

From: [REDACTED]
To: [Manston Airport](#)
Cc: [Richard Price](#)
Subject: Manston DCO
Date: 20 June 2019 10:33:10
Attachments: [Heathrow Noise-Insulation-Policy.pdf](#)
[DCO Submission 20 June 2019.pdf](#)

I have now had an opportunity to read the recent submission from RSP and also to read the document on noise mitigation provided by the sponsors of expansion by DCO at Heathrow airport and would like to submit the following comments regarding funding and noise mitigation as a further submission. Please can you acknowledge receipt and confirm this will be accepted as a submission. There are two pdfs attached one is my submission and the other is the Heathrow noise proposal.

Thanks Adem.

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Noise Mitigation

I note that the examiners have requested that RSP provide noise mitigation to those in the 60db contour and wrote previously to ask the examiners to consider directing RSP to use the 57db contour as London City Airport do. Since that email we have seen release of the noise mitigation proposals from the sponsors of expansion at London Heathrow via DCO, which I attach, and there is provision for mitigation again at the 57db Laeq,16hr or the full 55db Lden noise contour whichever is the bigger.

Can I please ask again that the examiners review the provisions for the residents of Ramsgate and Herne Bay and direct RSP to offer the mitigation on the same basis as which other airports in London are now routinely doing? I see no rationale for the residents of Ramsgate and Herne Bay to be asked to accept a lower level of support than the residents of London, indeed given the very low levels of income in Thanet these residents should be offered more not less assistance as they are less able to pay for mitigation themselves.

We must not forget that, if granted, this will be a project agreed and recommended by government as being of national significance within a legally applied framework and on that basis the same level of mitigation should be supported or required by them within each airport related DCO.

In addition can I please ask that the examiners review once more the level of assistance given in the light of the London City and Heathrow policies? I understand RSP have increased their initial level from £4,000 to £10,000 however at London City they pay 100% of whatever the cost of insulating properties is without cap. At Heathrow the proposal, detailed in Table 4.1 of the attached document, which may of course be improved by examiners on examination, for Scheme 1 at the 60db level has no cap and at Scheme 3 for 57db there is a contribution of £3,000. Perhaps the examiners could direct RSP to provide the same level of mitigation as Heathrow are providing with the proviso being that, should it be improved further during examination, RSP would meet these improved standards. We are told that RSP is a company of substance with significant backing from large institutional investors (but see section below on funding) and who expects to make a significant profit and return for investors in the project, they can surely therefore afford to provide assistance with noise mitigation on the same basis as other airport owners.

Unlike around London City and Heathrow, there are many listed buildings in Ramsgate which will require a very specialist approach to the installation of double glazing and ventilation, arrangements which will cost far in excess of £10,000 as many of the houses have 4 or 5 storeys with habitable rooms on each level. Can I ask that the examiners take this fact into account and either consider removing the cap of £10,000 or having an increased cap of say £25,000 for buildings that are listed?

Can the examiners also please consider directing RSP to include and enhance other schemes which Heathrow are providing which are detailed in Section 6 of the attached document covering, Temporary Home Relocation, Home Relocation, Vortex Protection and Expanded Vortex Protection.

Another factor which differentiates Ramsgate from the London centric airports is that it is a seaside town and as such has a large number of small bed and breakfast businesses and also small, medium and large hotels. Can I please ask whether these buildings will be included in the noise mitigation arrangements and if not can the examiners please consider including them on a special case basis if necessary.

Lastly can I reiterate that the noise contours supplied by RSP do not reflect the real life experience of living in Ramsgate with an airport. It is inconceivable that properties in Wellington Crescent and Albion Place, where planes approach the airport at around 300ft, do not qualify for noise mitigation. RSP have clearly drawn up contours, for which they used a provider with no experience of doing so, in order to minimise noise mitigation costs. We now have noise contours from two sources constructed independently by the CAA which reflect the true position and would result in noise mitigation being provided quite rightly to the residents of listed buildings in Wellington Crescent and Albion Place. I note RSP are trying to dispute the CAA contours on the basis that flight paths have not been agreed by the CAA however those used are the ones used historically and we know from interactions with the previous airport operators that they are not able to be changed.

Funding

In its recent submission Summary of Applicants Oral Submissions at the Compulsory Acquisition Hearing on 4 June 2019 D8/CAH2 RSP include a letter from a company called Aldgate Developments Limited. This is no doubt an attempt to satisfy the examiners that funding is available for this project as in the letter Aldgate say "including bringing development expertise and the £250m to fund the projected first phase of CAPEX works". There is a clear attempt here to give the impression that Aldgate has experience of airport development and that they actually have the £250m to which they refer. However a deeper analysis reveals that Aldgate have no experience of airport development, having operated only in the residential and office building markets and a very small balance sheet.

In the letter they state "it is our intention to allow Rubicon Capital Advisors.....to undertake this fundraise" and that Rubicon "have already discussed the project with a range of leading infrastructure funds who are very keen to invest" and lastly that "Rubicon are highly confident that the development financing can be arranged". The letter refers to correspondence with Rubicon which is not attached. Rubicon is again an advisor that will try, for a fee, to secure funding from other people. We are no further forward here with the funding issue, Aldgate is merely another RSP as are Rubicon. Aldgate's 2017 balance sheet shows tangible fixed assets of only £122,454 and net current assets of only £457,002, it is not a company of substance.

In order for the examiners to be certain that this project will be delivered it needs to see much more than this. There is no evidence here that any real investor has seen a detailed business plan which it has reviewed and concluded it is viable to invest in. There is no commitment from any real lender at all. RSP quotes other companies that have been

granted DCO's but which have not been asked for this level of detail but as I've said before those companies were companies of substance, rated by the rating agencies at investment grade or above, with large balance sheets over many years available for scrutiny publically by examiners and a demonstrated track record of delivering on large scale development projects in their chosen field.



AIRPORT
EXPANSION
CONSULTATION

NOISE INSULATION POLICY

JUNE 2019

Heathrow



AIRPORT EXPANSION CONSULTATION (JUNE 2019)

Heathrow is consulting on proposals for an expanded airport.

The Airport Expansion Consultation is our statutory consultation and we will be seeking your view on four key areas:

- Heathrow's preferred masterplan for expansion: our proposals for the future layout of the airport including the runway and other airport infrastructure such as terminals and road access. The masterplan will also reveal the airport's growth in phases – from runway opening in around 2026, to the end masterplan in approximately 2050;
- Plans to operate the future airport: how the future three runway airport will be operated, including important elements such as night flights, as well as how potential additional flights before the new runway opens could be operated on our existing two runways;
- Assessment of impacts of the airport's growth: our preliminary assessment of the likely impacts of expansion on the environment and local communities;
- Plans to manage the impacts of expansion: we will set out the airport's plans for mitigating the effects of expansion, including property compensation, our Noise Insulation Policy, a Community Fund, and measures to mitigate against air pollution, carbon, and other environmental effects.

We are grateful for feedback provided at previous consultations and have considered these responses in developing our proposals. We now ask for your views on our preferred proposals, so that we can further improve our project before we apply for development consent next year. You can provide feedback:

- online using the feedback form on our website aec.heathrowconsultation.com
- complete a feedback form, available at events or on request calling 0800 307 7996
- email us at feedback@heathrowconsultation.com
- write to us at Freepost LHR AIRPORT EXPANSION CONSULTATION

We have set out our proposals in a number of documents covering different topics and different levels of detail. All of these are available on our website, at Document Inspection Locations and at consultation events.



AIRPORT EXPANSION CONSULTATION DOCUMENT Overview and summary of the below documents					
Find out more about the preferred masterplan and how we will build the airport	Find out more about how our airport will operate in the future (including night flights)	Find out about the assessment of our impacts, both positive and negative, and how we plan to mitigate them	Find out about the plans to manage the impacts of expansion	Find out how we have responded to previous feedback and information about the approvals process	Your community and Heathrow Expansion
Preferred Masterplan	Future Runway Operations	Preliminary Environmental Information Report – Non Technical Summary	Proposals for Mitigation and Compensation	Consultation One Consultation Feedback Report	Heathrow Expansion and your area – Bedfont and Mayfield Farm
Construction Proposals	Early Growth	Preliminary Environmental Information Report	Draft Code of Construction Practice	Future Operations Consultation Feedback Report	Heathrow Expansion and your area – Brands Hill
Updated Scheme Development Report	Surface Access Proposals	Preliminary Transport Information Report	Noise Insulation Policy	How do we obtain approval to expand Heathrow?	Heathrow Expansion and your area – Colnbrook and Poyle
	Updated Scheme Development Report	Equality Impact Assessment: Initial Findings	Economic Development Framework		Heathrow Expansion and your area – Cranford, Hatton and North Feltham
			Environmentally Managed Growth		Heathrow Expansion and your area – Harlington and Cranford Cross
			Property Policies Information Paper		Heathrow Expansion and your area – Harmondsworth
			Property & Land Acquisition and Compensation Policies - Interim Professional Fees		Heathrow Expansion and your area – Longford and Bath Road
			Property & Land Acquisition and Compensation Policies - Interim Property Hardship Scheme		Heathrow Expansion and your area – Richings Park
			Property & Land Acquisition and Compensation Policies - Interim Property Hardship Scheme Panel Guidance		Heathrow Expansion and your area – Sipson
			Property & Land Acquisition and Compensation Policies - Interim Agricultural Land and Property		Heathrow Expansion and your area – Stanwell and Stanwell Moor
			Property & Land Acquisition and Compensation Policies - Interim Residential Property		
			Property & Land Acquisition and Compensation Policies - Interim Commercial Property		

FEEDBACK FORM

Have your say on the consultation by using the Airport Expansion Consultation Feedback Form or on our website aec.heathrowconsultation.com



NOISE INSULATION POLICY (DRAFT FOR CONSULTATION)

Non-Technical Summary

This document sets out the Noise Insulation Policy for the Heathrow Expansion Programme (the Project) to address the requirements of the Government policy - “*Airports National Policy Statement: new runway capacity and infrastructure at airports in the South East of England*” 2018 (Airports NPS).

This policy will address noise from aircraft movements in the air and on the ground, road, rail and construction noise associated with the Project.

The Noise Insulation Policy forms part of the extensive noise control measures included in the expansion Project to meet the aims of Government noise policy. The control measures on the aircraft fleet and operations first mitigate and minimise potential adverse noise effects arising from expansion and reduce existing noise from the airport. In a complementary manner, noise insulation provides compensatory control measures that aim to avoid residual significant adverse effects on health and quality of life from existing and predicted noise. This approach meets the aims of Government noise policy as stated in the Airports NPS.

For home owners, three levels of scheme will be offered, depending on the existing or predicted noise exposure level, as indicated by the relevant noise contour, source of noise and if confirmed through third-party assessment:

Scheme 1	Full cost of noise insulation fitout, potentially including new acoustic double glazing or secondary glazing, loft or ceiling insulation, ceiling over-boarding, external door upgrades and ventilation for aircraft noise.
Scheme 2	A package of noise insulation to exposed facades, potentially including acoustic double glazing or secondary glazing to windows, external door upgrades and attenuated ventilation for road, rail and construction noise exposure.
Scheme 3	A fixed £3,000 contribution to approved noise insulation works.

