



Single European Sky II

A European commitment to innovation

IRIS INFORMATION EVENT

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for Mobility
and Transport



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Aviation at European level

- Very high level of integration
- Excellent cooperation
- True European dimension
- Aviation Transport sector stronger and more dynamic
- Single European Sky II package raises new challenges





Today's situation in Europe

- Highly fragmented airspace
- Unoptimized route network
- Ageing technologies
- Significant environmental impact
- High ATM cost
- High level of safety
- Economic downturn

10 millions controlled
Flights in 2009

Fragmentation:
+ 2 billions EUR / year

Delays:
+ 800 millions EUR / year

CO₂ emissions:
Up to 4.8 millions tons/year

Airlines losses worldwide
In 2009: 8 billions EUR



Single European Sky I

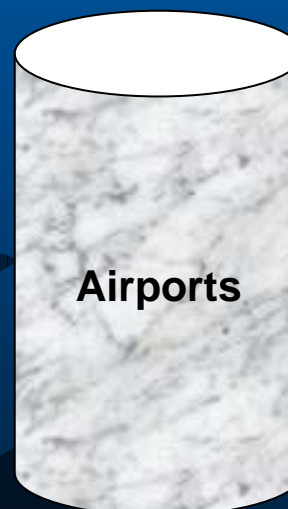
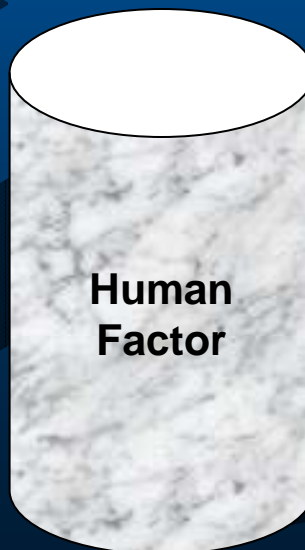
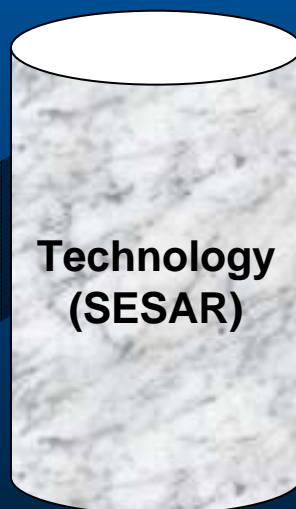
The foundations for EU action

- ➔ **Creation of a legal & institutional framework at EU & national level**
- ➔ **Civil-military cooperation**
- ➔ **Interoperability of ATM**
- ➔ **Launch of infrastructure programme**



Single European Sky II

5 essential pillars





Performance pillar (1/3)

«Implementing a new regulatory framework which covers the Performance scheme, the Functional Airspace Blocks and the network management function ... including crisis management»



Performance pillar (2/3)

→ 3 key measures:

→ **Performance based regulation**

- Application of performance targets on States (safety, environment/flight efficiency, cost-efficiency, capacity)
- Key role for the National Safety Agencies (NSA)
- First reference period starting 2012
- *Designation of a Performance Review Body (PRB)*

→ **Network management**

- Management of scarce resources: Route design; Transponder code allocation and co-ordination; Aeronautical frequency allocation and co-ordination
- Air traffic flow management
- More: deployments, crisis management...
- *Designation of a Network Manager*

