Comments from the Aviation Environment Federation on Defra's "consultation on draft plans to improve air quality: tackling nitrogen dioxide in our towns and cities", September 2015



6th November 2015

AEF has submitted a response to Defra's consultation on its updated air quality plans (see Annex). But we are concerned about the limited scope both of the questions themselves and of the information presented in the background documents. There was no opportunity for us to set out our wider views on Defra's approach to the air quality challenge by way of the online form provided. They are, however, set out below and were included in a letter sent to Environment Minister Elizabeth Truss.

We understand that the draft plan aims to demonstrate that the UK will achieve compliance with EU limit values in the shortest time possible. This is not merely a technical issue. It has importance for two reasons:

- (i) Illegally high levels of air pollution in the UK have led both to the European Commission launching formal infraction proceedings against us, which may lead to substantial fines, and to the UK Supreme Court ruling that the Government's plans for achieving compliance were inadequate and must be urgently revised.
- (ii) Air pollution is responsible for tens of thousands of deaths annually in the UK. Its prominence in terms of public and political debate as a public health threat appears to be increasing, with the recent revelations in relation to VW vehicles giving fresh cause for concern and suggesting that regulators have been failing the public in terms of ensuring that industry performance is in line with expectations.

Defra's emissions reforecasting

With this in mind, we are very concerned that the latest air quality plan consists almost entirely of a description of measures already in place rather than setting out steps that will accelerate the UK's compliance with limit values. It appears, in fact, that the bringing forward of compliance dates to 2020 - or 2025 for London – relates not to any new actions or measures by Government beyond those that were previously in place (and that were deemed inadequate by the Supreme Court earlier this year) but instead to a reforecasting of vehicle emissions. This is set out explicitly in paragraph 18 of the UK overview document, which states for that:

The revised projection differs from that published in July 2014, where 28 zones were projected to be non-compliant by 2020. This improvement is mainly due to the incorporation in the PCM model of updated information on vehicle emissions factors...The most significant changes impacting on the projection are a revised assessment of the performance of both Euro 5 and Euro 6 light duty diesel vehicles and a significant drop in the expected emissions from Euro VI heavy duty vehicles.

It is difficult, however, to feel confident in the reforecasting that Defra has conducted when, first, standards for diesel vehicles have in the past failed to deliver anticipated improvements in air quality and, second, it is unclear whether the figures presented in the updated plan are based on data from test procedures that are robust and accurate or whether they are based on tests that could turn out to have been manipulated. Huge discrepancies between the emissions assessed in test procedures and those associated with real world driving have recently been revealed, with VW able to evade emissions standards rules such that in some cases real world NOx emissions have been shown to be five times higher than those recorded in test conditions. This was noted, for example, by John McNally MP at the Environmental Audit Committee hearing on Tuesday 27th October 2015 (question 100). At the same hearing, Transport Minister Robert Goodwill admitted that "We do not know how wide the problem is across the industry, neither do we know how the fix will work in terms of bringing them back into compliance." Since reforecasting of emissions from diesel vehicles is the main reason for earlier forecasts differing from the latest figures, it is disappointing that there is not more of the consultation devoted to explaining this difference and setting out how monitoring and compliance will be improved in future.

The relevance of this work for potential expansion at Heathrow

Our interest as an organisation is limited to the environmental effects of aviation, which includes the air pollution associated with both aircraft and airports (including surface access for both people and freight). While emissions even at lower levels than those currently legislated for by the EU can harm health, and we support measures to improve air quality around all UK airports, it is only on the roads around Heathrow that emissions are known to consistently breach legal limits. The Government is nevertheless currently considering whether or not to accept the advice of the Airports Commission (AC) to expand the airport – a development that would, the AC admits, worsen air quality compared with baseline forecasts.

At the time of the AC's final publication, such breaches were anticipated to continue beyond the opening date of a new runway, with emissions very significantly over the annual mean NO_2 limit of $40\mu g/m^3$. The unmitigated forecast for 2030 at Bath Road is, based on Defra modelling, $47.4~\mu g/m^3$ without expansion or $48.7~\mu g/m^3$ if a North West runway was to be built¹. An effective package of mitigation measures beyond those currently anticipated, the Commission says, could collectively reduce NO_2 by 2.4 to $3.6~\mu g/m^3$. But this would clearly still leave the Bath Road site significantly in breach of the legal limit.

The new figures published with the Defra consultation closing today now anticipate emissions being below $40 \, \mu g/m^3$ at all receptor sites by 2025 - a very marked difference from the previous estimate. Our concerns about this in relation to the possibility of an expansion of Heathrow airport are follows.

