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
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
The Single European Sky "toolbox"

Reforming European ATM

2 main threads

Institutional
Reforming ATM organisation & management

PERFORMANCE
SafetY

Technological
Defining, developing & deploying Modern & interoperable ATM systems

Service provision
Airspace Regulation

Partnerships

FAB, FUA

Innovation
Interoperability

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

The Man in the Middle
SESAR: Defining, delivering & deploying ATM solutions

Definition
European ATM Master plan

Development
SESAR solutions

Deployment
Common Projects
Deployment Programme
Implementation projects

1 project = 3 interrelated processes
An active & evolving partnership

2004
Global consortium + Eurocontrol

SESAR solutions

2007
SESAR Joint Undertaking PPP

European ATM Master plan

Leveraging investments

Assembling expertise & resources

2014
SESAR Deployment framework Partnership
Deployment Manager

Deployment Programme

Enhancing performance
**SESAR solutions under deployment**

1. Extended AMAN & PBN in high density TMAs
2. Airport Integration & Throughput Functionalities
3. Flexible Airspace Management & Free Route
4. Network Collaborative Management
5. Initial (i)SWIM
6. Initial Trajectory Information Sharing

Critical network performance deficiencies

Building future ATM infrastructure
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, ...)

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Technological progress

Technology mandates (DLS, SPI,...)

Synchronised deployment (PCP, DP, ...)

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Regulatory aspects

Deregulation (monopoly, ...)

Performance targets (PRB, ...)

Thank you for your attention