

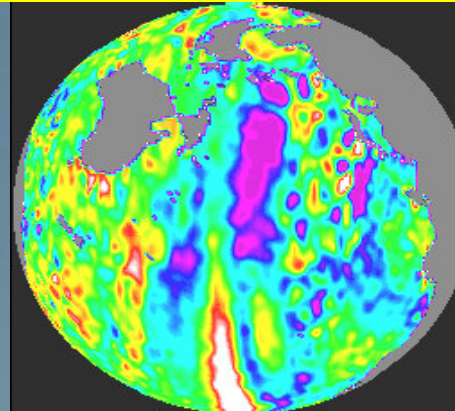
Welcome



The Myths of CO₂ in the Airline Industry



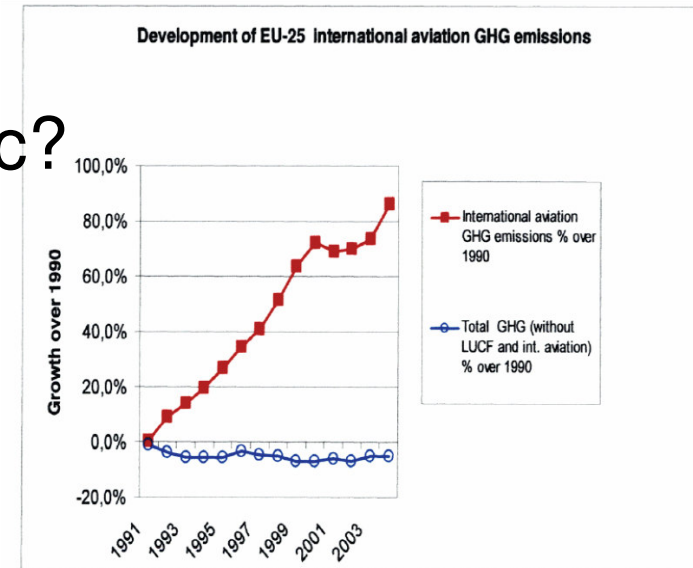
by
Dr. Raphael von Heereman
Head of Aeropolitical Affairs



Agenda



1. How is aviation seen in the public?
2. Worldwide CO₂ vs aviation CO₂
3. EU Commission's ETS proposal
4. Aviation enables globalization
5. Single European Sky: an alternative to ETS
6. UK Airport passenger duty for saving the environment
7. Conclusion



How is aviation seen in the public?



How is aviation seen in the public?



RETHINK AVIATION POLICY
Unless action is taken to curb the rise in the number of flights, all other national efforts to reduce emissions will be cancelled out by 2050. The Government must commit itself to working towards an EU-wide tax on airline fuel. The present aviation tax (levied per passenger) should be replaced with a tax on each plane journey (to encourage airlines to fill planes to capacity). And there should be a presumption against airport expansion in planning decisions.



»Bei einem Urlaubsflug nach Mallorca wird das Klima gleich stark geschädigt wie durch ein Jahr Autofahren.«

