

## Note

<b>Title</b>	ISH9 and Deadline 7 Noise Responses		
<b>Project</b>	Gatwick Airport DCO		
<b>Reference</b>	28AD.NT.8.0	<b>Author(s)</b>	BHo
<b>Date</b>	6 August 2024	<b>Reviewer</b>	VC

## Overview

1. This note sets out Suono's written response to the noise-related aspects of Issue Specific Hearing 9 and the Applicant's Deadline 7 documentation.
2. Our response to Action Points 10 and 11 are both included within this note, alongside the requested response to GEN.2.11.
3. Following the Applicant's rebuttal of the ExA's suggested requirements for future noise limits, and if the proposed development is to be permitted, this note sets out a suggested alternative, which is expected to at least partially achieve the ExA's aims while removing the Applicant's stated concerns.
4. The information provided by the Applicant in Action Point 9 is insufficient to properly comment on the Noise Insulation Scheme rollout. We request that the ExA ask the Applicant to provide a more detailed rollout program that includes numbers of properties within each year to be insulated, including non-residential buildings.
5. Further, as it stands, some local communities would be expected to experience material increases in noise for multiple years before receiving any insulation. This is not mitigation, but compensation.
6. No other outstanding information has been provided, which we again summarise in **Appendix A**.

## Issue Specific Hearing 9: Noise

### Action Point 10

7. There was clear support from a wide range of parties at ISH9 for the level of noise reduction proposed by the ExA compared to what is proposed by the Applicant. We note that the Applicant raised multiple concerns with the ExA's approach, including policy compliance.
8. Having heard from the various parties at ISH9, Suono has considered what requirement could be applied at Gatwick Airport, should the DCO be granted.
9. Our overall position remains that a revised and updated ES chapter is required from the Applicant, such is the confusion and inaccuracy surrounding their methodology and results. We also state again that in our experience of aviation expansion applications, the extant noise information provided is inadequate and that the resulting description of the consequent noise effects is not sufficient to allow for any permission to be granted.

10. The reasoning behind our stated position is set out in our ISH8 post hearing submission in REP6-122, noting the Applicant has not responded in any meaningful way throughout the examination.
11. Any future noise limits should be based on an assessed forecast, to ensure that the environmental effects have been sufficiently considered and that they are achievable by the Airport. We note that the Applicant is of the opinion that the ExA's proposals in their current form are not workable.
12. Noise limits should therefore be set from the 'Central Case' (CC). To provide justification for this, we set out the following reasons.
13. The Applicant has presented the Central Case as its core case in their Environmental Statement (ES). They did this while having all results of the Updated Central Case (UCC) in their possession, and yet they chose not to present the UCC in their ES.
14. We note that any noise limits should be based on a core case, as opposed to a sensitivity test such as the 'Slower Fleet Transition' (SFT) case. This is on the basis that we do not consider that limits set from a sensitivity test, where these are less onerous than the core case, are in compliance with aviation noise policy. As stated in the Overarching Aviation Noise Policy Statement 2023:

*"The impact of aviation noise must be mitigated as much as is practicable and realistic to do so, limiting, and where possible reducing, the total adverse impacts on health and quality of life from aviation noise."*

15. It is clearly possible to reduce aviation noise impacts derived using a sensitivity case that is noisier than the associated core case. This precise point is reinforced in the letter requesting updates and clarifications from the Department for Transport dated 2<sup>nd</sup> August 2024 with regards to the recent Luton Airport DCO. Under Section 11: Noise, the letter states (our emphasis):

*"Central Bedfordshire Council, Luton and District Association for the Control of Aircraft Noise and other Interested Parties considered that aircraft noise contour limit controls should be imposed to provide a level of control and enforceability of noise limits over that provided in the Green Controlled Growth Framework ("GCG Framework"). While the Department is aware that the Applicant is opposed to securing noise contour limits on the face of the Development Consent Order, and without prejudice to the Secretary of State's final decision, the Applicant is requested to provide suggested wording for a **requirement which would secure noise contour limits on the face of the Development Consent Order. This requirement should be based on the core growth predictions** in Tables 7.40, 7.43, 7.46, 7.49, 7.52 and 7.55 of Appendix 16.1 of the Environmental Statement Appendix 16.1 Noise and Vibration Information. The Applicant is also requested to provide amendments to the GCG Framework table 3.1 and Air Noise Management Plan (and any linked documents) to ensure compliance and support the monitoring and reporting with the proposed wording of the draft requirement to secure noise contour limits."*

