

West Sussex County Council's response to the Airports Commission's consultation on Air Quality Assessment

General comments

West Sussex County Council's comments

1. In January, 2015, the County Council submitted its response to the Airports Commission's consultation on the appraisal of the three options for additional runway capacity. This paper sets out views that augment the Council's earlier response, with a particular focus on the Commission's Air Quality Assessment and its implications for Gatwick Airport and the communities, businesses and environment of West Sussex.
2. In relation to air quality, the County Council's earlier response noted that further work was required to fully quantify the risks. The Council's response stated that such work needed to be shared and explained.
3. The County Council's response also noted that there were, for example, likely to be effects on the air quality not only on and adjacent to the Airport but also in towns and villages further afield due to increased aircraft and road traffic movements.

Timeframe for the consultation

4. The County Council notes that the additional work has now been completed and made available for comment. However, the County Council is very disappointed and concerned that the consultation period is so limited.
5. The very limited time allowed by the Commission to prepare a response to the consultation has severely restricted the opportunity to engage officers and Members in drafting the response. It has also denied the Council the opportunity to commission independent detailed analysis or verification of the consultation material.
6. Many individuals and organisations with legitimate and significant interests in the provision of additional runway capacity have not been able to dedicate sufficient resources to the consultation and the information it provides within the three-week period allowed. The Commission's decision to allow organisations and residents so little time has denied them an opportunity to consider and understand the forecast effects on air quality and the impacts that these will have on residents.

Gatwick Airport or Heathrow Airport

7. Should the Commission's recommendation be to provide increased runway capacity at Heathrow Airport rather than at Gatwick Airport, the County Council's comments will still apply to the operation of Gatwick Airport.
8. Heathrow Airport is already operating at, or very near to, full capacity. Until the new runway is operational at Heathrow Airport, additional aviation activity in the South East could well be directed to Gatwick Airport.

9. Increased activity at Gatwick Airport will result in detrimental impacts on air quality in and around the Airport. It will be important to avoid, reduce or mitigate the effects of increased aviation on local people, communities and the environment.
10. This includes investment in the necessary infrastructure to optimise access to Gatwick Airport by public transport, walking and cycling whilst reducing reliance on private motor vehicles and reducing congestion. This also includes the various mitigation measures as considered by the Commission.

Q5: 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?

Q6: Do you have any comments on the Commission's sustainability assessments, including methodology and results?

11. The appraisal of air quality as a specific topic appears to have followed a reasonable methodology employing established models to calculate the dispersion and dilution of pollutants and predict ground-level concentrations. The County Council notes that the work has included model verification.
12. The very limited time available for the consultation has severely restricted the options available to the County Council to analyse and scrutinise the consultation material and prepare a response to the Airports Commission. The County Council has not had the opportunity to commission independent detailed analysis or verification of the consultation material or the findings. The Commission's decision to allow organisations and residents so little time has denied them an opportunity to consider and understand the forecast effects on air quality and the impacts that these will have on residents.

The Commission's choice of modelling scenario

13. The Commission's states, in section 3.5 of Jacobs' report, that "assessments have been carried out for 2030 based upon the Airport Commission's demand model that results in the greatest likely air quality impact consistent with the Promoters' preferred business model. This means that the assessment is based on ... the Carbon Traded Low Cost is King (CT LCK) scenario for Gatwick 2R." It also states, in section 4.1, that "The Low Cost is King, Carbon Traded demand scenario of the Airports Commission's forecast represents an additional 200,000 ATMs per annum with the Gatwick 2R Scheme, to give a total; of approximately 480,000 ATMs by 2030."
14. From the Council's earlier work, as mentioned in the Council's response to the Commission's previous consultation, the Carbon Traded Low Cost is King scenario does not reflect the business model as presented by Gatwick Airport Limited (GAL). GAL's forecasts for 2030 indicate 405,000 air traffic movements carrying 65.4 million passengers which would have knock-on effects on the number of surface access movements and emissions.

15. The use of the Low Cost is King scenario implies that very little cargo would be carried by the primary airline operators using the expanded airport. This might result in under estimates of the emissions from road vehicles carrying cargo to and from the Airport.
16. The difference in choice of business model raises questions about the accuracy of the Commission's Air Quality Assessment as the basis for local understanding and national decision-making.

Q7: Do you have any comments on the Commission's business cases, including methodology and results?

Comparison with emissions targets and ceilings

17. The County Council acknowledges that the expansion of Gatwick Airport and the associated air traffic movement and surface access would increase emissions. It notes that the predicted increase would be predominantly associated with the net change in aircraft emissions and largely with non-ground operations – that is initial climb, climbout and approach)
18. The County notes that according to the Commission's work the incremental change to emissions by 2030 associated with a second runway at Gatwick Airport would not cause current targets to be exceeded.
19. The Council notes that some targets are currently being revised. The Council also notes that should those revisions result in lower targets the UK would fail to achieve compliance whether or not additional runway capacity was provided at Gatwick Airport.
20. Monitoring of the effects of an expanded airport, and the accompanying mitigation measures, will be essential to check whether the predicted effects become reality. Long-term forecasting and prediction are not guarantees that the likely effects will be the same as the true effects once the expanded airport becomes operational and other factors, such as evolutions in aviation and road traffic technology, come into effect. The local communities, authorities and the Government must be able to monitor air quality on a consistent and open fashion so that the true effects of increased aviation and road travel are understood and, if necessary, are the subjects of further mitigation measures.

