

## **LONDON BOROUGH OF RICHMOND UPON THAMES**

### **RESPONSE TO THE AIRPORTS COMMISSION'S CONSULTATION ON THE AIR QUALITY ASSESSMENT, MAY 2015**

#### **Introduction**

This response relates only to the air quality situation regarding the provision of extra runway capacity at Heathrow.

As our response to the Commission's Air Quality Assessment, we are contributing our views both here and also as part of the 2M group's more regional cross-Borough response. The purpose of this separate response is to enable a focus on air quality in the Borough, together with a focus on Health, contributed by our Public Health unit.

We understand the time constraints for the restricted time allowed for responses to this consultation but the situation remains, that a longer response time would have allowed a more complete assessment. Air quality is a serious issue and needs to be considered properly, especially as the threat is that Heathrow may be wrongly selected to gain an extra runway.

The Supreme Court judgement provides a much needed focus on the air quality situation in the UK. At the same time as the Court was firmly ruling that the situation must improve 'as soon as possible', the Airports Commission was preparing to publish the Jacobs work, with its more positive view on the future of air quality. The tone of the Airports Commission position on air quality was set by the covering letter to the consultation when it refers to the 'greater assurance' to be provided by the detailed dispersion modelling and the scope for mitigation. Naturally we do welcome the greater focus on detail but would urge caution on an over reliance on the delivery of benefits from the proposed mitigation measures. We believe that a more precautionary approach is needed and we will be watching with interest as to how the government respond within the December deadline set by the Supreme Court.

The consultation paper does nothing to convince us that air pollution is not a serious issue, with or without a new runway. As the number of passengers steadily rise, it is inevitable that air pollution will rise also. New technology that is designed to reduce emissions may actually increase NO<sub>2</sub> levels (Appendix H). An over dependence on mitigation measures to contain the increases runs the severe risk of failure of one or more component parts and puts the whole enterprise in jeopardy. The consequences of failure can only be guessed at, in terms of cost and the need to scale back the operation. It remains our view that the remaining/increasing risk of failure is unacceptable and is a further indicator that Heathrow is not the right location for airport expansion.

## **The questions:**

### **Question 5**

**Do you have any comments on how the Commission has carried out its appraisal of specific topics (as defined by the Commission's 16 appraisal modules), including methodology and results?**

We note that 'Air Quality' was one of the designated appraisal modules in the Commission's Appraisal Framework and welcome the fact that the topic has now been appraised in greater detail. Whilst we appreciate the greater level of detail on the final output, it glosses over some of the calculations, leaving us to take it on trust that the relevant factors have been included and then processed correctly. In that respect, some of the results lack transparency and therefore need to be treated with caution.

Table 3.1 identifies the differences between National Compliance and Local Compliance. We also note that there are differences in the Study Areas (para 3.2). Unfortunately the treatment of total emissions and the focus on 'change' of traffic flows has the effect of ignoring that many of the roads in the Borough (along with much of London) already exceed the Limit Value. These roads need to improve, not stay the same or get worse, as a result of expansion of Heathrow. The focus on the busiest roads ignores the fact that less busy roads also have a problem, when the receptor is close to the emission source. These receptors need protection as even small increases in Heathrow related traffic will tip the levels over the threshold more easily than on a major road. Although mitigation measures are proposed, there is no guarantee of their success, so that instead of decreases in emissions, the levels increase. As the Consultation paper points out, the modelling for each of the two Heathrow schemes already indicates increasing NO<sub>2</sub> concentrations for over 100,000 people (ENR scheme) and over 121,000 people (NWR scheme). With underperforming mitigation, the number of people affected can only increase yet more. This is a worrying prospect, and must weigh severely against the choice of Heathrow.

