



Response to the Department for Transport

Night Flight Restrictions

Stage 2 Consultation

3 September 2021

Stansted Airport Watch (SAW), formerly Stop Stansted Expansion (SSE), has some 7,500 members and registered online supporters including 150 parish and town councils, local residents' groups, and national and local environmental groups. Our objective is to ensure that the airport's operations are managed to reduce and minimise their adverse impacts. In this way we aim to protect the quality of life of the communities adversely affected by Stansted Airport and the natural environment locally and globally.



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1. Introduction

- 1.1 Stansted Airport Watch ('SAW') welcomes the opportunity to respond to this Department for Transport ('DfT') Stage 2 Consultation on Night Flight Restrictions.
- 1.2 We start by expressing our disappointment at the DfT announcement in July 2021 that the existing framework of restrictions would be rolled over for yet another year, i.e. three years from the original 2022 end-date instead of the proposed two years.
- 1.3 The reasoning provided by the DfT in the Executive Summary of the July 2021 Decision Document that "there is an argument for not changing limits at this stage, in so far as we do not have sufficient evidence to support a substantial change in policy" highlights the current policy and regulatory vacuum concerning noise limits and controls. Moreover, the lack of evidence may largely be due to the fact that there has been inadequate consultation on whether the current night flight restrictions are fit for purpose.
- 1.4 At the start of the Stage 2 Consultation Document ('the Consultation Document') the DfT makes the following statement:
- "The government recognises that noise from aircraft taking-off and landing at night is often regarded by communities as the most disturbing form of airport operations. We also recognise that there is evidence, including in the World Health Organisation's (WHO) revised [Environmental Noise Guidelines for the European Region](#), that sleep disturbance caused by aircraft night operations can have adverse health impacts on overflowed communities".¹*
- 1.5 We agree with this statement and note that the 2018 WHO revised *Guidelines* for aircraft noise "strongly recommend" limits of 45dB Lden during the day and 40dB Lnight at night compared with the previous levels of 55dB and 45dB respectively.
- 1.6 We also remind the DfT of the following commitment made in its July 2004 consultation on Night Flying Restrictions at Heathrow, Gatwick and Stansted, in relation to the (then) WHO *Guidelines for Community Noise* which set a limit of 45dB for the protection of human health:
- "3.12 The 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.'"²*
- [Emphasis added]
- 1.7 The new Night Flying Restrictions to apply from October 2025 are likely to continue to apply until at 2030 – i.e. to the end of the 2030 time horizon of the [Air Transport] White Paper referred to above. If the DfT is not prepared to follow the most recent scientific advice from the WHO and impose a 40dB limit on aircraft noise at night, it should at least honour its earlier commitment and impose a 45dB limit in line with the earlier WHO *Guidelines*. The protection of human health must be a key priority for the government and the scientific advice is clear.
- 1.8 The DfT seeks to justify non-compliance with the WHO scientific advice by citing the economic benefits of aviation, claiming that:

"The sector directly provided around 230,000 jobs [2018] with many more employed indirectly and the sector contributed at least £22 billion annually to UK GDP".³

¹ Consultation Document, 'Background', para 1.

² '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.

³ Consultation Document, 'Background', para 2.

- 1.9 However, in seeking to maximise its portrayal of the economic benefits of aviation the DfT has distorted the economic evidence by combining the aerospace industry (i.e. manufacture and servicing of aircraft and spacecraft, civilian and military) with the air transport sector (airports and airlines). The correct economic statistics, as evidenced by the ONS Annual Business Survey for 2018 are as follows:

Standard Industrial Classification	GVA (£billion)	Jobs '000
SIC 51 (Air Transport)	9.9	80
SIC 52.23 (Service activities incidental to air transportation)	7.1	57
Total	17.0	137

Source: Office of National Statistics Annual Business Survey 2018. Until recently the DfT defined the aviation sector as those activities within SIC51 and SIC52.23. It is unclear why aerospace has now been added but this clearly has the effect of overstating the contribution of aviation to GVA and jobs.

- 1.10 We fully accept that an equitable balance needs to be struck between the adverse environmental impacts of night flights and the economic benefits. However, the DfT must be seen to be an honest broker in this regard and it will not be viewed as such if it continues to present exaggerated claims for the economic benefits of aviation.
- 1.11 Confidence is further eroded as a result of the DfT repeatedly postponing the introduction of the new regime, and therefore the opportunity to begin applying stricter controls on night noise in order better to protect the health of local communities. The new regime will not now begin until three years later than originally planned. And it does not inspire confidence to note the incorrect spelling of Stansted ("Stanstead") in the Consultation Document.
- 1.12 In the introductory notes to the Consultation, the DfT states:
- "It is also important the government finds the right balance between limiting the adverse environmental impacts that night flights have on communities, while supporting the aviation sector ... and the businesses that depend on the availability of night flights to deliver critical goods and services."*
- [Emphasis added]
- 1.13 A key issue for this Consultation should be to establish which night flights are actually essential, i.e. could not reasonably operate between 0700 and 2300. We are very doubtful that all of the charter holiday flights, scheduled passenger flights and cargo flights that currently operate during the night could all be described as "critical".
- 1.14 Turning specifically to Stansted, where the current night flights quota of 13,700 flights per annum is more than twice as many as presently allowed at Heathrow (5,800), there is a pressing need to ease the burden of night flights upon local communities.
- 1.15 Average noise levels are meaningful up to a point but local people hear aircraft noise as a number of discrete noisy events. In that respect, the night flight restrictions for both the number of movements and the quota count are arguably closer to the noise disturbance that people actually hear compared with an equivalent averaged LAeq.8-hour night contour. The impact of each individual noise event is lost within the averaged LAeq.
- 1.16 We trust the above introductory points are helpful in setting the context for our responses to the specific questions asked in the Consultation, which we deal with in the next section.