Plane speaking

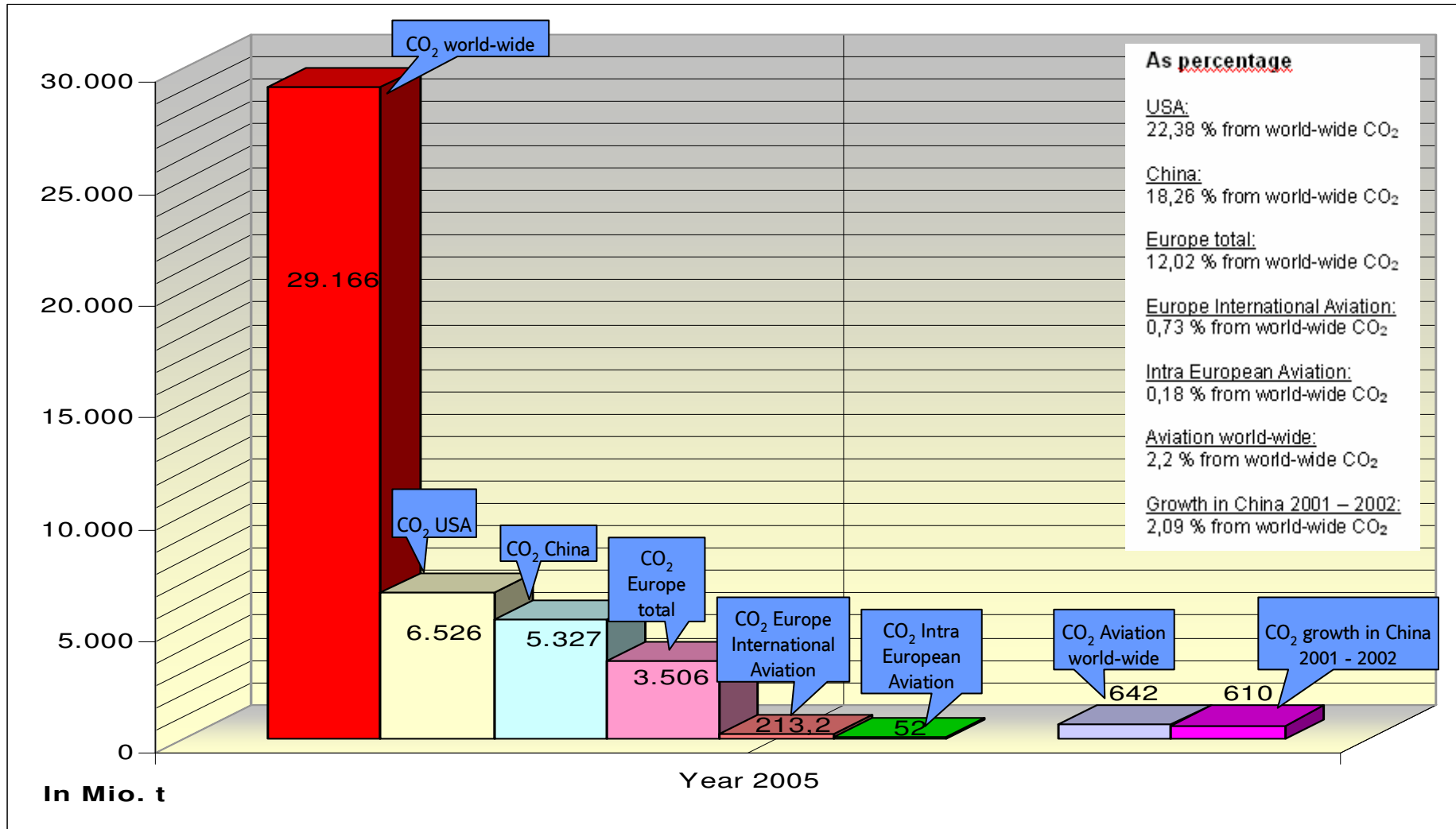
Ken Livingstone, the mayor of London, is on a mission to tackle climate change — and that includes challenging the aviation industry head on, he tells John Vidal

Luftverkehr bald "Klimakiller Nr. 1"

Worldwide CO₂ vs aviation CO₂



CO₂ Aviation Emissions World-wide vs. Europe



* = All flights starting and landing from EU

EU Commission's ETS proposal



Proposal of the European Parliament TUIfly.com

- Combination of Fuel Tax + VAT + environment charges + ETS
- No growth above a base year. Aviation should face a “rigorous” cap
- Initial allocation amount to be fixed at EU level
- Full auctioning of initial allocation
- A separate dedicated (closed) scheme for aviation
- Multiplier

Overview: EU ETS proposal



Aviation emissions will be capped for the whole aviation sector on the basis of the average yearly aviation emissions in the years 2004 to 2006.

Starting with 2011 a fixed percentage of the total quantity of allowances will be allocated free of charge on a basis of a benchmark

Thereafter: percentage will be reviewed in the context of the revision of the existing EU ETS

The remainder of the allowances will be auctioned. A future Commission's Regulation will be issued to set timing and design thereto. Auctioning proceeds should be used to mitigate climate change impacts and to cover administrative costs of ETS.

Freely allocated allowances to the aviation sector will be distributed by benchmarking on the basis of the efficiency factor CO₂/RPK

Example :
$$\frac{\text{RPK (No of Pax x flight distance)} \times \text{total distributed CO}_2}{\text{total RPKs}}$$

The more efficient the more free allowances

Commission proposes two different phases



Two phases :

- 01. JAN 2011: all flights between EU airports
 - 01. JAN 2012: all flights arriving or departing from an EU airport
- ☞ Note: the proposed act has an EEA relevance (i.e. Iceland, Norway and Liechtenstein). Switzerland is not included in the EEA.