Eligibility for schemes will be based on published noise contours of the defined Action Levels, or thresholds, as set out in the government Airports NPS for aircraft noise, extended to include road, rail and construction noise.



Noise Insulation Schemes will be made available before defined Action Levels are expected to occur as a result of the expansion project.

In the lead up to Development Consent Order (DCO) approval, we plan to insulate homes that will be exposed to the highest noise from the Project and that are already exposed to similar noise from existing Heathrow operations. This will be via a replacement of our existing noise insulation schemes expanded in the light of changing Government policy. Homes expected to be exposed to early construction noise from the Project as well as existing high levels of aircraft noise will also be prioritised. This will help develop and test our systems and suppliers, also avoid long waiting times between applications and fit outs. Once the DCO is approved we will prioritise those forecast to be newly affected by construction, road and rail traffic and aircraft noise. We will ensure that the insulation is offered and, if accepted, installed before the new noise occurs.

Home and community building owners identified as being within the eligibility contours will be contacted and invited to apply for the schemes. We will use a seven-stage awareness process to ensure property owners are aware of their eligibility and are encouraged to apply.

Once we have received an application, an assessment will be conducted to confirm eligibility. Approved contractors will deliver a standard package of noise insulation measures, within a quality management scheme including sample completion testing.

For the very few properties that will be newly exposed to very high noise levels, where an application is not received or an offer accepted, we may need to obtain compulsory rights to provide treatments to prevent unacceptable noise exposure levels.

A dedicated support team will be provided to assist applicants throughout the process, including investigation of complaints during and after completion. Applicants will also be able to appeal to an Independent Panel.

The schemes will remain open until they cease to be relevant (for example, at the end of the construction period for the construction noise insulation), or the scheme is updated (for example if noise mitigation means that a property is no longer within a relevant contour).

These schemes will replace the existing noise insulation schemes currently offered by Heathrow including the Quieter Homes Scheme, the Day Scheme and the Night Scheme. Before existing schemes are closed, properties in those areas will be informed and advised of the scheme closure and possible eligibility for the replacement schemes. The contact period, of at least 12 months, will allow time for applications under the existing schemes before they close.

Heathrow's Community Buildings Noise Insulation Scheme will be extended to include the impacts of Expansion.



In addition to the noise insulation schemes in this draft Noise Insulation Policy, Heathrow has two other existing noise and vortex related schemes that will be refreshed. These are the Home Relocation Assistance Scheme which offers financial help to eligible homeowners living in the noisiest areas around Heathrow to move away from the area if they wish; and the Vortex Protection Scheme which is designed to protect and repair homes from around the airport damaged by wind currents from aircraft wings.

Heathrow will also introduce a Temporary Home Relocation Scheme for those most impacted by short term construction noise.

These schemes are summarised at the end of the draft Noise Insulation Policy for reference.



PREFACE: DEVELOPMENT OF THE NOISE INSULATION POLICY

1. The remainder of this document sets out the draft policy relating to noise insulation schemes to be provided in connection with the development and operation of a new north-west runway and associated infrastructure to expand Heathrow Airport. This draft policy is subject to consultation.
2. Once finalised taking into account feedback from consultation and draft policy would form the basis for the implementation of our Noise Insulation programme, if development consent is granted and we proceed with construction,
3. If the DCO application is granted, this document would become the basis for the implementation of our Noise Insulation programme. It was thought helpful, therefore, to provide a working draft of the document for this consultation in order that stakeholders could understand the terms on which Heathrow proposes to commit and comment on them whilst they remain in draft.
4. Within the document itself, there are passages which represent explanatory text for the purposes of this consultation and which will be deleted from the version published before and submitted with the DCO application. Those passages are highlighted in grey.
5. With the benefit of this explanation, hopefully this draft document is clear in its purpose and we would be pleased to receive feedback on its content and approach.



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1. INTRODUCTION

1.1 The Noise Insulation Policy for Heathrow Expansion Programme

1.1.1 This document sets out the Noise Insulation Policy for the Heathrow Expansion Programme (the Project) to address the requirements of the *Airports National Policy Statement: new runway capacity and infrastructure at airports in the South East of England 2018* (Airports NPS).

1.1.2 The Noise Insulation Policy forms part of the extensive noise control measures included in the Project, to meet the aims of Government noise policy, as laid out in the Airports NPS at paragraph 5.68 (see below). Firstly, there are the mitigation control measures which cover actions ranging from aircraft fleet development, operational procedures, airport layout, airspace design, and night flight management, to managed respite through runway and airspace alternation. These control measures mitigate and minimise potential new adverse noise effects arising from expansion and, for many areas, reduce existing noise from the airport, within the context of Government policy on sustainable development. This Noise Insulation Policy provides compensatory control measures, which in combination with the mitigation controls, sets out to achieve the following:

- Firstly: to meet the Government noise policy to avoid significant adverse effects on health and quality of life that would otherwise newly arise from the expansion proposals, including preventing unacceptable adverse noise effects;
- Secondly: to avoid significant adverse effects on health and quality of life that would otherwise occur after expansion, but would also have occurred if Heathrow did not expand; and
- Thirdly: to more widely compensate for the adverse effects of aircraft noise both newly arising from expansion and that would have occurred if Heathrow did not expand, in line with Heathrow's committed community compensation scheme as set out in the Airports NPS (paragraph 5.245).

1.1.3 The objectives of this Noise Insulation Policy are to achieve the following:

- Set out the basis for Heathrow's noise insulation strategy and the definition and delivery of the Noise Insulation Schemes.
- Address noise from:
 - aircraft movements in the air and activity on the ground,
 - changes to road traffic associated with the airport expansion,
 - changes to rail traffic associated with the airport expansion, and,



- construction noise associated with the expansion programme.
- Describe how the package of Noise Insulation Schemes addresses the requirements of the Airports NPS and specifically the aim set out in paragraph 5.68 to avoid significant adverse effects on health and quality of life.

1.1.4 This document is structured to cover the following:

- the national, international and local policy, standards and guidance background,
- the assessment metrics and action levels that will be used to identify properties eligible for noise insulation,
- the Noise Insulation Schemes, and
- the staged delivery of these Schemes.

1.1.5 This document also includes outlines of the related, non-insulation programmes with respect to the Project – the Construction Temporary Rehousing Scheme, the Home Relocation Assistance Scheme (HRAS), and the Vortex Protection Scheme.

1.2 Heathrow's Noise Insulation Strategy

1.2.1 This Noise Insulation Policy for the Project can be viewed as a part of Heathrow's long-term noise insulation strategy which has three major policy components.

1. Development of our existing noise insulation schemes designed to address our current operations and changing Government policy.
2. Processes are now underway for certain non-expansion (two-runway) airspace changes such as Independent Parallel Approaches (IPA), easterly alternation and redesigning of the Compton departure route.
3. The Noise Insulation Policy for the Heathrow Expansion Programme (the Project) which includes the development of a new third runway and insulation mitigation options required by the Airports NPS.

1.2.2 The same Noise Insulation Schemes and processes will be used to deliver each of these policy components.



2. CONTEXT: POLICY, STANDARDS AND GUIDANCE

2.1 Airports National Policy Statement

2.1.1 The Government designated the “Airports National Policy Statement: new runway capacity and infrastructure at airports in the South East of England” (Airports NPS) in June 2018.

2.1.2 The Airports NPS addresses a range of issues including Heathrow airport expansion and noise insulation. For noise impacts Airports NPS says:

“5.47 The Government wants to strike a fair balance between the negative impacts of noise (on health, amenity, quality of life and productivity) and the positive impacts of flights...”

“5.48 The International Civil Aviation Organisation introduced the concept of a ‘Balanced Approach’ to noise management (resolution A33/7). This is given legal effect in the UK through EU Regulation 598/2014.

...

“5.68 Development consent should not be granted unless the Secretary of State is satisfied that the proposals will meet the following aims for the effective management and control of noise, within the context of Government policy on sustainable development:

- Avoid significant adverse impacts on health and quality of life from noise;
- Mitigate and minimise adverse impacts on health and quality of life from noise;
- and
- Where possible, contribute to improvements to health and quality of life.

...

“5.244 People are entitled to know what steps will be taken to help protect them against aircraft noise and, where appropriate, to help them to move house.

“5.245 In addition to statutory requirements, Heathrow Airport has publicly committed to a community compensation package comprising a number of more generous offers:

- ...
- *Following a third-party assessment, to provide full acoustic insulation for residential property within the full single mode easterly and westerly 60dB $L_{Aeq,16hr}$ noise contour of an expanded airport;*
- *Following a third-party assessment, to provide a contribution of up to £3,000 for acoustic insulation for residential properties within the full single mode easterly*



and westerly 57dB $L_{Aeq,16hr}$ or the full 55dB L_{den} noise contours of an expanded airport, whichever is the bigger; and

- *To deliver a programme of noise insulation and ventilation for schools and community buildings within the 60dB $L_{Aeq,16hr}$ contour.”*

2.2 Aviation Policy Framework

- 2.2.1 The Government published the Aviation Policy Framework (APF) in March 2013 which included the statement:

“3.17 We will continue to treat the 57dB $L_{Aeq,16 hr}$ contour as the average level of daytime aircraft noise marking the approximate onset of significant community annoyance. However, this does not mean that all people within this contour will experience significant adverse effects from aircraft noise. Nor does it mean that no-one outside of this contour will consider themselves annoyed by aircraft noise.”

- 2.2.2 The Draft UK Airspace policy published by the Department for Transport (DfT) in February 2017 and the consultation response that the DfT published in October 2017 has modified the APF.

“Consistent with the Noise Policy Statement for England, our objectives in implementing this policy are to: ... limit and, where possible, reduce the number of people in the UK significantly affected by the adverse impacts from aircraft noise.” (para 2.69 Oct 2017)

“The government acknowledges the evidence from recent research which shows that sensitivity to aircraft noise has increased, with the same percentage of people reporting to be highly annoyed at a level of 54dB $L_{Aeq,16hr}$ as occurred at 57dB $L_{Aeq,16hr}$ in the past. The research also showed that some adverse effects of annoyance can be seen to occur down to 51dB $L_{Aeq,16hr}$.” (para 2.70 Oct 2017)

“We will set a LOAEL at 51dB $L_{Aeq,16hr}$ for daytime and based on feedback and further discussion with CAA we are making one minor change to the LOAEL night metric to be 45dB $L_{Aeq,8hr}$ rather than L_{night} to be consistent with the daytime metric.” (para 2.72 Oct 2017).

- 2.2.3 The Consultation Response also states that the Government:

- *“expects airport operators to offer acoustic insulation to noise sensitive buildings, such as schools and hospitals, exposed to levels of noise of 63dB $L_{Aeq,16hr}$ or more*
- *expects airport operators to offer financial assistance towards acoustic insulation to residential properties exposed to levels of noise of 63dB $L_{Aeq,16hr}$ or more.”*



- 2.2.4 However, the government published the Aviation 2050 consultation in December 2018 which proposes the following noise insulation measures:
- *“to extend the noise insulation policy threshold beyond the current $L_{Aeq,16hr}$ 63dB contour to $L_{Aeq,16hr}$ 60dB.*
 - *to require all airports to review the effectiveness of existing schemes. This should include how effective the insulation is and whether other factors (such as ventilation) need to be considered, and also whether levels of contributions are affecting take-up*
 - *the government or ICCAN to issue new guidance to airports on best practice for noise insulation schemes, to improve consistency*
 - *for airspace changes which lead to significantly increased overflight, to set a new minimum threshold of an increase of L_{AeqT} 3dB, which leaves a household in the $L_{Aeq,16hr}$ 54dB contour or above as a new eligibility criterion for assistance with noise insulation.”*
- 2.2.5 These proposals have not yet been adopted by government but may need to be considered in the final Noise Insulation Policy submitted with the DCO if they would increase the area of eligibility. The progression of these Government policies (and draft policies) is summarised in Appendix B.

