

**Committee:** Stansted Airport Advisory Panel

**Agenda Item**

**Date:** 11<sup>th</sup> April 2013

**4**

**Title:** DfT: Night Flying Restrictions at Heathrow, Gatwick and Stansted, Stage 1 Consultation

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**Key decision:** No

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## **SUMMARY**

1. This report is about the DfT's consultation on what should be included in the new night flying restrictions for Stansted, which are due to come into effect in November 2014. In effect, this consultation is a scoping exercise. The report explains what the existing restrictions are, and how they have operated since they were introduced in 2006. The report goes on to look at the options for the next restrictions, and looks briefly at the evidence review.
2. The consultation asks seventy questions in all, but it is not necessary to answer every one, nor would the Council be able to. All the questions are set out for the Panel's information at the end of the report, along with officers' suggested replies in bullet point form. The Council's response has to be sent to the DfT by Monday 22<sup>nd</sup> April.

## **RECOMMENDATIONS**

3. That the Panel notes this report and advises officers what additional points, or proposed changes, it wishes to be included in the response to the DfT.

## **FINANCIAL IMPLICATIONS**

4. There are no financial implications associated with this report and its recommendation.

## **BACKGROUND PAPERS**

5. None

## IMPACT

6.

Communication/Consultation	<p>The DfT has embarked on a two-stage consultation to replace the existing night flying restrictions. This current Stage 1 consultation looks at how the existing regime has operated, and asks for views on the structure and content of the new one. The consultation also seeks views on how to assess the costs and benefits of night flying in drawing up the new regime. The Stage 1 consultation asks a number of questions, which are attached at the end of this report.</p> <p>The Stage 2 consultation will set out the Government's proposals for the new regime, taking into account the views it receives in Stage 1, the recently published Aviation Policy Framework (APF) and the results of the Heathrow Operational Freedoms trial.</p>
Community Safety	None.
Equalities	None.
Health and Safety	In drawing up the new regime, the Government will need to balance any perceived economic benefits of night flights against the effect on human health, especially sleep disturbance.
Human Rights/Legal Implications	None.
Sustainability	None.
Ward-specific impacts	The new night noise regime will impact all parts of the district overflowed by aircraft at night.
Workforce/Workplace	Officer and Member time in preparing this response.

## THE 2006-2014 NIGHT FLIGHT RESTRICTIONS

7. The three largest London airports – Heathrow, Gatwick and Stansted are designated in law for the purpose of noise regulation. The Government has for many years set noise controls at these airports, including night noise. The current night noise regime came into force on 30<sup>th</sup> October 2006, and has been rolled forward until October 2014 so that the new regime can take account of the APF.
8. The night period is from 23:00–07:00. The night quota period is from 23:30–06:00, the remaining 1.5 hours being known as the shoulder period. During the night period, the noisiest aircraft may not be scheduled to land or take off. During the night quota period, aircraft movements are restricted by numerical movement limits and by noise quotas which are set for each summer and winter season. If required, a shortfall in use of the movement limit and / or noise quota in one season of up to 10% may be carried over to the next season, but cannot be carried over for a second time if still unused. Similarly, an overrun of up to 10% in movements and/or noise quota usage in one season (not being covered by a carry-over from the previous season) is allowed, subject to a deduction from the corresponding allocation in the following season. An overrun of more than 10% will result in a deduction of 10% plus twice the amount of the excess over 10% from the next season's allocation. The maximum overrun is 20% of the original limit in each case.
9. Under the quota count (QC) system, each aircraft (including variants) is assigned a quota count according to its noise performance. As aircraft are less noisy on arrival than on departure the QC rating may vary, but not always. The very noisiest aircraft are QC/16, the least noisy are QC/0.25. To qualify as QC/0.25, an aircraft has to be between 84 and 86.9EPNdB. This stands for Effective Perceived Noise Decibels, which is a figure based on an average of flyover and sideline noise readings for departures, with a 9EPNdB discount for approach values. Aircraft that are below 84EPNdB are exempt from the regime and do not count towards the noise quota or the movement limit.
10. To give examples relevant to Stansted, the short haul, narrow bodied Boeing 737/800 is QC/0.5 on arrival, and QC1 on departure, representing about 37% of all night time movements. The Airbus A300, used for cargo operations, is QC/1 on arrival and QC/2 on departure (6% of all night time movements). At Stansted, 72% of all night movements are arrivals and 28% are departures. About 75% of all night movements at Stansted are before 02:00.
11. The Secretary of State has powers under the Civil Aviation Act 1982 to specify circumstances in which movements may be disregarded from the restrictions. These are emergencies and delayed flights where serious congestion or hardship would result, or delays resulting from widespread and prolonged disruption of air traffic. The Secretary of State can also authorise specific flights to be disregarded (such as VIP or emergency relief). All these movements are referred to as dispensations.

## HOW THE EXISTING NIGHT FLYING RESTRICTIONS HAVE OPERATED

12. The consultation document and annexes include a large number of tables, figures and maps which set out how the regime has operated at each of the designated airports. The following table pulls together the salient points for Stansted in 2012, and includes a commentary on trends from previous years.

