HEATHROW'S SUMMARY RESPONSE

1. The effects of easterly alternation

The application responds to government policy which calls on Heathrow to submit proposals for easterly alternation in order to:

- facilitate the redistribution of noise more fairly around the Airport; and

- extend the benefits of respite during runway alternation to all communities around Heathrow.

In reaching its policy decisions to end the Cranford Agreement the Government recognised that there would be some adverse effects but, in addition to bringing greater fairness in how aircraft noise is distributed during easterly operations and in predictable aircraft noise respite, the government decided that it would be preferable to benefit large numbers of people by removing them from the 57 dBA Leq contour, at the expense of exposing a smaller number of people to increased noise at higher levels.

The same conclusion was reached by the Secretary of State in the appeal decision in 2017 who found that the application would "*implement Government policy to redistribute noise more fairly around the airport; and that the public interest benefits that would result from the development (with appropriate mitigation) should carry very substantial weight in favour of the scheme*."

The effect of easterly alternation is comprehensively assessed in the application against all up to date policy and evidence, and it confirms not only would respite be more fairly extended – particularly to communities that have experienced constant overflying without relief since the 1950s – but that the net effects would be undeniably beneficial.

The **headline noise effects** are that easterly alternation would:

- reduce the overall number of people exposed above the daytime LOAEL by around 2,800;
- reduce the number of people exposed to levels above 54 dB LAeq,16hr ("the approximate onset of significant community annoyance") by 15,300;
- reduce the overall number of people exposed between the daytime LOAEL and SOAEL by 3,900.[1]

The adverse effects are smaller. Easterly alternation would:

- increase the overall number of people within the daytime SOAEL by around 1,100; and
- increase the overall number of people exposed to levels above 69 dB LAeq,16hr by around 500.

For those people, mitigation would be provided (see further below).

The overall effects can be measured in a number of ways, but each approach demonstrates the significant overall benefit of alternation. For example, the submitted EIA shows that:

[1] LOAEL is the lowest observed adverse effect level and is recognised as being 51dB during the daytime. SOAEL is the significant observed adverse effect level and is recognised as being 63DB during the daytime.

Overflights: The effect of the Proposed Development is to significantly reduce the population exposed to higher levels of overflights (more than 400, 500 and 600 events during a busy easterly day) as overflights would no longer be as concentrated over specific communities. There would be an increase for communities currently affected by lower frequencies of overflying but a reduction for those affected by much higher levels. This demonstrates the more equitable distribution of flights made possible by easterly alternation.

At night: the effect of the Proposed Development in 2028 would be to:

- reduce the number of people exposed between the night-time LOAEL and SOAEL by 9,700; and
- increase the number of people within the night-time SOAEL by around 1,700.

Numerically:

- 62,200 people would experience a beneficial change in aircraft noise exposure of at least 1dB;
- 39,600 people would experience an adverse change in aircraft noise exposure of at least 1dB.

Annoyance and sleep disturbance:

- The number of people defined as highly annoyed would reduce by between 400 and 8,200 (depending on the method of calculation).
- The number of people living with noise above 54DB, which is defined as the onset of significant community annoyance, would be reduced by 15,300.
- the number of people sleep disturbed is forecast to reduce by between 600 and 1,800.

These are very significant net benefits that would be brought to thousands of people.

The EIA endorses the Government's assessment that the overall effect of easterly alternation is substantially beneficial.

2. Mitigating adverse effects

Heathrow is a designated airport where Government policy is that it "***is appropriate for the Government to take decisions on the right balance between noise controls and economic benefits, reconciling the local and national strategic interests*.**" National policy sets the requirements for airport mitigation. That policy has not significantly changed since the 2017 decision with the Government expecting airport operators to offer financial assistance towards acoustic insulation to residential properties which leaves them exposed to levels of noise of 63 dB $L_{Aeq,16hr}$, or more.

Heathrow's quieter Neighbourhood Support scheme (QNS) goes much further and offers **full** noise insulation up to an indexed cap of £34,000 (now £35,130) for all residential properties affected by aircraft noise at 63 dB $L_{Aeq,16hr}$ and above. It also makes eligible residential properties exposed to night-time noise at 55 dB $L_{Aeq,16hr}$ and above, and properties specifically affected by noise from arriving aircraft at night. The QNS also offers similar mitigation to non-residential properties such as schools.[2]

The QNS was consulted on and endorsed by Government as part of Heathrow's Noise Action Plan in 2024. It can be regarded as up to date.

Any properties where noise levels reach 63dB $L_{Aeq,16hr}$ as a result of easterly alternation would qualify for the QNS, just like any other property around the airport.