2.3 Noise Policy Statement for England

- 2.3.1 The Government published the Noise Policy Statement for England (NPSE) in March 2010 and refers to it in the Airports NPS. The NPSE policy aims, that are repeated in the Airports NPS at paragraph 5.68, are:
- “Through the effective management and control of environmental, neighbour and neighbourhood noise within the context of Government policy on sustainable development:*
- *avoid significant adverse impacts on health and quality of life;*
 - *mitigate and minimise adverse impacts on health and quality of life; and*
 - *where possible, contribute to the improvement of health and quality of life.”*
- 2.3.2 The NPSE explanatory notes provide guidance on significant and adverse impacts:
- “2.20 LOAEL – Lowest Observed Adverse Effect Level*
- This is the level above which adverse effects on health and quality of life can be detected.*



2.21 Extending these concepts for the purpose of this NPSE leads to the concept of a significant observed adverse effect level.

SOAEL – Significant Observed Adverse Effect Level

This is the level above which significant adverse effects on health and quality of life occur.

2.22 It is not possible to have a single objective noise-based measure that defines SOAEL that is applicable to all sources of noise in all situations. Consequently, the SOAEL is likely to be different for different noise sources, for different receptors and at different times. It is acknowledged that further research is required to increase our understanding of what may constitute a significant adverse impact on health and quality of life from noise. However, not having specific SOAEL values in the NPSE provides the necessary policy flexibility until further evidence and suitable guidance is available.”

- 2.3.3 In addition to the above, Planning Practice Guidance-Noise (2014) includes the concept of Unacceptable Adverse Effect Level (UAEL). This is a level of noise exposure that would be perceived as “*intrusive and very disruptive*” and that “*at the highest extreme, noise exposure would cause extensive and sustained changes in behaviour without an ability to mitigate the effect of noise. The impacts on health and quality of life are such that regardless of the benefits of activity causing noise, this situation should be prevented from occurring.*”
- 2.3.4 The LOAEL, SOAEL and UAEL values being applied to the Project are provided in Chapter 17 of the Preliminary Environmental Information Report (PEIR) and will be adopted in this document when published. They are also summarised in Appendix B of this document.
- 2.3.5 We consider that this Noise Insulation Policy is one aspect of “avoiding” significant adverse noise effects on health and quality of life and “preventing” unacceptable noise effects.

2.4 World Health Organisation Guidelines for Community Noise (1999)

- 2.4.1 In 1999, the World Health Organisation (WHO) released Guidelines for Community Noise (GCN). These guidelines have informed a wide range of UK standards and guidelines, and contain recommended values for internal noise for specific environments and maximum night time noise levels that remain current.
- 2.4.2 WHO has also published:
- Night Noise Guidelines 2009 (NNG) which recommend a LOAEL and refer to GCN guideline text as remaining valid, and



- Environmental Noise Guidelines for the European Region 2018 (ENG) which recommend Noise Guideline values which are defined for L_{den} (which includes penalty for evening and night period) and L_{night} .

2.4.3 The WHO publications are guidance only and do not take precedence over Government legislation or policy.

2.5 *Noise Insulation Regulations (1975)*

2.5.1 The Noise Insulation Regulations provide a schedule of noise insulation measures to be provided if noise levels from a highway or road development are predicted to exceed action levels predicted using the Government method, Calculation of Road Traffic Noise (CRTN). CRTN is a historic calculation method which uses a different metric to those normally used for aircraft noise, $LA_{10,18hr}$, but this metric can be converted to $LA_{eq,T}$ for normal highway noise and this conversion is described in the PEIR.

2.6 *The Noise Insulation (Railways and Other Guided Transport Systems) Regulations 1996*

2.6.1 The Noise Insulation (Railways etc) Regulations provide a schedule of noise insulation measures to be provided if noise levels for a rail or similar development are predicted to exceed action levels predicted using the Government method, Calculation of Rail Noise (CRN).

2.7 *Guidance on sound insulation and noise reduction for buildings: BS8233:2014*

2.7.1 British Standard BS8233 provides guidance on the control of sound in and around new buildings, including noise from aircraft, roads and construction sites.

2.7.2 For residential buildings guideline internal noise levels are provided as annual average levels. BS8233 recognises that it may be desirable to build houses or flats above the guideline values for other reasons, such as access to transport, shopping etc, and that a relaxation of the guidance values may provide reasonable living conditions.

2.7.3 For non-residential buildings, BS8233 refers to a number of sector guidelines, including Building Bulletin BB93 for schools and Health Technical Memorandum HTM 08-01 for hospitals and recommends that a suitably qualified acoustician is retained for specialist uses, such as theatres, concert halls and cinemas.



2.8 Code of practice for noise and vibration control on construction and open sites. Noise BS5228-1:2009 and A1:2014

- 2.8.1 British Standard BS5228-1 provides guidance on the calculation and control of noise at construction sites and is widely used on minor and major development sites. Annex E of the Code addresses significance of effects with Example 1 being the “A-B-C” method that produces a table of threshold levels at various times of the day and night.

2.9 Airports NPS Tests

- 2.9.1 This Noise Insulation Policy has been designed so that the DCO will meet the first aim of the Airports NPS 5.68 (and NPSE), which is “*within the context of Government policy on sustainable development: to avoid significant adverse impacts on health and quality of life from noise.*”
- 2.9.2 The Airports NPS refers to the “Noise Mitigation – Noise Control Hierarchy” and this is discussed in more detail in the PEIR associated with this Airport Expansion Consultation. Within the control hierarchy, noise insulation will be relied upon where other higher priority mitigation is not practical or sustainable. To avoid significant adverse noise impacts, the Noise Insulation Policy will prioritise those properties and populations which will be newly exposed to noise levels above the SOAEL, including any properties which will be newly exposed to noise levels above UAEL.
- 2.9.3 The SOAEL values for aircraft noise, as identified in the PEIR, are daytime 63dB LAeq,16hr and night-time 55dB LAeq,8hr or one additional awakening. The daytime UAEL is 71dB LAeq,16hr and the night-time UAEL is 66dB LAeq,8hr. All these values are 92-day summer averages. See Appendix A for a glossary of terms and Appendix B for references to night time aircraft noise and other noise sources.
- 2.9.4 As quoted above, Airports NPS (paragraph 5.245) explicitly reiterates public commitments for noise insulation made by Heathrow which are a key part of the strategy to avoid significant noise impacts for areas newly above the SOAEL.
- 2.9.5 This Noise Insulation Policy will meet or exceed the minimum requirements of the first aim of Airports NPS 5.68 for the following reasons:
- Homes that will be newly exposed above any SOAEL value in the opening year, will have insulation offered (and installed, if accepted) in advance of the new runway opening.
 - As the number of aircraft movements increases after the opening year to a point when the airport’s noise impact is forecast to be highest, homes that will



be newly exposed above the SOAEL values will have insulation offered (and installed, if accepted) in advance of the SOAEL value being exceeded.

- Heathrow will extend the offer of noise insulation to homes that are already exposed to levels above the SOAEL values and will continue to be exposed above the SOAEL values after the new runway opens and as the air traffic to and from the expanded airport increases.
- After opening of the new runway, full insulation (Scheme 1) will be progressively offered to homes out to the Action Level of 60dB $L_{Aeq,16hr}$. As this is lower than the 63dB SOAEL for aircraft, this means more people and properties will be eligible for insulation.
- We have also made a commitment to use a combined contour based on both full, single mode contours, namely the easterly and westerly mode contours. This will produce a noise contour area larger than the area for the actual averaged east-west operations and effectively will treat areas impacted by one mode as if it occurred for the entire year.
- As use of the new runway grows after its 2026 opening, further areas for insulation will be sequenced to treat homes in advance of any air traffic growth and any associated noise forecast to newly exceed SOAEL.

2.9.6 As described in the PEIR, the other two aims of para 5.68 will be addressed by other mitigations, compensations and outcomes.

2.9.7 The second aim to mitigate and minimise adverse impacts on health and quality of life from noise will be addressed by a whole spectrum of noise mitigation measures. These range from promoting the aircraft fleet at Heathrow as the newest and quietest aircraft possible, and operational procedures including runway and airspace alternation to minimise noise levels and maximise predictable respite for communities.

2.9.8 The third aim is to, where possible, contribute to improvements to health and quality of life will be best addressed by our commitment that the expansion programme will achieve fewer people impacted by significant noise than “today” (i.e., 2013, the noise ‘policy baseline’ set by the Airports NPS).



3. OUR NOISE INSULATION SCHEMES

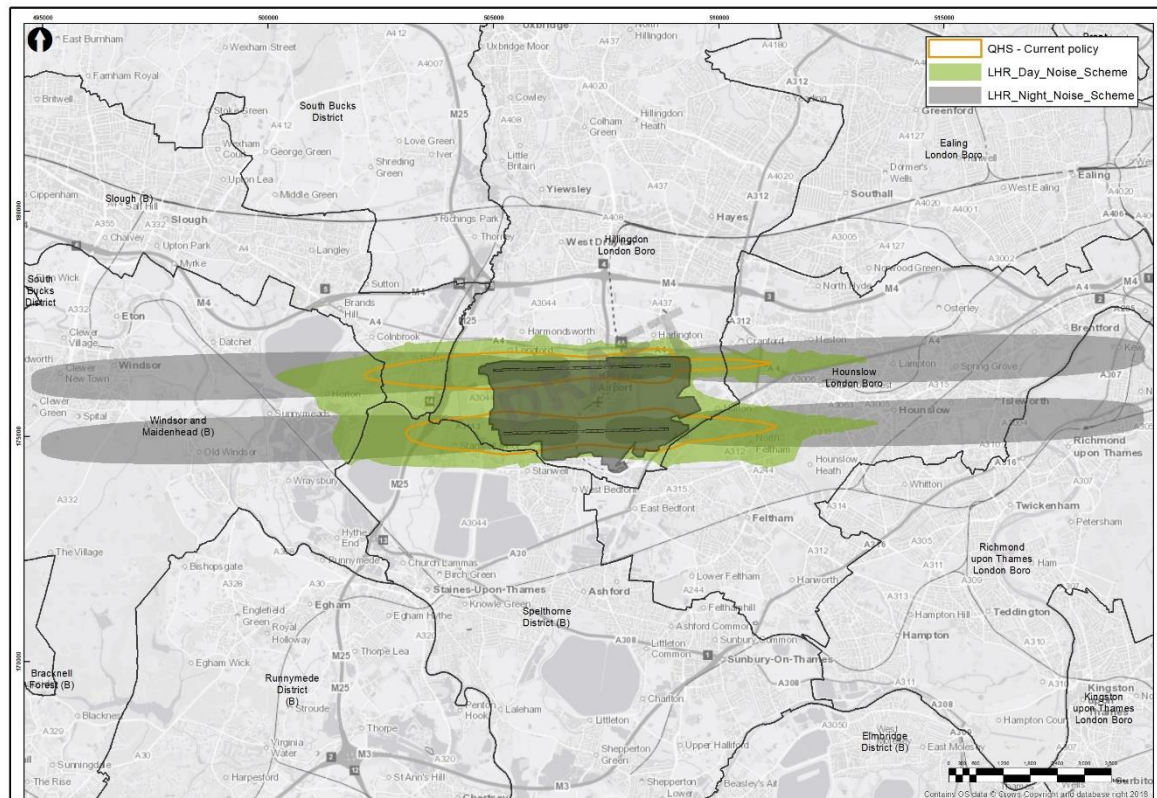
3.1 Existing Noise Insulation Schemes

3.1.1 The new Noise Insulation Schemes associated with the Project will replace the existing noise home insulation schemes including the Quieter Homes Scheme, the Day Scheme and the Night Scheme. The existing scheme boundaries are shown in Figure 3.1 below.