16. We have noted at every deadline since its issue at Deadline 4 that the information provided by the Applicant for the Updated Central Case is entirely insufficient for consideration.
17. A further reason that the ExA may find the UCC be unsatisfactory is contained in their reasoning for the proposed noise limit requirement:

***"Reason***

*For example, ANPS 5.60 "The benefits of future technological improvements should be shared between the applicant and its local communities, hence helping to achieve a balance between growth and noise reduction" and include clear noise performance targets*

## ***”Informative***

*The ExA has based this draft operational noise requirement on scenario 3 of ICAO’s ‘Global trends in Aircraft Noise’ ‘technology improvements of 0.2 EPNdB per annum for all aircraft entering the fleet from 2024 to 2050.’*

*“It is intended to provide a clear expression of benefits sharing for all those likely to be adversely affected by aircraft noise, time for the Applicant to develop any necessary supporting processes, and an incentive for the aviation industry, which it can respond to.”*

18. Although hard to precisely calculate due to the lack of information within the ES, we have used the Applicant’s ‘rule of thumb’ to try to compare the Central Case reduction to that proposed by the ExA, whereby they state 20% area change is roughly approximate to 1 dB.

19. Of all the cases, the Current Case most closely tracks the reduction apparently sought by the ExA, particularly up to 2038. The noise reduction proposed by the ExA in no case is met by that proposed by the ExA. The ExA may consider that this is sufficient reasoning to further extend any other noise mitigation measures, such as the Noise Insulation Scheme; this point is discussed in more detail below.

20. A review process could be put in place so that from 2038 onwards, noise contour area limits can be revised downwards, so far as practicable. This would match the approach taken in the Luton Airport DCO, which the Applicant constantly seeks to compare against.

21. Section 3.3 of REP11-013 (noise limit review) of the Luton Airport DCO is attached as **Appendix B**, as an example as to how this could be included for Gatwick.

22. As we have previously stated, such as in REP7-128, it is our expert opinion that the Local Authority is best placed to oversee such a review process.

23. The above approach would also alleviate another concern we have consistently raised, such as in REP1-137, whereby the Applicant’s approach does not guarantee certainty to local communities with noise contour area limits beyond 2038. Section 6.3.1 of The Noise Envelope appendix [APP-177] states:

*“The noise envelope should always remain relevant and should reflect evidence of the improvements in average fleet noise performance over time. The envelope should not function to prevent airlines serving changing markets. As noted above, the outcome of review for the 3rd Noise Envelope Period and subsequent noise envelope periods may require the noise envelope contour to change, which may include a reduction or an increase. (Subject to not exceeding the noise contour area required to be achieved during the 1st Noise Envelope Period). This is to ensure that the Airport can meet changing market needs in terms of routes served and aircraft types used.”*

24. This open-ended flexibility does not provide certainty of future noise levels, or demonstrate reduction over time, which is expected of the aviation industry. Section 3.3 of Aviation Policy Statement 2013 summarises this succinctly:

*“As a general principle, the Government therefore expects that future growth in aviation should ensure that benefits are shared between the aviation industry and local communities. This means that the industry must continue to reduce and mitigate noise as airport capacity grows.”*

25. The Applicant seeks to reason that such an increase would be allowable if new generation aircraft have low carbon emissions, but this is not a consideration of government policy. Indeed, the Costs Decision [APP/C1570/W/20/3256619, May 2021] for the Stansted Airport 43 mppa inquiry concludes in section 22:

*“...reliance on a perceived direction of travel in policy or emerging policy that may never come into being in the form anticipated is not a sound basis for making planning decisions.”*

26. To summarise the above, through setting limits from the Central Case core case, alongside a sensible review process to be implemented in the future, the ExA can achieve a similar level of noise reduction to that which they appear to seek through their proposed requirement wording in a manner that makes the Applicant's raised concerns redundant.

