













# **Gatwick Airport Northern Runway Project**

Planning Inspectorate's Reference: TR020005

# **Issue Specific Hearing 5: Aviation Noise Post-Hearing Submission**

Deadline 1: 12 March 2024

Crawley Borough Council (GATW-AFP107)
Horsham District Council (20044739)
Mid Sussex District Council (20044737)
West Sussex County Council (20044715)
Reigate and Banstead Borough Council (20044474)
Surrey County Council (20044665)
East Sussex County Council (20044514)

#### Issue Specific Hearing 5 ("ISH5") on Aviation Noise – 08 March 2024

#### Post Hearing Submissions including written summary of the Legal Partnership Authorities' Oral Case

**Note:** These submissions are made by the Legal Partnership Authorities. The Legal Partnership Authorities are comprised of the following host and neighbouring Authorities who are jointly represented by Michael Bedford KC and Sharpe Pritchard LLP for the purposes of the Examination:

- Crawley Borough Council
- Horsham District Council
- Mid Sussex District Council
- West Sussex County Council
- Reigate and Banstead Borough Council
- Surrey County Council
- East Sussex County Council

In these submissions, the Legal Partnership Authorities may be referred to as the "Legal Partnership Authorities", the "Joint Authorities" or the "Councils". Please note that Mole Valley District Council is also part of the Legal Partnership Authorities for some parts of the Examination (namely, those aspects relating to legal agreements entered into between the Applicant and any of the Legal Partnership Authorities) but not all parts and were therefore separately represented in relation to ISH5.

# **Purpose of this Submission**

The purpose of these post-hearing submissions is to provide a written summary of the Legal Partnership Authorities positions' on the Agenda Items discussed at the ISH. This includes both a summary of the Legal Partnership Authorities oral representations and, in some cases, further comments on the oral representations made by the Applicant at the ISH. Whilst the structure of these submissions follows the order of the Agenda Items, they do not include all of the Legal Partnership Authorities' concerns in relation to each Agenda Item as not all of these positions were rehearsed orally at the ISH due to the need to keep oral representations succinct.

Where the Legal Partnership Authorities positions were not rehearsed orally, these submissions sometimes include references to the relevant sections of the Local Impact Reports ("LIRs") where a position is set out in further detail. The Legal Partnership Authorities would also be happy to provide answers in writing to any specific further questions which the Examining Authority ("ExA") may have.

**Attendance:** ISH5 was attended by Michael Bedford KC for the Legal Partnership Authorities, instructed by Emyr Thomas, Partner and Parliamentary Agent, of Sharpe Pritchard LLP. David Monk (on behalf of Horsham District Council) made oral representations on the Legal Partnership Authorities behalf. The ISH was attended by various other representatives from the Legal Partnership Authorities who did not make oral representations.

| Examining Authority's Agenda Item /  | Post-Hearing Submissions   | References |  |  |
|--|--|------------|--|--|
|  | Questions  3.Civil aviation noise law and policy, and other relevant policies  |            |  |  |
| Questions from the ExA:  1. What does legislation have to say about noise, and aviation noise in particular (primary legislation)?  2. Can the Applicant explain how noise nuisance would be dealt with if a complaint was made to the LPA?  3. 'Provisions of any air navigation order' — what if something was going on at the airport that was 'other | regulate matters in the public interest, where justified, for planning reasons even if those matters either might not be a civil nuisance or might not be a civil trespass or might be exempted from claims against them were they to be a civil nuisance or a civil trespass or might not be a statutory nuisance, which is obviously the Environmental Protection Act matters. In other words, the reach of planning, provided it is serving a proper planning interest, is deeper and wider than simply those regulatory regimes and/or civil law controls.  The Authorities do not consider that that point of principle is in dispute between the Authorities and |            |  |  |
| activity' and that was complained about to the local authority?  4. If people are affected by aircraft in flight, but these protections that the aviation industry   | order to address in relation to noise. As the Authorities understand it, the Applicant's position is that there need to be further controls, but the debate is just around the nature of those controls.  There are two legal points that the Authorities want to highlight because they have a bearing on the framework within which the ExA consider matters.  |            |  |  |

has, would you agree that this situation has the potential to affect people's attitude towards noise?

5. Do you consider that an applicant has an obligation to be precautionary in its approach, where it has protection from EPA 1990.

The first is to note that there is a distinction in terms of the definition of 'night' for the purposes of night-time controls between policy guidance and the regulatory powers of the Secretary of State under the Civil Aviation Act.

