

# Civil/Military ATM Cooperation and Flexible Use of Airspace Webinar

Online  
20<sup>th</sup>-21<sup>st</sup> Nov 2024

This event is jointly organised with



# Civil-Military Cooperation



*The efficient organization and safe management of  
the European airspace  
for both civil and military airspace users  
through partnership at political operational and  
technical level*

# Civil-Military Cooperation

## Collaboration – Cooperation – Coordination

Collaboration	Cooperation	Coordination
Long-term (5 to 20 years) Envisioning, planning and development of future global aviation systems and operations	Developing mutually agreeable optimized solutions to strategic and pre-tactical issues and challenges in the nearer time horizon	Real-time exchanges of information and joint tactical decisions at the operational level

# Airspace is a common Resource

## Civil-Military ATM Coordination is based on the fundamental Principles that Airspace

- Should not be divided in civil or military ownership
- It should be seen as a common, but limited resource in which civil and military needs must be accommodated

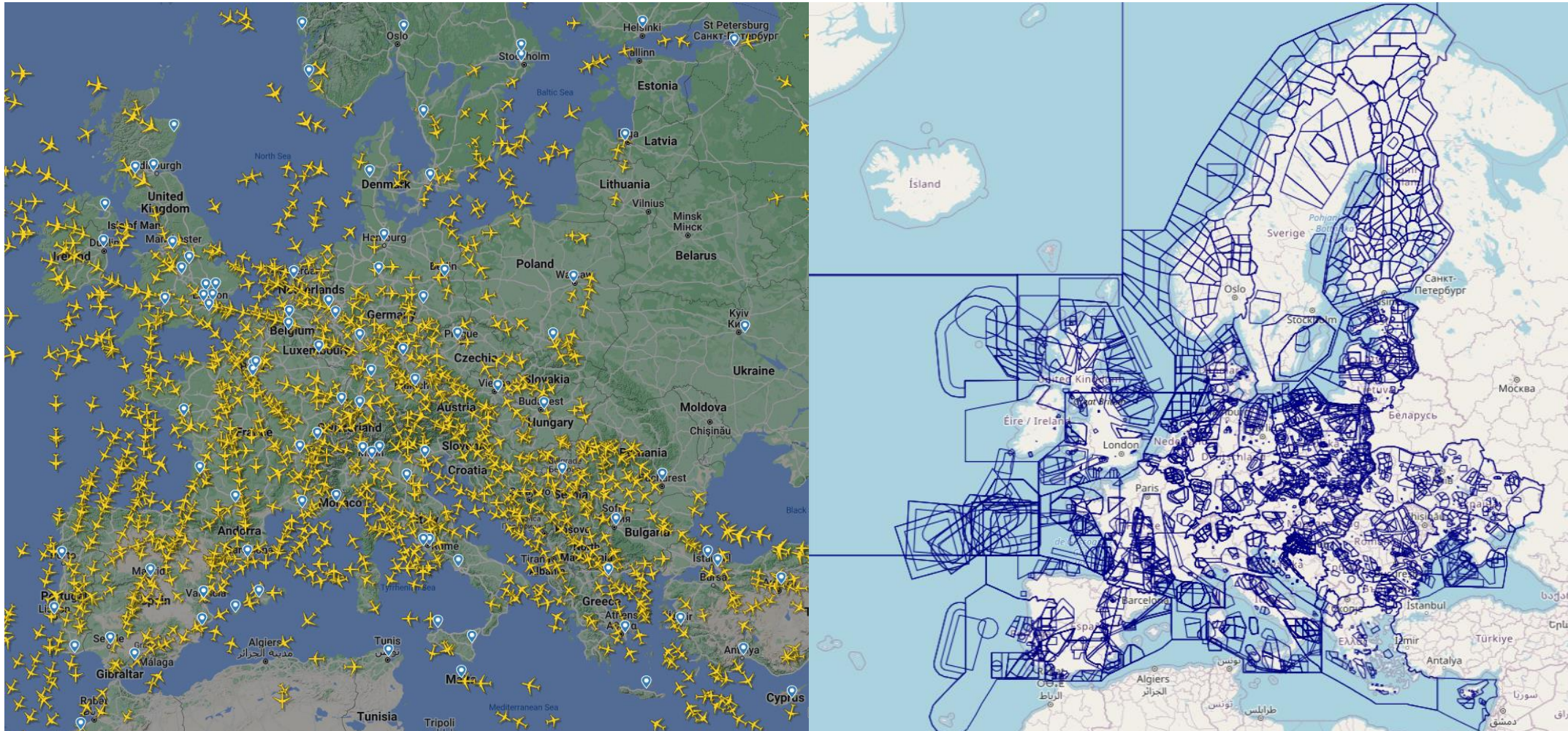
## In other words, it requires

- **Balanced Consideration between economic needs and Security & Defence Requirements**



# The need for Civil-Military cooperation

37% of European airspace is segregated, at the same time ~33.000 flights a day have to be safely accommodated...



# The Need for civil-military ATM Coordination

## Who are 'the Military'?

### *Roles and Responsibilities in European ATM*



- Governmental Regulator
- Service Provider ATS/ATM
- Military Aircraft Operator
- Airspace User
- National Air Defence Organisation
- Military Certification Agency



# Military Requirements for the Use of Airspace

Appropriate technical/operational means must enable the military to execute all required aerial missions e.g.:

Growing 5th generation fighter fleet (Growing F-35  
in around 10 years in Europe)

RPAS development /deployment

iOAT (improved Operational Air Traffic) Flight Plan

Adapting civil-military coordination procedures to  
the New Normal between NATO, EU,  
EUROCONTROL and States

A CNS infrastructure, capable of supporting all  
military needs (dual-use capabilities)



# Expected benefits

## Military

- Adequate volumes for the missions
- Possibility to have airspace in proximity of the air bases or ground installations
- Flexibility of planning and timing
- Quality of ATC service
- Most efficient use of airborne time

= Ensure mission effectiveness

## Civil

- Highest level of safety
- Maximum route availability
- Most direct routes
- Least fuel consumption possible (CO<sub>2</sub>)
- Stability of the planning and predictability
- Quality of ATC service