Local air quality monitoring results are judged against the Air Quality Objectives itemised in Table 2.2. The key standard to note is the annual mean objective for NO<sub>2</sub> of 40ug/m<sup>3</sup>. In addition, at para 2.1, is indicated that a more stringent objective of 20ug/m<sup>3</sup> is being considered by COMEAP. With our monitoring data we first measure the annual mean and then use the Defra distance calculator to establish the mean level at the nearest vulnerable receptor façade. Using the 'wider study areas' of the Borough, from Figures 5.2 (NWR) and Fig 6.2 (ENR), we have assessed the results from the nearest relevant monitors. Out of the 8 annual mean results (from the year 2013) they all exceeded 20ug/m<sup>3</sup>. Two were just below the objective, each at 38ug/m<sup>3</sup> and the rest were between 43ug/m<sup>3</sup> and 52ug/m<sup>3</sup>, given as façade levels. The highest unadjusted kerbside result was 61ug/m<sup>3</sup>. The

relevance of this is that 60ug/m<sup>3</sup> is the threshold above which there is a risk that the '1 hour mean' objective for NO<sub>2</sub> might also have been breached. These results indicate that there is a local problem with air quality. In turn it indicates that the anticipated Heathrow related additional emissions will either make the levels worse, or at least delay its improvement. An important point here is that any improvements should be kept for the community and not regarded as headroom to enable the airport to expand. In addition, as indicated at 3.2 'study areas', the "Traffic Model Simulation Area" includes total surface access emissions rather than road specific emissions, so there may well be road links that might be identified as being affected by Heathrow traffic but are below the filters set for flow change.

## **Question 6**

### **Do you have any comments on the Commission's sustainability assessment, including methodology and results?**

The Commission quotes a forecast of 722,000 atms in 2030 (NWR para 5.1). So the airport would then be nearly at its capacity of 740,000 atms. Whereas the scheme promoter for NWR indicates that by 2030 it would only be at 570,000 atms (para 5.6.1). There then appears to be no indication as how the movements and emissions would grow through to 2040 or 2050. However, according to the Commission's Strategic fit forecast, the number of passengers would continue to grow after 2030 with a further 18% through to 2050. However this masks the fact that, once the transfer passengers are subtracted, that the growth in passengers leaving/ arriving at the airport increases by 44%. Taken from now, that amounts to a doubling of passenger numbers in 2050 that will need to be accommodated. This presents a significant challenge, given the situation with surface access today. And the growth would not necessarily end then, as admitted by HAL, that they could not rule out the need for a 4<sup>th</sup> runway. The only purpose for a 4<sup>th</sup> runway would be in order to accommodate more people in more flights. It is accepted that relevant and appropriate mitigation would help. However, any failure of any component part would run the risk of inadequate headroom and thus run the risk of exceeding the air quality Limit Values and all that that means.

The provision of adequate surface access is thus of critical importance. The All Party Parliamentary Group on Heathrow and the Wider Economy did an assessment of the Heathrow position in February 2015. Many of the points raised remain a concern, of relevance for the air quality assessment. The demand for seating capacity exceeds the capacity available, and is projected to worsen. This will result in greater road congestion and in consequence it becomes an air quality issue. Related issues that impact on surface access are the expectation that the population within the catchment will increase; a freight assessment is still necessary and the local roads were excluded from the assessment. The question of financing the surface access costs is relevant in that road charging may then be necessary, with the burden falling on the local community, along with all the other burdens of hosting the expansion.

As admitted in the Consultation Executive Summary (and elsewhere), both of the Heathrow schemes, if unmitigated, would delay Defra in achieving compliance with the Limit Values. We now have the additional uncertainty about the effect on timing introduced by the Supreme Court. It is going to be tough enough to comply with the Court's ruling 'as soon as possible' without then exacerbating the problem.