## **Action Point 11: Sound Insulation**

27. So as to comply with Action Point 9, the Applicant has provided a three-page document to CAGNE on the timing of the rollout of the insulation scheme.

28. Despite the Applicant giving approximate numbers of properties for some zones in ISH9, the new document does not contain these figures. The noise chapter [APP-039] also does not contain the number of properties, only population counts.

29. Without these figures, it is difficult to provide detailed comment on the speed of the Noise Insulation Scheme rollout.

30. We note that the Noise Insulation Scheme should be based on the 2028 Central Case calculated contour areas, to take into account our response to Action Point 10 above.

31. Our understanding, based on what the Applicant has provided, is that the following timeframes are proposed:

- Inner Zone and Outer Zone 1 (60 dB  $L_{Aeq,16hour}$  and above) – 2 years duration, complete before new runway operational.
- Outer Zone 2 (57 dB  $L_{Aeq,16hour}$  and above) – 2 years duration, complete within 2 years of new runway becoming operational.
- Outer Zone 3 (54 dB  $L_{Aeq,16hour}$  and above) – 1 year duration, complete within 3 years of new runway becoming operational.

32. The provided document only discusses households and makes no reference to non-residential buildings which are eligible for noise insulation, which again limits what commentary we can provide.

33. Figures 14.9.4 and 14.9.10 of APP-064 show the noise differences between 'With Project' and 'Baseline' in 2032 for the daytime and night-time, respectively. No corresponding figures are provided for 2028, despite this being the worst-case noise year.

34. These figures show that local communities under the new runway flightpaths are expected to experience material increases in noise in both the day and night-time and they are replicated on the page below.

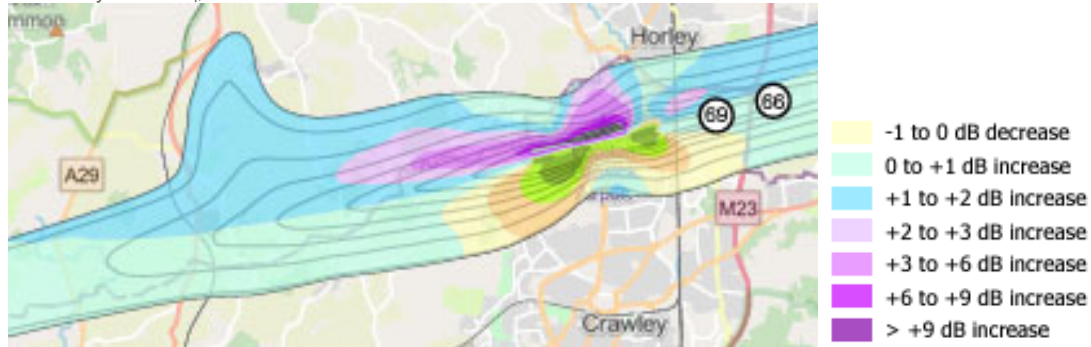
35. It is extremely difficult to identify where residences might be within these noise contours, as the Applicant has not provided any detailed mapping, despite the requests since REP1-113. However, it is clear that there will be noise-sensitive buildings in areas that would experience material increases in noise.

36. These are the communities that arguably are the most affected by the introduction of a new runway. The Applicant does not propose to insulate these buildings, residential or otherwise, until after the new runway is in operation, potentially leading to several years of material noise increases.

37. The Noise Insulation Scheme in these areas therefore only constitutes compensation and not mitigation, as the effect would already have occurred.