- The Quieter Homes Scheme (QHS) applies to homes based on the 2011 69dB $L_{Aeq,16hr}$ contour. It covers the full cost of carrying out the work which can include loft and ceiling insulation, double-glazing or external door replacements and loft and ceiling over-boarding. (This is practically the same as the new Scheme 1.)
- The (Residential) Day Noise Insulation Scheme (or Day Scheme) is based on the 1994 69dB $L_{Aeq,18hr}$ contour and is designed to protect those homes exposed to the aircraft noise in the day, including in the early morning arrival period before 06:00. These properties are eligible to receive 50% of the cost of replacement windows and external doors, or free secondary-glazing, and free loft insulation and ventilation.
- The Night Noise Insulation Scheme (or Night Scheme) is designed to address the impact of night flights on local residents. The scheme boundary is based on the footprint of the noisiest aircraft regularly operating between 23:30 and 06:00. These properties are eligible to receive 50% of the cost of replacement bedroom or bedsitting room windows, or free secondary-glazing of bedroom or bedsitting room windows, and free loft insulation and ventilation.



Figure 3.1 Boundaries for Existing Noise Insulation Schemes



- 3.1.2 The Community Buildings Noise Insulation Scheme applies to noise-sensitive buildings around Heathrow that are exposed to a medium to high level of noise (within the 2002 63dB LAeq,16hr noise contour). This includes hospitals, schools and colleges, nurseries attached to schools and hospices, nursing homes, registered nurseries, libraries and community halls. The scheme pays for buildings to make noise-insulating modifications such as double-glazing, replacement windows and ventilation. Eligible buildings are those in widespread use within the community, where people spend long periods of time, or where they are vulnerable.
- 3.1.3 Heathrow has two other schemes to assist home owners that are not directly related to noise insulation. The Home Relocation Assistance Scheme which offers financial help to eligible homeowners living in the noisiest areas around Heathrow to move away from the area if they wish. The Vortex Protection Scheme is designed to protect and repair homes around the airport damaged by wind currents from aircraft wing. These are discussed in more detail in Section 6.



3.2 Proposed New Residential Noise Insulation Schemes

- 3.2.1 The Noise Insulation Schemes are designed to ensure a suitable internal acoustic amenity for habitable rooms as summarised in the table below.

Table 3.1 New Residential Noise Insulation Schemes

Scheme	Noise Source	Description
Scheme 1	Aircraft noise	This includes a full package of noise insulation to habitable rooms, including bedrooms, living rooms, and dining rooms. This may include kitchens, toilets, bathrooms, but does not including porches, conservatories, out buildings and rooms solely for leisure activities. Windows may be upgraded to acoustic double glazing or by the addition of secondary glazing or both. External doors to habitable rooms may be upgraded. Ceilings or lofts may be over-boarded with additional lining. Acoustic thermal insulation batts (or equivalent) may be installed above ceilings in lofts. Suitable ventilation may be provided so that windows can be kept closed in warm weather. The scheme will be prioritised in the following order to: - prevent exposure above UAEL due to the Project, - avoid exposure newly above SOAEL due to the project, - avoid exposure above SOAEL due to the project or existing operations, and - deliver Heathrow's wider noise insulation commitments
Scheme 2	Road, rail and construction noise	Existing windows may be upgraded with replacement acoustic double-glazed units with "acoustic ventilation" or by the addition of secondary glazing, and external doors to habitable rooms may be replaced with doors that comply with the requirements of the Noise Insulation Regulations. Works are usually only to the façade (side) of the house that is closest to (or has line of sight of) the road or construction site.
Scheme 3	Aircraft noise	This is a £3000 contribution to a package of noise insulation treatment. For example, an owner might choose to replace certain windows or external doors, or install ventilation.

- 3.2.2 The Noise Insulation Schemes will provide additional noise insulation within properties that are exposed, or likely to be exposed, above the Action Levels set out below in Section 4.2.
- 3.2.3 Insulation aims to improve the internal acoustic amenity of the property in accordance with NPSE and the Airports NPS. The scheme is not intended to improve the noise environment outside of the property or building e.g. gardens.
- 3.2.4 To ensure the schemes are sustainable and will provide lasting benefit for people and properties, Heathrow will provide work packages from agreed suppliers with



suitable quality management procedures and aim to meet or exceed the minimum requirements of Airports NPS as set out above.

- 3.2.5 The schemes will provide “like for like” replacement of existing windows, doors etc, where reasonably practicable. This means that existing PVC windows will be replaced with PVC, aluminium with aluminium, and white with white. Approved contractors may be able to offer upgrades (e.g. timber effect or painted frames) as an extra cost option to the applicant. Cat flaps cannot normally be fitted to acoustic doors and windows but may be moved to doors or walls of non-habitable rooms.
- 3.2.6 The schemes will not be provided to properties that currently meet or exceed the benefit of the eligible package to avoid disruption without benefit, or even degradation, of existing properties.
- 3.2.7 Roofs are not replaced in the Noise Insulation Schemes and due to complications associated with existing roof conditions, it is not practical to replace roof windows or skylights. Generally, roof windows are replaced when a vortex protection roof is installed under the Vortex Protection Scheme. (See Section 6).
- 3.2.8 For practical reasons, ceiling over-boarding is usually undertaken by the home owner or their contractor with guidance provided and costs covered by the Noise Insulation Scheme.

3.3 *Community Buildings Noise Insulation Scheme*

- 3.3.1 The current community buildings scheme will be extended to cover community buildings impacted by expanded activity at Heathrow.
- 3.3.2 Community buildings include schools and colleges, hospitals, hospices and nursing homes, libraries and other public buildings where a large number of people will spend long periods of time or where the use is considered to be noise sensitive.
- 3.3.3 The scheme will identify potentially eligible community buildings within the contour whose owners will be invited to apply. Unsolicited applications will also be considered.
- 3.3.4 As per Airports NPS (5.245), the Action Level for schools will reduce to 60dB $L_{Aeq,16hr}$ (for a future operational scenario) compared to the current scheme based on the 2002 63dB $L_{Aeq,16hr}$.
- 3.3.5 A desktop or drive-by initial assessment may be used to determine if a site inspection is needed. Each eligible community building will receive an assessment to identify a suitable package of measures which will be carried out by an approved installer.



- 3.3.6 The scheme may include the provision of replacement acoustic double glazing or secondary glazing, external doors and ventilation. Eligible schools will also be invited to apply for grants for adobe buildings which provide outdoor noise-reducing shelter.
- 3.3.7 Insulation will only be offered if the building is not already insulated to an equivalent level to that of our scheme.

3.4 *Impact on Existing Schemes*

- 3.4.1 All residents entitled to claim for the existing schemes will be notified of the scheme closure with a period of at least 12 months during which claims may be lodged before closure.
- 3.4.2 The Quieter Homes Scheme (QHS) will be expanded to reflect any changes in Government policy before DCO is granted. If the DCO is granted and there is a decision to proceed with construction, then Scheme 1 will replace QHS. The Action Level for Scheme 1 will be lower than the existing QHS, so there will be expanded eligibility. This means homes eligible for the current QHS will be eligible for Scheme 1.
- 3.4.3 The Day and Night Schemes will be closed down if the DCO is granted and there is a decision to proceed with construction. Property owners in the areas of the schemes will be notified prior to the scheme closure and will also be advised if they are likely to be eligible for the new schemes. They will have the option to apply for the existing scheme before closure or apply for the new schemes when they open. Some areas of both schemes will become eligible for Scheme 1 which is a more complete treatment of the house but may not be delivered until after opening of the new runway. In some areas currently in the Night Scheme, furthest from the airport, night-time noise levels have decreased, and some homes may become eligible for Scheme 3 after the opening of the new runway.
- 3.4.4 The Community Buildings Noise Insulation Scheme (CBNIS) will be extended and no currently eligible building will lose eligibility.
- 3.4.5 The Home Relocation Assistance Scheme and the Vortex Protection Scheme will be refreshed to take the Project into account. See Section 6 of this document.



4. DEFINING ACTION LEVELS

4.1 Outline

- 4.1.1 Action Levels are the noise levels which can trigger the actions in the Noise Insulation Schemes. They are the threshold levels of eligibility for the Project's different schemes and noise sources. The Action Levels will be presented geographically as "contour lines" identifying the boundary of land where the Action Levels are exceeded.
- 4.1.2 In addition to aircraft noise, the Project will generate construction noise and noise from new or altered roads and railways that may cause potential adverse effects on communities. The Noise Insulation Schemes for each source vary and are described in more detail in Section 3.2.

4.2 Action Levels

- 4.2.1 The Action Levels for air, road, rail and construction noise, are provided below, based on metrics described in more detail in Appendix B and the PEIR.

Table 4.1: Action Levels for Aircraft, Road, Rail and Construction Noise

Noise Source	Action Level	Noise Insulation Scheme	Requirement Reference
Aircraft Noise	Unacceptable Adverse Effect Level (UAEL) Day time: 71dB $L_{Aeq,16hr}$ Night time: 66dB $L_{Aeq,8hr}$	Scheme 1 (with bespoke insulation package)	PEIR
	Initially, SOAEL values of 63dB $L_{Aeq,16hr}$ day, 55dB $L_{Aeq,8hr}$ night and one additional awakening per night (92-day summer averages). Then the full single mode easterly and westerly 60dB $L_{Aeq,16hr}$ noise contour of an expanded airport	Scheme 1	PEIR/ Airports NPS
	The full single mode easterly and westerly 57dB $L_{Aeq,16hr}$ or the full 55dB L_{den} noise contours of an expanded airport, whichever is the bigger	Scheme 3	Airports NPS
Road Noise	Day time: 63dB $L_{Aeq,16hr}$ Night time: 55dB $L_{Aeq,8hr}$ (and a change of at least 1dB from before expansion)	Scheme 2	PEIR
Rail Noise	Day time: 65dB $L_{Aeq,16hr}$ Night time: 55dB $L_{Aeq,8hr}$ >20 passbys per night: 80dB L_{Amax} <20 passbys per night: 85dB L_{Amax}	Scheme 2	PEIR



Noise Source	Action Level	Noise Insulation Scheme	Requirement Reference
	(and a change of at least 1dB from before expansion)		
Construction Noise	Refer to section 11 of the Draft Code of Construction Practice or Appendix B of this policy.	Scheme 2	CoCP and BS5228

4.3 Combined noise sources

- 4.3.1 The cumulative effect of different noise sources on health and quality of life is difficult to evaluate, especially where different noise metrics are used.
- 4.3.2 As a starting point, the noise level for each source (aircraft, road, rail, or construction) will be assessed separately using the relevant Action Level. Where a resident is affected by more than one noise source (for example construction noise and aircraft noise) a cumulative assessment will be undertaken that, as appropriate, will take account of when insulation may be triggered for the different sources and combined effects. Details of the assessment methodology will be defined in the Environmental Statement supporting the DCO application and this document will be updated.
- 4.3.3 Noise from natural sources, such as wind and rain, is not included in the NPSE definition of environmental noise. Furthermore, other noise sources that are not associated with the airport activity such as existing roads and railways are also excluded from this Noise Insulation Policy. When assessing a house site for noise insulation, any noise measurements or calculations will be undertaken or adjusted to exclude noise sources that are not caused by airport operations or expansion.