Under policy guidance, particularly when looking at health effects at night, 'night' is the full eight-hour period between 23.00 and 07.00. For the purposes of the DfT night-time noise regime, the night-time period is 23.30 to 06.00. Therefore, in policy terms there are night-time flights but in 'shoulder' periods they are not subject to the Secretary of State regulation. The Authorities consider that flights during those shoulder periods ought to be the subject of control and on our interpretation of the Applicant's evidence, the Authorities think that there are increases in the number of flights in those shoulder periods.

Secondly, the Applicant's current proposals in relation to the noise envelope and the reviews of it see a role for the Civil Aviation Authority as the independent reviewer (see requirements in Schedule 11 Part 2 of the draft DCO). The Authorities consider that that is inappropriate as an approach and the CAA in the PADSS which form part of its relevant representation has identified that that is not one of its statutory functions, and they currently disagree with the Applicant on this point.

Further, the Airports (Noise-related Operating Restrictions) (England and Wales) Regulations 2018 specifically identifies 'competent authorities' in relation to noise-related operating restrictions for airports, including not only regulation but also monitoring. The 2018 Regulations distinguish between competent authorities under the Town and Country Planning Act and under the Planning Act 2008, when dealing with a development consent order. Regulations 4 and 5 provide that if a development consent order imposes operating controls, the primary position is that the competent authority in relation to follow-up and monitoring of operating restrictions is the relevant local planning authority. The Secretary of State is given the power to override that starting position and make himself the competent authority.

The Authorities consider that approach to be entirely appropriate here as it is a regulatory requirement set out in the secondary legislation. However, that is inconsistent with the Applicant's approach, which is to exclude the local authority from a regulatory role and seek to place that obligation on the CAA, even though the CAA does not have that as a statutory function.

The Authorities recognise the Airport National Policy Statement, and it is common ground that that is an important and relevant consideration. It does not have effect, but its guidance on the three tests is, in the Authorities' view, relevant and important. The Authorities consider that there is a distinction between our interpretation of the way the policy works and the Applicant's interpretation.

CAA PADSS (which is part of CAA's RR).

The Airports (Noise-related Operating Restrictions)
(England and Wales)
Regulations 2018
(legislation.gov.uk)

Mr Rhodes referred in his initial overview not only to the NPS, but also to the Overarching Noise Policy Statement, which the Authorities recognise is a later document from March 2023. The Applicant has taken from the Overarching Noise Policy Statement that there is no longer, in the Applicant's view, any policy guidance that would suggest a sharing of the benefits of technological innovations reducing the noise from aviation. The Environmental Statement at Chapter 14 is very clear that that is not something that the Environmental Statement has sought to address.

The Authorities' interpretation of the suite of relevant policies (the Aviation Policy Framework, the Airport's NPS, and the Overarching Statement) is that the Overarching Statement is not intended to oust that 'sharing of the benefits' part of policy, or to displace it. The Authorities consider that, in fashioning appropriate controls for the regulation of aviation noise from this development, the mechanisms that are fashioned do so need to recognise that principle of 'sharing of the benefits' and at the moment the Applicant's structure does not do that. At the end of paragraph 14.2.44 of Chapter 14 of the ES the Applicant expresses its position that "...this ES does not provide further material on sharing

In other respects, the applicant has referred to all of the major policy and the legislation. However, there is a difference of views in their interpretation and application.

Overarching Aviation Noise Policy Statement 2023

Aviation Policy Framework 2013

Airports National Policy Statement 2018

Noise policy statement for England 2010

Paragraph 14.2.44 of Chapter 14 of the ES

Noise - GOV.UK (www.gov.uk)

National Policy Statement for National Networks (publishing.service.gov.uk)

# 4. Civil aviation noise character and guidance, and other relevant guidance This Agenda item was not discussed at ISH 5 due to timing. The Authorities would be happy to provide answers in writing to any specific questions the Examining Authority may have. 5.Lowest Observed Adverse Effect Levels (LOAEL) Principles and definition of The Authorities have approached the issue of LOAEL in a slightly different way to the matters being UK airspace policy: a probed in questions by the Examining Authority. The Authorities will wait to see what further a LOAEL framework for balanced decisions on the design information comes forward from the Applicant in response to questions raised during the hearing and reserve their position as to what will be said considering those further responses. and use of airspace (web version) (publishing.service.gov.uk) Taking at face value the LOAELs that the Applicant has used, and in the light of further guidance after the Survey of Noise Attitudes (SoNA) report and related matters, the Authorities have identified a clear need for some sensitivity testing around the approach to what an appropriate level should be. Noise policy statement for England **GOV.UK** The Authorities note the information about the LOAELs that are proposed being contained in the (www.gov.uk) aviation policy and the assessment in Chapter 14 of the Environmental Statement. The Authorities are also familiar with the SoNA report and the additional information that is in that and the criticisms Noise Exposure Hierarchy of it as well. The Authorities also understand that a LOAEL can be dependent upon the effect and can be at a Environmental noise different threshold for different effects, based on what time of the day or night the noise occurs. The guidelines for the European same is true for the SOAELs as well. Region (who.int) Whilst the Authorities understand that the Airport has undertaken the testing for aviation policy thresholds, the Authorities consider that there is new information coming to light which the Applicant should take into consideration and have regard to and conduct some sensitivity testing to demonstrate