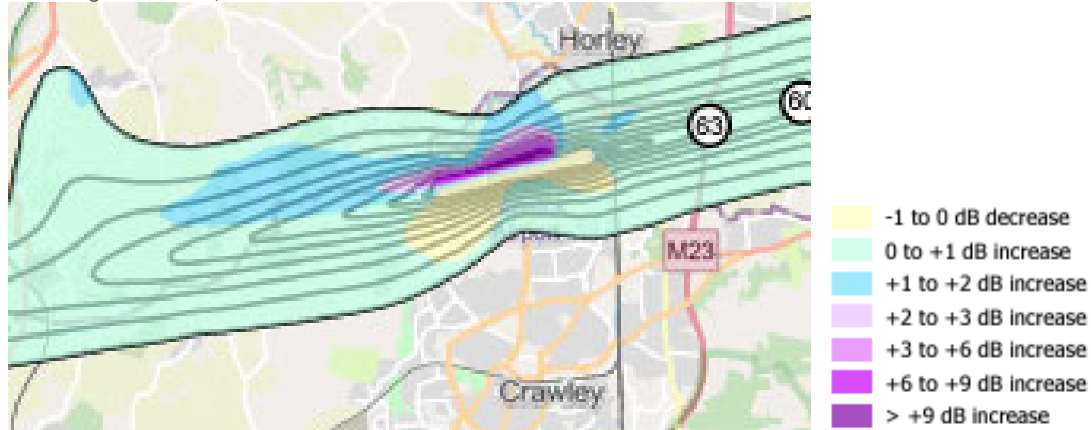
**Image 1 – Figure 14.9.4 cropped**

2032 Daytime LAeq,16hour increases



**Image 2 – Figure 14.9.10 cropped**

2032 Night-time LAeq,8hour increases



38. During ISH9, Mr Mitchell (for the Applicant) stated that they are relying on bunds and operating procedures to minimise ground noise to residences near to the Airport [transcript EV20-008 00:46:52:17 onwards]. This ignores the fact that ground noise effects clearly go beyond the boundary of the Airport, as set out in their own noise assessment [APP-039 etc].

39. It is not possible to see how effective these mitigation measures are around the Airport, as no noise contour information has been provided for either of the core cases (CC or UCC). We have asked for these contours to be provided at every deadline.

40. Again, it is noteworthy that the Applicant is ignoring the proposals within Luton Airport's DCO for ground noise mitigation, despite choosing to make comparisons elsewhere.

41. We also note again that we expect the ground noise assessment in its current form to be underestimating the noise impacts and therefore more dwellings may require noise insulation than allowed for within the Applicant's scheme [REP2-070].

## REP7-083 Response to the Examining Authority's Written Questions (ExQ2) – General and Cross-Topic

### GEN.2.11

42. The Applicant was asked in GEN.2.11 to consider whether all relevant chapters, appendices and figures of the ES are up to date, and if not, to provide the ExA with a complete list of changes at Deadline 7 (D7).

43. The below response is provided separately to the response above for Action Point 10, noting that conflict may arise between the two responses if the ExA indicates that the Central Case should be used to set noise contour area limits.

44. Within the question, the ExA provided one example of where they appear to consider that the noise chapter is not up to date, as follows:

*“The ExA notes that the updated navigational document which is provided at each deadline [REP6-002] provides information in relation to updates and ES Addendums that have been submitted including Appendices to the ES but that ES Chapters themselves are not necessarily updated (eg Appendix 14.9.7: The Noise Envelope was updated at D5 [REP5-029] by ES Chapter 14 [APP-039] has not been revised to incorporate this or any other changes).”*

45. The Applicant has responded to this question with references to their signposting documents and summarised with the following statement:

*“The Applicant considers that the ES has been kept up to date during the course of the Examination.”*

46. We would dispute that the ES can be considered up to date. Rather than draw the ExA's attention to any specific areas of the Applicant's noise documentation that we consider should be updated, we simply remind the ExA and the Applicant that documents addressing the following list of issues have all been submitted by the Applicant, before consideration of points raised by other parties, including CAGNE:

- new future baseline;
- new core case;
- new air noise contour area limits;
- new fleet mix;
- errors within ground noise assessment.

47. We consider it entirely without merit to be able to consider that the ES is “up to date” when such fundamental matters have been revised, amended and corrected since issue.

## REP7-089 Response to the Examining Authority's Written Questions (ExQ2) – Noise and Vibration

### NV.2.1 Noise Thresholds

48. The first part of the question asked of the Applicant is:

*“As noted in the Communities Against Gatwick Noise and Emissions (CAGNE) D2 submission [REP2-070], Stansted and Bristol airport expansion schemes used an adverse effect level of*

69 LAeq day and 63 LAeq night, and the same values were not contested during the Examination of the Luton DCO.

*“Why should the same values not be used for the Proposed Development?”*

49. The question asked by the ExA clearly refers to three airport expansion schemes; Stansted, Bristol and Luton.

50. At no point in their response does the Applicant respond to why the Stansted Airport assessment use the same values. We note that within the Stansted documentation it is also stated that the London City Airport appeal (2016) and Heathrow Airport’s Cranford appeal both also use a daytime UAEL of 69 dB  $L_{Aeq,16hour}$ .

