

## Annex C - Consultation response form on Emissions Cost Assessment

### PART 1 - Information about you

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Company Name or Organisation (if applicable)	Aviation Environment Federation
Please tick one box from the list below that best describes you /your company or organisation.	
<input type="checkbox"/>	Small to Medium Enterprise (up to 50 employees)
<input type="checkbox"/>	Large Company
<input type="checkbox"/>	Representative Organisation
<input type="checkbox"/>	Trade Union
<input type="checkbox"/>	Interest Group
<input type="checkbox"/>	Local Government
<input type="checkbox"/>	Central Government
<input type="checkbox"/>	Police
<input type="checkbox"/>	Member of the public
x	Other (please describe): Environmental organisation
<p>If you are responding on behalf of an organisation or interest group how many members do you have and how did you obtain the views of your members:</p> <p>The AEF represents over 100 community organisations, parish councils and local authorities around the UK's airfields and airports. At each AGM, up to 14 members are elected to an Executive Council to oversee the formulation of policy responses and the work programme. In addition, we hold meetings with members on relevant topics, and highlight Government consultations in our newsletter, inviting members to forward their views. Copies of all position papers and responses are available to all members.</p>	

If you would like your response or personal details to be treated confidentially please explain why:

## **PART 2 – List of questions**

### Consultation Questions

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

The key objective is to ensure the consistent use of data for measuring and reporting UK carbon emissions. We regard the UK emissions inventory, as reported to the UNFCCC, as the principal source of such information, and we would therefore support its use for the ECA.

For the years up to 2006, the basis for the UK emissions inventory has been fuel uplifted. We believe this provides a reasonable estimate of actual carbon emissions attributable to the UK, although our preference would be for a methodology that assesses total emissions based on all departing flights or 50% of the emissions from all arriving and departing flights. We accept that fuel uplift can be a reasonable proxy but would encourage the Government to move to a Tier 3 methodology as set out in IPCC's 2006 reporting guidelines as soon as possible.

The Government's position on this is not clear. In a written parliamentary answer last year, a DEFRA minister stated that the UK had moved to a tier 3 methodology for aviation emissions from 2006. However, we have not been able to confirm this and request that the DfT confirm the current status in its response to the consultation.

*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.*

This factor would be difficult to calculate. As stated in question 1, moving to a tier 3 methodology would allow missions to be calculated over the whole flights, irrespective of whether more than one leg was flown.

*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?*

Subject to the above qualifications, yes.

*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?*

The AEF believes firmly that it is important to have a sound scientific basis. The IPCC provides this basis. Insofar as the IPCC's 4<sup>th</sup> assessment report suggests that the RFI for aviation greenhouse gas emissions is now closer to 2 than 2.7 (as highlighted in the 1999 Special Report on Aviation and the

Upper Atmosphere) we accept 1.9 as representative of the low range value. However, we note that all IPCC reports to date have excluded the potential effects of cirrus. Estimates for the impact of cirrus vary greatly but even using an RFI of 4 may not fully take account of its potential.

Some may question the use of RFI in this respect. However, we believe it is justified in the absence of a more suitable metric at the current time: the ECA would lack credibility if it failed to address non-CO<sub>2</sub> effects and this outweighs any uncertainty regarding its application in this assessment.

*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?*

No. The Government figure for the social cost of carbon is based only on the current Kyoto target and does not include the cost of climate catastrophes. These weaknesses were highlighted by Sir Nicholas Stern in his recent report to Government. If included, the Stern Review concluded that at 2000 prices, the social cost of carbon is £238. This significantly higher value is also consistent with other studies on the social cost of carbon, including INFRAS/IWW (External Costs of Transport Update Study, October 2004) and IPCC.

We note that the Government's official figure for the social cost of carbon is 'currently being reviewed with revised guidance due to be published shortly'.

Notwithstanding the debate on quantifying the cost, we request that the DfT clarifies the use of the social cost of carbon in the context of the interim guidance issued by DEFRA in August 2007 (How to use the shadow price of carbon in policy appraisal). The interim guidance notes that the intention is to "use the shadow price of carbon (SPC) to value the increase or decrease in emissions of greenhouse gas emissions resulting from a proposed policy. Put simply, the SPC captures the damage costs of climate change caused by each additional tonne of greenhouse gas emitted – we convert these into carbon dioxide equivalent (CO<sub>2e</sub>) for ease of comparison. The SPC is different from the previously used social cost of carbon (SCC) in that it takes more account of uncertainty, is based on a stabilisation trajectory, and is in line with the marginal abatement costs of reaching the stabilisation goal".

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

When APD was first imposed in 1993 the then Chancellor, Kenneth Clarke, stated in his Budget speech that: "air travel is under-taxed compared to other sectors of the economy. It benefits not only from a zero rate of VAT; in addition, the fuel used in international air travel, and nearly all domestic flights, is entirely free of tax." So the revenue from APD is regarded as a means of creating a level fiscal playing field. Since then, changes to APD rates have made some references to the environmental performance of the industry without any direct attribution. We consider that a large proportion of

the £2 billion yield from APD must be regarded as the sector's contribution to Government spending, and not counted as contributing to the climate change costs of aviation.

We recognise that the last Pre-budget Statement (October 2007) announced the Treasury's intention to replace APR with a duty payable per plane rather than per passenger from November 2009. It is noted that this reform is intended to send better environmental signals and ensure aviation makes a greater contribution to covering its environmental costs. The puts an emphasis on wider environmental costs rather than limiting it to carbon. Hence the ECA must either be extended to include all external costs of aviation, including noise, local pollution, road traffic congestion, and loss of habitats; or, the costs of these impacts must be deducted from APD revenues before any reconciliation with the cost of carbon.

If all the emissions from aircraft using AVGAS are within the scope of the ECA, including all emissions from private aircraft operations, business aviation and recreational activity, it is reasonable to consider how revenues should be treated. We are not aware of any Government statement that seeks to establish a relationship between fuel duty on AVGAS and the environmental impact of operations. As with APD, any consideration should seek to establish the proportion of revenues that are regarded as an equitable tax contribution to the Treasury, and the extent to which revenues cover all environmental costs, not just those associated with climate change.

*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?*

At the current time, no. Given the variability inherent in most consumer offset schemes, and the different methods used to verify emissions reductions, we support the decision not to include individuals' offsetting decisions.

*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?*

Yes, but the ECA should not be limited to a retrospective analysis. If the ECA is to inform ministers on policy matters, it is essential that it also provides a forward-looking analysis of future impacts. We regard this as one of the most significant deficiencies of the current proposal.

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

No.

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

Insofar as NETCEN collates and maintains the UK carbon emissions inventory for DEFRA, and that DEFRA leads on work establishing and reviewing the social cost of carbon, we consider that the assessment should be carried out by DEFRA.

*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?*

Yes, with the caveats raised above (especially, not treating APD revenue as relating solely to carbon costs), and assuming that the assumptions (on RFI and carbon costs) and methodology are reviewed regularly to take account of new developments. To ensure credibility, the results from the ECA should include a high scenarios based on both an RFI of 4 and the high social cost of carbon.

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

Yes. Both the social cost of carbon and the scientific understanding associated with aviation's non-CO2 effects are subject to ongoing analysis and review. The ECA must take account of the latest advice.



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