Gatwick Airport Northern Runway Project Noise Management Requirements

Presentations to the Institute of Acoustics, and
the Chartered Institute of Environmental Health

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September 2026

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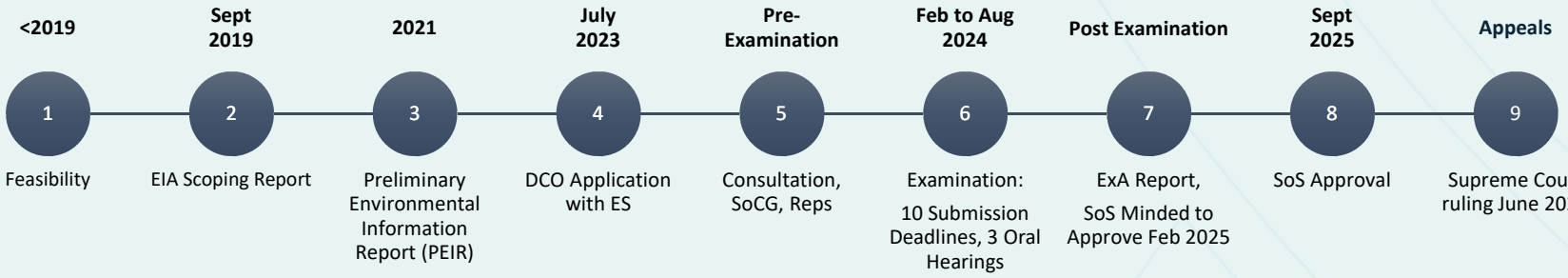
Development Consent Order Journey

Nationally Significant Infrastructure Project – Planning Inspectorate set process/programme



All 10 Local Planning Authorities opposed the project, stakeholders gave 5,941 comments on noise, so consultation was substantial.

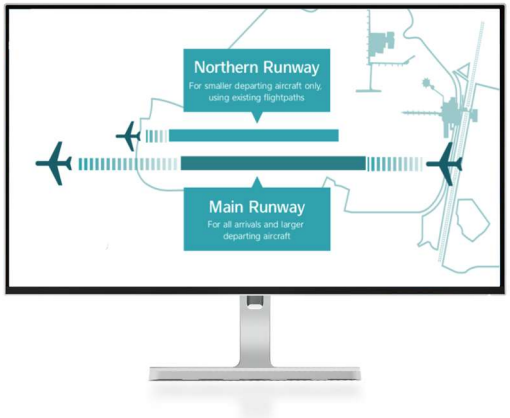
- Statutory consultations, including for scheme changes, Written Representations to Examining Authority
- Local Planning Authorities - Noise Topic Working Group 2019-2025
- Noise Envelope Group (Noise Management Board) – May-Oct 2022
- GAL Board – mitigation implications and costs


NEWS

Gatwick second runway plan approved by transport secretary

The Gatwick Northern Runway Project

- Airport facilities
- Surface access upgrades
- £2.2 billion privately funded
- Dual Runway operation