51. The Applicant also assumes, without supporting evidence, how the UAELs were derived within the Bristol assessment. There is no justification that these are precautionary, given that the acoustic consultants involved (Bickerdike Allen Partners) have also used the same values in other airport expansion schemes, such as Farnborough.

52. The Applicant also seeks to highlight that Luton only uses a precautionary UAEL but does not consider that a higher UAEL would likely have brought criticism from other parties.

53. The emphasis placed by the Applicant on their relocation scheme starting at 66 dB  $L_{Aeq,16hour}$  is noteworthy. The Applicant has, perhaps inadvertently, placed their ‘precautionary UAEL’ at this level. Any dwellings above this noise level should be counted within the Applicant’s ES as being at an unacceptable noise level.

54. One reason why it is important for the Applicant to set a UAEL within their application is to ensure that these dwellings are appropriately identified, rather than trying to minimise the importance of the matter through stating:

*“The NPSE makes no reference to a UAEL, nor does DfT policy on aviation noise since then. There is therefore no aviation noise policy basis for a UAEL.”*

55. If these dwellings are not identified, then a decision-maker does not have all the required information available to them.

56. It is also not clear what the relevance of the second sentence is in the quote above, as the Applicant has already referenced a precautionary UAEL for air noise. We note that the Cranford decision (reference APP/R5510/A/14/2225774) at Heathrow Airport makes it explicitly clear that an UAEL is to be set for air noise. Sections 239 and 240 of the decision report state:

*“239. As Mr Thornely-Taylor accepted (XX), the PPG provides the most recent and up to date national guidance dealing with the mitigation of adverse noise impacts. It is consistent with the NPPF and the NPSE, although it is a development of the latter. It provides more detail than the NPSE and even introduces a new category of noise, the “UAEL” (unacceptable SOAEL).*

*“240. The PPG is clearly intended to assist in policy application (rather than to change policy). Mr Thornely-Taylor dealt with the PPG very briefly in written evidence. saying: “the guidance explains in paragraph 009 that the management of noise associated with aircraft and airports is considered specifically by the Aviation Policy Framework”. However, the part of PPG section ID30-009 which makes reference to the APF does not use the word “specifically”. Nor does it expressly or impliedly have the effect that other parts of the PPG (or NPSE, or NPPF for that matter) are irrelevant, disappplied or made less important. It does not mean that only the APF is relevant to the assessment of noise. Notwithstanding what he had said in his*

written evidence, in XX Mr Thornely-Taylor readily accepted that the guidance is of general application.”

57. The Applicant then goes on to reference the UAEL’s set out in Heathrow’s PEIR:

*“The Heathrow Airport Third Runway PEIR referred to UAELs of  $L_{eq,16hour}$  71 dB and  $L_{eq,8hour}$  66 dB at night. The justification for the UAEL at this level was provided in the Heathrow PEIR Appendix 17.1 Annex F. The methodology adopted in the Heathrow PEIR was reviewed by an appointed Noise Expert Review Group (NERG) who confirmed the methodology was technically robust, and appropriately applied policy guidance.*

58. Irrespective of what values have been chosen, Heathrow’s ‘Noise Expert Review Group’ both state a UAEL and confirm that this is technically robust and an appropriate application of policy.

59. We note that the Applicant does not believe any awakening metric to be required, despite this also having been set by the same Noise Expert Review Group, whose advice is being heavily relying on by the Applicant in this instance. Our detailed response on this matter is set out within REP2-070.







## Appendix A: Noise Issues

Noise issues identified by Suono to date.

