

## Draft text for response to National Policy Statement on aviation

This is the response of the London Assembly Environment Committee to the draft Aviation National Policy Statement. It has been agreed by the committee following meetings on 10 November 2016 and on 16 March 2017, at which the committee discussed the environmental impacts of aviation and particularly of an expanded Heathrow with experts and stakeholders including Heathrow Airport, the Clean Air in London Campaign, HACAN Clearskies, Friends of the Earth, ClientEarth and the Local Authorities Aircraft Noise Campaign. There has already been a response from the London Assembly Transport Committee, focusing on issues of surface transport connections.

Successive Mayors of London and the London Assembly have long opposed expansion at Heathrow, because it would exacerbate the already-severe air pollution and noise impacts on Londoners. The current London Assembly likewise opposes the construction of a third runway at Heathrow on the grounds of both local and national environmental impact.

Despite this consistent opposition from the airport's own region, and many across the rest of the country, the Government has chosen to support a proposal by Heathrow Airport to build a third, north-west runway, with additional facilities to go with it. Heathrow's flights capacity would increase by 60 per cent, from around 480,000 air traffic movements per year to 770,000, and its passenger and freight capacity would increase.

This response focuses on the environmental impacts of this proposal: air pollution, noise pollution and carbon emissions.

## Air pollution

The legal limit on NO<sub>2</sub> is breached in many London locations, including Heathrow airport and roads leading to it (particularly the A4). These breaches are currently expected to continue until around 2025 and potentially longer, depending on the strength of Mayoral and national policy action to reduce air pollution. NO<sub>x</sub> (and particulate) emissions come from aircraft taking off, landing and running engines on the ground, from vehicles and buildings involved in airport operations, and from transport of passengers, freight, materials and staff to and from the airport, particularly by road.

The Government acknowledges that Heathrow expansion would increase air pollution – both in construction and in operation, particularly due to increased surface travel – and that this would harm the health of, and increase mortality among, people exposed to the increased pollution.

However, the Government argues, as did its Airports Commission, that this is acceptable as long as it is legal, and that it is legal as long as the increased pollution from expansion does not exceed the worst pollution in the whole of Greater London, thereby delaying compliance of the region as a whole with legal limits on pollutant concentrations.

We continue to reject this ‘zonal compliance’ argument. As well as being a disputed interpretation of the law<sup>1</sup>, it ignores pollution’s health impacts, which affect local residents and people travelling through regardless of pollution levels in other areas. **It is arguably illegal and in any case unacceptable to worsen and prolong local breaches of health-based air pollutant concentration limits in places where people are exposed.** It is acknowledged that expanding Heathrow would do this.

The High Court ruled in April 2016 that the Government must “choose a route to [compliance] which reduces exposure as quickly as possible.”<sup>2</sup> As each and every place where people are exposed to air pollution in excess of the limit values contributes to the extent of exposure, the judgement seems to suggest that each breach must be eliminated in the shortest possible time. The judgement therefore appears to legally rule out the zonal compliance approach.

The Government says that it “will only grant development consent if Heathrow Airport can demonstrate that expansion can take place within legal air quality limits.”<sup>3</sup> However, it also says that analysis of air pollution impacts has already concluded that expansion can take place within legal limits.

The way in which the Government is using this analysis is flawed, as is the analysis itself. The analysis concludes “In 2030, the 2015 Plan measures and the *effective implementation* of Real Driving Emissions (phase 2) would ensure that the option [Heathrow north-west

---

<sup>1</sup> For example, see the legal advice of Robert McCracken QC to Clean Air in London, that planning authorities must refuse permission for developments that would create or worsen breaches of air pollution limits, and stating that the Airports Commission had misdirected itself in the law on air pollution. [http://cleanair.london/legal/clean-air-in-london-obtains-qc-opinion-on-air-quality-law-including-at-heathrow/attachment/cal-322-robert-mccracken-qc-opinion-for-cal-air-quality-directive-and-planning\\_signed-061015/](http://cleanair.london/legal/clean-air-in-london-obtains-qc-opinion-on-air-quality-law-including-at-heathrow/attachment/cal-322-robert-mccracken-qc-opinion-for-cal-air-quality-directive-and-planning_signed-061015/)