¹ Table 9.4, Airports Commission Final Report, July 2015 https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/440316/airports-commission-final-report.pdf#page=196

We cannot, for the reasons set out above, feel confident in the reforecast of emissions
from diesel vans (which are responsible for a significant proportion of emissions around
Heathrow), that are now expected to bring about this dramatic improvement, without
further evidence. Our concern is compounded by the fact that significant improvements
in air quality around Heathrow have been forecast in the past, and have failed to
materialise.

Defra should, in our view, to set out in detail (i) why its previous forecasts were so significantly wrong (ii) what now gives it confidence in the new forecasts, and (iii) what policy measures, such as appropriate planning controls, will be put in place if the new forecasts turn out to be optimistic.

2. The work presented by Defra for consultation does not include modelling of the impact of a third Heathrow runway on NO_2 levels. Even if the new forecasts prove correct and emissions at Bath Road are below $40\mu g/m^3$ by 2025, a year before a new runway could be operational the AC estimates, it is clearly very possible that a new Heathrow runway could push them back over the limit.

Should the Government announce in December that it supports Heathrow expansion, we suggest that this plan and consultation will need to be redrawn to consider the impact of that decision, modelling emissions associated with construction and use of the runway and any associated increase in road traffic. The modelling will need to extend beyond 2030, as the runway is predicted to be operating below its maximum capacity at that point.

3. The Airports Commission has argued that the new runway should go ahead even if emissions remain in breach of health-based legal limits and even if expansion would compound the problem, as long as there is at least one other site in London where air quality is worse still, such that the Heathrow project did not strictly 'delay compliance'. It cites advice from the Highways Agency as following a similar approach in relation to road building. This suggests a potential approach whereby instead of regarding the limit values as an absolute requirement across all areas of a zone, planning decisions could be taken on the basis of a cynical reading of the EU law that allows an increase in harm to public health. The legality of this approach has meanwhile been challenged by Robert McCracken QC in advice to Clean Air in London².

We very much hope that Defra will make clear that planning consent should not be granted to a project (a) that will worsen air quality in an area where breaches to either current or likely future air quality limits are already anticipated or (b) where there is a significant risk of it causing breaches to either current or likely future limits.

² http://cleanair.london/legal/clean-air-in-london-obtains-qc-opinion-on-air-quality-law-including-at-heathrow/

Annex: response to Defra online consultation

Question 1: Do you consider that the proposed plan set out in the overview document strikes the right balance between national and local roles?

No. The plan does not appear to suggest any new action at a national level to tackle the air quality problem the UK is currently facing, with the possible exception of publishing some new data. Instead, it appears that the bringing forward of compliance dates to 2020 – or 2025 for London – relates not to any new actions or measures by Government beyond those that were previously in place, and that were deemed inadequate by the Supreme Court earlier this year, but instead to a reforecasting of vehicle emissions. We can feel little confidence in this reforecasting without further evidence being provided. Our concern is compounded by the fact that significant improvements in air quality have been forecast in the past, and have failed to materialise.

The only significant new proposed action in this consultation, buried among a description of plans that were previously in place, seems to be for local authorities to form Clean Air Zones. While there may be some merit in a framework that operates across local authority boundaries, local authorities have limited powers to deliver air quality improvements that can be trumped by national level decisions.

AEF is concerned with the environmental impacts of aviation, including the air pollution associated with both aircraft and airports (including surface access for both people and freight). While emissions even at lower levels than those currently legislated for by the EU can harm health, and we support measures to improve air quality around all UK airports, it is only on the roads around Heathrow that emissions are known to consistently breach legal limits. The Government is nevertheless currently considering whether or not to accept the advice of the Airports Commission to expand the airport – a development that would, the Commission admits, worsen air quality compared with baseline forecasts.

The Defra consultation notes that: "In making decisions on planning applications local planning authorities take into account whether what is proposed is sustainable development, in line with the Framework and supporting guidance and any local action to improve air quality and mitigation measures proposed as part of the development in question" and that "In keeping with the localism agenda, the principal responsibility for implementing geographically targeted measures will rest with relevant local authorities."

In the case of Heathrow expansion, the relevant local authority, Hillingdon, opposes the proposed expansion partly on the basis of concerns about its air quality impact. Yet a national level decision could over-rule this judgment.

The consultation further describes the important role in London of the Mayor's office in producing strategies and introducing measures to tackle air pollution, noting that "The size and complexity of the Capital's transport networks means the task of reducing NOx emissions, and NO2 concentrations to legal limits, is the most challenging in the

country." Yet while the current London Mayor, all Mayoral candidates, and the London Plan all oppose Heathrow expansion – with air quality high on the list of reasons why – this too could be overruled.

Defra needs to provide a clear statement that the requirements to meet air quality limit values in the shortest time possible applies in all locations and should ensure that any national planning decisions appropriately support and reinforce the action being taken at local level to improve air quality in problem areas.