

Consultation Response, County Councillor Jonathan Essex, Green Party, Redhill East. 17 December 2017.

This consultation is in response to the overall question, “Do you have any comments on the revised draft Airports NPS or any of the documents set out in the table on pages 7 and 8?”

Particular areas responded to are as follows:

1. Consultation process and clarity.
2. Revised Passenger Forecasts and the implications of this on carbon emissions.
3. Wider issues including surface access, the need to consider indirect emissions, freight emissions and considerations, impacts (including CO2 targets) beyond 2050.
4. How Carbon Emissions will be constrained (or not) by the Airports NPS

These are set out in the respective sections below.

Conclusion

The way that this revised Airports NPS and the various supporting documents sit together appears to deliberately gloss over a likely massive increase in carbon emissions, which together with the proposal that the Airports NPS does not then constrain development on the basis of emissions is dangerous, in regard to the potential climate impact.

The approach taken in the Airports NPS appears to be

- Predict what increased journeys are expected, at Heathrow and elsewhere; then
- Make some changes to reduce the carbon emissions baseline significantly, and
- Introduce measures to reduce the emissions down to the 37.5MtCO₂/year emissions cap by 2050.

The current revised Airports NPS is worse than the previous draft in terms of carbon emissions. If implemented it would be disastrous for the climate, and set a poor example and weak and dangerous politically. The Appraisal of Sustainability is far too narrow in its analysis of what is a key infrastructure investment for a globally connected industry. A wider approach is required to ensure that this does not lock in carbon emissions (and more localised environmental impacts) directly, and also embed these within systems globally that make it harder to cut carbon emissions.

A different approach to planning and economic decision making of major infrastructure investments is required. The various flawed assumptions used to justify the approach taken in this NPS should be challenged legally as this risks undermining international climate agreements through creating accounting, spurious arguments and lack of moral leadership, which is shameful.

1. Consultation process and clarity

This consultation is not clearly set out. The main documents are not clearly listed but connected to different links and sub-links accessed from the main consultation page. It is possible that those wishing to review these documents do not find and review all the required documents. For example, the link to the updated noise analysis (see [updated noise analysis](#) on the consultation page) takes you to the Appraisal of Sustainability documents (<https://www.gov.uk/government/publications/appraisal-of-sustainability-for-the-revised-draft-airports-national-policy-statement>). It is not clear where the updated noise analysis document is, or whether this is included within the Appraisal of Sustainability. No overall explanation is provided.

Many of the documents are found at www.gov.uk/government/collections/heathrow-airport-expansion as opposed to the consultation webpage itself.

I agree with the AEF¹ that this consultation is not just on major revisions, but a new overall approach to aviation expansion, not envisaged by the Airports Commission.

This response focuses on the how changes made in terms of carbon emissions at this late stage of consultation with the public on this issue. It is not just a revision of the existing NPS focusing on a couple of small areas. As it completely revisits the scale of future aviation capacity and expansion (primarily through changing the rules on expansion at existing airports) this should have much better clarity. For example, reading the main consultation document implies carbon emissions are going down as a result of these changes (paragraph 3.10) which is both misleading and the opposite of the truth.

The Non-technical summary of the Appraisal of Sustainability gives no indication that the environmental and climate impacts of the revised Airports NPS is any different. The impact of the proposals to increase capacity at other airports alongside one additional runway (contrary to the passenger forecasts of the Airports Commission) do not appear to be analysed at all. The Non-Technical summary says that, “[Impacts presented apply to both the carbon-capped and carbon-traded central scenarios unless otherwise stated](#)” – but the previous limit which the carbon capped scenario had to comply with (at the Airports Commission stage) has been lifted.

Finally, it is not acceptable to consult the public on the land-based and carbon emissions first and then consider the impacts in terms of noise and flight path later. This will feel to many residents that by the time they are consulted on the true scale and location of these more local impacts the decision to proceed will already have been made, and it will feel that noise impact consultation, as proposed now, will be too little, too late. The number of people expected to be impacted by noise has increased from 654,000 from a current 585,600 – compared to 252,000 from a current 266,100. This is a huge increase and is proportionally greater than the number currently affected. Where do these additional 400,000 people affected live?