= Ensure Flight efficiency

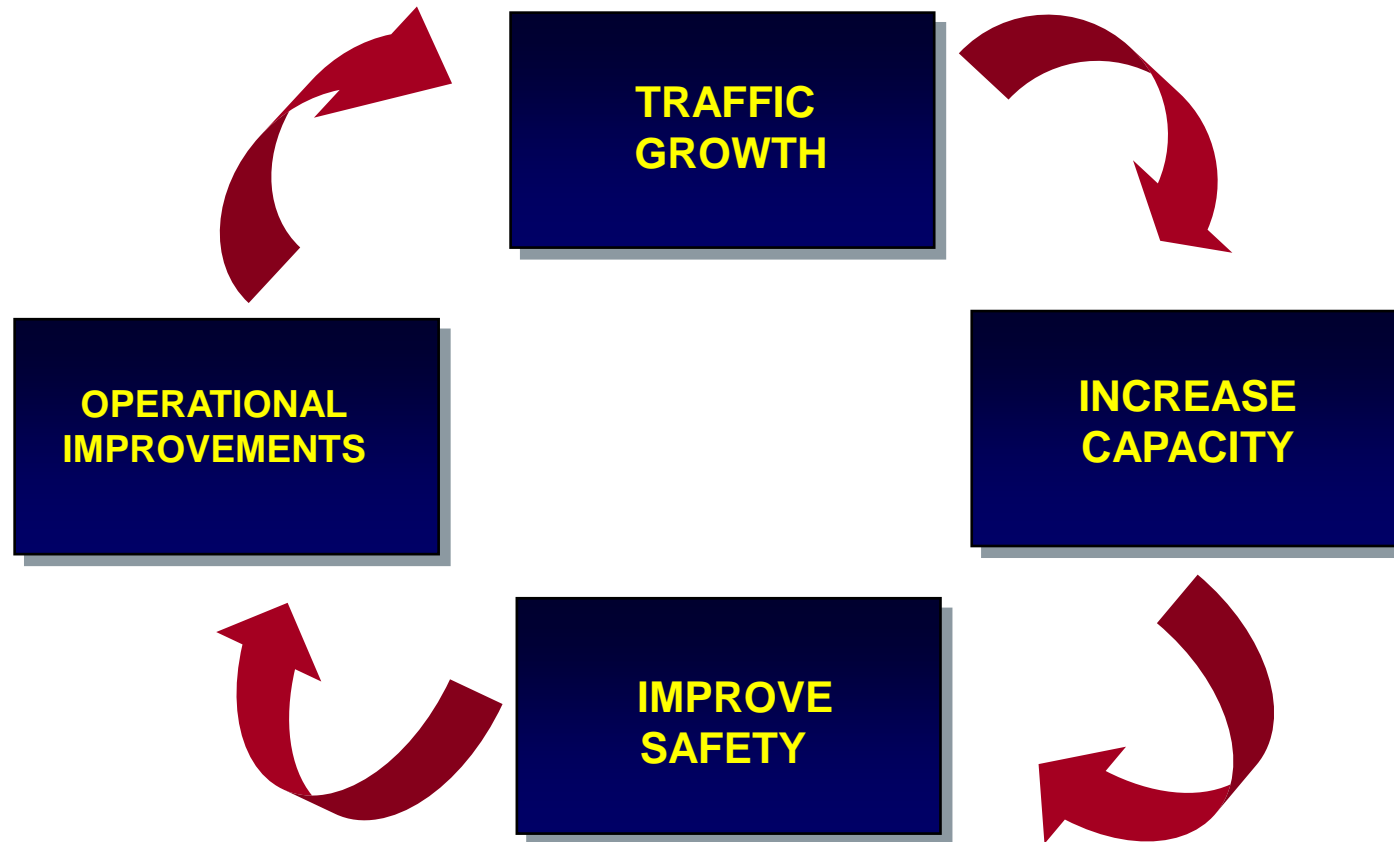


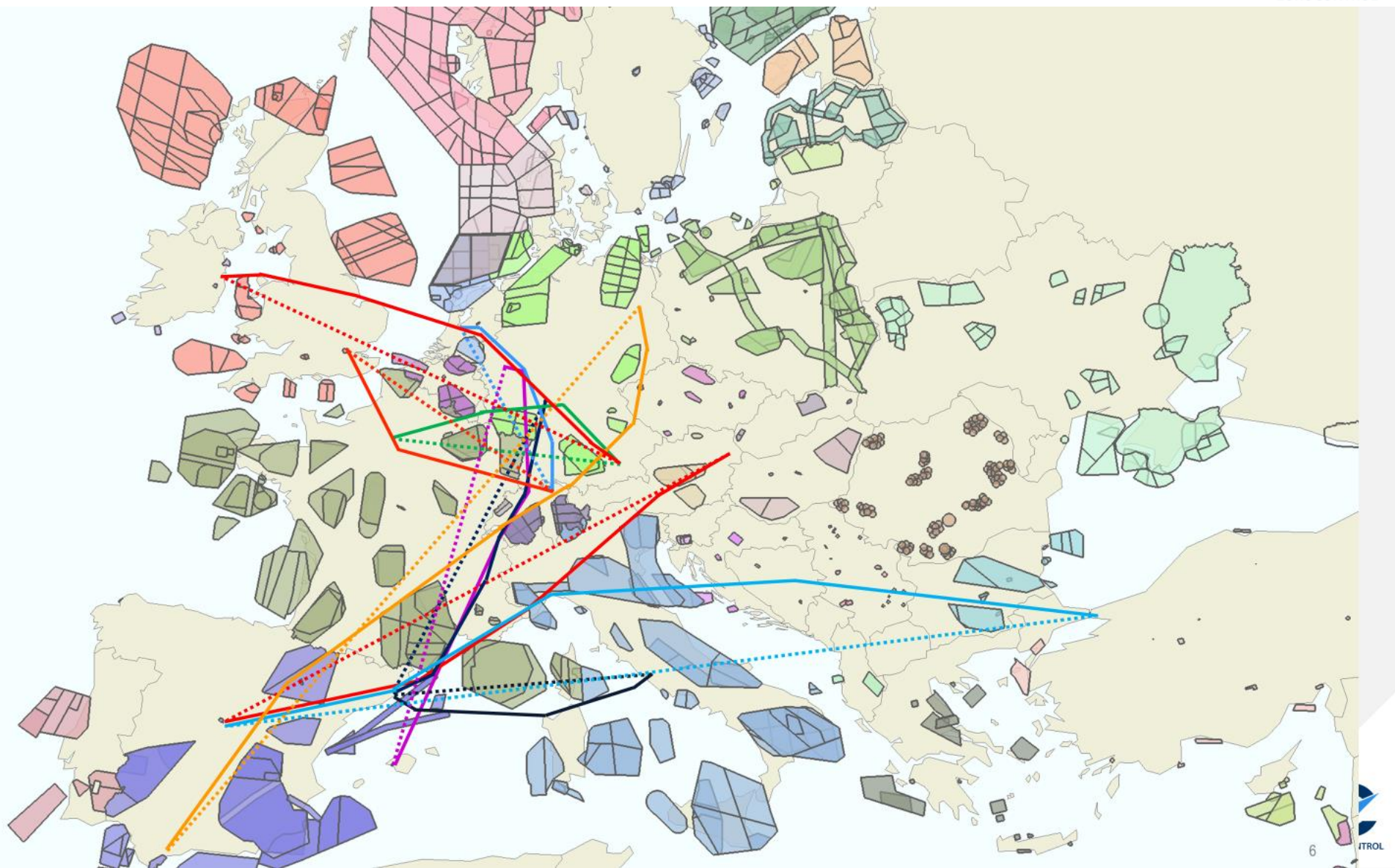
## DEFRAGMENTATION





# Operational Improvements





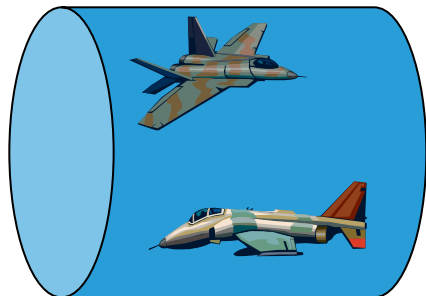
## *European Organisation for the Safety of Air Navigation: EUROCONTROL*

### *EUROCONTROL Revised Convention Art. 1*

To harmonise and integrate Air Navigation Services in Europe, aiming at the creation of a *uniform* Air Traffic Management System for *civil and military* users, in order to achieve the *safe, orderly, expeditious and economic* flow of traffic throughout Europe.