2. Response to Consultation Questions

Q1-Q5: These questions are dealt with on our front cover page and in our covering email.

Q6: Do you agree with our October 2022 to 2024 night noise objective for the designated airports?

A6: No. The objective to “limit or reduce the number of people significantly affected by aircraft noise at night ...” is weaker than the Environmental Noise Directive 2002/49/EC (‘END’) which states that the objective is “to avoid, prevent or reduce on a prioritised basis the harmful effects, including annoyance, due to exposure to environmental noise”⁴. The objective should be strengthened to match the END objective to take full account of the ever-growing evidence on the adverse health and other costs of night flights.

Furthermore, to qualify the objective with the statement “...while maintaining the existing benefits of night flights” is unbalanced and subjective. It is biased in favour of the aviation industry by effectively guaranteeing no reduction in night flight numbers while leaving the introduction of less noisy aircraft at the discretion of the industry. The government’s role as noise regulator at the designated airports should be to assess carefully and objectively both the benefits and the adverse noise and health impacts of night flights and strike an equitable balance. There has been no such assessment since 2006. Maintaining the current objective, as proposed, would further delay a proper evaluation of night flight benefits and harms.

Q7: Do you agree with how our October 2022 to 2024 draft noise objective for the designated airports will be measured?

A7: We do not agree with the proposed objective, since it also does not set clear targets to reduce noise at night. Therefore, we only partially agree with the proposals for measuring it. We would wish to see the following additional measures introduced:

- The movements limit should be reduced annually leading to a total ban on night flights, except in emergencies.
- The Stansted annual quota points limit should be sharply reduced so that it begins to have some practical effect.
- There should be an immediate ban on aircraft using reverse thrust when landing at night, except in emergencies.
- Night should mean night, that is a full 8-hours from 2300 to 0700

Q8: Do you agree that we should maintain the existing restrictions for two years from October 2022 to October 2024?

A8: No, and following the DfT Decision in July 2021, we are now told that the current restrictions are to be extended for three years, until 2025. This is complacent, irresponsible and it fails to take account of ever-growing evidence of the adverse health effects and other costs of night flights. There has been no proper review of the night flight regime for 15 years. This is not a fair outcome for communities around airports and under flight paths by failing to reduce adverse impacts for another three years after October 2022. As a minimum, the opportunity must be taken of the Covid-19 situation to thoroughly review and revise government policy and night flight restrictions during Stage 2 of this Consultation. In particular the 2018 WHO *Guidelines* for aircraft noise should be fully implemented.

⁴ END Article 1, Objective 1 - <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32002L0049&from=EN>.

Q9: What would be the impacts to you should the government maintain the existing restrictions for two years, from October 2022 to October 2024 [now October 2025] (provide evidence to support your view)?

A9: Annex D of this consultation document shows that for some years, Stansted has underused its allocated winter quota count. If the current quota count levels were continued to October 2025, this would give the industry freedom to increase night noise experienced around the airport and under flight paths for another three years. This will not provide an adequate incentive for the industry to reduce the number of people significantly affected by aircraft noise at night. We wish to see, as a minimum during a three-year roll-over period, that a start is made in reducing the quota count points for Stansted.

Q10: What would be the impacts to you should the government allow the night flight restrictions in place at the designated airports to lapse (provide evidence to support your view)?

A10: The impact would be totally unacceptable. Designation has the potential to achieve effective regulation of aircraft noise with the powers afforded to the Secretary of State being properly exercised. This should not be allowed to lapse. Furthermore, designation should be improved with clear criteria for airports accompanied by robust and effective arrangements for the regulation of aircraft noise with far more challenging quantitative noise reduction targets and timescales using the powers that regulation provides

Q11: Do you agree we should ban QC4 rated aircraft movements from operating at the designated airports between 23:30 and 06:00 from October 2022?

A11: Yes and also during the shoulder periods - i.e. the ban should apply from 2300 to 0700.

Q12: Provide evidence to support your view.