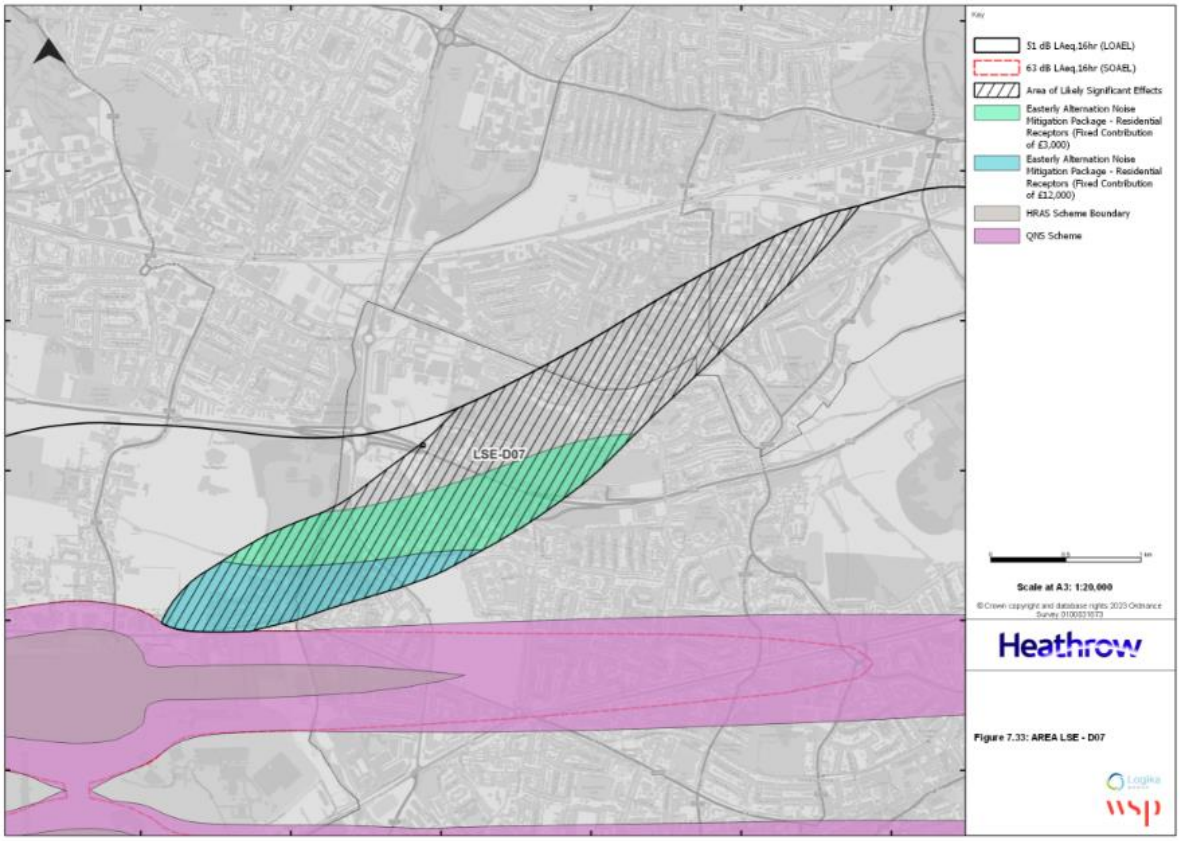
In the 2017 Cranford Inspector's report, the Inspector made clear that it would not be proportionate or reasonable to expect Heathrow to amend its airport wide noise insulation scheme as a result of the Cranford application. Neither would it be fair for residents affected by noise from easterly alternation to be compensated / mitigated to a higher standard than others already affected by aircraft noise. Hence the fair thing to do is to offer noise insulation to those uniquely affected by clearly noticeable adverse effects from changes in aircraft noise.

The overall changes in noise effects are relatively small and easterly alternation does not significantly affect the general shape of the QNS boundary. For example, residents of Longford already qualify for QNS.

One area is identified as being likely to experience a greater level of change than others. This area runs up from Cranford to North Hyde and Southall in Ealing. Here the area will be overflown by departures on a designated flightpath that is currently rarely used (as a result of the Cranford Agreement). The area is not directly in line with the runway, so it is not affected by arrivals. The flightpath would be used routinely for departures during easterly alternation, and the area would be subject to a change in daytime noise exposure levels of up to 3 to 5.9 decibels, although overall noise levels would remain below 63dB $L_{Aeq,16hr}$.

[2] Where the full cost of noise insulation unusually exceeds £35,130 Heathrow approaches this on a case-by-case basis. Cases can be referred to the independent Prioritisation Panel and to date Heathrow has accepted all of its recommendations. The QNS is indexed annually.