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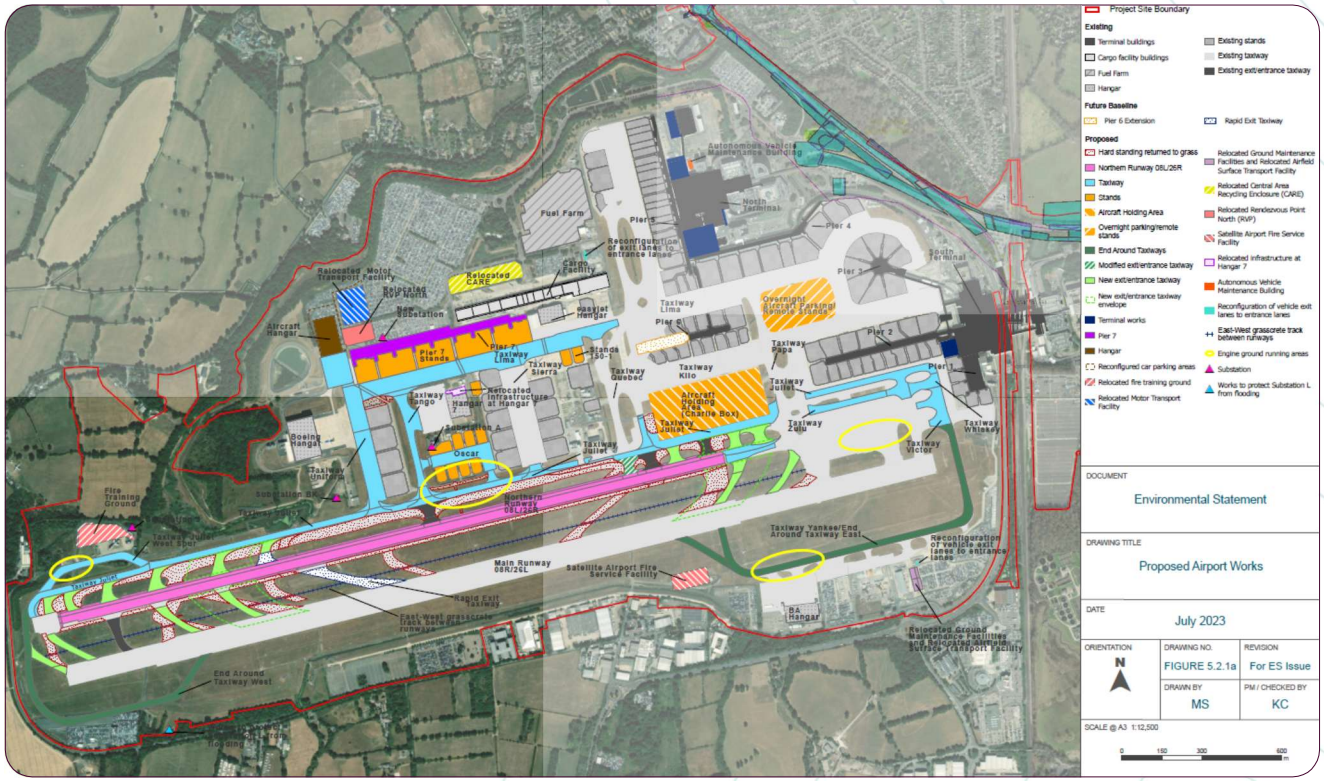
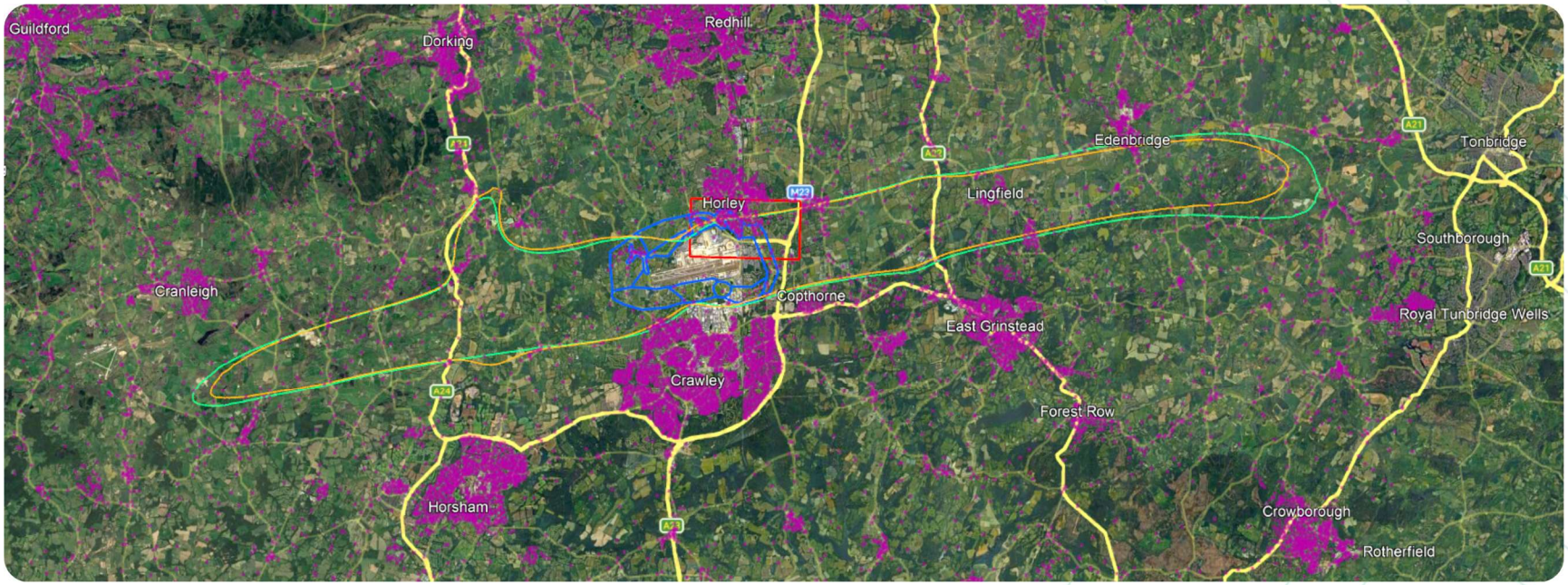


Study Areas



- Populated post-codes
- Ground Noise & Construction Noise Study Zones
- Road Traffic Scheme Noise Modelling Area
- Air noise – Day LOAEL $L_{eq\ 16hr}$ 51dB 146km^2, 26,000 people
- Air Noise – Night LOAEL $L_{eq\ 8\ hr}$ 45dB 157km^2, 28,000 people

