



Air Quality Technical Report - Summary

What is the purpose of the report?

1. This report represents the completion of the *first stage* of our commitment in the Air Transport White Paper to conduct a thorough review into how air quality targets can be met if we were to expand Heathrow. Additional runway capacity could be achieved either by introducing 'mixed mode' (mixing arrivals and departures) on the existing two runways, or by adding a short third runway to the north of the existing airport.
2. The report sets out the recommended methodology and approach for assessing air quality at Heathrow in future against the strict air quality limits set out in the White Paper. It is not a policy report.

Whose report is it?

3. The report is the work of three panels of scientific and technical air quality experts, including representatives from universities, the Department for Environment, Food and Rural Affairs, local government and the scientific and technical research community. The panels have met regularly over the last two years to review the data, knowledge and tools used by the Government to date, and to agree on a technically robust way forward for assessing the air quality impacts of future development at Heathrow.
4. The work of the panels has been independently peer reviewed (a list of those who participated is on the DfT website) and cleared as unbiased and technically sound.

What were the main findings?

5. The panels have confirmed that the three main pollutants of concern at Heathrow are nitrogen dioxide (NO₂), nitrogen oxides (NO_x) and particulate matter (PM₁₀), but have emphasised that the *key* air quality hurdle is NO₂. This is the only pollutant for which EU limit values (applying from 2010) are currently being breached at a number of sites around the airport and are likely to continue to pose a problem in the future, if no action is taken.
6. The panels have looked at a range of existing modelling tools and recommended the most appropriate (in terms of flexibility and the level of complexity it can handle) for the Heathrow study. In the course of their work, they identified a need to strengthen air quality measurement around the airport, and in response some additional monitoring has been put in place.

7. The panels have made a large number of detailed recommendations on how best to represent and model pollutants in future, which have been accepted in full. We believe that applying them will lead to a greatly improved, more sophisticated modelling approach compared with the earlier White Paper work in this area, which was acknowledged to contain significant uncertainties.

What happens next?

8. This is a specialist report which helps to ensure that we are best-placed to carry out an effective assessment of the likely position as regards air quality around Heathrow in the years ahead, taking into account expected growth in air and road traffic. It does *not* reach any conclusions about the viability of a third runway or the introduction of mixed mode operations, which is a matter for the next stage of the work.
9. Building on the report, we will now proceed to model future scenarios at Heathrow and test them for air quality impacts. This work will be carried forward over the coming months. It will also look at action that might be taken to reduce emissions over time. The outcome will inform policy conclusions on the prospects for proceeding with 'mixed mode' or a third runway without breaching our national or European air quality obligations.
10. We expect to go out to public consultation with our findings next year. Policy decisions are expected around the end of 2007. The full technical report and executive summary can be found on our website along with notes of the panel meetings.

For more information, contact Aviation Environmental Division on aed@dft.gsi.gov.uk or the DfT Press Office on 020 7944 3387.