



**Meeting of the Airports Commission
20th April 2015 - 10:00am to 15:30pm
Rm 6.02 Sanctuary Buildings**

Attendees:

Commission members:

Howard Davies - Chair
John Armitt
Ricky Burdett
Vivienne Cox

Apologies:

Julia King

Secretariat (agenda items):

Roy Calcutt

[REDACTED]

External Attendees (agenda items 5 to 10):

[REDACTED] - Jacobs
[REDACTED] - AQ Consulting
[REDACTED] - AQ Consulting
Helen ApSimon - EAP

[REDACTED] (Jacobs) - covered non-air quality environmental issues (*agenda item 13*)

1. Welcome

HD welcomed attendees and invited updates on the register of interests. None were received.

2. Note of Last Meeting

There were no comments on the notes of the previous two meetings. Notes agreed.

3. Round up of stakeholder meetings

There had been no stakeholder meetings since the last Commission Meeting (9 April).

4. Update on analysis and any current concerns

The Secretariat gave an update on the work completed since the last Commission Meeting including the soft market testing in respect of commercial finance.

5. Air Quality; history, context and narrative

The Secretariat briefed the Commissioners on the history of the work carried out on air quality and the objective stated within the Appraisal Module. The air quality assessment published for consultation captured the emission sources identified within the Appraisal Framework. This included a calculation of the change in emissions of NO_x, PM₁₀ and PM_{2.5} as a result of each scheme and an assessment of pollution at a national scale, including performance in relation to emissions ceilings.

It also included a local air quality assessment, including an assessment of the risk of 2030 air quality concentrations exceeding EU Limit values and Air Quality Objectives with the airport expansion schemes in place. It did not however include local dispersion modelling to provide greater assurance of these risk assessments, and the consultation documents noted that this work would be carried out prior to the Commission's *final report*. This was now complete.

The Commission discussed the UK's current performance on air quality. Helen ApSimon, a member of the Expert Advisory Panel (EAP) explained the situation and potential future changes.

Legislation relevant to air quality was discussed including that for impacts on ecosystems with a description of Critical Level and Loads as well as the difference between EU Limits and Local Air Quality Objectives.

The Secretariat also explained where the narrative for air quality will sit within the *Final Report*.

6. AQ Consultation Responses

The Secretariat explained that many technical responses on air quality, including those from councils, environmental groups and aviation industry as well as individuals had been received which had been analysed and reviewed by the Secretariat.

There were three main themes that came through from the responses:

- The Commission should do more work on the air quality assessment.
- The AQ dispersion model report should be made available for public comment before the *Final Report*.
- There were a range of comments concerning mitigations, which mainly comprised of suggestions that the Commission should: propose a suite of mitigations; assess the effectiveness of all mitigations; and/or include assessment where mitigations don't happen.

7. Methodology

██████████ and ██████████ explained the methodology behind the air quality modelling of scenarios used for both the Heathrow Schemes and Gatwick and it was pointed out that these were based on the worst-case or almost worst-case scenario.

It was explained that air quality dispersion modelling is very complex and requires several inputs from different sources, it also gives outputs for different purposes and initially the results are unmitigated except for embedded mitigations.

The assessments consider each scheme for 2030, considering key pollutants of NO_x, NO₂ and PM. The Commission asked clarification questions regarding the model. The study areas were described as emissions compilation, dispersion modelling and monetisation.

8. AQ Results

██████████ and ██████████ explained, in depth and scheme by scheme, the unmitigated results of the dispersion modelling. None of the schemes would materially affect the UK's compliance with the current National Emissions Ceilings Directive (NECD) and Gothenburg Protocol obligations. If the NECD is revised in line with the current proposals, the UK would not comply in 2030, with or without the schemes.

Helen ApSimon explained that there are differences between Defra's National Pollution Climate Model (PCM) and the ADMS-Airport dispersion model.

Defra's model brings together information from ambient concentration measurements, emissions inventories and air quality models in which the results are used for reporting under the directives to the European Commission in accordance with European Directives. It helps Defra understand and quantify the current air quality situation and provides projections of future air quality.

The ADMS-Airport model is widely used in the UK for the assessment of airports. The model simulates the dispersion and dilution of emissions released into the atmosphere when combined with meteorological data (wind speed, direction and atmospheric stability). The model has been used to predict ground-level concentrations of NO_x, NO₂ and PM₁₀ at a number of specific receptors. Nitrogen deposition rates at sensitive ecosystem receptors have been calculated from the NO₂ concentrations.