|   | the potential impacts. In addition to the SoNA work that has been carried out there is additional work being commissioned over the course of the next 12 to 18 months by DFT through the Civil Aviation Authority, which the Authorities hope will shed more light on this subject. Key to the Authorities is the sensitivity testing around the World Health Organisation figures that have been quoted, particularly in relation to the nighttime period. The Authorities note that other authorities, when comparing health effects, across Europe using other values, are going to much lower thresholds. We consider that that which was cited by the UK HSA is an appropriate sensitivity test and that the 40 dBLAeq night is also a relevant sensitivity test.  |  |
|---|---|--|
| Noise parameters available  | In addition to the recognised primary and supplementary metrics, Additional Noise Induced Awakenings was discussed with a threshold of one additional noise induced awakening per night over the 92 day summer period being treated as SOAEL at Heathrow.   |  |
| Sources of information available to develop aviation noise LOAELs | There was a discussion about the sources of information for LOAEL and SOAELs.  In the absence of any specific legislation setting LOAELS and SOAELs aviation policy must be acknowledged. However, the Authorities referred to new scientific evidence showing how the impacts of noise were being underestimated. Although not explicitly stated in the hearing the following information is considered relevant to that point:  - WHO – Night Noise Guidelines (2009), - Clark (2015) for the Airports Commission - Environmental Noise Guidelines (2018) - Smith et al (2022) - SoNA reports (various): - CAP 1506 2nd Edition - CAP 2161 – sleep * - CAP 2250 – further analysis daytime - CAP 2251 – Further analysis sleep*  (*Peer reviewers observed that the sleep results should only be regarded as indicative as the focus of SoNA was on daytime annoyance as a result new cross sectional studies being performed now.) | Clark, as part of Jacobs Commission Work  Environmental noise guidelines for the European Region (who.int)  Environmental Noise and Effects on Sleep: An Update to the WHO Systematic Review and Meta-Analysis - PubMed (nih.gov)  CAP1506: Survey of Noise Attitudes 2014: Aircraft |

|  |  | Noise and Annoyance,<br>Second Edition   Civil<br>Aviation Authority<br>(caa.co.uk)   |
|--|--|---|
|  |  | CAP2161: Survey of Noise<br>Attitudes 2014: Aircraft<br>Noise and Sleep<br>Disturbance (caa.co.uk)  |
|  |  | CAP2250: Survey of Noise<br>Attitudes 2014: Aircraft<br>Noise and Annoyance,<br>Further Analysis   Civil<br>Aviation Authority<br>(caa.co.uk) |
|  |  | CAP2251: Survey of Noise Attitudes 2014: Aircraft Noise and Sleep Disturbance, Further Analysis   Civil Aviation Authority (caa.co.uk)        |
| 6.Significant Observed an                                    | nd Unacceptable Adverse Effect Levels (SOAEL and UAEL)   |   |
| Principles and definition of a SOAEL and potentially a UAEL. | The Authorities consider that there is a need for further sensitivity work to be undertaken in this regard.  |   |
| OALL.  | In relation to the SOAEL aspect, the Authorities note the position that the Applicant has adopted. and note that there is more recent work against which there should be consideration to understand the |   |

more detailed impacts and the extent of SOAEL, particularly when considering the effects both during the day and night periods.

We also now note that in relation to SOAEL, in Chapter 14 of the Environmental Statement [APP-039] at paragraph 14.4.66 the Applicant states "SOAELs are defined with reference to Government expectations of compensation and noise insulation schemes specified in the Aviation Policy Framework (2013). For daytime, the SOAEL is set at Leq, 16 hour 63 dB. This represents the exposure level at which the most recent UK annoyance survey (CAA, 2014) indicates that 23% of the population would be highly annoyed. The SOAEL value for night-time is taken from the interim target of the WHO Night Noise Guidelines 2009 at Leq, 8 hour 55 dB, which is described in those guidelines as the level above which 'Adverse health effects occur frequently, a sizeable proportion of the population is highly annoyed and sleep-disturbed.' (WHO, 2009)."

