Торіс	Number	Concern	Summary of concern	GAL Comment
Noise	Noise 1	Over heating	With increasingly hot summers, and forecast increase in aircraft in the night period 23:00 to 07:00 concerns that the ventilation system provided to people will do nothing to cool the property in the summer months. TWG 4/5/22	The ventilators to be offered are not designed to meet overheating demands in all conditions, instead opening the windows would enable heat to be purged in domestic homes. There are a range of ventilators that can be turned up or down to ventilate noise sensitive rooms. It is envisaged that there would be one per noise sensitive room (living, dining, bedrooms). (TWG 4/5/22)
Noise	Noise 2	Noise insulation - levels and compensation	GAL is requested to review the scheme of mitigation and compensation and provide updated proposals having regard to the thresholds of qualifying for grants by applying good acoustic design and the policy of wherever possible improving an area as a result of NRP. This would still allow the airport to increase profitability and in part offset the social cost of the development. As part of this the noise exposure contours are to be produced with the airport operating in single mode to examine worst case daily exposure on a peak summer day and night (for Leq,T and N, above).	GAL has considered the thresholds for noise mitigation carefully and proposed to offer noise insulation at levels below the DfT guidance, i.e. making the scheme more generous than others. The two zone scheme also provides a higher level of mitigation to these worst affected which GAL feels is appropriate. We welcome views on the details of this scheme and will work with stakeholders to develop those details including through discussions at the Noise Envelope Group. We have provided 100% easterly and 100% westerly operations noise predictions for ground noise and operations noise predictions for air noise at the Community Representative Locations (See Appendix 14.2 Section 2, and discussion in para 14.9.67 to 14.9.84) however, these are provided for additional information and not used in the assessment of effects because the accepted criteria for judging those effects are the long-term average not the noise levels on a selection of the days when operations are only easterly or westerly. (August 2022)
Noise	Noise 3	Noise insulation - scheme flexibility	In terms of the noise insulation scheme it is suggested that the outer zone offer may be more flexible so properties that either already have ventilation or are unable to have ventilation fitted can benefit it an alternate way.	It is expected that very few dwellings already have acoustic ventilation or unable to have it fitted. Details of the final Noise Insulation Scheme will be discussed with the Noise Topic Working Group. (Aug 2022)
Noise	Noise 4	Noise - recommendatio n	To prevent and minimise ground noise and air noise impacts on communities to the North, any Northern Runway usage is limited to operations between 07:00 to 23:00 and is only used during the day for Chapter 3 aircraft or quieter.	The proposal is to use the Northern Runway between 06:00 and 23:00 hours to meet the requirements of the project. All aircraft at Gatwick are Chapter 3 or quieter. (Aug 2022)

Status - Agreed subject to ES, Outstanding or Not agreed

NOT AGREED - unclear from work to date how the noise insulation scheme will prevent properties from overheating in the summer, given inability to open the windows at night to cool the house down e.g. summer 2022, and issue only likely to get worse than at present.

Outstanding and subject to ES.

Outstanding and subject to ES.

Outstanding - restriction needs to be placed on the runway for Chapter 3 or quieter given night noise modelling is based on this assumption. Also time restriction needed unless main runway is out of use.

Торіс	Number	Concern	Summary of concern	GAL Comment
Noise		n	The DfT night noise regime as it stands (2023) is to be adopted including existing DfT movement cap for summer and winter periods and reduction in the quota count for core night period.	The Night Restrictions are set and enforced by the DfT and are consulted on periodically by the Department. As noted in the PEIR we have assumed they will prevail during the operation of the Northern Runway Project. They are important to Airport users and are part of the very wide series of controls limiting the effects of noise at Gatwick.
Noise	INOISE 6	Noise Envelope - mechanisms	Noise envelope - if the 'central case' is considered to represent an achievable rate of fleet transition, it is recommended that noise contour area limits are based on 'central case' noise predictions: Details on how the benefits of new aircraft technologies are shared between the applicant and local communities should be provided; Expected that a mechanism is adopted to allow for further reductions in the contour area limits to provide further community benefits with technology improvements in the future; Information should be provided in the noise envelope on what actions would be taken in the event of an exceedance of the noise envelope limits; Details on the enforcement regime should be provided; More detail on how potential compliance with contour limits will be achieved would be beneficial and help provide reassurance that exceedances of noise contour limits can be avoided; Existing restrictions on night flights, would expect to see these explicitly defined in the noise envelope; Recommended that consultation is undertaken with local communities and relevant stakeholders to discuss the contents of the noise envelope; discussions should allow the opportunity local communities and relevant stakeholders to submit recommendations for noise envelope contents to GAL.	These suggestions will be further discussed by the Noise Envelope Group.
Noise	Noise 7	improvements between the	Benefits of the reduction in aircraft noise should be shared as a minimum equally i.e. 50 /50 between the local residents affected by aircraft noise and the airport / industry. 4/5/22	It is suggested that LPAs refer to APF from paragraph 3.3 onwards and two 2017 Airspace consultation documents. A general reading of Government policy is that if the aviation industry continues to invest to reduce noise, it should have access to growth in accordance with general policies supporting sustainable development. GALs consultant stated that 50% doesn't appear in any of the policy documents. Benefit of new technology requires transition in the fleet, it is believed that the expectation is that if the fleet transition continues then the airport can grow. (4/5/22)
Noise	INoise 8	Noise - Noise Envelope	It is suggested that in the final ES the 2029 noise modelling scenario is run using 284,987 ATMs (i.e. 2019 air traffic movements) to demonstrate the extent to which the airport is sharing the benefits of quieter aircraft with the local community, and to assess the health impacts of the growth in its totality. This data would then help inform the setting of the noise envelope on the basis of the airport is allocated 50 % of the noise improvement for its growth. Aug 22	Sharing the benefits will be considered in the Noise Envelope Group. (Aug 22)

