

NEW ECONOMICS FOUNDATION (NEF)

DEADLINE 7:

NEF COMMENTS AND RESPONSE TO APPLICANT

Registration Identification Number: 20040182

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Published: January 2024

Purpose of this document

This document provides NEF's response to a document published by the Applicant:

- **8.132** *Applicant's response to comments by The Harpenden Society, LADACAN and NEF*

Summary

Social welfare-based cost-benefit analysis, including monetised environmental impacts, is a widely accepted and useful approach to understanding the proportionality of scheme impacts. NEF stands by its re-appraisal of the scheme's welfare-based cost-benefit analysis shown in Table 1 of our Deadline 5 submission. The table lacks assessment of monetised noise and air quality impacts which would further reduce the net present value. When unmitigated non-carbon costs are included, using the conservative 1.7x multiplier (recent evidence suggests it could be up to 3.0x) the overall net present value to society of the scheme turns deeply negative, even after controlling for the double counting of traded-sector emissions.

NEF also maintains its position that the proposed scheme will deliver no material wider economic impacts linked to business travel. Recent evidence, including sources provided by the airport, points towards the saturation of the business air travel market and a declining role in economic growth. Post-pandemic data only suggests an acceleration in this trend.

The latest iteration of the DfT's TAG aviation chapter, released since our last submission, further supports NEF's approach to appraisal, and the concerns we have raised with the applicant's assessment. TAG's aviation methodology has developed significantly since it was considered at the Bristol Airport hearing. Subsequent amendments have emphasised its applicability to the private-sector-led development context. The applicant has refused to accept TAG as best practice in aviation appraisal, or even "useful" to this process. Our view is that the applicant is engaging neither with the letter, nor the spirit of the DfT's guidance. If, despite clear DfT statements to the contrary, and its use in the Gatwick case, TAG is not useful to this appraisal, what standard can interested parties use to hold the applicant's work on economics to account? For the majority of their economic analyses, the applicant references no such standard.

New developments since deadline 5

The aviation chapter of the DfT's Transport Analysis Guidance (TAG/WebTAG) was updated and republished on the 30th November 2023. A previous Forthcoming Change Notice, referred to in NEF's deadline 5 submission, gave some insight into the contents of this chapter, but the final release is worth reviewing as it contains more detail, and a new worked example on the valuation of greenhouse gas emissions. It is important to note that the content and wording of the chapter is now different in a number of material ways to the version which was before the Planning Inspectors in the Bristol Airport Appeal hearing. The latest publication is the second iteration since the Bristol hearing in 2021.

The most important distinctions between the guidance we now have, and the guidance as it was in 2021 are:

Introduced in November 2022:

1. Stronger wording around the usefulness of the guidance to appraisals of "non-government aviation interventions" (para 1.1.3). *The applicant refuses to accept this usefulness.*
2. Direct reference to "planning applications for airport development" (para 1.1.4). NEF has sought further clarification from the DfT on this paragraph. Our short correspondence was submitted to the London City Airport inquiry (with permission) and has been attached to this submission for the information of the inspectors. This confirms, again, the applicability of TAG to planning applications for airport development as the DfT's best practice standard and as part of a wider business case assessment. *The applicant refuses to accept this applicability.*
3. Additional clarification on the treatment of Non-UK residents (para 3.2.10). *The applicant's approach to Non-UK residents runs contrary to the DfT's requirement that the assessment have "internal consistency" because some key scheme costs are excluded (inbound flight emissions) while benefits are included (air fare and travel time savings to foreign residents). The DfT are clear that if impacts cannot be accurately apportioned to domestic/foreign residents then "the analysis should include all impacts on all affected parties, regardless of origin".*

4. Additional guidance on the quantification of air quality impacts (para 3.3.2).
The applicant has not costed air quality impacts.

Introduced in November 2023:

5. Addition of several paragraphs of new detail on the assessment and valuation of greenhouse gas impacts (para 3.3.3), including:
 - a. Clarification on the recommended approach to traded sector emissions: “any change in emissions should be valued using the carbon appraisal values in the TAG databook” with “an additional adjustment to exclude the cost of traded sector permits”. *This appears to be the approach taken by the applicant (at least in regard to outbound carbon emissions) but, contrary to DfT guidance, they then seek to remove the resulting values from consideration in the cost-benefit analysis.*
 - b. Clarification that inbound flight emissions should be appraised. *The applicant has not appraised inbound flight emissions.*
 - c. More detail on the approach to non-CO2 emissions, including re-stating that quantitative assessment of non-CO2 impacts using the GWP factors provided by DESNZ is an appropriate sensitivity test. *The applicant does not accept that this is an appropriate sensitivity test.*
 - d. Greater detail on the recommended approach to distributional impacts (equity). *The applicant has not followed the approach recommended in TAG.*

Point-by-point response

Points are numbered as per doc 8.132.