Topic and Issue	Summary of our understanding of Applicant's position	Summary of Suono's position
Identification of core and sensitivity cases	Updated Central Case replaces Central Case.	UCC is not sufficiently assessed.
Air noise: results for all assessment years	The information provided in the Noise Chapter and Addendum is sufficient.	Results are missing for primary and secondary metrics for the new core case.
Noise envelope limits are too flexible	Noise contour limits set for 14 years into the future only.	Noise policy states that residents must be given certainty, which is not the case.
Providing forecasts used in modelling	Set out in REP3-071 Appendix F	Forecasts provided.
Air Noise UAELs	UAELs not set.	UAELs should be set as per previous permitted applications.
Lack of School Assessment	A school assessment is not necessary.	It is not acceptable to ignore a potentially significant noise effect.
Awakening assessment shortcomings	Awakening assessment only needs to consider air noise.	Awakening assessment should consider air and ground noise together.
Future generation aircraft noise levels not justified	Applicant has not provided any justification, so position is unclear.	Justification should be provided.
Air noise: model assumptions and clarifications	The assumptions used are sufficiently accurate.	Justifications should be provided.
Total aviation noise for air and ground assessments	There is no need to consider both sources cumulatively.	Comparable contours for both assessments should be provided.
Flightpaths	The existing flightpaths can be used.	It has not been demonstrated that the flightpaths are the reasonable worst-case.
Additional noise controls	No additional noise controls are necessary.	There is not enough information to inform what noise controls are necessary.



Topic and Issue	Summary of our understanding of Applicant's position	Summary of Suono's position
Noise contour figures (air and ground)	The figures provided are sufficient.	Noise contour figures should be provided using a high-quality Ordnance Survey underlay to allow the identification of residences.
Noise Insulation Scheme: worsening	The Applicant has updated their NIS as a result of Suono's comments.	There remain outstanding improvements to be made.
Noise Insulation Scheme: policy	The NIS is sufficient.	The Inner Zone should be expanded to cover the 60 dB LAeq,16hour daytime contour area.
Noise Insulation Scheme: funding	The NIS is sufficient, having been revised as a result of Suono's comments.	The level of funding should be revised upwards to at least match industry best practice.
Noise Insulation Scheme: overheating	The NIS is sufficient.	Mitigation, such as blinds or cooling mechanisms, should be made available to the whole scheme.
Noise Insulation Scheme: ground noise	The NIS is sufficient, having been revised as a result of Suono's comments.	It is not possible to inspect the proposals, as the noise contours provided are insufficient.
Noise Insulation Scheme: clarifications	The NIS is sufficient, having been revised as a result of Suono's comments.	Multiple requests for clarification have been set out in this note.
Noise Insulation Scheme: schools	The NIS is sufficient, having been revised as a result of Suono's comments.	The 'mitigation' offered is actually compensation and does not reduce the likelihood of significant effects occurring.
Fixed mechanical plant noise errors	The Applicant has not updated their original assessment.	The assessment should be updated to account for fundamental errors.
Ground noise: model and assessment descriptions	The information provided in the Noise Chapter is sufficient.	We request a full description and details of the noise model and assessment.
Ground noise: LOAELs and SOAELs	These thresholds should match the air noise assessment.	The Applicant's approach does not align with these thresholds.
Ground noise: EGR splits	The Applicant has provided 60% of split locations.	100% of how locations are split in model should be provided.
Ground noise: providing contours	The Applicant has provided contours at one value only.	Full sets of noise contours should be provided.
Ground noise: results for all assessment years	The Applicant has provided results for only a selection of assessment years.	Results are missing for primary and secondary metrics for the new core and sensitivity cases.



Topic and Issue	Summary of our understanding of Applicant's position	Summary of Suono's position
Ground noise: figures showing modelled locations	The information provided in the Noise Chapter is sufficient.	A figure showing where noise sources are located in the ground noise model should be provided.
Ground noise: baseline measurements	The baseline measurements provided are representative.	The baseline measurements are potentially not representative due to a changing noise climate since 2016.
Ground noise: wind corrections	The wind corrections within the noise model are sufficient.	The wind corrections are not the reasonable worst-case, nor standard industry practice.
Ground noise: taxi speeds	The Applicant states two inconsistent positions in their documentation.	Taxi speeds in APP-075 and APP-173 differ, and the ground noise model could be underpredicting noise effects.
Ground noise: bund heights	The bund and barrier height can be reduced from 12m to 10m.	Reducing the barrier height is contrary to aviation noise policy.
Road traffic noise: assessment traffic flows	There is no need to update the road traffic flows within the noise model with the new core case.	Justification should be provided as to why the road traffic noise model does not need to be updated.





