

ECAC/EU Conference – Meeting the Environmental Challenge

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«Aviation and Climate Change– Review of the Common European Approach»

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Agenda

1. Initial Position
2. Strategic Approach
3. Comprehensive European Approach
4. Outlook
5. Conclusions



1. Initial Position (1/3)

Environmental challenge –
the impact of aviation on the environment

local

global

- Local impact \Rightarrow noise and emissions (noise and local air quality standards exceeded at various European airports)
- Global impact \Rightarrow greenhouse gases (contribution of approx 2% of anthropogenic CO₂)



1. Initial Position (2/3)

Political environment

- Strong political/public pressure in Europe to improve environmental situation
- No willingness to expand civil aviation at any cost
- Claim for sustainable development
- Distinct public awareness of Climate Change problems
 - ⇒ measures are required
 - ⇒ unrestricted growth not possible w/o measures

Europe aware of its international responsibility, willing to meet its commitments and to optimise the situation in order to ensure sustainable development of the aviation sector!



1. Initial Position (3/3)

UNFCCC and Kyoto Protocol

- UNFCCC commits all Signatory States (CBDR)
- Kyoto Protocol defines reduction goals (for Annex 1 countries)
- International civil aviation is not subject to specific reduction goals
- International civil aviation is obliged to contribute to process through ICAO
- Europe takes these obligations seriously

Aviation sector to contribute to the reduction of GHG emissions also with regard to post Kyoto process!



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2. Strategic Approach (1/4)

- Climate change is a global problem and therefore needs a global solution
- Basic goals/regulations to be defined through global processes & organisations (UNFCCC; ICAO)
- All GHG-intensive sectors have to make a contribution to an improvement
- Aviation has to be included into the orchestra of contributing sectors in an appropriate way
- Aviation has to be integrated in the post Kyoto process



2. Strategic Approach (2/4)

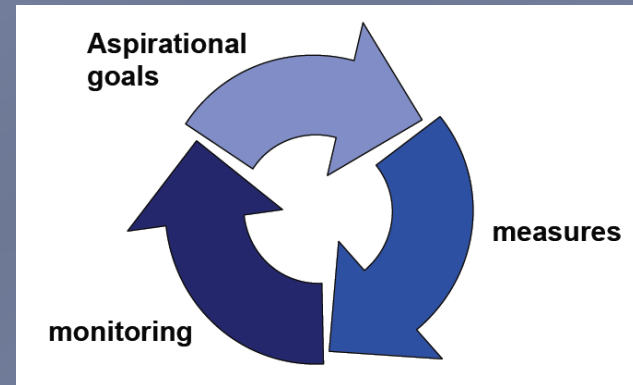
- ICAO is the right global organisation to bring forward contribution of aviation to the solution of the climate change problem
- Urgency of the problem asks for rapid response, also by ICAO
- ICAO has failed to show leadership as regards climate change issues in the past
- Leadership can be established through GIACC process
- Europe is supportive of this process
- Failure of the process would not hinder ECAC Member States from going ahead with their own concept, in order to fulfil their international obligations



2. Strategic Approach (3/4)

Problems must be tackled according to good management principles.

- Clear and meaningful aspirational goals
- Set of measures has to be offered and put into effect
- Effect of the measures taken has to be monitored regularly
- System has to be adjusted and improved according to experiences made and actual developments



2. Strategic Approach (4/4)

- If ICAO does not provide solutions there is risk that sector will be regulated through other processes
- Goals to be designed that they can be included into decisions of UNFCCC COP15
- Focus should be set on goals that are applicable to all ICAO Member States
- Common but differentiated responsibilities to be respected throughout the process taking into account the specificities of international aviation

Global solutions needed within in the ICAO framework to tackle the climate change challenge!



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3. Comprehensive European Approach (1/6)

Global aspirational goals to be set in progressive framework:

- Short-term: Fuel efficiency
- Mid-term: Carbon neutral growth
- Long-term: Emission reductions to embark on a path towards a "zero carbon emission" aviation

No single measure capable of reaching these goals



comprehensive approach is needed



3. Comprehensive European Approach (2/6)

Approach to be founded on 4 pillars:



Goals can only be tackled by the inclusion of economic measures, especially market-based measures



3. Comprehensive European Approach (3/6)

Research and technological development

- European Clean Sky Joint Technology Initiative: public private partnership, total of 1.6 billion € over 7 years; industry, research centres and universities involved (e.g. ‘green aircraft’, ‘green engines’)
- “classic” collaborative research in aeronautics and air transport 1.15 billion € until 2013 with strong emphasis on greening air transport
- National research programmes



3. Comprehensive European Approach (4/6)

Operational achievements

- Guiding principle: minimize fuel consumptions throughout the system, by inter alia
 - **Manufacturers:** guidance and training on optimal operating conditions of their products and maintenance
 - **Airports:** restricted use of APU's through provision of power to act stands, use of alternative fuels for ground vehicles, advanced architectural design to save heating/cooling energy
 - **Operators:** accelerated fleet renewal, improved flight planning, best practice operation
 - **ANSP's:** Optimized flight procedures, Continuous Descent Approaches (CDA), Dynamic Management of European Airspace Network (DMEAN)



3. Comprehensive European Approach (5/6)

Infrastructural improvements

- More efficient air traffic management
 - Better integration of highly fragmented European airspace: Single European Sky SES (e.g. Functional Airspace Block Europe Central -FABEC)
 - Single European Sky ATM Research Programme SESAR; environmental goal: reduction of emissions per flight by 10%; Budget 2'100 Mio €
 - Harmonized regulation in Europe, performance targets – performance monitoring



3. Comprehensive European Approach (6/6)

Economic / Market Based Measures

- Noise and emissions based landing charges
- Support of the creation of global open ETS for aviation within the ICAO framework
- European ETS conceived as a first step towards an international agreement and designed to be adapted to fit a global framework
- European ETS can be integrated into a global system



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4. Outlook

- ICAO to prove leadership
- GIACC process to be successfully continued and concluded according to initial schedule (delivery of results to ICAO Council in June 2009)
- ICAO to offer a clear commitment in relation to a climate change action plan to COP 15 in order to avoid risk of losing position as regulating instance for climate change issues with respect to international civil aviation
- Consequent and continuing focus on the Comprehensive European Approach



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5. Conclusions

- Aviation has to contribute to solving climate change challenge in order to enable sustainable growth
- This is a global issue requiring global solutions under ICAO leadership
- A comprehensive approach to tackling aviation emissions is indispensable – there is no silver bullet solution
- Global ETS for aviation is necessary and has to be implemented through ICAO
- Aviation sector to be fit for the COP 15 challenge