If this is correct that SOAELs are set on "Government expectations of compensation and noise insulation" why they have not take account of more recent policy such as Aviation 2050: The Future of UK Aviation where it is clearly stated that the Government "proposes ... to extend the noise insulation policies beyond the current 63dB LAeq 16hr contour to 60 dB LAeq 16hr"

The Environmental Statement also goes on to itself cite decisions such as Manston where 60 dBLAeq 16 hr is the point at which insulation is installed.

The night figure of 55LAeq 8hr is based on the WHO interim night noise target. However, this was reduced in the 2018. The further analysis of the Survey of Noise Attitudes itself also includes a range of exposure response functions including for sleep disturbance and the Examining Authority cited the curve in Table 4 where the same percentage of Highly Sleep Disturbed clearly occurs at a threshold of 48 dB LAeq 8hr as at 55 dB LAeq 8hr.

The DfT Night Flight Restrictions at the designated airports 2017-2022 also acknowledged that average indicators are insufficient to fully predict sleep disturbance. and other metrics also need to be considered. The Authorities would also like to highlight the issue with additional awakenings and how that might be used in connection with determining a nighttime SOAEL. The Authorities are aware that Heathrow, for example, are proposing to use a threshold of one additional noise induced awakening per night on average over the 92-day summer period to define what is SOAEL for intervention.

The Authorities would also note that the Heathrow metric is clarified above as the transcript is incorrect.

| Sources    | of    | information |  |  |
|------------|-------|-------------|--|--|
| available  | to    | develop     |  |  |
| aviation   | noise | SOAELs      |  |  |
| and UAELs. |       |             |  |  |

The Applicant only referenced aviation policy and has chosen to go no further stating only the SOAELS for the summer day and night period. The ExA questioned this, but the Applicant maintained at the hearing that they were correct.

The Authorities will reserve further comment until they have considered the Applicant's Post Hearing Submissions in the light of the ExA's questions.

## 7. Assessment, control, mitigation and compensation

Forecasting, modelling, and monitoring overview.

The Authorities do not consider that this issue can be addressed without getting into the adequacy (or otherwise) of the modelling that the Applicant has put forward as part of the noise assessment. The Authorities have a significant number of concerns about some of the modelling inputs such as: concerns about the baseline scenarios from a demand point of view, the surface transport assessments and baseline. These points link into what should be appropriately assumed for the noise. The Authorities' concerns are wider than simply issues about how the appropriate baseline is formulated and go to the fleet mix and whether the fleet mix is up to date.

## Key Forecasting Issues

The forecasts used for noise assessment are unchanged from those prepared before the 2021 consultation and have not been updated since. Although York Aviation, advisers to the Authorities, considered them a reasonable as a worst case in 2021, more recent fleet orders suggest that the slower transition fleet mix used for the assessment of noise effects is overly conservative and will lead to the noise envelope being set too large.

During ISH1, the Applicant made the specific point regarding recent fleet orders for next generation aircraft as corroboration for its view on growth in the number of pax per atm. This reinforces the view that the fleet mix assumptions in relation to the transition to next generation aircraft are too conservative and need to be updated with the consequence that noise contour limits should be lower.

If forecasts in the NRP case are too high (as the Authorities believe they are), the initial noise envelope limit that lasts to 2038 will be set too large. This would allow for noisier aircraft but without necessarily the growth and benefits commensurate with if the traffic was less. There would also be issues in terms of process for resetting the noise envelope thereafter.

The Authorities consider the use of route 9 (Wizad) assumed in the noise assessment is contrary to its purpose and is a direct result of the progressive growth and the expansion only exacerbates this. As Route 9 (Wizad) is presently overflown less than 100 times per year and with the proposal to increase the overflights this should be assessed as a new flight path. No satisfactory assessment of Wizad has been undertaken.

The ExA has asked that requirements for modelling be confirmed subsequent to the hearing.

It is anticipated that this relates to the information above but the joint authorities also wish to record that they consider:

- Ground noise modelling is unsatisfactory, not all sources appear to have been considered correctly, slow transition fleet has not been used, no contours have been presented under any case year.
- There is no cumulative impact assessment for ground noise and air noise.
- For air noise, supplementary metrics have not been presented for worst years and so effects underestimated.
- Single mode noise contours have not been produced.
- A scenario test of using 2019 ATMs but with predicted quieter fleet technology for 2029 so as
  to understand the total improvement with technology and thereby inform the change with
  growth in baseline and development scenarios has not been provided.
- Consideration and valuation of health impacts is likely to underestimate effects due to the above.