Aviation Noise Policy - Overview

1. Civil Aviation Act 1982 and 2012
2. Environmental Noise Regulations 2005
3. Noise Policy Statement For England, 2010
4. Aviation Policy Framework 2013
5. Regulation 598, 2014 – Balanced Approach
7. Consultation Response on UK Airspace Policy, 2017
8. Aviation 2050, The Future of Aviation, a Consultation 2018
1. Airports National Policy Statement 2018
2. National Planning Policy Framework 2021
7. Policy Paper, Overarching Aviation Noise Policy, DfT March 2023
8. Local Plans
9. **Case Law > best practice**

Noise Assessment Methodology & Results

Not covered in this paper

- **Construction noise**[(1)] – mitigation, moderate significant at ~35 properties
- **Road traffic noise** – mitigation – not significant
- **Ground noise** – mitigation, significant effects externally at 37 properties
- **Air noise** – mitigation, significant effects externally at 80 properties

Modest residual effects considering the large scale of the project and study area.

(1) Construction noise is not addressed further here. 170 areas of construction work were modelled, in one of 24 time periods across the 15 year construction programme, reported across 12 Receptor Areas as for ground noise.

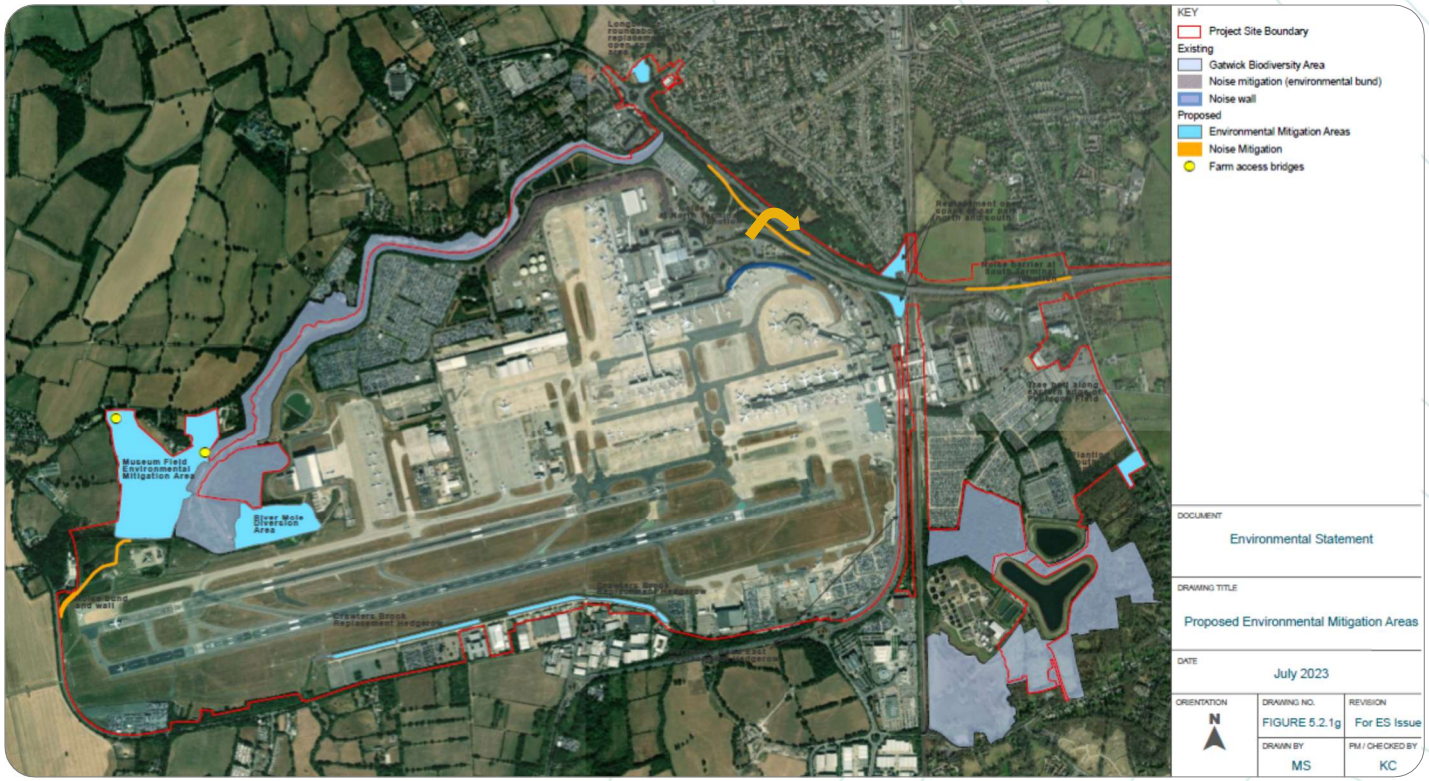
Existing Mitigation

Gatwick Airport has a sophisticated Noise Management system developed over many years:

