

## **Heathrow Airport Limited response to CISHA scrutiny report**

29 February 2024

Heathrow welcomes the air quality scrutiny report from CISHA. As one of the most important environmental issues faced by airports, we were pleased that air quality was selected as the inaugural scrutiny project for the Council. The activity has added significant information to help inform our ongoing work through Heathrow 2.0 to deliver clean air at and around Heathrow.

Air quality is improving year on year at and around the airport. This is the result of several factors, particularly increasingly lower emissions vehicles and a growing number of electric vehicles at the airport and in the community, and increasingly lower emissions aircraft. This positive trend has continued for over a decade.

CISHA made five recommendations to Heathrow. We agree with the intention behind all of them, and below we explain our response to each in more detail, including what we are doing now and what additional activity we are planning.

### **CISHA recommendation 1**

#### **Building evidence on the impact of air pollution around Heathrow Airport on public health**

Poor air quality is detrimental to human health and therefore the continued improvement observed around Heathrow airport is a welcome trend. None-the-less we agree there are opportunities to enhance the body of research into public health impacts.

Our air quality monitoring activity is carried out in accordance with standard practice and our reporting shows how measurements compare to the limits for different pollutants put in place by Government to protect health. In 2022 the limits for key pollutants of local concern were fully complied with at all monitoring stations around Heathrow. These are nitrogen dioxide and particulate matter (PM10 and PM2.5 – particles of 10 microns or less and 2.5 microns or less respectively).

One monitoring station operated by Heathrow at Harlington recorded a concentration of low-level ozone above Government limits for this pollutant. This is a commonly observed phenomenon cross the wider Southeast of England during summer months due to the effect of certain weather conditions on concentrations of this pollutant, which is not specific to Heathrow.

The monitoring network provides high quality data from those locations covered. Aside from supplying direct measurements, the data are used to model air quality across the entire Heathrow area. The latest model is for the year 2019 – the last full year unaffected by the pandemic. The 2019 model shows that some locations experienced pollution concentrations above the limits. These are within 200 metres of motorways, and a few metres of A roads. The model will be updated in 2024 using the latest data from 2023, which are expected to show a further improvement on 2019 levels of air pollution. Once we have these results, we will investigate opportunities to expand monitoring to more of these locations.

2023 monitoring data will be available during the second quarter of 2024 (April-June) and published on the Heathrow Airwatch website ([www.heathrowairwatch.org.uk](http://www.heathrowairwatch.org.uk)). These data are drawn from monitoring stations operated both by Heathrow and by Local Authorities.

Particles much smaller than PM2.5s – called ultrafine particles (UFPs) – are not currently subject to Government limit values. Their impact on human health is poorly understood and Heathrow has been involved in directly funding research on UFPs since 2016. As part of this focus, we are planning collaborative research with a group of other airports to understand more about their distribution and impact at Heathrow and airports elsewhere in the UK. During 2024 we will undertake a review of academic literature and studies from airports around the world on the health impact of UFPs, to ensure that additional research is building on the latest state of knowledge. Findings and implications for our work programme will be discussed with the Heathrow Air Quality Working Group (HAQWG).

What we are doing	What we are planning
<ul style="list-style-type: none"> <li>Monitoring key air pollutants of concern across the Heathrow area</li> <li>Ultrafine Particles (UFPs) research and monitoring</li> <li>Discussing further joint research with other UK airports to establish more information on UFPs</li> </ul>	<ul style="list-style-type: none"> <li>Review of the current state of knowledge on the impact of UFPs</li> <li>Increased role for HAQWG in reviewing data with consideration for a dedicated UFP sub-committee</li> <li>Where feasible and agreed, extended UFP monitoring network</li> </ul>

**CISHA recommendation 2**

Expanding the monitoring infrastructure around Heathrow Airport

The air quality monitoring network around Heathrow is the most extensive of any UK airport. There are 13 continuous monitoring stations within 3km, five of which are owned by Heathrow. In line with the CISHA recommendation, we are committed to ensuring it is effective and comprehensive and are reviewing its coverage, including at locations under flight paths. We will consider opportunities to extend monitoring in locations where there is both a clear case to do so, and monitoring is feasible to implement.

Consideration of extended UFP monitoring will form part of this exercise. Note that the location of continuous monitoring stations is determined by several factors including location of emissions sources; meteorological conditions; site accessibility and safety; exposure; geography; historical data; range and sensitivity of analysers; planning permission and siting regulations. Through HAQWG we will discuss working with Local Authorities on the development of a low-cost sensor-based monitoring strategy.