5. DELIVERY

5.1 Phasing and Transition from existing schemes

- 5.1.1 The new noise insulation schemes will replace the existing noise insulation schemes as described above. The stages of the Noise Insulation Policy are shown below in Table 5.1 below.
- 5.1.2 We will also consider options to assess the effectiveness of the new Noise Insulation Schemes, and to demonstrate our ability to deliver our schemes for subsequent stages.
- 5.1.3 The staged roll out of programmes may overlap and will ensure all properties likely to be significantly exposed to adverse noise effects will be offered noise insulation before the source of the noise effect is introduced. This staging will also help to avoid long waiting times between applications and fit outs.

Table 5.1 – The Staged Roll-out of Noise Insulation Schemes.

Stage	Period	Homes for Noise Insulation	Scheme
Stage 1	From late 2019 (subject to CAA approval) until DCO application is granted	Homes that are exposed to the highest noise with existing operations, in line with latest Government policy, and this includes homes that would also be exposed to the highest noise with the Project. Also homes potentially exposed to early construction noise as well as existing high aircraft noise. Homes will also be selected in this stage to develop and test our systems and suppliers. (Figure 5.1)	Scheme 1
Stage 2	Between DCO application granted and start of major construction phases	Homes identified as potentially impacted by construction noise, but outside forecast aircraft noise impacted areas. (Figure 5.2 shows the indicative construction noise study areas.)	Scheme 2
Stage 3	Between DCO application granted and new runway opening	Homes forecast to be newly exposed to high, or very high, noise levels from aircraft or the new or altered roads or rail, in stages as the Project progresses.	Scheme 1 and Scheme 2
Stage 4	New Runway opening onwards	Insulation provided in advance for homes forecast to exceed SOAEL for aircraft (i.e. 63dB L _{Aeq,16hr} day and 55dB L _{Aeq,8hr} night) as traffic using the expanded airport grows to a point where the airport's noise impact is forecast to be highest (the peak year as defined in the Environmental Statement). There will also be progressive roll-out of offers to homes at aircraft noise levels from SOAEL down to the 60dB Action Level as airport movements grow.	Scheme 1



Stage	Period	Homes for Noise Insulation	Scheme
		Figure 5.3 has the current estimate of the predicted noise contour for 2027, but revised noise contour forecasts will be published every 5 years. (This is referred to as the Inner Area in the PEIR. We expect this stage to be completed by 2040).	
Stage 5	New Runway opening onwards	There will be progressive roll-out of offers to homes at noise levels down to the 57dB $L_{Aeq,16hr}$ and 55dB L_{den} Action Levels as airport movements grow. Revised noise contour forecasts will be published every 5 years. (This is referred to as the Outer Area in the PEIR.)	Scheme 3

5.2 Identification of eligible buildings

- 5.2.1 At each stage, the relevant existing or predicted noise contour will be used to identify the properties that may be eligible for the Noise Insulation Schemes. Noise contours will be calculated based on expected air, road, rail and construction traffic movements and the modelling of construction plant noise.
- 5.2.2 For this consultation, preliminary noise contours are available below and in Chapter 17 of the PEIR. The aircraft noise contours have been developed based on indicative flight paths. These contours are presented to provide an indication of the scope of the Noise Insulation Schemes.
- 5.2.3 For the DCO application in 2020, updated noise contours will be provided in the Environmental Statement.
- 5.2.4 The predicted aircraft noise contours will also be updated as part of the statutory airspace flight path options consultation for an expanded Heathrow, currently planned for 2022, and further again in 2023 when the final flights paths are defined.
- 5.2.5 This will mean that the aircraft noise contours are expected to evolve and be updated as the Expansion scheme design and airspace change process continues to evolve and develop. This may result in some changes to the predicted future contours so that some homes indicated as being within a certain noise contour may later fall outside that contour and vice versa. The aim at each stage will be to reduce the noise impact, in line with the Airports NPS and the ICAO “balanced approach”, which would also reduce or change the homes within the contours, as far as reasonably practicable.
- 5.2.6 Subsequently, the current noise contours will be published every year (for the previous year), and projected noise contours will be updated every 5 years in conjunction with developments of the Noise Envelope.



- 5.2.7 This will mean that future eligibility for noise insulation schemes will be continually reviewed and residents will be informed if they are likely to be eligible within 5 years. Where a 5-year review identifies that a contour may reduce and properties may not be eligible in future, the scheme will remain open for at least 12 months after the property ceases to be within a relevant contour.
- 5.2.8 In densely developed areas such as those with terraced homes, there are likely to be adjacent properties exposed to similar noise levels with one property inside the contour whilst its neighbour outside. For this policy any residential property with any part of its curtilage within the contour will be assessed to be within the contour.

Figure 5.1 – Stage 1 – Prior to DCO Grant

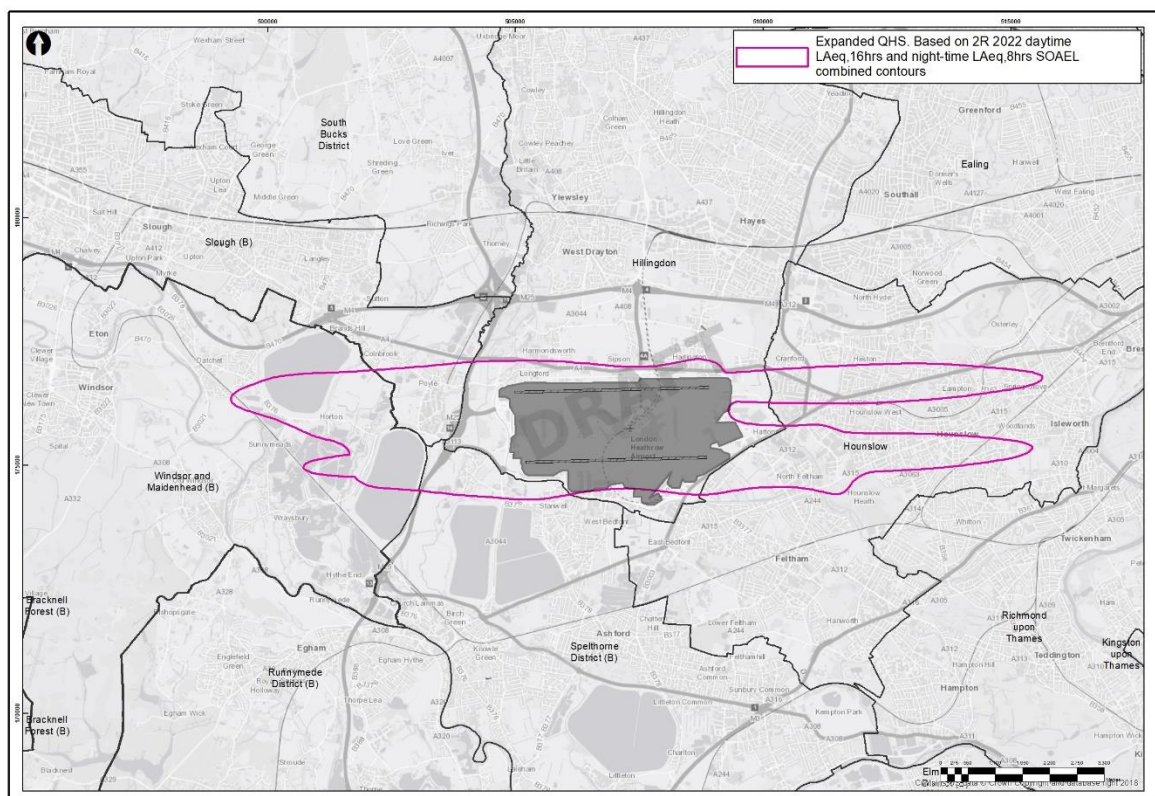


Figure 5.2 – Stage 2 – Indicative Construction Noise Study Area

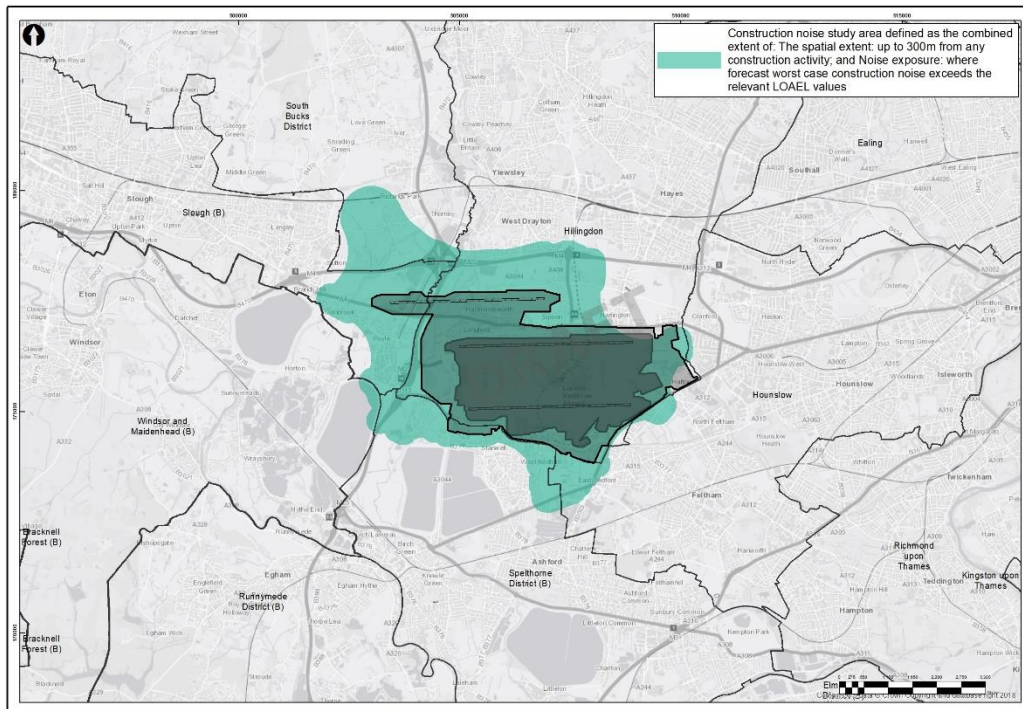
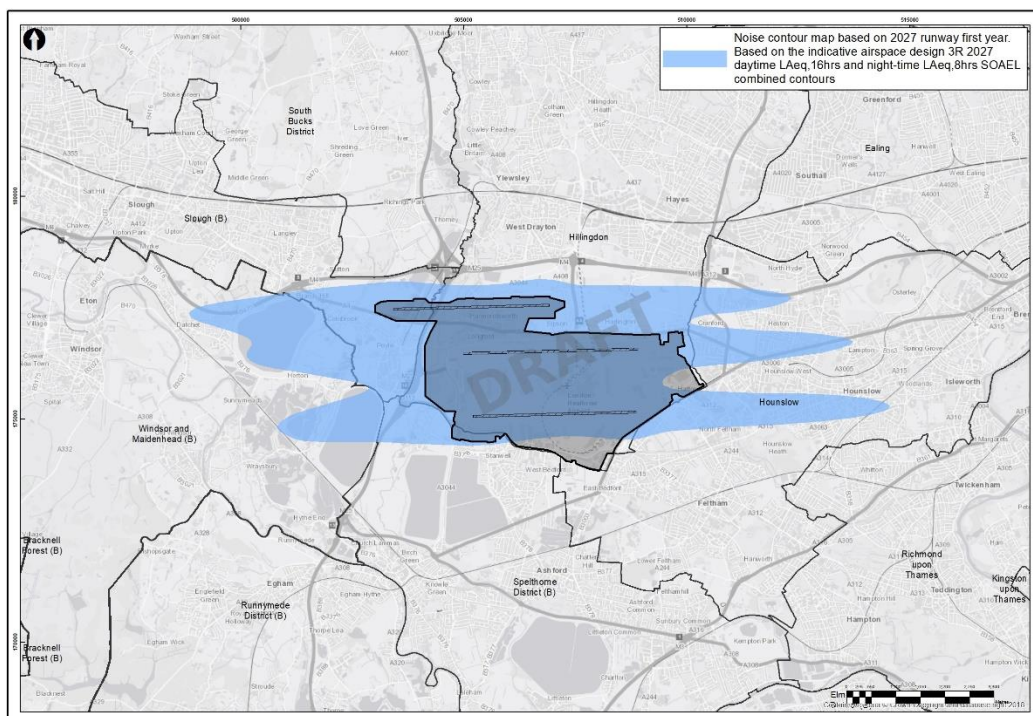