Area north-east of Cranford, newly affected by easterly departures (figure 1)



As a result of that area not being currently overflown, the change in noise levels is more significant. However, flying there would only take place during easterly operations and only then for 50% of the time due to alternation, i.e. for the 50% of the day when the northern runway is used. **In any year, the area would be overflown and affected 10% to 14% of the time on average**, meaning that, following the introduction of easterly alternation, the summer or year round noise levels would not reach a level normally defined as significant adverse and the properties would not qualify for QNS, because the noise levels would be much lower.

Whilst there is no policy obligation to do so, Heathrow does recognise that easterly alternation will bring some new effects. Accordingly, for the purposes of this application (and subject to planning permission being granted and implemented), in addition to the QNS scheme, Heathrow has devised the Easterly Alternation Noise Mitigation Scheme, which responds to changes in noise levels, even where those changes do not result in overall levels which would normally qualify for noise insulation under government policy or the QNS. The table below shows the Easterly Alternation Mitigation Scheme that was set out in the application.

Noise Mitigation Schemes

Quieter Neighbourhood Support:

Extended eligibility reflecting impacts due to the Proposed Development. This initiative is aimed at mitigating the effects of noise for communities surrounding the Airport, offering:

- funding of up to £34,000 for noise insulation in eligible homes surrounding the Airport (around 20,000 properties);
- noise insulation and ventilation in eligible schools; and
- eligible homeowners' financial assistance with the costs of moving away from areas experiencing high levels of airport noise.

Easterly Alternation Noise Mitigation Package:

Proposed voluntary initiative to address significant adverse noise impacts from 'easterly alternation', offering:

- A fixed contribution of £3,000 towards sound insulation of homes forecast to experience an increase in noise exposure in excess of 3dB, leaving them exposed to levels between 54 and 60 dB $L_{Aeq,16h}$;
- A contribution of up to £12,000 towards sound insulation of homes forecast to experience an increase in noise exposure in excess of 3dB, leaving them exposed to levels between 60 and 63 dB $L_{Aeq,16h}$;
- A bespoke package of insulation and ventilation for schools and colleges forecast to experience an increase in noise exposure in excess of 3 dB, leaving them exposed to levels above 54 dB$L_{Aeq,16h}$; and
- Financial assistance of £10,000 for receptors within 500m of the Runway 09L aircraft start of roll position in respect of the potential for noise induced vibration.

Figure 1 above shows where the QNS and this additional mitigation will apply.

Heathrow have provided officers with details of how the cost of the noise insulation works would be funded and that, whilst the cost and recommended insulation solutions will vary from property to property, the funding is likely to be sufficient to meet Heathrow's internal noise level targets, which are aligned with British Standard BS8233:2014 (which strictly only apply to new homes).

3. Further discussions with LB Hillingdon (shared without prejudice)

Officers have sought clarity on the justification for the detail of the mitigation proposals, including in the light of proposals that have been put forward by those promoting expansion at Luton and Gatwick Airports. In response to the questions raised, Heathrow's response is set out below.

LBH: above 63dB Heathrow's QNS scheme appears to be capped at £34,000 whilst Luton and Gatwick's schemes are uncapped.

Heathrow: the QNS figure of £34,000 is not capped in practice, because:

- first, it is indexed to keep pace with inflation – it is currently published as £35,130 and will continue to be indexed;

- experience to date is that full noise insulation can be provided to properties at costs ranging between £11,000 and £22,000. This is particularly meaningful because Heathrow's QNS roll out has prioritised areas at Longford and Stanwell Moor where noise levels are relatively high. As the QNS is rolled out to areas with lower exposure, it is likely that average costs to achieve suitable insulation may be lower.

- As we have explained in our responses to LBH's detailed questions on noise insulation installation, in exceptional cases (such as unusually large premises), Heathrow has reached agreement on a case-by-case basis to meet higher costs where that is necessary; and

- where disputes and special cases arise, matters are referred to Heathrow's independent Prioritisation Panel. In all cases to date, Heathrow has accepted the recommendations of the Panel.

Heathrow cannot change the terms of its airport-wide QNS, which was endorsed under the Noise Action Plan, but as explained above, the QNS is not capped in practice.

LBH: between 60dB and 63dB $L_{Aeq,16hr}$ (where there is a 3dB increase), Heathrow is offering £12,000, but Luton offer up to £20,000. How can LBH know that Heathrow's offer is sufficient?

Heathrow: we have studied the noise insulation schemes proposed at Gatwick and Luton and the evidence submitted to support them. We have found no explanation for the £20,000 figure.

