

# The Future Development of Air Transport in the United Kingdom: Scotland.

## Consultation Response from Friends of the Earth Scotland

Friends of the Earth Scotland are very concerned about the environmental impact of air transport and in particular the threats posed if the Government is to adopt a 'predict and provide' attitude towards dealing with further rapid expansion rather than looking to control to within sustainable limits.

### **1. Air Transport Growth and Sustainable Development**

A study carried for the the Department for Environment, Transport and the Regions <sup>(1)</sup> concluded that "even with deployment of the most promising future technologies, if demand is unconstrained by capacity, then in absolute terms, the next effect of the aviation industry on the environment is set to increase."

#### **▪ Climate Change**

On 25<sup>th</sup> February 2003 the Prime Minister launched the Energy White Paper saying that "we need urgent global action to tackle climate change." However the proposed air traffic growth projections will take us in the wrong direction:

Aviation is the fastest growing source of anthropogenic climate change emissions, currently account for 3.5 of emissions and set to rise to 15% by 2050.

Aviation is excluded from the UK climate change targets and international aviation emissions were excluded from the Kyoto protocol.

The consultation document states that climate change emissions from air travel in 2030 could be around 80 Mt of CO<sub>2</sub>, including nearly 5.5Mt from domestic flights. For comparison, the UK hopes to reduce total climate change emissions (i.e. from all sources) to less than 600Mt in 2010. If the UK is to deliver the target of a 60% cut in emissions by 2050, emissions associated with aviation could represent 20% of all UK emissions by 2030.

#### **▪ Air Pollution**

Aviation is a significant source of nitrogen oxides which aggravate asthma and cause lung disease. The Royal Commission on Environmental Pollution<sup>(2)</sup> note that: "the increasing development of hub airports in the consolidation model also raises problems. It is possible that as aircraft become larger aircraft emissions affecting air quality within the airport boundary might increase at a rate greater than aircraft movements. There may come a point when local air quality issues become the main limiting factor on the growth in the use of these hubs by aircraft."

- **Noise**

The consultation document defines 63 dBA Leq as ‘moderate annoyance’, however the WHO suggests that “to protect the majority of people from being moderately annoyed during the daytime, the outdoor sound pressure level should not exceed 50 dB LAeq.”<sup>(3)</sup>

## **2. Demand Management**

The UK Government predicts a doubling of air passenger numbers by 2020 and trebling by 2030. However the forecasts assume that fares will fall by 44% by 2030 and that the industry will continue to receive huge tax concessions. Rather than accepting this predict and provide model the focus should be towards managing demand to ensure that air travel is constrained within socially and environmentally defined limits.

The Government should begin the process of demand management by ending the favourable tax treatment of airports and airlines. The Royal Commission on Environmental Pollution, the Institute of Public Policy Research and the Sustainable Development Commission have already called upon the Government to take action on this. The tax subsidy is currently estimated to be worth approximately £9.2 billion a year<sup>(4)</sup>.

Tax not paid:

Tax free aviation fuel	£5.7 billion a year
No VAT on flight tickets or aviation fuel, aircraft meals etc	£4.0 billion a year
Duty free	£0.4 billion a year

Tax paid

Air Passenger Duty (APD)	£0.9 billion a year
--------------------------	---------------------

Net tax subsidy	£9.2 billion a year
-----------------	---------------------

The Government’s SPASM model has since been re-run at the request of groups including Friends of the Earth to include aviation fuel taxed as the same rate as motor vehicle fuel and with VAT imposed on all flights departing from UK airports. The model demonstrates that demand can be managed. With these factors the passenger number predictions rise from 180 million in 2000 to around 315 million in 2030 (compared to the official forecast of 500 million)<sup>(4)</sup>. The model shows no new need for any new runways in the UK and would also secure government revenue for public spending on essential services like public transport.

The projected growth scenario for Edinburgh and Glasgow is reduced as follows when the model is run to include the above assumptions:

Edinburgh 11.0 mppa (instead of 9.0 to 22.5 mppa)

Glasgow 12.0 mppa (instead of 10.2 to 19.6 mppa)

Government’s research<sup>(5)</sup> demonstrates that the majority of those questioned (79%) said they would be prepared to pay more to fly, with 25% accepting an 15% cost increase.

