AOM20 — Implement ATS Route Network (ARN) - Version 7

Implement ATS Route Network Version 7 (ARN V7) as a response to the Airspace Action Plan and the 2015 Airspace Concept and Strategy for the ECAC States.

Develop, validate and implement ARN V7 in accordance with Advanced Airspace Scheme (AAS) principles taking into account military requirements.

The objective will ensure the progressive deployment of the AAS route network and consolidate into a network approach the first FAB developments, Free Route Airspace (FRA) implementation, and Terminal Airspace System (TAS) developments.

The progressive implementation of ARN V7 will ensure the delivery of the airspace structure elements of SESAR Deployment Baseline.

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Edition	2022
Stakeholders	Air Navigation Service Provider / Military / Airspace Users / International Organisations and Regional Bodies
Type	SESAR
Scope	ECAC
Status	Achieved

Context

Related Elements

OBJ
AOM20

OI
Operational Improvement Steps

Applicability Area(s) and Timescales

Applicability Area: All ECAC States

Timescales	From	By	Applicable to
Initial operational capability	01-05-2011	-	Applicability Area
Full operational capability	-	31-10-2013	Applicability Area

Links to ATM Master Plan Level 2

OI Operational Improvment Steps

Code	Title	IOC	FOC	Related Elements
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
AOM-0402	Further Improvements to Route Network and Airspace incl. Cross-Border Sectorisation and Further Routing Options	-	-	OBJ ICAO
AOM-0504	Optimum Trajectories in Defined Airspaces at Particular Times	31-12-2009	31-12-2013	EN OBJ ICAO
AOM-0801	Flexible Sectorisation Management	31-12-2006	31-12-2010	EN OBJ ICAO
AOM-0802	Modular Sectorisation Adapted to Variations in Traffic Flows	31-12-2007	31-12-2011	EN OBJ 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 Block Modules: No associated data

References

Applicable legislation
None
Applicable ICAO Annexes and other references
ECAC Advanced Airspace Scheme Concept
The Airspace Action Plan approved at the 27th EUROCONTROL PC in November 2007
The 2015 Airspace Concept and Strategy for the ECAC States adopted by SCG/7 in February 2008
Deployment Programme 2022
-
Operating Environments
En-Route
Network

Expected Performance Benefits

Safety	Some enhancement through reduction in controller workload.
Capacity	Increased through reduction in conflict points, and specialization of routes and sectors to enhance productivity and reduce controller workload.
Operational efficiency	-
Cost efficiency	Savings in route distances in some States as well as better fuel efficiency through increased use of preferred flight profiles and improved sectorisation.
Environment	Reductions in emissions through use of more optimal routes.
Security	N/A

Stakeholder Lines of Action

Code	Title	From	By	Related Enablers
ASP01	Implement national airspace structure changes	01-05-2011	31-10-2013	
ASP02	Ensure compatibility of en-route and terminal airspace	01-05-2011	31-10-2013	
USE01	Adapt flight planning	01-05-2011	31-10-2013	
INT01	Amend ICAO EUR Regional Plan	FINALISED		
AGY01	Adapt Flight Planning and ATFCM systems, processes and procedures	01-05-2010	31-10-2012	

Supporting Material

Title	Related SLoAs
EUROCONTROL - DMEAN Concept of Operations - Edition P1 / 09/2004 http://www.eurocontrol.int/dmean/public/standard_page/Concept_of_operations.html	AGY01
EUROCONTROL - European ATS Route Network (ARN) Version 2013-2015 06/2013 http://www.eurocontrol.int/sites/default/files/publication/files/ernip-part2-arn-v-2013-2015-07062013.pdf	ASP01, ASP02
EUROCONTROL - European Airspace Design Methodology Guidelines - General Principles and Technical Specifications for Airspace Design - Edition 1.1 / 05/2012 http://www.eurocontrol.int/articles/operations-planning	ASP02
EUROCONTROL - European Route Network Improvement Plan - Framework Document - Edition 1.1 / 05/2012 http://www.eurocontrol.int/articles/operations-planning	ASP02
EUROCONTROL - Route Availability Document (RAD) - Edition 1.1 / 05/2012 http://www.eurocontrol.int/articles/operations-planning	ASP02
ICAO - EUR Region Plan for Implementation of Amendment 1 to the 15th edition of the PANS-ATM Document 'New FPL Contents for 2012' - Edition v1.28 / 06/2012 http://www.eurocontrol.int/articles/icao-flight-planning-modifications-2012-documentation-related-links	USE01

Consultation & Approval

Working Arrangement in charge	NETOPS / RNDSG
Outline description approved in	01/2010
Latest objective review at expert level	04/2012
Commitment Decision Body	Provisional Council (PC)
Objective approved/endorsed in	08/2011
Latest change to objective approved/endorsed in	07/2012