- Noise Action Plan 2023 (4th round) 42 actions
- Night Restrictions (Designated Airport)
- Section 61 Agreement
- Noise Management Board (since 2016)
- Noise & Track Keeping (20+ monitors) Noise & Track Keeping Advisory Group
- Departure Noise Limits, differential landing fees, airline league tables
- Airspace and Noise team, quarterly and annual reports
- Ground noise bunds and wiggly wall, airfield operating procedures & limits
- Noise insulation scheme
- Land use planning – 3rd party consultee

Project Mitigation – Road Traffic & Ground Noise

- A new right turn from the North Terminal / A23 Junction reduces traffic flows.
- Speed reduction 50 to 40mph.
- Noise barriers and bunds.
- Ground Noise included in the Noise Insulation Scheme when above ambient.



Project Mitigation – Air Noise

The Northern Runway:

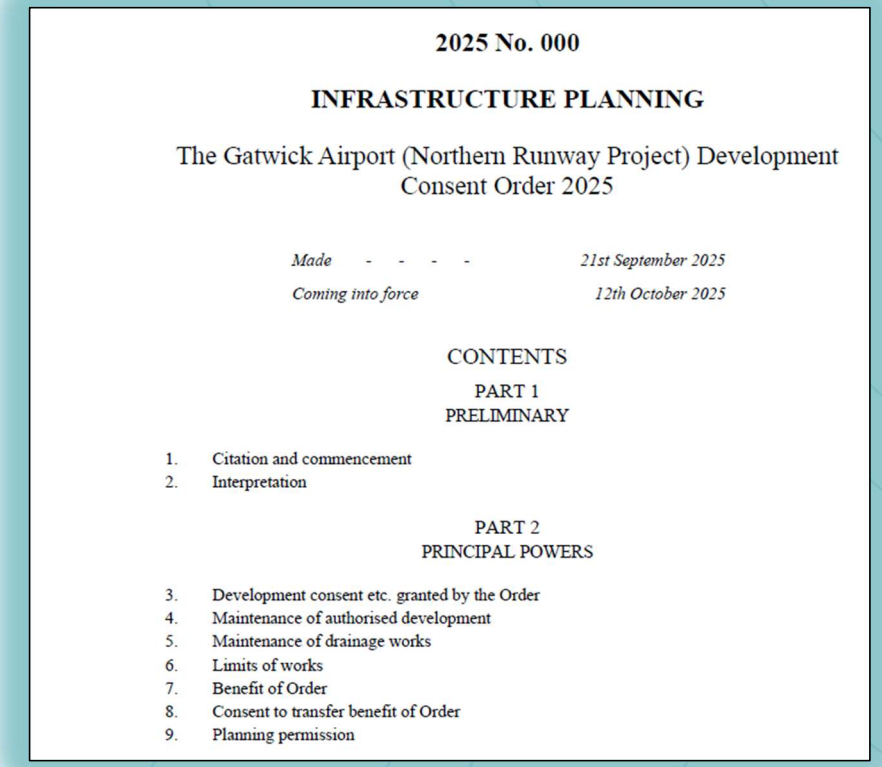
- Only used for departures
- Only used for smaller aircraft - ICAO Code C eg B737
- No scheduled flights from 2300-0600 hours

