

# Environmental Audit Select Committee

## Budget 2003 and Aviation

This submission has been produced by the British Air Transport Association - the trade association for UK-registered airlines. BATA members cover the scheduled, charter and cargo airline sectors and produce over 90% of UK airline output. Our submission responds to the specific issues listed in the Committee's press release of 1<sup>st</sup> April.

**Can the full environmental costs of aviation be identified? What are the main issues of principle and methodological difficulties in attempting to do so? Can remote but potentially catastrophic risks be properly reflected in such an approach?**

The environmental impacts of aviation are of two main types - **Local** and **Global**. There are significant areas of uncertainty in the quantification of the impacts of both types and whilst some impacts are managed through a voluntary approach (eg fuel efficiency) others are highly regulated (eg Noise).

### **Local impacts**

The impact of **Noise** has a direct affect on people living close to airports and, despite a marked reduction in the population affected around, for example, Heathrow over the last **20 years** noise impact is a continuing cause of concern. The impact is largely a nuisance rather than a source of direct environmental damage and it has proved very difficult to quantify or value the effect. The Government's current **ANAS** study is the latest attempt to understand and quantify what is a highly subjective issue. Most attempts to quantify a cost have been based on estimated effect on property.

Aviation's noise impact is already well regulated with detailed schemes in place at the main airports in the UK. The costs of operating within these regulations and of relevant noise mitigation schemes (eg soundproofing) are absorbed by the industry and hence paid for by air travellers.

The impact of aviation on **Local Air Quality** is a fairly new issue. Following the introduction of EU health limits on pollution, which came into effect from 2005 and 2010, much joint airline, airport and local authority work is underway around the one airport where there is a risk that the NO<sub>2</sub> limits will be exceeded.

It has become clear that the previous modelling of air pollution has greatly exaggerated the contribution of aircraft. However, it is likely that action will need to be taken to control emissions from all contributing sources in and around the airport. An action plan should be put in place once there is a better understanding of the various sources, their contribution and potential from improved technology.

### **Global impact**

The main environmental impact of aviation is on Global Warming and the most recent assessment of this was undertaken by the Intergovernmental Panel on Climate Change (IPCC) in 1999. The IPCC reported that, with the exception of CO<sub>2</sub>

emissions, there were a number of areas of scientific uncertainty that limited their ability to define the impact of aviation on climate.

BATA supports the need for continuing scientific research on the atmosphere at altitudes used by most civil aircraft to improve our understanding of both the atmospheric chemistry and aviation's impact on climate change.

Despite these large uncertainties, the impact of non-CO<sub>2</sub> emissions such as NO<sub>x</sub>, contrails and aerosols was estimated by IPCC and added to the CO<sub>2</sub> emissions to reach a total climate impact of 2.7 times that of the CO<sub>2</sub> emissions alone. This factor of 2.7 continues to be used in any assessment of aviation's environmental impact.

**How comprehensive and accurate are the environmental costs included in *Aviation and the Environment: Using Economic Instruments*, and in the Department for Transport's consultation *The Future Development of Air Transport in the United Kingdom*?**

It is not clear. The potential inaccuracies in assessing aviation's impact, including the 2.7 factor on global warming referred to above, are bound to transfer to the cost calculations in both **Aviation and the Environment: Using Economic Instruments** and the previous paper **Valuing the External Costs of Aviation** (DETR December 2000).

Both papers conclude that the major environmental impact of aviation is that related to global warming with an estimated cost an order of magnitude greater than Noise, Local Air Quality or any other impact.

The assumed cost of carbon is another key factor in any calculation. The figure of £70/tonne used in the Economic Instruments paper is not justified and is clearly much higher than assumptions in previous work and values experienced in the UK emissions trading scheme.

This unjustified price assumption together with the large scientific uncertainties surrounding aviation and climate change inevitably result in a figure which has, as any product of an hypothesis multiplied by an assumption, an inherently high risk of inaccuracy.