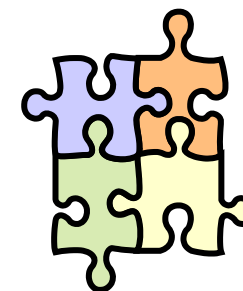


# What is the key to a successful CIVIL/MILITARY COORDINATION?



✈ ***Flexible Use of Airspace  
Levels 1,2, and 3***

✈ ***Interoperability of Systems***



✈ ***Collaborative Decision-making***



# Flexible Use of Airspace - Community Specification on the FUA

## FUA Regulation

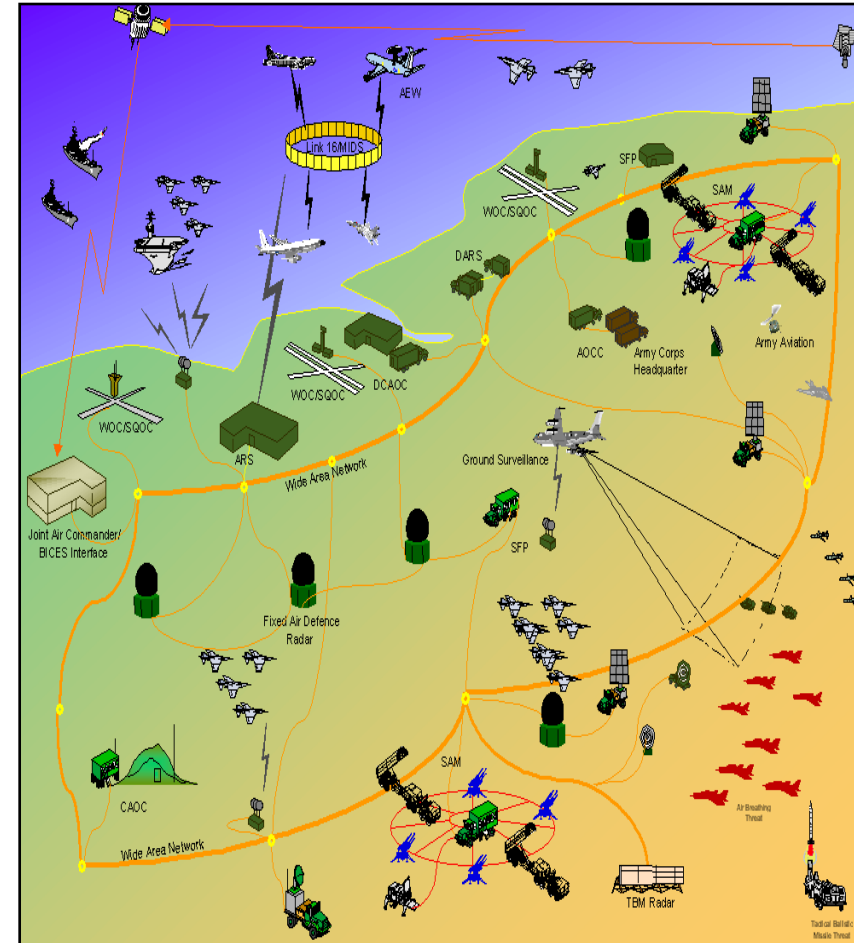
No. 2150/2005 of 23 Dec 2005  
(now adopted by SSC)

- Harmonised Application
- Essential Elements
- Compliance Criteria
- Acceptable Practises
- FUA Implementation



# INTEROPERABILITY OF SYSTEMS

- **COMMAND and CONTROL** roles require the availability of information to **build and recognize air picture** and to **identify flights** entering national territory
- **MILITARY** should exchange ATM information with civil ATC centers and systems (SWIM)
- Radar data, flight plans, flight data, trajectory information, aeronautical information, meteo, etc.
- **Security** aspects have to be covered to cope with sensitivity of data
- **MILITARY** entities might need to route ATM data to **military aircraft** via available data link



# COLLABORATIVE DECISION-MAKING

## National

Parliament

ASM Level 1

## International

EU

EUMC – MILREPS/EC

Single Sky Committee: 1 civ + 1 mil per nation (possibility)

