THE HEATHROW QUIET NIGHT CHARTER 2018-2022

WORKING IN PARTNERSHIP TO ACHIEVE FEWER OFF-SCHEDULE MOVEMENTS, PREDICTABLE OPERATIONS AND QUIETER OPERATIONS
Heathrow and its partners, including NATS, airline operators and their representative bodies, have come together and agreed to increase collaboration to deliver incremental improvements in night time operations, noise management and mitigation. The partners will take voluntary steps to implement a wide set of initiatives to increase performance of operations, and reduce the overall impact of unscheduled night movements on local communities.

Whilst the number of flights has increased significantly since the 1970s, Heathrow’s noise footprint has continuously reduced as newer, quieter aircraft have been purchased by airlines. The example below shows the noise footprint of the Boeing 737 aircraft over time. It’s also worth noting that the new aircraft is much larger than its predecessors.

Airlines at Heathrow currently operate 40% of movements by aircraft in the lowest international category for noise, and 0.1% in the highest.

Notwithstanding these achievements, the airport understands the impact we have on local communities and we are working hard to reduce the impact of our operations.

**Figure 1:** Boeing 737 noise footprint reduction over time

<table>
<thead>
<tr>
<th>Year</th>
<th>Aircraft</th>
<th>Noise Footprint</th>
</tr>
</thead>
<tbody>
<tr>
<td>1967</td>
<td>Boeing 737-200</td>
<td>77.0 km²</td>
</tr>
<tr>
<td>1988</td>
<td>Boeing 737-400</td>
<td>25.0 km²</td>
</tr>
<tr>
<td>1998</td>
<td>Boeing 737-800</td>
<td>15.4 km²</td>
</tr>
<tr>
<td>2017</td>
<td>Boeing 737 MAX 8</td>
<td>9.5 km²</td>
</tr>
</tbody>
</table>

Figure 1: Boeing 737 noise footprint reduction over time
Night flights are a particularly sensitive aspect of the operation for the airport, airlines, passengers and local communities. There is a complex balance in effectively managing the impact whilst realising the economic benefits for the UK, and protecting passengers using a capacity constrained airport. The airport has a limit on the level of noise and therefore has restrictions in place to ensure these limits are not exceeded. The airport and airline operators have already been successful in reducing and mitigating noise within these limits, for example, the significant reduction in the noisier aircraft types, such as the ageing Boeing 747 fleet, operating late into the night and we continue to strive to operate well within these limits, rather than simply meet them. The improvement can be seen in the charts opposite which show QC use against allocation and the reduction we have seen over time.

This is an area in which we believe we can work more closely together and continue to improve upon to ensure we meet our commitment to reduce the number of flights that might operate after 23:30 and for those that do operate, to operate more quietly. The emphasis of the night charter is to build on these successful actions, deeply embed them and take further steps to reduce the impact of our operation over time.

1 There are three regulatory tiers that govern aircraft noise which are International (ICAO), European (EU Directives) and National (Government (DfT)). Collaboration takes place with key stakeholders including industry, environmental and community. Policy development is driven through various means including Consultations and Independent Commissions.
AIMS AND PURPOSE

The Quiet Night Charter (QNC) has been developed to identify what voluntary initiatives can be introduced that:

• promote improvements in the reduction and mitigation of noise from aircraft landing and taking off at Heathrow
• seek to go beyond assurance and compliance with current processes and regulation and looks at opportunities to operate above and beyond these measures
• engender a closer working relationship between airlines, Heathrow Airport and other stakeholders, including NATS
• further promote and build trust with local communities, providing opportunities to engage on the work within the Charter through Heathrow’s community forums
• recognise best practice and identify where and how this can be shared in the operational and noise environment across all stakeholders
• support Heathrow’s Sustainability 2.0 programme.

The QNC intends to bring together and recognise the successes that have been and are being achieved by the airport and its partners, notably airline operators and NATS, in respect of noise management and mitigation. The QNC offers opportunities for a closer and more successful collaboration helping us to identify ways in which we can excel at being a good neighbour within existing legal and regulatory constraints. The charter will not impose additional operational restrictions on the airlines, over and above those within the existing or future regulatory and compliance structures.