ASPECT	PERMITTED	ACTUAL	COMMENTS
<b>WINTER QUOTA COUNT 2011/12</b>	3,310	1,632 (49.3%)	Permitted count has decreased in steps from 3,510 in 2006/07. Usage has dropped from 71.6% in the same period.
<b>SUMMER QUOTA COUNT 2012</b>	4,650	3,604 (77.5%)	Permitted count has decreased in steps from 4,900 in 2007. Usage has dropped from 89.8% in the same period, but has picked up a bit in the last 2 years.
<b>WINTER MOVEMENT LIMIT 2011/12</b>	5,000	2,298 (46%)	Same permitted limit since 2006/07. Usage has dropped from 75% in the same period.
<b>SUMMER MOVEMENT LIMIT 2012</b>	7,000	5,837 (83.4%)	Same permitted limit since 2007. Usage has dropped from 104.4% in 2007. In 2007, there were 7,307 movements which used up part of a 10% carry-over. This is the only occasion since 2006/07 that Stansted has used any carry-over.
<b>WINTER 2011/12 EXEMPTIONS</b>	N/A	221	The number of exemptions has varied from between 150 to 296 during the winter seasons from 2006/07.
<b>SUMMER 2102 EXEMPTIONS</b>	N/A	331	331 is the highest level of summer exemptions.
<b>WINTER 2011/12 DISPENSATIONS</b>	N/A	0	There have been no winter dispensation flights at Stansted since 2006/07.
<b>SUMMER 2012 DISPENSATIONS</b>	N/A	0	There have been a total of 14 summer dispensation flights at Stansted since 2007.

13. It is helpful to look at operations at Stansted Airport in general. When planning permission was granted in 2003 for expansion to 25mppa (UTT/1000/01/OP), Condition ATM1 capped annual passenger and cargo movements to 241,000 in total, of which no more than 22,500 could be cargo. The Generation 1 planning permission for expansion to 35mppa

(UTT/0717/06/FUL) raises the total cap on movements to 264,000, of which no more than 20,500 can be cargo. Generation 1 has not yet been implemented.

14. Passenger throughput has dropped from just under 24 million passengers per annum (mppa) in late 2007 to 17.47mppa in the year to the end of February 2013. In the same period, the number of passenger air transport movements has reduced from about 207,500 to 121,000. The number of cargo movements has stayed fairly constant between 10,000–10,500 between 2008 and 2013, transporting between 180,000–205,000 tonnes of freight each year.
15. Given the drop in passenger throughput since 2008, Stansted has unsurprisingly operated relatively comfortably within the night movement limit and noise quota, which were both set when the authorised throughput was 25mppa. The drop in the usage of the winter movement limit and noise quota seems to broadly reflect the drop in the airport's passenger throughput. Summer usage (although it too has reduced) has held up somewhat in comparison.
16. The Section 106 agreement signed in 2003 as part of expansion to 25mppa prohibits the airport operator from seeking any relaxation of the night noise regime currently in force.
17. The number of exempt movements is about 1.5 per night out of an average of about 24 movements. Were these all to count towards both the movement limit and noise quota (say at QC/0.25 as they are the less noisy aircraft) neither would be exceeded, but the headway would be reduced. The number of dispensation flights at Stansted is about 2 per year (mostly VIP), so does not appear to be an issue.
18. As part of the regime, the following objectives were confirmed by the Secretary of State for each of the designated airports. For Stansted, these were as follows, with the DfT's own comments in italics on how they were met:

#### Environmental objectives

1) progressively to encourage the use of quieter aircraft at night while allowing overall growth of the airport as envisaged by the White Paper (2003 Air Transport White Paper refers)

*The average QC per movement in winter 2005/06 was 0.83 and in summer it was 0.70. In winter 2011/12 the average was 0.71 and in summer it was 0.62.*

2) to limit the overall noise from aircraft during the night quota period close to existing levels while permitting expansion of the airport's overall traffic in line with ATWP objectives

*In 2002/03 the 6.5 hour 48dBA Lnight contour (for the winter and summer seasons combined) was 30.4sqkm. In 2011/12 it was 29.3sqkm.*

3) to meet noise abatement objectives as adopted from time to time

#### Noise abatement objectives

4) to minimise sleep disturbance resulting from overflight of the noisiest types

of aircraft

*The average QC rating per aircraft has fallen over the last 10 years, and the number of QC/4 aircraft operating in the night quota period has generally fallen over the course of the current regime.*

5) to mitigate the effects of noise (in particular sleep disturbance effects) by encouraging the adoption by the airports of night-noise-related criteria defined in the Stage 2 consultation paper, for domestic and other noise-sensitive premises, to determine which residents should be offered sound insulation to be paid for or contributed to by the airport. The boundary of the scheme was based on the noise footprint of the noisiest aircraft regularly operating at each airport – in the case of Stansted that was the MD-11 on departure  
*Evidence on how this was met has been requested.*

#### Night noise abatement objectives

6) to limit the 6.5 hour 48dBA Lnight contour (for the winter and summer seasons combined) to 38sqkm by 2011-2012.

*In 2011/12, the relevant contour (for the winter and summer seasons combined) was 29.3sqkm.*

19. The consultation annexes also give 6.5 hour 48dBA Lnight contours for maximum use of quota and movement limits at Stansted. In 2011/12, the area within the contour would have been 40.5sqkm, greater than the 2002/03 contour and above the target in the night noise abatement objective. Had throughput at Stansted not have declined post-2008, action might have been required to meet the objective as throughput neared 35mppa if far greater use was made of the available movement limits and night quota.

