

HEATHROW ROUND 4 NAP 2024 – 2028
**TECHNICAL ENGAGEMENT FORUM
WORK PLAN**

Heathrow



OUR JOURNEY TO

QUIETER

JUNE 2025

GLOSSARY

- AAL: Above Aerodrome Level
- ENR: Environmental Noise (England) Regulations 2006/2238
- GIS: Geographic Information System
- HA: High Annoyance
- HSD: High Sleep Disturbance
- SID: Standard Instrument Departure
- SMART (objectives): Specific, Measurable, Achievable, Relevant, Time-bound
- SOP: Standard Operating Procedures
- SSA: Slightly Steeper Approach

TECHNICAL ENGAGEMENT FORUM OVERVIEW

- Partnership between Heathrow Airport, major airlines, Boeing, Airbus, and NATS
- Focus on voluntary noise reduction initiatives through operational improvements while maintaining rigorous safety standards
- Enhanced coordination with external stakeholders
- Unified approach to noise abatement communications
- Commitment to comprehensive data collection and analysis

STRATEGIC GOALS & IMPLEMENTATION

- Target: 10% reduction in noise impact by 2030 vs 2019 levels
- Focus on reducing highly annoyed (HA) and highly sleep disturbed (HSD) populations
- Primary emphasis on night-time noise reduction
- Annual effectiveness reviews and updates
- Implementation of revised Codes of Practice
- Measurement using ENR ANNEX III dose response relationships
- SMART objectives: driving regulatory framework
- Timeline (1st phase): 18-month Work Plan from June 2025 with periodic update circa every 6 months to the NACF

SUMMARY TABLE

Sub-Group	Time frame	Objective	Expected outcome
Sub-Group 1	January 2025 to December 2026	Develop a GIS-based tool that allows participating airlines to calculate their contribution to Heathrow HA and HSD impact, and adapt whenever possible their operating procedures accordingly.	Reduction in HA and HSD values of Heathrow operations
Sub-Group 2.1	July 2025 to June 2026	Create a data sharing system for airlines to assess ground noise using individual track data and noise measurements (LAmax, SEL) to improve departure operations.	New noise limits proposals
Sub-Group 2.2	June 2025 to June 2026	Optimise aircraft climb requirements between 1,000' and 6,000' by monitoring performance by aircraft type and analysing cost-efficiency while maintaining operational efficiency and reducing noise impacts.	New rate of climb limits proposals
Sub-Group 3.1	January 2025 to June 2026	Create tracking methodology to precisely monitor and measure noise differential from landing gear deployment timing, and to identify opportunities to optimise operating procedures accordingly.	Optimised delayed landing gear deployment per airline
Sub-Group 3.2	July 2025 to December 2026	Increase SSA operations to reduce the noise footprint during final approach through comprehensive operational performance evaluations and noise measurement analysis.	Increased SSA operations per airline
Sub-Group 4	January 2025 to March 2026	Create equitable and predictable periods of respite in defined areas during night quota period through procedural management of departure routes and holding patterns, with operational changes implemented through SID closures and flight plan modifications.	Increased periods of respite

SUB-GROUP 1 - HA/HSD PERFORMANCE (BUILD AN ASNP TOOL)

Description:

The Airline Specific Noise Pack (ASNP) is a tailored noise management solution, providing airlines with detailed insights into their performance in terms of impact on local communities (HA, HSD).

Actions:

Develop and implement a sophisticated interactive GIS tool for noise impact analysis, establish comprehensive noise attenuation measurement, and collect detailed demographic data to accurately compute community impact.

Airline responsibility:

Share flight profile data and assess ASNP specifications.

Timeline:

Development and implementation phase from January 2025 through December 2026.

SUB-GROUP 2.1 - DEPARTURE NOISE (AIP NOISE LIMITS)

Description:

Implementation of an advanced methodology for sharing and analysing ground performance noise data, enabling more effective noise management strategies during aircraft departures in case of noise limits modifications.

Actions:

Create and maintain a comprehensive monitoring database for tracking noise levels, support airlines in optimising their Noise Abatement Departure Procedures through data-driven insights.

Airline responsibility:

Calculate costs associated with variable noise limits, evaluate procedure changes.

Timeline:

Extended development and implementation period from July 2025 through June 2026.

SUB-GROUP 2.2 - DEPARTURE NOISE (CLIMB RATES)

Description:

Comprehensive initiative to optimise aircraft climb requirements between 1000' and 6000' AAL, focusing on noise impact reduction while maintaining operational efficiency.

Actions:

Monitor optimised climb rates for each aircraft type, conduct thorough cost-efficiency analysis, and evaluate operational impacts without restrictions on acceleration timing and de-rate/cut-off procedures.

Airline responsibility:

Calculate costs, evaluate procedure changes and training requirements.

Timeline:

Structured implementation approach from June 2025 through June 2026.

SUB-GROUP 3.1 - ARRIVAL NOISE (LANDING GEAR)

Description:

Creative methodology to monitoring and optimising landing gear deployment timing, utilising cutting-edge technology to reduce noise impact during final approach.

Actions:

Install and calibrate high-definition camera systems for precise monitoring, develop sophisticated tracking methodology, analyse deployment patterns for optimisation opportunities.

Airline responsibility:

Evaluate potential improvements, training and SOP modifications.

Timeline:

Technical implementation and analysis phase from January 2025 through May 2026.

SUB-GROUP 3.2 - ARRIVAL NOISE (SSA)

Description:

Enhancement of Slightly Steeper Approach operations to reduce noise footprint during final approach, while maintaining the highest safety standards and operational efficiency.

Actions:

Conduct comprehensive performance evaluations, develop detailed procedure specifications, implement pilot training programmes, and monitor effectiveness through data analysis.

Airline responsibility:

Evaluate implementation timeline (including training and aircraft type considerations) and calculate associated costs.

For airlines operating during the early arrivals period (04:30-06:00), specify required procedure changes.

Timeline:

Development and implementation period from July 2025 through December 2026.

SUB-GROUP 4 – INCREASE RESPITE ON LATE RUNNERS & EARLY ARRIVALS

Description:

Creating equitable and predictable periods of respite in defined areas during night quota period (23:30 to 06:00) through procedural alternation of departure routes and holding patterns allocation.

Actions:

Develop operational concepts and procedures changes through SID closures, preferential holding patterns, and flight plan modifications. Measure costs and benefits using simulation, live trial and dose-response curves for respite impact evaluation.

Airlines Responsibility:

Share comprehensive data for operational concept refinement. Evaluate and provide feedback on proposed alternative SID and coordinate timely flight plan modification.

Timeline:

Structured implementation approach from January 2025 through March 2026.

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