Looking to the future we want to enhance and strengthen relationships between our industry partners to identify, share and implement voluntary initiatives, strategies and best practice so that we can support the following aims:

• reduce the number of late running arriving and departing flights in the night quota period
• provide a more predictable flight & ground operation to support expectations of local communities
• reduce and/or mitigate the levels of noise experienced by local communities
• offer greater awareness of how the operation is run at Heathrow providing real time information to local communities.

Expectations and outcomes

Heathrow 2.0 provides a framework upon which the QNC bases its goals. The Noise Action Plan sets out how Heathrow intends to manage and mitigate the impact of aircraft associated noise, across a broad scope of activities and over a five year period. The Charter is an important initiative within this plan. We would expect to achieve changes in practices and/or behaviours, as follows:

Expectations
• greater collaboration
• improved standards and behaviours
• improved reputations
• shared best practices
• improved passenger experience.

Outcomes
• reduced number of unscheduled operations in the Night Quota Period
• improved consistency in standards and application
• improved performance, better measures and understanding of performance including improved and enhanced analysis to review performance.

GOVERNANCE

To take the charter forward and embed it into operations an Operations Group has been set up with all key stakeholders that have responsibility across the operational fields. From its inception, this Group will oversee implementation and subsequently review performance as we progress.

The main purpose of the Group will be to:

• take ownership of the Charter to ensure it delivers the initiatives and continually review performance
• lead performance review of unscheduled night flights
• develop performance measures and recommend improvement actions
• conduct analysis of further initiatives to improve performance.
HOW THE QNC WILL WORK

Behaviours
Implementation of the agreed initiatives will be reliant upon certain behaviours that will support the efficacy of the QNC and engender trust to assist us in realising and accepting common goals, be consistent in our endeavours and remain committed. Recognising the value and benefit of the QNC on our respective operations and within the local communities will help deliver success. The Operations Group will provide direction and support the ongoing efforts by taking ownership of the QNC, monitor implementation, review and update against performance, in summary:
• monitor and measure operational performance directly associated with resulting NJMs and the avoidance and mitigation of NJMs
• analyse of underlying performance trends at airport and airline level
• report use of Night Quota
• report and challenge poor performance across airline operators to maintain fair and equitable use of the Night Quota
• track and review progress of initiatives within the Charter.

Perception is a very real aspect of how noise can be seen to impact local communities. Whilst actively mitigating and reducing this impact, evidencing how we can and are achieving success will be instrumental in positively engaging and collaborating with all stakeholders, including with local communities, and in building positive relationships to further progress.

APPROACH
In order to achieve the desired outcomes, the QNC adopts a Balanced Approach, which advances a hierarchical methodology and provides a framework for noise management:
• reduction at source (quieter aircraft)
• noise abatement operational procedures (quieter operations)
• land use planning & management
• operating restrictions

As per the NAP, in addition to the recognised Four Pillars, Heathrow also advocates the following:
• introduce voluntary measures
• work closely with local communities
• open and transparent reporting.

Measures
For each of the six agreed initiatives and alongside existing operational practices, measures both new and existing will be identified to enable the forum to monitor performance year on year. This will enable identification of trends, inform analysis, support further initiatives, and where appropriate and practicable improve operations, with specific focus on reduction and mitigation of night noise.

Balanced Approach
The QNC intends to be consistent with the ICAO “balanced approach”, which advocates a hierarchical methodology and provides a framework for noise management:
• reduction at source (quieter aircraft)
• noise abatement operational procedures (quieter operations)
• land use planning & management
• operating restrictions

As per the NAP, in addition to the recognised Four Pillars, Heathrow also advocates the following:
• introduce voluntary measures
• work closely with local communities
• open and transparent reporting.

Community
To maintain the valued input the existing community forums provide, there are opportunities to share and advise the intent and progress of the QNC. There may also be the opportunity to debate aspects regarding the ongoing principles of the Charter, shape potential future initiatives in offering considerations for review by the Operations Group. Local communities will be engaged with:
• reports resulting from factual data and analysis
• real-time operational information via the Noise website and Noise Twitter account
• continued ability to respond in real-time.

