heathrow and Gatwick as an airport subject to the NFR regime. We therefore ask the DfT to make a preliminary assessment of the costs and benefits and to consult interested parties on a proposal to remove Stansted from the NFR regime.

***Q13(a): Do you agree with the locations of the proposed new noise monitors at Heathrow? If not, are there alternative locations you would favour and why?***

A13(a): No comment.

***Q13(b): Do you agree with the proposal to apply runway-specific limit adjustments for easterly departures at Heathrow? If not, please give reasons.***

A13(b): No comment.

## Impact Assessment questions

***Question 1: Do you agree with our assessment of how movements and quota usage are likely to change over the period to the end of the summer season 2017 at Heathrow, Gatwick and Stansted?***

Answer 1: It is clear that there is currently considerable headroom within the limits for movements and quota points for Stansted Airport. Table 1 in the Impact Assessment ('IA') gives the latest movement figures which are 2,876 for the winter 2012/13 and 6.003 for the summer 2013 giving a total of 8,879 which is 74% usage of the annual permitted maximum.

The recent quota points usage was even less. The winter 2011/12 usage was 49% and the summer 2012 usage was 77%.

At the end of the proposed regime in October 2017, using the central (2.5%) and high (4.5%) growth forecasts in the IA give the following annual figures:

| | Movements | Usage |
|---|---|---|
| Central forecast | 9,801 | 82% |
| High forecast | 10,588 | 88% |

There continues to be considerable headroom through to the end of the period. While the high forecast growth rate could take the summer 2017 season to its limit, the carry-over rules ensure that there is still headroom since the winter usage starts at 58% and continues to be low throughout the whole period.

The estimates for the number of people and the area affected by aircraft noise for the beginning and end of the proposed three-year regime for Stansted Airport clearly show an increase in the number of people affected within the 48dBA and 51dBA contours[21]

***Question 2: Do you agree with our assessment of the costs and benefits of option 1 at Heathrow, Gatwick and Stansted? Would you expect there to be any additional costs and benefits?***

Answer 2: See our Answer 1 above.

***Question 3: Do you agree with our assessment of the costs and benefits of option 2 at Heathrow, Gatwick and Stansted? Would you expect there to be any additional costs and benefits?***

Answer 3: See our Answer 1 above

*Stop Stansted Expansion*

*January 2014*

[21] Stage 2 Consultation, Annex B, Tables 7 to 10.