A12: As less noisy aircraft enter service, it is entirely proper that the regulations are tightened to ensure older and noisier aircraft are phased out so that the benefits of advances in technology are shared more fairly between the industry and local communities. However, it is noted from Annex D of the Consultation Document that there were no QC4 night movements at Stansted in the last winter 2018/19 and summer 2019 periods. In the preceding seven winter and summer periods, QC4 movements amounted to less than 0.005% of total night movements at Stansted and the effect of this ban for communities living around Stansted Airport, whilst a step in the right direction, would be negligible.

Q13: What are your views on the:

- **findings of the night flight dispensation review?**
- **proposals for the night flight dispensation review?**

A13: The DfT review shows that the definitions of flights qualifying for dispensations are currently inadequate. It appears that events that should be accommodated by normal scheduling and within standard resilience planning are being claimed as dispensations inflicting sleep disturbance on local communities particularly during the sensitive hour of 23.30 to 00.30. Stansted has a very high proportion of low-cost carrier airlines (over 85% of movements) which are more susceptible to knock-on delays causing the final flight of the day to land in the night quota period. It is unacceptable that during the four-year period between 2014 and 2018, there was a marked increase in dispensations at each airport, with the most notable increase being at Stansted. It is noted that in 2019 this trend has started to be reversed and

this must be continued. The arrangements by which airports approve their own dispensations appear not to have been entirely effective. Many flights that do not qualify for dispensations have nonetheless been approved and dispensations have been used by Gatwick and Stansted routinely to increase the number of flights operating at night in the summer.

We support the three DfT proposed improvements for night flight dispensation. In addition, more efforts should be directed towards improving the reporting and monitoring of dispensations and reducing capacity related delays which should also be a key objective of the Airspace Modernisation programme

Q14: Should disruption due to local weather qualify for dispensations?

A14: Disruption due to local weather should only qualify for dispensation in genuinely exceptional circumstances. In all other circumstances it should be accommodated in the airlines' and airports' routine scheduling.

Q15: Should disruption due to en-route weather qualify for dispensations?

A15: Only in exceptional circumstances. En-route weather patterns should be accommodated in airlines' and airports' routine scheduling.

Q16: Should disruption due to foreign airport weather qualify for dispensations?

A16: Only in exceptional circumstances, as above.

Q17: Should disruption caused by ATC industrial action qualify for dispensations?

A17: Only in exceptional circumstances.

Q18: Should disruption caused by industrial action by airport staff qualify for dispensations?

A18: No.

Q19: Should disruption caused by industrial action by airline staff qualify for dispensations?

A19: No.

Q20: Should network capacity delays qualify for dispensations?

A20: No.

Q21: Should delays caused by serious criminal or terrorist activity that affect multiple flights qualify for dispensations?

A21: Yes, but on a case-by-case basis against set criteria e.g. a Major Incident being declared.

Q22: *Should cumulative delays qualify for dispensations?*

A22: No. Airlines and airports should plan sufficient resilience into their schedules, by way of a contingency allowance, to allow for cumulative delays building up during the day. There is evidence of at least one airline doing the exact opposite by scheduling a shorter journey time for the last flight of the day so as to achieve a scheduled arrival time by 2330.

Q23: *Should dispensations be permitted for flights delayed to the NQP due to a medical emergency that has passed?*

A23: Yes, but on a case-by-case basis depending on the circumstances against set criteria.

Q24: *Should dispensations be permitted for flights delayed to the NQP due to a police emergency (for example a disruptive passenger) that has passed?*

A24: Yes, but on a case-by-case basis depending on the circumstances against set criteria.

Q25: *Should dispensations be permitted for the repositioning of emergency service (including medical transplant) aircraft?*

A25: Yes, but on a case-by-case basis depending on the circumstances against set criteria.

Q26: *Should dispensations on the basis of reducing carbon emissions be permitted?*

A26: No. Such a dispensation would be wide open to abuse. Furthermore, around airports the priority must be to reduce noise impacts. Airline schedules should take account of the possibility of after 0600 arrivals in UK airspace being earlier than expected and pre-2330 arrivals being later than expected.

Q27: *Should pre-emptive dispensations be permitted?*

A27: No and particularly since the DfT review says there is currently insufficient evidence to conclude whether the benefits of landing flights early on poor weather days outweigh its negative effects. Airlines and airports are responsible for managing their schedules and they should accommodate the risk of poor weather within them.

Q28: *Should dispensations be granted for information technology failures?*

A28: Yes, but on a case-by-case basis depending on the circumstances against set criteria.

Q29: *Supply any further views or evidence on the guidance allowing airport operators to grant dispensations you may have?*

A29: Dispensations should only be granted in exceptional circumstances rather than on many occasions as has happened at Stansted and Gatwick in recent years. Each dispensation should be independently reviewed and reported to all relevant stakeholders. There should be a process for disputing dispensations granted and consequences for incorrectly granted dispensations such as fines that are levied for departure noise and track keeping infringements.

Q30: What are your views on government dispensations overall (provide evidence to support your view)?