Predicted concentrations at health-based receptors

21. The County Council notes that the Commission's work predicts that air quality objectives at receptor locations will not be exceeded. However, the Council is concerned that the work predicts that the unmitigated effect would be that more properties would experience an increase in emissions than a decrease or no change.
22. The Council notes that the maximum predicted annual mean NO₂ concentration at any receptor location resulting from the expansion of Gatwick Airport is predicted to occur to the south of the Airport, close to the A2011 in

Crawley where the background concentration is higher. This road falls within an area where Crawley Borough Council proposes to designate an Air Quality Management Area. The proposal has recently been subject to public consultation.

23. Almost 21,000 properties are predicted to have higher concentrations of NO₂. That would affect more than 51,000 people. There would be 62 properties “at risk” due to the scale of the increase in emissions. The Commission needs to explain “at risk” and what that means for the residents of those properties.
24. The Commission also needs to explain:-
 - whether the 21,000 properties include schools, care homes or other places where vulnerable people might live or congregate; and
 - whether the 51,000 people include school children, patients and others as well as residents.
25. The Airports Commission must, in its recommendations, stress the need to avoid, reduce and mitigate the effects on air quality of providing additional runway capacity. The Commission and the Government must ensure that the full range of appropriate mitigation measures is implemented. The Government must, through the appropriate instruments such as a National Policy Statement on Aviation, ensure that such measures are designed, funded and implemented before the additional runway capacity becomes operational.

Impacts on sensitive ecosystems

26. The County Council is pleased to note that the addition of a runway at Gatwick Airport is not predicted to result in critical loads being exceeded at designated habitats.
27. Every effort must, however, be made to ensure that detrimental impacts are avoided, reduced or mitigated so as to protect local and designated habitats and their enjoyment by local residents and communities.

Construction impacts

28. The County Council notes the Commission’s statement that there are insufficient details available at this stage to undertake any quantitative assessment of the construction impacts. Can the Commission advise as to when the detail might be available for such an assessment to be undertaken?
29. The qualitative assessment that has been conducted suggests that effective mitigation can adequately control dust impacts from large construction projects. It also suggests that emissions from on-site plant and construction traffic can be mitigated. The mitigation of these effects must be stipulated by the Commission and, in due course, the Government in reaching conclusions on the provision of additional runway capacity.

Monetisation of impacts

30. The Government must make sufficient provision to meet the predicted costs or the impacts of additional runway provision on air quality. This provision must be available at the appropriate level – local or national – to meet the needs generated by increased air and surface traffic and the implications these will have on people and environments.

Mitigation measures

31. The County Council notes that the Commission has considered and evaluated the mitigation measures set out by the promoter and additional measures.
32. These measures must feature in the Commission's recommendations to the Government on the provision of additional runway capacity in the South East. In turn, the Government must incorporate appropriate measures into the necessary instruments such as a National Policy Statement on Aviation and associated statements on the provision of additional runway capacity.
33. Mitigation measures that the Airports Commission believes have the greatest potential for reducing or mitigating the effects on air quality include:-
 - achieving high public transport access and congestion-free road access – please refer to the County Council's response to the earlier consultation for full details;
 - concentrating aircraft activities in the midfield area;
 - continue emissions charging to encourage airlines to use the cleanest aircraft;
 - installing fixed electrical ground power and pre-conditioned air to all future aircraft stands to reduce the need for auxiliary power units; and
 - improving the infrastructure for, and use of, ultra-low emission vehicles both airside and landside.
34. This list is not exhaustive; further measures should be investigated to assess their potential effectiveness in reducing and mitigating the effects on air quality including:-
 - the provision of car-sharing schemes for staff of the Airport and nearby businesses so as to reduce the number of vehicles on local roads; and
 - 24-hour public transport services serving the Airport for employees and air travellers.
35. As noted in the County Council's response to the Commission's earlier consultation, Gatwick Airport Limited (GAL) sets out a headline target to increase the sustainable transport mode share for employees to 40% which, although challenging and perhaps optimistic, was supported in principle by the County Council. Indeed, the Airports Commission has not challenged the employee mode share assumption.
36. Achieving this modal share would need a good public transport network the provision of which requires measures beyond the existing public transport schemes on the rail network and related to the Airport site. These measures, which will require investment by GAL, the Government and its agencies, will

be essential if the effects of the Airport's expansion on air quality are to be reduced and mitigated. The Commission must specify that investment if it recommends expansion of Gatwick Airport.

In conclusion

- The County Council notes that the additional work on air quality assessment has been completed and made available for comment. However, the County Council is very disappointed and concerned that the consultation period is so limited.
- The appraisal of air quality as a specific topic appears to have followed a reasonable methodology employing established models to calculate the dispersion and dilution of pollutants and predict ground-level concentrations. The County Council notes that the work has included model verification.
- The Commission's Carbon Traded Low Cost is King scenario does not reflect the business model as presented by Gatwick Airport Limited (GAL). The difference in choice of business model raises questions about the accuracy of the Commission's Air Quality Assessment as the basis for local understanding and national decision-making.
- The County notes that according to the Commission's work the incremental change to emissions by 2030 associated with a second runway at Gatwick Airport would not cause current targets or objectives to be exceeded.
- The County Council is concerned that the unmitigated effect would be that more properties would experience an increase in emissions than a decrease or no change. The Council is also concerned that properties would be "at risk" due to the scale of the increase in emissions. The Commission needs to explain "at risk" and what that means for the residents of those properties.
- The Airports Commission must, in its recommendations, stress the need to avoid, reduce and mitigate the effects on air quality of providing additional runway capacity. The Commission and the Government must ensure that the full range of appropriate mitigation measures is implemented. The Government must also ensure that the necessary investment is made in public transport infrastructure and services to support the additional runway, wherever it is provided.
- The County Council will work with the Airports Commission, the Government and other partners to ensure that the detrimental effects predicted as a result of providing additional runway capacity are avoided, reduced or mitigated.