Consequences for 2011



- Flights to Non EU such as Morocco, Egypt, Turkey and up to now Switzerland are not subject to the Scheme in 2011

FRA TFS 3237 km

FRA FAO 1959 km

FRA HER 2116 km

Frankfurt Cyprus 2640 km

Frankfurt - Morocco 2654 km

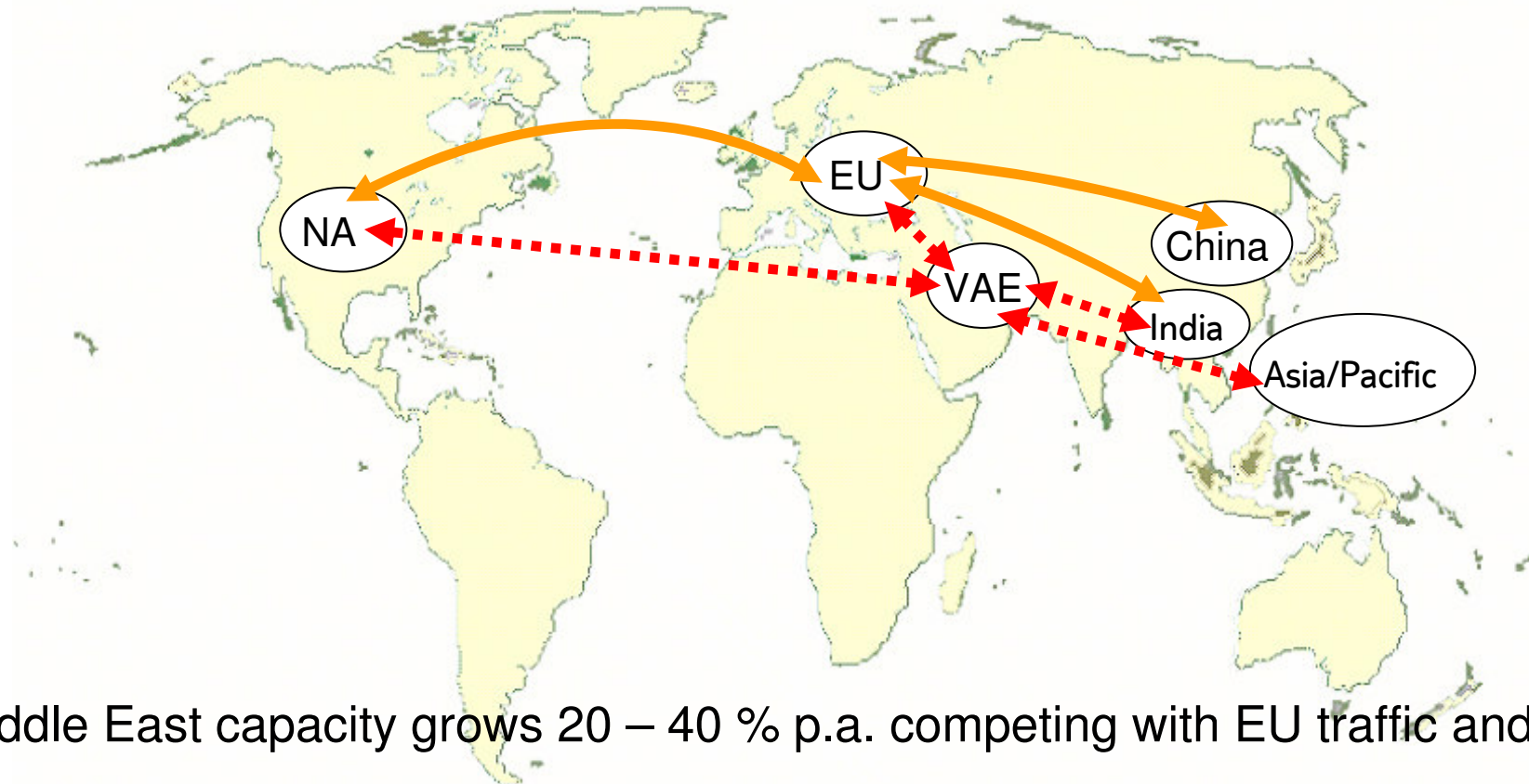
Frankfurt - Tunisia 1470 km

FRA CAI 2923 km

- Flights to Spain, Portugal, Greece needs allowances
- 5th freedom US - cargo flights within the EU would be included in the ETS