A30: In general, we have no concerns with government dispensations but, in some instances, they could be open to abuse. They should continue to be rarely granted and only in exceptional circumstances.

Q31: What length should the night flight regime beyond 2024 [now 2025] be?

A31: No longer than five years, noting that the current five-year regime has been extended by a further three years and there has not been a proper review of the night flight regime for 15 years - see also our answer to **Q8** above.

Q32: How do you think the length of regime will affect you (provide evidence to support your view)?

A32: Five years is a reasonable period to be able to fully assess the effectiveness of a regime and to be able to properly consult on up-to-date evidence with proposals in adequate time before the start of the next regime. It should be noted that the revision of airport Noise Action Plans under the Environmental Noise (England) Regulations takes place every five years.

Q33: Do you think that QC is the best system for limiting noise at the designated airports?

A33: Aircraft are intrinsically noisy machines. People hear aircraft noise as a discrete number of noisy events with associated noise levels, durations and noise characteristics as well as the frequency of occurrence of these noisy events compared to the background or ambient noise levels. The current system for limiting night noise at the designated airports is a combination of the number of movements and the cumulative amount of noise produced by the differing aircraft types. In that respect the QC system is a reasonable proxy for the cumulative amount of noise. However, since all aircraft in the vicinity of an airport are noisy, there should be more weight given to the frequency of movements than currently allowed and a better system would be to apportion more weight to frequency of movements. Stansted is presently allowed 13,700 night flights a year, more than twice as many as presently allowed at Heathrow (5,800). Stansted is located in rural surroundings where the ambient or background noise levels are relatively low as recognised by the Secretary of State for Transport.⁵ A better system for Stansted would be to include ambient or background noise levels in the assessment of noise impacts for limiting noise levels at night.

Q34: What do you think are the:

- **advantages of changing to a new system?**
- **disadvantages of changing to a new system?**

A34: See our answer to Q33 above.

Q35: Do you have evidence of other noise management regimes being used elsewhere and how they compare with the current system?

A35: A shortcoming in the current methodology of measuring aircraft noise is the use of A-weighting for all metrics. A-weighting under-estimates the sound pressure level of noise with

⁵ Secretary of State for Transport letter dated 10 December 2013 to Sir Alan Haselhurst MP.

low frequency components. A-weighting was originally intended only for the measurement of low intensity sound levels and largely discounts frequencies below 200Hz. At lower amplitudes of sound this gives a reasonably accurate assessment of the way sound is perceived. However, the noise spectrum of aircraft engines has a large component of total noise below 200Hz. A-weighting measurements use filters to attenuate frequencies below 200Hz whereas C-weighting, originally intended for high intensity sounds, will give a more accurate assessment of aircraft noise.

The WHO *Guidelines for Community Noise* state:

*"The evidence on low-frequency noise is sufficiently strong to warrant immediate concern. Various industrial sources emit continuous low frequency noise (compressors, pumps, diesel engines, fans, public works); and large aircraft, heavy-duty vehicles and railway traffic produce intermittent low-frequency noise. Low-frequency noise may also produce vibrations and rattles as secondary effects. Health effects due to low-frequency components in noise are estimated to be more severe than for community noises in general (Berglund et al. 1996). Since A-weighting underestimates the sound pressure level of noise with low-frequency components, a better assessment of health effects would be to use C-weighting."*⁶

There should be recognition of the large low frequency content of aircraft engines so that this carries more weight in the noise regime. Furthermore, modern high ratio bypass turbofan aircraft engines are characterised by a tonal (whine) feature which increases the likelihood of annoyance and sleep disturbance. BS 4142 provides a method to measure industrial noise based on the margin by which it exceeds background noise levels with a 5dB penalty for the acoustic characteristics present in the noise such as a distinguishable whine features. Analysis should be carried out to establish how this can be incorporated into the next Night Flight Regime ('NFR').

Q36: Should we introduce an additional QC category for quieter aircraft in the longer-term?

A36: Yes, noting that all aircraft are noisy and "quieter aircraft" is an oxymoron description. Some aircraft are less noisy than others.

Q37: Should the government reintroduce an exempt category?

A37: No. All aircraft are noisy machines and cause sleep disturbance.

Q38: Please provide evidence to support your position.

A38: See our answers to **Q33** and **Q35** above.

Q39: Do you think we should re-baseline the night quota system in the longer-term?

A39: Yes, otherwise the system becomes too complicated with decimals adding to the complexity of the existing decibel logarithmic measurement of noise levels.

Q40: What factors should we consider when anticipating how to best future proof a re-baselined QC system?

A40: The system needs to be more readily understood by communities. Additionally, the basis of the current QC system is categories of 3 decibel steps. This means that an aircraft

⁶ 'Guidelines for Community Noise', WHO, 1999, para 3.8.

certified at the top of one category is effectively indistinguishably less noisy to the human ear than an aircraft in the category above. This factor needs to be considered to see if it is truly representative of the noise emitted as perceived by people on the ground. See our answers to **Q33** and **Q35** above.