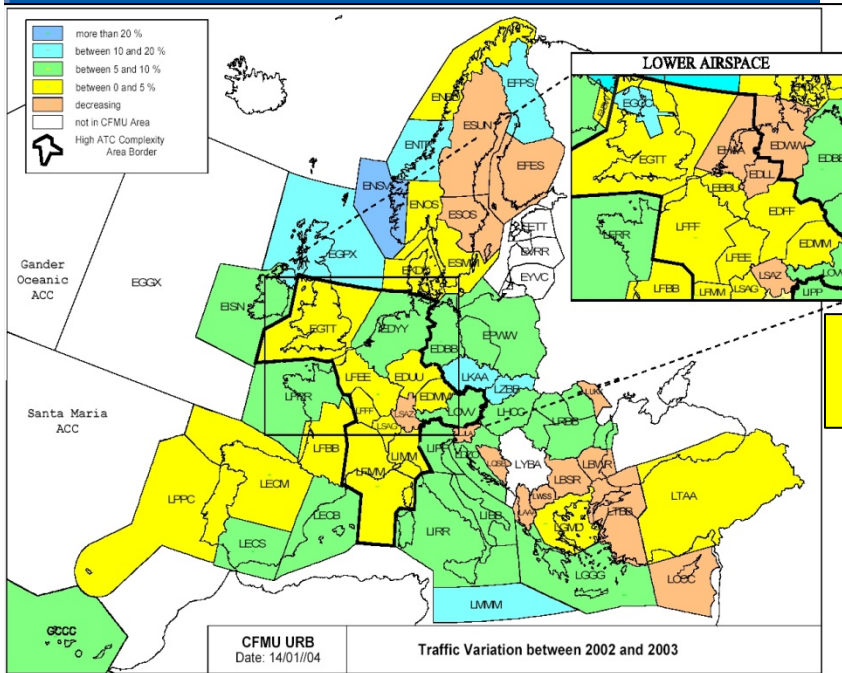
→ **Functional Airspace Blocks (FABs)**

- Organise airspace no longer according to National borders but to main traffic flows
- *Designation of a FAB coordinator*