### **OPTIONS FOR THE NEXT NIGHT NOISE REGIME**

20. The APF includes two paragraphs on night noise in the chapter called “Noise and other local environmental impacts”. These are Paragraphs 3.34 and 3.35. In these paragraphs, the Government says it recognises the high community cost of night noise, but it also recognises the importance to the UK economy of certain types of night flights, such as express freight services which may only be viable if they operate at night. In view of the community cost of night flights, the Government says:

*“we expect the aviation industry to make extra efforts to reduce and mitigate noise from night flights through use of best-in-class aircraft, best practice operating procedures, seeking ways to provide respite wherever possible and minimising the demand for night flights where alternatives are available. We commend voluntary approaches such as the curfew at Heathrow which ensures that early morning arrivals do not land before 4.30am”.*

21. The consultation seeks views on options for avoiding, limiting or mitigating noise from aircraft at night, looking at the relative costs and benefits and any trade-offs.

22. *Reduction at source: current and expected fleet mix changes*

There is little published information on future intentions of airlines to operate particular aircraft on particular routes, or on planned retirements of aircraft. The Boeing 747-400 (QC/2 on arrival and QC/4 on departure) is currently the noisiest scheduled aircraft at any of the three designated airports, and is expected to retire in the next decade, although it may not be completely phased out.

23. *Land use planning*

The National Planning Policy Framework gives advice on the impact of noise on health and quality of life as a result of new development, and on mitigation including the use of conditions. There is no specific policy on noise at night, but impacts should form part of any consideration.

24. *Operational procedures*

3 degrees is the current angle of descent, but this can be increased in exceptional circumstances. There have been trials using a steeper angle of descent. The noise benefits from a steeper angle are potentially significant, but there are technical and practical issues to resolve. Displaced landing thresholds move the point of touchdown further from the end of the runway, and are generally used for safety or operational reasons (e.g. to reduce runway occupancy times). They can provide noise benefits, particularly for those living closest to airports, but it is not possible to use different landing thresholds at different times of the day. At Stansted, displaced landing thresholds are used only for easterly operations.

25. NATS is leading work on the London Airspace Management Programme (LAMP) to develop a modernised airspace around London. PRNAV (performance based navigation) is being implemented in the London Terminal Control Area, in which the enhanced ability of aircraft is used to reduce lateral dispersion of aircraft either side of a flight path. This may result in some increased noise below the flight path. Finally, there may be scope to limit the joining points on final approaches during certain parts of the day (including the night quota period) to provide some respite to residents via a system of alternation.

26. *Movement limits*

Paragraph 11 of this report sets out the existing movement limits. The DfT says that it will need to consider carefully the costs and benefits of changing movement limits bearing in mind a number of factors, including future airport growth and health and disturbance impacts.

27. *Setting noise quotas for each year of the next regime*

Paragraph 11 also sets out the existing noise quotas. The DfT says that reducing the noise quota was the main way of achieving the current environmental objective of progressively encouraging the use of quieter aircraft. The scope to reduce the average QC per movement still further will depend upon the availability of newer, quieter aircraft to replace noisier ones. The DfT will need to understand any planned or expected changes in the nature of operations at Stansted, as this will determine the type of aircraft in

use (including shifts from short haul to long haul or vice versa). Also, the DfT will need to take into account the freeze in quota limits during the extension period to 2014, which may have not incentivised airlines and airport operators to make continuous improvements.

28. *Ban on scheduling or operating the noisiest aircraft*

During 2010, there were no QC/8 movements at Stansted during the night quota period, but there was one cargo departure in 2011 and one passenger departure in 2012. There were no QC/16 movements. The current regime introduced for the first time a scheduling ban on QC/4 operations during the night quota period. The DfT intends to reconsider this as part of this consultation to see if a full operational ban is merited. Between 2006 and 2012 there were 47 QC/4 operations during the night quota period at Stansted, which is less than 0.2% of total night time operations for the combined summer 2011 and winter 2011/12 seasons. The DfT also intends to reconsider the need for a QC/4 operating ban during the shoulder periods. At Stansted, noise and track keeping data indicates that there were 17 QC/4 operations at Stansted in 2011 during the shoulder periods, 12 of which have now been replaced by QC/2 aircraft.

29. *Guaranteed respite period*

Unlike at Heathrow (where there is a voluntary scheduling curfew between 23:30-04:30), there is no such curfew at Stansted. The DfT is not aware of any conclusive evidence of the benefits of respite periods, but these would need to be weighed against any increased disturbance caused either side of the period if flight concentrations increase. There are also economic arguments for retaining the ability to operate services throughout the night, such as the timing of express freight services.

30. *Making better use of economic incentives*

A recent review has identified that at Stansted there is no differentiation between landing charges for daytime and night-time arrivals. Differentiation exists between season, Chapter certification and weight. As Stansted is economically regulated, there is limited scope to raise the noise related element of landing charges because of the overall charge cap. There may be scope for changing the balance between daytime and night-time related charges to incentive the use of quieter aircraft during the night period whilst not exceeding the cap. The DfT's Aircraft Noise Management Advisory Committee has begun a review of noise abatement procedures at the noise designated airports, and any proposals would be subject to separate consultation.

