



House of Commons
Environmental Audit Committee

The Airports Commission Report Follow-up: Carbon Emissions, Air Quality and Noise

Seventh Report of Session 2016–17

*Report, together with formal minutes relating
to the report*

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Environmental Audit Committee

The Environmental Audit Committee is appointed by the House of Commons to consider to what extent the policies and programmes of government departments and non-departmental public bodies contribute to environmental protection and sustainable development; to audit their performance against such targets as may be set for them by Her Majesty's Ministers; and to report thereon to the House.

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Summary

In November 2015 we published an interim report on the Airports Commission's recommendation for airport expansion in the South East of England. In October last year the Government announced its support for a third runway at Heathrow Airport, in line with the Commission's recommendation. The Government has since published a draft Airports National Policy Statement. This report is a follow-up to our first report.

We have seen little evidence so far of the “step change” in the Government's approach to environmental mitigation which we called for in our interim report. To inform the National Policy Statement process, the Government needs to set out new modelling on air quality following the High Court's latest ruling and a new approach to air quality post 2019; an emissions reduction strategy that will allow the UK's carbon budgets to be met and effective noise mitigation measures enforced by an Independent Aviation Noise Authority. The Government must not allow our air quality standards to be watered down as a result of leaving the EU.

On air quality, the Government must produce a new air quality strategy, following the latest High Court judgement, to determine whether Heathrow Airport expansion can be delivered within legal air quality limits. It should set out how it will avoid an increase in the number of serious breaches of EU air quality limits. Surface access is widely considered the main contributor to airport related pollution. There is no agreement about the costs of required access improvements between the Government, Transport for London and local authorities. The Government must produce a fair assessment of the costs of expected transport improvements needed. We foresee legal and commercial risks if monitoring and responsibility for delivering measures such as Heathrow's “no more cars on the road” pledge are not clearly set out. Such measures will only have credibility if they are legally enforceable.

In our report, ‘The Future of the Natural Environment after the EU Referendum’, we called on the Government to ensure that the UK has an equivalent or better level of environmental protection after we leave the EU. Our air quality standards, which derive from EU legislation, are no exception, and the Government should set out in response to this report, and during the National Policy Statement process, how it plans to maintain or improve upon current air quality standards.

There has been no clarity from the Government on carbon emissions. The Government's headline cost-benefit analysis for Heathrow expansion is based on a hypothetical international framework to reduce emissions which would leave international aviation emissions 15% higher than the level assumed in the Fifth Carbon Budget (2028–2033).

The Government has said Heathrow “can” be delivered within emissions limits but it hasn't decided or stated what these limits are. It is considering rejecting the Committee on Climate Change's advice on the limits that should be adhered to and the level of passenger demand which is compatible with those limits. The Government's revised aviation strategy must set out its approach to reducing emissions, the target it will work to and the measures it will take to close the policy gap between where we currently are and where we will need to be in each carbon budget period to 2050. If the Government does reject the Committee on Climate Change's advice on aviation emissions it should

set out clearly the resulting additional emissions reduction requirements on other sectors of the economy and the resulting costs to those sectors. These assumptions should be tested with industry and subjected to independent scrutiny by the Committee on Climate Change.

On noise, in order to minimise the impacts for local communities, the Government must follow the Airports Commission's recommendations on providing predictable respite and the timing of a night flight ban. The Government's noise targets should be more ambitious and be assessed against the projected impact of a two-runway airport as well as the position today. The need for an authoritative Independent Aviation Noise Authority remains clear.

1 Introduction

1. In 2015, we carried out an inquiry into the environmental aspects of the Airports Commission's recommendation for airport expansion in the South East of England. We set out the key environmental issues that the Government would need to address in respect of carbon emissions, air quality and noise when making its decision. We published an interim report and said we would invite the Secretary of State for Transport to appear before the Committee, should the Government proceed with expansion in line with the Commission's recommendation.¹
2. On 25th October 2016 the Government announced its support for a new north-west runway at Heathrow Airport as its preferred option to deliver airport expansion in the South East. On the same day we announced our intention to call the Secretary of State for Transport, Rt Hon. Chris Grayling MP to scrutinise how environmental concerns would be addressed.
3. We contacted those who provided oral evidence during our previous inquiry, inviting them to submit further evidence in light of recent developments for this one-off evidence session. We are grateful to those who submitted written evidence for taking the time to do so.
4. The aim of this hearing was to focus on the action that Government has taken since our previous report. The purpose of this report is to build on our interim report and identify areas that require more consideration and action by the Government if it is to deliver the "step change" in approach to environmental mitigation that we called for in our previous report.²
5. The Secretary of State for Transport published a draft National Policy Statement (NPS) for airports expansion on 2 February 2017. This will be consulted on, examined by a departmental Select Committee (or Members of several such Select Committees meeting together) and a final National Policy Statement is likely to be debated on and voted on by the House.³ If it is approved, then a detailed planning application will follow. Due to the timing of publication, the Committee has not had time to analyse the draft National Policy Statement or the accompanying documentation in great detail. However, where relevant, we have drawn attention to areas of concern.

1 Environmental Audit Committee, The Airports Commission Report, page 4, HC 389

2 Environmental Audit Committee, The Airports Commission Report, page 3, HC 389

3 House of Commons Debates, 25 October 2016, Col. 162; 2 February 2017, Col. 1183

2 Air Quality

Introduction

6. The issue of air quality in urban areas continues to move up the political agenda in light of the recent High Court ruling on the Government's 2015 Air Quality Plan and scientific evidence around the effects on human health of exposure to NO_x. In this section we refer briefly to our previous interim report as we consider the impacts of recent Air Quality developments, including ClientEarth's High Court case and updated COPERT emission factors, on the Government's analysis of the Air Quality impacts of Heathrow expansion; and then set out our conclusions of what the Government must do over the course of the NPS process.

EU Limit Values

7. The Airports Commission based its air quality conclusions on EU Directive 2008/50/EC, which limits values in respect of certain key pollutants—including an annual mean limit value of 40µg/m³ NO₂. Our interim report and this report focused on NO₂ concentrations because this is where the worst of the UK's air pollution problem lies. The majority of main roads in London regularly breach legal values for nitrogen dioxide. It took only five days for the annual EU limit to be breached on Brixton Road in 2017.⁴ A zone is deemed to be in breach of the Directive if any receptors in different parts—links—of the zone exceed the limit values. The Airports Commission found that expansion would not delay compliance with EU limit values. Critics of expansion were concerned that this depended on an interpretation of the Directive which meant air quality could deteriorate, provided it was less bad than the worst recorded results within the zone.⁵ For most witnesses, including the Airports Commission, it was the contribution of rail and road access to NO₂ levels that was the key factor in determining the impact of airport expansion on air quality, rather than the increased number of aeroplanes arriving at and departing the airport.⁶ Prior to the publication of the Airports Commission's report, the High Court ruled that the Government needed to produce a new air quality strategy. In our interim report we recommended:

Before the Government makes its decision, it will need to demonstrate that its revised air quality strategy can deliver compliance with legal pollution limits within the timescales agreed in the finalised [revised air quality] plan to be approved by the European Commission. It will also need to show this can be maintained even when the expanded airport is operating at full capacity. Heathrow's existing air quality strategy should also be revised to meet the new targets. Failing this, Heathrow should not be able to expand.⁷

4 ERG, King's College London, [London Air Data](#); at 21h on 5th January 2017 Brixton Road reported its 19th hour above the EU limit threshold for NO₂

5 See Transport for London; Aviation Environment Federation; Communities Against Increased Aviation Noise; Friends of the Earth England and Wales; Gatwick Airport; Twickenham Friends of the Earth.

6 Airports Commission Final Report, page 28

7 Environmental Audit Committee, [Airports Commission Report](#), page 14, para 47, HC 389

8. Since our interim report, the UK has voted to leave the European Union in a referendum. The Government plans to leave the EU before April 2019. Our inquiry into the Future of the Natural Environment after the EU referendum found that around a third of EU environment legislation cannot be easily cut and pasted into UK law, and that the loss of EU governance and enforcement mechanisms risks UK environmental protections being watered down.⁸ The Government should set out in their response to this report, and in the National Policy Statement, how it will ensure that air quality standards, and the means of enforcing them, will be as good as, or better than, current EU standards after we leave.

Vehicle Emissions Modelling and Future Testing

9. In response to our interim report, the Department for Transport told us it had accepted the recommendation to test the Airport Commission’s analysis against its revised air quality plan, noting that “this work [...] confirmed the [Airports Commission’s] conclusion that a new runway can be delivered without impacting the UK’s compliance with air quality limit values for nitrogen dioxide.”⁹ The work to which the Department referred was the Air Quality Re-analysis Study which was based on the assumptions of the impact of the 2015 Air Quality Plan and on Pollution Climate Mapping modelling, using the then most up to date COPERT—Computer Programme to Calculate Emissions from Road Transport—emissions factors.¹⁰

10. However, in September 2016, after the Government’s in-depth re-analysis had already taken place, the COPERT emissions factors were updated. The update occurred because, as the 2016 re-analysis explained, the previous factors “significantly underestimated” emissions from Euro 6 diesel cars and Euro 5 and Euro 6 cars and light commercial vehicles.¹¹ The Foreword to the re-analysis, therefore, included an “initial qualitative review” of the new evidence and produced two forecasts based on different runway opening dates. It also modelled the impact of new vehicles on the road, which will have to be compliant with stricter real driving emissions tests (RDE), due to be implemented for all new car registrations in 2021.¹² The Foreword stated:

In 2025, with RDE fully effective but some older and RDE non-compliant vehicles remaining in the fleet [...] the risks remain that the Heathrow Northwest Runway [...] could impact on EU limit value compliance [...]; [therefore expansion could] cause a worsening of exceedances of the limit value alongside one or more PCM [Pollution Climate Mapping] links without delaying compliance of the zone/agglomeration.

By 2030, assuming that the majority of the fleet is fully RDE compliant and with the influence of non-RDE compliant vehicles reducing over time, it is possible that the projected compliance with EU limit values [...] could be maintained.¹³

8 Environmental Audit Committee, [The Future of the Natural Environment After the EU Referendum](#), HC 599

9 [Letter from Secretary of State for Transport to the Chair](#), 8 November 2016

10 [Air Quality Re-analysis Study](#), Page 6, Para 1.1.17

11 [Air Quality Re-analysis Study](#), Foreword, Page 1

12 Under RDE test, introduced through EU law, a car will be driven on public roads and exposed to a wide range of different conditions. Specific equipment installed on the vehicle will collect data to verify that legislative caps for pollutants such as NOx are not exceeded.

