

CP1		Active							ECAC+	
AOM19.4		Management of Predefined Airspace Configurations								
REG	ASP	MIL	APO	USE	INT	IND	NM	MET	AIS	USP

Subject matter and scope

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.

Applicability Area(s) & Timescale(s)

Applicability Area 1	All EU SES States		
Applicability Area 2	Albania, Azerbaijan, Bosnia and Herzegovina, Türkiye, Ukraine, United Kingdom		
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

References

European ATM Master Plan

Ol step -	[AOM-0202-A]-Automated Support for strategic, pre-tactical and tactical Civil-Military Coordination in Airspace Management (ASM).								
Enablers -	AAMS-06b AOM19.5	AAMS-09a AOM19.5	AAMS-11 AOM19.5	AIMS-06	ER APP ATC 77	MIL-0502	NIMS-42 AOM19.5	PRO-011 AOM19.5	

AOM19.4	Management of Predefined Airspace Configurations
----------------	---

		PRO-024 AOM19.5	SWIM-APS-02a	SWIM-APS-03a	SWIM-INFR-05a	SWIM-NET-01a			
OI step -	[AOM-0206-A]-Flexible and modular ARES in accordance with the VPA design principle								
	Enablers -	AAMS-06b AOM19.5	AAMS-06c AOM19.5	AAMS-09a AOM19.5	AOC-ATM-15	ER APP ATC 77	SWIM-APS-03a	SWIM-APS-04a	SWIM-INFR-05a
		SWIM-NET-01a							
OI step -	[CM-0102-A]-Dynamic Sectorisation based on complexity								
	Enablers -	CTE-C05a COM11.1, COM11.2	CTE-C05b COM11.1, COM11.2	ER APP ATC 15	ER APP ATC 93 FCM06.1				

Legend:	WXYZ-001	Covered by SLoA(s) in this objective	WXYZ-002 zzz	Covered by SLoA(s) in another objective Objective covering the enabler	WXYZ-003	Not covered in the Implementation Plan
---------	----------	--------------------------------------	-----------------	---	----------	--

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

Essential Operational Changes

Fully Dynamic and Optimised Airspace

SESAR Solution

#31 - Variable profile military reserved areas and enhanced (further automated) civil-military collaboration, #66 - Automated Support for Dynamic Sectorisation

ICAO GANP - ASBUs

FRTO-B1/4	Dynamic sectorization
NOPS-B1/6	Initial Dynamic Airspace configurations

Deployment Programme

3.1.2	Management of Predefined Airspace Configurations
-------	--

European Plan for Aviation Safety

- none -	
----------	--

Operating Environments

En-Route
Network
Terminal Airspace

Stakeholder Lines of Action (SLoAs)

SLoA ref.	Title	From	By
AOM19.4-ASP01	Define and Implement procedures in support of an improved ASM solution process	01/01/2018	31/12/2022
AOM19.4-ASP02	Adapt ATC/ASM systems to support the management of predefined airspace configurations and scenarios	01/01/2018	31/12/2022
AOM19.4-ASP03	Use NM systems and applications	01/01/2018	31/12/2022
AOM19.4-ASP04	Safety Assessment	01/01/2018	31/12/2022
AOM19.4-ASP05	Training	01/01/2018	31/12/2022
AOM19.4-ASP06	Operational use	01/01/2018	31/12/2022
AOM19.4-NM01	Define and Implement procedures in support of an improved management of predefined airspace configurations and scenarios	01/01/2018	31/12/2022

AOM19.4	Management of Predefined Airspace Configurations
----------------	---

AOM19.4-NM02	Adapt NM systems to support the management of predefined airspace configurations and scenarios	01/01/2018	31/12/2022
AOM19.4-NM03	Safety Asssment	01/01/2018	31/12/2022
AOM19.4-NM04	Training	01/01/2018	31/12/2022
AOM19.4-NM05	Operational use	01/01/2018	31/12/2022

Description of finalised and deleted SLOAs is available on the eATM Portal @ https://www.eatmportal.eu/working/depl/essip_objectives