2. The current design of CORSIA means it has, and will have, no meaningful impact on aviation emissions in the UK. The applicant speculates about what may happen in the future, such speculation has many inherent risks. The applicant has used the DfT’s Jet Zero assumptions about the trajectory of future CORSIA prices. Even if these do materialise, these prices are well below the carbon values which should be used in appraisal. According with DESNZ and BEIS guidance, the residual cost (the carbon value less the permit price paid) to society must be appraised and included in the scheme cost-benefit analysis.

3. The applicant accepts that the correct method of costing greenhouse gas emissions is to establish the residual after deducting carbon permit prices from the total emissions cost. This emissions cost should be included in the primary cost-benefit analysis.
4. This process is not a national emissions inventory, it is an impact assessment. Inbound emissions and their welfare costs should be assessed according with DfT and DESNZ guidance. If the applicant wishes to include benefits accruing to foreign residents in the cost-benefit analysis, they must also include this cost. The assessment, as presented by the applicant, does not have internal consistency and therefore is not fit for purpose.
5. The applicant confuses matters by referring to double counting of traded-sector emissions. A clear process for dealing with this is set out by the DfT and DESNZ and described above. The residual carbon cost, after deducting carbon permit prices, is what matters, and this residual is significant. This residual is what NEF has used in its estimate of the scheme cost-benefit analysis.

The applicant is correct that there may be some displacement of greenhouse gas emissions in the aviation sector. However, the rapid overall growth in international aviation emissions (around 4-5% per year outside of pandemic times)¹ highlights that this displacement must be extremely limited. If the applicant disagrees, the applicant can submit an assessment of such displacement for scrutiny.

6. TAG assessment is not a yes/no matter. TAG is a best-practice guide. NEF is holding the applicant to account against this standard.
7. See point 6.
8. The DfT and DESNZ clearly regard the DESNZ non-CO2 multiplier as useful for the purposes of a sensitivity test. NEF has conducted such a test. The applicant's interpretation of the High Court ruling as having "rejected" the multiplier is a clear contortion of the nuance of the ruling. The High Court simply ruled that the absence of the use of the multiplier was not grounds for the Court to intervene in the planning process. This is unsurprising given that the multiplier is recommended as a sensitivity test. There is broad consensus

¹ See: International Energy Agency (IEA) Aviation. Available at: <https://www.iea.org/energy-system/transport/aviation>

that if only the carbon cost of the scheme is quantified, this will be a significant underestimate of its true social welfare cost.

9. Noted

10. Given that the multiplier is recommended for use by DESNZ and by the DfT, as a sensitivity test, to claim there is “no justification” is clearly incorrect.

11. .

12. The applicant’s assessment must be internally consistent. If benefits arising to foreign residents are included, costs arising to foreign residents (in this case via international emissions accounting norms) must also be included. The welfare impact of GHG emissions must be included in the scheme cost benefit analysis, and done so consistently.

13. The applicant’s cost-benefit analysis is flawed and not fit for purpose in its current form.

14. NEF has re-worked the applicant’s cost-benefit analysis according with best practice as set out by the DfT, and according with basic principles of comprehensive socioeconomic impact assessment.

15. The applicant’s approach is obstructive. It would not be difficult for the applicant to devise a sensible approach to allocating construction costs.

16. The applicant’s approach to emissions costs is clearly inconsistent and at odds with DfT best practice guidance. Responsible appraisal practice does not arbitrarily exclude costs to one user group.

17. The Jet Zero strategy does not consider the ramifications of emissions growth in aviation on operational costs in other emitting sectors.

18. The welfare-based cost-benefit analysis is of vital importance to decision makers. It helps understand the proportionality of impacts when deciding whether proceeding with the scheme is in the public interest.

19. If the applicant’s position on TAG is correct, there was no “requirement” for the majority of the economic analysis produced by the applicant. NEF reserves its right to critique that analysis against the best practice standard set out by government. A TAG appraisal is not a yes/no matter. It is a best practice guide which is important if decision makers are to have confidence in the claims made about the scheme’s impact.