## **NIGHT FLIGHTS EVIDENCE REVIEW**

31. The consultation identifies seven main impacts of night flights. These are:

- Air transport users

Improved user choice, reduced user costs and reduced travel times

- Airline and airport profits

An additional source of potential profits for both



- Noise

The most obvious is sleep disturbance, which can result in awakenings, difficulty falling asleep or reduced sleep quality. Long term exposure can result in adverse health effects, which may be related to sleep disturbance. Next day effects of sleep disturbance can include fatigue and sleepiness, which may impact on productivity. The consultation describes the next day effects as a “secondary effect of sleep disturbance”, but this seems to undervalue them (officers’ comment).

- Air quality

As the atmosphere is more stable at night, pollutants are dispersed less easily, and air pollution from night flights can have a greater local impact.

- Climate change

Night flights add to emissions which contribute to climate change. The impact of non-CO<sub>2</sub> emissions is under review, particularly the relationship between warming and cooling effects.

- Public accounts

Air Passenger Duty levied on night flights is a small proportion of overall receipts, but is still significant. More indirect positive impacts include extra tax receipts from additional jobs created, boosted economic activity in other sectors, but there could be negative impacts if spending is diverted from goods and services across the rest of the economy.

- Wider economic impacts

The consultation admits that the nature of these impacts is unclear, but include opening up markets, fostering international trade, encouraging UK investment, improved business efficiency, raised productivity. Both directly and indirectly, night flights affect employment levels.

32. In the final part of the consultation document, the DfT begins to consider how it might assess the impacts of any changes to the night flights regime, with particular reference to using its Aviation Appraisal Guidance (AAG). The DfT says that it will be critical to assess the response of airlines and air transport users to any change, but this will not be easy because there are many reasons behind the decision to operate any night flight. Also, the DfT’s aviation models do not differentiate between day and night flights, as they focus on changes in annual passenger numbers and aircraft movements. What the DfT calls “off model” analysis” will be necessary to assess an airport’s ability to accommodate flights at particular times. One approach (CE Delft 2011 – Heathrow) is to put a value on passengers’ ability to arrive at their preferred arrival times, but the DfT would need to know what to assume about passengers preferred arrival and departure times at Stansted. The DfT also intends to look at the impacts on non-UK residents and firms.
33. In relation to airline profits, the AAG sets out a method for estimating the effect of policy options on airlines and airports associated with a change in passenger numbers, but there is no similar method for freight.
34. The DfT has concluded that any changes to the impact that night noise currently has on the local population needs to be assessed even though the AAG does not provide a method for doing this. Work that the CAA has carried out proposes that the following should be quantified and monetised:

- The value of sleep disturbance
- The increased risk of heart attacks
- The increased incidence of hypertension (including secondary effects of stroke and dementia)

There would be an effect on daytime noise if night flights were displaced to the day, which the DfT would need to assess.

35. The DfT proposes to estimate, as a minimum, the change in NO<sub>x</sub> emissions caused by changes to the night flights regime and monetise the impact (this is a regional assessment). Assessing the impacts on NO<sub>2</sub> and PM<sub>10</sub> concentrations at household level and monetisation of the PM<sub>10</sub> impact (the local assessment) is a significantly more costly exercise. The DfT says it will need to consider whether such an approach would be proportionate in light of the policy options identified.
36. The DfT says it does not intend to value the CO<sub>2</sub> emissions separately, as to do so would double count the carbon impact now that the aviation sector has been included in the EU's Emissions Trading System (ETS). The ETS requires airlines operating flights to and from the UK to surrender allowances and credits to cover their annual CO<sub>2</sub> emissions. For non-CO<sub>2</sub> impacts, the DfT will consider the strength of the latest scientific evidence in deciding whether the non-CO<sub>2</sub> impacts should be estimated as a sensitivity test.
37. The DfT will not take account of changes in employment tax receipts. This is because changes in employment in one sector of the economy tend to be offset by changes in employment in other sectors, unless there are specific reasons to suggest there would be an impact on the overall labour supply. If the DfT has reason to believe there would be an impact on labour supply, these will be taken into account as part of the assessment of the wider economic impacts.
38. As there is no aviation specific guidance to assess the wider impacts of changes to the night noise regime, the DfT has reviewed the approaches taken in other sources. These relate to effects on productivity, tourism and employment. The DfT says it is difficult to establish a causal link between business use of aviation and productivity, because greater business use may increase productivity and economic growth, which then could drive increased business use of aviation. More research may be required. In relation to tourism, the DfT proposes a qualitative assessment, taking account of both the impacts on foreign in-bound tourists and UK out-bound tourists. The AAG suggests that employment effects only need to be considered if there are specific reasons to suggest there would be an impact on the overall labour supply.

## CE DELFT REPORT: BAN ON NIGHT FLIGHTS AT HEATHROW AIRPORT (2011)

39. HACAN ClearSkies commissioned this report, which examines the social, environmental and economic effects of a ban on night flights at Heathrow. The purpose of the report is to aid a plea for a ban on flights between 23:30 and 06:00.
40. The report found that the impact of a ban on UK welfare is likely to range from +£860 million to -£35 million 2013-2023. The loss would occur in the unlikely event that all current night time passengers stopped travelling to Heathrow once the ban was introduced. The more likely scenario is that a proportion of passengers will continue to use the airport, in which case benefits will accrue. The main benefit will be a significant decrease in costs associated with sleep disturbance. As a result, the improved health and well-being are expected to offset the main costs of a ban – passengers' time and airline profits – by a wide margin.
41. The authors recognise that the results are sensitive to the valuation of night noise, and more detailed study is required including the impact on passenger choices, on airline networks and on tourism. Finally, the report concludes that job losses from a ban would be small as the number of jobs directly dependent on night flights is not high and employees would find other jobs in a well-functioning labour market.

