

SESAR		Active								Multi-N	
ATC15.1		Information Exchange with En-route in Support of AMAN									
REG	ASP	MIL	APO	USE	INT	IND	NM	MET	AIS	USP	

Subject matter and scope

Implement, in en-route operations in selected ACCs, information exchange mechanisms, tools and procedures in support of basic AMAN operations in adjacent ACCs and/or subjacent TMAs (including, where relevant, support for AMAN operations involving airports located in adjacent ATSUs).

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		All ECAC+ States except: Albania, Armenia, Azerbaijan, Bulgaria, Cyprus, Georgia, Israel, Latvia, Lithuania, Luxembourg, Malta, Moldova, Montenegro, North Macedonia, Slovenia, Ukraine			
Timescales:		From:	By:	Applicable to:	
Initial operational capability		01/01/2012		Applicability Area	
Full operational capability			31/12/2019	Applicability Area	

References

European ATM Master Plan

OI step -		<a href="#">[TS-0305]-Arrival Management Extended to En-Route Airspace</a>									
	Enablers -	ER APP ATC 111	HUM-TS-0305	PRO-052							
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

-none-
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Essential Operational Changes

Fully Dynamic and Optimised Airspace
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SESAR Solution

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ICAO GANP - ASBUs

- none -
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Deployment Programme

- none -
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European Plan for Aviation Safety

- none -
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Operating Environments

En-Route
Terminal Airspace

Stakeholder Lines of Action (SLoAs)

SLoA ref.	Title	From	By
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ATC15.1	Information Exchange with En-route in Support of AMAN		
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ATC15.1-ASP01	Develop safety assessment for the changes	01/01/2012	31/12/2019
ATC15.1-ASP02	Adapt the ATC systems that will implement arrival management functionality in En-Route sectors in support of AMAN operations in adjacent/subjacent TMAs	01/01/2012	31/12/2019
ATC15.1-ASP03	Implement ATC procedures in En-Route airspace/sectors that will implement AMAN information and functionality	01/01/2012	31/12/2019
ATC15.1-ASP04	Train operational and technical staff and update Training Plans	01/01/2012	31/12/2019
ATC15.1-ASP05	Revise and publish Aeronautical Information documents	<b>DELETED</b>	

Description of finalised and deleted SLOAs is available on the eATM Portal @ [https://www.eatmportal.eu/working/depl/essip\\_objectives](https://www.eatmportal.eu/working/depl/essip_objectives)

### Expected Performance Benefits

Safety:	Maintained or improved
Capacity:	Improved airport/TMA capacity.
Operational Efficiency:	Reduction of low-level holding operations and low-level tactical vectoring.
Cost Efficiency:	-
Environment:	Reduction in holding and in low-level vectoring, by applying delay management at an early stage of flight, has a positive environmental effect in terms of noise and CO2 emissions. Moreover, it reduces delay and has a positive effect on fuel burn.
Security:	N/A