¹ “*the consultation presents new evidence on a wide range of key impacts including new forecasts of noise impacts, CO₂ emissions, air pollution and the impacts of expansion on other UK airports. Such a major revision at this stage reinforces that the NPS as drafted is not fit for purpose, and that significant challenges remains*”

2 Increasing Proposed Aviation Capacity and Carbon Emissions

2.1 New plan to further expanding Heathrow *and* Gatwick, as well as other airports

This revised NPS appears to argue for an expanded Heathrow *as well as allowing* increases in flights elsewhere. The increase in seat-km flown and aircraft distance flown can be seen by contrasting the Interim Report of the Airports Commission (carbon capped 2050 estimates) with those in the DfT Aviation Forecasts, 2017. This shows an increase in estimated mmpa (389 mppa to 435 mppa) and increase to 1.475 billion seat-km by 2050 as opposed to 1.198 billion seat-km previously. This is different from the approach taken by the Airports Commission.

Based on these forecasts for the constrained scenarios it appears that the UK Government now plans to exceed the passenger-km in the Airports Commission report in 2050 by 23.1% and number of passenger movements by 2050 by around 11.8%. This would equate to an increase in annual CO₂ emissions from 37.5MtCO₂/year to around 42-46 MtCO₂/year (depending on whether it correlates more closely to plane or seat-km).

Paragraph 3.10 of the consultation document makes two statements which appear entirely inconsistent. It says that:

- Carbon emissions are now forecast to be substantially lower than previously forecast², as aircraft are expected to fly shorter distances and airlines are using more fuel-efficient aircraft; **while**
- Higher demand also means an expanded Heathrow will fill up sooner than previously forecast.

More rapid expansion will lead to **higher** carbon emissions. The total distance travelled by 2050 is proposed to be greater (see above).

These new forecasts reflect a different approach to aviation strategy being proposed now, after the Airports Commission work, than that which underpinned the Airports Commission. As well as the forecast changes, the methodology, and limits on what expansion is accepted at other UK airports³ is different. This is unacceptable.

- **The Airports Commission sought** to (unconvincingly, as it was only showed in the carbon capped case, with some optimistic assumptions made) to stay within the agreed method of accounting for carbon emissions of international aviation. This meant that expansion of aviation through an additional proposed runway in the South East of England would be matched by constraint on aviation elsewhere.
- **Now the Government is proposing** to further expand aviation with one additional runway at Heathrow *and* additional flights at other airports. This new proposal is no longer to consider the carbon constrained case. This is objected to for two different reasons:

² This presumably is supposed to refer to as carbon emissions per flight, not overall – either at Gatwick, Heathrow or for all airports. However, that is not what the consultation document says.

³ Para 3.9 states that “the Department’s passenger demand forecasts were a key input into the economic and strategic assessment set out in the AC’s report and the FRSR”. It is unacceptable that the decision of the Airports Commission was made with one set of passenger forecasts, which has been presented as consistent with our carbon budgeting (at best) and then once this recommendation to proceed has been made the passenger forecasts have been expanded.

- **Firstly, the way to constrain carbon emissions has changed.** The carbon capped model was the only scenario modelled by the Airports Commission where aviation stayed within carbon limits. So not following this approach will increase overall emissions, as more flights will occur.
- **Secondly, rather only considering one new runway by 2050 across the UK, other expansion is now proposed alongside this.** By now stating that other airports can enhance their capacities the total number of flights will grow, as opposed to be capped, across all UK airports. This is a completely unconstrained vision for aviation growth that is not accountable in terms of its climate impacts.