<sup>2</sup> <http://www.bailii.org/ew/cases/EWHC/Admin/2016/2740.html> paragraph 52

<sup>3</sup> (reference to consultation document)

runway] would be *unlikely* to impact on the compliance with limit values.”<sup>4</sup> We observe that:

- Impact on zonal compliance is stated to be *unlikely*, but is not ruled out. The main consultation papers say “expansion is capable of taking place within legal limits” based on analysis that “contains a worst-case scenario”. This seems to allow the reader to conclude that expansion will not breach legal limits, even under a worst-case scenario. Attention to the analysis shows precisely the contrary, even based only on zonal compliance.
- The conclusion is based on the extra runway not opening until 2030. The analysis makes clear that earlier opening would make delayed zonal compliance more likely. The Statement of Principles agreed in October 2016 between the Government and Heathrow envisages opening in 2026.
- The conclusion emphasises the reliance on effective implementation of measures to bring the real driving emissions of diesel vehicles into line with on-paper emissions standards. This is challenging and controversial in itself – the diesel emissions scandal is well-known, and the Government itself acknowledges the extent to which even the latest diesel cars emit more pollution in real driving situations.<sup>5</sup>
- The conclusion relies on the UK’s 2015 National Air Quality Plan, which was struck down by the High Court as incompatible with UK law, for reasons including over-optimistic projections of future air quality.

There also appears to be no remedy of deficiencies in the analysis that we have previously pointed out – that the modelling of future air pollution does not reflect potential pollution breaches that could be created by road remodelling and traffic diversion, because it reports spot projections only at existing monitoring points, and excludes from its analysis any homes within 10 metres of a new road section. In addition, there has also still been no detailed modelling of construction impacts, which could come in the early- and mid-2020s at crucial times for limit value compliance.

## Surface transport and mitigation measures

The National Air Quality Plan and the case for Heathrow expansion in particular also rely on Heathrow-specific measures to reduce air pollution, such as improved public transport links and an ultra-low-emission zone. Without these measures, expansion is projected to worsen pollution much more, to the extent that it would be highly likely to delay zonal compliance.

A crucial part of keeping down expansion’s air pollution effects would be to ensure that road traffic does not increase. This would be extremely challenging to deliver, as passenger numbers and freight increase. The application for development consent will have to include details of how public transport will cater for at least half of passenger journeys to the airport by 2030, and 55 per cent by 2040. Staff car trips should reduce by a quarter by 2030 and by a half by 2040. Overall, Heathrow ‘should continue to strive to meet its public pledge to have landside airport-related traffic no greater than today.’ However, this element is not a condition of consent. **We recommend (as did the House of Commons Environmental**

---

<sup>4</sup> The emphasis is in the original report of the analysis (using bold rather than italic type in that document).

<sup>5</sup> *Improving air quality in the UK: tackling nitrogen dioxide in our towns and cities* Defra and DfT May 2017

**Audit Committee) that, if expansion were approved, the cap on airport-related road traffic should be made legally enforceable, with a clear and transparent monitoring process.**

There is a serious lack of clarity about investment in surface transport to Heathrow. In order to accommodate much greater passenger and freight traffic at the airport, without increasing road traffic to and from the airport, it will be necessary to greatly increase public transport capacity to and from the airport. However, Heathrow Airport, the Government and Transport for London are still arguing about what schemes would be required, when they will be constructed, what they are likely to cost, and who should meet what share of the costs. With these matters unresolved, it seems hard to be confident of how expansion's traffic or pollution impacts will be constrained.

We share the concerns of our colleagues on the London Assembly Transport Committee that the proposals seem to accept the Airports Commission's recommendation to expand Heathrow, while ignoring the Airports Commission's clear recommendations for a number of major new surface transport schemes. The Transport Committee found that this approach 'risks creating severe overcrowding on London's transport network, and undermining efforts to encourage modal shift to sustainable transport modes.' We would add that it risks greatly exacerbating the air pollution effects, not just of Heathrow-related traffic, but of other traffic caught in the congestion.