Risk	Likelihood	Impact	Mitigating actions
That the new night flights regime implemented in 2014 has a detrimental impact on the quality of life of local residents.	2. There is some risk because the Government has to balance the economic case for night flights against the local environmental considerations.	2. Any increase in night flights would affect the quality of life of local residents.	The Council has the opportunity to respond to the DfT's consultation and put its case for a more challenging new night flights regime in 2014.

1 = Little or no risk or impact

2 = Some risk or impact – action may be necessary.

3 = Significant risk or impact – action required

4 = Near certainty of risk occurring, catastrophic effect or failure of project.

## Summary of Questions *(Officers' comments are included in italics under the relevant question)*

### Policy and legal landscape

Q1: Are there any other matters that you think we should cover in the second stage consultation?

- *There is no "one size fits all" regime. Stansted is currently permitted to handle 12,000 night flights a year, more than twice the number permitted at Heathrow. Whilst it is accepted that more residents are affected by night flights at Heathrow, Stansted is an airport in the countryside, with low levels of background noise. Any new regime must take Stansted's rural setting into account in drawing up new movement limits and noise quotas.*

### Factual Information

Q2: Do you have any comments on our assessment of the extent to which the current objectives have been met?

- *Whilst operations at Stansted have met the relevant 6.5 hour 48dBA Leq contour, the consultation indicates that the contour would have been exceeded at a higher (or maximum) use of quota and movements. Had growth have continued towards 35mppa with more use of the quota and movement limits, action might therefore have been required to reduce night noise. One conclusion that can reasonably be drawn from this is that the decline in throughput has meant that the airport operator has been operating in a "comfort zone" as far as compliance with the contour is concerned.*

Q3: Do you have any views on how these objectives should change in the next night noise regime?

- *Stansted is operating at only 50% of its approved capacity, with an indication from the new owner that it would like to grow the airport by 5mppa by 2018. The new objectives ought to be stepped (say at 5mppa intervals) so that they are challenging to a growing airport at all points. The option is objectives that may only impact on operations at or near 35mppa, giving residents little intermediate relief which they deserve.*

### Structure of the Current Night Noise Regime

Q4: Do you have any views on whether noise quotas and movement limits should apply only to the existing night quota period or to a different time period?

- *Restrictions should apply to the 8 hour night period, but a single restriction for that period is not favoured as it could encourage more flights to migrate to the deep night period. There should be separate restrictions for the deep night*

*between 23:30–06:00 and for the shoulder periods between 23:00-23:30 + 06:00-07:00.*

Q5: Do you have any new evidence to suggest we should amend or move away from the current QC classification system?

- *No, but aircraft classified as below 84 EPNdB should default to QC/0.25. This is because even the less noisy aircraft can awaken residents, especially in locations where background noise levels are lower. It is no comfort to learn that you have been awakened by an aircraft that doesn't count because it is supposedly "quiet".*

Q6: Do you have any views on the optimum length of the next regime and how this should align with the work of the Airports Commission?

- *It would make sense for the new (and future) regimes to become aligned with the Noise Action Plans such that the Plans provide the detail of how the regimes will be complied with.*

Q7: Do you have any views on how dispensations have been used?

- *These do not appear to be a significant issue at Stansted.*

Q8: Do the dispensation guidelines still adequately reflect current operational issues?

- *They would seem to.*

Q9: Would you favour adding greater contingency to the seasonal movement limits (within any overall movement cap for the airport) in order to avoid large numbers of dispensations?

- *No, (see Question 7).*

Q10: Do you consider there is still a need to retain the principles of carry-over and overrun? If so, please give reasons why.

- *There has been only one instance of carry-over at Stansted since 2006, and no use of over-run. It is not considered that there is a need to retain these contingencies in the new Stansted scheme. Use of carry-over and overrun does not give residents the consistency and predictability that they deserve from the regime.*

Q11: If we retain the principles do you think we should change the percentage of movements and noise quota which can be carried over or overrun?

- *The percentages should certainly not be increased. From Table 4 in the consultation annexes, it seems that the available flexibility is very generous, even for operations at Heathrow. Reducing to a maximum 5% carry-over and 5% (max 10% with penalty deductions) over-run would seem to be feasible.*

## **Exploration of Options for the Next Night Noise Regime**

Q12: Do you have any comments on our analysis of fleet and operational trends?

- *If Stansted remains primarily as an airport for low fares airlines to operate point-to-point services, it seems logical to assume that the average retirement age of aircraft at Stansted will stay below the industry average. This may mean that longer term technological advances in airframe and engine design that reduce noise may benefit Stansted sooner than at other airports.*

Q13: In the absence of any new restrictions, what changes in operations and fleet mix do you expect in the period between now and 2020 (and beyond 2020 if possible)?

