NEW ECONOMICS FOUNDATION (NEF)

DEADLINE 5:

NEF COMMENTS AND RESPONSE TO APPLICANT

Registration Identification Number: 20040182

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Purpose of this document

1. This document provides NEF's response to three documents published by the Applicant:
    - **8.69** *Applicant's response to written questions – Climate Change and Greenhouse Gas Emissions*
    - **8.81** *Applicant's response to written questions – Socio-economic effects*
    - **8.107** *Applicant's response to Deadline 3 Submissions - Appendix A New Economics Foundation*, which responds exclusively to NEF's comments.

Climate impacts have been underestimated

2. The Applicant's response to written questions reveals that 47% of the additional carbon emissions created by the proposed scheme between 2025 and 2050 fall within the Non-Traded Sector. As others have noted, CORSIA presently has no meaningul impact on UK aviation emissions. This means that under current policy, there are no caps or mitigations in place on a cumulative forecast of an additional 2.7 million tonnes of CO2 over the period.
3. This has key ramifications for the Applicant's economic assessment. The Applicant has claimed at various points that carbon costs can be ignored in the cost-benefit analysis because they are already accounted for in the forecasts. As it turns out, around half of the scheme's emissions are not within the Traded Sector. As a result, they are not accounted for by any mitigation and guidance states that they must be included as a scheme cost within the primary cost-benefit analysis. The Applicant has assumed in their forecast modelling that in the future these non-traded sector emissions will be charged to airlines (i.e. priced-in). However, under current policy they are not, as such this assumption does not permit exclusion from the cost-benefit analysis. To do so would contradict all government appraisal guidance. These residual emissions have a social welfare cost which must be recognised in the appraisal.
4. The Applicant continues to resist the inclusion of inbound flight emissions. This is despite the BEIS guidance we have shared twice before, which the Applicant has ignored, which states that they should be included in the valuation process.

5. However, to remove all doubt from the issue, the DfT have now released a new 'Forthcoming Change Notice' on the TAG aviation chapter which confirms this position, and also confirms that this was already the Green Book position [emphasis added]:

   "Unit A5.2 will also state that, in line with HM Treasury Green Book appraisal guidance, any UK specific scheme or policy will require all associated changes in emissions to be appraised, ***which means that changes in emissions from flights both arriving and departing into the UK will need to be appraised****. In some circumstances, there may be evidence that a UK-specific scheme or policy has displaced emissions from elsewhere within the sector."* (PDF p.7) – DfT (2023) Forthcoming Change to TAG. 19th October 2023.

6. This Notice from the DfT reflects the fact that this is a project appraisal and impact assessment and -not- a national emissions accounting exercise.

7. If this appraisal is to follow best practice, the Applicant should set out their estimate of the emissions from, and the carbon cost of, inbound flights.

8. For completeness, the Applicant should also apply the 1.7x multiplier, recommended by DESNZ in its document *2023 Government Greenhouse Gas Converstion Factors for Company Reporting* (p.107) to account for non-carbon emissions. This document presents the *"current official set of UK government conversion factors"* (p. 14) for use by organisations and companies. It should be noted that the 1.7x multiplier (i.e. 70% of carbon impacts) is a highly conservative estimate of the potential scale of damage, the 2023 DESNZ report highlights that the latest research could suggest a multiplier as high as 3.0x in the worst case (see DESNZ, 2023, p.103-107). Figure 10.4 of the 2023 CCC Progress Report to Parliament (p. 273) also highlights that the 1.7x mulitiplier is at the very bottom end of the range of potential climate impacts from non-carbon gases.

9. The Climate Change Committee's position on the assessment of non-CO2 is also stronger, stating:

   "No airport expansions should proceed until a UK-wide capacity management framework is in place to assess annually and, if required, control sector CO2 emissions and non-CO2 effects." (CCC 2023 Progress report to Parliament, p.15)

10. Given that the application of the multiplier is an incredibly simple step, recommended as a sensitivity test by the DfT TAG guidance, and by DESNZ,

there is no plausible reason why the Applicant would *not* do this step other than to obscure the scheme's potential negative impacts.

Correcting the cost-benefit analysis for overseas impacts

11. NEF raised this issue in our first Written Representation (para 65). The Applicant is wrong to imply it was raised belatedly.

