The Single European Sky policy

The Future of Air Traffic Management
What Can We Learn from Each Other?
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The Single European Sky policy

1 - European context

2 - SES "toolbox"

3 - Looking into the future
Air transport is a key component of the European transport system

Generating benefits well beyond the air transport industry

EUR 110 billion to EU GDP
1.4 million jobs
Growing air traffic requires revolutionary solutions

- **2012**
  - 9.5 million flights*
  - 0.7 billion passengers**

- **2035**
  - 14.4 million flights*
  - 1.4 billion passengers**
An Aviation Strategy for Europe

An ambitious EU external aviation policy
- Negotiating new EU-level aviation agreements
- Providing more connections and better prices for passengers
- Creating investment opportunities for EU companies
- Better manage traffic in crisis situation

Tackling limits to growth
- Achieving the Single European Sky
- Boosting the efficiency of airport services
- Tackling the capacity crunch
- Improving connectivity to stimulate growth

Maintaining high EU standards
- Environment
- Safety
- Passenger rights
- Social dialogue and quality jobs

Innovation and digital technologies
- Deploying SESAR
- Unleashing the potential of the drones’ market
Fragmentation of airspace
Improving performance

- Enable a **3-fold increase** in capacity which will also reduce delays both on the ground and in the air
- Improve safety by **a factor of 10**
- Enable a **10% reduction** in the effects flights have on the environment
- Provide ATM services to the airspace users at a **cost of at least 50% less**

Achieving highly efficient air transport
Seamless & safe mobility of citizens
Reforming European ATM

2 main threads

Institutional
- Reforming ATM organisation & management
- Service provision
- Airspace Regulation
- FAB, FUA

Technological
- PERFORMANCE
  - SAFETY
- Innovation
- Interoperability
- Partnerships
- SESAR

Strong legal framework
Performance Scheme

**Safety**
- Safety management, application of severity classification

**Capacity**
- En route ATFM delay per flight

**Environment**
- Horizontal flight efficiency (actual trajectory, last filed plan)

**Cost efficiency**
- En route Determined unit cost
- TNC (potentially, from 2017)
Functional Airspace Blocks
Network Manager

• Pivotal Role

• Adding Network Value

• Attributing Effect

• Decision-making (what's best for us all)

• Information sharing
1 project = 3 interrelated processes
An active & evolving partnership

2004
Global consortium + Eurocontrol

European ATM Master plan

2007
SESAR Joint Undertaking PPP

SESAR solutions

2014
SESAR Deployment framework Partnership
Deployment Manager

Deployment Programme

Enhancing performance

Leveraging investments

Assembling expertise & resources
SESAR solutions under deployment

Critical network performance deficiencies

1. Extended AMAN & PBN in high density TMAs
2. Airport Integration & Throughput Functionalities
3. Flexible Airspace Management & Free Route
4. Network Collaborative Management

Building future ATM infrastructure

5. Initial (i)SWIM
6. Initial Trajectory Information Sharing
Expected benefits

EUR 4.9 Billion in performance gains
(ex. 5 % delay cost savings)

66% reduction of fuel burn
EUR 0.8 billion (6%) CO₂ credit savings

23% Air navigation services productivity
Organisational aspects

Institutional solutions (FABs, ...)

Industrial partnership (SJU, SDM, ...)

Technological progress

Technology mandates (DLS, SPI, ...)

Synchronised deployment (PCP, DP, ...)

Regulatory aspects

Deregulation (monopoly, ...)

Performance targets (PRB, ...)

Thank you for your attention