FRAMEWORK FOR NOISE MANAGEMENT

Quieter planes
Quieter procedures
Land-use planning and management
Operating restrictions and voluntary measures
Working with local communities

APPROACH
GENERAL COMMITMENT

Quieter planes
As aircraft and technology improves and planes become quieter, we will continue to work to ensure that residents share in the benefits. We are committed to continuing to provide a strong financial incentive for airlines to use the quietest planes currently available, including in the early morning period, through the use of variable landing charges.

Quieter procedures
We are committed to take full advantage of opportunities to manage airspace differently, working with local communities to identify changes that could benefit them. This will include trialling new airspace management and operating procedures.

Land-use planning and management
We are committed to continuing to help with noise insulation and mitigation through a range of schemes. We will also continue to press the Government to provide more detailed guidance on planning around airports, and to restrict noise sensitive development in high noise areas.

Operating restrictions and voluntary measures
We do not see restrictions as a first resort and are committed to developing voluntary measures through collaborative approaches. These can be quicker to implement and more effective. Where restrictions are in place we are focused on ensuring that they are adhered to fully.

Working with local communities
Underpinning all of our work to address aircraft noise, we are committed to engaging openly and constructively with local communities to understand their concerns and to provide accessible information and an on-going dialogue.
A number of agreed initiatives have been developed to support the implementation of the Charter throughout and beyond the next five years, a summary of which has been included in the table below. A regular review of how effective these principles are over time will be conducted with the opportunity to adapt existing strategies, or add further strategies as time progresses.

<table>
<thead>
<tr>
<th>INITIATIVE</th>
<th>PURPOSE</th>
<th>MEASURE²</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 CONTINUED IMPROVEMENT OF “LATE RUNNERS”</td>
<td>Working together Heathrow and our airlines can consistently improve performance to avoid and mitigate as far as possible unscheduled flights operating in the Night Quota Period, achieve continuing performance improvement of marginal late flights and for late flights to operate earlier whilst addressing consistent poor performing flights</td>
<td>Wheels up/down times Number of NJMs Number of dispensed NJMs Number of NJMs denied Number of movements managed back to pre-23:30 Number of NJMs that operate earlier/later than authorised</td>
</tr>
<tr>
<td>2 ATC INTERVENTION TO MITIGATE NIGHT JET MOVEMENTS</td>
<td>Monitoring flight status and flight plans the operational ATC and APOC teams will take proactive and timely intervention to avoid a NJM on arrival, a consequential departure on turn-round into the Night Quota Period (LH or SH), or potentially bring forward the time of a flight operating in the Night Quota Period</td>
<td>Number of Interventions resulting in: No NJM or earlier arrivals / departures Number of SH versus LH interventions Average reduction in NJM operating time</td>
</tr>
<tr>
<td>3 NOISE EXEMPT FLIGHT SCHEDULE CONSTRAINTS</td>
<td>General Aviation/ noise exempt flights will be treated similarly to all aircraft operators in the management of the airports Night Quota pool allocation</td>
<td>Number of rejected NJM for GA flights</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>INITIATIVE</th>
<th>PURPOSE</th>
<th>MEASURE²</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 INVESTING FOR A QUIETER NIGHT</td>
<td>The combined investment of all parties to support predictable, on time, quieter operations. Potential investment across a broad range of environments and scope for collaboration sharing best practice and end to end processes. For example, ideas include investment in Operational Team training, European and global flight status assessment tools/capability, integration with wider ATC services (network &amp; beyond), procedural change/adaptation, terminal wayfinding &amp; protocols etc</td>
<td>Outcome of data analysis on performance review forum</td>
</tr>
<tr>
<td>5 INFLUENCE THE USE OF QUIETER AIRCRAFT IN THE NIGHT PERIOD</td>
<td>Continue to support, promote and influence the reduction and risk of operating noisier aircraft types (QC4) in the Night Period, 23:00 – 07:00</td>
<td>Reducing trend in QC4 operations Re-timing of QC4 operations</td>
</tr>
<tr>
<td>6 OPERATING PROTOCOLS FOR LATE ARRIVALS TO AVOID LATE DEPARTURES IN THE NIGHT QUOTA PERIOD</td>
<td>Heathrow, ATC (NATS) and airlines working together to agree a set of operating protocols to avoid delayed arrivals scheduled to turn-round as departures resulting in unscheduled flights in the Night Quota Period 23:30 – 06:00</td>
<td>Number of delayed arrivals that lead to a NJM on departure Number of requests from delayed arrivals requesting a NJM for departure rejected</td>
</tr>
<tr>
<td>7 (UNDER REVIEW) PLANNED NIGHT DEPARTURE ROUTINGS</td>
<td>Consider more flexible and predictable alternation of SIDs from 23:30 to fairly and equitably share noise across local communities whilst influencing the reduction in use of NJMs</td>
<td>This initiative is subject to a feasibility and scoping study prior to inclusion for consideration of modelling and trialling</td>
</tr>
</tbody>
</table>