13 [Air Quality Re-Analysis Study](#), Foreword, page 2

11. Hillingdon, Richmond, Wandsworth and Windsor and Maidenhead local authorities were highly critical of this reanalysis. They said:

We are greatly concerned that the Foreword is not a proper analysis, it is described as a qualitative review. This is an unacceptable approach. The Government should have re-modelled and undertaken a proper assessment using the new emissions factors before coming to any conclusion on the air quality impacts of Heathrow expansion.¹⁴

12. During our evidence session the Transport Secretary told us that the detailed data on the impact of RDE had not been available to the Cabinet sub-committee which took the decision to approve Heathrow expansion:

At the time that the sub-committee took the decision, we did not have the full detailed data on the new emissions factors, so we did a qualitative analysis. We are now doing a full model run, which will be incorporated in the appraisal of sustainability that will be published early next year and consulted on.¹⁵

13. The Airports National Policy Statement published on 2 February 2017 included the Government's Updated Air Quality Re-analysis. This was published as a "follow-up" to the previous Re-analysis study, but incorporating the updated COPERT factors. The scope of this study mirrors that of the previous, it re-analyses "existing datasets to assess the implications of the updated COPERT emission factors, and associated updates to the PCM projections, on the conclusions of the AC's work in relation to EU limit value compliance".¹⁶

14. The conclusions of this study, using the updated vehicle emissions factors, echo those of the Government's previous re-analysis:

In 2030, the option [Heathrow Northwest Runway] *does not impact* on compliance with limit values in the core assessment scenario.

The risk of an impact on compliance with limit values increases the earlier the assumed opening year for the option. In 2025, the risk is high and the option is likely to impact on zone compliance due to impacts in central London.¹⁷

High Court Ruling

15. Both the 2016 and 2017 Air Quality Re-analysis studies published by the Government base their conclusions on the Government's revised Air Quality Plan, which was published in December 2015. However, on 2 November 2016 the Supreme Court ruled that this plan was based on "optimistic emissions data [and] did not seek to meet the requirements of

14 Written Evidence, para 2.3

15 Secretary of State for Transport, Oral Evidence, 30 November 2016, Q8

16 WSP | Parsons Brinckerhoff, [Updated air quality re-analysis: impact of new COPERT emission factors and associated new pollution climate mapping sensitivity testing](#), page 16

17 *Ibid.* page 2

the Directive as soon as possible” and that the Government must develop a new draft plan by April 2017.¹⁸ The Mayor of London, reflecting his fundamental concerns about airport expansion, told us:

It is yet to be demonstrated that an expanded Heathrow could operate without exceeding legal limits for NO₂. [...] The requirement for Defra to draft a new Air Quality Plan incorporating more realistic emissions factors is likely to further complicate attempts to demonstrate compliance of an expanded airport.¹⁹

16. Hillingdon, Richmond, Wandsworth and Windsor and Maidenhead local authorities argued that the Government should withdraw support for Heathrow expansion and remodel the impacts using the new emissions factors **and** against the new Air Quality Plan.²⁰

17. In response to our interim report the Government told us they were “carefully considering what this [ruling] means for the airport capacity programme”.²¹ During our evidence session the Transport Secretary told us that the High Court decision will not affect the Government’s projected timetable. He noted that “it is important to separate these two issues [expansion and air quality]” arguing:

I don’t think that the air quality issue addressed in the Supreme Court and the challenge around reducing levels of NO_x is part of the same debate as the Heathrow expansion. The NO_x issue, the air quality issue, even around Heathrow itself, is about the traffic on our roads.²²

18. The Government published its Draft National Policy Statement on 2 February 2017, it announced that its consultation will last 16 weeks, closing on the 25 May 2017. Given the Government has been given a deadline of July 2017 to complete its new air quality plan, this means the Government will be unable to carry out a full re-analysis of air quality impacts using both the updated COPERT emissions factors and the measures of the new air quality plan within the consultation period.²³

Appraisal of Sustainability

19. The Government’s Appraisal of Sustainability was published shortly before this report. We have been unable to provide a full assessment of the Appraisal, however, we would like to highlight some of its conclusions that are of concern to the Committee.

18 High Court Ruling, <https://www.judiciary.gov.uk/wp-content/uploads/2016/11/clientearth-v-ssenviron-food-rural-affairs-judgment-021116.pdf>

19 Letter from Mayor of London to the Committee, 17 November 2016, para 6.1; Hillingdon, Richmond, Wandsworth and Windsor and Maidenhead local authorities made a similar point in their written evidence, para 2.3

20 Written Evidence, para 2.16

21 Letter from Chris Grayling to the Chair, 8 November 2016

22 Oral Evidence, 30 November 2016, Q1

23 <https://www.gov.uk/government/speeches/additional-airport-capacity-and-airspace-policy-reform>

20. The Appraisal argues that the overall concentration of NO₂ will remain below the UK's annual mean objective, however it adds that all the considered schemes for airport expansion would result in “a net increase in population exposure to air pollution”. It estimates, for Heathrow expansion, that an increased 47,063 properties could be exposed to air pollution, by an average of 0.9µg/m³.²⁴

21. The Appraisal also states that Heathrow expansion is “predicted to cause new exceedances of critical levels at the South West London Waterbodies RAMSAR/Special Protection Area and the Wraysbury Reservoir Site of Special Scientific Interest. These impacts potentially result in significant negative effects of internationally designated sites for nature conservation.”²⁵

Interpretation of Compliance

22. The Government's 2016 re-analysis study of air quality interpreted compliance with EU limit values along the same lines as that of the Airports Commission:

If the maximum concentration in a zone is above the limit value and increases with the option or if the option causes the maximum concentration in a zone to increase from a level below the limit to a level above the limit value, the option is considered to impact on compliance within that zone.

In all other cases, the option is not considered to impact on zone compliance. However, in describing the impacts of an option where the zone compliance is unaffected, we distinguish between cases where all road links affected by an option have predicted concentrations below the limit value and cases where options contribute to worsening of existing exceedances of the limit values or create new exceedances without affecting the maximum concentration in the zone.²⁶

23. The Airports Commission's approach was characterised by critics during our inquiry as allowing air pollution to get worse in some areas, so long as other areas within Greater London were worse.²⁷ Daniel Moylan, argued that road schemes in London were evaluated against a requirement that the scheme should not cause air quality to deteriorate and that this should be the minimum standard.²⁸ Such concerns were reiterated to us by the group of London Boroughs cited above—they told us that they continue to believe that the Airports Commission approach is incorrect and therefore that the reanalysis study “relies on the same flawed test”.²⁹

24. In our interim report we recommended that a view of compliance which could allow air quality to deteriorate “provided it is no worse than the worst link in the zone” would make little sense in policy terms for protecting public health and wellbeing.^{30 31} When questioned on whether the Government is working towards this scenario the Secretary of State told us:

24 [Appraisal of Sustainability: draft Airports National Policy Statement, main report](#), page 85

25 *Ibid.*

26 [Air Quality Re-analysis Study](#), Page 6, Paras 1.1.17–18

27 For example, Daniel Moylan, 14 October 2015, Q46

28 Oral Evidence, 14 October 2015, Q48

29 Hillingdon, Richmond, Wandsworth, Windsor and Maidenhead, written evidence, para 2.1

30 Richard di Cani, TfL, Oral Evidence, 30 November 2016, Q41

31 Environmental Audit Committee, [Airports Commission Report](#), page 14, para 43, HC 389

We have now been told by the courts to go back and do the work again, and clearly that is going to happen. There are two issues here. One is, yes, there are legal rules to comply to, but secondly, it is also about doing the right thing.^{32 33}

25. In a letter to the Committee after our evidence session the Transport Secretary reiterated that legal NO₂ requirements will remain the Government's measure for UK air quality compliance, but did not provide clarity on the interpretation of legality that the Government intends to use. He told us the "final development consent will only be granted if we are satisfied that, with mitigation, the scheme is compliant with our legal obligations on air quality".³⁴

26. The updated Air Quality Re-Analysis published 2 February 2017 provided no further comments on the Government's interpretation of compliance in relation to the EU air quality limits.³⁵

Health Costs

27. In our interim report we recommended that the Government carry out a full assessment of the likely costs of preventing an adverse impact on health from expansion.³⁶ Some London Boroughs agreed with this, arguing that a full Quality of Life Assessment was needed.³⁷ The Transport Secretary told us that the Government will seek to deal with health impacts as "effectively as we can" by stepping up Government support to encourage people to take on new technologies, like ultra-low emission vehicles.³⁸

28. Alongside the Airports National Policy Statement, the Government published its Health Impact Analysis. The purpose of which is to "assist decision makers in judging the impact of airport expansion and its broader legacy to the population's health." Regarding the health impacts of air quality, the analysis found that during both the construction and operational phases of Heathrow airport expansion, there would likely be "moderate adverse impacts upon health outcomes, including increased risk of respiratory disease, cardiovascular disease and adverse, short-term temporary and intermittent impacts".³⁹ and that there would be:

Major adverse impact upon vulnerable groups where health impacts could lead directly to deaths, acute or chronic diseases. These vulnerable groups include children and young people and people living with long-term health conditions may be susceptible to major adverse health impacts.⁴⁰

32 Oral Evidence, 30 November 2016, Q41

33 High Court Ruling, <https://www.judiciary.gov.uk/wp-content/uploads/2016/11/clientearth-v-ssenviron-food-rural-affairs-judgment-021116.pdf>

34 Letter from Chris Grayling, 9 January 2017

35 WSP | Parsons Brinckerhoff, [Updated Air Quality Re-analysis](#)

36 Environmental Audit Committee, [Airports Commission Report](#), page 11, HC 389

37 Hillingdon, Richmond, Wandsworth and Windsor and Maidenhead, para 2.7

38 Oral Evidence, 30 November 2016, Q42

39 Draft Airports National Policy Statement : health impact analysis, shortlisted schemes, pages 168–177

40 Ibid.

Low Emission Technology

29. The Transport Secretary told us that the problem of air quality must be tackled before the new runway becomes operational. When questioned on the significant impacts of air pollution, including the worrying health impacts, he consistently referred back to the effectiveness of Government action encouraging the take up of ‘low emission technologies’ to improve air quality. He stated: “we have to continue, in my view, an across-the-piece strategy to drive the migration of the transport in our busiest urban areas to lower emission technologies”.⁴¹

