

AOM19 — Implement Advanced Airspace Management

Establish a collaborative civil-military airspace planning at the European Network level through an integrated Airspace Management/Air Traffic Flow Capacity Management (ASM/ATFCM) process and an extended planning phase into the day of operations.

Ensure full exploitation of capacity becoming available through the identification of efficient combinations of areas allocation, routes availability, including CDRs, and sector configurations able to cope with traffic demand. The process will be applied also for improving the planning activities related to the updates to airspace status.

Foster a consistent application of the Flexible Use of Airspace (FUA) Concept across the European network, and support a safe, efficient and accurate flow of ASM data.

This will support the ECAC States collective responsibility for European airspace planning and management that provides for a continuum and transparency of airspace structures and rules at boundaries while satisfying national security and defence requirements.

The improved planning process refers to the use of specific procedures allowing Airline Operators (AOs) to optimise their flight planning in order to achieve a more efficient utilization of available airspace through more dynamic responses to specific short notice or real-time airspace status changes, requirements and route optimisation at the pre-tactical and/or tactical levels.

Develop, validate and implement ASM/ATFCM processes, procedures and supporting tools at national, sub-regional and the European Network level to ensure that airspace is used more flexibly, capacity is better balanced and predictability is enhanced through greater adherence to planned activities as a result of better planning and notification.

It will provide a coherent response to the recommendations of the Performance Review Commission (PRC) report on Civil-Military Airspace Utilisation (2007) in accordance with the Dynamic Management of the European Airspace Network (DMEAN) Framework Programme and DMEAN Conception of Operations (CONOPS) and supporting expected deliverables of SESAR WP7 [Network Operations] in particular P7.5.2 [Advanced FUA Concept].

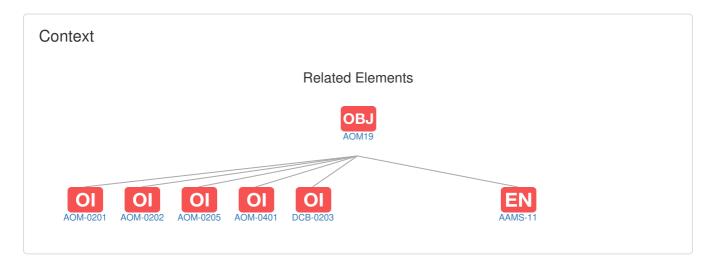
Ultimately, the ASM operations continue until the real-time activation of airspaces or routes. The alignment between both ASM/ATFCM processes shall continue to ensure the assessment of the network impact, the identification of flights affected by real-time modifications, as well as the timely dissemination of the decisions. Airspace uses (allocations, activations, deactivations) are issued from the ASM tools (LARA, STANLY, etc) via B2B.

FOR MILITARY AUTHORITIES: It is the responsibility of each Military Authority to review this ESSIP Objective IN ITS ENTIRETY and address each of the SloAs that the Military Authority considers RELEVANT for itself. This has to be done on top and above of the review of "MIL" SloAs which identify actions EXCLUSIVE to MIL Authorities

Edition 2022

Stakeholders Air Navigation Service Provider / Airspace Users / Network Manager

Type SESAR
Scope ECAC
Status Removed



Applicability Area(s) and Timescales

Applicability Area: All ECAC States

| Timescales | From | Ву | Applicable to |
|--------------------------------|------------|------------|--------------------|
| Initial operational capability | 01-01-2011 | - | Applicability Area |
| Full operational capability | - | 31-12-2016 | Applicability Area |

Links to ATM Master Plan Level 2

Operational Improvment Steps

| Code | Title | IOC | FOC | Related Elements |
|----------|--|------------|------------|------------------|
| AOM-0201 | Moving Airspace Management Into Day of Operation | 31-12-2008 | 31-12-2012 | EN OBJ ICAO |
| AOM-0202 | Enhanced Real-time Civil-Military Coordination of Airspace Utilisation | 31-12-2019 | 31-12-2023 | OI EN OBJ ICAO |
| AOM-0205 | Modular Temporary Airspace Structures and Reserved Areas | 31-12-2008 | 31-12-2012 | OI EN OBJ ICAO |
| AOM-0401 | Multiple Route Options & Airspace Organisation Scenarios | - | - | OI OBJ ICAO |
| DCB-0203 | Enhanced ASM/ATFCM Coordinated Process | 31-12-2008 | 31-12-2012 | OI EN OBJ ICAO |

EN Enablers

| Code | Title | IOC | Related Elements |
|---------|--|------------|----------------------|
| AAMS-11 | ASM support systems enhanced to exchange real-time airspace status updates | 31-12-2016 | STK OI EN OBJ DS PCP |

SOL Links to SESAR Solutions

| Code | Title | Program | Related Elements |
|-----------------|-------|---------|------------------|
| No record found | | | |