What we are doing	What we are planning
<ul style="list-style-type: none"> <li>On-going monitoring of NOx, PM10, PM2.5, O3, BC and UFPs</li> <li>The air quality monitoring network around Heathrow is the most extensive of any UK airport – with 13 continuous monitoring stations within 3km of the airport, five of which are owned by Heathrow</li> </ul>	<ul style="list-style-type: none"> <li>Review potential for additional monitoring where modelling shows elevated concentrations</li> <li>Work with local authorities on the development of a low-cost sensor-based monitoring strategy</li> </ul>

**CISHA recommendation 3**

**Improving the way Heathrow Airport communicates and displays air quality data and information**

Since the formation of CISHA, HAQWG has discussed the importance and challenge of communicating the complex science of air quality with our local community. Heathrow agrees that there are opportunities to improve the way information is made available.

As a fundamental next step, Heathrow Airwatch – which has provided real-time data from local monitoring stations operated by Heathrow and Local Authorities for over a decade – will receive a major overhaul. This affords the opportunity to implement several CISHA recommendations, such as making it more user friendly and supplying clear contextual information. CISHA will be consulted on its design.

What we are doing	What we are planning
<ul style="list-style-type: none"> <li>Heathrow Airwatch website provides real-time data from local monitoring stations</li> <li>The website provides historical data and reports</li> <li>An update to the Airwatch website has been commissioned and work has commenced (in January 2024)</li> </ul>	<ul style="list-style-type: none"> <li>CISHA recommendations are being used to inform the updated website requirements</li> <li>CISHA will be consulted on the design and specification of the website</li> </ul>

**CISHA recommendation 4**

Introducing independent oversight over Heathrow Airport’s air quality targets

CISHA’s scrutiny of Heathrow 2.0 helps to ensure Heathrow maintains high standards in sustainability reporting and it has an ongoing role to hold Heathrow to account for its targets. HAQWG comprises Local Authorities, statutory bodies and other stakeholders, offering an independent view on air quality at and around the airport and the work of Heathrow. A key pillar of its work is to review our strategy and actions.

An independent chairperson represents HAQWG, reporting progress directly to CISHA. To broaden the representation of the group, representatives from the Health Security Agency and Department for Transport will be invited to join HAQWG. These invitations will be made during Q1 2024.

What we are doing	What we are planning
<ul style="list-style-type: none"> <li>• CISHA’s scrutiny of Heathrow 2.0 helps to ensure we maintain the highest standards in sustainability action and reporting</li> <li>• HAQWG provides feedback on Heathrow's air quality initiatives and monitoring results</li> <li>• Its chairperson reports progress directly to CISHA</li> </ul>	<ul style="list-style-type: none"> <li>• A revised Air Quality Action Plan will be part of an updated Heathrow 2.0</li> <li>• We will invite representatives from the Health Security Agency and the Department for Transport to further expand the expertise of the group and bring further perspectives</li> </ul>

**CISHA recommendation 5**

Set air quality targets and expectations for airlines and other airport suppliers

Through Heathrow 2.0, our airport partners are engaged on a wide range of sustainability issues, including air quality, with clear expectations for supplier best practice set out.

Heathrow invests in sustainability at the airport through our capital programme and delivering air quality benefits is a requirement. During the period to the end of 2026, this includes over £250m of capital investment involving much of Heathrow’s supply chain.

Companies operating at the airport will need to comply with ultra-low emissions zone requirements from 2025. During 2024 we continue to invest in EV charging infrastructure to support a smooth transition to zero-emissions vehicles airside, with a target of 87% by 2030.

For airlines operating at Heathrow, we successfully use our landing charges to incentivise the cleanest and quietest fleet and airline fleets continue to become lower emissions every year.

What we are doing	What we are planning
<ul style="list-style-type: none"><li>• Expectations for supply chain partners are set through Heathrow 2.0 and delivered through procurement processes</li><li>• Heathrow’s capital programme requires the delivery of air quality benefits</li><li>• We successfully use our landing charges to incentivise the cleanest and quietest aircraft fleet</li></ul>	<ul style="list-style-type: none"><li>• Suppliers, and other companies operating at the airport, will need to comply with airside ultra-low emissions zone requirements from 2025</li><li>• Heathrow continues to invest in EV charging infrastructure to enable the transition to zero-emissions vehicles</li></ul>