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27<sup>th</sup> January 2015

My reference: GD/EF- DCC

Your reference:

Please ask for: Guy Denington

Dear Sirs

**Airports Commission consultation – airport expansion options**

We are glad to have an opportunity to comment on the Commissions appraisal of the shortlisted options for the expansion of airport capacity in the south east of England. The proposed response below is primarily concerned with the two options at Heathrow although some mention of the third option at Gatwick is necessary. The Commission has invited respondents to address eight questions and our formal response is arranged accordingly.

We should reaffirm that the Council continues to recognise the importance of Heathrow to London and the Royal Borough, but we remain opposed to its expansion because of the environmental impacts. We are a member of the 2M Group of local authorities led by the London Borough of Wandsworth, and have been concerned about developments at the airport including reduced controls over night-flights and the alternating use of the two runways. In September 2013 we responded to a discussion paper on aviation noise from your Commission with a number of reservations about the way aircraft noise is measured, and concerns about the impact of aviation noise on local communities. The current proposals for expansion are the largest ever put forward for Heathrow and could double the number of passengers using the airport.

We consider it most important therefore that our views are carefully considered and that serious attention is given to our suggestions to improve the Commission's appraisal before it reports with its recommendations. I should add that this response has been in collaboration with Cabinet Members. Our answers to the set of consultation questions are as follows:-

***Question 1: What conclusions if any do you draw in respect of the three short-listed options?- In answering this question please take into account the Commissions consultation documents and any other information you consider relevant.***

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TfL has circulated a helpful table comparing the main aspects of the three shortlisted options, which underlines the difference between the Gatwick second runway and the two Heathrow options.

## Overview of AC findings about options



	COST Total (£ PV)	COST Surface Access proportion (£ PV)	ATMs (year)	ATMs (hour)  [and change against 2013]	BENEFIT GDP Impacts (PV)	JOBS Additional Direct+Indirect+ Induced In 2050 (gross)	JOBS Additional in 2050 including catalytic (net)	HOMES Additional (excluding catalytic)	NOISE >55dB L <sub>den</sub> in 2050  [and change against 2013]
Heathrow North West Runway	£16.8bn	£3.4bn	740,000	128 [+40]	£112bn to £211bn	64,100 to 108,300	179,800	29,800 to 70,800	516,700 to 726,600 [-259,400 to -39,500]
Heathrow Extended Northern Runway	£14bn	£4.3bn	700,000	128 [+40]	£101bn to £214bn	54,800 to 92,900	164,200	22,900 to 60,600	852,000 to 936,200 [+85,900 to +170,100]
Gatwick Second Runway	£5.2bn to £7bn	£0.5bn	560,000	98 [+43]	£42bn to £127bn	7,900 to 32,500	49,600	0 to 18,400	24,600 to 35,700 [+13,300 to +24,400]

Table of comparisons between the three expansion options provided by TfL: Jan. 2015

This 'overview' comparison based on cost to build, cost of additional surface access, air traffic movements (ATMs) economic benefits, additional jobs and homes and noise quoted by TfL shows the Gatwick option offering 77 per cent of the ATMs against the average of the other two options, but to have considerably less impacts e.g. cost to build £0.5bn compared with £4.3bn for the cheaper Heathrow option and approximately 30,000 people affected by aircraft noise at Gatwick compared with almost 900,000 for the same Heathrow option.

**Question 2: Do you have any suggestions for how the short-listed options could be improved, i.e. their benefits enhanced or negative impacts mitigated? The options and their impacts are summarised in section three.**

No comment

**Question 3: Do you have any comments on how the Commission has carried out its appraisal? The appraisal process is summarised in section two.**

A serious failing in the appraisal process is the limited computer modelling carried out both for surface transport and air quality. See answers to questions 5 and 8.

**Question 4: In your view, are there any relevant factors that have not been fully addressed by the Commission to date?**

The potential for the rail network, with further investment, to provide alternatives to short-haul flights with the possibility of a 10 per cent shift to rail, has not been adequately addressed, although we acknowledge that in the absence of a national transport strategy and high speed rail plans uncertain, this is difficult.

The omission of comprehensive health impact assessments for each option is more serious. Although monetised estimates for health dis-benefits such as heart attacks, hypertension, sleep disturbance and annoyance have been estimated by Heathrow Airport Ltd to cost £25 billion to mitigate, other impacts such as the harm to children in schools under the flight-paths, or the health damage caused by continued air pollution concentrations has not been taken into account. There is now mounting medical evidence available to inform health impact assessments.

By ruling out consideration of a new airport in the Thames estuary and two of the three remaining options increasing the number of flights over central London, the question of safety, air traffic control issues and the risk of accidents appears to have been largely disregarded.

***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 have particular concerns about the appraisal of surface transport access, air quality impacts and aircraft noise in connection with the Heathrow options and that they have not been adequately addressed.