Q41: What costs, if any, would you anticipate in re-baselining the QC system?

A41: Not assessed.

Q42: Would you be impacted if the NQP was extended to 23:00 to 07:00?

A42: Yes, and this would be very much welcomed as an important improvement to reduce the adverse impacts of aircraft noise at night.

Q43: Provide evidence to support your view.

A43: The normal definition of 'night' is the 8 hours from 2300 to 0700 as laid down in the WHO *Guidelines for Community Noise*. There are currently no movement restrictions on the number of aircraft that can take-off and land during the two 'shoulder' periods, from 2300 to 2330 and from 0600 to 0700, the very times when most people are trying to get to sleep or just before they wake up. This is a particular problem at Stansted where low-cost carriers such as Ryanair seek to use their aircraft for as many hours as possible each day, with the result that these early morning and late evening 'shoulder' periods at Stansted are subject to very intensive use. Night should mean night', i.e. the full 8 hours from 2300 to 0700.

Additionally, aircraft are currently allowed to use reverse thrust when landing at Stansted at night. This is extremely noisy at the best of times and, in the case of Stansted, with its rural setting and low ambient levels of noise at night, the use of reverse thrust causes major disturbance. There should be an immediate ban on aircraft using reverse thrust at night except in the case of emergencies.

Q44: Do you think night flights in certain hours of the NQP have a greater impact on local communities than other times of the NQP?

A44: Yes. Flights are likely to have a greater adverse impact at the beginning of the NQP when local residents are normally trying to get to sleep and towards the end of the NQP when many local residents, may be awakened earlier than intended and may have difficulty getting back to sleep. Please also see our answer to **Q43** above.

Q45: Provide evidence to support your view.

A45: In 2009, the WHO published a report which concluded that "above 55 dB L_{night}, noise is a significant concern for public health" and recommends that for the longer term, night noise exposure should be reduced below 40 dB L_{night}, outside.⁷ In 2018, the WHO published further advice⁸ concerning both day and night noise exposure. For night noise exposure, the WHO "strongly recommends" reducing noise levels produced by aircraft during night-time below 40 dB L_{night} and concluding that "aircraft noise above this level is associated with adverse effects on sleep". As a measure of the importance of this scientific evidence, a "strong recommendation" is defined by the WHO as:

⁷ 'Night Noise Guidelines for Europe', WHO, 2009 -

https://www.euro.who.int/_data/assets/pdf_file/0017/43316/E92845.pdf.

⁸ 'Environmental Noise Guidelines for the European Region', WHO, 2018 -

https://www.euro.who.int/_data/assets/pdf_file/0008/383921/noise-guidelines-eng.pdf.

“...one that can be adopted as policy in most situations. The guideline is based on the confidence that the desirable effects of adherence to the recommendation outweigh the undesirable consequences. The quality of evidence for a net benefit – combined with information about the values, preferences and resources – inform this recommendation, which should be implemented in most circumstances.”⁹

It is also important to note that the 2018 WHO aircraft noise thresholds are significantly lower than those for road and rail noise, confirming that people are more sensitive to aircraft noise than to noise from other modes of transport at any given level.

The CAA's 'Survey of Noise Attitudes 2014' ('the SoNA 2014 study')¹⁰, concluded that “less than one quarter of all subjects reported having their sleep disturbed by aircraft noise, this occurring on average once every five nights”.¹¹ This frequency of sleep disturbance is nonetheless not trivial and the CAA pointed out that “the SoNA 2014 study was not designed specifically with a view to analysing attitudes to aircraft noise at night, and therefore this is very much an exploratory examination, with the consequential limitations”.¹² A recent peer review of the SoNA study¹³ endorsed the CAA's recommendation for further research with a view to obtaining a better understanding of the relationship between night noise exposure and the effect on sleep. It will be important for this further research to be undertaken so as to differentiate results at airport level, noting Stansted's rural setting.

Even at this stage, however, the available WHO and SoNA evidence is sufficiently robust to warrant a complete overhaul of the current night flying restrictions to set appropriate revised noise limits and relevant regulations to reflect the serious adverse impacts of night flights.

Q46: *Would a mechanism that disincentivises aircraft movements in periods of the night that are more sensitive for communities impact you (provide evidence to support your view)?*

A46: Yes, there should be disincentives for night operations, e.g. increased landing charges.

Q47: *Provide evidence to support your position.*

A47: As further evidence of the negative impacts of night flights, a 2011 report by CE Delft showed that a ban on night flights at Heathrow before 0600 could benefit the UK economy as a whole¹⁴. The CE Delft social cost benefit analysis found that the economic benefits of less night noise and, consequentially, less sleep disturbance, in addition to other positive side effects, would outweigh the costs of decreased earnings for the aviation sector and a possible decline in tourism revenue. The report concluded that the cost of a night flight ban at Heathrow was likely to range from an annual saving to the UK economy of almost £860 million compared to an annual loss of £35 million, which would only occur if all current night flight passengers stopped travelling to/from Heathrow if a night flight ban was introduced.

