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Department for Transport  
Zone 1/22  
Great Minster House  
76 Marsham Street  
London SW1P 4DR

Dear Sirs

## **Consultation on Emissions Cost Assessment**

### ***Introduction***

1. Although Stop Stansted Expansion ('SSE') has not been formally invited to respond to this consultation on emissions cost assessment ('ECA') we trust you will pay due regard to our comments. SSE represents over 6,800 members and supporters. We have no political affiliations and our membership includes more than 130 local parish councils, residents' groups, national and local environmental groups and other organisations.
2. We note that the list of stakeholders in Annex B of the consultation document ('CD') is dominated by the aviation industry and does not include any local airport community groups, such as SSE. We respectfully submit that those who are adversely affected by the activities of the UK's major airports *are* important stakeholders in relation to this consultation and we find it disappointing that no local airport community group is included in the list. Presumably those listed were provided with a copy of the CD and formally invited to respond. This is a recipe for a pro-expansion bias within the response. Criterion 1 of the Government Code of Practice for Public Consultations speaks of the need to consult widely. It is implicit in this that you should consult in a balanced way and so we would welcome an explanation as to why the list of stakeholders was so heavily skewed towards industry groups.

### ***Role of Emissions Cost Assessment***

3. The CD proposes a more limited role for ECA than that foreshadowed by *The Future of Air Transport White Paper Progress Report* ('ATPR'), December 2006, which stated:

*'We propose to consult on the development of a new emissions cost assessment to inform Ministers' decisions on major increases in aviation capacity.'*<sup>1</sup>

*'We are also clear that major decisions on increases in airport capacity need to take account of not only their local environmental effects, but also the wider context of aviation's climate impact.'*<sup>2</sup>

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<sup>1</sup> ATPR at page 4, para 1.6.

<sup>2</sup> ATPR at page 13, para 2.33.

4. The wording of the ATPR creates the expectation that the purpose of the ECA would be to enable Ministers to take account of climate change effects when making decisions about major increases in aviation capacity. There is no hint in the ATPR that an exclusion to this would be when Ministers were making decisions on planning applications for major increases in aviation capacity. However, in the inserted box on page 11, the CD states:

*'We do not believe it should be carried out on an ad-hoc basis to inform the consideration by the planning system of individual airport development proposals'*<sup>3</sup>

5. We believe that the DfT's view on this is untenable. The Town and Country Planning (Environment Impact Assessment) Regulations, 1999, do not limit the consideration of environmental effects to just the *local* environmental effects and the planning system cannot be prevented from examining all of the significant environmental effects of a development and (necessarily so) on 'an ad-hoc basis'. Nor can it be prevented from taking account of *all* material considerations. In the case of the Stansted G1 planning application, which by any standards is a proposal for '*a major increase in airport capacity*', the environmental effects of the emissions must properly be weighed and the best tools available, for example ECA, should be used to do that.

6. The Government published *The Future of Air Transport White Paper* ('ATWP') in 2003 setting down its strategy for airport expansion to 2030 and confirmed this strategy in the ATPR as recently as December 2006. It is therefore difficult to see what decisions on '*major increases in airport capacity*' are now contemplated where an ECA would be used if its use is to be restricted to a national level and it is explicitly not to be used by Ministers in the context of a planning judgement.

7. Although the stated purpose of ECA is 'to inform Ministers' decisions on major increases in aviation capacity' the CD creates the impression that its purpose is to establish whether revenues from APD and AVGAS duty are sufficient to cover aviation's climate change costs. Taxation policy is of course a matter for HMT and so quite why tax revenues and climate change costs should be directly compared for the aviation sector (and no other sector so far as we are aware) is not clear. Is the DfT saying that if aviation is not meeting its climate change costs then APD and AVGAS duty should be increased or is it saying that airport expansion plans should be curbed?