**We fully support the London Assembly Transport Committee's recommendations that 'a costed plan to deliver the required capacity upgrades needs to be produced *before* Parliament can properly consider the National Policy Statement' and that 'it is imperative that decisions are made on precisely what surface access is required, how much it would cost and who would be expected to pay for it.'**

The suggested ultra-low-emission zone for Heathrow has not been detailed. It would presumably rely on Mayoral powers, so it is unclear how the Government, Heathrow or this Committee can be confident of its implications for pollution.

What has been detailed by the Mayor (more recently than the national pollution projections on which the Heathrow case has been based) is the strengthening of his proposed Ultra Low Emission Zone, which is likely to reduce air pollutant concentrations in inner London. This will bring forward compliance with the limit values in inner London and make it more likely that pollution levels near Heathrow could become the factor delaying zonal compliance – which even the Government acknowledges would make expansion illegal.

Overall, we do not think that air pollution implications have been adequately considered in the proposals for Heathrow expansion so far. **We recommend that further consultation be undertaken based on a clear setting-out of the air pollution implications of expansion** including:

- the estimated impacts on local pollutant concentrations based on the best available data, covering all relevant receptors, including those near new or altered road segments, and comparing pollution under an expansion scenario with pollution under a comparable future scenario without expansion (to be comparable, both scenarios will need to include the same pollution reduction measures, unless they are necessarily dependent on expansion)
- the estimated impacts on human health, with the same comparison

- consideration of the impacts of the expansion as actually proposed, including opening in 2026
- modelling of impacts at multiple future times, including 2040 and 2050 as well as 2030, to take into account the full effect of increasing flights, passengers and freight, and also including during construction (including construction impacts) and during the first year of operation, to show the impact during the crucial periods for limit value compliance
- modelling of traffic effects including diversion
- the implications of different scenarios for factors like surface access links (public transport and road), real driving emissions, and emissions from other sources, where these are currently uncertain
- the range of possible scenarios that may result from expansion, including local breaches, local pollution worsening, and zonal compliance delay if these cannot be ruled out
- information provided by the Mayor of London and Defra, to ensure that the modelling reflects regional and national plans and data

## Noise

Noise from aircraft at Heathrow is already a problem. The Airports Commission itself noted that over 700,000 people are affected by noise from Heathrow, more than three times as many as any other European airport. Aircraft noise affects residents' health (especially because of disturbed sleep from night flights), education (especially because of disturbed lessons from morning and afternoon flights), and other aspects of well-being.

Three runways will create more, and more widespread, noise than two. Because individual aircraft are becoming quieter, the Government maintains that fewer people will be affected by noise from Heathrow in 2030 than today. But equally, with aircraft becoming quieter, a relevant comparator for a future three-runway airport would be the two-runway airport with future, quieter aircraft, rather than the current noise levels. Transport for London's analysis indicates that the real difference between a three-runway Heathrow and a two-runway Heathrow would be over 200,000 additional people affected by noise. It may also be noted that the choice of 2030 as a comparison point excludes the expected further increase in flights to 2040 and 2050, as the airport grows its business to make full use of capacity.

There is also the issue that, although individual aircraft are getting quieter, there are more flights than in the past. Although Heathrow's noise footprint as measured by the Government's methodology has shrunk over the years, complaints about noise have increased. It seems that the number of flights may be more significant in noise nuisance than the volume of individual flights, and so that the methodology for calculating noise levels may need updating.

The proposal presents predictable respite periods as a mitigating feature of the scheme, but notes that, with the new runway, respite for any given area would be reduced from one-half of the day (as is given by the existing respite scheme) to one-third.

Projections of future noise reductions rely on changed take-off and landing paths, involving steeper angles and curved routes. These are as yet largely untried so it is unclear as to the extent of their potential benefit, if any.

### Mitigation measures and targets

The Government has committed to a ban on night flights. This would be of six and a half hours. The Airports Commission recommends that it should be from 11.30pm to 6.00am, but the Government says that, depending on consultation it may start as early as 11pm or finish as late as 7am. Heathrow has suggested a ban from 11pm to 5.30am, which would minimise the impact on the current schedule (early morning arrivals are more popular and lucrative than late nights). The ban could apply to scheduled landings as with the current regime – this has been found to involve flights arriving in London airspace earlier than they are allowed to land and circling in stacks.