No new flight paths

Air traffic cap 389,000 commercial aircraft movements per year

Noise Envelope

Noise Insulation Scheme



2025 No. 000

INFRASTRUCTURE PLANNING

The Gatwick Airport (Northern Runway Project) Development Consent Order 2025

Made - - - - 21st September 2025

Coming into force 12th October 2025

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PRELIMINARY

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2. Interpretation

PART 2
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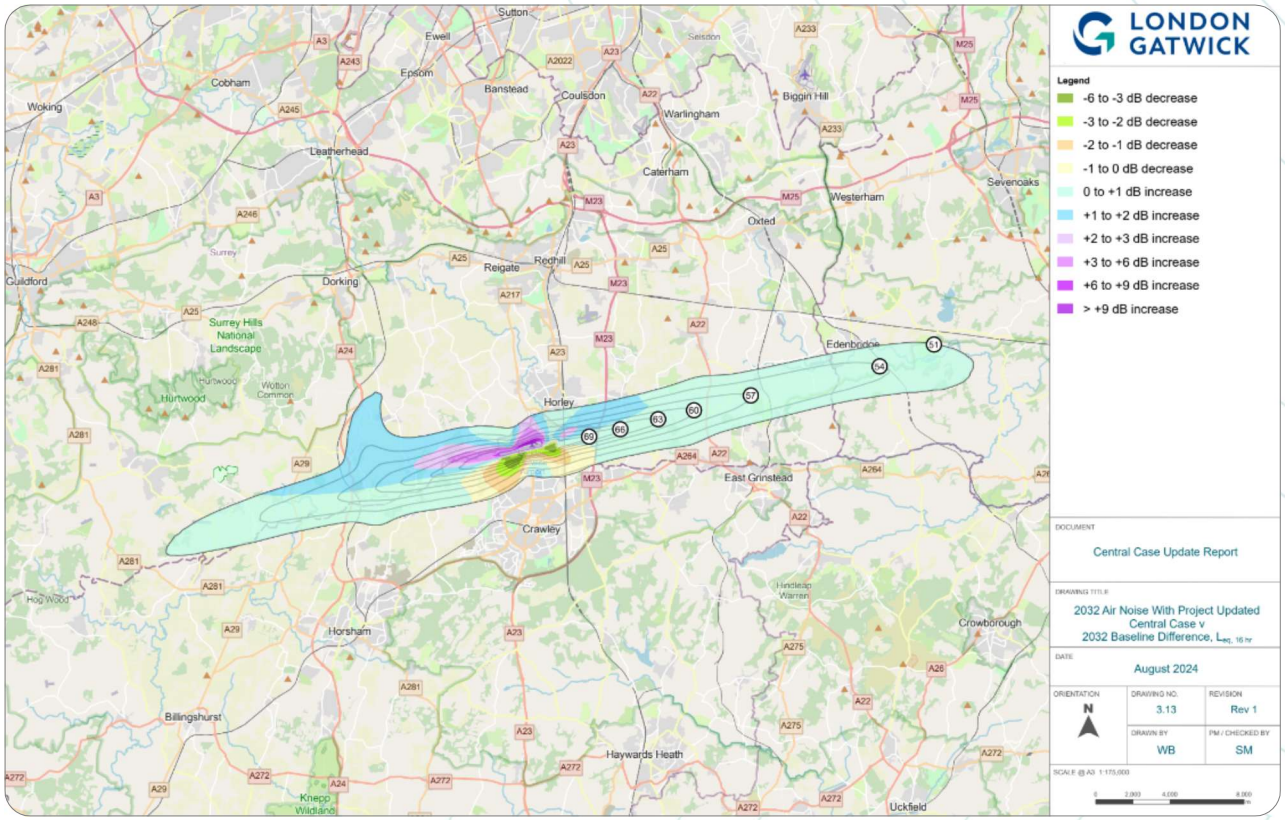
4. Maintenance of authorised development
5. Maintenance of drainage works
6. Limits of works
7. Benefit of Order
8. Consent to transfer benefit of Order
9. Planning permission

Project Mitigation – Air Noise Impacts

- The air noise assessment provided over 100 noise contour plots, covering 4 assessment years, 3 aircraft fleet transition forecasts, using 7 noise metrics.
- 28,000 people within LOAEL.
- The vast majority will have slight impacts +0 to1dB
- Flight numbers increase 20% day, 10% night, on existing flight paths
- Noise Envelope sets limits on contour areas.



Noise Envelope (1 of 4) - development

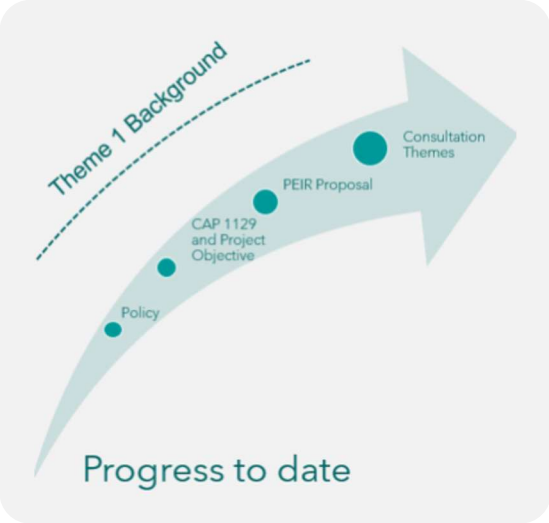
Policy requires **'sharing of the benefits of new technology'** between the airport (growth) and communities (noise reduction).

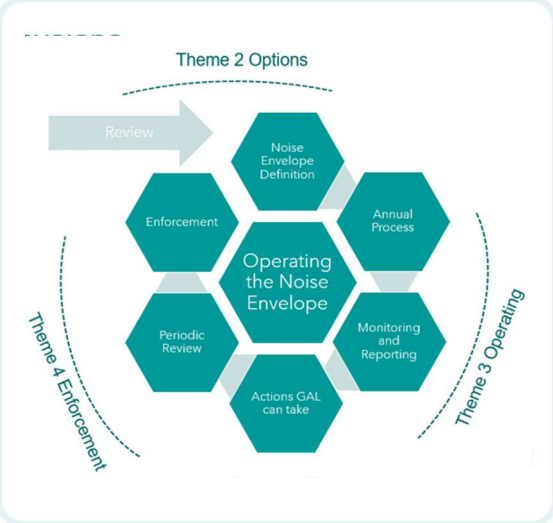
CAA CAP 1129 guidance suggests to be effective a Noise Envelope should be agreed with stakeholders. This led to a substantial 6 month consultation in 2022.