Total aviation noise caused by the Proposed Development.

Critically, for additional awakenings, there are locations where impacts already exceed the proposed SOAEL of one additional awakening and there is no mitigation offered because only the marginal amount of new effect is considered by the Applicant.

Controls do not seem to be adequate with the reliance placed on the use of a noise insulation scheme rather than preventing emissions at source.

There is no compensation offered for the impact on the use or enjoyment of the properties affected or enforced changes to lifestyle as a result.

| Reasonable   | worst-case   |
|--------------|--------------|
| assessment a | nd choice of |
| baseline.    |              |

The Authorities note that not all years have been presented for the potential worst case for different noise sources by the Applicant.

Please see submissions above for further information regarding the fleet mix and forecasting interface. In the Authority's view, the worst case may be overstated.

In addition, the Authorities have concerns regarding the use of the Standard Instrument Departure routes (SIDs), in particular WIZAD SID, towards Horsham. Some use of this departure route has been assumed for noise modelling but the Applicant has claimed in meetings that the use of this SID is not required for capacity purposes, although some doubts remain. However, overall airspace congestion could lead to a requirement to make greater use of this departure route in any event until airspace modernisation over London has been completed (into the 2030s?). The Applicant proposes new departure routes to the south ahead of this date but the implications of these are not clear from documents shared by the Applicant and further queries have been raised.

Methods proposed to avoid, reduce or compensate for likely significant adverse aviation noise effects and prevent unacceptable levels of aviation noise.

The airport mitigation hierarchy appears to be reliant on noise insulation rather than trying to seek to reduce noise at source, implement operational practices to prevent and minimise noise production, or insert barriers to break propagation pathways.

With reduction at source, quiet operational practices or barriers, this reduces all effects and thereby the impact on the receiver. It mitigates adverse impacts. The airport needs to further explore how it can place the emphasis on this approach.

Where there is no other option, then noise insulation is the last resort. To ensure that policy requirements are met then single mode contours need to be prepared and used for noise insulation scheme for Leqs (16h and 8h), N65, N60 and possibly awakenings.

Further information is contained within the LIR but the following are important principles for any new scheme:

- Noise contours are to be based on single mode runway use.
- The scheme must cater for insulation, ventilation and cooling requirements.
- The inner zone needs to be extended to daytime noise insulation standards discussed in the LIRs (including one awakening and standards for day and night average metrics).
- The outer zone should be extended to the extent consistent with scientific evidence based showing onset of community annoyance.

|                           | No compensation has been offered to anyone who is affected.  |  |
|---------------------------|--|--|
| Non-residential receptors | The ExA queried whether the Applicant had considered the guidance in the Acoustic Design of Schools Performance Standards published in 2015 (known as BB93) for the assessment of schools. The Applicant responded that it had considered schools to see if there was a change as a result of the project; if there had been no change as a result of the project then there could not be any significant effect as a result of the project, regardless of any design standard relevant to the school. | BB93: acoustic design of schools - performance standards - GOV.UK (www.gov.uk) |
|                           | The Authorities consider that this is a design standard to assure education. The airport has grown substantially since 1979 and many such establishments would have been built in locations where ambient noise levels were low. The change is likely to have arisen due to aircraft noise as the industry expanded. It is considered that this does provide a means of informing an assessment, including both the averaged noise metric and the event-based metric.                                  |  |
| 8. Action Points          | During ISH5, the Authorities took an action to outline their concerns regarding modelling as follows   |  |
|                           | "To set out concerns regarding modelling at Deadline 1 separately or within Local Impact Report".  |  |
|                           | In response to this Action, please note that concerns regarding modelling are set out in the sections and paragraphs as follows in the respective LIRs:  |  |
|                           | <ul> <li>Joint West Sussex LIR: Chapter 14 (Noise and Vibration), paragraphs 14.50 – 14.227 and Table 14.1</li> <li>Joint Surrey LIR: Chapter 12, Paragraphs 12.97-12.99; 12.110-12.129; Ground noise – Chapter 12, Paragraphs 12.132; 12.139-12.143; Road traffic noise – Chapter 12, Paragraphs 12.158-12.162</li> <li>East Sussex County Council LIR: Section 4 (Assessments of Local Impacts) Paragraph 4.2.1 and Table 1 Reference number N1</li> </ul>   |  |