30. The Government’s Updated Air Quality Re-analysis study concluded that:

The level of risk is primarily dependent on the timing of the introduction of, and effectiveness of, measures to reduce emissions from vehicles on the wider road network. It is largely independent of assumptions relating to the impact of the option itself or the direct mitigation of option-related emissions. Impacts near the airport, do not, in general, affect zone compliance.⁴²

31. The importance of reducing vehicle emissions to improve air quality is demonstrated in the Government’s updated air quality reanalysis. However the Government’s reliance on low emission technology as the solution is of concern because we have no confidence that the Government will meet its target for 60% of all new cars to be Ultra-Low Emissions Vehicles (ULEVs) by 2030, as a result of our inquiry into Sustainability in the Department for Transport.⁴³

Conclusion

32. **The UK has already breached legal NO₂ limits in London for 2017. The High Court has ordered the Government to produce a new plan to tackle air pollution by July 2017, the conclusions of both of the Government’s air quality re-analysis studies are based on the previous, over-optimistic plan. The effectiveness of the Government’s new air quality plan will be integral to determining whether Heathrow expansion can be delivered within legal limits. We are concerned that the timing of the draft NPS consultation means the Government will be unable to carry out a comprehensive re-analysis of the air quality impacts, using the new air quality plan, before the consultation process is complete. *The Government must publish such an assessment alongside the final National Policy Statement, it must work towards a scenario in which all road links affected by expansion have predicted concentrations below the limit value. Whilst the health impact assessment is a step in the right direction, the Government must carry out work to reduce the significant health impacts identified, before construction of the third runway begins.***

41 Oral evidence, 30 November 2016, Q1

42 DfT, [Updated Air Quality Re-Analysis](#), February 2017, p. 2

43 Environmental Audit Committee, [Sustainability in the Department for Transport](#), HC 184, para. 25

33. Since the Government intends to withdraw the UK from the EU before April 2019, there is no certainty about what our legally binding air quality limits will be after 2019. We are disappointed that these limits are not clearly laid out in the Draft National Policy Statement. *We encourage the committee scrutinising the NPS to consider this report and its recommendations, and urge the Government to clarify its position in its response to this report.*

34. We are concerned about the Government's apparent reliance on low emission technology to solve the problem of air quality. We do not consider encouraging people to buy ULEVs an adequate response to the significant health impacts of air pollution and we have no confidence that the Government will meet its 60% target. *The Government should work with Defra on an air quality alert system for people who are especially vulnerable to the effects of short-term exposure to pollutants.*

Surface Access

35. In a recent report Sustainable Aviation stated that “the primary emission source of concern to UK air quality is road traffic” and that non-airport road traffic in the vicinity of Heathrow airport accounts for 27% of NO_x emissions.⁴⁴ In our interim report we recommended:

Before the Government decides to go ahead with Heathrow expansion it should set out its assessment of what would be required in terms of infrastructure improvements, agreed responsibilities for funding and milestones for completion. This should be part of a wider transport strategy for West London to minimise the risk of unintended consequences. The Government must make a binding commitment that Heathrow will fund the infrastructure improvements.⁴⁵

36. Heathrow Airport reiterated that road traffic “remains the key contributor to air pollution around the airport”. In their Statement of Principles they note that one of the key drivers for their surface access plan is to “have no more airport cars on the roads” as a result of expansion.⁴⁶ They plan to achieve this through working to increase public transport mode share to at least 50% and by improving road access to the airport.⁴⁷ They cited evidence of the Airport's track record of delivering meaningful improvements in air quality, noting that “over a five year period, ground based emissions of nitrogen oxides from airport activity reduced by 16%”.⁴⁸

Requirements

37. There is little agreement on the surface access requirements that are essential for expansion. The Airports Commission estimated £5 billion in total capital costs would be required for surface access, including improvements to the M4, M25, local A-roads and Southern Rail access to Staines.⁴⁹ Heathrow said, in its Statement of Principles, that it

44 Sustainable Aviation, 'UK Aviation and Air Quality: our contribution, the challenges and opportunities', pp24,46

45 Environmental Audit Committee, [Airports Commission Report](#), page 17, HC 389

46 [Heathrow Airport Limited: Statement of Principles](#), page 38

47 Ibid.

48 Heathrow Ltd., Written Evidence, para 3.2

49 [Airports Commission Final Report](#), tables 8.2 & 11.2

considers the M25, A-road and airport stations works essential to the new runway being operational by 2026 and said it had set aside £1 billion to pay in full itself for these works.⁵⁰ TfL said it would cost £15–20 billion to fund the total transport infrastructure required.⁵¹

38. The Mayor of London was critical of the Government’s approach and Heathrow’s, saying that:

Delivering mode shift will be critical to limiting highway traffic and helping tackle air pollution, but no new rail infrastructure is deemed by Government or Heathrow Airport Limited to be required for expansion, rendering such an aspiration simply not credible.⁵²

39. The Government has yet to publish an assessment of the essential infrastructure requirements for expansion. In its response to our interim report the Government told us that it would set out its surface access requirements in the NPS, and noted that Heathrow had set out a surface access plan and committed to public transport use targets and to no increase in road traffic.⁵³ The Committee has not examined the Draft National Policy Statement in detail, however early impressions are that it does not add further clarity on this question.⁵⁴

40. In oral evidence the Transport Secretary told us “I understand how it is going to be funded” and strongly criticised TfL’s estimates of £15 billion, saying that he did not “know what you would spend the money on.”⁵⁵ Documentation released with the announcement of expansion indicated the Government’s support for the Airports Commission’s conclusions that the total cost for surface access improvements would be £5bn, however they are yet to provide their own more detailed estimate.⁵⁶ The Transport Secretary argued there are two dimensions to the Government’s plan for improving public transport access:

First of all, there are the immediate improvements needed as a result of the runway itself. That is to the various neighbouring roads to the M25, all of which will be borne directly by the airport. Then there are improvements that will be happening anyway, like the Piccadilly line improvement, which will substantially increase capacity on the Piccadilly line, and Crossrail and HS2.⁵⁷

41. In response to Heathrow’s promises, the Transport Secretary told us that “the Heathrow contribution will be much higher” than the £1 billion they plan to set aside. He also confirmed that the airport’s commitments to deliver no increase in the overall road access to the airport and the proportion of passengers accessing the airport by public transport will be regarded as “mandatory parts of the agreement process.”⁵⁸ The Airport also said it wanted costs to be “capped” and to be exempt from cost overruns it had not

50 [Heathrow Airport Limited: Statement of Principles](#), page 20, para 1.10.1

51 Oral Evidence, Richard di Cani, 14 October 2015, Q55

52 Letter from Mayor of London to the Committee, para 6.1

53 Letter from Secretary of State for Transport to the Chair, 8 November 2016

54 WSP | Parsons Brinckerhoff, [Updated Air quality Re-analysis: impact of new COPERT emission factors and associated new pollution climate mapping sensitivity testing](#)

55 Oral Evidence, 30 November 2016, Q20 & 22

56 DfT, [Review of the Airports Commission’s final report](#), page 17, para 73

57 Oral Evidence, 30 November 2016, Q20

58 Chris Grayling, Oral Evidence, 30 November 2016, Q23

proposed.⁵⁹ In response Mr Grayling said that any cost overruns on the project itself would be the responsibility of the airport: “as it is a privately funded project, any commitments that they do not get right, they will have to pay for”.⁶⁰

Accountability and Capacity

42. Identifying the impact of Heathrow on local traffic, and therefore on air pollution, is complex and contested by the airport and local authorities. Our previous report stated:

The Government should not approve expansion at Heathrow until it has developed a robust framework for delivery and accountability. [...]

The Government must establish clearly delineated responsibilities for meeting air quality limits before deciding to go ahead with the scheme. We foresee significant legal challenges further down the line if this is not done, for example, if central Government tried to hold local authorities to account for a failure to meet the [air quality] targets that they attributed to airport expansion or to penalise the airport for pollution that it attributed to background traffic.⁶¹

43. In response to questions on responsibility and capacity being dependent on meeting air quality limits, the Transport Secretary said:

Of course we will monitor the overall issue and make sure that the airport is held to the commitments it has made in a variety of different areas, but on-the-ground enforcement for obvious breaches resides with the local authority.⁶²

It depends when and where [a breach should occur]. If it is clearly the case that the airport does not have the ability to deliver the commitments, for example, on road access to the airport, so that we are expecting a huge increase and air quality problems as a result, then no, the airport will not be able to release its infrastructure.⁶³

Conclusion

44. The Government has not yet published a comprehensive assessment of the infrastructure requirements of an expanded Heathrow, including an outline of costs, responsibilities and accountability. The Government must publish such an assessment and consult on it before publishing a final National Policy Statement.