The Government has also committed to binding targets for noise reduction, which we have previously recommended. The EAC found that the Government's proposed noise targets need to be clearer and more ambitious, however. The Government's preferred noise threshold for determining who is affected (57 dB LAeq, 0700-2300hrs at the community annoyance level, with higher thresholds to receive help with noise insulation or moving

home) has been criticised for not having kept pace with people's decreasing tolerance for noise disturbance, as measured by surveys. It also ignores night noise, which is the most significant factor affecting most people's health and well-being.

**we recommend a revised measure for the binding noise reduction targets, which more closely reflects the effects of noise on well-being and perceived nuisance, giving greater weight to the *frequency* of noise episodes and to night noise between 11pm and 7am. We recommend that the targets be set at a level that reflects the reductions in noise that would have been expected with newer aircraft from a two-runway Heathrow.**

Heathrow has committed to fund insulation and other community work. There would be about £700 million (in phases over a period of twenty years, beginning one year before opening the new runway) to insulate up to 160,000 homes in the airport's noise footprint, and up to £40 million to insulate schools and community buildings. Heathrow told us that it would look at the timing of this work, but offered no clarity on whether or how many homes would have to wait until the end of the 20-year period for insulation. **we recommend that it be a binding condition that insulation be phased over a much shorter period and/or begin much sooner, so that no affected home should wait more than 5 years for insulation, with the most-affected homes insulated before the new runway begins operation.**

The Government has said it intends to establish an independent aviation noise regulator. This has been widely recommended, including by the London Assembly Environment and Transport Committees and the Airports Commission, and supported by Heathrow itself. However, there is a consultation on a type of body with limited independence, set up within the Civil Aviation Authority and with terms of reference, appointment processes and funding set by the Secretary of State. We fully support the EAC's conclusion that **"We are concerned that these features make this body an instrument of the Government, preventing it from being independent or credible."**

## Carbon emissions

The UK has committed to reducing CO<sub>2</sub> emissions by 80 per cent by 2050. Although international aviation is not yet included in the 5-yearly carbon budgets, the Committee on Climate Change (CCC) is required to take aviation emissions into account and says that, if other sectors reduce their emissions by 85 per cent, the aviation sector could be allowed to maintain its emissions at 2005 levels. More efficient aircraft would allow passenger numbers to increase by 60 per cent within this.

The draft NPS says “the Government agrees with the Airports Commission’s assessment that a new runway is deliverable within the UK’s climate change obligations.” In contrast, the CCC notes that Heathrow’s business case depends on air travel growth greater than 60 per cent, and associated growth in CO<sub>2</sub> emissions of 15 per cent. The CCC says it “has limited confidence about the options for other sectors to go beyond [85 per cent reductions] by 2050” and that “using the Government’s publications, it is not possible to assess whether the business case makes sense when emissions conform to the planning assumption [that aviation emissions do not grow]” because that analysis has not been published.

To implement the greater carbon reductions (perhaps 90 per cent, rather than 80 per cent) implied by the 2015 Paris conference agreement, then these issues are more pressing still.

According to the EAC, the Government “is considering rejecting the CCC’s advice on the limits that should be adhered to and the level of passenger demand which is compatible with those limits.” The EAC points out that shifting emissions reductions still further from aviation to other sectors will increase costs to the economy as a whole. It recommends that **‘the business case for Heathrow expansions must be assessed against a cost/benefit analysis which uses realistic carbon policy assumptions.’ We fully support this recommendation.**<sup>6</sup>

---

<sup>6</sup> In place of the last recommendation, the position of the Green Party Group is: The Green Party Group on the London Assembly does not support any further aviation expansion at Heathrow or any other airport. Aviation is the fastest growing source of greenhouse gas emissions. Aviation expansion is incompatible with attempts to combat global warming and the significant carbon emission cuts needed now and in the near future to avert the dangerous and unpredictable impacts of climate change.