## Appendix B: Example noise limit review

- c. as part of the bi-annual process<sup>2</sup> of slot management and capacity declaration; and
- d. where in the forward plan the Level 2 Threshold Equivalent QC or Limit Equivalent QC is exceeded, to include within the annual Monitoring Report proposals for slot management measures, additional interventions or mitigation to ensure that the Limit will not be exceeded.

Table 3.1: GCG Limits and Thresholds for aircraft noise

Limit	Up to 2028	2029 – 2033	2034 – 2038	2039 - 2043*	2044 onwards (in 5 year cycles)*
Average summer day-time noise levels, as measured by size (km <sup>2</sup> ) of 54 dB LAeq,16hr noise contour	<b>Limit</b>				
	33.0	32.0	30.4	32.6	32.6
	<b>Level 2 Threshold (95% of limit)</b>				
	31.4	30.4	28.9	31.0	31.0
	<b>Level 1 Threshold (85% of Limit)</b>				
	28.1	27.2	25.8	27.7	27.7
Average summer night-time noise levels, as measured by size (km <sup>2</sup> ) of 48 dB LAeq,8hr noise contour	<b>Limit</b>				
	43.3	42.1	39.8	43.2	43.2
	<b>Level 2 Threshold (95% of limit)</b>				
	41.1	40.0	37.8	41.0	41.0
	<b>Level 1 Threshold (85% of Limit)</b>				
	36.8	35.8	33.8	36.7	36.7

### 3.2 Monitoring

3.2.1 Monitoring of the aircraft noise Limits is to be undertaken in accordance with the **Aircraft Noise Monitoring Plan** at **Appendix C**.

### 3.3 Noise Limit Review

3.3.1 Once the DCO is granted and implemented, the airport operator will adopt the Aviation Environmental Design Tool (AEDT) noise model used to prepare the forecasts relied upon in making the DCO (the forecasts presented in the ES). This ‘DCO noise model’<sup>3</sup> will then be maintained and used as the basis for planning for growth and noise control at the airport to ensure that future noise

<sup>2</sup> Twice each year, once for winter and once for summer

<sup>3</sup> The ‘DCO noise model’ is defined in the Aircraft Noise Monitoring Plan in Appendix C, and will be updated in line with any approved Airspace Change Proposal.

forecasts can be consistently compared with the noise Limits and Thresholds set by the DCO using the same model (comparing 'like with like').

- 3.3.2 Once the DCO is made and implemented, the airport operator will review, and as necessary update, the noise forecasts every five years. The airport operator will review and as necessary update its noise forecasts around the mid-point of each five-year Noise Action Plan period. The five-yearly forecasts will be based on the latest available information for matters such as predicted ATM growth; fleet mix; and aircraft noise source levels and will be informed by annual monitoring of noise performance.
- 3.3.3 The airport operator will also update forecasts when the International Civil Aviation Organization (ICAO) publish a new 'noise chapter' for the Next-Gen, low carbon, aircraft (i.e. the next 'Chapter' following on from the current 'Chapter 14') or on the approval of an Airspace Change Proposal<sup>4</sup>.
- 3.3.4 In response to a new ICAO noise chapter, the airport operator will create an alternative noise forecast that will be based on the most up to date five-yearly forecast available at the time aligned with any parallel requirements to provide noise information as part of any airspace change process. The alternative noise forecast will be used to evaluate how aircraft noise around the airport could change as a result of the progressive introduction of latest noise 'Chapter' aircraft. The alternative forecast should include sensitivity tests as appropriate (e.g. for the rate at which new Chapter aircraft will enter into the fleet mix).
- 3.3.5 The alternative noise forecast will be used to progressively test whether the DCO Noise Limits (and corresponding thresholds) could be reduced from 2039 onwards. No change in DCO Noise Limits or Thresholds is envisaged before 2039<sup>5</sup> to ensure that the limits set by the DCO up to 2039 (particularly as set for the 2034-2038 five-year period), as adjusted for any approved Airspace Change Proposal, to drive the continuing introduction of New-Gen aircraft into the growing fleet using the airport.
- 3.3.6 The airport operator will present the alternative noise forecasts to the Noise Technical Panel at the earliest opportunity. The Noise Technical Panel should have due regard to the CAA's parallel consideration of noise information with regard to any Airspace Change Process.
- 3.3.7 Within six months of a change and based on the alternative noise forecasts, the airport operator must prepare a Noise Limit Review. This is a document that should set out the airport operator's proposal to reduce, where reasonably practicable, the DCO Noise Limits or Thresholds. For airspace change, this would be in response to an approved Airspace Change Proposal. For a new ICAO noise chapter and associated new aircraft technology, the Noise Limit Review would present proposed noise Limit and Threshold reductions from