12. The Applicant has helpfully provided the relevant TAG guidance on the treatment of non-UK residents (Doc 8.107, para 2.1.4, p. 1). This guidance only serves to reinforce NEF's point and highlight the flaws in the Applicant's cost-benefit analysis. The TAG guidance clearly sets out two options:

    a. It is preferable to present a cost-benefit analysis which focuses only on welfare impacts on UK residents. The Applicant is deficient here as they have included benefits to foreign residents. Note that this does not contradict other guidance which states that foreign impacts should still be reported separately.

    b. As a second, less preferential option, all scheme impacts, regardless of the location of impact, can be presented. The Applicant is deficient here as they have not included greenhouse gas emissions which will be the responsibility of foreign governments (they have also not included non-carbon climate impacts).

13. In either case, the Applicant's analysis is deficient, and clearly overstates the scheme's benefit.

14. We can make a simple modification to the Applicant's analysis to remove the benefits arising to overseas residents, as shown below in Table 1. We have also controlled for the fact that almost half of the scheme's carbon cost is in the non-traded sector and therefore falls within the core cost-benefit assessment. These changes result in a negative net present value (NPV) for the scheme, worth -£621m, when all non-traded carbon and non-CO2 impacts are accounted for. This includes applying the conservative non-CO2 multiplier (1.7x) which is recommended by the DfT in the Aviation TAG unit as a sensitivity test, and by BEIS/DESNZ in its carbon valuation and greenhouse gas emissions reporting guidance document.

Table 1: Revised scheme net present value (NPV) to UK residents over 60 year appraisal period

Impact	**Notes**	**UK Value (£m)**
Journey time savings	UK Business	£271
	UK Leisure	£17
	Total	£288
Air fare savings	UK Business	£571
	UK Leisure	£1,539
	Total	£2,110
Airport profits		£45
Air passenger duty		£259
Construction costs		-£1,527
Non-traded carbon costs		-£721
Traded carbon costs		-£814
Non-traded non-CO2 costs	DESNZ 1.7x multiplier	-£1,075
Totals		
Net Present Value including non-traded carbon costs		£454
Net Present Value including non-traded carbon and non-CO2 costs		-£621
Net Present Value including traded and non-traded carbon and non-CO2 costs		-£1,435

15. The Applicant objects to such a move ostensibly because *"it is simply not possible to identify all impacts on non-UK residents"* (doc 8.107, para 2.1.5). This is odd. It is perfectly possible to make a robust estimation of such impacts. Airport profits and Air Passenger Duty accrue in the UK. Construction costs also accrue in the UK. Construction costs may be passed to passengers via ticket prices, but the Applicant has already completed the job of accounting for, and splitting air fare impacts between UK and foreign residents. Climate (carbon) costs can either be assigned by national emissions accounting responsibility (i.e. inbound vs outbound flights), or if this is not satisfactory, they can be assigned based on the proportion of passengers who are domestic versus foreign residents. Both options involve simple calculations. In Table 1 we have opted to split present climate costs by national government responsibility. Presenting climate costs split by passenger residency would worsen the scheme's final net present value as significantly more UK residents fly from Luton Airport than foreign.
16. Finally, we would like to re-emphasise the Applicant's own point, which explains why it is still important to take account of carbon costs which occur

within the Traded Sector (and hence why government guidance emphasises that such costs should still be presented):

"Investment will also be required to ensure that carbon emissions from the Proposed Development are compliant with the objective of reaching Net Zero. This, again, reflects a cost to society, as these resources could be used for other activities." (Need Case para 8.6.1, p. 204)

17. Another way to frame the cost of these additional traded-carbon emissions is as a factor that will increase competition in the carbon market and drive up the cost of ETS carbon permits for other regulated businesses – a cost to wider society.

18. The scheme's NPV is further negative (-£1,435m) if the costs of traded carbon are considered.

19. The scheme cost-benefit analysis still lacks consideration of costed noise and air quality impacts which would likely drive its net present value into further negative territory. In the Gatwick Airport case, the Airport's consultants monetised these impacts and placed their net present value at around -£92m (London Gatwick, Economic impact of the Northern Runway Project: national impact assessment, p. 7-53). The equivalent figure for Luton should be added to the core cost-benefit analysis.

Cost-benefit analysis is key to aviation/airports policy

20. It is a central principle of government aviation policy that costs and benefits must be weighed up. NEF is in agreement with York Aviation in their recent (November 2023) evidence to the London City Airport Planning Appeal where they state:

    "It was an important principle of the APF [Aviation Policy Framework] that the costs, particularly environmental costs of airport development, should be balanced against the benefits of growth."

    And that:

    "The concept of balancing benefits and costs is reiterated in the MBU [Making Best Use] policy." (Proof of Evidence of Louise Congdon, p.12)

21. The relevant paragraph of the APF states:

    "The aviation sector is a major contributor to the economy and we support its growth within a framework which maintains a balance between the benefits of aviation and its

costs, particularly its contribution to climate change and noise" (APF para 5, page 9)

22. The government has set out, in TAG and the Green Book, an established, best practice, methodology for the task of weighing up the proportionate balance of scheme benefits against environmental costs such as climate change and noise.