8. The ECA states (page 4) that 'The Government has made a commitment to ensure that the aviation sector covers its external climate change costs'. Our understanding is that the Government's policy is to ensure 'aviation pays the external costs its activities impose on society at large' (ATWP. para 2.18). In other words, the full environmental costs of air travel should be internalised and not just its climate change costs. Moreover, this is not simply UK Government policy but an EU-wide policy as agreed by the Treaty of Amsterdam. We would welcome clarification as to whether there has been a change in Government policy since the 2003 ATWP which would help explain the significantly different form of words you have used in the CD.

9. We now turn to the specific questions set down in the CD

### **Questions for Consultees**

#### **Question 1: Are the UK emissions inventory carbon figures from domestic and departing international flights a satisfactory indicator of the UK aviation carbon emissions?**

10. The objective of ECA, as we understand it, is to assess the climate change impact of possible major increases in aviation capacity. It is therefore appropriate that the ECA

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<sup>3</sup> ECA Consultation Document at page 12, unnumbered box insert.

assesses the carbon emissions of additional domestic and departing international flights based on the most recent data available. The UK emissions inventory carbon figures provide the best starting point for such an assessment.

11. There may be an argument for adjusting the inventory figures to take account of where the fuel is purchased. We would not argue against this on the ground of correctness but it would make the assessment a more complex and time consuming exercise. The additional work involved would need to be weighed against the materiality of the adjustment that would ensue.

12. There is a stronger argument for applying a UK residency weighting to the emissions inventory figures. A review of the CAA Annual Passenger Survey data for the period 2000-2006 (see Annex 1) shows that UK residents accounted for 62.5% of international terminal passengers and 66.2% of international terminating passengers at UK airports. One can debate which is the better yardstick but air passenger country of residency is clearly both a relevant and a material consideration in relation to responsibility for the carbon emissions from air travel. To put it another way, would it be fair to hold the Maldives responsible for 50% of the emissions generated by planeloads of visiting UK tourists?

13. There is no logical weighting that can be applied to international cargo flights (would you weight imports or exports?) and so the '50:50 rule' should be applied to cargo flights.

**Question 2: Do you believe an uprating factor should be applied to the estimated carbon emissions to account for long-haul UK departing flights with more than one leg? Please explain your answer.**

14. Yes, we believe that it would be relatively simple to assess the additional amount of fuel taken on board by long-haul flights from the UK which refuel en route.

**Question 3: Are you content that the UK emissions inventory figures for UK domestic and departing international flights provide a satisfactory indicator for total UK aviation sector activity?**

15. In addition to the points made in our response to questions 1 and 2 above, ground sources such as airport vehicles and buildings, and surface access movements generated by airports should be separately estimated as a percentage of aviation emissions. Estimates for airport-related surface access were provided by the DfT in *The Future Development of Air Transport in the UK: South East* consultation document and these ranged from 4.3% to 4.7% of the aviation emissions.<sup>4</sup> A similar approach should be adopted for the purposes of ECA.

**Question 4: Do the proposed values for the factor for non-CO2 effects provide a robust way forward, recognising there are uncertainties that must be taken into account?**

16. We consider that it would be more appropriate to use the range of 2.0 to 4.0 indicated by the IPCC (and by Stern<sup>5</sup>) to reflect the uncertainty. Ultimately, Ministers' decisions in relation to major increases in airport capacity will be matters of judgement and so a precise single value is not essential. A single value may also create the illusion of certainty.

**Question 5: Do the proposed values for the social cost of carbon provide a robust way forward, recognising there are uncertainties that must be taken into account?**

17. No, the figure of £70 per tonne of carbon<sup>6</sup> is too low. It emerged from a literature review

<sup>4</sup> *The Future Development of Air Transport in the UK: South East*, DfT, Feb 2003, Annex E, Table E2.

<sup>5</sup> *Report of the Stern Review: the Economics of Climate Change*, HMT, Oct 2006.

