The Single European Sky
ATM Research (SESAR) initiative

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Europe facing development challenges

Air Traffic Control is operated like 20 years ago

Basic technologies are obsolete

European airspace cannot be further divided
Research has failed to deliver the necessary modernisation efforts

Technology is not the only challenge: **decision making is also a key issue**

*In Europe, the issue is even more complex due to fragmentation*
An in-depth ATM reform is needed

Rationalise ATM institutional set up:
- Single European Sky
- High Level Group

Reorganise ATM R&D:
- SESAR
- SESAR Joint Undertaking
Single European Sky

ATM Institutional reform

The Single Sky Legislation reforms the organisation of air navigation service provision

- Separation of regulatory activities from service provision (National Supervisory Authorities, Air navigation service providers)
- Organisation of cross-border functional airspace blocks
- Common standards for service provision (certification, Charging schemes)
- Interoperability
- Establishes bodies which manage implementation (SSC, ICB), involving all stakeholders (staff, military,....)
- Implementing powers to the Commission
High Level Group (set up in Nov 2006) is reflecting on the best regulatory framework to support a European performance based ATM for 2020 by:

- the simplification of the current regulatory framework, avoiding duplication of EU and non EU regulations
- the development of EASA into the ultimate EU safety authority (including Airports and ATM)
- the evolution of Eurocontrol in this context (transparency, separation of operative and legislative tasks)

Report will be presented to VP Barrot on 03July and will be a key element in the review of SES
The technological & industrial complement to the Single Sky Legislation

Technological advances developed by SESAR will be implemented through EU law
One programme for Europe
shared by all the players in the air transport sector
Combines resources and efforts – avoiding fragmentation
Addresses environmental issues

One vision to be shared with the world
a solution to European issues
with a global perspective
Open to international partnership
Objectives

- A consistent, focussed and user-driven project.

- Ambitious but realistic objectives for the European ATM infrastructure:
  - Triple capacity
  - Reduce by 50% ATM costs
  - Increase safety by a factor of 10
  - 10% reduction of environmental impact per flight

- A European programme with worldwide reach
3 phases

2004  2008  2013-16  2020 >

**Definition**

Define the different technological steps, programme priorities and operational implementation plans.

**Development**

Develop new equipments, systems or standards, through defined and coherent R&D activities;

**Deployment**

Deploy the new system through a large scale production and implementation of the new ATM infrastructure.
SESAR is currently in the Definition phase

Work is performed by a consortium of over 30 companies and Eurocontrol

- Consortium is led by Aircraft Operators
- Project directorate headed by Airbus
- Assembles wide stakeholders’ expertise
- With international participation

A 60 M€ effort
Co-funded by Eurocontrol and EU
The ATM Master Plan will provide the **schedule** and **work programme** for the development & implementation of new technologies, functions or organisations needed in all regions of Europe.

- It is defined by the principle actors of the air transport sector
- It shall be endorsed by the EU Council

**It will be the European ATM modernisation plan**
Development phase

This phase will develop and validate equipments, systems & standards, which will ensure a convergence towards a fully interoperable ATM system.

This phase will be managed by the SESAR Joint Undertaking.
SESAR Joint Undertaking

Single management entity

Consistency and cost effectiveness
Performance-oriented management
Aircraft operators participation in decision-making
No ATM R&D will be funded outside of SESAR
The SESAR Joint Undertaking

- A body established by EU Council (Feb 27 2007), with extensive executive powers
- In particular, the JU will concentrate all ATM R&D activities and budgets
- EC and Eurocontrol are founding members, and will have their R&D activities performed through the JU
- The JU will be the EU counterpart of US JPDO+ research agencies (FAA and NASA)
International cooperation in SESAR

- JU Membership is open to public & private entities from Non EU Countries which have concluded at least one agreement with the European Community in the field of air transport.

- EC and FAA signed a Memorandum of Understanding organising coordination of SESAR and NEXTGEN.

- Standardisation through ad hoc bodies (CEN/CENELEC/ETSI, EUROCAE, …)

- EASA will become increasingly involved.

- Coordination at ICAO level.
Conclusions

- The EU landscape in ATM and ATM R&D is changing dramatically
- For cooperation with the US, and also within EU, everything is facilitated:
  - One single entry point
  - One source of information/calls for tenders-proposals
  - One single face for coordination
Contacts in the European Commission

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