These two elements make this revised NPS not an incremental change to the consultation to date, but in effect restarting the whole process, and undermining much work carried out to date. The reference in the consultation to a 'revised forecast' not just misleading it is incorrect. The new approach now taken is inconsistent with the Airports Commission work.

2.2 No Proposed Management of Passenger Demand

This has been updated based on new passenger demand forecasts. The Airports Commission considered that demand needs to be constrained, but did not say how. Now this NPS proposes that demand is not constrained, so impacts will be greater. This effectively means that the NPS approach (and proposed policies on carbon emissions) do not constrain aviation, let alone plan the industry to operate within a designated carbon budget. This approach is unacceptable and inappropriate.

The Airports Commission is noted to have contained one paragraph recommending expansion of existing airports but this was not modelled in anyway in terms of the sustainability appraisal for this report. The aviation strategy's stated aim for all existing airports to: "[make best use of their existing runways](#)" is not considered in the AoS. Lifting planned caps at other airports outside of Heathrow is not consistent with the way carbon emissions are proposed to be capped in the Airports Commission report.

2.3 Reduced baseline carbon emissions

The baseline emissions (e.g. see AoS, question 27) appears to have been revised downwards. For example, paragraph 9.6.5 of Appendix A of the AoS shows a predicted baseline increase of 0.9 MtCO₂/annum from 2015 to 2050, compared to a similar figure of 13.7 MtCO₂/annum. ***It is unclear what has accounted for the difference, and whether these are real changes proposed to be implemented or a different set of assumptions.*** This could be clearly presented to allow easier scrutiny. That is not currently the case.

The AoS notes an increased estimated carbon impact of a new third Heathrow runway (LHR-NWR) by 5 MtCO₂ p.a.²⁵. (page 28 of the AoS non-technical summary). It is unclear how this figure relates to the calculations and total carbon emissions claimed in the report.

2.4 Measures to claim 37.5MtCO₂/year is still possible.

The revised NPS proposed replacing the carbon capped scenario (demand management) with an approach that instead sets out future measures to reduce emissions, at different levels depending on which runway option is chosen.

This is used to argue for even greater aviation expansion. But no details as to the likelihood or timescale for these measures is presented. Until they are implemented emissions will be higher – but this is not clearly assessed.

Similar estimates for efficiency gains were made in the Airports Commission reports. These figures were criticised as being overly optimistic, so it is not clear how they can possibly be robust now. This approach of creating carbon accounting should not be assessed thoroughly by the AoS, which should provide an overall Strategic Environmental Appraisal that extends to the assumptions made, and the adequacy of the cases made, and when these changes might be seen, if at all.

These measures include:

- Increase in biofuels from 2.5% in the original Airports Commission carbon capped scenario in the case of LHR-NWR in 2050 (to 8.1% in paragraph 9.11.7 of the AoS Appendix A, 15% in paragraph 9.13.8.3 of the AoS Appendix A and 18% in footnote 98 of the AoS Appendix A). The figure in the Airports Commission report was justified and its adequacy reviewed and challenged. No rationale for raising this figure has been provided, and no assessment as to whether this level of biofuel use for (an expanded) aviation industry in the future can be considered sustainable is included in the AoS.
- Other policy measures are mentioned in the AoS in Appendix A include more efficient ground movement, regulations on aircraft types able to use UK airports (is this feasible?) and increasing the carbon traded price for 2050 (no clear basis for this provided, assume this would be a European as opposed to a UK market), higher rate of annual fuel efficiency improvement of 0.2% and other measures including single engine taxiing. It is not clear why these measures are realistic, or deliverable.

