

Deployment Scenario Title	Network optimisation of multiple ATFCM time-based measures
Deployment Scenario Description	Network optimisation of multiple ATFCM time-based measures: this involves improving efficiency and reducing the adverse impact of multiple regulations affecting the same flight or flow. It also involves exploring the relationships between the DCB regulations and their interaction through flights to quantify the network effect of those interactions. The key to this is identifying and eliminating regulations that have a negative impact on network performance.
Essential Operational Change	ATM Interconnected Network
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	
APP, ENR, SWIM, MET	APP, ENR, MET, SWIM	APT Operator	APT Operator	Scheduled, BA Fixed, BA Rotorcraft, GA, FOC		Network Manager

SESAR Solutions			
Solution Code	Solution Title	Solution Description	Related Elements
PJ.09-02	Integrated Local DCB Processes	Integrated Local DCB Processes see the seamless integration of local network management with...	SOL PJ OI DS EOC ICAO
PJ.09-W2-47	Network optimisation of multiple ATFCM time based measures	The key R&D activity aims at improving the efficiency and reducing the adverse impact of...	PJ DS EOC

Operational Improvement Steps			
OI Step Code	OI Step Title	OI Step Description	Related Elements
CM-0104-B	Automated support to INAP (Integrated Network Management and Extended ATC Planning) function	Local DCB actors and Extended ATC Planning actors are working within an INAP (Integrated Network...	SOL OI EN DS
CM-0302	Ground based Automated Support for Managing Traffic Complexity Across Several Sectors	The system supports INAP actors for smoothing flows of traffic and de-conflicting flights across...	SOL OI EN DS
DCB-0210	Full integration of Dynamic Airspace Configurations into DCB	The aim of this OIs is to elaborate the complete DCB solution that includes Dynamic Airspace...	SOL OI EN DS
DCB-0213	Consolidation and facilitation of Target Times between local DCB, Airport CDM and Extended Arrival Management	In case of Airport and Extended Arrival sequencing induced constraints are overlaying Network...	SOL OI EN DS ICAO

Enablers						
Required/Optional	New/Inherited	Develop/Use	Enabler Code	Enabler Title	Enabler Description	Related Elements
🔒			AAMS-02	Dynamic Airspace Configuration tools for the Integrated Network Working Position	New Dynamic Airspace Configuration (DAC) operational tools shall be designed and integrated into...	STK OI DS
🔒			ER APP ATC 17	Enhance Traffic and Flow Management sub-systems to support dynamic flow management in co-ordination with local, regional, and European levels.	A traffic complexity functionality that takes into account traffic complexity, traffic density...	STK OI DS PCP
🔒			FOC-002	Assessment of real time ASM data	This enabler allows the AU to assess the impact of real time ASM data on the flight operations...	STK OI DS
🔒			METEO-06c	Generate and provide Meteorological information relevant at short notice ('time to decision' between 3 minutes and 7days)	ATM-MET system acquiring, generating, assembling and providing Meteorological (MET) information...	STK OI EN DS
🔒			NIMS-09	Capacity planning and scenario management equipped with tool to assess the impact of requested flight level changes	Develop a Flight Level (FL) management tool to assess the impact of Requested Flight Level (RFL)...	STK OI DS
🔒			NIMS-23	Capacity planning and scenario management equipped with tools integrating SB/MT information, to assist ATS in optimising the use of airport and airspace usable capacity	Tools that provide functionality for simulating, evaluating the balance between demand and...	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
🔒			NIMS-46	Integrated local DCB working position	Integrated local DCB working position with improved situation awareness need to be developed for...	STK OI DS

Enablers						
Required/ Optional	New/ Inherited	Develop/ Use	Enabler Code	Enabler Title	Enabler Description	Related Elements
🔒			NIMS-48	Integrated Network Working Position (iNWP)	New operational tools shall be designed for iNWP (Integrated Network Working Position):...	STK OI DS
🔒			SWIM-APS-03b	Provision of ASM-ATFCM Information Services for Step 2	Wide area communications services for collecting, disseminating and negotiating demand and...	OI EN DS S
🔒			SWIM-APS-04b	Consumption of G/G and initial A/G ASM-ATFCM Information Services on Wide Area communications	Wide area communications services for collecting, disseminating and negotiating demand and...	OI DS S
🔒			SWIM-INFR-05b	General SWIM Services infrastructure Support and Connectivity	Provision of the additional functionality needed by the individual Stakeholder to support their...	OI DS
🔒			SWIM-SUPT-01b	SWIM Design-Time Registry	One or more (i.e. federated) design time registry systems to provide the European ATM Service...	STK OI DS
🔒			SWIM-SUPT-03b	SWIM Supporting Security	SWIM Technical infrastructure to support transport and message level security, identity...	STK OI DS