<sup>6</sup> The £70 per tonne of carbon figure was at year 2000 prices with a recommendation that it be increased annually by RPI + £1. At 2007 prices it would be about £90.

carried out by the Government Economic Service in 2002<sup>7</sup> and has been overtaken by events over the past six years including: greater recognition of the urgent need to cut CO<sub>2</sub> emissions – and to cut them more deeply; the UK target of a 60% reduction in carbon emissions by 2050 and the Report of the Stern Review.<sup>8</sup> In addition the £70 basis takes no account of important uncertainties including the probability of climate catastrophes (e.g. melting of the Greenland ice cap and West Antarctic ice sheet), socially contingent impacts of climate change (e.g. famine, disease) and impacts post 2100.<sup>9</sup> The figure is currently under review and we would expect that review to take full account of the Report of the Stern Review which arrives at a social cost of carbon some four times greater than £70 per tonne at current prices<sup>10</sup> even for stabilisation at 500-550ppm. Moreover, stabilisation at 500-550ppm may be politically judged to be the lowest that can be aimed for, but it will not be sufficient to avoid serious climate change and the associated costs thereof.

**Question 6: Should APD and duty collected on AVGAS be treated as contributing to the climate change costs of aviation?**

18. This question confuses the purpose of ECA (to inform decisions on potential increases in aviation activity) with taxation. In any case, APD and AVGAS are not hypothecated taxes, nor indeed are the taxes on motoring which far exceed that sector's climate change costs. In our view it would be wholly misleading to treat APD and AVGAS revenues as contributing directly to the climate change costs of aviation, just as it would be inappropriate to consider the significant VAT rebates enjoyed by the aviation sector as adding to the climate change costs of aviation.

**Question 7: Are there any other actions, in addition to offsetting and emissions trading, taken by the aviation industry which you would regard as relevant to the emissions cost assessment?**

19. Offsetting and emissions trading are not relevant to ECA.

20. We regard voluntary offsetting as an irrelevance and indeed as a distraction. The cost of offsetting is only a fraction of the social cost of carbon and it creates the false impression, amongst individual travellers, businesses and other organisations that they have addressed the environmental impact of their air travel. To that extent offsetting, however well intentioned, may well be counter-productive in addressing the challenge of climate change. In addition, the take-up rate is very low and the basis used for calculating emissions by many of the carbon offset schemes is dubious, as is the effectiveness of many of the projects which are funded by the monies raised. We do, however, accept that the last two points may be dealt with by the proposed accreditation scheme.

21. Turning to emissions trading, we do not believe that meaningful and effective emissions trading arrangements will be achievable for aviation within any reasonable timescale, even at an EU level and the development of meaningful and effective emissions trading arrangements will be even more problematic at a global level, making this – at best – a very distant prospect. Stern emphasises the need for *urgent* action and reliance upon emissions trading to address aviation emissions is ill suited to a problem which demands urgent action.

22. If the EU emissions trading scheme is to be effective annual allocations of carbon permits will need to be progressively reduced thereby forcing up the price of carbon. Airlines would not be competitively disadvantaged by a high carbon price because all would require to

<sup>7</sup> 'Estimating the Social Cost of Carbon Emissions', Clarkson & Deyes, 2000 (GES paper 140).

<sup>8</sup> 'Report of the Stern Review: the Economics of Climate Change', HMT, Oct 2006.

<sup>9</sup> 'Aviation and the Environment Using Economic Instruments', HMT & DfT, Feb 2003, Annex A, para A4.

<sup>10</sup> 'Report of the Stern Review: the Economics of Climate Change', HMT, Oct 2006, at page xvi of Executive Summary and Box 13.1 on page 288 of main Report. NB: 1 tonne of carbon = 3.67 tonnes of CO<sub>2</sub>.

bear the same costs. However, the aviation sector would become the 'cuckoo in the nest', gradually forcing manufacturing businesses – or at least those which are energy intensive and need to compete internationally – to relocate outside the EU because the price of carbon permits would become unaffordable for them.