Surface transport -

With regard to surface transport access we believe that the eventual maximum passenger demand of 149 million passengers per year (mppa) should have been modelled as against the 103.6 mppa actually used. Past experience suggests that growth in demand exceeds estimates (the number accommodated by developing Terminal 5 was supposed to represent a maximum). In the foreseeable future, continuing expansion with the possibility of a fourth runway has not been ruled out by the Commission. The lack of comprehensive traffic modelling beyond the immediate Heathrow area means not only that traffic conditions have not been properly assessed, but also that air quality modelling has been denied a dynamic input.

In the meantime we are unconvinced by the optimistic forecast of a shift in modal share to rail from 28 per cent to 43 per cent given that, other than Crossrail, no significant additions to the rail network are envisaged providing direct access to the airport especially from the south and west. In fact the Commission has forecast that the Piccadilly line and Crossrail's central section will be over capacity by 2030 even without expansion at Heathrow. The modelling of rail passenger traffic, specifically background growth, has used Railplan version 6 instead of the more recent Railplan version 7 which detracts from the accuracy of forecasting. Additionally, forecasts for passenger numbers only cover the period to 2030; there is no prediction for rail journeys when airport expansion reaches full capacity in 2050.

Without a substantial shift from road to rail, congestion on major roads will increase. However, we note that, neither detailed modelling of the impacts on the strategic road network, such as the A4 through the Royal Borough has been carried out, nor the spill-over effect onto local roads. Added to this we believe that the predicted increase in airfreight and its reliance on the road network has not been properly factored in, so that there is no forecast of Heathrow-related HGV traffic along the A4 corridor.

The Piccadilly Line with four stations and the Circle and District system with six stations in the borough (and connecting with Heathrow Express at Paddington) are very important transport routes for residents and visitors alike. These lines are already

overcrowded and upgrading work does not take into account extra journeys to and from an expanded Heathrow. Travellers using Heathrow also require extra space for luggage further reducing seating capacity, but we could not find any evidence that this has been accounted for.

We therefore share the London Borough of Hammersmith and Fulham's concerns regarding the unknown scale of the congestion and pollution impacts likely to arise by 2050, when the full effects of a doubling in passenger numbers would be felt. We also consider TfL's estimate (£15-20 bn) of the probable long-term cost of creating sufficient surface access infrastructure is more persuasive than the Commission's estimate (£ 3.4-4.3 bn) partly because the latter only covers the period to 2030.

#### Air Quality

In our response above we highlighted the inadequacy of the measures to improve public transport to cope with any expansion at Heathrow and the consequences for road traffic.

The lack of priority being given to the potential air quality impact of surface transport demand generated by expansion at Heathrow would undermine the efforts of London boroughs in working towards improving the capital's air quality, particularly in view of the very real possibility of fines imposed by the EU for not meeting the nitrogen dioxide objective.

Together with other central London boroughs, we are facing an acute air pollution situation with levels of nitrogen dioxide levels exceeding the annual average national objective, in some places by a factor of two. Typically this is where major roads intersect such as in Knightsbridge on the route of the A4. The entire borough is an Air Quality Management Area with approximately half of the nitrogen dioxide levels and three quarters of the particulate matter coming from road sources. Automatic air pollution monitoring at five sites and modelling over the past ten years shows that reducing levels of the two problem pollutants is proving very difficult; nitrogen dioxide levels across the majority of the borough exceed the annual average national objective.

The map of part of west London below, based on dispersion modelling, shows the areas affected by annual mean nitrogen dioxide concentrations in excess of the national objective level of  $40 \mu\text{g}/\text{m}^3$  (the borough boundaries are shown in blue). Other than the green areas the colouring shows the dominant influence of the road network on pollution levels



Source Data: London Atmospheric Emissions Inventory based on 2010 data and predicting conditions in 2012 (GLA, 2014).

This is having a considerable health impact, at a national level 29,000 premature deaths were attributed to long term exposure to very fine particles in 2008 compared with 2,222 deaths from road accidents (8.3% of all deaths in the borough are attributable to particulate air pollution). Children's respiratory health is being harmed with increasing incidence of asthma and reduced lung development for those living and going to school on, or near, major roads as shown by the EXHALE project, and yet no dispersion or dynamic traffic modelling has been carried despite the admitted failure in the interim report to adequately model air quality impacts.

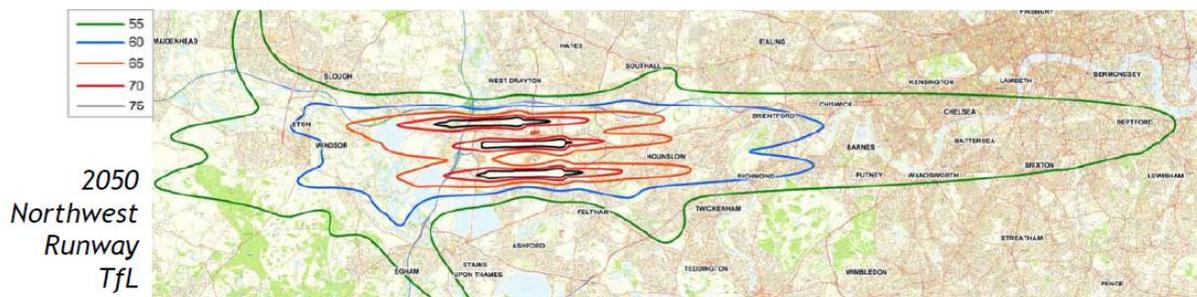
Without proper traffic modelling linked to pollutant dispersion modelling it is impossible to predict the degree of change in road traffic levels, congestion and increased emissions. What is certain is that any increase in road traffic emissions will counteract the measures being taken as part of our Air Quality Action Plan and our residents and visitors will continue to experience unacceptable levels of poor air quality. It is essential that this deficiency in modelling is addressed.