EUROCONTROL

Permanent Commission: Min. Transport and Defense

Provisional Council: DGCA + Mil. ATM Director + NATO

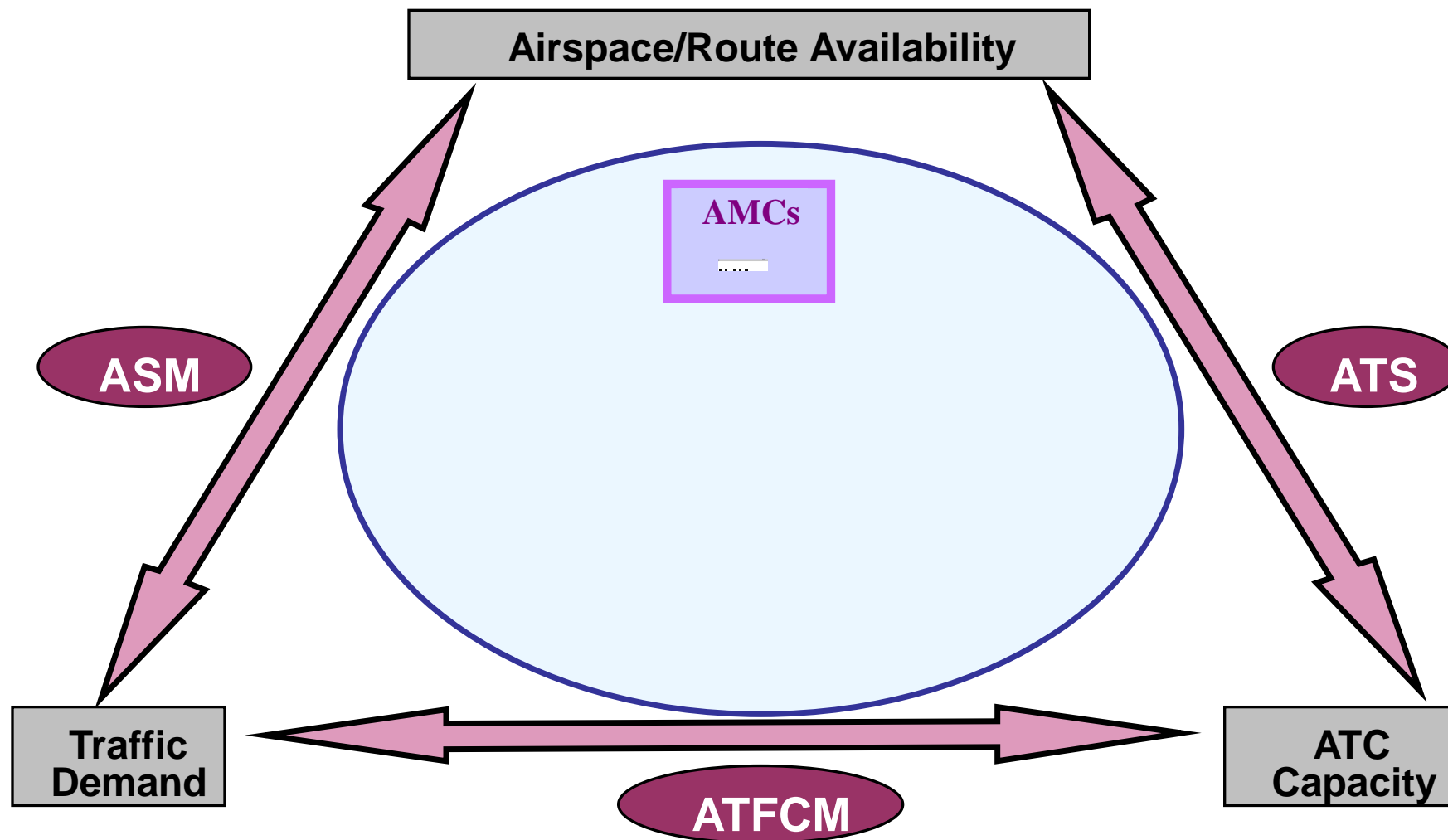
CMSC: High Level Civil + Military ATM reps.