- *At Stansted in the longer term, any changes in operations and fleet mix will depend to a large degree upon the aspirations of the new owners. This may include an element of long haul, which has never survived at Stansted for any length of time. In the shorter term, no significant changes are anticipated. Both cargo and general business aviation are expected to remain relatively vibrant.*

Q14: Please set out how you expect local land use planning policies to impact upon the numbers of people exposed to night noise in the next regime. Please give details of any housing developments planned to take place within the current night noise contours (see Annex B).

- *The Council's emerging Local Plan provides for 115 new houses in total in Thaxted, which lies with the 6.5 hour 48 dBA Lnight contour for both actual and maximum usage as set out in Annex B. Thaxted is located to the NE of the airport and is mainly affected by westerly arrivals.*

Q15: Please provide any information on the feasibility of increasing the angle of descent into Heathrow, Gatwick or Stansted, particularly within the next seven years.

- *This may be more difficult on easterly approaches to Stansted because of possible conflicts with Luton traffic. No doubt this will be considered as part of NATS' London Airspace Management Programme.*

Q16: What are your views on the analysis and conclusions in annex H? Would you favour changing the current pattern of alternation in favour of an easterly preference during the night quota period? *(Heathrow specific question)*

Q17: Do you have any views on the costs and benefits of a night-time runway direction preference scheme at Gatwick or Stansted?

- *This would need to be considered extremely carefully. It is not obvious what the benefit would be for residents near Stansted. From the recent DfT seminar on the consultation document, it is understood that landing with a tail wind would only be possible where the wind speed does not exceed 5 knots. This means that a runway direction preference scheme would be unlikely to be feasible in gusting or strong wind conditions even if it were set up.*

Q18: Please provide any information about the feasibility of using displaced landing thresholds in the next seven years for arrivals from the east at Heathrow and from the north east at Stansted.

- *Subject to technical considerations, displaced landing thresholds could be used from the NE at Stansted. The immediate benefit would be to those living in Molehill Green and Gaunts End, which are closest to the point of touchdown, but there would also be some relief for Thaxted residents.*

Q19: Please provide any information about airspace changes or other operational procedures which could mitigate the impact of night noise in the next regime period

Q20: Do you have any comments to make on the figures relating to movement limits and usage?

- *At Stansted, winter movements have dropped from 75% of the limit to 46% from 2006 to 2011. In the same period, summer movements have reduced from 104.4% to 83.4%. The 2006 regime was introduced at a time when the authorised throughput at Stansted was 25mppa. The recent winter usage implies that the 5,000 winter movement limit may already be sufficient to deal with 35mppa. Summer usage will be challenging at 25mppa.*

Q21. In the absence of any new restrictions, how do you expect demand for movements in the night quota period over the course of the next regime to change?

- *As Stansted's existing scheme was introduced at a time when the authorised throughput was 25mppa, it is expected that there will be pressure from the airport operator and the airlines to increase both the summer and winter movement limits to cope with 35mppa. Again, much will depend on the aspirations of Stansted's new owners.*

Q22: Do you have any comments to make on the figures relating to noise quota limits and usage?

- *At Stansted, winter noise quota usage has dropped from 71.6% to 49.3% from 2006 to 2011. In the same period, summer quota usage has dropped from 89.8% to 77.5%. As per Question 20, it also appears that the winter noise quota limit may already be sufficient to deal with 35mppa. Again, summer usage will be challenging at 25mppa.*

Q23: Do you agree with our initial assessment of the scope for reducing the noise quota in the next regime without imposing additional costs?

- *The consultation document refers to the scope at minimum cost to airlines. A balanced approach would weigh the cost to airlines against the benefits to residents. Minimum cost to airlines should not be the default position.*

Q24: Do you have any views on the relative disturbance caused by the noise of an individual aircraft movement against the overall number of movements in the night quota period?

- *Noise at night from an individual aircraft movement (especially against a quieter rural background) is sufficient to awaken a resident. A current average of 24 movements per night at Stansted during the night quota period (about 4 per hour) is sufficient to perpetuate sleep disturbance / deprivation.*

Q25: What are your views on the feasibility of a QC/8 and QC/16 operational ban in the night period? Please set out the likely implications of such a ban and the associated costs and benefits.

- *Stansted had no QC/16 operations in 2010-2012 and only one QC/8 cargo and one QC/8 passenger departure. An operational ban at Stansted therefore appears feasible with little cost to airline operations, even taking into account growth that may occur towards 35mppa.*

Q26: How many QC/4 aircraft do you expect to be in operation over the next seven years during the night quota period? Is the downward trend at Heathrow expected to continue?

- *Very few, if any, at Stansted.*

Q27: What are your views on the feasibility of a QC/4 operational ban in the night quota period at any or all of the three airports? Please set out the likely implications of such a ban and the associated costs and benefits.

- *QC/4 operations during night quota period at Stansted represent about 0.2% of total night time operations for the summer 2011 and winter 2011/12 seasons. An operational ban therefore seems feasible, even taking into account growth that may occur towards 35mppa.*

Q28: Are there more cost-effective alternative measures (such as penalties) to reduce the number of unscheduled QC/4 operations during the night quota period?

- *A significant increase in the landing charge should be effective, but it should relate to the whole of the 8 hour night. Increased charges for just the night quota period could be seen to give encouragement to QC/4 operations during the shoulder periods.*

Q29: What are your views on the feasibility of an operational ban of QC/4 aircraft at any or all of the three airports during the shoulder periods? Please set out the likely implications of such a ban and the associated costs and benefits.

