

# NOISE ACTION PLAN 2019-2023

EXECUTIVE SUMMARY

ADOPTED AND APPROVED BY THE SECRETARY OF STATE  
FOR ENVIRONMENT, FOOD AND RURAL AFFAIRS –  
FEBRUARY 2019



Heathrow

# INTRODUCTION

In meeting our obligations as the competent authority for producing a Noise Action Plan for Heathrow Airport we have produced the following suite of documents:

- Heathrow Airport: Noise Action Plan 2019-2023
- Heathrow Airport: Noise Action Plan 2019-2023 – Executive summary
- Heathrow Airport: Noise Action Plan 2019-2023 – Supporting annexes

This document provides an Executive Summary of Heathrow Airport Limited's Noise Action Plan to manage aircraft noise impacts over the five-year period 2019-2023. The actions contained within the plan are kept under review. If appropriate and agreed with the Heathrow Strategic Noise Advisory Group, we will update or amend these on an annual basis.

It is important to note that the action plan relates to limiting and where possible reducing noise associated with the current two runway airport within the annual ATM cap of 480,000 movements.

Airports bring a range of economic, social and environmental impacts, both positive and negative. Airports are important economic generators, providing jobs, encouraging inward investment and boosting tourism. However, there are also some negative impacts for those communities that live and work around airports. Noise remains a significant issue for people living or working close to airports or under flight paths.

Limiting and where possible, reducing this noise is a long-standing commitment within Heathrow's sustainability agenda.

The Environmental Noise (England) Regulations 2006 require airport operators to develop Action

Plans designed to manage noise issues and effects arising from aircraft departing from and arriving at their airport, including reduction if necessary.

More specifically the guidance provides details on the general requirements for action plans, expected content (see Annex 14), considerations in determining actions and the process for public consultation, adoption and publication. In helping airports to determine what actions may be necessary the guidance points to two key pieces of information. These are:

- the current noise impact of their operations as shown by the results of the strategic noise mapping; and
- the current control measures they have in place.

In 2017, DEFRA published guidance for airport operators to produce noise action plans, including information on what is required for updating an existing plan. An Airport Noise Action Planning Data Pack was also provided – the information within this was based on strategic noise mapping of Heathrow Airport completed in 2017, showing the situation in 2016. Data is provided on estimated population and dwelling statistics for various noise level indicators and associated noise level contour maps.

This guidance required that the public is consulted about proposals for actions plans, given time to participate in the preparation and review of the actions plan, have their views taken into account and be informed of decisions taken.

The Department for Transport (DfT) has direct control over noise policy at Heathrow and over many years has established a range of operational controls and statutory objectives to manage and where possible reduce noise.



# SUMMARY OF THE ACTION PLAN



Heathrow has had a detailed noise management strategy for a number of years which has further enhanced the approach set by the DfT. Consequently, we believe we have a comprehensive and effective approach to aircraft noise management.

In considering the strategic noise maps we noted that the areas identified were consistent with those we identified in our experience of managing aircraft noise impacts over the past 25 years. Traditionally our approach to noise management has contained actions aimed at addressing areas beyond these contours and additionally, ground noise. In the absence of further guidance to identify important areas within specific contour bands the actions contained within this plan continue to support this wider approach.

The action plan and accompanying text aims to:

- demonstrate our continuing commitment to managing aircraft noise impacts associated with Heathrow airport's operations;
- allow us to engage with communities affected by aircraft noise and better understand their concerns and priorities, so that we can ensure our airport noise strategies and action plans are well informed;
- enable us to make progress towards our long term statutory and voluntary aircraft noise objectives; and
- enable us, in our role as the competent authority for Heathrow Airport's Noise Action Plan, to meet the requirements of the Environmental Noise Directive 2002/49/EU and The Environmental Noise (England) Regulations 2006 SI (2006) 2238.

Over the following paragraphs we have set out the key aspects of Sections 2 to 9 of the Noise Action Plan and the supporting annexes.