	Status - Agreed subject to ES, Outstanding or Not agree
	Outstanding - given GAL recognise importance of DfT guidelines then recommendation is needed that limits summer and winter core night (23:30 to 06:00) movements to a maximum of 11,200 movements in the summer and 3,250 in the winter period.
	No agreement on this - awaiting full DCO. We would highlight that we support the need for CAP 1129 to be followed; an independent chair; properly funded* independent advice and support to the Noise Envelope Development Group. *by the Promoter
1	No Agreement on this. Given the local community has no ability to take a statutory nuisance case against the airport (unlike any other industry) and is reliant on the airport being a 'good neighbour' this is concerning.
	No agreement on this, as airport refused to run scenario.

Торіс	Number	Concern	Summary of concern	GAL Comment
Noise	Noise 9	Noise Envelope -	Use of the 54 and 60 Leq contour as the daytime control mechanism, 45 Leq and N60 as primary controlling mechanism for night time contours, and annual Lnight contours. Promotion of secondary metrics to primary where a significant change from that forecast in the DCO.	GALs email of 6th Jan 23 explains why will not be taking on effectively none of the LAs suggestions on this.
Noise	Noise 10	Single mode	Production of single mode contours of noisiest aircraft (e.g. 2-5 % of movements) likely to be flying at night 23:00 to 07:00 in 2029 - arrivals and departures. This is to help in discussion of aircraft noise e.g. in relation to the noise envelope for example, as residents have repeatedly said (not just in DCO) that average contours as used by industry do not adequately represent what they experience on the ground.	GAL supplied a single mode contour for a route 1 departure but not for any of the other routes.
Noise	Noise 11	Noise - LOAELs	GAL are proposing the use of a daytime LOAEL of 51 dB LAeq 16 hr and night-time LOAEL of 45 LAeq 8 hr based on the DfT's Survey of Noise Attitudes (SoNA) study. However, both of these levels are significantly above levels recommended by the WHO for aviation noise in general, and at night.	The PEIR explains the choice of the Lowest Observable Adverse Effects Level across several paragraphs from 14.4.57, where it is explained that the LOAELs used accord with those provided in the Consultation Response on UK Airspace Policy: A Framework for Balanced Decisions on the Design and Use of Airspace (Department for Transport, 2017b). Earlier in the PEIR, there is an explanation for why the adoption of WHO Guidelines was not considered appropriate. 14.2.39 explains that the WHO 2018 Environmental Noise Guidelines are based on a detailed review of the literature from 1999 to 2015. In the case of aircraft noise, the scatter in the dose/response relationships is considerable, but a single dose response is offered for each health effect with associated target levels for aircraft noise in terms of the European annual average noise metrics Lden and Lnight. However, in Section 5, Implementation of the Guidelines, the WHO note: 'Furthermore, cultural differences in what is considered annoying are significant, even within Europe. Therefore, it is not possible to determine the "'exact value''' of % HA [highly annoyed] for each exposure level in any generalized situation. Instead, data and exposure-response curves derived in a local context should be applied whenever possible to assess the specific relationship between noise and annoyance in a given particular situation.' Paragraph 14.2.40 goes on to explain the importance of the Survey of Noise Attitudes (SoNA) study undertaken for the UK Government. SONA assessed annoyance in the UK and reported in 2017, after the cut-off date for studies considered in the WHO report. The SoNA study gives the local annoyance response relationship relevant to the UK. It shows, in the UK, about 7% of the population in 2014 was annoyed by aircraft noise at Leq, 16 hour 51 dB, and the Department for Transport has hence adopted this as the LOAEL. It should be noted the following UK airport development ESs have used the same day and night period LOAELs and SOAELs as the PEIR: Bristol Air

Status - Agreed subject to ES, Outstanding or Not agre

No agreement on this. UKHSA also made the following comment:

With regards to a noise envelope, the Applicant states that "Leq, 16 hour day or Leq,8 hour night contours are the most common contours used because their relationships to annoyance and sleep disturbance in the UK are well understood". Whilst UKHSA acknowledges that there are established relationships between these two metrics and annoyance and sleep disturbance, the term "well-understood" is misleading. It is widely accepted that, at best, averaged noise metrics such as Leq,16hr explain up to one third of the observed variance in annoyance responses. Another third can be explained by so-called nonacoustic factors. We recommend caution in any suggestions that a noise envelope described solely by Leq,16 hour day or Leq,8 hour will be an accurate indicator of annoyance and sleep disturbance.