Consequences for 2012



Middle East capacity grows 20 – 40 % p.a. competing with EU traffic and jobs

Emirates operates 79 aircraft, 89 orders (45 A380) and 44 options;

Qatar operates 38 aircraft, 22 orders and 27 options;

Etihad operates 11 aircraft; 30 orders and 12 options

New entrants and intention



To ensure access to the market for new aircraft operators, a proportion of allowances will be allocated by auctioning.

- No free allowances are reserved for new entrants!!!!!!
- New entrants have a serious competitive disadvantage
- All incumbent operators do receive free allowances
- Commission will re regulate competition?

Impact on Aviation Sector ?



Impact Assessment conclusion of the DG Environment:

«...Incorporating aviation into the EU-ETS would have only a **marginal effect** on the profitability of the aviation sector... »

Impact Assessment conclusion of a study assigned by the DG Enterprise

«as demand for air travel decreases due to higher cost (and consequently higher ticket prices) demand for related industries also falls.... »

Losses to European aviation and related industries



Losses to European aviation and related industries in m EUR (2008 to 2020)					
	Airlines	OE Build	MRO	Tourism	Total
VAT (15%)	-218,203	-25,688	-21,822	-196,343	-462,057
Departure tax (5 EUR)	-33,056	-4,138	-3,516	-31,635	-72,345
Fuel tax (100%)	-72,868	-1,488	-9,405	-44,570	-128,331
Emissions charge (100%)	-55,645	2,296	-5,396	-34,980	-93,724
ETS 1 (Base, 20)	-9,236	-2,099	-2,863	-11,968	-26,165
ETS 2 (Base, 40)	-15,559	-6,500	-7,189	-24,057	-53,305

Source: PwC

The Basic Assumptions used in the EC Impact Assessment do not reflect Market Realities



- Cost of allowances needed for traffic growth will be over Euro 45 bill. in the period to 2022.
- Demand will be reduced as a result of the changes in the price of air travel caused by airlines passing on a part of the costs of allowances into ticket prices.
- The introduction of the EU ETS will result in a reduction in consumer choice in terms of the range and frequency of air services.
- regions and regional airports would be particularly affected.
- The introduction of the EU ETS will also result in a loss of consumer surplus of between Euro 55.9 mill. and Euro 123.7 mill. in 2011 growing to between Euro 426.2 mill. and Euro 2.18 bill. in 2022.

Aviation enables globalization



The EU as the most dynamic and competitive economy without civil aviation?



The Lisbon strategy to make the EU "the most dynamic and competitive knowledge-based economy in the world capable of sustainable economic growth with more and better jobs and greater social cohesion, and respect for the environment by 2010" was adopted by the European Council in 2000 and re-launched in 2005.

... In order to compete with the dynamic economies of Asia and North- America and to attract foreign direct investments global accessibility is crucial. This function is particular by the European airport sector and the aviation industry....

(EU Kom- Working document "Airport capacity, efficiency and safety in Europe, Introduction, page 1)

Civil aviation is an indispensable element to reach this aim



Demand for Aviation is growing within the EU 27

Growth in aviation is important for EU integration with the 12 new member states where the economic level is well behind those of the EU 15

Air transport will play an important role to catch up with the EU 15

Improved Air Transport Links will help create a more mobile labor and good market between the EU 15 and the new member states

To compete with the dynamic economies of Asia and North America - avoiding distortion in competition

Civil aviation in Europe is an important and not negligible economic factor



- 4,1 Mio. Jobs in Europe by civil aviation (ATAG)
- 1,51 Mio. direct jobs (airlines; airports; ATM, civil aviation authorities etc.)
- 1,82 Mio. indirect jobs: Suppliers; Manufacturers; Call Center, Lawyers, GDS,
- 0,83 Mio. induced jobs: Tourism, Commerce, Service providers for direct and indirect job holders

Civil aviation generates over 250 billion € GDP or 8 % of the European GDP (AEA)

Including the catalyst effects airline industry creates 7,5 million jobs or € 1041 billion