**Section 2** sets out the purpose and scope of the Noise Action Plan. While complying with EU and UK regulations, the purpose is to manage and where possible reduce the impact of noise from aircraft operating at Heathrow over the five-year period 2019- 2023. The scope of the Noise Action Plan is extended beyond the areas identified by the strategic noise mapping to include ground noise issues and actions that impact on areas outside the noise contours. The Noise Action Plan only includes actions related to developments for which the airport has been granted planning permission. The section also points out that responsibilities for noise management do not always fall to the airport operator but to the DfT, NATS and/or the CAA. In such cases the airport operator can only recommend proposed changes. It is also highlighted that final approval and adoption of the Noise Action Plan rests with the Secretary of State for the Department of Food and Rural Affairs (DEFRA).

**Section 3** provides a description of the airport, possible future development and Heathrow's long-term noise strategy. The granting of any new planning permission for development such as the Development Consent Order (DCO) for a new runway, expanded capacity or airspace change would trigger a need to update this Noise Action Plan. In the long-term, Heathrow will continue to implement the principles of ICAO's Balanced Approach on aircraft, procedures, land-use management and operating restrictions in conjunction with working with communities to reduce or mitigate the impacts of aviation noise. Annexes 2 and 3 show the airfield plan and typical daily flight paths to and from Heathrow.



**Section 4** introduces the issue of aircraft noise, how it can be measured and reported, and some of its impacts on health and quality of life. Historically time-average noise metrics such as Leq and Lden have been used to describe airport noise levels and to regulate activity. Event-based metrics such as N70 and overflights, that some members of the community can better understand are available but reported by Heathrow in other reports. This section highlights some of the effects of noise and briefly discusses the interdependencies between noise and emissions.

This section also details the relevant legal context in which Heathrow airport operates. The governance structure for noise within which Heathrow operates is complex. At an international level there is the International Civil Aviation Organization (ICAO) that sets noise certification standards as well as recommended practices in relation to aircraft noise. The EU has Directives which relate to aircraft noise including the Environmental Noise Directive. The UK Government has a range of acts, regulations and guides on civil aviation, airports, aircraft, noise and planning. Annexes 5-8 list the limit values that are placed on Heathrow, night restrictions, planning conditions and regulated noise abatement procedures.

**Section 5** outlines our strategic approach to aircraft noise management framed around our long-term objective to limit and where possible reduce aircraft noise impacts. Our commitments on noise fall under the following five headings:

- Quieter planes
- Quieter procedures
- Noise mitigation and land-use planning
- Operating restrictions and voluntary measures
- Working with local communities

All of our actions have been developed within the framework set out in the ICAO Balanced Approach to Aircraft Noise Management, which represents the global approach to tackling noise adopted by governments around the world in recognition of the shared challenge of noise. The UK Government recently confirmed its support for the 'balanced approach' in its Aviation Policy Framework.

The text goes on to describe the current measures in place to manage noise at Heathrow airport under each of the above headings. This is a very detailed section of the Noise Action Plan and is an indication of the wide range of the statutory and voluntary noise management controls already in place. Supplementary information is given where appropriate in the annexes, including noise insulation scheme boundary maps.

**Section 6** summarises the results of the 2016 strategic noise mapping required by the Environmental Noise Directive and also assesses the accumulated noise benefits evident at the end of Heathrow's two Noise Action Plans since 2006.

Annexes 12 and 13 support this section. For example, Annex 12 shows that the area of the 55dB L<sub>den</sub> contour for 2016 was 198km<sup>2</sup>, 19% lower than for 2006, when it was 244.7km<sup>2</sup>. This contour was estimated to contain a population of 683,700, compare with 766,100 in 2011 and 725,500 in 2006. In order to provide some context, data from the London Agglomeration strategic noise maps for road and rail is provided [not available as at 31 August 2018]. This shows that an estimated 766,000 people were within the 55dB L<sub>den</sub> Heathrow air noise contour for 2011. This compares with over 2.4 million exposed to similar levels of road noise and around 525,000 by rail noise sources. Annex 13 presents the outcome for each action in the Noise Action Plan for 2013-2018. Annex 10 provides an

overview of comments from the external auditor on the outcomes of the actions.