PCP Links to PCP ATM Sub-Functionalities

| Code | Title | Related Elements |
|-----------------|-------|------------------|
| No record found | | |

ICAO Block Modules: No associated data

References

Applicable legislation

Council Decision of 30 March 2009 endorsing the European Air traffic Management Master Plan of the Single European Sky ATM Research (SESAR) project (2009/320/EC)

Regulation (EC) No 2150/2005 of 23 December 2005 on Implementation and Application of the Flexible Use of Airspace

Applicable ICAO Annexes and other references

None

Deployment Programme 2022

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Operating Environments

Terminal Airspace

En-Route

Network

Expected Performance Benefits

Safety Improved through better co-ordination of civil and military airspace needs at the

European Network level. Potential gains through more efficient airspace allocation and better knowledge of traffic environment and some enhancement through

reduction in controller workload.

Capacity Increased through better utilization of airspace resources within and across

airspace boundaries. Potential increase through dynamic adjustment of airspace resources and suppression of some flight regulations thanks to local ATFCM

measures with the same ATC sector manning.

Operational efficiency

Cost efficiency Potential cost reduction through the availability of more optimum

 $routes/trajectories\ and\ reduction\ of\ flight\ delays\ thanks\ to\ increased\ capacity.$

Environment Emissions reduced through the use of more optimum routes/trajectories.

Security N/A

Stakeholder Lines of Action

| Code | Title | From | Ву | Related Enablers |
|-------|---|------------|------------|---------------------|
| ASP01 | Implement an improved ASM/ATFCM process | DELETED | | EN |
| ASP02 | Implement CIAM Phase 1 | DELETED | | |
| ASP03 | Implement CIAM Phase 2 | DELETED | | EN |
| ASP04 | Implement Rolling ASM/ATFCM process | 01-12-2011 | 31-12-2016 | EN |
| ASP05 | Implement Interoperability of local ASM support system with NM system | 01-01-2014 | 31-12-2015 | EN |
| ASP06 | Simplify CDR categorisation | DELETED | | |
| ASP07 | Optimise flexible airspace structure design and availability | 01-01-2009 | 31-12-2015 | |
| ASP08 | Improve accuracy of airspace booking | 01-12-2010 | 31-12-2015 | EN |
| ASP09 | Deploy automated ASM support systems | 01-07-2010 | 31-12-2015 | EN |
| ASP10 | Improve notification to airspace users | 01-07-2011 | 31-12-2016 | |
| USE01 | Implement an improved Notification Process supporting the Rolling ASM/ATFCM process | 01-05-2009 | 31-12-2016 | |
| USE02 | Implement improved notification process supporting the Rolling ASM/ATFCM process | DELETED | | |
| NM01 | Develop System and procedures for an improved ASM/ATFCM process | 01-12-2010 | 31-12-2015 | EN |
| NM02 | Upgrade NM systems to allow exchange in real-time of ASM information | 01-09-2014 | 31-12-2016 | EN |

| Supporting I | Vlaterial |
|--------------|-----------|
|--------------|-----------|

| itle | Related SLoAs |
|--|--|
| EUROCONTROL - European ATS Route Network (ARN) Version 2013-2015 06/2013 ttp://www.eurocontrol.int/sites/default/files/publication/files/ernip-part2-arn-v-2013-2015-07062013.pdf | ASP07 |
| EUROCONTROL - European Route Network Improvement Plan (ERNIP) Part 3 - Airspace Management Handbook - Guidelines for Airspace Management - 5.5 / 11/2017 | NM01 |
| EUROCONTROL - FLEXIBLE USE OF AIRSPACE AMC/CADF OPERATIONS MANUAL - Edition 5.1 http://www.eurocontrol.int/sites/default/files/publication/files/fua-amc-cadf-ops-manual-current.pdf | NM02 |
| EUROCONTROL - Local And Regional Airspace Management Supporting System Conceptual Description - Edition 2.0 / 11/2008 http://www.eurocontrol.int/sites/default/files/content/documents/single-sky/cm/civil-mil-coordination/lara-conceptual-description-20081111.pdf | ASP09 |
| EUROCONTROL - NM B2B Reference Manuals - access available on request to NM http://www.eurocontrol.int/articles/nm-services-and-products | NM02 |
| EUROCONTROL - SPEC-112 - EUROCONTROL Specification for the application of the Flexible Use of Airspace (FUA) - Edition 1.1 / 01/2009 https://www.eurocontrol.int/publication/eurocontrol-specification-application-flexible-use-airspace-fua | ASP04, ASP05, ASP08, ASP09, ASP10, NM01 |

Consultation & Approval

Working Arrangement in charge NETOPS
Outline description approved in 03/2013
Latest objective review at expert level 05/2014

Commitment Decision Body Provisional Council (PC)

Objective approved/endorsed in 07/2010

Latest change to objective approved/endorsed in 07/2014