45. We reiterate that we foresee legal and commercial risks down the line if clear responsibilities and accountability for meeting air quality targets are not set out at the beginning of the process. For example, Heathrow have said there will be “no more cars

59 Heathrow Airport Limited, [Statement of Principles](#), page 19, para 1.9

60 Chris Grayling, Oral Evidence, 30 November 2016, Q23, Q25

61 DfT, Review of the Airports Commission’s final report, page 16 para. 53

62 Oral Evidence, 30 November 2016, Q28

63 Ibid.

on the road” as a result of expansion. *There needs to be clarity over how this pledge will be delivered and monitored, the consequences if it is not met and the implications of that for local authorities’ responsibilities to deliver air quality compliance.*

3 Carbon Emissions

Background

46. In our interim report, we examined the Airports Commission’s analysis of the potential impact of differing carbon policies on the viability of expanding airport capacity in the South East of England. By far the largest climate change impacts come from additional international flights, we have therefore focused on these rather than the mitigation measures proposed in relation to construction and operation.⁶⁴ We found a significant policy gap between aviation emissions policy as it stood and the measures modelled by the Commission. We noted that, whilst the Airports Commission had modelled various carbon policy scenarios,⁶⁵ it had not made recommendations on how emissions should be managed. The former Commissioners argued this was for the Committee on Climate Change. We recommended that the Government’s decision on airport expansion should be accompanied by a package of measures to demonstrate a commitment to bringing emissions from international aviation within the economy-wide target set by the Climate Change Act 2008.⁶⁶

47. Since our interim report, the Government has legislated for the Fifth Carbon Budget,⁶⁷ which starts in 2028, but is yet to publish its plan for meeting the Budget. The International Civil Aviation Organisation’s (ICAO) has also agreed a Global Carbon Offsetting and Reduction Scheme (CORSIA).⁶⁸ The UK has indicated it will participate from the beginning of the scheme in 2021.⁶⁹

48. In announcing the Government’s decision, the Secretary of State for Transport said “it [Heathrow expansion] can be delivered within carbon [...] limits”.⁷⁰ The draft National Policy Statement document repeats this claim—acknowledging that the Heathrow additional runway scheme generates the most additional CO₂, but stating this was not considered a differentiating factor between schemes because “The Airports Commission concluded that any one of the three shortlisted schemes could be delivered within the UK’s climate change obligations, as well as showing that a mix of policy measures and technologies could be employed to meet the Committee of [*sic.*] Climate Change’s planning assumption”.⁷¹ The Government has said it will update its aviation strategy—including on carbon emissions—later this year.⁷²

64 Department for Transport, [Draft Airports National Policy Statement: Assessment of Sustainability](#), para. 6.11.6; The impact of construction and operation of the runway itself is discussed in the Airports Commission’s Report and in written evidence from Heathrow Ltd.

65 The two main scenarios were carbon-traded (in which a global emissions trading system is in place by 2030) and carbon-capped (in which domestic policies maintain emissions to 2005 levels by 2050).

66 Environmental Audit Committee, [The Airports Commission’s Report: Carbon Emissions, Air Quality and Noise](#), HC 389, Chapter 2

67 *The Carbon Budget Order 2016*

68 International Civil Aviation Organisation, [Assembly Resolution A39–3: Consolidated Statement of Continuing ICAO Policies and Practices Related to Environmental Protection – Global Market-based Measure scheme](#), accessed 18 January 2017

69 European Civil Aviation Conference, [Declaration of Directors General of Civil Aviation of EU Member States and the other Member States of the European Civil Aviation Conference: Adhering to the Global Market-based Measure \(GMBM\) Scheme from the Start](#), accessed 18 January 2017

70 [HC Deb](#), 25 Oct 2016, Col. 163 & 173

71 Department of Transport, [Consultation on Draft Airports National Policy Statement](#), para. 4.53, accessed 2 February 2017

72 Caroline Low, Oral Evidence, 30 November 2016, Q67

International Aviation and the Climate Change Act 2008

49. As set out in our interim report, the Committee on Climate Change and Government are required by the Climate Change Act 2008 to take international aviation emissions into account when setting carbon budgets.⁷³ To do this, the Committee on Climate Change includes “an appropriate planning assumption” into carbon budgets for the purposes of setting contributions from other sectors. This assumes that UK gross⁷⁴ international aviation emissions will be no more than 2005 levels—37.5 MtCO₂—in 2050. This is in line with a target set by the then-Government in 2009 and has been described by the CCC as consistent with passenger growth of around 60% over the 2005–2050 period.⁷⁵ This is less than the carbon reduction targets set for other sectors, such as energy or industry, reflecting the technical challenges of developing non-fossil fuel alternatives for aviation fuel.⁷⁶

50. The status of the planning assumption in relation to Government policy has been the source of some confusion during our inquiry. The Secretary of State told us “there is no law of the land that requires us to meet any particular [international aviation emissions reduction] target” and pointed out that the Climate Change Act 2008 does not require international aviation to be included in the carbon budgets.⁷⁷ However, the planning assumption played a key role in the Airports Commission’s report and was perceived by some of our witnesses, including Heathrow Ltd. itself, to be a Government target.⁷⁸

51. The aviation industry also has its own emissions reductions targets, although they are less ambitious than the CCC’s planning assumption which was used by the Government when legislating for the Fifth Carbon Budget. The ICAO agreement aims at a “global aspirational goal of keeping the global net CO₂ emissions from international aviation from 2020 at the same level”. The Aviation Environment Federation (AEF) have set out a number of ways in which it falls short of meeting the planning assumption and, as we set out below, it assumes carbon prices lower than those assumed under the Airports Commission’s carbon-traded model.⁷⁹ Sustainable Aviation published a “CO₂ Road Map” in 2012 which aimed to show how the UK aviation industry could “accommodate significant growth to 2050 without a substantial increase in absolute CO₂ emissions” and reduce net levels to 50% of 2005 levels through internationally agreed carbon trading.⁸⁰ The planning assumption requires reductions in **actual** emissions to 2005 levels, as opposed to calculating net emissions after the operation of a carbon trading system, which both the ICAO and Sustainable Aviation focus on.⁸¹

73 Climate Change Act 2008, Section 10(2)(i) and Section 30(1)

74 Gross (absolute or actual) emissions refer to the level of emissions emitted by a country or sector. Net emissions is the level of emissions emitted, minus those emissions offset through international or cross-sectoral emissions trading and other schemes.

75 Environmental Audit Committee, *Airports Commission Report*, paras 6–8, HC 389

76 See for example, Sir Howard Davies, oral evidence, 4 November 2015, Q166

77 Oral Evidence, 30 November 2016, Q59

78 For example, Heathrow Airport Ltd. in their supplementary written evidence refer to “the Government’s target of 37.5MtCO₂ emissions from aviation by 2050”

79 International Civil Aviation Organisation, [Resolution A39-3, Consolidated Statement of Continuing ICAO Policies and Practices Related to Environmental Protection – Global Market-Based Measure Scheme](#), accessed 18 January 2017; AEF, supplementary written evidence and [The MBM, the Climate Change Act and the Emissions Policy Gap](#), accessed 18 January 2017

80 Sustainable Aviation, [CO₂ Road-Map](#), accessed 18 January 2017

81 AEF, supplementary written evidence

52. Whilst international aviation is not yet included in carbon budgets, other sectors' contributions have been calculated assuming that the planning assumption for international aviation will be met by 2050. This point was made in a letter from the Chairman of the CCC, Lord Deben, to the Secretary of State for BEIS, Rt Hon Greg Clark MP, following the Government's announcement on Heathrow. Lord Deben noted that the Government's headline analysis of the costs and benefits of expansion in its announcement on expansion was based on modelling which assumed the planning assumption would be exceeded by 15% in 2050. Lord Deben observed that exceeding the planning assumption would result in other sectors having to make deeper reductions in their emissions. He said the CCC has "limited confidence" that such reductions could be achieved.⁸² We also note that the modelling used by the Airports Commission in this scenario assumes the UK's continued participation in the European Emissions Trading Scheme up to 2030.

53. The Government intends to set out further details about its approach to aviation emissions in a series of documents to be published later this year.⁸³ Caroline Low said the Government would be looking to put "flesh on the bones" of the Airports Commission's carbon sensitivity model.⁸⁴ The Government argued this analysis demonstrates it is possible to meet the planning assumption with a higher rate of passenger growth—80% between 2005 and 2050—than the CCC believes is compatible.⁸⁵ The Secretary of State said that three elements would make this possible: improvements in aircraft efficiency, biofuels (which the Government has just launched a consultation on) and the ICAO agreement on offsetting.⁸⁶ In our interim report we noted that current Government policy fell short of meeting some of the assumptions modelled by the Commission in these areas alongside concerns that some of these may not be achievable practically or politically.⁸⁷

54. Although the Secretary of State argued that the Airports Commission Report showed it was possible to deliver Heathrow expansion and additional passenger growth whilst still meeting the planning assumption, he did not say that this was necessarily the Government's intention. He told us that the Government had not decided whether it intended to work towards the planning assumption.⁸⁸ Nor had the Government decided whether to work towards a target of reducing actual aviation emissions (as recommended by the CCC) or one of reducing net emissions (which would count offset emissions as a reduction).⁸⁹ We asked whether he had consulted other Ministers or sectors over the higher emissions reductions that they might be required to make if the planning assumption was not met. He said he had not yet done so.⁹⁰

55. In its draft National Policy Statement, the Government states that the Airports Commission Report showed "that a mix of policy measures and technologies could be employed to meet the Committee of Climate Change's [*sic.*] planning assumption".⁹¹ In our interim report, we identified a "policy gap" between the theoretical measures modelled

82 Letter from Lord Deben to Rt Hon Greg Clark MP, Department of Transport's Assessment of the Case for a Third Runway at Heathrow, 22 November 2016 (henceforth, CCC Letter)

83 Oral Evidence, 30 November 2016, Q56

84 Oral Evidence, 30 November 2016, Q56

85 Letter from Secretary of State for Transport to Chair, 9 January 2017, and CCC Letter

86 Oral Evidence, 30 November 2016, Q49

87 Environmental Audit Committee, [Airports Commission Report](#), page 10, para 29

88 Letter from Secretary of State for Transport to Chair, 9 January 2017

89 Oral Evidence, 30 November 2016, Q50 & Q51

90 *Ibid.* Q55

91 DfT, [Draft National Policy Statement](#), para. 4.53

by the Airports Commission to control aviation emissions and current policy.⁹² The AEF, in their supplementary evidence, argued that the Government had tacitly accepted the existence of a policy gap in their announcement and had decided to dispense with the planning assumption rather than try to meet it.⁹³ The Secretary of State denied that such a gap existed—citing the Airports Commission’s work and the measures discussed above.⁹⁴ The draft National Policy Statement states that Heathrow Airport will be expected to take “ambitious measures” to limit carbon emissions, however, as discussed earlier, the main generator of CO₂ will be through flights themselves.⁹⁵

56. As an example, we asked the Secretary of State about carbon prices. The ICAO envisages a carbon price of between \$12 and \$40 per tonne in 2035.⁹⁶ The price modelled by the Commission for 2035—under the carbon-traded scenario which underpins the headline figures in the Government’s announcement and which would miss the planning assumption by 15% in 2050—was £101 per tonne.⁹⁷ For other scenarios, particularly the carbon-capped scenario in which the planning assumption is met—the price modelled by the Commission was higher.⁹⁸ We note the uncertainty in carbon price forecasts, and that the price of an emissions allowance in the EU’s Emissions Trading Scheme was around €4.60 when this report was produced. In our interim report we remarked that these “give an indication of the scale of intervention likely to be required” to meet the CCC’s planning assumption.⁹⁹