**Section 7** sets out our approach to developing the action plan. It sets out how we used the strategic noise mapping (Annex 11) and other data sources, including community feedback from complaint and polling data (Annex 4), to identify the noise issues around Heathrow. It describes the updated guidance from DEFRA on preparing the noise action plans. The public consultation on the draft document is described with explanation of the responses to the main issues raised given in Annex 15.

**Section 8** is the list of actions. There are 52 actions under the five pillars of the noise management framework detailed. This is the result of the collaborative development and consultation review from a variety of sources over the past one and a half years.

Some previous actions have been completed, others amalgamated and some were no longer relevant. We have added 16 actions and updated 22 actions in our plan. Key areas of work are identified below:

- continuing to drive operational performance standards and procedures (Actions 2.1 through 2.11);
- working with airline and NATS colleagues to implement our Quiet Night Charter (Action 4.2)
- supporting the Heathrow Community Noise Forum with an independent advisor (Action 5.3);
- working with local governments on local planning principles and encroachment policy (Actions 3.6 and 3.8);

- conducting a review of our charging structure that provides incentives to our airlines and takes account of CAA recommendations in this area (Action 1.4);
- developing a new noise insulation strategy (Action 3.3);
- preparing an annual five-year noise contour forecast with analysis of impacts on health and well-being (Action 5.11);
- further enhancing our communication tools and data and complaints management, as well as investigating new methods of detecting and communicating changes to operations that might impact residents. (Actions 5.1, 5.2, 5.8 and 5.16); and
- supporting and encouraging independent research to enhance our understanding of how aviation affects and can improve quality of life and health outcomes near our airport (Action 5.13).

**Section 9** discusses how we intend to evaluate the ongoing delivery and outcomes of the Noise Action Plan. It defines terminology such as performance indicator, goal and annual target from a Heathrow Airport Limited perspective and reiterates the commitment to use the annual reporting and audit verification process to assess progress.

It also details a number of key performance indicators and associated targets which we will use to provide a more concise assessment of progress against the plan. These are set out below.



## NAP 2019-2023 Key Performance Indicators

|   |
|---|
| <b>OVERALL PERFORMANCE</b><br>KPI 1: Area of noise contours                               |
| <b>QUIETER PLANES</b><br>KPI 2: Fleet mix<br>KPI 3: A320-family retrofits                 |
| <b>QUIETER PROCEDURES</b><br>KPI 4: Track keeping and CDA<br>KPI 5: FQG ratings           |
| <b>SOUND INSULATION</b><br>KPI 6: Properties insulated<br>KPI 7: Satisfaction with scheme |
| <b>NIGHT FLIGHTS</b><br>KPI 8: Nights with no movements                                   |
| <b>COMMUNITIES</b><br>KPI 9: Annual public opinion polling                                |
| <b>NAP PROGRESS</b><br>KPI 10: % actions on track   |

Finally Annex 17 contains the contours forecast for 2023 and the expected decrease in the noise footprint and Annex 18 provides estimates of the costs for implementing this Noise Action Plan over the next five years.

**The action plan is supplemented by a number of supporting annexes which provide key data and analysis. These are detailed below:**

|          |  |
|----------|--|
| Annex 1  | Glossary of terms  |
| Annex 2  | Airfield map   |
| Annex 3  | Typical daily flight paths   |
| Annex 4  | Community response to noise  |
| Annex 5  | Limit values in place at Heathrow                                  |
| Annex 6  | Night restrictions   |
| Annex 7  | Planning conditions for Terminal 4 and Terminal 5                  |
| Annex 8  | AIP Noise abatement procedures Heathrow                            |
| Annex 9  | Noise mitigation scheme boundary map                               |
| Annex 10 | Comments from independent auditor                                  |
| Annex 11 | Strategic noise maps   |
| Annex 12 | Noise mapping and impacts 2006-2016                                |
| Annex 13 | Actions of NAP 2013-2018 progress and outcomes                     |
| Annex 14 | Extracts from DEFRA Guidance for airport operators July 2017       |
| Annex 15 | Consultation 2017 and 2018   |
| Annex 16 | Key changes in the actions and KPI's from second Noise Action Plan |
| Annex 17 | Forecast 2023 contours and results                                 |
| Annex 18 | Financial information  |

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