**Has the Government defined the correct environmental policy objective for aviation – that, where appropriate, the industry should pay for its environmental costs? How does this relate to the Government's primary objective for airports – to maximize the significant social and economic benefits, whilst seeking to minimize the environmental impacts?**

BATA airlines accept that they, like all industries, should cover their environmental costs in a fair and equitable manner.

Wherever possible we believe that this should be achieved by reducing impacts through technology and operational improvements, appropriate regulation (eg noise, local air quality), mitigation and , in the case of new development, appropriate compensation.

Government policy should be focussed on reducing environmental impacts. A policy aimed at just raising tax revenue would be environmentally ineffective (and possibly

counter productive) and would conflict with economic and social policies. It must be stressed that air travel is now enjoyed by the vast majority of the population (50% of the UK population has flown in the last 12 months) and air transport is a crucial facilitator for many of the UK's key industries.

It is inaccurate to allocate the objective of "maximising the significant and social and economic benefits, whilst seeking to minimize the environmental impacts" purely to airports. Users of air transport need airlines and the ground and air infrastructure to make a journey happen. This should be a policy objective for the whole of aviation.

**Would the incorporation of environmental costs be sufficient to achieve sustainability in the air transport sector? What additional measures, if any, would need to be taken if this were to have little impact on rates of growth? To what extent is there a tension between the policy of incorporating environmental costs (especially of carbon) and the Government's long-term objective of a 60% reduction in CO<sub>2</sub> by 2050?**

BATA airlines believe that a sustainable growth in air transport capacity is justified based on a fair balance being struck between environmental impacts and economic and social benefits.

The industry agrees that external costs should be covered and we would like to note that Air Passenger Duty (APD) raises almost £1 Billion annually and covers the environmental cost estimate put forward in the DETR paper Valuing the External Costs of Aviation of December 2000. Aviation in the UK also covers all other external costs such as infrastructure, security and even the costs of its regulator.

The industry has a good record of improvement in fuel efficiency and reduction of noise impacts and will continue to seek further improvements. The UK airline fleet is one of the youngest in the world and to maintain the environmental benefits of fleet replacement it is important that the economic performance of the industry is not undermined.

In particular, we see potential for fuel efficiency through improved Air Traffic Control in Europe and for improvements in fuel efficiency, noise and NO<sub>x</sub> through improved technology in future aircraft.

On the key issue of global warming we support the introduction of open, international **emissions trading** (based on CO<sub>2</sub> initially) - a much more effective tool than taxes or charges - **as a replacement for APD.**

This question suggests a need for demand management beyond the internalisation of environmental costs. This is something we would reject in principle and also on behalf of our customers. Demand management by price is regressive. It would have an immediate effect on inbound tourism and an insidious, but no less important, affect on general business and trade. **Aviation should be treated as any other public transport mode.**

**Given the international context, what practical options for incorporating environmental costs are really available to the Treasury and the Department for Transport, and how should any revenues be used?**

Aviation is very much an international activity in the UK. About 90% of air travellers arriving or departing UK airports are on an international journey.

The UK depends on air transport for business and trade. Two thirds of inbound tourists arrive by air and account for three quarters of inbound tourism spend. One third of goods (by value) are moved by air.

The UK should not implement measures that disadvantage either the UK aviation industry or the UK as a whole. The nature of demand for air transport is such that any unilateral attempt to reduce, for example, "the UK's aviation emissions" would result in the export of emissions, as well as the export of jobs. The impact on global warming would be negligible, but the impact on the UK economy would be severe. It is therefore very important that the way forward on aviation and global warming is international.

Whilst such a solution is being developed we should be taking all possible measures to improve efficiency in current operations and to encourage the development of even better technology for future aircraft.

As the UK has a significant Aerospace Manufacturing sector we would suggest that some of the existing £1 Billion per annum of APD revenue is used to support this research and technology development.

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