Table 9.8 of the AoS Appendix A appears to propose to vary the assumptions made as to a level of biofuel, efficiency of ground movements, regulation on aircraft types and renewable fuel uptake in 2050 so that each of the three final runway options come close can be *predicted* to meeting emissions limits by 2050.. These all are proposed to vary, depending on the choice of runway. This raises various questions:

- Firstly, what is the proposed way these will be introduced, so emissions do not rise between 2015 and 2050 before (potentially) reaching these levels then. This is crucial as it is the emissions that occur between 2015 and 2050 which will determine if we stay within the carbon budget.
- Secondly, are all of these deliverable, at all the levels proposed? No justification as to the maximum levels set out was provided. For example, will the biofuels be produced in the UK, and in that case what is the energy used to produce the biofuels? Is it possible to mandate this level of fuel in the UK for all planes using UK airports, or types of aircraft landing at what are commercially run airports? And if this is not able to be delivered unilaterally then is it appropriate to include it within the set of measures that can

implemented at the time a planning decision for airport expansion is made?
How does this relate to the signing of the ICAO agreement, which does not appear to have any ambition for unilateral action in it at all?

- Why vary what is proposed depending on the choice of runway, when the ambition for climate change should be to keep emissions as low as possible? The objective of this revision of the Airports NPS appears to be to 'promise to make efficiency gains to exactly the extent needed to secure growth desired'.

2.5 Continued increase in aviation (and wider transport) emissions

The revised Airports NPS quotes new figures for both aviation and wider transport impacts in the UK carbon data for 2015, as opposed to 2014. This shows that aviation emissions continue to increase, as to wider transport emissions.

The AoS does not assess the linkage between the rise in aviation emissions, the rise in wider transport emissions and the type of economic development pathway of the UK. The assumption made that it is possible to align the industrial strategy and UK economic strategy to aviation expansion, and reduce the emissions of the UK economy while aviation emissions continue to rise has not been tested. It should be. Also the tendency for domestic emissions to be substituted by imported emissions, through shipping and air freight should also be modelled, as this is intrinsically related to the airport expansion plans.

Paragraph 7.4.105 of the AoS notes that carbon emission impacts will also arise cumulatively from development elsewhere including surface access, housing and indirect employment growth. It is unclear if these factors are included in the total emissions calculated as a result of the aviation expansion, and if not why not. (The airport expansion will change patterns across the UK in terms of employment and travel, which will require infrastructure and housing investment that is not required if this does not occur. As this would be a result of the expansion, it is not clear why it is not modelled. Clearly there could be more housing (very locally) to an expanded airport and less surface transport need (for staff), or vice versa. While the balance between housing and transport need is not fixed (it could be impacted, for example, by the relative affordability of both – a critical aspect in ensuring infrastructure provision leads to modal shift) there will be some impact, which should be modelled and assessed.

2.6 Beyond 2050

The aviation strategy aims to be for 2050, and beyond. There is no clarity given as to how the emissions for aviation plan to be reduced beyond 2050 – or indeed earlier, such as in response to strengthened international climate agreements.

3 Appraisal of Sustainability – General Issues.

3.1 The Scope of the AoS should consider how the Draft NPS relates to the Aviation Strategy, Industrial Strategy and wider economic strategies for the UK.

The Aviation strategy states (paragraph 1.24) that, “The government is keen to ensure that such decisions do not affect the market, perhaps by unintentionally making certain aspects more or less competitive than others”. It is unclear how unilaterally opting for a higher carbon trading price, or opting for the carbon capped carbon price would be able to be implemented in accordance with this strategy.

The stated aim of the aviation strategy should also be assessed by the AoS. The aim “to achieve a safe, secure and sustainable aviation sector that meets the needs of consumers and of a global, outward-looking Britain” is not sufficient to ensure that climate change policy sets the overall framework for the airports NPS and aviation strategy.

3.2 Surface Access issues

Paragraph 5.5.21 of the AoS acknowledges that the full surface access improvement to meet need have not been identified, and only those identified have been assessed. Therefore the overall *policy level (SEA)* impact of the proposed aviation expansion on surface access needs, and the impact of this, has not been adequately assessed.

The surface access assumptions for Gatwick (LGW-2R) are noted in paragraph 5.5.22 of the AoS as being those required ‘by 2030 to meet background demand growth’.