- *A QC/4 shoulder period ban at Stansted appears feasible given the recent decline in the numbers of QC/4 aircraft operating in 2012 during that period.*

Q30: What is the rationale for operating services at precise times during the night quota period (as they do now)?

- *The main rationale for cargo flights would be continuity of delivery / "next day" services, whilst for passenger flights it would seem to be the needs of*



*businesses for morning meetings. In the Council's view, there is a need to distinguish between those night operations that are deemed essential to the economy as opposed to those that are merely desirable. This assessment could form the basis of a detailed inventory of night flights at Stansted against which the health impacts on local residents could be judged.*

Q31: What is the scope for introducing a respite period at Gatwick or Stansted? Please set out the associated costs and benefits.

- *As 75% of all night movements at Stansted are before 02:00 there would appear to be scope for looking at a respite period from 02:00-06:00. Table 15 of the consultation document indicates that there is currently an average of 1.5 movements per hour during that period. The benefits would be to the health of overflowed residents, but these benefits would be reduced if the displaced movements migrated to the rest of the night instead of to the day. The costs would depend upon the nature of these flights, most of which are arrivals. There is Government support for voluntary curfews in the APF.*

Q32: What is the feasibility of making Heathrow's voluntary curfew mandatory? *(Heathrow specific question).*

Q33: If you favour a guaranteed respite period, what would be the minimum period which you would consider to be worthwhile?

- *4 hours.*

Q34: What are your views on the principle of trading off a complete restriction on movements in one part of the current night quota period against an increase in flights in another part of the night quota period?

- *This is not something that would be favoured. The aim should be to either eliminate those night flights that would have flown during the curfew, or allow them to migrate to the day time.*

Q35: What are your views on the possibility of fewer unscheduled night flights arising from an increase in daytime arrivals 'out of alternation' or vice versa? *(Heathrow specific question)*

Q36: What value do you place on day time respite compared with relief from noise in the night quota period?

- *Relief from noise at night is the Council's number one priority for its residents. The clear evidence from the CE Delft report is that a ban on night flights at Heathrow would benefit UK welfare, and it would be surprising if the same conclusions did not apply to Stansted.*

Q37: Do you have any views on the extent to which landing fees can be used to incentivise the use of quieter aircraft during the night period?

- *At Stansted there is no price discrimination according to whether landings are during the 16 hour day or 8 hour night. In the Council's view this is a missed*

*opportunity which should be coupled with the new night noise regime to further dissuade the noisier aircraft from flying at night.*

Q38: Please provide comments and evidence on the extent to which the noise insulation scheme criteria have been met. Where possible please include figures for numbers of properties insulated under the scheme and numbers which are still potentially eligible.

- *According to the Stansted Noise Strategy and Action Plan 2010-2015, 517 out of 1,044 properties qualifying for noise insulation have taken up the scheme at a cost of £1.4 million since 2004.*

Q39. Do you have any suggestions for changes to current compensation schemes or for new compensation schemes that might be introduced to help offset the impact of night noise on those exposed to it? For new schemes, please explain the parameters that you would suggest for the scheme and the rationale for choosing those parameters.

- *From what is said in the new APF, it seems clear that the Government is content for the existing compensation scheme at Stansted to be rolled forward. Paragraph 3.41 of the APF states that airports may wish to use alternative criteria or have additional schemes based on night noise where night flights are an issue. The Government's suggestion in the APF that airport consultative committees should be involved in reviewing schemes and invited to give views on the criteria to be used is welcomed.*

Q40. Do you have any proposals for new or improved economic incentives that could be deployed to incentivise the use of quieter aircraft during the night period?

- *Differential landing charges would be one option (see Question 28).*

### **Night flights Evidence Review**

Q41: Is there any other evidence we should consider in assessing the response of airlines and air transport users to changes in the night flights regime?

- *As the consultation says, all the studies that have been reviewed consider the impacts associated with banning night flights at Heathrow. The new regime for Stansted should be informed by a similar study or studies based on the situation that exists at Stansted.*

Q42: Is there any reason why we should not seek to ensure consistency with the Aviation Appraisal Guidance approach to assessing air passenger impacts?

Q43: What are your views on how we should assess the impacts on air passengers associated with a change in night flights regime, if we are unable to use the Department's aviation models?

Q44: Do you think there is merit in applying the approach employed by CE Delft? If so, do you agree that it is reasonable to assume that business passengers and transfer

passengers prefer to arrive on a night flight, if they would choose to do so if one were available? What are your views on what we should assume about terminating passengers' preferred arrival times and about passengers' preferred departure times?

- *Yes, the CE Delft approach has merit. The key word is “prefer” to arrive on a night flight. The Council’s response to Question 30 is relevant here.*

Q45: Do you agree that the impacts on passengers who decide not to travel (or become able to travel) as a result of the change in night flights regime could be critical to the balance of costs and benefits?

- *Passengers who decide not to travel at all will have some effect on the costs / benefits balance, but it is doubtful that this will be a critical effect. Again, an inventory of Stansted night flights would be helpful. If night flights were banned at Stansted, airlines would adapt to the changed regime.*

Q46: Are you aware of any evidence that we could use to value the impacts on passengers who decide not to travel or (become able to travel) as a result of the change in night flights regime?