The reason we have doubts about the success of the proposed mitigation is because we have seen it fail before. Whilst we accept that there may be incremental technology based improvements in noise and pollution emissions, there have also been emission reduction projections which failed to materialise, and the forecasts had to be remodelled. This happened at both the Defra level of operation as well as the Richmond Borough specific level. When the modelling was updated it became evident that many additional areas of the Borough exceeded the air quality objectives. Increasing emissions from Heathrow related traffic will not help us to secure air quality improvements for our residents.

### **Question 7**

#### **Do you have any comments on the Commission's business case, including methodology and results?**

The Airports Commission's North West Runway: Business Case and Sustainability Assessment notes that there are three main risks related to this scheme in relation to air quality (para 4.28). First, the risk that fleet-turnover does not produce the expected reduction in relation to per-vehicle emissions. Second, the risk that the anticipated shift towards sustainable modes of transport does not occur to the extent expected. Third, the risk that European rules on air quality are further tightened during the delivery period. The scheme promoter has further identified demand management measures such as road vehicle access charging which, while not forming part of the core surface transport package, could be used to further promote mode shift or the use of less polluting vehicles to access the airport. Then it notes that the most complicated risk arises from legal limits on air quality; this will need continued monitoring and assessment (4.29). Each of these risks remains and the Supreme Court ruling is retaining the focus on legal limits.

The Assessment also notes (10.8) that the risks are likely to be exacerbated by the unmitigated emissions associated with the additional traffic caused by expansion.

In the absence of effective mitigation, the Heathrow Airport Northwest Runway scheme will increase emissions of local air quality pollutants in 2025 and 2030 in a local area where there are current exceedances of legislative limits and future risks of these continuing without any airport expansion (10.15).

Due to the increase in harmful emissions forecast to result from the Heathrow Airport North West Runway scheme the Commission judges that without mitigation measures the scheme performance is 'significantly adverse' in relation to the

objective of improving air quality consistent with EU standards and local planning policy requirements (10.19)

The promoter proposes a fall back option, if these measures did not adequately tackle the issue, with an access charging scheme which could offer a greater degree of control over ensuring that this impact was more fully mitigated (10.18). The above extracts indicate the reliance on the effectiveness of the mitigation measures to ensure that the air quality will not deteriorate. Even the fall back option is no guarantee that it will be enough, especially if the European rules on air quality are further tightened.

We support modal shift from road vehicles on to public transport, for the 2 runway airport, so long as it does not increase the downtime on our railway level crossings. Whilst the same argument would hold for a 3<sup>rd</sup> runway, we would not support the provision of better public access in order to promote the expansion of Heathrow, as we remain opposed to extra runway capacity at Heathrow.

### **Health impact of air pollution**

Air quality is a significant Public Health issue, that needs careful consideration and mitigation as it has a negative impact on health, disproportionately impacting on the most vulnerable. Thus, air pollution contributes to widening health inequalities but there is no consideration in the assessment of the potential inequalities in health on local residents.

Adverse effects range from worsening respiratory symptoms and poorer quality of life, to premature deaths from cardiovascular and respiratory diseases.

We take this opportunity to again reiterate our request for a full and comprehensive health impact assessment along with an equalities impact assessment with the inclusion of air pollution as a specific factor.

The Airports Commission have said that a Health Impact Assessment should only be carried out once a planning application is submitted. Yet to fully consider the expansion options being consulted on, information about the total potential health impacts of expansion should be available.

The information available on the health impacts of expansion is limited and not collated together – informing only to some extent the costs associated with air pollution and aircraft noise. The total health impact in terms of likely population size to have their health negatively impacted by airport expansion should be made clear.

The monetisation of health impacts (discrete from those that dominate the damage cost assessment) was limited to a 2030 snapshot of morbidity impacts through the increase in respiratory and cardiovascular related hospital admissions and for expansion of Heathrow North West option, it is calculated to cost up to £10.8 million

to mitigate. It is unclear if these impacts and their associated costs are considered to be acceptable, how the costs and impacts would be mitigated or who would do this.

**The assessment does not present the full health impact that Heathrow expansion could bring.**

END