57. In our interim report we noted scepticism from some witnesses that future Governments would be likely to sign up to such prices, although Heathrow Ltd. were confident of their ability to prosper under them.¹⁰⁰ In oral evidence, to the Committee in 2015, the former Commissioner, Professor Dame Julia King, agreed that the lower carbon prices—for the carbon traded model—were in line with CCC and Government modelling, but higher prices—those needed to meet the planning assumption—“are such high carbon prices that [...] I do not think it is entirely sensible to regard them as in any way real carbon prices.”¹⁰¹ When asked if he could envisage carbon prices reaching those levels the Secretary of State said “The answer is we don’t know [but] the Airports Commission has taken some fairly prudent assessments on this.”¹⁰²

Non-CO₂ Emissions

58. We asked the Secretary of State whether its upcoming aviation strategy would examine greenhouse gas emissions other than CO₂. He said that non-CO₂ emissions would be reduced alongside CO₂, but “there is no clear scientific basis to look at other emissions and put those at the heart of our strategy”.¹⁰³ The Assessment of Sustainability

92 Environmental Audit Committee, [The Airports Commission Report: Carbon Emissions, Air Quality and Noise](#), para. 29

93 AEF, supplementary written evidence

94 Oral Evidence, 30 November 2016, Q68

95 DfT, [Consultation on Draft National Policy Statement](#), para. 6.38

96 International Civil Aviation Committee, [What would be the impact of joining CORSIA?](#), accessed 18 January 2017

97 Airports Commission, [Strategic Fit](#), para. 4.14

98 Ibid.

99 Environmental Audit Committee, [Airports Commission Report](#), para. 17

100 Heathrow Ltd, supplementary written evidence

101 Oral Evidence, 4 November 2015, Q150

102 Oral Evidence, 30 November, Q57

103 Oral Evidence, 30 November, Q74

says that non-CO₂ emissions “are likely to be up to two times the magnitude of the CO₂ emissions themselves, but [...] cannot be readily quantified due to the level of scientific uncertainty and therefore have not been assessed”.¹⁰⁴

Conclusions

59. The headline cost and benefits figures in the Government’s announcement on Heathrow and the draft National Policy Statement assumed a black hole in the 2050 carbon budget that other sectors, such as energy or industry, would have to fill. It also assumed continued participation in the European Emissions Trading Scheme up to 2030, it is imperative that the UK remains within the EUTS or any future European emissions trading scheme. The Government has told us it intends to base its policy on another scenario which incorporates assumptions about the level of passenger demand compatible with managing emissions which are more optimistic than the Committee on Climate Change’s advice. *The business case for Heathrow expansions must be assessed against a cost/benefit analysis which uses realistic carbon policy assumptions, in line with the Government’s aviation strategy, and takes account of the resulting impacts on other airports and other sectors of the economy. These must be the headline figures in future Government publications, including the final National Policy Statement.*

60. *The Government claims that Heathrow expansion can be delivered within “the UK’s climate change obligations”. The Government has not set out what it means by “obligations”, let alone how it will meet them. It has not decided whether to accept the Committee on Climate Change’s recommendation on limiting emissions from international aviation. It has not decided whether to follow the CCC’s advice on offsetting. The Airports Commission told us the appropriate body to make recommendations on managing aviation emissions is the CCC. It would not be a credible position for the Government to claim that it can deliver Heathrow expansion within emissions limits whilst rejecting independent advice as to what those limits should be and how they should be met.*

61. The signing of the ICAO agreement is a necessary first step to reducing emissions from international aviation, but it is not sufficient in itself. *The Government should reconfirm its intention to participate in this scheme from 2021, which is after the date when the Government intends to have formally completed leaving the EU, urge other major emitters, including the United States, to live up to their commitments to participate from the earliest possible date, and work towards strengthening the agreement during its review periods.*

62. Our interim report noted a significant policy gap between the modelling done by the Airports Commission and meeting the Committee on Climate Change’s advice on aviation emissions. The Committee on Climate Change has repeatedly urged the Government to draw up an emissions reduction strategy for aviation. The ICAO agreement means the Government no longer has any excuse not to do so. In the absence of concrete policy proposals from Government, we cannot assess whether the additional emissions from additional flights to and from Heathrow can be properly mitigated. Expanding Heathrow without drawing up such a strategy would, therefore, be putting the cart before the horse.

104 Department for Transport, [Draft Airports National Policy Statement Assessment of Sustainability](#), para. 6.11.10

63. The Government's aviation strategy should be integrated with the cross-Government emissions reduction plan. It should set out costed policies to either meet the Committee on Climate Change's planning assumption or to make up the shortfall from other sectors. This decision will have to take account of the limited progress towards decarbonisation outside the energy sector and the likely additional climate change impact of some non-CO₂ emissions. Where the Government makes assumptions that are more optimistic than the Committee on Climate Change's advice it should subject those assumptions to independent scrutiny from industry and the CCC and, if necessary, revise its plans accordingly. This strategy should be available well before the end of the scrutiny period for the draft National Policy Statement and consultation on it should be completed before the National Policy Statement is finalised.

4 Noise

Introduction

64. The Airports Commission made several recommendations for mitigation and compensation measures to reduce the impact of noise on local communities. These included: predictable respite; a night flight ban; and operational and technological improvements, including steeper approaches and a ban on flights between certain hours, known as a ‘noise envelope’.¹⁰⁵ Our previous report concluded that the Government should not approve expansion until the airport can demonstrate that it accepts and will comply with the Airports Commission’s conditions.¹⁰⁶ The Airports Commission also proposed an independent aviation noise authority to monitor and advise on aircraft noise.¹⁰⁷ In our interim report we recommended this authority carry out a survey of attitudes to aircraft noise, something we discuss again in the final section of this chapter.

Mitigating Measures

65. In its Statement of Principles, Heathrow outlined its proposals for each of the Airports Commission’s major measures, including predictable periods of respite and a ban on night flights between 11pm and 5.30am.¹⁰⁸ In its Blueprint for Noise Reduction the airport also outlined the technical and operational improvements it will carry out to reduce noise, and referred to its recent trial of steeper descents.^{109 110}

Respite

66. In our interim report we noted concerns that, with expansion, respite would decrease from half the flying day to one third—and to one quarter for some.¹¹¹ In its Statement of Principles, Heathrow also said it would publish a timetable of respite, whilst ensuring there would be “some respite” for everyone living under the final flight path.¹¹² In its announcement the Government referred to a “predictable timetable of respite for those living under the flight path.” However, boroughs close to the airport were concerned that the Government had not published, alongside the announcement, any further information on its work to understand respite.¹¹³

67. On guaranteeing local communities a break from overflying, the Secretary of State told us that the crucial reason the extension of the Northern Runway was not accepted was that it would not allow for the provision of respite. Therefore the key element of the new, third runway was that it could provide “respite at all”.¹¹⁴ He told us that there are two options to manage expanded airspace:

105 [Airports Commission Final Report](#), ch.14

106 Environmental Audit Committee, [Airports Commission Report](#), ch.4, HC 389

107 [Airports Commission Final Report](#), page 10

108 [Heathrow Airport Limited: Statement of Principles](#), page 25

109 Heathrow Airport Limited, [Blueprint for Noise Reduction](#),

110 Heathrow Airport Limited, [Slightly Steeper Approach Trial Report](#)

111 Oral Evidence, Daniel Moylan TfL, 14 October 2015, Q67

112 [Heathrow Airport Limited: Statement of Principles](#), page 25

113 Hillingdon, Richmond, Wandsworth, Windsor and Maidenhead, para 3.6

114 Oral Evidence, 30 November 2016, Q103

You can either have aircraft following a very defined single route, in which case one group of people is affected all the time. You can put in place—indeed, we already have—noise mitigating measures for people on that route. The alternative is to spread them out and therefore give people much more respite, but of course in that situation far more people are affected and you are much less able to provide noise mitigation measures. That is an essential part of the consultation.¹¹⁵

68. The Government published its Draft National Policy Statement on 2 February 2017. This contained a summary of the mitigation measures that could be used to reduce the noise impact of an expanded Heathrow. On respite the NPS states:

Predictable respite—a runway alternation scheme, to provide communities with predictable periods of respite. The timings, duration and scheduling should be defined in consultation with communities and relevant stakeholders.¹¹⁶

Night Flights

69. The Airports Commission recommended that there should be a ban on all scheduled night flights in the period 11:30pm to 6:00am.¹¹⁷ In its announcement the Government said that it would propose a six and a half hour night flight ban, but the timing would be subject to consultation. Heathrow supports the introduction of a legally binding ban on flights “from 11 pm to 5.30 am, when the third runway opens”.¹¹⁸

70. According to London Boroughs close to the airport, Heathrow’s proposed timings for the ban would only mean retiming a maximum of four flights per night out of 16–18 nightly arrivals. They describe this as “disingenuous” and an approach that “does nothing to build bridges” with the local community.^{119 120} When questioned on this figure, Mr Grayling told us that the number of flights rescheduled would depend on the final timings adopted. He argued :

“There is a clear objective. We have a complete ban on scheduled flights for six and a half hours. Those that would fall within the current six and a half hour bracket would end up having to move.”¹²¹

71. The Governments Draft National Policy Statement addressed the issue of a night flight ban stating:

The Government expects a ban on scheduled night flights of six and a half hours between 23.00 and 07.00. The operation and timings of such a ban should be defined in consultation with local communities and relevant stakeholders in line with the requirements of EU Regulation 598/2014.¹²²

115 *Ibid.* Q102

116 [Airports Draft National Policy Statement](#), page 128

117 [Airports Commission Final Report](#), page 10

118 [Heathrow Airport Limited: Statement of Principles](#), page 25; see written evidence also

119 Written Evidence. Hillingdon, Richmond, Wandsworth, Windsor and Maidenhead, ACR0002, para 3.7

120 The Mayor of London told us, with expansion, there would be a net increase in flights of at least 30% between 11pm and 7am

121 Oral Evidence, 30 November 2016, Q104

122 [Draft Airports National Policy Statement](#), page 54

72. We are concerned that the Government’s National Policy Statement has provided no further clarity on how predictable respite will be achieved or on the specific timings of a night flight ban. *The Government must carry out further work on respite which should form part of the NPS process, alongside plans for a live timetable of respite to be published beginning when the new runway is operational. We welcome the Government’s commitment to a 6.5 hour night flight ban. However as the Government’s case for expansion has relied heavily on the Airports Commission’s work; it would appear inconsistent to reject its key recommendation on the precise timing of a night flight ban. The Government must consider this recommendation alongside consideration of the health aspects caused to residents, in line with the requirements of EU Directive 598/2014.*