***Question 8: Should the emissions cost assessment be based on the most recent calendar year for which a full and consistent data set is available?***

23. The purpose of ECA is 'to inform Ministers' decisions on major increases in aviation capacity' and so it must therefore be forward looking. Realistic forward projections of emissions will therefore be more important than the historical data. Such forward projections should, of course, have regard to the most recently available data but the growth trend and the forecasts will be of greater importance for the purposes of informing Ministers' decisions on major increases in aviation capacity.

***Question 9: Are there any other data sources you believe might be relevant to carrying out an emissions cost assessment?***

24. We have referred above to a UK passenger weighting and to surface access and other ground-based emissions.

***Question 10: Should the assessment be carried out by the Department, or by another Government body?***

25. We certainly do not believe that the DfT should carry out this assessment. In our view the DfT is so wedded to the expansionist agenda of the aviation industry that it could not be relied upon to act impartially in carrying out this type of assessment. Either DEFRA or the recently formed Office of Climate Change would be better suited.

***Question 11: Do you agree that the assessment should be based on Government data, such as the social cost of carbon, radiative forcing factor and emissions data, in order to ensure consistency and credibility going forward?***

26. The assessment should be based on the best data available whether this comes directly from Government sources or from other reliable sources such as the IPCC in relation to scientific data and the CAA in relation to statistical data. The choice of the most appropriate data and the manner of presentation of the results will be of vital importance in ensuring consistency and credibility. This is another reason why we consider it important that ECA should be carried out by DEFRA or the Office of Climate Change rather than the DfT. The DfT's reliance, in the ATPR on economic analysis published by Oxford Economic Forecasting and derived from a report which was largely sponsored by the aviation industry is a prime example of the need for objective, independent analysis.

***Question 12: Should the methodology be kept under review to take account of developments in the evidence base and policy?***

27. ECA should of course be based on the most up-to-date evidence and if a change in methodology is required to reflect new evidence then this should automatically be made.

28. Specifically, we are aware that the climate change impact of the contribution made to cirrus cloud formation by aircraft in flight is subject to considerable scientific debate. However it may well be a very significant contributor to climate change. As soon as there is a sound scientific basis, ECA should incorporate the climate change impact of the contribution made to cirrus cloud formation by aircraft in flight.

29. Changing the methodology because of a change in policy should be subject to consultation.

We hope you will find our comments helpful.

Yours faithfully

Brian Ross  
for Stop Stansted Expansion

## Annex A

**Analysis of CAA Data: UK/Foreign passengers***Source: CAA Annual Passenger Survey Reports 2000-2007***(A) International Terminal Passengers**

| Year         | UK             | Foreign        | Per cent<br>UK |
|--------------|----------------|----------------|----------------|
| 2000         | 68,975         | 50,525         | 57.7%          |
| 2001         | 70,556         | 47,770         | 59.6%          |
| 2002         | 66,231         | 47,037         | 58.5%          |
| 2003         | 84,443         | 51,884         | 61.9%          |
| 2004         | 74,480         | 53,271         | 58.3%          |
| 2005         | 118,991        | 63,017         | 65.4%          |
| 2006         | 88,139         | 38,922         | 69.4%          |
| <b>Total</b> | <b>502,840</b> | <b>301,901</b> | <b>62.5%</b>   |

**(B) International Terminating Passengers**

| Year         | UK             | Foreign        | Per cent<br>UK |
|--------------|----------------|----------------|----------------|
| 2000         | 65,747         | 30,787         | 68.1%          |
| 2001         | 67,433         | 28,614         | 70.2%          |
| 2002         | 62,614         | 25,995         | 70.7%          |
| 2003         | 79,867         | 30,430         | 72.4%          |
| 2004         | 70,305         | 31,226         | 69.2%          |
| 2005         | 88,932         | 58,612         | 60.3%          |
| 2006         | 92,079         | 60,541         | 60.3%          |
| <b>Total</b> | <b>461,230</b> | <b>235,418</b> | <b>66.2%</b>   |

*NB: The CAA surveys a different number and selection of airports each year and so care must be taken when comparing data from one year to another.*