## **3. Investing in Alternatives**

Section 1.4 of The Future Development of Air Transport in the United Kingdom: Scotland (summary) states 'In the majority of cases air services are the only realistic means of

This claim is completely unfounded. Department for Transport statistics <sup>(6)</sup> demonstrate that the majority of journeys (trips per person per year) are made by walking, car or bus in the UK.

As noted by the Royal Commission on Environmental Pollution <sup>(2)</sup>:  
“Emphasis should shift towards providing reliable, efficient and more sustainable alternatives to flight.”

The Air Travel - Greener by Design Steering Group estimated that “more than two thirds of jet fuel is used over sectors shorter than 2,800 km” <sup>(7)</sup>. RCEP note that “when considered alongside the local impacts of take-off and landing, the conclusion must be that short-haul air traffic has disproportionate environmental impacts.”

Instead of encouraging airport expansion and proliferation, for internal UK travel and intra European journeys, it is essential that the government divert resources into encouraging and facilitating a modal shift from air to high-speed rail.

Eurostar have noted that it could hugely expand its operations to Europe, and could readily expand from the current 7 million passengers per year to 40 million passengers per year. It estimates that its market could be enlarged in future to be competitive with air for journeys as long as 1000km.

#### **4. Aviation, Tourism and the Economy**

The document states that aviation is currently estimated to add £0.6 billion of value to the Scottish economy each year and accounts for 1.2% of Scotland's GDP. However this figure should be compared with the effective £9.2 billion subsidy that the industry receives on a UK level as a result of the favourable tax treatment of aviation. Given the resulting additional tax burden on taxpayers the economic arguments in favour of air travel can be seen to be shortsighted.

Section 9.11.17 of the full consultation document states that the potential tourism receipts from passengers coming to Scotland is £0.5bn, and acknowledges that the comparative figure for outbound expenditure by Scots travelling abroad is £0.7 bn. On this basis the further development and expansion of air travel in Scotland is highly likely to extract more money than it injects into the economy.

#### **5. Aviation and Social Welfare**

The consultation states that “Airports and air services are widely recognised as making a substantial contribution to the economy and social welfare of the UK...”

However past trends suggest that opportunities for additional flight travel will be utilised by the more affluent in society, 76% of trips are leisure trips and nearly 20% of UK visits overseas are made by only 3% of the total population. 73% of leisure and 95% of business trips are made by those in socio economic group A-C1.

Friends of the Earth Scotland acknowledges the role that air travel plays in supporting remote rural communities in particular Scotland's islands, but notes that this does not constitute the bulk of future demand predictions.

## Conclusions

- 1) The consultation's premise of a huge increase demand in air travel and airport capacity in the UK is not sustainable. The climate change, air pollution and noise impacts would be extensive.
- 2) The economic arguments portrayed in the consultation in favour of air travel growth are simplistic and shortsighted.
- 3) Rather than adopting a 'predict and provide' attitude Government should be seeking to manage demand by:
  - ending aviation's unfair tax breaks and subsidies by introducing a fair tax regime and a charge directly related to aircraft emissions which cause climate change;
  - regulating airports for the pollution they cause - airports are currently largely unregulated in this respect, unlike other polluting activities like factories, waste incinerators; food processing and energy plants
  - setting legally binding environmental limits for the amount of pollution and road traffic each airport can generate
  - extending peoples' transport choice by improving high speed rail alternatives to replace internal domestic flights and short haul trips to Europe, which make up the majority of flights leaving the UK.

## References

- (1) Arthur D Little Ltd. (2000). Study into the potential impact of changes in technology or the development of Air Transport in the UK, DETR Report on Contract No. PPAD 9/91/14
- (2) Royal Commission on Environmental Pollution (2002). The environmental effects of civil aircraft in flight.
- (3) World Health Organisation.  
[http://www.who.int/environmental\\_information/Noise/ComnoiseExec.htm](http://www.who.int/environmental_information/Noise/ComnoiseExec.htm)
- (4) Aviation Environmental Federation. (2003). The Hidden Cost of Flying.
- (5) Department for Transport (2002). Attitudes to Air Travel.
- (6) <http://www.transtat.dft.gov.uk/tables/tsgb02/1/pdf/10302.pdf>
- (7) Air Travel – Greener by Design (2002) Society of British Aerospace Companies Ltd. London.
- (8) <http://www.parliament.uk/post/e3.pdf> (based on CAA, November 1999)

Dr Dan Barlow  
Head of Research  
Friends of the Earth Scotland  
0131 554 9977