Q48: *What would be the impact on you if QC4 rated aircraft movements were banned between 23:00 and 07:00 after October 2024?*

A48: This would be an important step in the right direction to reduce the adverse impacts of aircraft noise at night. This should apply from October 2022.

⁹ Ibid, Executive Summary, Recommendations, page xv.

¹⁰ 'Survey of Noise Attitudes 2014: Aircraft Noise and Sleep Disturbance', (CAP 2161), CAA, 2016.
<http://publicapps.caa.co.uk/modalapplication.aspx?appid=11&mode=detail&id=10536>.

¹¹ Ibid, para 2.8.

¹² Ibid, para 1.2.

¹³ 'SoNA 2014 Study, Peer Review', CAA, 2021.

<http://publicapps.caa.co.uk/modalapplication.aspx?appid=11&mode=detail&id=10537>.

¹⁴ https://cedelft.eu/wp-content/uploads/sites/2/2021/04/7307_finalreportJF.pdf.

Q49: What would be the impact on you if a scheduling ban was placed on QC2 rated aircraft movements between 23:30 and 06:00 after October 2024?

A49: This would be an important step in the right direction to reduce the adverse impacts of aircraft noise at night.

Q50 What would be the impact on you or your business if a scheduling ban was placed on QC2 rated aircraft movements between 23:00 and 07:00 after October 2024?

A50: Not applicable.

Q51: If bans are introduced should the implementation be staged?

A51: There should be an unequivocal government commitment to phase out all flights in the period from 2300 to 0700 except in the case of emergencies. In the case of Stansted this means progressively reducing the current 13,700 annual movements allowance at the end of the current roll-over period, i.e. October 2025, leading to a complete ban by 2030 except in the case of emergencies.

Q52: Please provide evidence to support your position.

A52: A progressive reduction in night flying with annual targets would enable a smooth transition to a total ban in 2030. We would also remind the DfT of its longstanding commitment to achieving compliance with the WHO *Guidelines for Community Noise*, as follows:

“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’.”¹⁵

In other words, the commitment – originally given in 2004 – was to achieve compliance with the WHO *Guidelines* by 2030, so we are now two-thirds of the way to that point. It is now incumbent upon the DfT to publish clear targets and milestones for monitoring progress towards achieving full compliance with the WHO *Guidelines* by 2030.

Q53: In a future regime how should we manage the number of aircraft movements (detailing the airport or airports relevant to your view)?

A53: There should be an unequivocal government commitment to phase out all night flights in the period from 2300 to 0700 except in the case of emergencies. In the case of Stansted this means progressively reducing the current 13,700 annual movements allowance from the end of the current roll-over period, i.e. October 2025, leading to a complete ban by 2030 except in the case of emergencies.

¹⁵ *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.

Q54: In a future regime how should we manage an airports' noise allowances (detailing the airport or airports relevant to your view)?

A54: As stated in our answer to **Q53** above, there should be an unequivocal government commitment to phase out all night flights in the period from 2300 to 0700 except in the case of emergencies. In the case of Stansted this means progressively reducing the current 13,700 annual movements allowance from the end of the current roll-over period, i.e. October 2025, leading to a complete ban by 2030 except in the case of emergencies.

Q55: Should we remove the movement limit and manage night flights through a QC limit only?

A55: Emphatically not. As explained in our answer to **Q33** above, the best system for limiting night noise at the designated airports should be a combination of the number of movements with more weight given to the frequency of movements and the cumulative amount of noise produced by the differing aircraft types coupled with an assessment of ambient or background noise levels .

Q56: Provide evidence to support your view.

A56: See our answer to **Q33** above. All aircraft are noisy machines and the frequency of aircraft movements is an important determinant of noise disturbance.

Q57: Should we introduce a ring-fencing mechanism to ensure night slots are available for:

- **commercial passengers**
- **dedicated freight business**
- **general aviation**

A57: For the regime commencing in 2025, there should be no night flights except where it can be clearly demonstrated that it would not be feasible for that flight to operate during the 16 hours from 0700 to 2300. That should be the basis for ring fencing. There may also be a case for allowing a very limited number of the least noisy aircraft (QC0) to operate between 2300 and 0700. See our answer to **Q37** above.

A58: Provide evidence to support your view.

A58: See our answers to **Q33**, **Q36** and **Q37** above. All aircraft are noisy machines.

Q59: Should an airline be able to use unused allowances later in the season?

A59: No. In a similar way to slot allocation, the principle should be "use it or lose it".

Q60: If the government decided that unused allowances should be returned to the airport's pool, what would be the impacts on:

- **communities?**
- **airports?**
- **airport users?**
- **airlines?**
- **business in and around airports?**

A60: See our answer to **Q59** above. Unused allowances should be removed altogether.

Q61: Do you agree or disagree that the current carry-over process benefits you?

A61: The carry-over process disadvantages communities around Stansted Airport.