The resulting Noise Envelope:

- Sets limits on contour areas
- Prescribes monitoring and reporting of compliance including CAA as Independent Reviewer
- Provides for future review to ensure it remains relevant

Consultation – The Noise Envelope Group (May-October 2022)





Noise Envelope (2 of 4) in the DCO

Noise Envelope Limits

By the end of the first year after opening of the NRP, the area enclosed by the 92-day summer season average mode noise contours for the Airport shall not exceed:

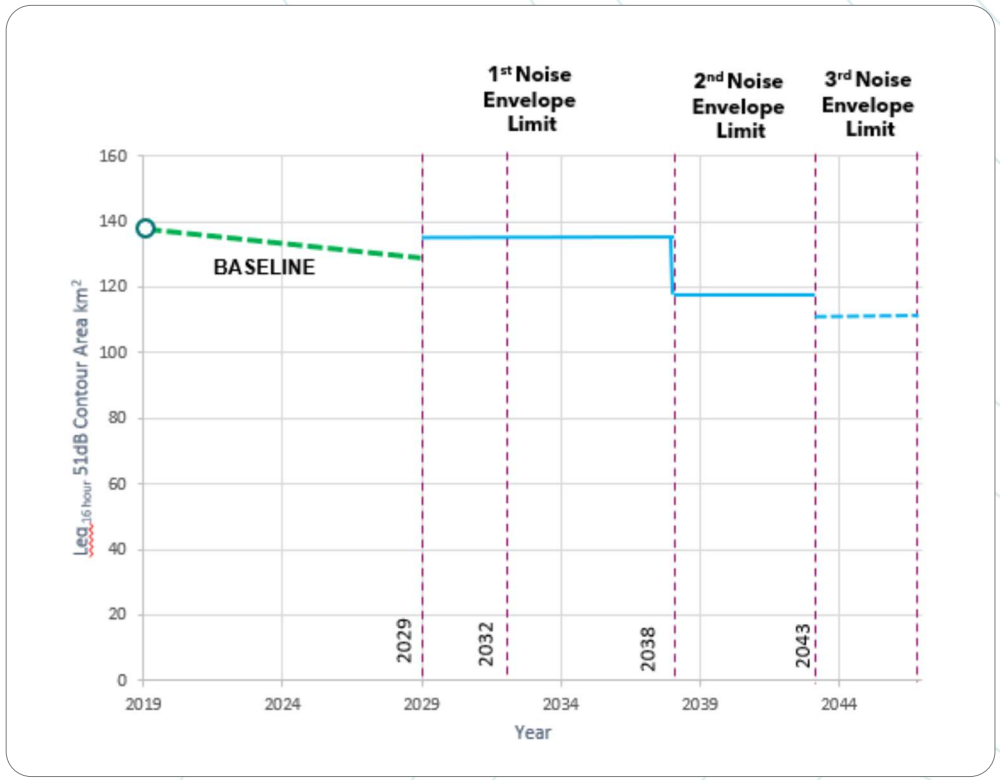
- $L_{eq\ 16\ hour}$ day 51 dB 135 km2
- $L_{eq\ 8\ hour}$ night 45 dB 146 km2

Lower limits are set for a second period, 9 years after opening or if annual commercial ATMs reach 382,000,
to ensure noise levels reduce.

There was much debate on noise metrics, what noise limits ensured sharing of benefits, and enforcement.

The DCO Noise Envelope prevents GAL declaring new slots if limits are or are forecast to be exceeded.

GAL developed a forecasting process to pre-empt exceedance, to allow time to adjust allocation of new
slots to ensure compliance.



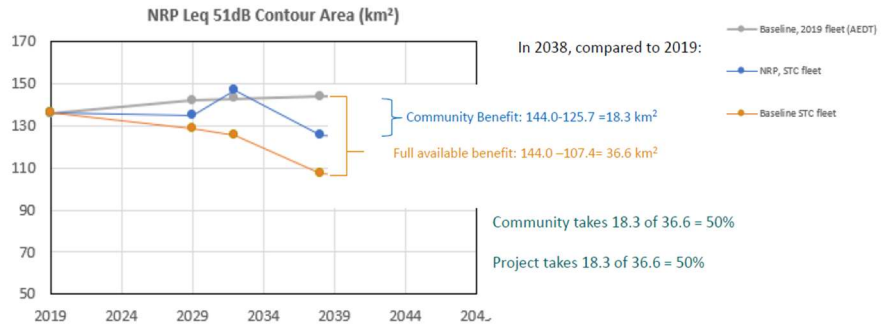
Noise Envelope (3 of 4) Deciding Limits

- Aiming to agree a Noise Envelope with stakeholders was problematic, some groups strongly opposed any expansion.
- Leq noise contour area is very sensitive to noise level
- (1dB giving about 20% area change). GAL studied their forecasts in great detail, including fleet transition to quieter aircraft following a stall during COVID (a Slow Transition) and again following recovery in 2024 (an Updated Central Case).
- Some community groups wanted tighter noise limits to give more share of the benefits to communities affected - restrict growth, give noise reduction quicker.
- Ultimately the SoS accepted the limits proposed,

