EU Aviation Policy and Climate Change

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Overview

- The challenge of climate change
- Aviation’s contribution to climate change
- Action in other sectors
- Implications for aviation
- Options for aviation
- Summary and next steps
The Climate Change challenge

Variations of the Earth’s surface temperature for...

- the past 140 years (global)
- the past 1000 years (Northern Hemisphere)
The Climate Change challenge
### What science expects

- Rising sea level, risk of flooding, erosion and wetland loss will increase
- Extreme weather events (e.g. heat waves) will occur more often
- Increase of water shortage
- Health risks
- ...

### The overall objectives

- **Kyoto - EU ‘-8%’** (2008-2012)
- **6th Community Environment Action Plan:**
  - T: max +2°C
  - CO₂: <550 ppm
  - GHG: 70% reduction likely to be needed in the long term

### Ultimate objective

- Realise the UNFCCC aim
Aviation’s contribution

**CO₂ from international aviation as reported by EU-15**
- increased by 67% 1990-2002
- +4.4%/year
- +3.2% of EU15 CO₂ in 2002

NB! CO₂ only part of total impact: IPCC estimated the total radiative forcing to be 2-4 times greater

Aviation’s contribution

ICAO in December:

- ”STRONG RECOVERY FOR AIR TRAFFIC IN 2004”:
  - World passenger traffic (in p-km) increased by about 14% 
  - For freight (t-km), the figure was 13%

* Provisional estimates
Source: ICAO (December 2004)
Aviation’s contribution

- **Air traffic demand in Europe likely to double by 2025:** Eurocontrol scenarios* operate with 2.5-4.3% annual increase in no. of flights
- **ICAO CAEP/6 forecast suggests doubling of world passenger fleet from 2002 to 2020**
- **Technological improvements at current pace will continue to be outstripped by growth**

*Source: Eurocontrol Challenges to Growth 2004 Report (CTG04), December 2004*
Other sectors’ contribution

- EU-15 GHG emissions decreased by 2.9% from 1990 to 2002
- From 1 January 2005, broadly half of EU emissions became subject to caps under the EU Emissions Trading Scheme
Implications for aviation

- Aviation’s climate change impact likely to grow, in absolute and relative terms, for decades to come if nothing is done
- Currently the sector has no incentive to take account of climate costs (ie. to internalise its external costs)
- Commission’s 1999 Communication on Air Transport and Environment proposed long term policy target:
  - to achieve improvements to the environmental performance of air transport that outweigh the environmental impact of growth
  - Use of market-based measures
- Political pressure: EP, Council, UK Presidency
- So far the EU has been waiting for ICAO, but
- 6th Environment Action Programme:
  “…identifying and undertaking specific actions to reduce greenhouse gas emissions from aviation if no such action is agreed within the International Civil Aviation Organisation by 2002”
To date 2 main options for economic instruments have been considered in Commission studies:
- Fuel taxes
- Emissions charges

Incorporation of aviation in the EU ETS another possibility
Study launched in November 2004
Draft final report by 8 May – agreed final report 2 months later
Contract awarded to consortium of
- CE Delft
- Oeko-Institute
- Center for Aviation, Transport and the Environment, MMU
- International Institute for Air and Space Law
Economic incentives can help...

- to encourage the sector to adopt in-service technology and operational practices that are better environmentally
- to ensure that users of air services bear the full environmental cost of those services
- to generate more resources and/or more efficient use of resources
Climate change is happening – and the EU is doing something about it
Aviation is not contributing to climate change mitigation – on the contrary
Commission intends this Summer to draw policy conclusions on the use of economic instruments and suggest a way forward:
  - Stakeholder consultation 1st half of 2005
  - Communication scheduled for July 2005
  - Debate in EU institutions (EP & Council)…
  - …probably followed by legislative proposals
Possible points for discussion

- pros and cons of alternative incentives
  (taxes, charges, emissions trading)
- possible improvements to the way that resources for achieving a better environment are targeted
- improving public awareness and perhaps changing attitudes to the use of air passenger and air freight services
Thank you for your attention

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