Like-for-Like Comparisons

73. In its final report the Airports Commission argued it would be “possible to agree a noise envelope for an expanded Heathrow that would ensure that the total number of people affected by noise under expansion would be no higher than it is today”.¹²³ TfL was critical of the Commission’s statement that its proposed mitigation measures could ensure noise did not exceed current levels, arguing this is contrary to the DfT’s Transport Appraisal Guidance methodologies for assessment, which require a comparison between doing something and doing the minimum for the same future year.¹²⁴ In our interim report we recommended that:

The Government needs to demonstrate that, in assessing the case for expansion, it has based its decision on whether an expanded Heathrow would be noisier or less noisy than a two runway Heathrow at the same point in time-taking into account respite and the need for predictable flying.¹²⁵

74. The Government’s Draft National Policy Statement does not appear to be in line with our recommendation. In the Appraisal of Sustainability, when considering the increased number of people affected by noise, it refers to data collected by the Airports Commission. Which measured the increased number of people affected compared with today, rather than with the number that would have been affected compared to a two runway airport in 2030.¹²⁶

Fewer People Affected than Today

75. The Commission said a noise envelope should be agreed and Heathrow must be legally bound to stay within these limits.¹²⁷ In its announcement on expansion the Government said it proposes legally binding noise targets, adding that: “the Airports Commission concluded, even with the extra flights added by the airport’s expansion, fewer people

123 Airports Commission Final Report, page 279, para 14.18

124 Transport for London, ACR0075, para 4.5

125 Environmental Audit Committee, [Airports Commission Report](#), page 24, HC 389

126 [Appraisal of Sustainability](#), page 77 (see footnotes)

127 [Airports Commission Final Report](#), page 10

would be affected by noise from Heathrow by 2030 than are today”.¹²⁸ This was supported by Heathrow Airport who told us that “we have designed our expansion plans to ensure that fewer people are impacted by significant aircraft noise than today”.¹²⁹

76. Some London Boroughs told us, however, that this aim was “totally disingenuous” and communities would lose improvements in noise reduction that they would have seen without expansion due to new technology and operational techniques.¹³⁰ The Mayor of London also pointed to like-for-like analysis undertaken for TfL which found:

A three runway Heathrow would result in an increase in the number of people exposed to significant aircraft noise (at 55dB Lden) of over 200,000 compared to a two-runway Heathrow (applying similar assumptions). Heathrow Airport Limited claimed a new runway could lead to less noise, but only by not comparing like with like.¹³¹

77. The Civil Aviation Authority carried out analysis on behalf of the Airports Commission to consider three future airport operational scenarios. Considering the scenario that maximises respite it found, at 54dB LAeq 16 hour contour, in 2030 and 2040 three runways were shown to affect fewer people than two. Similarly, on the 55dB Lden 24-hour metric and the ‘maximise respite’ scenario, an expanded airport was shown to affect fewer people than a two runway Heathrow in 2030, 2040 and 2050.¹³²

78. The Transport Secretary, responding to views that the Government’s targets were unambitious, said:

The interesting thing of course, is because you have six rather than four flight paths, the impact in noise of a plane flying overhead and the benefits in noise reduction terms will still happen.¹³³

One of the reasons we chose the north-west runway option rather than the extended northern runway option was that this allows us still to provide respite to people on the routes—not quite as much as before, because of the configuration of an extra runway that operates in mixed mode, or an element of mixed mode that inevitably has to happen when you have three runways rather than two or four.¹³⁴

79. The Government’s Draft National Policy Statement has provided no further clarity on the legally binding noise targets it proposes. The Appraisal of Sustainability states:

Noise envelope—should be tailored to local priorities and include noise performance targets. The design of the envelope should be defined in consultation with local communities and relevant stakeholders with suitable review periods.¹³⁵

128 Chris Grayling MP, [Government Decides on New Runway at Heathrow](#)

129 Written Evidence, page 5, para 6.5

130 Written Evidence. Hillingdon, Richmond, Wandsworth, Windsor and Maidenhead, para 3.3

131 Letter from Mayor of London to the Committee, 17 November 2016

132 Civil Aviation Authority, [Noise Modelling for the Airports Commission: Compendium of results](#), June 2015, table c4

133 Oral Evidence, 30 November 2016, Q88

134 Ibid.

135 [Appraisal of Sustainability: draft Airports National Policy Statement](#), page 127, table 7–3

Technological Improvement

80. We heard that advances in aircraft technology may provide some noise mitigation in future. Sustainable Aviation told us that UK aviation would be able to accommodate significant air transport movement growth to 2050, whilst at the same time achieve a reduction in the total noise output of UK aviation compared to 2010. It added that future noise reductions would be achieved through changes in aircraft technology and operational techniques, but would require Government assistance and policy certainty in order for improvements to be effective.¹³⁶ In a recent report, SA acknowledged however that some technological changes may result in an overall decrease in noise impacts, but that noise levels under that flightpath may be increased.¹³⁷

81. Daniel Moylan, the former Mayor's aviation adviser, told us during our 2015 inquiry, however, that:

Much of the noise improvement has already been achieved, and the aero engine manufacturers confirm that they do not expect to see very much more. It takes time for that to arrive on the airfield, because [...] planes have a life of about 30 or 40 years, so you will expect to see some improvement continuing as existing modern technology is rolled out into the fleet, but there is a limit to it.¹³⁸

82. On the impact of technological improvement Mr Grayling told us:

[...]if you are on the flight path into or out of Heathrow over the coming period, as we see more and more of those new generation planes coming to Heathrow, the noise levels above you will drop.¹³⁹

83. Mr Grayling added: "Steeper approach is definitely one option [to reduce noise]. This is part of the airspace consultation."¹⁴⁰ Heathrow carried out a trial of 3.2 degree descents between September 2015 and March 2016 which was, reportedly, "successful, meeting all objectives with no adverse impact on the daily operation." However, the technical report reveals that the magnitude of the benefit is small (c.-0.5dBA) and unlikely to be perceptible on the ground.¹⁴¹ This report considers attitudes towards aviation noise in more detail in the following section.

84. The Government's draft National Policy Statement argues that there have been reductions in noise over recent decades due to technological and operational improvements; it adds "further opportunities for noise reductions are expected in the next decade as part of the UK airspace modernisation programme".¹⁴²

85. The NPS does not lay out the technical and operational improvements the Government expects or requires Heathrow airport to carry out. It states: "It is recognised that Heathrow Airport already supports a number of initiatives to mitigate aircraft noise,

136 Written Evidence, pages 4–5

137 Sustainable Aviation, 'UK Aviation and Air Quality: our contribution, the challenges and opportunities', p40

138 Oral Evidence, 14 October 2015, Q67

139 Oral Evidence, 30 November 2016, Q88

140 Oral Evidence, 30 November 2016, Q107

141 Heathrow Airport, [Slightly Steeper Approach Trial Report](#), page 60, para 140

142 [Draft National Policy Statement](#), page 50

such as developing quieter operating procedures [...] The applicant is expected to continue to do so, and to explore all opportunities to mitigate operational noise in line with best practice”.¹⁴³

Conclusion

86. The stated goal of “fewer people [...] affected by noise from Heathrow by 2030 than are today” shows a lack of ambition. Without Heathrow expansion, local communities would have seen a decrease in aircraft noise as new technology and airspace management techniques were developed. A number of scenarios in the Airports Commission’s technical report showed that an expanded Heathrow in 2030 could be quieter than a two runway airport at the same time. The Government and Heathrow have argued three runways will allow the airport to manage its airspace more efficiently. The NPS does not clearly lay out the nature of the legally binding noise targets and it only compares an expanded airport in 2030 with noise levels today, it does not compare noise levels in 2030 with a two-runway airport at the same time. *The Government should publish a comparison between projected three and two-runway noise levels in 2030 as well as with noise levels now. The Government and Heathrow should work towards a goal of less noise than a two runway Heathrow would create in 2030.*

87. The Government has argued that, with more effective use of airspace and new technology and operational techniques, noise levels will fall. There is a trade-off between carbon emissions reduction and noise reduction. *The Government should work with the sector and public to set its priorities. If the Government plans to rely on future technical improvement to reduce noise impacts, then it must provide the aviation industry with support by setting a clear strategic direction for the industry and guarantee policy certainty for investment.*

Independent Aviation Noise Authority

88. In its announcement on Heathrow expansion the Government proposed new legally binding noise targets. Heathrow airport supports this Airports Commission recommendation in its Statement of Principles.¹⁴⁴ During oral evidence the Secretary of State said “this [noise targets] is something that we need to consult on. It would also be part of the remit of the new independent noise body that I intend to set up”.¹⁴⁵

89. In our interim report we supported the Airports Commission’s recommendation for the establishment of an Independent Aviation Noise Authority. We concluded:

This body will need a more up to date understanding of people’s attitudes to noise if it is to be credible. One of the first tasks of such a body should be to undertake a survey of people’s attitudes to aviation noise. The results of this survey should underpin both its own work and future Government policy on managing noise. In particular, they should form part of a piece of work to develop a set of metrics to assess noise impact.¹⁴⁶

143 Ibid. page 51

144 Heathrow Airport Ltd: Statement of Principles, para 2.3

145 Oral Evidence, 30 November 2016, Q89

146 Environmental Audit Committee, [Airports Commission Report](#), page 22, HC 389

90. The Mayor of London emphasised the importance of an Independent Aviation Noise Authority for helping to “restore people’s trust” in the regulation of aviation and its noise impacts.¹⁴⁷ A lack of trust has manifested itself in response to Heathrow’s offer to spend more than £1 billion, including £700 on noise insulation, in the community. Richmond Heathrow Campaign previously noted that it took Heathrow five years to invest £4.8 million in refitting schools and community buildings, and they questioned how long it would take to invest £700 million.¹⁴⁸ The airport has promised to administer its noise insulation in phases over a period of twenty years, beginning one year before operations on the new runway begin.¹⁴⁹

91. In response to our interim report the Government told us that it:

Believes in the principles of an independent aviation noise commission and will consult on this shortly. Such a body could usefully carry out such surveys [on noise attitudes] on a more regular basis. Research is one of the functions which the Airports Commission proposed it should have.¹⁵⁰

92. The Secretary of State confirmed to us “I fully intend that there should be an independent aviation noise body; what we will be consulting on is its remit rather than its existence.” Caroline Low added: “the role of the independent noise authority, which is potentially a national role, not just around Heathrow, will be captured in the [NPS] airspace and noise consultation”.¹⁵¹ With regards to the role of this body, the Transport Secretary told us that:

At the moment the enforcement body is the Civil Aviation Authority. There may not be a lot of logic in changing the enforcement powers, but it is a question of defining exactly what remit the new organisation should have.¹⁵²

93. In light of the publication of the ‘reforming policy on the design and use of UK airspace’ consultation, this Committee is concerned with the apparent downgrading of the proposed Independent Aviation Noise Authority to an Independent Commission on Civil Aviation Noise. The consultation document sets out the Government’s preference for the governance and structure of this body. It states that it will be “an independent body within the CAA”; its Terms of Reference, appointment process for the Commissioner and Board members, and funding will all be decided by the Secretary of State; and it should be “classified as a function of Central Government”. We are concerned that these features make this body an instrument of the Government, preventing it from being independent or credible.

