SESAR
The EU programme for ATM modernisation
Europe facing development challenges

Air Traffic in Europe will more than double within the next 20 years
ATM reform is needed

• Air Traffic Control is operated like 20 years ago
• Airspace cannot be divided further
• Basic technologies are obsolete

Traffic growth in Europe cannot be sustained without a substantial technological step.
Institutional reforms: a Single European Sky

The Single Sky legislation, adopted in March 2004, reforms in depth the organisation of air navigation services provision:

- Implementation of National Supervisory Authorities and separation regulator/provider
- Organisation of cross-border functional airspace blocks
- Interoperability

And confers on the Community extensive implementing powers, in accordance with the « comitology » principles.
SESAR: ATM technological reform

The technological/ industrial complement to the Single Sky legislation

• **One programme for Europe**, shared and committed to by all actors (industry, users and providers, military, staff,…)

• **One vision to be shared with the world**
Examples of key SESAR technologies

• High capacity digital and voice telecommunications between ground and air.
• Secured system-wide telecommunication network
• Automated decision support tools for air traffic controllers
• Aircraft-based air traffic management in low density areas
• Active satellite navigation (GALILEO) for all flight phases (take-off/cruise/landing)
• Wake turbulence detection systems
SESAR objectives

• A consistent, focussed and users-driven project.
• Ambitious but realistic objectives for the European ATM infrastructure:
  – Triple capacity
  – Half cost
  – Environmental impact per flight -10%
  – Factor 10 in terms of safety
• A European project which needs to be synchronised with other international initiatives
Three phases:

- **Definition phase (2005-2007)**, delivering the European ATM Master Plan.
- **Development phase (2007-2013)**: develop the new systems
- **Implementation phase (2014-)**, deploy the new technologies
The SESAR definition phase

A consortium of 32 companies will perform the work:

– Led by Aircraft Operators
– Project directorate headed by Airbus
– Assembling wide stakeholders expertise
– With Eurocontrol contribution

60 M€, co-funded by EC and Eurocontrol
200 persons full time for 2 years
Organise and coordinate development activities, following the ATM Master Plan
• Ensure the necessary funding for SESAR
• Monitor the execution of the ATM Master Plan
• Ensure the involvement of all stakeholders
• Organise technical work of R&D, validation and studies
Conclusion

• SESAR is conceived as an open programme:
  – Public-private partnership
  – International participation

• SESAR will be coordinated with other regional initiatives through ICAO

• SESAR : a solution to European issues, with a global perspective

• Start discussions on possible international partnership