Figure 5.3 – Stage 3 – Indicative Noise contour map based on 2027 runway opening year

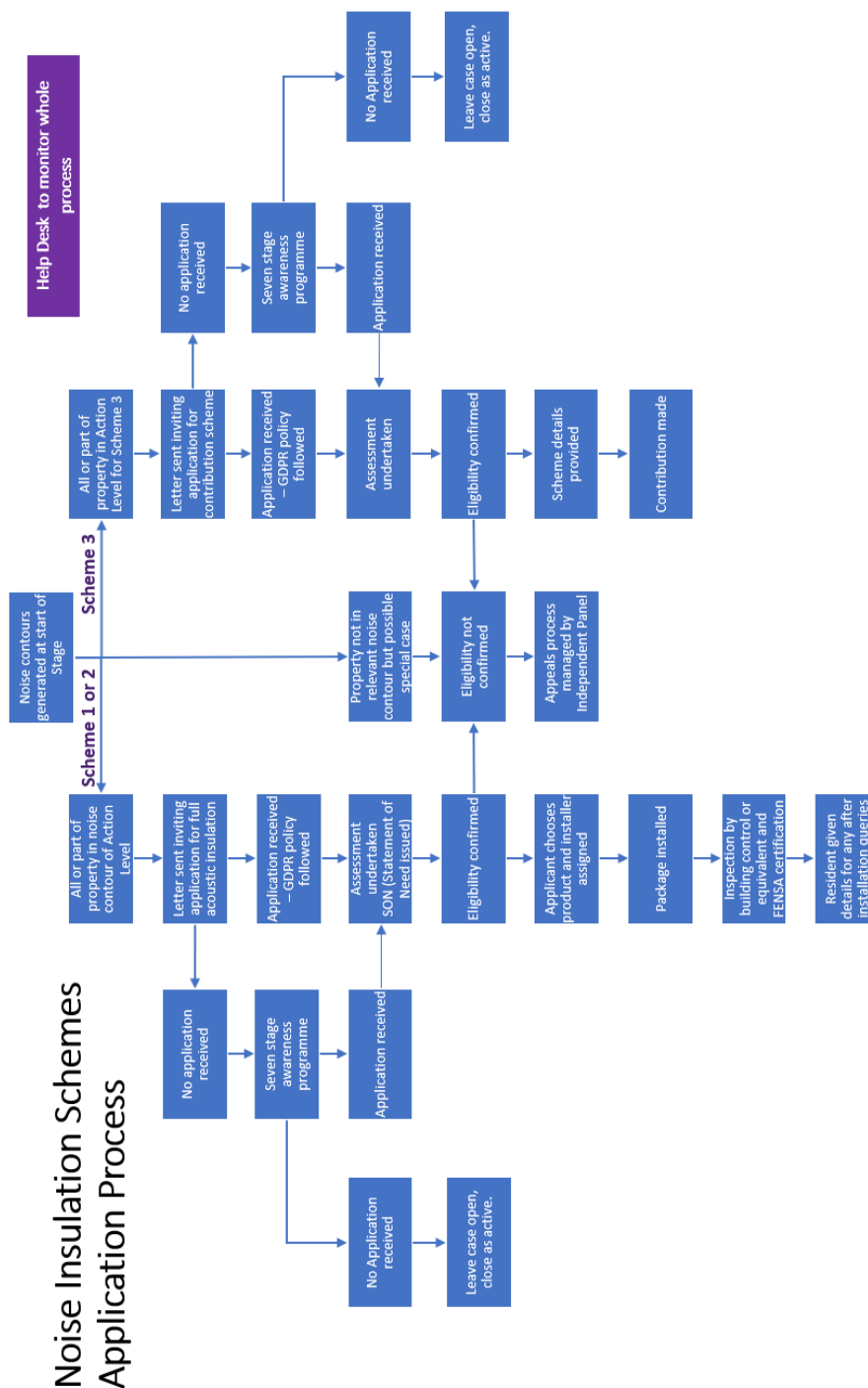




5.3 Application Process

5.3.1 The process for delivering the Noise Insulation Schemes is summarised in a flow chart in Figure 5.4.

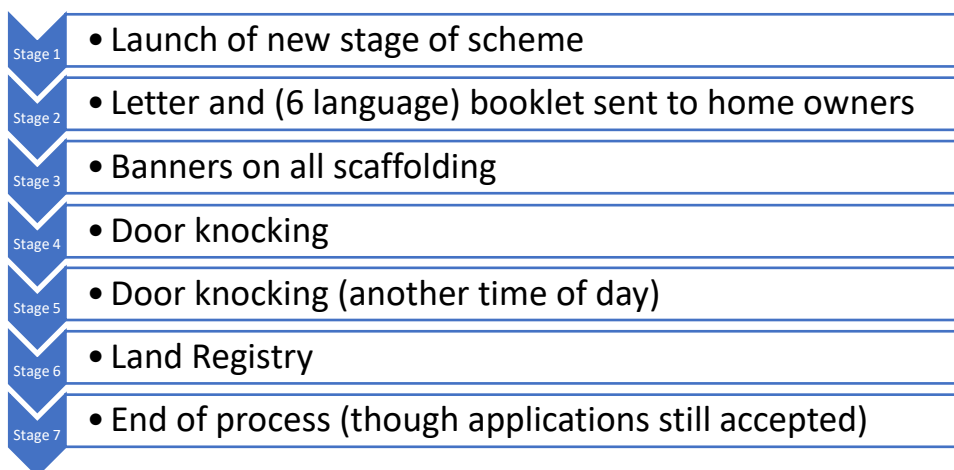
Figure 5.4 – Application Process Flow Chart





- 5.3.2 At each stage, or at intervals within a stage, the owners of properties identified as within the relevant noise contour will be contacted by post and advised that they are eligible to apply for the scheme.
- 5.3.3 Where a property is rented, the tenant must obtain the permission of the property owner to apply for the scheme. This is for legal reasons.
- 5.3.4 Although Heathrow will seek to identify all eligible people and invite them to apply, a helpdesk will be available for people to check if they are eligible to apply.
- 5.3.5 The invitation to property owners will be supported by a seven-stage programme that is designed to promote awareness of the scheme and encourage applications. The seven-stages are outlined in a flow chart in Figure 5.5 and Appendix C.
- 5.3.6 If the homeowner does not respond during this seven-stage process, the application will be marked as dormant unless the property is within the UAEL contour. The homeowner may apply at a later date (if still eligible) but we cannot then guarantee that the insulation will be installed before the noisy activity starts.

Figure 5.5 Seven-stage awareness programme



- 5.3.7 Once an application has been received and a property owner has registered for the scheme, an assessment of the property will be carried out by the Assessor, a third-party organisation appointed by Heathrow. An initial desktop or drive-by assessment may be used to identify if a detailed inspection is required.
- 5.3.8 The initial assessment will address the following questions:
- Is the applicant entitled to apply for the property (the homeowner or appointed agent)?
 - Is the property within a relevant noise contour?
 - What is the relevant scheme and is there a priority for delivery?



- Has the property benefited from a previous scheme? What is the condition of the property?
- What works or options would be offered under the relevant scheme?
- Are any consents required for the works?
- Are there any special considerations?

- 5.3.9 Once the Assessor confirms eligibility, the property owner will be provided with scheme details and a list of approved installers or processes to enable work to take place. For Scheme 1 this will normally be summarised in a Statement of Need (SON) based on the house construction external noise levels, and priority.
- 5.3.10 Records will be made of all properties contacted as eligible, persons making applications under the scheme, the outcome of the assessment, and the satisfactory completion of the package, if provided.
- 5.3.11 Heathrow will seek to provide information to home owners, house purchasers or their agents and tenants, on request, concerning the eligibility of properties for noise insulation schemes, subject to data protection and confidentiality requirements. It is for this reason the database of information is managed by an address rather than the owner's or resident's name.
- 5.3.12 Properties eligible for the Scheme 3 contribution to noise insulation will be required to use a supplier approved by Heathrow to ensure suitable quality management.
- 5.3.13 After the completion of works, auditing will be conducted to demonstrate compliance. This will include performance inspection or tests of a sample range of properties.
- 5.3.14 A dedicated support team will be provided to assist applicants throughout the process, including people needing special assistance, and to investigate any complaints during and after completion. Applicants will also be able to appeal to the Independent Panel. (See Section 5.4.)
- 5.3.15 Reasonable time needs to be allowed for applicants to be identified, for applicants to consider and apply for the scheme, to receive applications and determine eligibility, and to carry out the works. Therefore, the Noise Insulation Schemes will open in advance of the relevant expected noise change. It is also possible that applicants may defer, perhaps hoping that they will find the noise acceptable and avoid the disruption of the works. The schemes will therefore remain open for at least a year after the relevant expected noise change occurs.
- 5.3.16 Where consents are required for the installations proposed by the Noise Insulation Schemes, for example, planning, listed building or conservation area consents, and building control, the appointed contractor and the Heathrow support team will



assist the applicant in obtaining the necessary consents¹. It is normally the responsibility of the homeowner to obtain these consents, but in some circumstances support with consent applications could be provided.