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:	-

Detailed SLoA Descriptions

AOM19.4-ASP01	Define and Implement procedures in support of an improved ASM solution process	From: 01/01/2018	By: 31/12/2022
Action by:	ANS Providers		
Description & purpose:	Define and implement procedures supporting ASM solutions process for the management of predefined Airspace configurations and scenarios, through a CDM process in coordination with NM and concerned stakeholders.		
	Note :This SLoA needs to be synchronised between civil and military ANSPs, AUs and NM.		
Supporting material(s):	SDM - Standardisation and Regulation support to CP1 deployment 2021, Deliverable D1.1.1 07/2021 Url : https://www.sesardeploymentmanager.eu/publications/deployment-programme		
Finalisation criteria:	1 - The predefined airspace configuration and scenario concepts and related modus operandi are defined and approved by the national and sub-regional (FAB) High Level Airspace Policy Bodies (HLAPB or its equivalent)		
AOM19.4-ASP02	Adapt ATC/ASM systems to support the management of predefined airspace configurations and scenarios	From: 01/01/2018	By: 31/12/2022
Action by:	ANS Providers		
Description & purpose:	Adapt ATC/ASM systems including: <ul style="list-style-type: none"> • system changes for predefined airspace configurations; • sharing of predefined airspace configuration inputs and outputs, including: • ATC sector configurations; • Predefined airspace scenarios, when relevant, or selected temporary airspace structures 		
	Note :This SLoA needs to be synchronised between civil and military ANSPs.		
	AOM19.4-ASP02 and AOM19.4-ASP03 can be implemented in parallel.		
Supporting material(s):	SDM - Standardisation and Regulation support to CP1 deployment 2021, Deliverable D1.1.1 07/2021 Url : https://www.sesardeploymentmanager.eu/publications/deployment-programme		
ATM Master Plan relationship:	[ER APP ATC 15]-Flight Data Processing: support Dynamic Sectorisation and Dynamic Constraint Management. [ER APP ATC 77]-ATC Systems enhanced to exchange real-time (tactical) airspace status data with ASM support system		
Finalisation criteria:	1 - ATC/ASM systems have been adapted		
AOM19.4-ASP03	Use NM systems and applications	From: 01/01/2018	By: 31/12/2022
Action by:	ANS Providers		
Description & purpose:	Use NM systems and applications (CHMI, CIAM) for the provision of airspace configuration and scenarios inputs (ATC sector configurations and ASM scenarios).		
	Note :This SLoA needs to be synchronised between civil and military ANSPs and NM.		
	AOM19.4-ASP02 and AOM19.4-ASP03 can be implemented in parallel.		
Supporting material(s):	SDM - Standardisation and Regulation support to CP1 deployment 2021, Deliverable D1.1.1 07/2021 Url : https://www.sesardeploymentmanager.eu/publications/deployment-programme		
Finalisation criteria:	1 - NM systems and applications are being used		
AOM19.4-ASP04	Safety Assessment	From: 01/01/2018	By: 31/12/2022
Action by:	ANS Providers		

AOM19.4	Management of Predefined Airspace Configurations		
----------------	---	--	--

Description & purpose:	The safety assessment of the changes must be developed and delivered to the competent authority.		
Finalisation criteria:	1 - Safety assessment has been developed and delivered to the competent authority.		
AOM19.4-ASP05	Training	From: 01/01/2018	By: 31/12/2022
Action by:	ANS Providers		
Description & purpose:	All relevant staff must be duly trained.		
Finalisation criteria:	1 - Training has been completed.		
AOM19.4-ASP06	Operational use	From: 01/01/2018	By: 31/12/2022
Action by:	ANS Providers		
Description & purpose:	Management of Predefined Airspace Configurations is in operational use once the systems have been implemented, the procedures are in place, the safety assessment has been delivered and approved, and the training has been completed.		
Finalisation criteria:	1 - Management of Predefined Airspace Configurations is put into service		
AOM19.4-NM01	Define and Implement procedures in support of an improved management of predefined airspace configurations and scenarios	From: 01/01/2018	By: 31/12/2022
Action by:	NM		
Description & purpose:	Once AOM19.4-ASP01 and AOM19.4-ASP02 have been completed, define and implement procedures supporting ASM solutions process for the management of predefined Airspace configurations and scenarios (e.g. by updating the ASM Handbook).		
	Note :This SLoA needs to be synchronised between civil and military ANSPs, AUs and NM.		
Supporting material(s):	SDM - Standardisation and Regulation support to CP1 deployment 2021, Deliverable D1.1.1 07/2021 Url : https://www.sesardeploymentmanager.eu/publications/deployment-programme		
Finalisation criteria:	1 - Procedures have been defined and promulgated		
AOM19.4-NM02	Adapt NM systems to support the management of predefined airspace configurations and scenarios	From: 01/01/2018	By: 31/12/2022
Action by:	NM		
Description & purpose:	Adapt NM systems including: • system changes and technical solutions needed for predefined airspace configurations and scenarios; • sharing of predefined airspace configuration and scenarios inputs and outputs.		
Supporting material(s):	SDM - Standardisation and Regulation support to CP1 deployment 2021, Deliverable D1.1.1 07/2021 Url : https://www.sesardeploymentmanager.eu/publications/deployment-programme		
Finalisation criteria:	1 - NM systems have been adapted.		
AOM19.4-NM03	Safety Asssment	From: 01/01/2018	By: 31/12/2022
Action by:	NM		
Description & purpose:	The safety assessment of the changes must be developed and delivered to the competent authority.		
Supporting material(s):	SDM - Standardisation and Regulation support to CP1 deployment 2021, Deliverable D1.1.1 07/2021 Url : https://www.sesardeploymentmanager.eu/publications/deployment-programme		
Finalisation criteria:	1 - Safety assessment has been developed and delivered to the competent authority.		
AOM19.4-NM04	Training	From: 01/01/2018	By: 31/12/2022
Action by:	NM		
Description & purpose:	All relevant staff must be duly trained.		
Finalisation criteria:	1 - Training has been completed.		
AOM19.4-NM05	Operational use	From: 01/01/2018	By: 31/12/2022
Action by:	NM		
Description & purpose:	Management of Predefined Airspace Configurations is in operational use once the systems have been implemented, the procedures are in place, the safety assessment has been delivered and approved, and the training has been completed.		
Finalisation criteria:	1 - Management of Predefined Airspace Configurations is put into service.		