Military ATM Board: Mil. ATM Directors + NATO

NATO

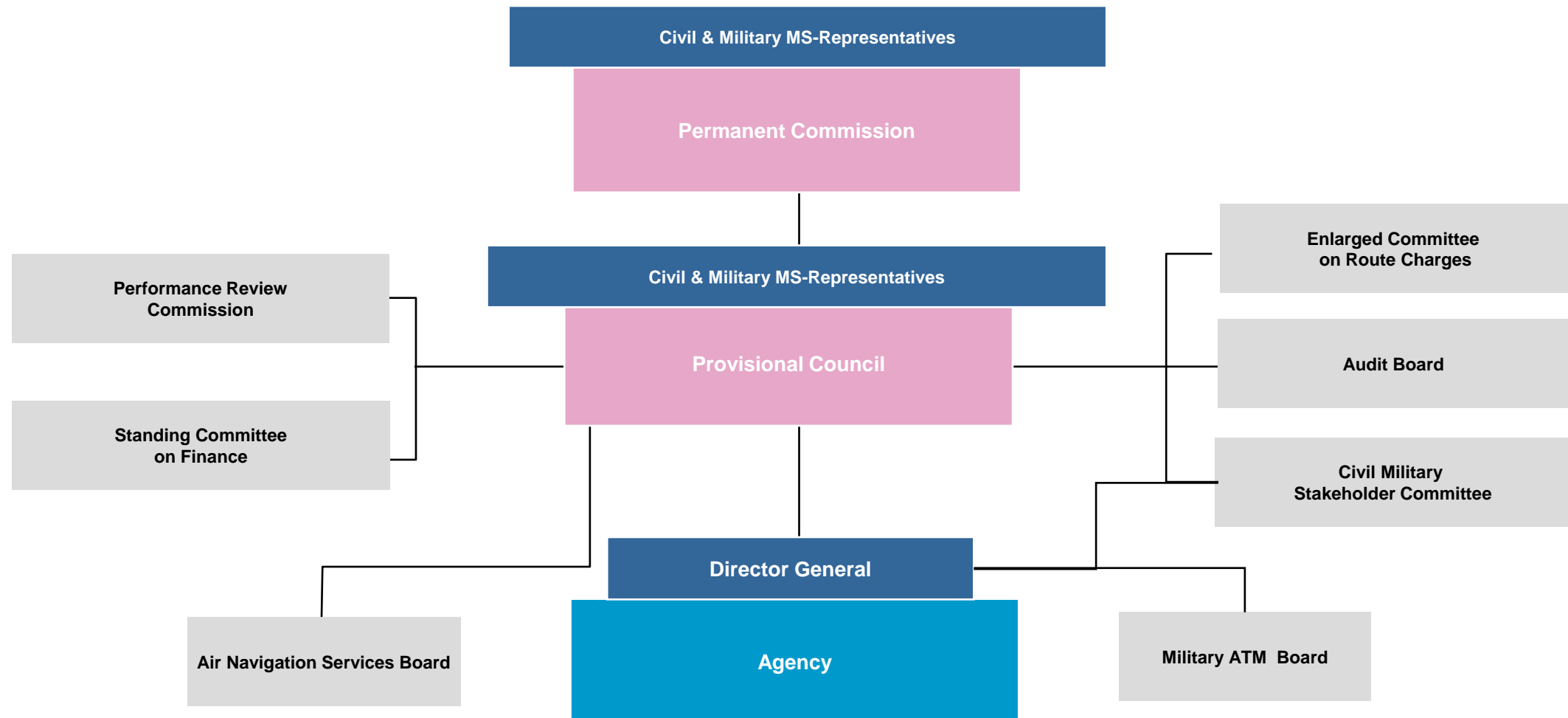
High Level Civil + Military ATM reps + SC's

# COLLABORATIVE DECISION-MAKING





# EUROCONTROL – a Civil-Military Organisation







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Thank You