Q62: Provide evidence to support your view.

A62: Stansted does not fully use its winter movement quota and uses the carry-over process to accommodate additional holiday charter flights at night during the summer period. Holiday charter flights cannot be described as providing "critical services" (the term used by the DfT in the introduction to this Consultation) and night flights cause greater disturbance during the summer when there is greater likelihood of local residents having bedroom windows open (or, at least, wishing to have their bedroom windows open).

Q63: What changes, if any, would you like to see to the carry-over process and how would this impact you?

A63: Pending the phasing out of all night flights there should be a single annual limit rather than separate summer and winter limits, with no carry-over from one year to the next.

Q64: How fair a balance between health and economic objectives do you think our current night flight approach is?

A64: The current approach to night flights does not provide an equitable balance between health and economic objectives. As noted in our answer to **Q8** above there has been no proper review of the night flight regime for 15 years. This is not a fair outcome for communities around airports and under flight paths who suffer from adverse noise impacts and sleep disturbance. The current Night Flying Restrictions do not reflect up-to-date evidence on the adverse health and other costs of night flights or any serious assessment of the economic benefits of night flights.

Furthermore, by setting the national noise objective to "limit or reduce the number of people significantly affected by aircraft noise at night, including through encouraging the use of quieter aircraft, while maintaining the existing benefits of night flights", DfT has precluded the option of a proper cost-benefit analysis of "the benefits of night flights" in accordance with normal government policy. In 2017, the DfT published a report it had commissioned from Systra which looked at the economic impacts of possible changes to the night flight regimes at Heathrow, Gatwick and Stansted. But this only examined the impacts of the night flights regime as experienced by airports, airlines, passengers and public accounts. The DfT made clear the report did not "seek to assess the impacts associated with changes in noise pollution from aircraft" but added "whilst this impact is not considered here, it does form an important part of the Department's considerations in decisions on changes to the night flights regime". This omission should be rectified.

Finally on this point, DfT seeks to characterise this issue as striking a balance between, on the one hand, the economic benefits of night flights and, on the other hand, the health impacts and annoyance inflicted upon local communities. However, there are at least two categories of economic costs associated with night flights. First, they reduce the cost of flights for charter holiday companies and thereby stimulate outbound tourism, the economic benefit of which accrues to Spain, Portugal, Greece etc rather than to the UK. Second, sleep disturbance reduces the efficiency of people at work and, in the case of Stansted, many of those disturbed will be employed in important financial services roles in the City of London which (unlike outbound holiday tourism) is a major contributor to the UK economy.

Q65: What are your views on the health impacts of aviation noise at night, including potential impacts on different groups in society (provide evidence to support your view)?

A65: We have dealt with this in our answers to **Q42, Q43, Q45 and Q63** above. In addition, the average Stansted summer night actual modal split 48dBA Leq noise contour has continuously increased in area over the last six years with consequent numbers of population affected as follows:

Year	Area sq km	Population
2019	72.2	9,950
2018	72.0	9,950
2017	64.0	7,760
2016	61.9	7,800
2015	57.2	6,950
2014	56.3	6,650

Source: Annually published CAA ERCD reports for Noise Exposure Contours for Stansted Airport, the latest being ERCD Report 2003 for 2019¹⁶

This represents a 28% increase in the noise exposure contour area and a 50% increase in population affected over six years. Additionally these figures apply to a 48dB noise contour, not the lower 45dB and 40dB levels recommended by WHO as described in paragraph 1.7 above. Clearly more people are being adversely affected and the trend has been a continual increase. This is not a fair outcome for communities around Stansted Airport and under flight paths by failing to reduce adverse noise impacts – quite the reverse. This is especially the case for vulnerable groups in society where the WHO *Night Noise Guidelines* state that 40 dB should be the target to protect the public including the most vulnerable groups such as children, chronically ill, those with existing poor physical or mental health and elderly people.

Q66: What are your views on the economic value of night flights, including the potential value on different businesses and aviation sectors (provide evidence to support your view)?

A66: The onus is upon the aviation industry to demonstrate, for each category of flights (charter holiday flights, scheduled passenger flights, mail and parcels flights, other cargo flights, etc) the economic advantage of operating the flight by night rather than by day. In addition,

¹⁶ <https://live-webadmin-media.s3.amazonaws.com/media/9086/2019-dft-noise-contour-stansted.pdf>

having regard to clear self-interest of the industry, the DfT should commission its own independent research and ensure that any economic claims made by the industry are fully evidenced, properly scrutinised and peer reviewed. Consideration also needs to be given to the wider economic consequences of enabling cheaper holiday charter flights by utilising aircraft during the night. In 2019, i.e. pre-pandemic, the UK tourism deficit reached a record £33.9 billion with outbound tourism outstripping inbound by a factor of more than 2 to 1. In 2020, with air travel restricted, the tourism trade deficit fell to £7.6 billion, a net improvement of £26.2 billion for the UK Balance of Payments. See also our answer to **Q47** above

Q67: What are your views on changes to aircraft noise at night as result of the COVID-19 pandemic (provide evidence to support your view)?