94. Of most concern, however, is the role envisaged by the Government for this body. The consultation document outlines eight functions of this body. These eight functions all refer to this body as having a solely advisory nature. We do not have confidence that a purely advisory function would enable it to have a sufficiently meaningful impact on aviation noise policy.¹⁵³

147 Written Evidence, page 7, para 4.19

148 Environmental Audit Committee, [Airports Commission Report](#), page 25, HC 389

149 Heathrow Airport Limited: Statement of Principles, page 26, 33

150 Letter from Chris Grayling to the Chair, 8 November 2016

151 Oral Evidence, 30 November 2016, Q97, Q98

152 *Ibid.* Q98

153 [UK airspace policy: a framework for balanced decisions on the design and use of airspace](#), chapter 6

Noise Attitudes Survey

95. The Government was previously criticised for failing to provide clear noise guidance for the Commission to base comprehensive recommendations on. In our interim report we recommended a survey be carried out of people’s attitudes to aviation noise to determine whether the onset of significant annoyance had changed from 57dB to 55dB and to inform future Government policy on managing noise.¹⁵⁴ In response to our report the Transport Secretary wrote:

In 2014–15 IPSOS/MORI conducted, on behalf of the Department for Transport, a survey on noise attitudes which focused on noise from civil aviation near to major airports in England. Results are currently being analysed with the view to publishing a report early next year.¹⁵⁵

96. Caroline Low told us that:

The Commission looked at the full range of metrics, because on the 57Lden, which is the number that has been used historically and is quite helpful for looking back for historical comparisons, we agree with the WHO that the onset of annoyance is now probably further out than the 57 contour, so the Commission looked at a much wider range of contours and indeed different metrics.¹⁵⁶

97. Stakeholders in the aviation industry have emphasised the importance of a noise attitudes survey to understand the “noise challenge and how people react to aircraft noise events”.¹⁵⁷ Sustainable Aviation told us in 2015 that such a survey would allow the industry to respond better to public concerns and reduce the number annoyed by aircraft noise.¹⁵⁸ The London Boroughs we heard from were critical of the IPSOS/MORI survey because they said it had been under “peer review” for several months and not subject to any public consultation.¹⁵⁹

98. During oral evidence the Transport Secretary explained the apparent three-year delay in publication:

It is part of the process that leads up to the publication of the national policy statement. [...] We [the Government] have not currently taken a decision [...] we have made a recommendation. [...] what we do now is set forward all the evidence for consideration as part of the process that happens over the next 12 months.¹⁶⁰

99. On 2 February 2017 the Government published two consultations: its draft Airport National Policy Statement; and its UK airspace policy framework. Documentation published alongside these included the results of the Attitudes to Noise Survey and an

154 Environmental Audit Committee, [Airports Commission Report](#), page 22(73), HC 389

155 Letter from Chris Grayling to the Committee, 8 November 2016

156 Oral Evidence, 30 November 2016, Q89.

157 Sustainable Aviation, Written Evidence, page 5

158 Written Evidence, Sustainable Aviation, page 5

159 Written Evidence. Hillingdon, Richmond, Wandsworth, Windsor and Maidenhead, para 3.2

160 Oral Evidence, 30 November 2016, Q91 & 93

Appraisal of Sustainability. There is an apparent inconsistency of the reporting of the metrics being used to measure noise at Heathrow airport on which mitigating measures are to be based.

100. The draft National Policy Statement recognises that people’s sensitivity to noise has increased in recent years.¹⁶¹ This is in line with the results of the Attitude to Noise Survey. This concluded: that adverse effects of annoyance can be observed down to 51dB LAeq 16hr; and that sensitivity to aircraft noise has increased, with the same percentage of people being highly annoyed at 54dB LAeq 16hr as there was at 57dB LAeq in the ANASE study previously used to inform aviation noise policy.¹⁶²

101. Despite this evidence that noise attitudes have changed, and annoyance has increased, the Appraisal of Sustainability, on which the draft National Policy Statement is based, states “this report focuses on the 57 dB LAeq 16hr threshold, and the expected changes in population exposed to this this threshold [...]”¹⁶³

Engagement

102. To improve trust further between communities and the airport the Airports Commission recommended a new Community Engagement Board be created, alongside the Independent Aviation Noise Authority, “with real influence over spending on compensation and community support and over the airport’s operations [...] set up under an independent chair”.¹⁶⁴ Heathrow has stated its support for the creation of this body which it promised to set up “after the Government approves Heathrow expansion”.¹⁶⁵ The Government, in response to our interim report, stated it would “require Heathrow to develop a Community Engagement Board, including the appointment of an appropriate independent chair, in consultation with local authorities and local communities, and for this body to be in place to participate in the consultation on a draft airports NPS”.¹⁶⁶

103. We heard from Caroline Low that the process of creating this body is already under way and that it was being considered whether “an existing body can be developed into that, because that may be more efficient, or whether they need to set up a new body”.¹⁶⁷ When questioned on the remit of this body Caroline Low told us that it is currently not being “established as any sort of statutory body with spending powers. Will it have influence? Absolutely. We would expect it to be collecting the evidence from the community and helping the airport and us to understand what the right package is”.¹⁶⁸

104. We questioned the Transport Secretary about the concerns about engagement and trust between Heathrow and local communities, and the doubts raised over the ability of the airport to fulfil its promises for insulation in our interim report. Mr Grayling told us that commitments made by the Airport will be enshrined in the planning conditions, but

161 [Draft Airports National Policy Statement](#)

162 [Survey of noise attitudes 2014: Aircraft](#)

163 [Appraisal of Sustainability: draft Airports National Policy Statement](#), page 76

164 Airports Commission Final Report, page 10

165 Heathrow Airport Limited: Statement of Principles, para 5.4.4

166 Letter from Chris Grayling to the Committee, 8 November 2016

167 Oral Evidence, 30 November 2016, Q115

168 Oral Evidence, 30 November 2016, Q117

that the Government has not yet considered the logistics of rolling out the £700 million for noise insulation, nor has it considered what would happen if the funding ran out. He added that these concerns would be addressed as part of the NPS consultation.¹⁶⁹

Conclusion

105. The importance of the Government’s proposed Independent Aviation Noise Authority is demonstrated by the lack of ambitious noise targets and the necessity for a body to enforce the mitigation and compensation measures proposed by the Government and Heathrow. We are concerned that the Government has downgraded the proposed Independent Aviation Noise Authority to an Independent Commission on Civil Aviation Noise. The proposed structure and role of this body would prevent it from having an authoritative role, and may raise questions about whether it is truly independent and credible. *The Government must create an Independent Aviation Noise Authority with an independent chair, the ability to enforce its policy recommendations and the remit to monitor and enforce Heathrow’s commitments to provide respite, including the live timetable; its compliance with night flight scheduling; and the schedule and investment timetable for rolling out the promised noise insulation.*

106. We are concerned with the inconsistency of the metrics used to measure noise attitudes. The Government has recognised that the level of significant annoyance has reduced and the number effected increased, yet it bases its conclusions on the out of date 57 dB LAeq 16hr contour. *The Government must ensure that the NPS process is informed by the most up-to-date noise metrics, in light of the Attitudes to Noise Survey we expect the Government to consider 54 dB LAeq 16hr as the onset of significant annoyance.*

107. We continue to support the Airports Commission in its recommendation of a Community Engagement Board, but emphasise that this body must have real influence and act as a bridge between the airport and communities during the NPS process. We question whether Heathrow’s 20 year timetable for rolling out noise insulation is reasonable. We believe that communities affected by noise in 2026 should not have to wait 20 years for insulation.

