AOM19.4 — Management of Predefined Airspace Configurations

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Predefined Airspace Configuration is a predefined and coordinated organisation of routes and their associated airspace structures, temporary airspace reservations and predefined ATC sectorisation, to meet civil/military airspace users' needs and increase performance in terms of capacity and/or flight efficiency, applicable both in free route (FRA) and in fixed-route network environments.

Predefined Airspace configurations are activated for a specific geographic area and/or time period at pre-tactical level through a CDM process involving the AMCs, NM, ATFCM, ATC and airspace users. The notification of predefined Airspace Configurations will be based on automatic flows of information between the different stakeholders provided by the Network Manager. The optimal organisation of airspace structures, such as the allocation of temporary airspace reservations, is achieved through the ASM solutions process that aims at delivering options that can fulfil military needs while improving flight efficiency and alleviating capacity problems identified in any specific area within the European airspace.

This collaborative process is based on the partnership between ANSPs, NM, AOs and the military collaborating to make the best decision to satisfy civil and military requirements and improve performance achievements. One of the ASM options is the utilisation of airspace scenarios composed by different predefined airspace configurations.

The Predefined Airspace Scenarios provide a coordinated set of temporary airspace reservations identifying a possible ASM Solution supporting the ASM/ATFCM CDM process. It is managed as a stand-alone scenario or supporting an associated Airspace Configuration.
The identification and the development of predefined airspace configurations and scenarios is executed by relevant actors, at strategic level: the High Level Airspace Policy Body (HLAPB or its equivalent; at national and sub-regional level), with participation of the civil and military airspace users as appropriate, supported by the Network Manager.

The system requirements enabling the implementation of this objective are as follows:

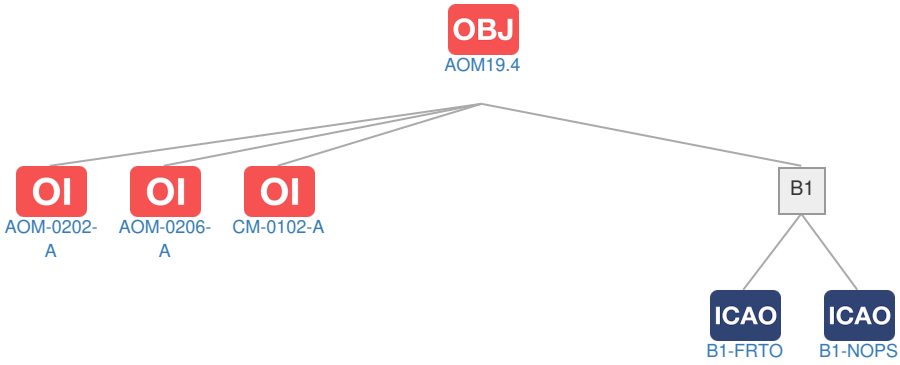
• The Network Manager, as well as local ATM system, shall facilitate an automatic flow of information between the different stakeholders for the identification of optimal predefined Airspace Configurations;
• NM systems shall facilitate the management of predefined airspace scenarios among ATM partners and the notification to AUs/CFSPs of the temporary airspace reservations;
• The Network impact assessment shall be carried out by NM systems before the application of predefined airspace configurations and scenarios;
• The NM systems shall support the predefined airspace configurations in any fixed route or FRA environment;
• ASM/ATFCM systems and ATC systems shall support the full sharing of the airspace configuration inputs and outputs in any fixed route or FRA environment;
• In alternative to local ASM/ATFCM systems and ATC systems, stakeholders may use NM systems and applications (CHMI, CIAM) to support sharing of predefined airspace configuration.
• The ATC system shall support the dynamic configuration of sectors in order to optimize their dimensions and operating hours in accordance with the traffic demands of the NOP.

NOTE FOR MILITARY AUTHORITIES: It is the responsibility of each military authority to review this 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 military authorities.