5.4 Appeals and Exceptions

Applications from non-eligible properties

- 5.4.1 Although Heathrow will seek to identify all eligible home owners and invite them to apply, a help desk will support other people who wish to check eligibility to apply. These may be people who are not in the current stage, or who are outside the contours, or who have a special case for consideration.

Appeals

- 5.4.2 An independent appeal process will be available to applicants who do not accept an eligibility or Statement of Need (SON) decision. After the initial response by the Assessor, an appeal may be made to an Independent Panel who will carry out an initial review, consider if further action is appropriate and advise the complainant of their decision.
- 5.4.3 Heathrow will set up and fund the Independent Panel in consultation with other community and local authority stakeholders, modelled on that set up for the Thames Tideway project.

Exceptions

- 5.4.4 The policy and schemes described above meet or exceed the minimum requirements of the Airports NPS and NPSE, and provide sustainable and practical schemes for the majority of people and properties. However, there may be exceptional cases where a bespoke alternative performance standard to meet the requirements could be considered. Examples may be:
- a person with a specific health or disability issue associated with noise,
 - a property which is not suitable for the standard schemes, such as some listed or historic buildings,
 - a property exposed to very high noise levels above the UAEL of 71/66dB $L_{Aeq,16/8hr}$ for aircraft noise.
- 5.4.5 Bespoke assessments and schemes are inherently costly and can be disproportionate in the effort and funds required for assessment and design compared to delivery and therefore may not be considered practicable or

¹ Normally the property owner or resident will apply for the consent and retain the benefit of any permissions granted.



sustainable but can be appropriate in exceptional circumstances. The Independent Panel would review cases where bespoke assessments may be justified and recommend the most appropriate treatment options. Where substantial works are required, temporary relocation may be offered on a similar basis to that offered for construction noise.

- 5.4.6 For the very few properties that will be newly exposed above the UAEL, where an application is not received or an offer accepted, we may need to obtain compulsory rights to provide bespoke treatments to prevent exposure above UAEL. Such treatments may also need to include temporary rehousing to allow the work to be done to those homes. This will be addressed in the DCO application.



6. **OTHER SCHEMES BEYOND THE NOISE INSULATION POLICY**

In addition to the noise insulation schemes in this draft Noise Insulation Policy, Heathrow has two other existing noise and vortex related schemes that will be refreshed. These are the Home Relocation Assistance Scheme which offers financial help to eligible homeowners living in the noisiest areas around Heathrow to move away from the area if they wish; and the Vortex Protection Scheme which is designed to protect and repair homes from around the airport damaged by wind currents from aircraft wings.

Heathrow will also introduce a Temporary Rehousing Scheme for those most impacted by short term construction noise. These schemes are summarised in this section for reference.

6.1 ***Proposed Temporary Home Relocation Scheme***

- 6.1.1 This section sets out a draft proposal for a Temporary Home Relocation Scheme for those most impacted by short term construction noise.
- 6.1.2 Where, after applying best practical means mitigation, construction noise at any residential receptor is predicted to exceed the construction noise insulation Action Levels for a temporary period, Heathrow would offer an option of temporary re-housing for the duration of the works. The Action Level will be based on the UAEL for construction noise of around 75 to 85dB $L_{Aeq,T}$, as detailed in Appendix B.
- 6.1.3 Heathrow will contact the owners or occupiers of properties affected before the works are due to start to allow residents to find alternative property and move before the noisy works begin. Temporary re-housing could be a similar rental property or a hotel.
- 6.1.4 Heathrow will provide a help desk and work with local property agents to identify suitable temporary accommodation and support applicants who choose to find their own temporary housing. Applications will be assessed for:
- Property location and eligibility
 - Ownership/occupancy
 - Accommodation requirements including any special needs or adaptations
- 6.1.5 Eligible applicants will receive a Statement of Need (SON) setting out what range of temporary accommodation will be provided within the scheme, details of local letting agents, removal and storage companies, and the Heathrow helpdesk support.



- 6.1.6 Subject to eligibility, Heathrow would pay the reasonable costs of:
- Equivalent temporary accommodation based on reasonable market rates,
 - Packing and removal costs, and storage of personal goods if required
 - Kennel/cattery or equivalent housing for pets,
 - Works to secure the vacated property when empty, including disconnection and re-connection of services, and
 - Additional insurance for temporary accommodation and vacated property.
- 6.1.7 Applicants will be able to make their own arrangements, but payments will be audited and claimants must receive approval from Heathrow of the supplier and of the costs before using suppliers not previously audited by the scheme.
- 6.1.8 Heathrow will usually seek to support temporary accommodation as close as practical to the vacated property, but sufficiently distant to avoid significant noise impacts. Where temporary accommodation is a significant distance from the permanent location, assistance with travel costs (e.g. workplace or school) may be provided.

6.2 *Home Relocation Assistance Scheme (HRAS)*

- 6.2.1 Since 2002, Heathrow has offered the Home Relocation Assistance Scheme to offer financial help to eligible homeowners living in the noisiest areas around Heathrow to move away from the area if they wish. It was developed in consultation with local residents, businesses, campaign groups and local authorities. People who meet the criteria can get financial assistance with the costs of moving.
- 6.2.2 This current HRAS scheme applies to residential properties around Heathrow that are exposed to a high level of noise defined for this scheme as lying within the 2002 69dB LAeq,16hr noise contour.
- 6.2.3 The criteria for eligibility including the following:
- The applicant must own the property when applying. (If the applicant lives elsewhere, it must be the only property in the UK that is owned by the applicant.)
 - The applicant must be planning to move to a quieter area outside the boundaries of the scheme.
 - The applicant must not retain a beneficial interest in, or right of occupation to, the property after moving.

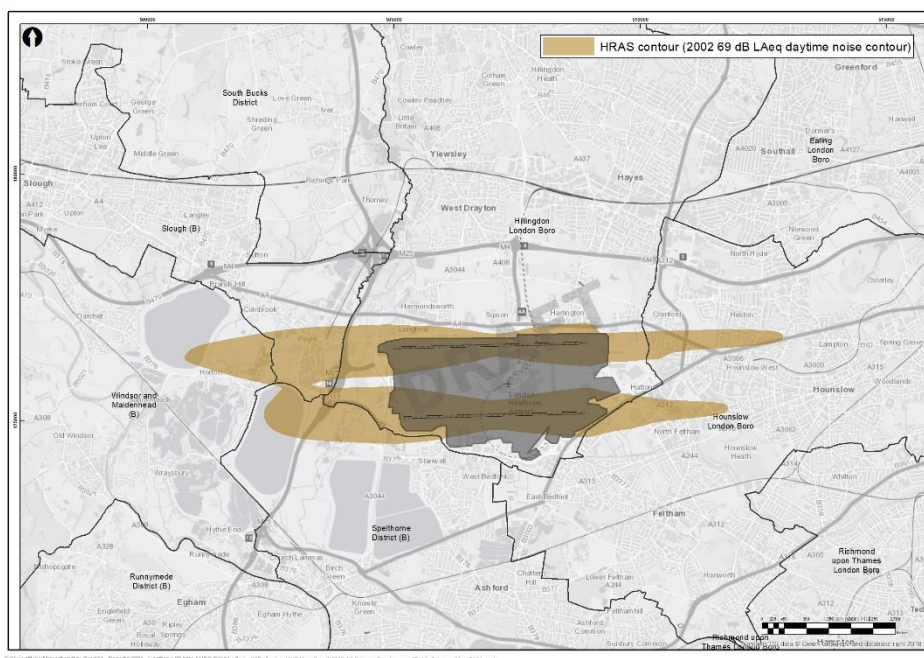


- Residents must have owned or be living in the property prior to February 2005.
- Long-term tenants (with at least three years remaining on their lease) may also be eligible for assistance if the property they are renting is being sold. However, short-term tenants are not eligible for the scheme.

6.2.4 Homeowners receive a lump sum of £5,000, plus 1.5% of the sale price of the property (up to a maximum of £12,500). There is only one payment per property. No other assistance is provided and the property is no longer eligible for a Noise Insulation Scheme². The property is sold in the open market by the owner.

6.2.5 More information on this current scheme and its eligibility criteria are provided by a Noise Helpdesk (0800 344844) or email communityschemes@heathrow.com

Figure 6.1 – Boundary for Existing HRAS



6.2.6 Heathrow is taking the opportunity to enhance the Home Relocation Assistance Scheme. The eligibility criteria will remain the same.

6.2.7 The compensation values are under review. Under the refreshed HRAS, eligible homeowners would receive the same lump sum of £5,000 and an additional 5% of the sale price of the property, up to a new higher maximum cap. There is only one payment per property.

² Under the “agent of change” and “caveat emptor” principles, the open market buyer of a property should consider any noise insulation requirements within their purchase price offer. For houses purchased by Heathrow, any noise insulation scheme would normally be provided before the property is returned to the market.



- 6.2.8 HRAS will apply to the areas to east, west and possibly south of the existing two runways based on the $L_{Aeq,16hr}$ 69dB noise contour. (See below for discussion of the year of the applicable contour.)
- 6.2.9 As with the Noise Insulation Schemes, HRAS eligibility will require that some part of a property lies within the relevant, calculated noise contour.
- 6.2.10 More information about a refreshed HRAS will be available later this year. Eligibility for HRAS will continue to be based on the 69dB $L_{Aeq,16hr}$ contour from 2002. It can be noted that since 2002, the annual noise contour at Heathrow has continually decreased in size, which means that some houses that qualified for HRAS in the past, now lie outside the current 69dB contour.
- 6.2.11 In 2021, if the DCO is granted and there is a decision to proceed with construction, HRAS will be based on the 69dB $L_{Aeq,16hr}$ contour for 2020 (because the 2021 contour will not be available). With expansion, however, there may be years when the noise contour could be different to the previous year. Therefore, the intention is that HRAS will be based on the noise contour for 2020 or the projected contours for 2025, whichever is larger. Subsequently, from 2026, HRAS will be based on noise contour for 2025 and the projected contours for 2030, whichever is larger.
- 6.2.12 In this manner, a homeowner will be able to make a decision on selling and claiming the HRAS scheme, based on the highest noise levels expected for five years.
- 6.2.13 If with the publication of a new HRAS contour, a property newly falls outside, previous eligibility for the scheme will be considered for 12 months.

6.3 Vortex Protection Scheme

Existing Vortex Protection Scheme

- 6.3.1 A vortex is a circulating current of air generated by the wings of an aircraft. It can sometimes strike and damage the roofs of houses located under a flight path. Pitched roofs with loose-laid tiles are prone to vortex damage. For many years, Heathrow has had a Vortex Protection Scheme to both repair and protect homes around the airport.

Damage Repair

- 6.3.2 If a home has been damaged by a vortex strike, Heathrow operates a 24-hour emergency service and will repair it. Although legal liability for vortex damage rests with the airlines, Heathrow voluntarily funds this scheme as part of its commitment to its local communities.



