



Heathrow's Blueprint for noise reduction

Ten practical steps to cut noise
in 2016/17

Working together with our communities

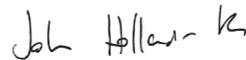
As part of our commitment to engage openly and constructively with our local communities we have established a number of forums to engage with residents, community and pressure groups, local councillors and MPs. These are:

Step by step towards a quieter Heathrow

We share a common objective with our neighbours: to make Heathrow quieter. Over the last few years that's exactly what we've been doing in conjunction with our airlines and industry partners through offering financial incentives to airlines to operate their most modern fleets, encouraging quieter procedures and through operating restrictions. As a result, Heathrow is getting quieter but there's still more we can do.

Our second **Blueprint for Noise Reduction** is a response to feedback from local communities and focuses on the key areas raised by them. Through our local forums, residents and local stakeholders have an opportunity to directly influence Heathrow's noise management priorities and future airspace planning. Many of the actions in this second Blueprint have been developed in collaboration with members of these forums, in particular the Heathrow Community Noise Forum.

Our Blueprint for Noise Reduction sets out 10 practical steps we can take now – it challenges us and everyone we work with to be quieter, sooner. We look forward to reporting back our progress against these steps.



John Holland-Kaye



Heathrow Community Noise Forum

The Heathrow Community Noise Forum informs and consults residents and local councils from 12 local boroughs, as well as other stakeholders including the Department for Transport (DfT), Civil Aviation Authority (CAA), NATS (The Air Navigation Service Provider) and British Airways. Topics cover airspace planning, future trials and consultations, and developing the understanding of airspace and operational issues. Many of the actions in this Blueprint have been developed in collaboration with the working groups of the Heathrow Community Noise Forum. They focus on key areas of interest including: noise metrics and monitoring; noise policy and communications; quieter operating procedures; and reducing the impact of night flights. www.heathrow.com/hcnf

Heathrow Strategic Noise Advisory Group

The Heathrow Strategic Noise Advisory Group (formerly known as the Heathrow Noise Forum) works on a range of strategic issues and seeks to foster collaboration in noise management at Heathrow. Established in 2014, stakeholders include representatives from DfT, CAA, NATS, International Air Transport Association (IATA), British Airways, Heathrow, local community group HACAN and local authorities.

Heathrow Airport Consultative Committee

The Heathrow Airport Consultative Committee provides a forum to discuss a range of broad matters concerning the development or operation of the airport which impacts users and people living and working in areas affected by this. It is made up of formal representatives from councils, cities, airport users and local residents. www.hacc.org.uk

Local Focus Forum

The Local Focus Forum is made up of representatives from local resident associations and councillors from villages and wards bordering Heathrow. We meet quarterly with the members to inform and engage them about developments at the airport and to receive feedback on the effect of the airport on their communities on a broad range of issues including noise. To find out more visit www.heathrow.com/noise

Ten practical steps we're taking to make Heathrow quieter in 2016/7

Collaborating to improve the quality of life of our local community



1

Early phase out of noisiest and introduction of quietest planes

We will introduce lower landing charges for the quietest types of aircraft, known as Chapter 14 aircraft, such as the A350. This will make Heathrow the first airport in the world to differentiate charges for Chapter 14 aircraft, further encouraging airlines to use their newest fleets at Heathrow. We will also continue to work with airlines to encourage an early phase-out of the oldest and noisiest aircraft known as Chapter 3 aircraft, such as older B737 aircraft which now account for less than 1% of aircraft using the airport.



2

Fitting quiet technology to A320s

Building on progress from the previous Blueprint for Noise Reduction, we will continue to encourage airlines to retrofit their A320 fleets with new technology to reduce the distinctive high pitched whistling sound made by the A320 family of aircraft on approach. This has the potential to reduce the noise from each aircraft by around 6 decibels. Once more than a third of A320 movements have been retrofitted we will undertake a field study to quantify the changes in noise levels.



3

Fly Quiet programme

Through our Fly Quiet programme, we will continue to encourage airlines to use quieter aircraft and to fly them in the quietest possible way. The programme is based on the UK's first ever league table which ranks airlines according to their noise performance. The Fly Quiet league table is published every quarter comparing each of the top 50 airlines (according to the number of flights to and from Heathrow per year) across six different noise metrics. We will undertake a review of the programme during 2016 and launch an updated programme during 2017.