Q47: Do you think that the method used by Oxford Economics (2011) to assess the impacts on productivity of changes in business usage of aviation (the approach is described in paragraphs J22-23 of Annex J) would adequately take account of the impact on air freight service users of changes in the current night flights regime?

Q48: Do you think that, were we to employ the method used by Oxford Economics (2011) to assess the impacts of changes in business usage of aviation on UK productivity (the approach is described in paragraphs J22-23 of Annex J), we would need to isolate the impact on business air passengers in our assessment of air passenger impacts in order to avoid double-counting of business air passenger impacts?

Q49: Is there any other evidence or information that we should consider in assessing the impact on air freight service users of a change in the night flights regime?

Q50: Is there any reason why we should not seek to ensure consistency with the Aviation Appraisal Guidance approach to assessing airline and airport impacts?

Q51: What are your views on how we should assess the impacts on profits, if we are unable to use the Department’s aviation models?

Q52: Do you agree that there is merit in our applying a similar approach to that employed by Oxford Economics to estimate the economic value of night flights at Heathrow? If so, are you able to provide any evidence of how much freight is carried on night flights at the designated airports? What factors should we consider in assessing the applicability of the available profits data to night flights at the designated airports?

Q53: Is there any other evidence we should consider in assessing the impacts of a change in the night flights regime on airlines and airports?

- *Whilst this consultation relates to new regimes at the three designated airports, it is important than any possible knock-on effects of those regimes on other UK airports are also given some consideration. It is presumed that these effects will be identified by this consultation process.*

Q54: Do you agree that the approach proposed by the Civil Aviation Authority (CAA) for estimating the cost of sleep disturbance from aircraft noise reflects the available evidence? If not, how do you think it should be changed?

- *Following the recent DfT seminar on the consultation document, it appears that the CAA's approach does reflect the available evidence.*

Q55: Is there any other evidence, not considered by the CAA in their literature review, which we should consider in assessing the noise impacts of a change in the night flights regime?

Q56: Do you agree that we should ensure that the method used to assess air quality impacts should be proportionate to the proposals under consideration?

- *According to the consultation document, the methods used will depend on the scale of the expected impacts. The example used is that changes to the night flights regime would affect air quality significantly less than a third runway at Heathrow, so a "Heathrow" approach to assessing the impact of the night flights regime would not be proportionate. This is fine, as long as the approach that is used is thorough and fit for purpose.*

Q57: Is there any other evidence we should consider in assessing the air quality impacts of changes in the night flights regime?

Q58: Do you agree with our proposed approach? Is there any evidence on nonCO<sub>2</sub> climate change impacts we should consider?

Q59: Is there any reason why we should not seek to ensure consistency with the Aviation Appraisal Guidance approach to assessing public accounts impacts?

Q60: What are your views on how we should assess the impacts on the public accounts, if we are unable to use the Department's aviation models?

Q61: Do you agree that there is merit in our applying a similar approach to that employed by Oxford Economics to estimate the impact on APD revenues?

Q62: Do you agree that the impact of any change in the night flights regime is unlikely to have a significant impact on employment, and therefore any impact on employment taxes will be minimal?

- *Yes, it is clear that most night flights are part of a wider network of operations by each airline so any impact on employment and taxes should be small.*

Q63: Is there any further evidence we should consider in attempting to assess the indirect impact of a change in the night flights regime on indirect taxation revenue across the rest of the economy?

Q64: What are your views on our employing a similar approach to that employed by Oxford Economics and Optimal Economics in assessing the impact of a change in the regime on UK productivity? Do you agree that if we were to employ this approach there would need to be adjustments to avoid double counting the benefits to business passengers and freight service users?

Q65: Is there any further evidence we should consider in attempting to assess the impact of a change in the night flights regime on UK productivity?

Q66: Do you agree with our proposal to assess the impact of a change in the night flights regime qualitatively? If not, why not, and what would you suggest as an alternative?

Q67: Is there any further evidence we should consider in attempting to assess the impact of a change in the night flights regime on UK productivity?

Q68: Do you agree with our proposed approach to considering the potential impact of a change in the night flights regime on UK employment? If not, why not, and what would you suggest as an alternative?

- *Yes, the approach seems sound. It is logical to assume that employment effects only need to be considered if there are reasons to believe there would be an impact on the overall labour supply.*

Q69: Is there any further evidence we should consider in attempting to assess the impact of a change in the night flights regime on UK employment?

Q70: Are there any other impacts, not considered above, that we should consider in assessing the impacts of a change in the night flights regime (e.g. impacts related to the way people travel to and from the airport)? If so, what evidence should we consider in assessing these impacts?

- *The Stansted Express rail service to the airport is not 24 hours per day because of the need for track repossessions for maintenance. The earliest arrival is at 04:30 (Monday-Friday) which is extremely tight for the first wave of departures at 06:00, and too late for staff for the 04:00 shift change. The airport is pressing for a first arrival before 04:00, but this may require services to terminate earlier in the late evening / early night to compensate. However, regional coach services are in robust health, and should be able to cope with any changes to the night flights regime. The strategic and local road networks are not stressed during the night period, but there may be local impacts to consider such as noise from road traffic if night flights are to increase.*