The unmitigated results showed that the Gatwick scheme should not delay Defra's compliance with EU Limits but both Heathrow options could do so (at the Bath Road), although the NWR scheme was only forecast to be marginally above the next highest receptor in the Greater London zone without mitigation. None of the schemes were forecast to breach Local Air Quality Objectives.

Monetised results for damage and health costs were also described.

9. Mitigations

The results as described had taken into account mitigation by design, but did not include any additional mitigation measures proposed by Promoters.

Several mitigations were described by the Secretariat including their potential implications on the EU limit levels. The Commission also discussed whether there is a possibility of congestion charging and Ultra Low Emissions Zones on particular roads.

As there are no PCM sites that are predicted to be over the EU limit for Gatwick 2R in 2030, no calculations were made of the impact of potential mitigations for that scheme.

For Heathrow, the results of this analysis showed that with identified mitigations, the Heathrow NWR scheme could result in emissions below the highest PCM point in the London zone. It would be more difficult to achieve this for the Heathrow ENR scheme, the mitigations tested did not bring emissions at the Bath Road below the next highest receptor in the zone. Therefore, more extensive (and potentially costly) mitigations would be needed to achieve compliance.

10. Limitations

The Secretariat explained that modelling a multi-variable real world situation is highly complex, however the model has been verified against actual data for 2009 and found to be sound. Nevertheless assumptions and limitations must be recognised and Helen ApSimon presented slides on the limitations and assumptions made on air quality modelling following the Defra Local Air Quality Management (LAQM) technical guidelines and International Civil Aviation Organization (ICAO) guidelines.

11. Narrative

The Secretariat talked through the air quality narrative of the *Final Report*.

12. AQ discussion

HD gave an overview of the discussions so far. A question was raised on whether the total emissions forecast would be affected by the Mayor's Air Quality Strategy.

ACTION: The Secretariat to consider effects of Mayor's AQ Strategy.

The Commissioners discussed the pros and cons of consulting on the additional air quality analysis that had been carried out post national consultation launch. The Commission agreed a consultation should take place. The Commission agreed on the length of time of the consultation and the amount of time likely to be needed to analyse responses. The agreed new timescale would allow the Commission to produce the *Final Report* by the summer in line with its terms of reference.

ACTION: The Secretariat will check availability of Commissioners in the second half of June for further meetings and possible launch dates.

13. Environmental Topics

The Secretariat talked through its paper on three further environment modules – Biodiversity, Place and Water & Flood risk. The Secretariat explained that it had undertaken analysis on all three schemes at an appropriate level for this stage of the process across all three modules. Consultation responses had not identified any issues that required additional work to be undertaken.

It was noted by the Commission that there would be a need for more detailed studies on certain subjects such as birdstrike and flood risk if a given scheme is taken forward. The promoter would be expected to work with the Environment Agency and Natural England on these as appropriate.

14. Draft reports on Consultation responses

The Secretariat talked through the draft of the Consultation Response document that had been sent to the Commissioners in advance, alongside the draft Systra consultation report.

Of the 72,000+ responses received the majority were organised campaign responses in support of Heathrow expansion. The Secretariat gave further information on the numbers of responses from organisations, and how they broke down in terms of opposing or supporting the three short-listed options.

The Commission asked the Secretariat to review the quotations selected for the Systra report to ensure that these reflected the calibre of the detailed, technical responses received to consultation.

ACTION: Secretariat to check the consistency of quotations used in the Systra report.

The Secretariat presented maps showing data on all responses received by postcode. Around 91% of consultation responses had postcode data.

ACTION: Secretariat to include the maps within the Systra consultation report document.

The Commission emphasised the importance of ensuring that a brief explanation is given in the Consultation Response document to all of the key themes emerging from consultation.

15. AoB

The Commission discussed the note that had been circulated to Commissioners the previous week regarding the City Airport Development Programme (CADP). The note explained that Newham Council's Strategic Development Committee had recommended to grant planning permission and notified the Mayor of London of the planning applications as they are of "potential strategic importance" under the provisions of the Town & Country Planning Order (Mayor of London). The Mayor, after discussion and engagement with the GLA Planning team refused planning permission on the grounds that the application was in his opinion contrary to London Plan policies.

The *Final Report* drafting section on Other London Airports had been presented to the Commission previously in February but it was proposed to update the section on City Airport.

ACTION: The Secretariat to send a further draft of the *Final Report* on Wednesday 27th April so the Commissioners could view the text on City Airport alongside text on other London airports.