  In June 2026 the Supreme Court rejected the request to deliver reduction quicker stating: *'Given that the policy objective of shared benefits is to be achieved, at least in part, through future technological improvements, it is necessarily the case that to some degree, the benefits to local communities may come later, as those improvements begin to take effect in practice.'*

The noise modelling forecasts show an increase in noise contours after opening above the future baseline with baseline growth and fleet transition, reducing after a few years and then 'sharing the benefit' of future reduction in aircraft noise emissions.

Gatwick NRP Slow Transition Case Fleet (Summer Day)



ATMs	2019	2029	2032	2038	2047
Day	766	848	976	983	988

In the early years after opening noise increases and the Project/industry takes the benefit.

The Central Case has not been modelled.

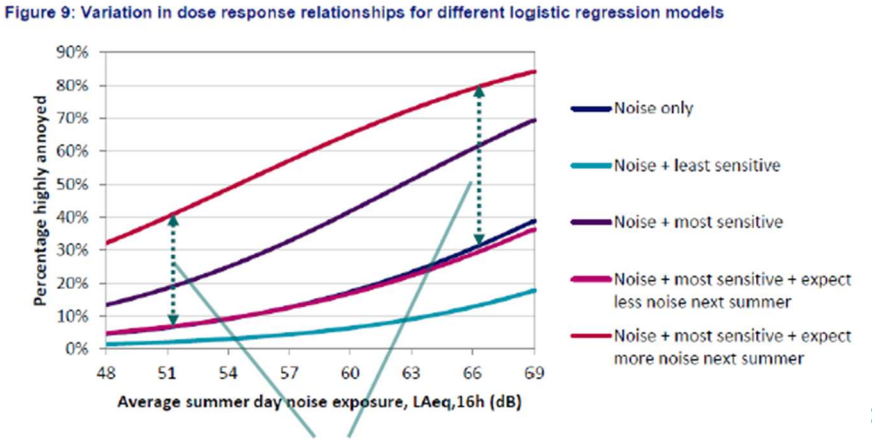
Noise Envelope (4 of 4) Benefits

The SoS has to strike a balance between the benefits the Project will bring and its negative effects after mitigation, in accordance with policy.

Community Groups may be disappointed that the Noise Envelope limits allow growth in air traffic and short-term increase in noise followed by long-term reductions.

The Noise Envelope with its strict enforcement processes through the DCO provides certainty that noise will be limited and contours will not increase above 2019 levels. This is a major benefit, and in itself will reduce community annoyance.

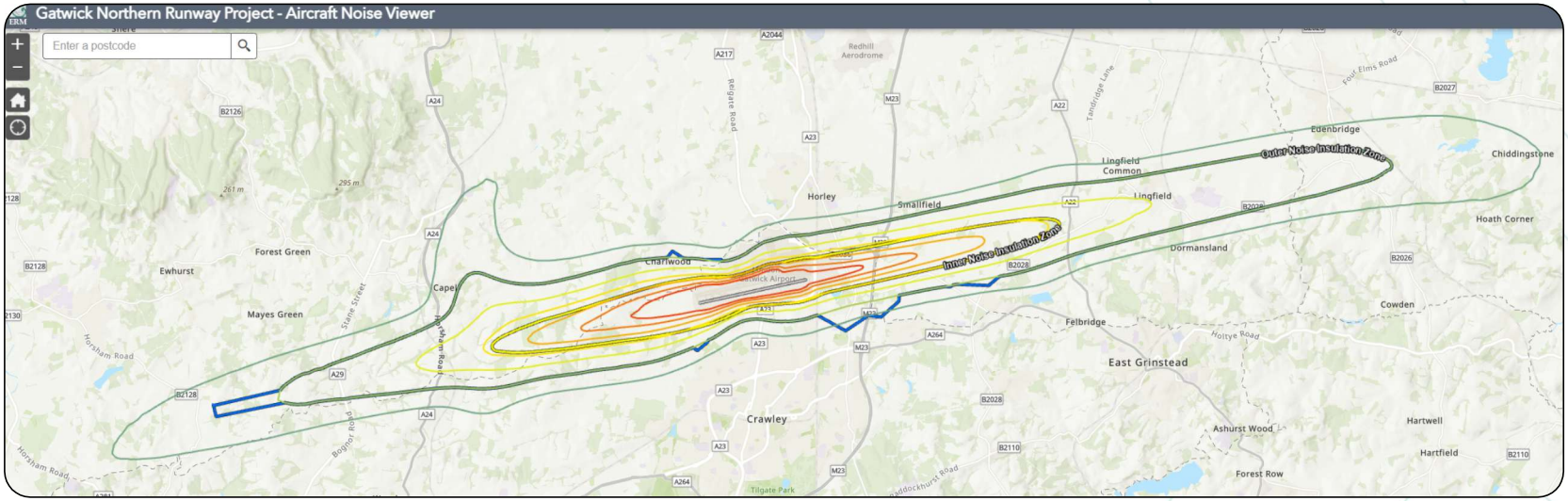
SoNA 2014 – Expectation of Next Summer



Range in annoyance due to different expectations of noise next summer: 30-50%

Expectations of reducing noise levels in future reduces community annoyance now.