4

Campaign for quiet approaches

We will continue to campaign for quieter approach procedures in 2016 and 2017.

Landing gear:

We will undertake a follow-up study of airlines procedures for lowering landing gear (ie wheels and undercarriage). Once lowered, landing gear increases airframe noise, so an approach is quieter if the landing gear is deployed as late as safely possible. A study last year demonstrated significant variation of deployment procedures amongst airlines operating the same aircraft type. Since then we have been working with airlines to lower wheels as late as possible and improve consistency.

This study will allow Heathrow to understand the inconsistencies that occur and improve performance.

Continuous Descent Approach:

Through our Fly Quiet Programme, we will continue to pioneer Continuous Descent Approaches (CDA). Aircraft approach airports in two stages. Pilots can make the first stage less noisy by descending at a steady rate in what's known as CDA. The alternative – coming down in steps with periods of level flying in between – is noisier because aircraft fly at low altitudes for longer. In 2015 87% overall and 96% at night-time of arrivals achieved a CDA.

Steeper approaches:

We will report on the Slightly Steeper Approach trial in summer 2016, following the successful trial which ran from Autumn 2015 to Spring 2016. An aircraft's angle of descent has an effect on the noise experienced by people below. The steeper the angle, the less time an aircraft spends at low altitudes, which means that fewer people are affected by higher levels of noise. At Heathrow, aircraft come in to land at an angle of 3 degrees. We believe that 3.25 degrees would be as safe, yet slightly quieter. Our long-term aim is to incorporate steeper angles of descent in our proposals for redesigning the Heathrow airspace as part of the Government's Future Airspace Strategy.



5

Campaign for quiet departures

The climb profiles of aircraft will vary for a number of reasons such as weather, operating weight and the specific operating procedure selected by the airline. In 2016 we will undertake a departure profile noise study to establish the climb gradients used by different airline / aircraft type combinations in order to understand why some aircraft are lower than others and to monitor noise changes resulting from different procedures. This information will be used to inform discussions about potential changes to operating procedures.



6

Establish a Quiet Night Charter

We will introduce a voluntary Quiet Night Charter in 2016, developed in conjunction with members of the Heathrow Community Noise Forum and our airlines. The Charter will include initiatives aimed at reducing the impacts of night operations such as fewer late running aircraft and increased periods of respite for residents.



7

Ventilation programme for local schools within our Community Buildings Scheme

We will support a programme by Hounslow that will start to install ventilation technology in five local primary schools that have already benefitted from replacement windows through Heathrow's Community Buildings Noise Insulation Scheme. This is part of a multi-million-pound commitment to fund ventilation and cooling systems in 26 local schools over the next few years that are most impacted by aircraft noise.



8

Expand our noise monitoring network

We will significantly increase the number of permanent noise monitors situated in the local vicinity to record aircraft noise levels over the next 12 months. Noise data will be provided through the Heathrow noise website. In addition, we will upgrade our existing noise monitors and increase the number of mobile monitors deployed locally making a total of 50 new noise monitors overall.



9

Introduce a suite of supplementary noise metrics

We will publish a range of additional noise metrics in 2016 in direct response to concerns about the limitations of traditional metrics, to improve understanding of local noise impacts and change. The range of metrics will be agreed with input from members of the Heathrow Community Noise Forum and will be published annually.