The additional surface access needs due to the proposed additional flights at Gatwick do not appear to have been assessed at all. Electrification of the North Downs line appears also to be excluded – a have any public transport improvements - and no explanation for this is given. The only rail project modelled in any of the cases is Southern Rail access to Staines. It is unclear how this in any way fits with the predicted shift in journeys from private to public, shared and active transport set out in the AC report.

3.3 Freight Emissions (and wider considerations)

Paragraph 9.11.3 of the AoS Appendix A notes that emissions arising from freight were not considered by the AC, and have not been considered in the case for the Airports NPS. This Airports NPS is referenced in the UK’s industrial strategy white paper. The freight impacts of how these are planned together should be estimated, and reflected in the AoS.

3.4 Economic Costs

Paragraph notes that ‘increases in emission are not addition and not monetised in ACs or DfT’s economic analysis of carbon impacts’ It is not clear why this is the case, and why the AoS accepts what appears to be the exclusion of the economic cost of carbon impacts.

4 Revised Airports NPS fails to propose to constrain Carbon Emissions

The revised NPS proposes that increased carbon emissions should no longer be a factor in terms of planning consent. (para 5.81) “unless the increase in carbon emissions resulting from the project is so significant that it would have a material impact on the ability of Government to meet its carbon reduction targets, including carbon budgets”. This is not clear. Also, the aim of a carbon budget is a) cumulative not an amount of emissions at any point in time and b) may decrease in the future, such as the commitment to deepen the carbon targets agreed in Paris in 2015.

This contrasts with the IPCC working group 3 chapter on human settlements, infrastructure and spatial planning⁴ noted that:

The global expansion of infrastructure used to support urbanisation is a key driver of [greenhouse gas] emissions across multiple sectors. Due to the high capital costs, increasing returns, and network externalities related to infrastructures that provide fundamental services to cities, emissions associated with infrastructure systems are particularly prone to lock-in ... especially for energy and transportation Infrastructure.

Instead the NPS should ensure carbon emissions *remain* within agreed carbon accounting limits. This should be a precondition that is always complied with. The carbon budget should be treated as a mandatory minimum standard. Not as a target.

Greenhouse gas emissions estimates should be conservative, based on current proven technologies that are already being used. Future technologies should be used to transition to more sustainable aviation, if that is possible, in future, not justify expansion of the use of current technologies, now. Basing decision making on future (as of yet, unachieved) efficiency gains risks infrastructure locking-in even greater emissions. Proposing to do without demand management either is tantamount to treating those already suffering from climate impacts (e.g. droughts in East Africa, storm events in the tropics, areas vulnerable to sea level rise) with contempt.

We must ensure that the NPS, if replicated worldwide will drive a rapid reduction in carbon emissions. The current NPS, if implemented for Heathrow expansion, represents a significant acceleration in UK aviation emissions. If this approach continues to be followed worldwide this would be disastrous.

The SEA (Appraisal of Sustainability) for the Airports NPS must, crucially, be linked to a global equality impact assessment (that includes climate impacts), and a strategic policy review of global (as well as UK) aviation strategy. This is crucial as the UK has a globally significant aviation sector and Heathrow acts as a major global hub. This should be governed by the UNFCCC process. The current approach is inadequate and irresponsible.

⁴ KC Seto, S Dhakal, A Bigio, H Blanco, GC Delgado, D Dewar, L Huang, A Inaba, A Kansal, S Lwasa, JE McMahon, DB Müller, J Murakami, H Nagendra, A Ramaswami, "Human Settlements, Infrastructure and Spatial Planning.," in *Climate Change 2014: Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*, R Pichs-Madruga, Y Sokona, E Farahani, S Kadner, K Seyboth, A Adler, I Baum, S Brunner, P Eickemeier, B Kriemann, J Savolainen, S Schlömer, C von Stechow, T Zwicker, JC Minx O Edenhofer, Ed. Cambridge, United Kingdom and New York, NY, USA.: Cambridge University Press, 2014.