



Round Table
Potential of OSS in ATM

jointly organized by

CALIBRE

and

EUROCONTROL

7th Dec 2005



Quick Presentation of EUROCONTROL

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Eurocontrol





From ATC to ATM

- ◆ ATC is one part of Air Traffic Management
- ◆ **ATM = ATC + ATFM + ASM**
 - ATC = Air Traffic Control
 - ATFM = Air Traffic Flow Management
 - ASM = Air Space Management
- ◆ From real time to planning and optimizing



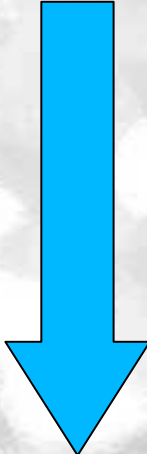


ATM is based on CNS

(Operations are based on infrastructure)

- ◆ **C**ommunication (voice + data links)
- ◆ **N**avigation (beacons, ILS / GPS, Galileo)
- ◆ **S**urveillance (active + passive)

EUROCONTROL: history of conventions

Main	reason	goal	result	Member States
1960	Jet flights	<u>ATC</u> Air traffic Control	Maastricht UAC	6  35 today
1981	Delays	<u>ATFM</u> Air Traffic Flow Management	CFMU Central Flow Management Unit	
1997	Rise in traffic	<u>ASM</u> Air Space Management	RVSM Reduced Vertical Separation Minimum	

