

Deployment Scenario Title	Dynamic airspace configuration
Deployment Scenario Description	Dynamic airspace configuration: the objective is to improve the use of airspace capacity for both civil and military users by increasing the granularity and the flexibility of airspace configuration and management within and across ANSPs' areas of responsibilities. This will result in the integration of concepts and procedures to allow flexible sectors that can be dynamically modified according to demand. This includes potential implications for ATCO licences, international boundaries, and potentially interoperability and air-ground multi-datalink communication capabilities.
Essential Operational Change	Fully Dynamic and Optimised Airspace
Maturity	In development phase: Key R&D Activities

Applicable Operating Environment			
Airport	Terminal Airspace	En-Route	Network

Timeline																						
2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	

Performance Contribution of the DS				
Capacity	Safety	Environment	Cost-efficiency	Operational efficiency

Stakeholders affected (at least one enabler to be deployed)						
ANSP		AO		AU		Network Manager
Civil	Military	Civil	Military	Civil	Military	
TWR, APP, ENR, SWIM, AIS, MET	APP, ENR, AIS, MET	APT Operator		Scheduled, BA Fixed, GA, FOC	Transport, WOC	Network Manager

SESAR Solutions			
Solution Code	Solution Title	Solution Description	Related Elements
PJ.08-01	Management of Dynamic Airspace configurations	Management of Dynamic Airspace Configurations refers to the development of the process,...	SOL PJ OI DS EOC
PJ.09-W2-44	Dynamic Airspace Configurations (DAC)	The objective of this Key R&D activity is to improve the use of airspace capacity for both...	PJ DS EOC

Operational Improvement Steps			
OI Step Code	OI Step Title	OI Step Description	Related Elements
AOM-0208-B	Dynamic Mobile Areas (DMA) of types 1 and 2	Dynamic mobile area (DMA) is an integral part of the MT described by a 4D data set. DMA...	SOL OI EN DS
AOM-0805	Collaborative Airspace Configuration	Airspace configurations are activated through integrated collaborative decision making processes...	SOL EN DS
AOM-0809-A	Initial Sector Design and Configurations Unconstrained by Predetermined Boundaries	En-route ATC sectors design principles based on dynamic definition and delineation of volumes of...	SOL EN DS
CM-0102-B	Dynamic Airspace Management based on complexity	Following CM-0102-A supporting Dynamic Sectorisation for the purpose of workload and complexity...	SOL OI EN DS

Enablers						
Required/Optional	New/Inherited	Develop/Use	Enabler Code	Enabler Title	Enabler Description	Related Elements
🔒			AAMS-12	Airspace management system equipped with a method to achieve regional airspace coordination capability	Develop a co-ordination tool between AMC, Network Manager and FMP(s) concerned in order to: -...	STK OI EN DS
🔒			AAMS-13	ASM scenario management sub-system equipped with tools for assessing the impact of airspace changes on capacity	ASM scenario management sub-system enhanced with tools to assist Network functions to assess the...	STK OI DS
🔒			AAMS-16a	Airspace management functions equipped with tools able to deal with free-routing	Tools (modelling, simulation) supporting the design and management of new airspace categories,...	STK OI DS PCP
🔒			AAMS-19	Dynamic Airspace Configuration tools for the Integrated local DCB working position	To prepare the future integration of DAC and DCB at local level, new Dynamic Airspace...	OI DS
🔒			AIMS-04	Network management functions supported with real-time airspace data	Network management systems enhanced with tools for collection and provision of real time airspace...	OI DS
🔒			AIMS-15	Aeronautical Information sub-system enhanced to be able to handle Dynamic Mobile Areas	Aeronautical Information sub-system enhanced to be able to handle moving airspace data such as...	STK OI DS
🔒			AIMS-22	Airspace management functions enhanced to provide airspace status information	Pan-European Airspace Management system enhanced to provide real time airspace status information.	STK OI EN DS
🔒			AIMS-23	Enhanced digital data chain to ensure Aeronautical Information data provision to meet full 4D trajectory management requirements	Enhanced aeronautical information data provision chain enabling the provision of high quality...	STK OI DS
🔒			ER APP ATC 15	Flight Data Processing: support Dynamic Sectorisation and Dynamic Constraint Management.	Enhance Flight Data Processing function to support Dynamic Sectorisation and Dynamic Constraint...	STK OI DS PCP

Enablers						
Required/ Optional	New/ Inherited	Develop/ Use	Enabler Code	Enabler Title	Enabler Description	Related Elements
🔒			ER APP ATC 80	Enable ATC System to Use Dynamically-Defined Airspace Reservations	Modifications to be performed on ATC systems as a consequence of the introduction of operational...	STK OI EN DS
🔒			NIMS-04	ATFCM capacity planning sub-system enhanced to take into account dynamic sector shapes	Develop a capacity calculation mechanisms to take account dynamic sector shapes	STK OI DS
🔒			NIMS-30	ATFCM scenario management equipped with tools for assessing the impact of DAC and capacity changes on trajectory efficiency	Develop a DCB/ASM Generic Network Working Position integrating local ASM and DCB to enable ATFCM...	STK OI DS
➔			METEO-05c	Generate and provide MET information relevant for TMA and En-route related operations at short notice ('time to decision' between 3 minutes and 7days), including for low-level IFR operations.	The ATM-MET system is acquiring, generating, assembling and providing Meteorological (MET)...	STK OI EN DS
➔			NIMS-14b	Demand Data Repository Phase II	The objective of DDR Phase II is to extend the DDR Phase I services by providing traffic...	STK OI EN DS PCP
➔			NIMS-14c	Demand Data Repository Phase III	DDR Phase III will provide (a) business trajectories (b) forecast traffic samples combining...	STK OI EN
➔			NIMS-19	Flight Planning management sub-system enhanced for AFUA	Flight Planning management sub-system enhanced for re-processing of flight plans in response to...	STK OI
➔			PRO-010	Procedures to ensure that all actors involved in the airspace reservations are well aware about the real status of airspace availability and subsequent changes	Military Procedures to ensure that all operations that are involved with the airspace reservation...	OI
➔			PRO-146	ASM Procedures for agreeing and promulgating information on Mobile Exclusion Areas	-	OI