CEO of easyJet: Given that aviation CO₂ only accounts for 1.6 % of global greenhouse gas emissions, grounding every aircraft in the world would have a minuscule impact on climate change yet a vast impact on our economies

United Nations World Tourism Organization: Increase Tourism to Fight Poverty



- 2007 should be a critical year to consolidate tourism as a key agent in the fight against poverty
- In acting within the Doha Development Round of the World Trade Organization, to increase tourism commitments and provide specific tools to help poor countries use tourism services to fight poverty and promote sustainable development.
- In acting on Climate Change, to build a pro development element into tourism and climate strategies, particularly for airline flights, taxation and emission trading.
- For International Development Agencies – the World Bank Group, the Regional Development Banks and National Aid Agencies, to place Tourism amongst their key priorities for infrastructure and entrepreneurial support.
- Global tourism represents 3,8 % of the global GDP and employs 72 million persons.

Civil Aviation for sustainable development in developing countries



- Nature based eco tourism becomes a significant source of revenues and employments whilst helping to ensure the conservation of protected areas
- Air transport makes a significant contribution to sustainable development in Africa where 15 % of the total protected area worldwide is.
- Tourism has driven the expansion of the domestic economy and employment. E.g. Mauritius, Morocco, Tunisia, Egypt, Ghana Tanzania, Ghana and Senegal.
- Not surprisingly, these countries are also among the fastest growing African economies.
- There is a proven connection between tourism, investment and standard of living. The African non oil economies with the fastest growth in investment and the highest GDP per capita tend to be those with the largest share of tourism in GDP. Costa Rica has promoted eco tourism as a way of reversing a growing process of deforestation. 72 % of passengers (25 % of the population) arrived by air.

Source: ATAG

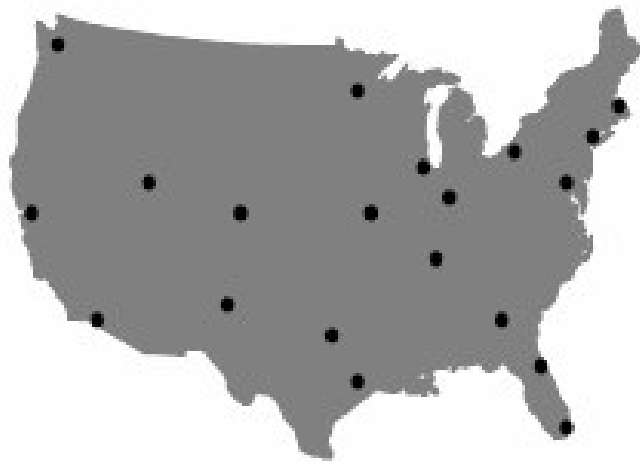
Single European Sky: an alternative to ETS



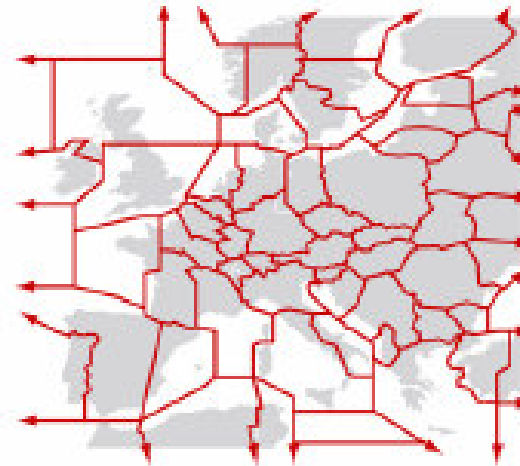
Single European Sky would save up to
10 Mio. tons of CO₂



U.S. airspace 9,8 Mio km²
Hubs 31



EU: airspace 10,5 Mio km²
Hubs 27



1 ATC Organisation
21 En route center
1 operating system
1 program language
900 flights/controller
380 US\$ ATC cost/ flight