169 Chris Grayling, Oral Evidence, 30 November 2016, Q112–123

Conclusions and recommendations

Air Quality

1. The UK has already breached legal NO₂ limits in London for 2017. The High Court has ordered the Government to produce a new plan to tackle air pollution by July 2017, the conclusions of both of the Government's air quality re-analysis studies are based on the previous, over-optimistic plan. The effectiveness of the Government's new air quality plan will be integral to determining whether Heathrow expansion can be delivered within legal limits. We are concerned that the timing of the draft NPS consultation means the Government will be unable to carry out a comprehensive re-analysis of the air quality impacts, using the new air quality plan, before the consultation process is complete. (Paragraph 32)
2. *The Government must publish such an assessment alongside the final National Policy Statement, it must work towards a scenario in which all road links affected by expansion have predicted concentrations below the limit value. Whilst the health impact assessment is a step in the right direction, the Government must carry out work to reduce the significant health impacts identified, before construction of the third runway begins.* (Paragraph 32)
3. Since the Government intends to withdraw the UK from the EU before April 2019, there is no certainty about what our legally binding air quality limits will be after 2019. We are disappointed that these limits are not clearly laid out in the Draft National Policy Statement. (Paragraph 33)
4. *We encourage the committee scrutinising the NPS to consider this report and its recommendations, and urge the Government to clarify its position in its response to this report.* (Paragraph 33)
5. We are concerned about the Government's apparent reliance on low emission technology to solve the problem of air quality. We do not consider encouraging people to buy ULEVs an adequate response to the significant health impacts of air pollution and we have no confidence that the Government will meet its 60% target. (Paragraph 34)
6. *The Government should work with Defra on an air quality alert system for people who are especially vulnerable to the effects of short-term exposure to pollutants.* (Paragraph 34)
7. The Government has not yet published a comprehensive assessment of the infrastructure requirements of an expanded Heathrow, including an outline of costs, responsibilities and accountability. (Paragraph 44)
8. *The Government must publish such an assessment and consult on it before publishing a final National Policy Statement.* (Paragraph 44)

9. We reiterate that we foresee legal and commercial risks down the line if clear responsibilities and accountability for meeting air quality targets are not set out at the beginning of the process. For example, Heathrow have said there will be “no more cars on the road” as a result of expansion. (Paragraph 45)
10. *There needs to be clarity over how this pledge will be delivered and monitored, the consequences if it is not met and the implications of that for local authorities’ responsibilities to deliver air quality compliance.* (Paragraph 45)

Carbon Emissions

11. The headline cost and benefits figures in the Government’s announcement on Heathrow and the draft National Policy Statement assumed a black hole in the 2050 carbon budget that other sectors, such as energy or industry, would have to fill. It also assumed continued participation in the European Emissions Trading Scheme up to 2030, it is imperative that the UK remains within the EUTS or any future European emissions trading scheme. The Government has told us it intends to base its policy on another scenario which incorporates assumptions about the level of passenger demand compatible with managing emissions which are more optimistic than the Committee on Climate Change’s advice. (Paragraph 59)
12. *The business case for Heathrow expansions must be assessed against a cost/benefit analysis which uses realistic carbon policy assumptions, in line with the Government’s aviation strategy, and takes account of the resulting impacts on other airports and other sectors of the economy. These must be the headline figures in future Government publications, including the final National Policy Statement.* (Paragraph 59)
13. *The Government claims that Heathrow expansion can be delivered within “the UK’s climate change obligations”. The Government has not set out what it means by “obligations”, let alone how it will meet them. It has not decided whether to accept the Committee on Climate Change’s recommendation on limiting emissions from international aviation. It has not decided whether to follow the CCC’s advice on offsetting. The Airports Commission told us the appropriate body to make recommendations on managing aviation emissions is the CCC. It would not be a credible position for the Government to claim that it can deliver Heathrow expansion within emissions limits whilst rejecting independent advice as to what those limits should be and how they should be met.* (Paragraph 60)
14. The signing of the ICAO agreement is a necessary first step to reducing emissions from international aviation, but it is not sufficient in itself. (Paragraph 61)
15. *The Government should reconfirm its intention to participate in this scheme from 2021, which is after the date when the Government intends to have formally completed leaving the EU, urge other major emitters, including the United States, to live up to their commitments to participate from the earliest possible date, and work towards strengthening the agreement during its review periods.* (Paragraph 61)
16. Our interim report noted a significant policy gap between the modelling done by the Airports Commission and meeting the Committee on Climate Change’s advice on aviation emissions. The Committee on Climate Change has repeatedly urged

the Government to draw up an emissions reduction strategy for aviation. The ICAO agreement means the Government no longer has any excuse not to do so. In the absence of concrete policy proposals from Government, we cannot assess whether the additional emissions from additional flights to and from Heathrow can be properly mitigated. Expanding Heathrow without drawing up such a strategy would, therefore, be putting the cart before the horse. (Paragraph 62)

17. *The Government's aviation strategy should be integrated with the cross-Government emissions reduction plan. It should set out costed policies to either meet the Committee on Climate Change's planning assumption or to make up the shortfall from other sectors. This decision will have to take account of the limited progress towards decarbonisation outside the energy sector and the likely additional climate change impact of some non-CO₂ emissions. Where the Government makes assumptions that are more optimistic than the Committee on Climate Change's advice it should subject those assumptions to independent scrutiny from industry and the CCC and, if necessary, revise its plans accordingly. This strategy should be available well before the end of the scrutiny period for the draft National Policy Statement and consultation on it should be completed before the National Policy Statement is finalised.* (Paragraph 63)

Noise

18. We are concerned that the Government's National Policy Statement has provided no further clarity on how predictable respite will be achieved or on the specific timings of a night flight ban. (Paragraph 72)
19. *The Government must carry out further work on respite which should form part of the NPS process, alongside plans for a live timetable of respite to be published beginning when the new runway is operational. We welcome the Government's commitment to a 6.5 hour night flight ban. However as the Government's case for expansion has relied heavily on the Airports Commission's work; it would appear inconsistent to reject its key recommendation on the precise timing of a night flight ban. The Government must consider this recommendation alongside consideration of the health aspects caused to residents, in line with the requirements of EU Directive 598/2014.* (Paragraph 72)
20. The stated goal of "fewer people [...] affected by noise from Heathrow by 2030 than are today" shows a lack of ambition. Without Heathrow expansion, local communities would have seen a decrease in aircraft noise as new technology and airspace management techniques were developed. A number of scenarios in the Airports Commission's technical report showed that an expanded Heathrow in 2030 could be quieter than a two runway airport at the same time. The Government and Heathrow have argued three runways will allow the airport to manage its airspace more efficiently. The NPS does not clearly lay out the nature of the legally binding noise targets and it only compares an expanded airport in 2030 with noise levels today, it does not compare noise levels in 2030 with a two-runway airport at the same time. (Paragraph 86)
21. *The Government should publish a comparison between projected three and two-runway noise levels in 2030 as well as with noise levels now. The Government and Heathrow should work towards a goal of less noise than a two runway Heathrow would create in 2030.* (Paragraph 86)

22. The Government has argued that, with more effective use of airspace and new technology and operational techniques, noise levels will fall. There is a trade-off between carbon emissions reduction and noise reduction. (Paragraph 87)
23. *The Government should work with the sector and public to set its priorities. If the Government plans to rely on future technical improvement to reduce noise impacts, then it must provide the aviation industry with support by setting a clear strategic direction for the industry and guarantee policy certainty for investment.* (Paragraph 87)
24. The importance of the Government's proposed Independent Aviation Noise Authority is demonstrated by the lack of ambitious noise targets and the necessity for a body to enforce the mitigation and compensation measures proposed by the Government and Heathrow. We are concerned that the Government has downgraded the proposed Independent Aviation Noise Authority to an Independent Commission on Civil Aviation Noise. The proposed structure and role of this body would prevent it from having an authoritative role, and may raise questions about whether it is truly independent and credible. (Paragraph 105)
25. *The Government must create an Independent Aviation Noise Authority with an independent chair, the ability to enforce its policy recommendations and the remit to monitor and enforce Heathrow's commitments to provide respite, including the live timetable; its compliance with night flight scheduling; and the schedule and investment timetable for rolling out the promised noise insulation.* (Paragraph 105)
26. We are concerned with the inconsistency of the metrics used to measure noise attitudes. The Government has recognised that the level of significant annoyance has reduced and the number effected increased, yet it bases its conclusions on the out of date 57 dB LAeq 16hr contour. (Paragraph 106)
27. *The Government must ensure that the NPS process is informed by the most up-to-date noise metrics, in light of the Attitudes to Noise Survey we expect the Government to consider 54 dB LAeq 16hr as the onset of significant annoyance.* (Paragraph 106)
28. We continue to support the Airports Commission in its recommendation of a Community Engagement Board, but emphasise that this body must have real influence and act as a bridge between the airport and communities during the NPS process. We question whether Heathrow's 20 year timetable for rolling out noise insulation is reasonable. We believe that communities affected by noise in 2026 should not have to wait 20 years for insulation. (Paragraph 107)

Formal Minutes

Tuesday 7 February 2017

Members present.

Mary Creagh, in the Chair:

Caroline Lucas	Joan Ryan
Scott Mann	Mr Gavin Shuker
Kerry McCarthy	Dr Matthew Offord
John Mc Nally	

Draft Report (*The Airports Commission Report Follow-up: Carbon Emissions, Air Quality and Noise*), proposed by the Chair, brought up and read.

Paragraphs 1 to 107 read and agreed to.

Summary agreed to.

Resolved, That the Report be the Seventh Report of the Committee to the House.

Ordered, That the Chair make the Report to the House.

Ordered, That embargoed copies of the Report be made available, in accordance with the provisions of Standing Order No. 134.

[The Committee adjourned

Witnesses

The following witnesses gave evidence. Transcripts can be viewed on the [inquiry publications page](#) of the Committee's website.

Wednesday 30 November 2016

Question number

Rt Hon Chris Grayling MP, Secretary of State for Transport, and **Caroline Low**, Director of Airport Capacity, Department for Transport

[Q1-133](#)

Published written evidence

The following written evidence was received and can be viewed on the [inquiry publications page](#) of the Committee's website.

ACR numbers are generated by the evidence processing system and so may not be complete.

- 1 Aviation Environment Federation ([ACR0003](#))
- 2 Heathrow Airport Limited ([ACR0006](#))
- 3 London Boroughs of Hillingdon, Richmond, Wandsworth and the Royal Borough of Windsor and Maidenhead ([ACR0002](#))
- 4 Mayor of London ([ACR0004](#))
- 5 Sustainable Aviation ([ACR0001](#))

List of Reports from the Committee during the current Parliament

All publications from the Committee are available on the [publications page](#) of the Committee's website.

The reference number of the Government's response to each Report is printed in brackets after the HC printing number.

Session 2016–17

First Report	Soil health	HC 180 (HC 650)
Second Report	Flooding: Cooperation across Government	HC 183 (HC 645)
Third Report	Sustainability in the Department for Transport	HC 184 (HC 819)
Fourth Report	Environmental impact of microplastics	HC 179 (HC 802)
Fifth Report	Sustainability and the HM Treasury	HC 181
Sixth Report	The Future of the Natural Environment after the EU Referendum	HC 599
First Special Report	EU and UK Environmental Policy: Government Response to the Committee's Third Report of Session 2015–16	HC 644

Session 2015–16

First Report	The Airports Commission Report: Carbon Emissions, Air Quality and Noise	HC 389
Second Report	The Future of the Green Investment Bank	HC 536
Third Report	EU and UK Environmental Policy	HC 537
First Special Report	Local Nature Partnerships: Government Response to the Committee's Twelfth Report of Session 2014–15	HC 377
Second Special Report	Climate change adaptation: Government Response to the Committee's Tenth Report of Session 2014–15	HC 590