23. All additional emissions have a societal cost, even those which fall within any emissions envelopes set out in government documents such as Jet Zero. Nowhere in government policy is there any indication that government sanctions the removal of greenhouse gas costs from the best-practice appraisal, and cost-benefit analysis, of an individual scheme. To do so would be an extremely unusual and inappropriate deviation from government appraisal guidance.

WebTAG provides the framework for a robust cost-benefit analysis

24. The Applicant's appraisal documents are clearly deficient against the best practice standard set out in TAG across a range of areas. The Applicant continues to avoid the implications of this deficit by making demonstrably false statements regarding the applicability of TAG (WebTAG).

25. The November 2022 update to the Aviation unit of TAG revised the wording of the opening page. This revision made it clearer than ever before that TAG is applicable to private sector development contexts. It states that the DfT:

    "expect this guidance to be useful to other appraisal practitioners considering the impacts from non-government aviation interventions"

    This can be directly contrasted with the Appellant's claim in their latest rebuttal of NEF analysis (doc 8.107) which states*"WebTAG is not useful in this case"* (para 10.1.2, p. 10). The Appellant's position is evidently out of step with the DfT.

26. This view is also out of step with consultants working for other airports. Gatwick Airport's ongoing DCO application states [emphasis added]: *"a TAG welfare analysis is considered as* ***a useful framework*** *to assess and present the economic impacts (costs and benefits) of the Project that are additional at the national level."* (London Gatwick, Economic impact of the Northern Runway Project: national impact assessment, para 3.2.3, p. 3-11).

27. The Government's introduction to TAG on its website states:

    "Projects or studies that require government approval are expected to make use of this guidance in a manner appropriate for that project or study. For projects or studies that do not require government approval, TAG should serve as a best practice guide." (DfT, Transport Analysis Guidance, 2022)

28. This DCO application requires government approval. TAG is the standard to which the appraisal should be held.

29. NEF notes the difference between a local planning application and a DCO. We would suggest that given the more direct involvement of central government in the determination of a DCO, a tighter role for TAG than that set out by the Planning Inspectors in the previous Bristol and Luton cases might be appropriate.

30. That said, NEF finds the previous statements made by the Planning Inspectors in their Bristol and Luton reports to be at odds with the government's position on the issue. In the Luton case, the inspectors wrote:

    "The Bristol appeal decision noted that as such assessments were to support a Government intervention and as there was not one, then the absence of a WebTAG assessment did not weigh significantly against that development".

31. NEF believe this statement to be incorrect, as there was in fact a 'government intervention' at stake. To understand what represents a 'government intervention' we can look at advice from the Office for Fair Trading, which provides guidance on the role of "Government in Markets – Why competition matters – a guide for policy makers" (2009). This document sets out *"the rationale for government intervention in markets"*. This document clearly sets out how government *"interventions"* in markets include putting in place *"rules and regulations that determine appropriate conduct of firms and individuals"* (p. 1). The rules put in place to restrict air traffic movement at an airport clearly represent one such example. Government approval of an airport expansion application represents an intervention via a change to the regulations permitting air traffic movements.

32. The Inspectors continue…

    "There are basic difficulties when the WebTAG approach is applied to proposals such as this one. The process is about identifying value for money where public money is being expended and it has to monetise impacts when spending public money in order

to understand which policies and projects deliver better value for money." (Report to the Secretary of State, May 2023, para 8.177, p.55)

This view is shared by the Applicant (doc 8.107, para 10.1.2, p. 10)

33. This represents an incorrect understanding of the function of TAG. The inspectors state that TAG is *"about identifying value for money where public money is being expended".* This is incorrect. TAG, explicitly, addresses all interventions which 'require government approval'. As set out above, there are many types of intervention which do not involve expenditure of public money.

34. At paragraph 3.2.11, the Aviation Unit of TAG specifically provides advice on the design of a cost-benefit analysis when a scheme is privately financed. The DfT state: *"Since aviation investment is most commonly paid for by the private sector, it is also necessary to include private financing costs in the total scheme costs"* (p. 7). If TAG is not intended for the appraisal of private sector investments, why is this advice provided?