- 6.3.3 Every house, school, church or hospital affected by a vortex strike is eligible for the Vortex Protection Scheme. This includes home situated above commercial properties. However, the scheme does not cover damage to other property, such as cars, from roof tiles dislodged by a vortex.
- 6.3.4 An assessor will inspect a roof reported as damaged. The damage caused by vortex strikes is very specific and the assessor will quickly be able to confirm whether one has occurred. Once approved, remedial repairs to the roof are carried out at no cost to the home owner.

Vortex Protection

- 6.3.5 If a roof is repaired under the Vortex Protection Scheme, the property is eligible for permanent protection. This involves strengthening the roof by fixing down tiles with metal clips that have passed stringent wind tunnel tests – this has proven to be the most effective way to protect roofs from vortex damage. This work will be completed as soon as possible and free of charge.
- 6.3.6 Because the majority of vortex strikes are concentrated in small areas near the end of runways, Heathrow offers blanket vortex protection for homes in these high-risk areas. This currently includes streets where 50% of the homes on a given road have been struck, where all of the homes are invited to register under a blanket scheme.
- 6.3.7 To date, no further vortex damage has been recorded at any home that has had its roof strengthened under the Vortex Protection Scheme.

6.4 Expanded Vortex Protection Scheme

- 6.4.1 For the Project, a new blanket area based on the new runway layout has been defined that identifies homes where vortex damage may occur. After granting of the DCO and a decision to proceed, Heathrow will undertake vortex protection of all of the roofs in the defined area that are eligible within a blanket roll out.
- 6.4.2 After opening of the new runway expected in 2026, the Vortex Protection Scheme will continue as it does today. We will respond to reports of vortex damage, and areas with many confirmed reports of damage will be considered for blanket protective treatments.



APPENDIX A: GLOSSARY

Term	Definition
Airports NPS (or ANPS)	Airports Noise Policy Statement (2018)
APF	Airports Policy Framework
BS 5228	British Standard 5228 (2014): Code of practice for noise and vibration control on construction and open sites Part 1: Noise.
BS8233	British Standard 8233 (2014): Guidance on sound insulation and noise reduction for buildings
CAA	Civil Aviation Authority
CoCP	The Draft Code of Construction Practice included in the current consultation documents.
CRTN	Calculation of Road Traffic Noise – a guidance document for road noise referred to in the Noise Insulation Regulations
CRN	Calculation of Railway Noise – a guidance document for rail noise referred to in the Noise Insulation Regulations
dB (or dBA)	Decibel (usually A-weighted to approximate the response of the human ear.) is used to measure noise level on logarithmic scale (relative to a standard reference.)
DCO	Development Consent Order
DfT	Department for Transport
Double glazing	This is a window pane with two sheets of glass giving better noise insulation (and thermal insulation) performance than a pane of single glazing. The double glass units are factory sealed and installation will usually require the removal of the existing windows and frames. Acoustic double glazing, for example using laminated glass, can provide better noise reduction than standard thermal double glazing.
ENG	Environmental Noise Guidelines for the European Region (2018)
GCN	Guidelines for Community Noise (WHO 1999)
The Project	Heathrow Expansion Programme
HRAS	Home Relocation Assistance Scheme
ICCAN	Independent Commission on Civil Aviation Noise
L_{A10} or L_{10}	The noise level exceeded for 10% of a measurement period. This is traditionally used to measure road traffic noise.
$L_{Aeq,16hr}$	The noise level averaged over the 16-hour day period (07:00-23:00) and over the 92-day summer period. This day time aircraft noise metric has been used in the UK since the 1980's.
$L_{Aeq,8hr}$	The noise level averaged over the 8-hour night period (23:00-07:00) and over the 92-day summer period. This night time aircraft noise metric has been used in the UK since the 1980's.
$L_{Aeq,T}$ or $L_{eq,T}$	The energy equivalent noise level over a specified period, T, and A-weighted to approximate the response of the human ear.
L_{den}	The annual average energy equivalent noise level, A weighted to approximate the frequency response of the human ear and time weighted for day, evening and night time periods. This annual aircraft noise metric was adopted as the standard noise metric in the EU in 2002.



L _{Amax} or L _{max}	The maximum noise level occurring during a measurement period, A weighted to approximate the frequency response of the human ear.
L _{night}	The A-weighted noise level averaged over the 8-hour night period (23:00-07:00) and over the calendar year.
LOAEL	Lowest Observable Adverse Effect Level
NNG	Night Noise Guidelines (WHO 2009)
Noise Insulation Policy	The policy set out in this document to address the Airports NPS requirements for the Heathrow Expansion Programme, The Project.
Noise Insulation Regulations	Noise Insulation Regulations (1974) as amended by Noise Insulation Regulations (Amended) 1988 and The Noise Insulation (Railways and Other Guided Transport Systems) Regulations 1996
Noise Insulation Schemes	The 3 schemes or levels of acoustic treatment for aircraft, road, rail and construction noise set out in this Policy.
Noise Insulation Strategy	Heathrow's wider and long-term approach to the insulation of homes and community buildings for existing activities, airspace changes and the Expansion Project.
NPPF	National Planning Policy Framework (2019)
NPSE	Noise Policy Statement for England
PPG or PPGN	Planning Practice Guidance-Noise (2014)
The Project	The Heathrow Expansion Programme
Secondary glazing	This is an upgrade of the acoustic performance of an existing window, by the installation an addition glazing pane in its own frame on the existing sill of the window.
SOAEL	Significant Observable Adverse Effect Level
SON	Statement of Need
UAEL	Unacceptable Adverse Effect Level
WHO	World Health Organisation



APPENDIX B: NOISE METRICS AND ACTION LEVELS

Aircraft Noise [92-day summer average levels unless noted otherwise]				
Level	Daytime dB L _{Aeq,16 hr}	Night time dB L _{Aeq,8 hr}	Event dB L _{Amax}	Policy Source
<i>“approximate onset of significant community annoyance”</i>	54			APF (2013) as amended by Consultation Response on UK Airspace Policy (2017)
LOAEL	51	45		Air Navigation Guidance (2017) and PEIR
Financial assistance toward insulating homes and schools	63			Consultation Response on UK Airspace Policy (2017)
SOAEL	63	55	One additional awakening per person, per night	PEIR
Proposed new expectation for financial assistance toward insulating homes and schools	60			Draft Aviation Strategy 2018
UAEL	71	66		PEIR
Action Level for Scheme 1	The full single mode easterly and westerly 60dB L _{Aeq,16hr} noise contour of an expanded airport		One additional awakening per night	
Action Levels for Scheme 3	The full single mode easterly and westerly 57dB L _{Aeq,16hr} or the full 55dB L _{den} noise contours of an expanded airport, whichever is the bigger		One Additional awakening per night	Airports NPS (5.245)
Proposed Govt new expectation for financial assistance toward insulating homes	An increase of 3dB compared to before expansion which leaves a household in the 54dB L _{Aeq,16hr} contour			Draft Aviation Strategy 2018



Road Noise				
Level	Daytime L _{Aeq,16 hr}	Night time L _{Aeq,8 hr}	Event	Source
LOAEL	50	40		PEIR
SOAEL	63	55		PEIR
UAEL	71	66		PEIR
Action Levels for Scheme 2	63/55dB L _{Aeq 16/8 hr} (and a change of at least 1dB from before expansion)			PEIR and Noise Insulation Regulations
Rail Noise				
Level	Daytime L _{Aeq,16 hr}	Night time L _{Aeq,8 hr}	Event L _{Amax}	Source
LOAEL	50	40	60	PEIR
SOAEL	65	55	80 (>20 events) or 85 (<20 events)	PEIR
UAEL	71	66		PEIR
Action Levels for Scheme 2	65/55dB L _{Aeq 16/8 hr} (and a change of at least 1dB from before expansion)			PEIR and Noise Insulation Regulations
Construction Noise				
In line with Section 11 of the draft CoCP, to be eligible the dwelling must be one in which the predicted or actual noise exceeds any of the relevant thresholds in CoCP Table 11.1 for:				
- A period of 10 or more days of working in any 15 consecutive days during construction, or - A total of 40 days or more in any 6 consecutive months during construction				
The noise thresholds for both construction and noise insulation are set out in the Table below:				
Day	Time (hours)	Averaging Period, T	Noise Insulation Action Level L _{Aeq,T} (dB)*	Construction Temporary Rehousing Action Level L _{Aeq,T} (dB) *
Monday to Friday	0700 – 0800	1 hour	70	80
	0800 – 1800	10 hours	75	85
	1800 – 1900	1 hour	70	80
	1900 – 2200	1 hour	65	75
Saturday	0700 – 0800	1 hour	70	80
	0800 – 1300	5 hours	75	85
	1300 – 1400	1 hour	70	80
	1400 – 2200	1 hour	65	75
Sunday & Public Holiday	0700 – 2200	1 hour	65	75
Any night	2200 – 0700	1 hour	55	65



* DCO Project construction noise only. Trigger levels are defined as 1m in front of the closest façade of a habitable room. Where measurements are used, they will be taken either at the façade or in free-field. A façade correction will be applied to any free-field measurements to establish the façade level.

* Where the current ambient noise level is greater than the noise insulation trigger level:

1. the ambient noise level will be used as the noise insulation trigger level
2. the temporary rehousing trigger level will be the ambient noise level +10dB.



APPENDIX C: SEVEN-STAGE AWARENESS PROGRAMME TO INFORM AND ENCOURAGE APPLICANTS

Stage 1: Launch of New Stage

Public awareness of the launch of a new stage of noise insulation will be driven through notices posted at the following – Community Centres, Churches, Local MP's and Schools.

Stage 2: How individual residents are made aware of Heathrow's Noise Insulation Scheme

All property owners that qualify for Heathrow's current stage are individually written to explaining the scheme in detail. A comprehensive booklet written in six languages will be sent to all homes identified within the relevant contour – English, Arabic, Hindi, Polish, Punjabi and Urdu.

Every effort is made to ensure that qualifying residents are able to understand the booklets that outline the scheme, key facts, explain proposed works and most importantly who to contact should further information be required to clarify what is in the booklet and answer any questions.

Stage 3: Banners on all scaffolding

During works on a property, scaffolding set up at a home being fitted out will include a banner displaying. Neighbouring properties will be able to that it is a Heathrow related scheme and neighbours will be encouraged to phone up, investigate their eligibility and register for the scheme.

Stage 4: Door knocking

Staff 'door knock' resident's properties that are eligible for the scheme to speak directly with them and hand over another booklet that explains the scheme in detail. This will give the residents the opportunity to ask any questions that they may have as a result of the scheme being discussed. In the event that there is nobody home at the time of the visit, another booklet will be posted to drive awareness of the Noise Insulation Scheme.

Stage 5: Door knocking

Stage 4 is repeated at a different time of day. If, for example, a property was originally visited in the morning then the second visit would be in the afternoon to make every effort to speak with the resident.



Stage 6: Land Registry

Heathrow contact the Land Registry with a view to contacting landlords whose homes qualify for NIS. A comprehensive booklet will be posted to further drive awareness of NIS to help drive registrations.

Stage 7: End of process

Make a record that all awareness processes have been completed. The residents/ landlords still have the opportunity to come forward as long as they are still within the specified noise contour. The purpose of documenting is to demonstrate that all seven stages have been processed.

There are lots of ways you can contact us or find out more



Find all the consultation information on our website
aec.heathrowconsultation.com



Email any questions about the consultation to
info@heathrowconsultation.com



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