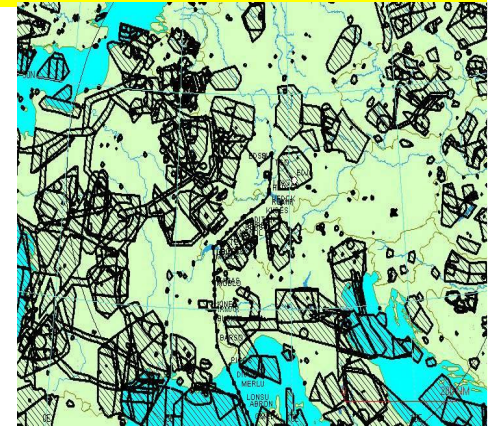
47 ATC Organisation
58 en route center
22 operating system
30 program languages
480 flights/ controller
667 US\$ ATC cost / flight

Source: DFS

Current set-up of the European ATM generates unnecessary costs to users



Fragmentation of air traffic management (2005):	€ 1.4 billion
Flight inefficiencies in (2005):	€ 1.4 billion
En-route ATM delays (2005):	€ 1 billion

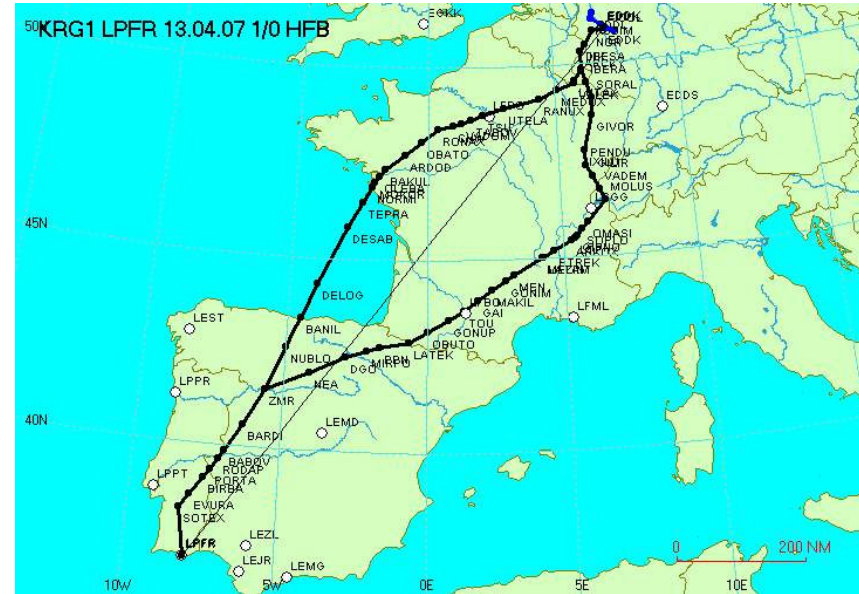
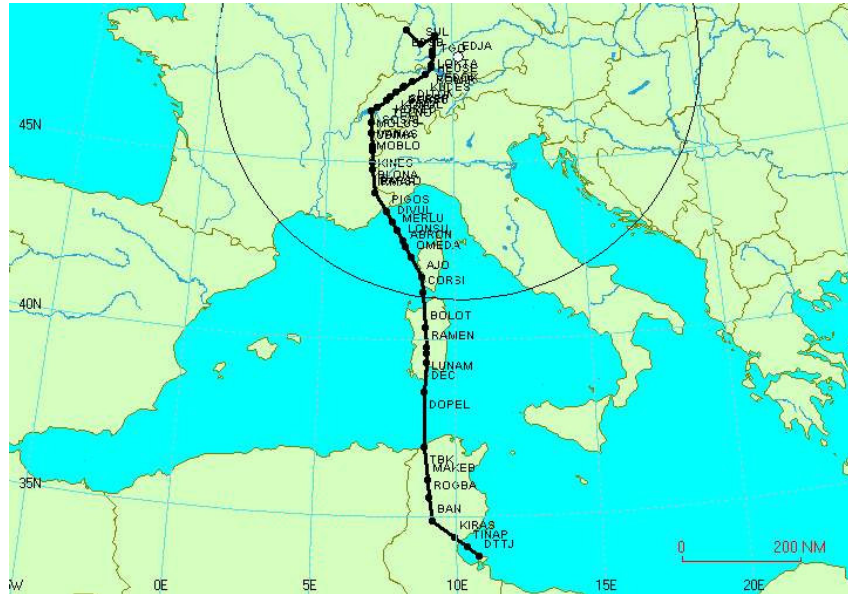


The € 3.8 billion is more than half of what users paid for European ATC in 2005 Unit costs nearly two times higher than in the USA