² These are example measures and may be adapted, replaced, withdrawn or added to by the Operations Group as we progress.
## GLOSSARY OF TERMS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACL</td>
<td>Airports Coordination Limited</td>
</tr>
<tr>
<td>AOC</td>
<td>Airline Operators Committee – the airline operators’ representative body</td>
</tr>
<tr>
<td>APOC</td>
<td>Airport Operations Centre – 24 hour monitoring and control centre to support collaborative decision-making in the management of the airport</td>
</tr>
<tr>
<td>ATC</td>
<td>Air Traffic Control</td>
</tr>
<tr>
<td>Balanced Approach</td>
<td>ICAO's recommended approach to the management of aircraft noise through the exploration of four principle elements</td>
</tr>
<tr>
<td>CAA</td>
<td>Civil Aviation Authority</td>
</tr>
<tr>
<td>GA</td>
<td>General Aviation – commercial aviation that involves business and private flying and other non-standard commercial scheduled air transport services (such as royalty and VIPs)</td>
</tr>
<tr>
<td>ICAO</td>
<td>International Civil Aviation Organization</td>
</tr>
<tr>
<td>Late runner</td>
<td>An aircraft arriving or departing outside of an airport's restricted operating hours</td>
</tr>
<tr>
<td>LH</td>
<td>Long haul – an aircraft flying a route over a long distance incorporating both long (over 6-8 hours) or ultra-long haul (over 12 hours) i.e West Coast USA or the Far East</td>
</tr>
<tr>
<td>NAP</td>
<td>Noise Action Plan – Heathrow's five year plan that sets out measures to manage and reduce the effects of aircraft noise</td>
</tr>
<tr>
<td>NATS</td>
<td>National Air Traffic Services – provider of ATC services and resource</td>
</tr>
<tr>
<td>Night flight</td>
<td>An aircraft that is scheduled to operate between 23:30 and 06:00</td>
</tr>
<tr>
<td>Night period</td>
<td>The period between 23:00 and 07:00</td>
</tr>
<tr>
<td>Night Quota Period</td>
<td>The period between 23:30 and 06:00</td>
</tr>
<tr>
<td>NJM</td>
<td>Night Jet Movement (Night Movement) – an aircraft arrival or departure during the night quota period</td>
</tr>
<tr>
<td>Noise exempt</td>
<td>An aircraft that has been rated for its noise output as zero (QC0)</td>
</tr>
<tr>
<td>QC</td>
<td>Quota Count – the amount of quota (QC points i.e QC0.125/0.5/1/2/4/8/16) assigned to an individual aircraft that might operate a night movement</td>
</tr>
<tr>
<td>QC allocation</td>
<td>The amount of QC points allocated to the airport by the Department for Transport for use each season and managed by the airport</td>
</tr>
<tr>
<td>QNC</td>
<td>Quiet Night Charter</td>
</tr>
<tr>
<td>SH</td>
<td>Short haul – an aircraft flying a route over shorter distance (generally less than six hours) i.e European destinations</td>
</tr>
<tr>
<td>SID</td>
<td>Standard Instrument Departure – a defined and coded controlled pathway out of an airport (from the runway) and onto the airway structure</td>
</tr>
</tbody>
</table>

---

Get in touch:

If you would like to receive more information, or would like a large text or alternative format of this document please contact us:

Call our freephone number **0800 344 844**

Send an email to **noise@heathrow.com**