### Detailed SLOA Descriptions

ATC15.1-ASP01	Develop safety assessment for the changes	From:	By:
		01/01/2012	31/12/2019
Action by:	ANS Providers		
Description & purpose:	<p>Develop safety assessment of the changes, notably ATC systems and procedures that will implement arrival management functionality in En-Route sectors and associated procedures.</p> <p>The tasks to be done are as follows:</p> <ul style="list-style-type: none"> <li>- Conduct hazard identification, risk assessment in order to define safety objectives and safety requirements mitigating the risks;</li> <li>- Develop safety assessment;</li> <li>- Deliver a safety assessment report to the NSA, if new standards are applicable or if the severity class of identified risks is 1 or 2.</li> </ul> <p>This safety assessment shall be based on fully validated/recognised method.</p>		
Supporting material(s):	<p>EUROCONTROL - EAM 4 - ESARR 4 - Risk Assessment and Mitigation in ATM - Edition 1.0 / 04/2001            Url : <a href="https://www.eurocontrol.int/publication/esarr-4-risk-assessment-and-mitigation-atm">https://www.eurocontrol.int/publication/esarr-4-risk-assessment-and-mitigation-atm</a></p> <p>EUROCONTROL - Air Navigation Systems Safety Assessment Methodology (SAM) - Version 2.1 / 11/2006            Url : <a href="https://www.eurocontrol.int/tool/safety-assessment-methodology">https://www.eurocontrol.int/tool/safety-assessment-methodology</a></p>		
Finalisation criteria:	1 - The safety assessment report including safety arguments for the changes has been delivered to the NSA and a notification of acceptance was received.		
ATC15.1-ASP02	Adapt the ATC systems that will implement arrival management functionality in En-Route sectors in support of AMAN operations in adjacent/subjacent TMAs	From:	By:
		01/01/2012	31/12/2019
Action by:	ANS Providers		
Description & purpose:	Implement, in selected ATC systems, the necessary functionality and information exchanges to support the use of AMAN information in En-Route sectors requiring data exchange generated from AMAN systems and operations in adjacent/subjacent TMAs.		
Supporting material(s):	<p>EUROCONTROL - SPEC-106 - EUROCONTROL Specification for On-Line Data Interchange (OLDI) - Edition 5.0 / 07/2020            Url : <a href="https://www.eurocontrol.int/publication/eurocontrol-specification-line-data-interchange-oldi">https://www.eurocontrol.int/publication/eurocontrol-specification-line-data-interchange-oldi</a></p> <p>EUROCONTROL - GUID-176 - EUROCONTROL Guidelines for On-Line Data Interchange (OLDI) - Edition 1.1 / 07/2020            Url : <a href="https://www.eurocontrol.int/publication/eurocontrol-guidelines-line-data-interchange-oldi">https://www.eurocontrol.int/publication/eurocontrol-guidelines-line-data-interchange-oldi</a></p>		
ATM Master Plan relationship:	<a href="#">[ER APP ATC 111]-Enhance AMAN to provide arrival sequence time information into En-Route decision making.</a>		
Finalisation criteria:	<p>1 - ATC systems are either already compliant to AMAN use in En-Route or have functionality implemented to support the necessary exchange of information needed to support AMAN operations in En-Route airspace that is interfacing with AMANs in adjacent/subjacent areas.</p> <p>2 - ANSPs have described the level of system support and functionality with direct reference to the relevant complexity level as defined in the AMAN Information Extension to En-Route Sectors - Concept documentation.</p>		
ATC15.1-ASP03	Implement ATC procedures in En-Route airspace/sectors that will implement AMAN information and functionality	From:	By:

ATC15.1		Information Exchange with En-route in Support of AMAN	
		01/01/2012	31/12/2019
<b>Action by:</b>	<b>ANS Providers</b>		
<b>Description &amp; purpose:</b>	Define, validate and implement the necessary ATC procedures in selected En-Route airspace/sectors, to support the use of AMAN information in En-Route sectors that are interfacing with AMAN systems operating in adjacent/subjacent TMAs.		
<b>Supporting material(s):</b>	EUROCONTROL - SPEC-106 - EUROCONTROL Specification for On-Line Data Interchange (OLDI) - Edition 5.0 / 07/2020 Url : <a href="https://www.eurocontrol.int/publication/eurocontrol-specification-line-data-interchange-oldi">https://www.eurocontrol.int/publication/eurocontrol-specification-line-data-interchange-oldi</a> EUROCONTROL - GUID-176 - EUROCONTROL Guidelines for On-Line Data Interchange (OLDI) - Edition 1.1 / 07/2020 Url : <a href="https://www.eurocontrol.int/publication/eurocontrol-guidelines-line-data-interchange-oldi">https://www.eurocontrol.int/publication/eurocontrol-guidelines-line-data-interchange-oldi</a>		
<b>ATM Master Plan relationship:</b>	<a href="#">[PRO-052]-ATC Procedures for extending sequencing for TMA into the en-route sectors</a>		
<b>Finalisation criteria:</b>	1 - Procedures have been implemented, documented and are in operational use. 2 - ANSPs have defined, validated and implemented procedures directly related to the relevant complexity level chosen (ref. SLoA ATC15-ASP02), as defined in the AMAN Information Extension to En-Route Sectors Concept documentation.		
<b>ATC15.1-ASP04</b>	<b>Train operational and technical staff and update Training Plans</b>	<b>From:</b> 01/01/2012	<b>By:</b> 31/12/2019
<b>Action by:</b>	<b>ANS Providers</b>		
<b>Description &amp; purpose:</b>	Train operational staff in the use of ATC procedures in En-Route airspace/sectors that will implement AMAN information and functionality in support of AMAN in adjacent/subjacent TMAs.  The tasks to be done are as follows: - Develop a training package (material); - Update the training plans; - Determine staff population to be trained; - Apply the training plans.		
<b>Finalisation criteria:</b>	1 - The training plans have been updated and a training package has been developed by the ANSP. 2 - All concerned personnel have been trained.		