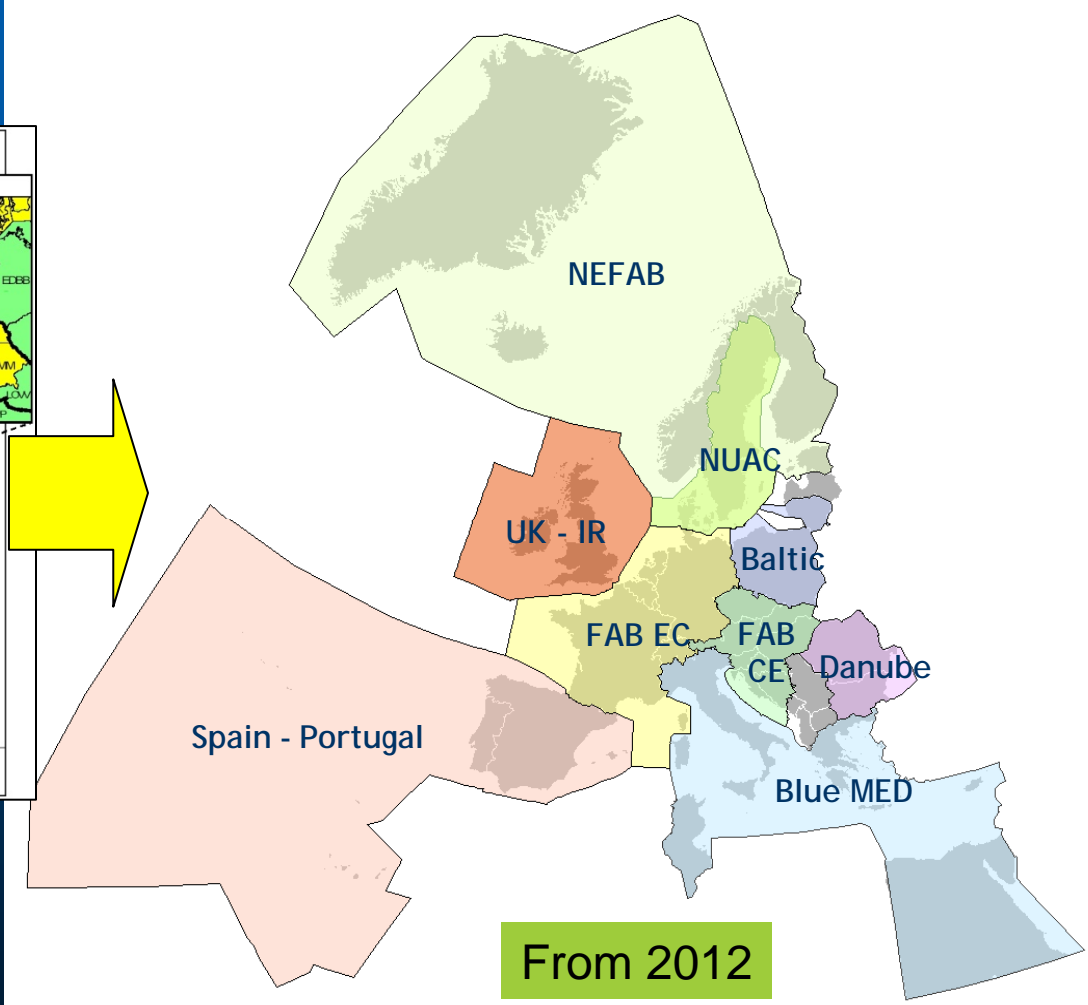


Performance pillar (3/3)

Reducing the fragmentation



Today



From 2012



Safety pillar

«Achieving the highest safety standards through a total system approach in safety matters with the extension of EASA competences to ATM and airports»



Airport pillar

«Integrating the infrastructure in a gate-to-gate approach where airports are entry and exit points to the network»



Human factor pillar

«acknowledging the human factor as the overriding enabler of change»



Technological pillar

«building the most advanced ATM technology in Europe through SESAR and the European ATM Master Plan»



SESAR

- ➔ The technological arm of SES
- ➔ Developing, validating and deploying a European ATM system able to support:
 - ➔ increase in traffic;
 - ➔ improving safety by a factor of 10;
 - ➔ reducing CO2 emission;
 - ➔ cutting down ATM cost by 50%.
- ➔ The first real ATM Public-Private Partnership in Europe



SATCOM in the SES framework (1/3)

- ➔ Through the SES framework, increasing levels of performance will have to be met
- ➔ SESAR operational concept supports the achievement of SES objectives, including more demanding levels of performance
- ➔ SESAR development phase is defining an architecture able to support SESAR operational concept, developing and validating associated new technologies



SATCOM in the SES framework (2/3)

- SATCOM is acknowledged as a key element of the SESAR architecture;
- IRIS is considered as a potential contribution to the SESAR architecture;
- Technical coordination between SESAR JU and ESA is taking place with the objective to synchronise key decision points and confirm/reject IRIS as the SATCOM element of the SESAR architecture, presumably before end 2011 to match ESA's deadline in 2012.
- If confirmed as the SATCOM element of the SESAR architecture, IRIS deployment would take place as part of SESAR deployment phase



SATCOM in the SES framework (3/3)

- SES service provision regulation
(Reg. No 550/2004 amended by Reg. No 1070/2009)
 - SATCOM service provider certification (art. 7)
 - Relation between SATCOM service provider and ANSPs (art. 10)

- SES interoperability regulation
(Reg. No 552/2004 amended by Reg. No 1070/2009)
 - SATCOM system verification (art. 6)

- Safety oversight by EASA
(Regulation (EC) No 1108/2009 amending Regulation (EC) No 216/2008 in the field of aerodromes, air traffic management and air navigation services and repealing Directive 2006/23/EC)



International dimension

- ✈ In the field of ATM, international cooperation is fundamental as worldwide interoperability is absolutely required by airspace users
- ✈ Interoperability between SESAR and NextGen is a must. Cooperation with the FAA is also critical to ensure and drive the emergence of a single global standard for ATM through a coordinated EU-US support to ICAO
- ✈ The Commission and the SESAR Joint Undertaking are also developing promising contacts with other Third Countries such as Brazil, China, Canada and India



Conclusions

- ✈️ Achieving the Single European Sky is the most challenging objective for European Aviation over the coming years: it's time for action!
- ✈️ The Commission has the institutional responsibility to drive the implementation process. Our objective: a seamless, safe, performing & sustainable single sky for Europe by 2012
- ✈️ SESAR will bring a key contribution, developing the new generation ATM system
- ✈️ We need to move towards implementation of SES without delay: "Contribute and make SES and SESAR another European success story"