RBBC made the following comment at the PEIR stage: It is also important to note that sleep stage change risk, in effect the risk of being awoken, may be lower than estimated from average Lnight noise dose where events are noisy but relatively few, but higher, where events are relatively quiet, but more numerous. At Gatwick given the significant increase in movements including during 23:00 to 07:00, a N60 or awakening contour should be used as a primary metric.

Outstanding and subject to ES. GAL refused to supply this output when asked, and also refused LAs permission to use existing data to commission their own work

Outstanding and subject to ES.

Heathrow in 2023 FASI work are using WHO values in the options appraisal in addition to the values used by GAL.

Current choice is likely to lead to underestimation of health impacts, which will then be compounded further by the out of date WebTag methodology.

UKHSA response also made similar comments 'Furthermore, we disagree with the proposal for a noise envelope defined using a 51 dB Leq,16 hour day and 45 dB Leq,8hour night "because they represent the lowest level of observable adverse effects during the day and night" (14.8.52). The scientific evidence is clear that there are adverse health effects below these two levels (also acknowledged in para. 14.2.40), and therefore such a noise envelope would not capture all communities adversely affected by noise.'

Торіс	Number	Concern	Summary of concern	GAL Comment	Status - Agreed subject
Noise	Noise 12	Noise - Health	The current TAG assessment methodology for noise is based on noise health studies largely published before 2010 and includes only a limited number of health outcomes. Therefore in addition to a noise TAG assessment using the 'outdated' methodology, GAL should also undertake an updated TAG assessment that takes account of the most recent Exposure Response Functions using <i>for example</i> WHO ENG 2018 ERFs*, to help examine the potential variability in the TAG assessment methodology. The health 'cost' based on both approaches should be published. *Basner, M., and McGuire, S. (2018). "WHO Environmental Noise Guidelines for the European Region: A Systematic Review on Environmental Noise and Effects on Sleep," Int. J. Environ. Res. Public Health 15, 519		Awaiting ES
Noise	Noise 13	Noise - Road Traffic	The predicted noise levels from Table 4.5.4: Predicted Road Traffic Noise Levels appear acceptable but insufficient evidence has been provided with regards to the impacts on first floor receptors. Currently the only elevated receptors that appear to be considered are in Table 4.5.2 of Road Traffic Noise Appendix. All elevated facades must be considered in order to establish if the proposed barrier height provides acceptable mitigation to first floor and above.	Noted, this is the intention. Further site visits have been completed and more will be undertaken to confirm affected buildings details. If LPAs are aware of any particularly noise sensitive receptors, please let us know.	We note GALs intention and we are not in agree this time.
Noise	Noise 14	Noise - Road Traffic	Need for a noise barrier along the A23 south of the Longbridge roundabout - min height 2m.	Not needed	Not agreed - as a minim Longbridge roundabout with the A23.
Noise	Noise 15	Noise - Construction	Clarity on whether there may be receptors exposed to construction noise from multiple, separate instances of short term (<1month) activities over a relatively long period of time, and how the assessment will deal with such cases. Currently the PEIR states that 'Minor works or those expected to last less than a month have been excluded as they are unlikely to lead to significant effects' (Paragraph 14.5.2). However Paragraph 14.11.10 notes that 'It is more common for noise disturbance from adjacent sites to add to the duration of the disturbance' (14.11.10), suggesting that multiple short-term construction works may likely add up to longer exposure durations.	?	Awaiting ES

	Status - Agreed subject to ES, Outstanding or Not agre
	Awaiting ES
oe undertaken nsitive	We note GALs intention to not install noise barrier and we are not in agreement with that proposal at this time.
	Not agreed - as a minimum barrier needed from Longbridge roundabout to proposed new junction with the A23.
	Awaiting ES

Торіс	Number	Concern	Summary of concern	GAL Comment
Noise	Noise 16	Noise - construction phase	During construction phase - especially in the summer - residents in close proximity to construction work e.g. A23 south of the Longbridge roundabout are offered the opportunity to stay in local hotels overnight (at no cost) so they are able to sleep.	At meeting 28/06/23 GAL did appear to be open to this

Status - Agreed subject to ES, Outstanding or Not agre

Outstanding and subject to ES.

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