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<sup>4</sup> Either promoted by the airport operator or in response to a CAA instruction as needed to optimise airspace design across the SE of England.

<sup>6</sup> Other than as a result of an airspace change which could require noise limits to be increased where the airspace change is a direct consequence of CAA instruction to optimise the airspace in SE England balancing the needs of different airports.

<sup>6</sup> The short term day and night noise contour area limits set by condition 10 to the planning permission 15/00950/VARCON dated 13 October 2017 as calculated using the 'DCO noise model'.

2039 onwards in five-year steps based on the alternative noise forecast and discussions with the Noise Technical Panel.

- 3.3.8 The proposal made in the Noise Limit Review in response to a new ICAO noise chapter and associated new aircraft technology must:
- a. Permit the airport growth granted by the DCO.
  - b. Reduce the Noise Limits and corresponding Thresholds if reasonably practicable (as informed by the alternative noise forecasts and dialogue with the Noise Technical Panel as set out in preceding paragraphs and if reasonably practicable what the new Noise Limits and Thresholds would be and when the Noise Limits and Thresholds would be changed).
  - c. Where (b) identifies opportunities to reduce Noise Limits and corresponding Thresholds, reduce the Noise Limits and corresponding Thresholds so they are below the '2019 cap'<sup>6</sup> as quickly as is reasonably practicable to share the benefits of the technology improvement with the communities affected by aircraft noise.
  - d. Identify whether changes to the forecast shape of the 54dBLAeq,16h and 48dBLAeq,8h noise contours have occurred, such that noise impacts are experienced by different local authorities from those originally identified and included as part of the Noise Technical Panel.
  - e. Where (d) identifies changes to the forecast shape of the 54dBLAeq,16h and 48dBLAeq,8h noise contours, set out any necessary amendments to the local authorities included as part of the Noise Technical Panel.
- 3.3.9 The draft Noise Limits Review must be submitted to the Noise Technical Panel for review. The Noise Technical Panel must complete its review within one month. The Noise Technical Panel review must have due regard to parallel consideration of noise information by the CAA with regard to any Airspace Change Process.
- 3.3.10 Within two months, the airport operator then updates the Noise Limits Review where it considers necessary having regard to the Noise Technical Panel review and formally submits it to the ESG for determination in accordance with paragraph 24(3) of **Schedule 2** to the **DCO**. The airport operator will provide a note documenting its response to the Noise Technical Panel's review on the draft Noise Limits Review and any parallel consideration of noise information by the CAA and this note is submitted to ESG in support of the application for ESG to approve the final Noise Limits Review.
- 3.3.11 The ESG must determine the airport operator's request for approval within 56 days, or the application is deemed to have been approved.
- 3.3.12 The decision of the ESG to accept or reject the Noise Limits Review will be published on the airport operator's website.
- 3.3.13 Following the determination of the first Noise Limits Review, the airport operator must prepare a Noise Limits Review and submit for ESG approval every five-

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<sup>6</sup> The short term day and night noise contour area limits set by condition 10 to the planning permission 15/00950/VARCON dated 13 October 2017 as calculated using the 'DCO noise model'.

years following the same steps set out above always taking account of the latest information available and taking account of any further changes (i.e. further ICAO noise chapters and / or airspace change approvals).