FLIGHTPATH 2050: EUROPE'S VISION FOR AIR TRANSPORT

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OVERVIEW

- **Context and Background**
- **Aviation Today**
- **Future Challenges and Goals**
- **The 2050 Vision**
- **The Way Forward**

CONTEXT

- **ACARE/ SRA process for 2020 and beyond**
- **Strategy for 2020- 2050?**
- **Fine-tuning of goals and objectives for Research, Technology, Development and Innovation**
- **In line with radical changes in aviation since 2000**

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AVIATION 2000-2011..

- **Market more liberalised**
- **More focus on climate change**
- **Decreasing oil reserves**
- **Threats from terrorism (9/11)**
- **Natural events (volcanos, snow)**
- **Health hazards (Bird and Swine flus etc)**
- **Financial Crisis**
- **Emergence of the LCC's**
- **Capacity crunch**
- **etc….**

AVIATION - HOW WE SEE OURSELVES?

"Aviation brings people together, delivers goods, is safe, seamless, secure, cost effective, adding value through speed, reliability and resilience, in a global network, over any distance, without negative effects on the environment. Aviation also contributes to society in other critical, non-transport public service areas"

THE CHALLENGES

Fierce Industrial competition from both traditional and emerging challengers. To compete Europe has to :

- Address European passengers expectations
- Enhance its industrial competitiveness globally
  - Increase levels of technological development, and speed to market
  - accelerate the pace of policy development
  - Substantial and sustained investments in technologies
- Breakthrough technology is needed:
  - energy
  - management of complexity
  - environmental performance
  - Automation

THE GOALS

GLOBAL LEADERSHIP

- The best products and services
- A competitive industry with strong research and a balanced regulatory framework
- Creating value
- Attracting the best people and talents

SERVING SOCIETY

- Affordable, sustainable, reliable and seamless connectivity
- Supporting EU integration
- Providing non-transport aerial applications
- Ensuring safety and security
- Jobs

THE 2050 VISION: CONTEXT

GLOBAL

- An interconnected, interoperable, global aviation system,

- Global regulatory system with market access, free, fair and open competition

- No airspace congestion or bottlenecks for the predicted 16 Billion passengers

EUROPE

- Aviation connects European regions

- an integral element of interconnected multimodal travel

- Number and quality of services increased

- recognized globally for the innovative concepts

2050 VISION: SCOPE

- **European Air Transport**
- **Meeting society and market needs**
- **Maintaining industrial leadership**
- **Protecting the environment and the energy supply**
- **Ensuring safety and security**
- **Prioritizing research, testing capabilities and education**

THE AIR TRANSPORT VISION

- **Ground infrastructure will comprise: major hubs, secondary airports, vertiports and heliports connected to a multimodal framework**

- **Passenger and freight Infrastructure, services, operators, aircraft, airports, ground-handlers and the military are integrated into global interoperable multi-modal networks provided by a small number of organisations.**

- **Shared information platforms and new IT concepts facilitate planning and decision-making.**

- **Easy access to airports – seamless door-to-door services**

- **Airport design and processes and services are based on new, highly efficient, concepts with disruption resilient operations**

- **UAS's will afford new aviation applications eg. public services, information infrastructure**

THE PASSENGER VISION

The passenger experience is paramount!

- Informed choices

- 4 hrs door-to-door

- Flight ETA to 1 min

- interconnected , and seamless

- ATM system working 25 million flights
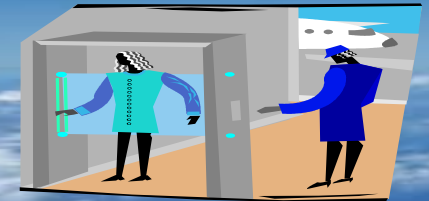
THE VISION (CONT)

- **Maintaining industrial leadership**
  - Europe will have more than 40% of the global market share of aviation products and services
  - Europe will maintain leading edge design
  - Europe will have streamlined systems and processes, with decreased development costs

- **Protecting the environment and the energy supply**
  - Europe will have a 75% reduction in CO_2/pax km, 90% reduction inNO_x emissions, 65% reduction in noise
  - Aircraft movements are emissions-free when taxiing
  - Europe is a centre of excellence on sustainable alternative fuels
  - Europe is at the forefront of atmospheric research

- **Ensuring safety and security**
  - Air transport will have less than one accident per 10 million commercial aircraft flights
  - Weather and hazard risks are properly mitigated
  - Seamless security checks with minimum impact and intrusiveness
  - Aircraft are resilient to security threats, also with a secure data network.

- **Prioritizing research, testing capabilities and education**
  - Research and innovation strategies are coordinated
  - A collaborative network of mulitdisciplinary technology clusters is created
  - Strategic test, simulation and development facilities are identified
  - Students are attracted to careers in aviation

THE WAY FORWARD

- **A research and innovation friendly environment for Europe**

- **Robust governance, funding and financing**

- **Appropriate mechanisms for making inter-modality a reality**

- **A new strategic roadmap (to guide future framework programmes)**

THANK YOU