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21. .
22. See point 19.
23. See point 19.
24. See point 19
25. .
26. The argument that Gatwick Airport have used TAG because their application is somehow different in nature to that of Luton Airport is incredibly weak. Gatwick airport have applied for a DCO just as Luton Airport have. NEF reserves its right to provide comments on the Gatwick DCO.
27. See point 19.
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38. The applicant is correct that Luton Airport has historically served a lower income group of travellers than most other UK airports. It is also the case that particularly deprived communities live very close to Luton Airport's flight path, and are most exposed to climate hazards. Our concern here is less with the equity of historical patterns, and more with future impacts. Will the airport's move into the long-haul market serve a different, potentially higher income, passenger group? Will new flights be populated with first-time flyers or frequent flyers?

In NEF's view a key equity issue relates to the distribution of impacts between air passengers and non-flyers. A large proportion of recent air

passenger capacity growth has been captured by frequent flyers. In any given year 50% of the UK population do not fly, yet all will experience the detrimental affects of climate change. All will be exposed to the higher emissions trading prices caused by aviation growth (increasing, for example, energy costs), and all will suffer the hazards and damages resulting from unmitigated non-CO2 emissions.

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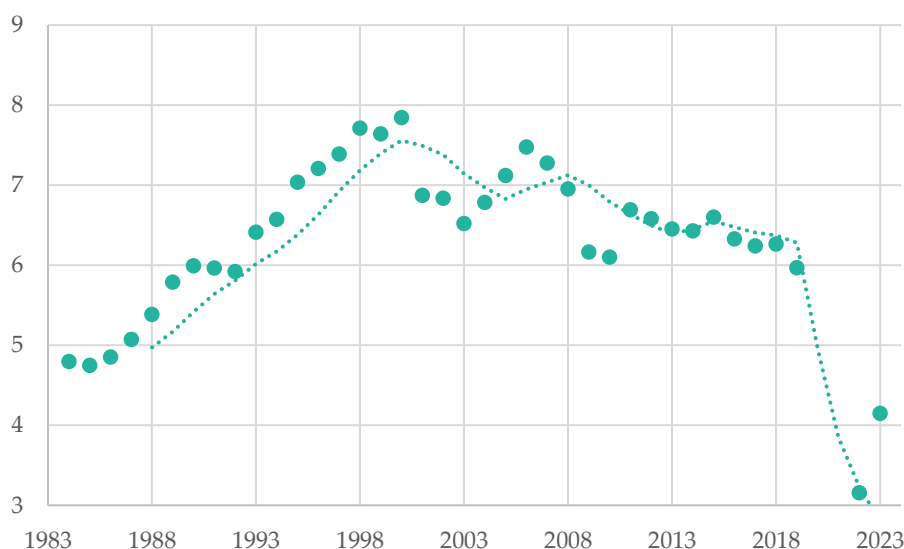
42. .

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45. The business passenger – GDP elasticity applied by the applicant is not credible. It cannot be assumed that the relationship used, developed on data spanning 1980 to 2010, heavily influenced by an era of booming growth in the air-travel dependency of the economy in the 80s and 90s (Figure 1), is fit for purpose in 2023/24 given trends seen since 2011 and the global pandemic. Structural shifts (Figure 1) have occurred which such a model cannot account for. These shifts are widely recognised across the aviation industry and are triggering changes in business models from airlines previously more dependent on the business passenger market.

Figure 1: Business purposes air trips per million pounds of real GDP (i.e. chained volume measure), with five-year moving average shown. Sources: ONS Travepac, ONS economic accounts



46. The applicant has cited four consultancy reports in evidence defending its business elasticities. All four studies use out-of-date data, and two of them appear to refer to different iterations of the same model used by the applicant. The most recently published study, Oxford Economics for ATAG (2020), does not publish new analysis (and hence references out-of-date data). That study does however state:

“Analysis shows a positive relationship between connectivity to the global network as a proportion of GDP and labour productivity, and hence higher GDP and living standards among developing economies. For developed countries, there is still a positive relationship but with smaller incremental impacts once a threshold level of connectivity as a proportion of GDP is reached” (p.25)

This is precisely the point made in NEF’s Losing Altitude report (2023). In the UK’s already highly connected economy, with a net outbound tourism flow and stagnant business demand, connectivity growth no longer creates significant wider economic benefits.

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