Noise Insulation Scheme (1 of 2) development



- The main stakeholders engaged in developing the Noise Insulation Scheme (NIS) were the Local Authorities.
- The scheme went through multiple revisions, responding to additional requests and precedents to ensure it met best practice.
- GAL developed an online interactive map on which stakeholders could search by their postcode to understand predicted noise levels and if they were within the NIS [Noise Contour Viewer].
- The GAL Board were consulted as costs increased.

Noise Insulation Scheme (2 of 2) in DCO

4,300 homes eligible, 3 zones.

Inner Zone based on the predicted Leq 16 hr 60dB daytime and Leq 8 hr night 55dB 2032 summer noise contours £26,000 + VAT or more if necessary.

Outer Zone comprising two sub-zones:

Outer Zone 1 $L_{eq\ 16\ hr}$ 57 to 60 dB £6,500

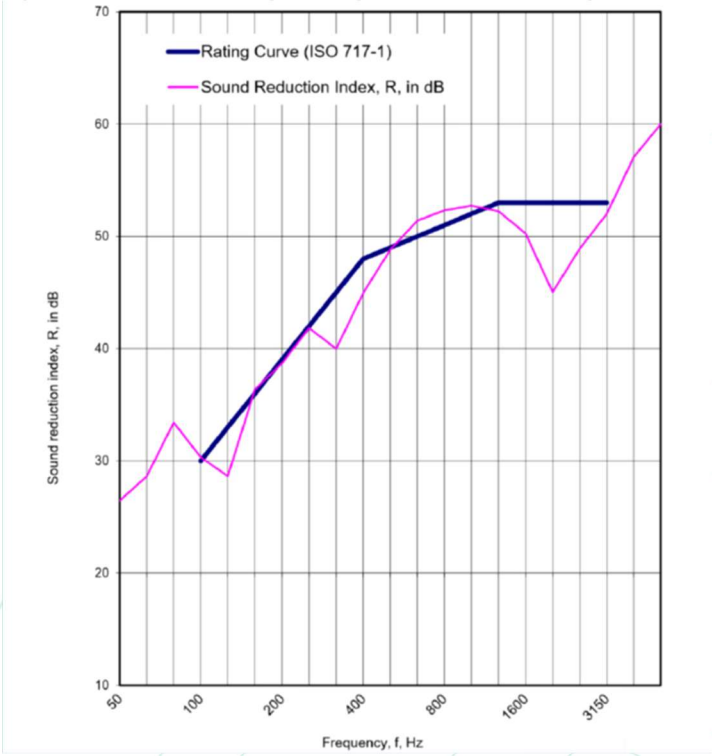
Outer Zone 2 $L_{eq\ 16\ hr}$ 54 to 57 dB £4,500

For Noise Sensitive Rooms

Noise Insulation - Acoustic double glazing, doors, upgrading bedroom ceilings

Ventilation - Acoustic Ventilators, low solar gain glass, blinds and thermal insulation to upstairs ceilings

- Includes Ground Noise, where above ambient
- Schools scheme
- NIS Independent Panel to oversee a prioritised roll out



Conclusions

Airport noise policy is complex and evolving, so extensive consultation is required to interpret policy in the relevant local context.

The noise impacts of the Gatwick Airport Northern Runway Project are in fact quite modest, but due to strong local opposition were closely scrutinised through a lengthy DCO application, before the SoS approved the scheme.

Consequently, the noise mitigation commitments represent best practice in line with current policy. The Noise Envelope is one of only a few examples that implement government and CAA guidance, and will apply to the largest airport so far to adopt this form of noise limit. Similarly, the Noise Insulation Scheme improves on other airport scheme in various ways including addressing overheating, and will form best practice.

At other airports, the communities affected, their local planning authorities and the SoS will expect future airport expansion projects to deliver equivalent noise mitigation, to ensure affected populations are treated fairly. This could have significant implications for some airports, and could, or perhaps should, influence which airports expand.

Thanks

Gatwick Airport Ltd	Client
Hayes McKenzie	Ground noise
Environmental Research and Consultancy Department, Civil Aviation Authority	Air noise modelling
Environnemental Resources Management	Road traffic noise
Herbert Smith Freehills Kramer	Legal

www.MitchellEnvironmental.co.uk