Eurocontrol

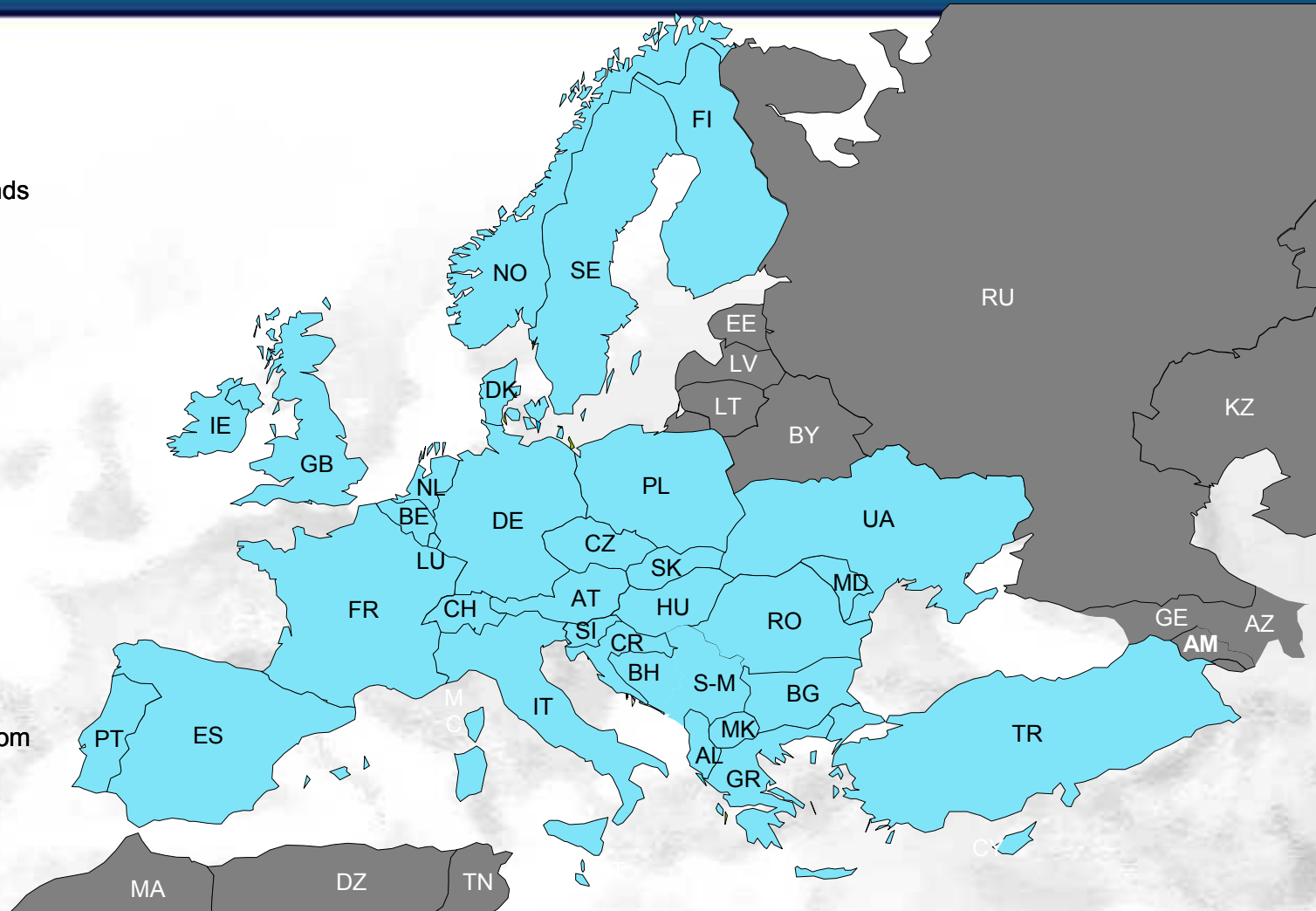


- ◆ 35 Member States
 - = 25 EU Member States
 - 3 (Latvia, Lithuania, Estonia)
 - + 13
- ◆ Institutional cooperation: EU, ESA, FAA, NASA, ...
(civil+military, industries, R&D)



CALIBRE+Eurocontrol, Round Table « OSS in ATM », 7th Dec 05

1. **Albania**
2. Austria
3. Belgium
4. **Bosnia and Herzegovina**
5. **Bulgaria**
6. **Croatia**
7. Cyprus
8. Czech Republic
9. Denmark
10. Finland
11. France
12. Germany
13. Greece
14. Hungary
15. Ireland
16. Italy
17. Luxembourg
18. **FYROM**
19. Malta
20. **Moldova**
21. **Monaco**
22. the Netherlands
23. **Norway**
24. Poland
25. Portugal
26. **Romania**
27. **Serbia-Montenegro**
28. Slovakia
29. Slovenia
30. Spain
31. Sweden
32. **Switzerland**
33. **Turkey**
34. **Ukraine**
35. United Kingdom



 35 Member States



Main goals:

- **Safety**=mission
- Capacity
- Efficiency
- Security
- Environment

E U R O C O N T R O L

Main activities:

- Pan European programmes
- **R&D**
- Training
- ATC for 4+8 States
- CFMU
- Route charges
(5.6€ billion in 2003)



2 critical events for ATM

◆ 11th Sept 2001

◆ **SECURITY**



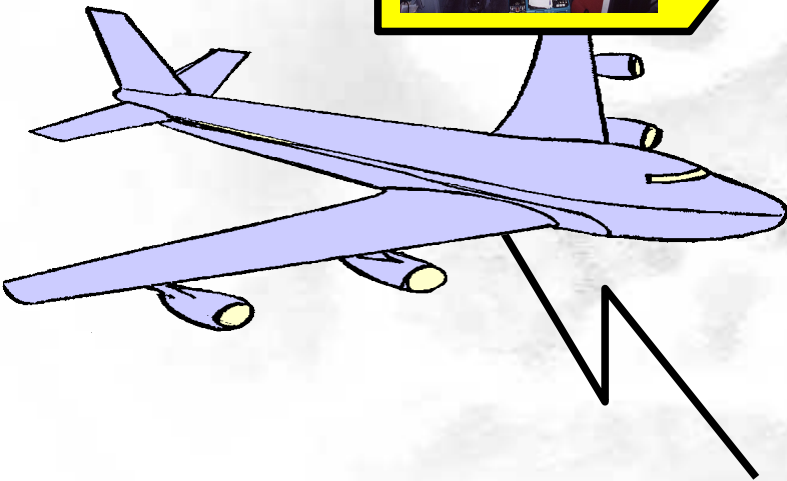
◆ 1st July 2002

◆ **SAFETY**



Ground:ATC vs. Avionics:TCAS

TCAS



ATC