#### Noise-

The 'scorecard' approach to assessing population noise exposure and the generation of disturbance and annoyance is an advance over previous methodologies, but the use of combined metrics is in need of further refinement to be relied on as truly representative of the community reaction to aviation noise. The adoption of 55 Lden as a yardstick at least equates to a reduction in the previously used LAeq 57 dB to approximately LAeq 54 dB. The attempt to capture the actual disturbance caused by individual over-flying events and their number by applying a threshold/movement count factor (N60 and N70) is also welcomed. There are still questions surrounding these metrics for instance, the A weighting although widely used probably under represents lower frequencies in the character of aircraft engine noise. N60 and N70, the number of overflying events exceeding 60 and 70 dB respectively, does not reveal the degree of exceedance, or the number of events just below the threshold.

We would urge the Committee to accept the findings of the ANASE update study (Attitudes to Noise from Aviation Sources in England) published in 2014. This is also the view expressed by the All Party Parliamentary Group on Noise from Heathrow Airport which published its findings in December 2014. While further research in this field is carried out, the WHO (2009) guidelines on noise levels should be used to reflect moderate annoyance at 50 dB LAeq and serious annoyance at 55 dB LAeq.

Aircraft noise troubles a number of our residents in the south of the borough particularly in the early morning period. The corresponding WHO long-term night-time guideline value is 40dB LAeq, whereas the actual level is likely to exceed this and for those closer to the airport may be between 45 and 55 dB. The noise modelling carried out by the Commission shows under certain conditions that even the 55 dB Lden contour (indicating the onset of annoyance) already extends across Chelsea, and for the Heathrow Northwest runway option the enlarged (55 dB) noise footprint would probably double the number of residents affected.



**Modelled noise contour mapping commissioned by TfL and carried out by CAA's ERCD consultancy, showing the possible eastward extent of the 55 dB Lden footprint using certain assumptions, and covering the lower half of Kensington and Chelsea.**

The Commission's own assessment that overall the noise impacts are significantly adverse, or still adverse if noise mitigation is deployed is likely to alarm our residents who are already experiencing disturbance and those who may be disturbed for the first time.

The uncertainty surrounding the scenarios tested owing to the questionable validity of the underlying assumptions is troubling. It remains the case that manufacturers' noise certifications cannot be relied on once aircraft have been in service for a few years and that the aircraft industry's ability to continue to deliver significantly quieter aircraft in the short and even medium term is doubtful. We also note that provisional flight paths, fleet mix and runway/operational modes are all unknown. Therefore we consider the worst case scenario has not been demonstrated by the Commission.

**Question 6: Do you have any comments on the Commission's sustainability assessments, including methodology and results?**

Increasing airport capacity in the south-east or elsewhere will inevitably lead to emissions from burning fossil fuels, either as aviation fuel, or indirectly in increasing road traffic accessing the airports. Even if fuel efficiency gains materialise and pollution mitigation is increased, the UK's carbon reduction targets will be more difficult to meet.

**Question 7: Do you have any comments on the Commission's business cases, including methodology and results?**

No comment

**Question 8: Do you have any other comments?**

The current proposals for expansion are the largest ever put forward for Heathrow, and in certain circumstances could as much as double the number of passengers using the airport, and there would be approximately a quarter of a million new flights. The scale of this development warrants more detailed assessments of the impacts particularly as they extend across a large part of west London. We have highlighted the issues which need further examination and hope the Commission will carry out the necessary work before reaching its final conclusions.

We also believe that a short term view has been taken of the demand for capacity at the airport. The report suggests that the maximum capacity of 740,000 movements per year may be reached within ten to fifteen years of the opening of any third runway probably prompting the airport to lobby for a fourth runway.

The consultation document sets out a business case and sustainability appraisal for each option and provides a large volume of supporting material in sixteen technical reports, the technical report on noise alone is 700 pages.

Overall while the range of the assessments is commendable the complexity of the documentation makes it inaccessible to all those other than the experts in those fields. Allowing only a three month consultation period including the Christmas holidays has seriously limited the opportunity for members of the general public, or residents' groups, to respond.

Since further significant assessment work is to be carried out we would strongly recommend an additional consultation before the final report.

Yours faithfully

**Elizabeth Fonseca**  
**Bi-borough Environmental Quality Manger**