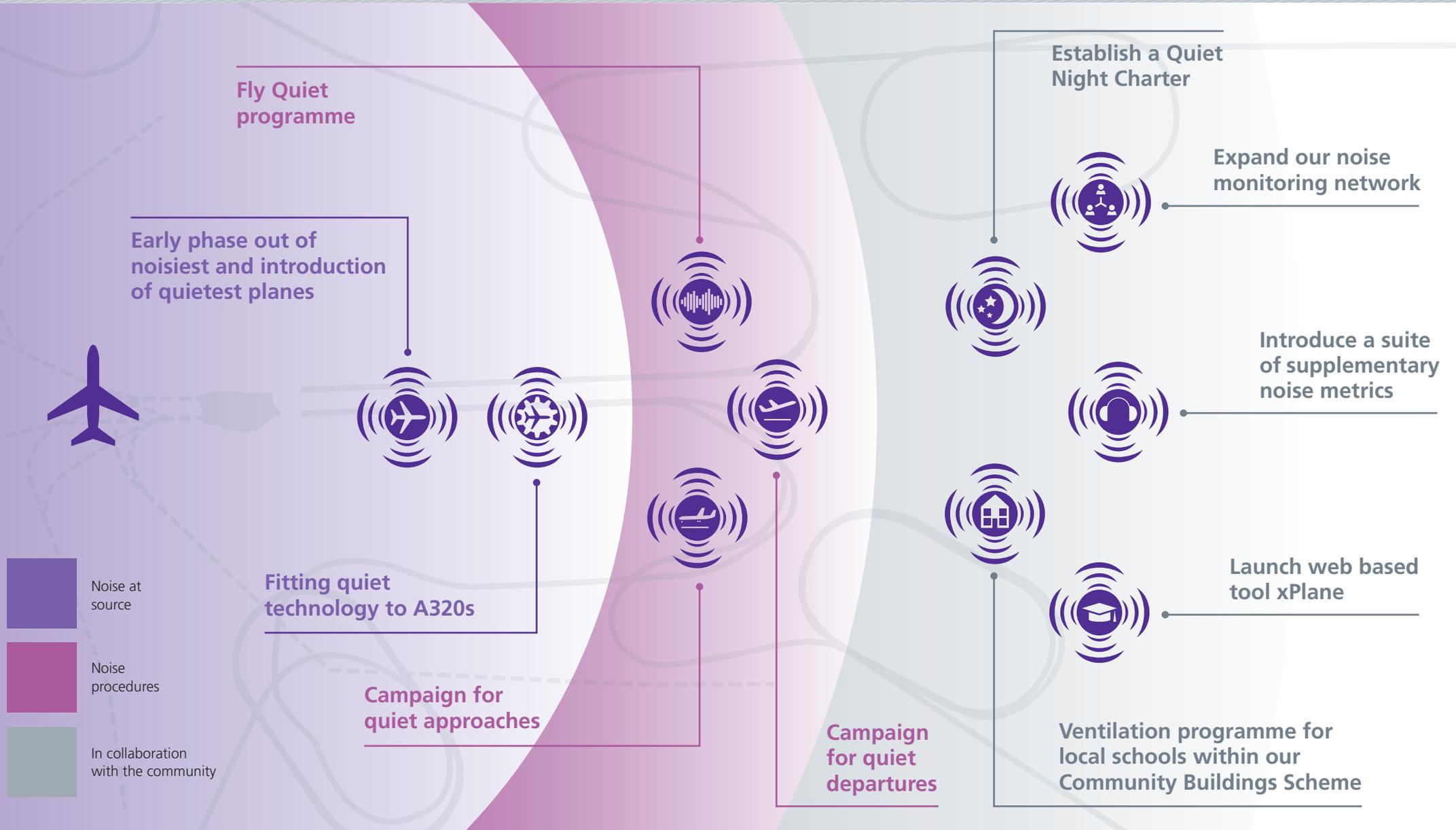


10

Launch web based tool xPlane

Building on Heathrow's other web based tools - Webtrak and Webtrak My Neighbourhood - we will launch a new online tool called xPlane in Autumn 2016. xPlane enables local residents to access flight data specific to their individual location and carry out their own analysis of flights over a selected area. Results will include the numbers, heights, position and types of aircraft for self-selected periods over the last five years.

Ten practical steps we're taking to make Heathrow quieter in 2016/7





A quieter Heathrow

We are committed to making Heathrow quieter working in collaboration with our local communities and airlines to reduce the impact of noise. Our second Blueprint for Noise Reduction sets out the ten practical steps we're taking now to make Heathrow Quieter in 2016/7 including:

- Undertaking departure and arrival noise studies to help establish operational best practice and be the first airport to introduce a Chapter 14 element in our landing charges to encourage the use of quieter aircraft;
- Reducing the impact of our night operations through a voluntary Quiet Night Charter - addressing both late departures and early morning respite;
- Launching xPlane, a web-based tool that will enable local residents to access flight data specific to their location.

If you have any comments or suggestions, or would like to know more, please contact:

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