Heathrow's figure of £12,000 was broken down and explained in our Response to LB Hillingdon Noise Mitigation Questions, 25 August 2025 (Question 2), as follows:

With £12,000:
We anticipate that properties 60-63dB will require windows to be replaced to meet BS8233:2014 internal average ambient noise levels, as well as loft insulation and a Siegenia vent or PIV.

- Contractor surveys – £500
- Ventilation Product – £1,300
- Bathroom / Kitchen Ventilation – £1,500
- Loft Insulation (50 SQM Average Property size) – £1,500
- Secondary Glazing (8 No. secondary glazing units between 3 & 4 Sqm) – £7,200

Total: £12,000 (EX VAT)

As per the above, we are confident that the measures proposed (namely secondary glazing, new ventilation and loft insulation) will meet the required internal ambient noise levels. Again, we have supporting evidence (contractor final accounts to suggest that the £12,000 figure can provide the necessary measures outlined).

Having reviewed LB Hillingdon's question, Heathrow is willing to additionally commit:

- that an objective test be set for the sufficiency of mitigation – namely that it should aim to achieve forecast internal noise levels consistent with BS8233:2014 (residential standards for new buildings), or a minimum improvement of 5dB in sound insulation, noting that this target may not be able to be achieved in certain specific circumstances due to the limitations of the existing building fabric/structure. The level of mitigation and relevant works required to achieve acoustic aims set out above will be determined following a surveyor/assessor visiting the property. (Whilst we have set out our confidence that the offer will be sufficient for these purposes, we recognise that LBH seeks greater comfort that a satisfactory environment will be achieved); and

- that the role of the Prioritisation Panel is extended to deal with any disputes or referrals under this category.

LBH: similar questions arise in relation to Heathrow's offer of £3,000 for properties in the 54dB to 60dB $L_{Aeq,16hr}$ category (where there is a 3dB increase) – why is that sufficient when Luton offers £4,000 to £6,000 and Gatwick offers £4,500 to £6,500?

Again, we have found no basis for the offers at other airports. Those airports, of course, do not currently offer any mitigation at these noise levels and have offered to do so only if their airports receive consent for significant expansion. They also both made the point in evidence that their offers far exceed what is required by policy.

At Heathrow, easterly alternation brings no growth in traffic.

Our proposal was explained in our August Response to Noise Mitigation Questions, as follows:

With £3,000:
We anticipate that properties between 54-60 dB LAeq,16hr should be able to meet BS 8233 internal average ambient noise levels in habitable rooms with standard glazing (assumes existing glass retained and is double-glazed unit), loft insulation and an enhanced Siegenia vent or PIV.

Total cost estimate of PIV and loft insulation:

- Contractor surveys – £200
- Ventilation Product – £1,300
- Loft Insulation including hatch and perimeter seal (50 SQM Average Property size) – £1500

Total: £3,000 (EX VAT)

We are confident that the measures proposed (namely new ventilation and loft insulation) will meet the required internal ambient noise levels. We have supporting evidence (contractor final accounts) to suggest that the £3,000 figure can provide the necessary measures outlined.

At these levels of noise, no planning policy requires noise insulation to be offered. At Heathrow, adverse effects from aircraft noise will only arise approximately 15% of the time for these properties – whereas the cases at Luton and Gatwick relate to effects experienced every day.

Accordingly, we regard this offer of compensation for those affected to be a good offer which recognises the change that will be brought about for these properties for only c.15% of the time and a fair contribution to additional insulation if they wish to take up the offer.

This is not something, therefore, that would be referred to the Prioritisation Panel and Heathrow does not propose to change this element of its offer.

4. Conclusion

The analysis undertaken for this application shows the pattern of effects to be comparable in principle to that understood by the Government when the decision was made to end the Cranford Agreement. Ending the Agreement and introducing easterly alternation brings respite to communities who have been denied it by the Agreement for c.70 years. It benefits significantly more people than it harms.

And those who are most affected will have those effects mitigated through a scheme of noise insulation which both exceeds that which the Secretaries of State found to be acceptable in 2017 and exceeds what is required by Government policy.

In addition to noise insulation, and recognising impacts on Longford Village, the proposals also include the construction of an up to 7m high purpose-built noise barrier, which responds to consultation responses from residents. The noise barrier will mitigate noise from aircraft on the ground and as they taxi to and use the northern runway for departures.

The proposals also provide for a financial contribution to the Council of up to £250,000 (in total) towards the enhancement of Berkeley Meadows, Avenue Park and Cranford Park recognising the adverse impacts identified on these receptors.