Edition	2022
Stakeholders	Air Navigation Service Provider / Network Manager
Type	CP1
Scope	ECAC+
Status	Active

Context

Related Elements



Applicability Area(s) and Timescales

Applicability Area 1: All EU SES States
(All EU SES States)

Applicability Area 2: Albania, Bosnia and Herzegovina, Türkiye, Ukraine, United Kingdom
(All ECAC+ States except AM, AZ, GE, IL, LU, LV, MA MT, MD, MK and SE)

Timescales	From	By	Applicable to
Initial operational capability	01-01-2018	-	Applicability Area 1 + Applicability Area 2
Full Operational Capability / Target Date	-	31-12-2022	Applicability Area 1 + Applicability Area 2

Links to ATM Master Plan Level 2

OI Operational Improvment Steps

Code	Title	IOC	FOC	Related Elements
AOM-0202-A	Automated Support for strategic, pre-tactical and tactical Civil-Military Coordination in Airspace Management (ASM).	31-12-2020	31-12-2025	SOL OI EN OBJ DS PCP ICAO
AOM-0206-A	Flexible and modular ARES in accordance with the VPA design principle	31-12-2020	01-10-2025	SOL OI EN OBJ DS PCP ICAO
CM-0102-A	Dynamic Sectorisation based on complexity	-	-	SOL OI EN OBJ DS PCP ICAO

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 ICAO Block Modules

Designator		Title	Related Elements
B1			
	B1-FRTO	Improved Operations through Optimized ATS Routing	SOL OI OBJ PCP
	B1-NOPS	Enhanced Flow Performance through Network Operational Planning	SOL OI OBJ PCP

References

Applicable legislation
- COMMISSION IMPLEMENTING REGULATION (EU) 2021/116 of 1 February 2021 on the establishment of the Common Project One supporting the implementation of the European Air Traffic Management Master Plan provided for in Regulation (EC) No 550/2004 of the European Parliament and of the Council, amending Commission Implementing Regulation (EU) No 409/2013 and repealing Commission Implementing Regulation (EU) No 716/2014

Applicable ICAO Annexes and other references
None

Deployment Programme 2022
Family 3.1.2 - Management of Predefined Airspace Configurations

Operating Environments
Terminal Airspace
En-Route
Network

Expected Performance Benefits

Safety	Improved safety due to increased situational awareness of supervisors.
Capacity	Increased capacity due to better use of available resources, both human and airspace.
Operational efficiency	Reduced saturation periods and flight delays. Improved operational efficiency.
Cost efficiency	Increased cost efficiency.
Environment	Reduced fuel burn and emissions.
Security	-

Stakeholder Lines of Action

Code	Title	From	By	Related Enablers
ASP01	Define and Implement procedures in support of an improved ASM solution process	01-01-2018	31-12-2022	
ASP02	Adapt ATC/ASM systems to support the management of predefined airspace configurations and scenarios	01-01-2018	31-12-2022	EN
ASP03	Use NM systems and applications	01-01-2018	31-12-2022	
ASP04	Safety Assessment	01-01-2018	31-12-2022	
ASP05	Training	01-01-2018	31-12-2022	
ASP06	Operational use	01-01-2018	31-12-2022	
NM01	Define and Implement procedures in support of an improved management of predefined airspace configurations and scenarios	01-01-2018	31-12-2022	
NM02	Adapt NM systems to support the management of predefined airspace configurations and scenarios	01-01-2018	31-12-2022	
NM03	Safety Asssment	01-01-2018	31-12-2022	
NM04	Training	01-01-2018	31-12-2022	
NM05	Operational use	01-01-2018	31-12-2022	

Supporting Material

Title	Related SLoAs
SDM - Standardisation and Regulation support to CP1 deployment 2021, Deliverable D1.1.1 07/2021 https://www.sesardeploymentmanager.eu/publications/deployment-programme	ASP01, ASP02, ASP03, NM01, NM02, NM03

Consultation & Approval

Working Arrangement in charge	NETOPS
Outline description approved in	-
Latest objective review at expert level	05/2018
Commitment Decision Body	Provisional Council (PC)
Objective approved/endorsed in	-
Latest change to objective approved/endorsed in	-