A67: The COVID-19 pandemic reduced the total number of aircraft movements at Stansted by about 65% in the 12 months to July 2021 compared to the previous 12-month period, although night flights declined by only about 40% due to an increase in cargo flights. These reductions have been welcomed by communities living around airports since they have provided some relief from the adverse impacts. Local residents have commented that “you can hear the birds again and the wind rustling in the trees”. The increased number of cargo flights at night has not been welcomed because these are generally older, larger, noisier aircraft which take longer to climb out on departure.

The industry is forecasting that traffic volumes will remain below pre-pandemic levels for many years. This hiatus provides an opportunity to transfer as many night flights as possible to operate between 0700 and 2300, in line with the DfT's stated objective: “to limit or reduce the number of people significantly affected by aircraft noise at night...” and in line with the objective of the Environmental Noise Directive: “to avoid, prevent or reduce on a prioritised basis the harmful effects, including annoyance, due to exposure to environmental noise”.

Q68: In your opinion what are the advantages or disadvantages that the emergence of new technology will have in relation to night noise from aircraft within the next 10 years (provide evidence to support your view)?

A68: The most significant new technology in our view is the progressive replacement of ground-based navigation aids by satellite-based technology and in particular Performance Based Navigation (‘PBN’) systems. One key factor of the UK Airspace Modernisation Programme must be the successful introduction of PBN to accurately and consistently improve track keeping. PBN has the capability to tailor route designs to suit each airport locality for the more efficient use of airspace and, just as importantly, reduce adverse night noise impacts and provide respite for communities around airports. This will be an advantage for Stansted where for instance it will at last be possible to implement Continuous Descent Approach for both runway directions and reduce the adverse noise impacts for people living under approaches to Stansted Runway 04.

Q69: Should we include a reference to night noise when we publish a revised aviation noise objective?

A69: Yes. We would welcome a reference to night noise in a revised aviation noise objective. As already referred to in our answer to **Q6** above, the objective should be strengthened and a reference should be clearly worded and capable of objective interpretation and enforcement by independent regulatory, planning and enforcement bodies. The wording proposed in the consultation is a headline statement and devoid of practical benefit or meaning without a set of specific parameters and is therefore currently not fit for purpose.

The overriding objective should be for night flights to be progressively phased out, as set out in our answer to **Q51** above. In the interim, the government’s policy should be that

aircraft may only operate at night where there is clear and compelling evidence of very substantial net economic benefits (compared to operating between 0700 and 2300) having taken account of all community, health and climate adverse impacts and costs.

Q70: What factors relating to night noise should we include if we do introduce a noise reference in our revised aviation noise objective?

A70: See our answer to **Q69** above.

Q71: Should the government set criteria for airport designation?

A71: Yes. Stansted is a designated airport and designation has the potential to achieve effective regulation of aircraft noise by the powers it affords to the Secretary of State assuming the regulations are regularly reviewed and updated as circumstances change. For example, the Secretary of State sets noise abatement procedures for Stansted under Section 78 of the Civil Aviation Act 1982 but these procedures have not been changed since 2007. See also our answer to **Q10** above.

Q72: What do you think are the:

- **advantages to the government setting criteria for airport designation?**
- **disadvantages to the government setting criteria for airport designation?**

A72: The advantage of the government setting criteria for airport designation is that it can provide clear policy to achieve a long-term, sustained reduction in aviation noise and promote, deliver and enforce initiatives in pursuit of that goal. See also our answer to **Q10** above.

Q73: What factors, if any, do you think we should consider when setting criteria for designation?

A73: Factors should include the location and operational size of the airport in ATMs, passenger and cargo numbers and the population affected. See also our answer to **Q10** above.

Q74: How should any criteria for designation be agreed?

A74: The DfT should develop a draft set of criteria for designation together with proposals for the effective regulation of aircraft noise in both the day and night periods. It should discuss the draft criteria with stakeholders through its normal engagement channels, including the Airspace and Noise Engagement Group ('ANEG'), and then formally consult on them.

Q75: What impact, if any, do you think the designation of an airport have on:

- **communities?**
- **airports?**
- **airport users?**
- **airlines?**
- **business in and around airports?**

A75: See our answer to **Q10**, **Q71** and **Q72**.

Q76: What impact, if any, do you think the de-designation of an already designated airport (Heathrow, Gatwick, Stansted) will have on:

- **communities?**
- **airports?**
- **airport users?**
- **airlines?**
- **business in and around airports?**

A76: See our answer to **Q10** above.

Q77: Any other comments?

A77: The noise exposure contours in the Consultation Document¹⁷ do not adequately represent the numbers of people affected by night flights. They are averaged over 6½ and 8 hours and do not adequately reflect the noise impacts for people living under flight paths.

*Stansted Airport Watch
September 2021*

¹⁷ Appendix G.