35. Further underscoring the wider applicability of TAG than just contexts of public expenditure, the introduction to the aviation unit of TAG (A5.2) states [emphasis added]: *"The DfT regards this unit as best practice for the appraisal of an aviation intervention and would assess the merits of* ***any*** *aviation intervention against this benchmark"* (p.3). Clearly, the DfT would asses "any" aviation intervention against TAG, the best practice benchmark. This would therefore include private sector-sponsored airport expansions. The Aviation unit of TAG makes repeated reference to 'aviation interventions'. At no point is the guidance limited to the expenditure of public funds.

36. The Planning Inspectorate's prior position on TAG has had damaging consequences, allowing sub-par economic appraisal to go unchallenged and thereby propagating poor projections leading to misinformed decision making.

37. For example, in their Luton report, the Inspectors state at para 8.178:

    "This was just an appraisal of climate change costs and had not been compared to benefits of the proposal including the GVA. However, even taking these costs at face value at their highest, the discounted GVA of the scheme would far exceed those costs"

    This demonstrates a fundamental misunderstanding of appraisal best practice. GVA and climate change (carbon) costs are not appropriate figures

for comparison. Rightly, GVA is not included in the cost-benefit analysis presented by York Aviation for this application, nor was it included in the Gatwick DCO application. This is because carbon costs form part of the welfare-based analysis of benefits and costs. GVA is not a welfare-based measure. This is explained in detail in TAG Unit A2.1. The comparison made by the Inspectors is not appropriate and, if TAG guidance had been given adequate consideration, this error would not have occurred.

Equity has not been adequately assessed

38. The Applicant's failure to accept WebTAG as best-practice guidance, and the requisite appraisal framework in this context leaves a range of critical issues unassessed.

39. Taking the issue of equity. In their response to written questions on socio-economic effects (doc 8.81) the applicant has directed the inspectors to their Equality Impact Assessment (doc 7.11) in response to the inspectors' question about the equity of economic impacts.

40. An Equality Impact Assessment (EqIA) is not comparable with the distributional analysis methodology which is recommended by TAG. A TAG distributional assessment would provide important, higher quality, information, to the Inspectors.

41. The EqIA provides a qualitiative, and somewhat speculative assessment of how certain groups with protected characterestics might be impacted by individual aspects of the proposal. A TAG distributional assessment would present the actual distribution of the quantified economic impacts, and particularly claimed benefits, at the core of the scheme's economic case.

42. For example, the largest claimed benefit of the proposed scheme is the reduction in ticket prices (air fares) passed to leisure travellers. This is worth £1.5bn to UK residents in Net Present Value in the Applicant's cost-benefit analysis. Travel time savings are also key. We do not know how these claimed benefits are distributed, whether they accrues to wealthier or poorer households, or whether they bias towards particular age groups, genders, and racial groups. Given the Airport's pre-existing knowledge about its passenger base, and the type of future routes that would be served (including increasing long-haul) such a calculation should be relatively simple. A methodology is set out in detail in TAG Unit A4.2.

43. Had the Applicant also calculated monetised noise and air quality impacts, following best practice in appraisal, it would also have been possible to assess the distribution of those costs across society, also as per TAG Unit A4.2.

44. As it stands, NEF remains concerned that the majority of the scheme benefits (passenger air fare and travel time savings) accrue to wealthier travellers who take multiple flights per year, while the scheme costs skew towards less wealthy groups vulnerable to climate, noise, and air quality impacts.

Business passengers and business productivity impacts are overstated

45. We appear to have reached an impasse on this issue. In their latest response to NEF the Applicant repeats its Figure 1.1 (doc 8.107), a figure which does not include changes prior to 2010, or post-2019. In doing so the Applicant hides the sizeable structural shift which took place following the 2007/08 recession, and the similar shift currently taking place following the pandemic. The Applicant's forecasts have not controlled for this shift.

46. Contrary to the Applicant's forecast of significant underlying demand, given ongoing economic stagnation in the UK and global economies, and the accelerated growth of remote-working capacity, a reasonable forecast would suggest that there will not be significant additional business passenger demand until the mid-2030s at the earliest.

47. The wider shift away from business air travel in South East England is further evidenced in the recent moves by London City Airport and Southampton Airport to expand further into the leisure travel market,[1] as well as recent studies such as the 2023 Deloitte Corporate Travel Study which identified a "limited upside" to corporate travel.

48. In any case, NEF has already provided robust evidence from the DfT that constrained airport capacity does not meaningfully constrain business passenger demand due to business passengers' higher willingness to pay than leisure travellers.

49. The outputs of the Applicant's analysis of business productivity, which relies on an out-of-date relationship, a methodology entirely detached from best-

[1] See for example: BBC News (21st September 2023) Southampton Airport's extended runway completed.

practice guidance in TAG, and a growth forecast completely blind to emerging trends, cannot be relied upon.

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