The [UN] Intergovernmental Panel on Climate Change estimates that there is a 12 % inefficiency in global air traffic management. That means up to 73 million tons of wasted CO₂ emissions and nearly \$ 13.5 billion in wasted costs

Source: ELFAA

Unnecessary fuel burn and CO₂



Route: Djerba- Karlsruhe
Distance: 1255 km
Great Circle: 1054
Differenz: 201 km = 15 min
Additional Fuel: 15 X 50 l X 0,60 €
Sum: 450 €

Faro Köln
DIST 1093
GC 902
Differenz 191

UK Airport passenger duty for saving the environment



Airport passenger duty



British Parliament introduced by February 1st, the new airport passenger duty

- Economy class flights in Europe, including internal UK flights: £10 (€ 15,00)
- Business and first class flights in Europe: £20 (€ 30,00)
- Economy class long-haul flights: £40 (€ 60,00)
- Business and first class long-haul flights: £80 (€ 120,00)

Meaning an extra billion revenues (1,5 billion €)

On the other side, what is cost for:

Long-term UK GDP will suffer by 400 million pounds



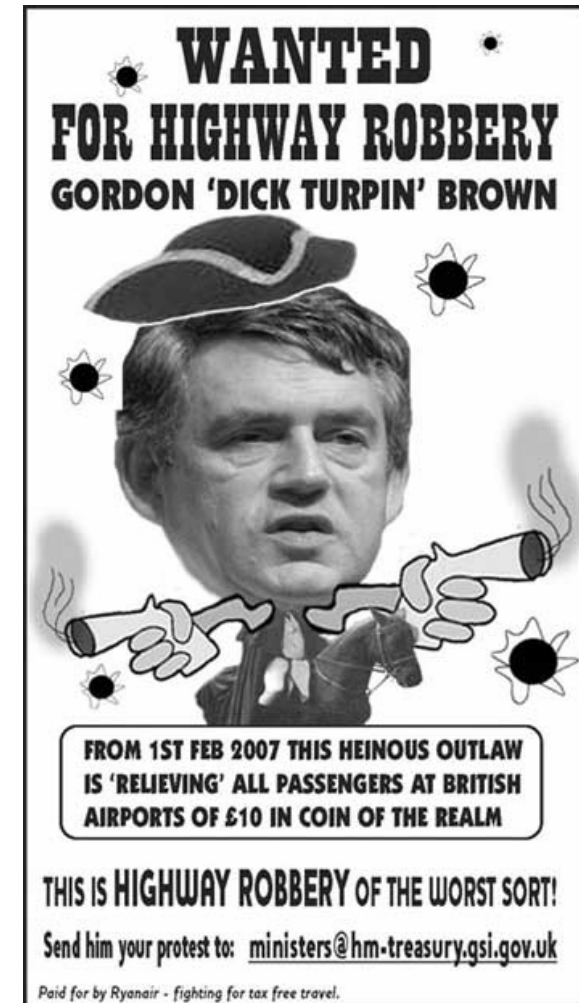
Another consideration of Airport passenger duty



- The Chancellor estimates through this measure a reduction of greenhouse CO₂ by 750,000 tons
- Intergovernmental Panel on Climate Change (IPCC) estimates that a tonne of CO₂ does £70 of damage to the environment
- Taking into consideration this valuation of 70 pound/ per tonne CO₂ this measure would bring a climate benefit of 53 million. But the UK Government will receive an extra billion £.
- In a UK Briefing Giovanni Bisignani, CEO of IATA said:

„If I may be blunt, Mr. Brown is spending far too much of other people’s money to support his green credentials.”

He also asked him, to which environmental projects will the billion pounds be allocated? No reply



Conclusion



Conclusion



- ✓ Aviation is no luxury but necessity to reach the aim of the Lisbon agenda
- ✓ Aviation is the key element of the future of EU 25
- ✓ EU ETS will not be the solution to climate change
- ✓ A global rather than a regional or national solution is needed
- ✓ Aviation harms the environment less than it helps other EU goals
- ✓ Aviation enables globalisation
- ✓ 8 % GDP or 1 - 2 Mio. jobs at stake
- ✓ Single European Sky has the potential to save more CO₂ than ETS up to 10 Mio. tons or 8 %.
- ✓ Aviation assumes social responsibility towards third world countries



Thank you very much
for your attention!



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