COM10 — Migrate from AFTN to AMHS

The purpose of this objective is to enable EATM Network-wide support of a specific profile of the Extended level of service of the ATSMHS (ATS Message Handling Service), as defined by ICAO. An initial transition step supporting migration from the AFTN to the Basic ATSMHS level of service is foreseen.

AFTN, complemented in Europe by the CIDIN, has provided an effective store-and-forward messaging service for the conveyance of text messages, using character-oriented procedures, for many years. However AFTN / CIDIN technology is now becoming obsolescent, and is not sufficiently flexible to support future messaging requirements. It is intended that existing AFTN and CIDIN users and systems will transition to more modern technology, using the ATSMHS application, defined by ICAO to replace the AFTN telegraphic style of working with a store-and-forward message handling system based on international standards and providing enhanced functionality.

This implementation objective makes use of the EUROCONTROL Specification 0136, Edition number 2.0 "EUROCONTROL specification on the Air Traffic Services Message Handling System (AMHS)" recognised as Community Specification in the Official Journal of the European Union (ref. OJ C 323, 31.12.2009, p. 24), to help the ground ATS Messaging systems of the EATM Network to meet the essential requirements for interoperability mandated by Commission Regulation (EC) No 552/2004. In application of Article 4 of Commission Regulation (EC) No 552/2004, compliance with the essential requirements for interoperability shall be presumed for AMHS systems, together with the associated procedures, that meet the AMHS Community Specification.

For global AMHS address management ICAO has strongly recommended the use of the ATS Messaging Management Centre (AMC) implemented by EUROCONTROL under the aegis of the ICAO EUR Office (Paris) to every ICAO Contracting State worldwide, as soon as there is an AMHS project or implementation in that State.

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.

Edition	2022
Stakeholders	Air Navigation Service Provider / Aeronautics Industry
Type	SESAR
Scope	ECAC+
Status	Removed

Context

Related Elements

OBJ
COM10

EN
CTE-C06c

Applicability Area(s) and Timescales

Applicability Area: All ECAC+ States

Timescales	From	By	Applicable to
Initial operational capability	01-12-2011	-	Applicability Area
Full operational capability	-	31-12-2018	Applicability Area

Links to ATM Master Plan Level 2

EN Enablers

Code	Title	IOC	Related Elements
CTE-C06c	AMHS	31-12-2012	STK OI OBJ DS

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
Standards and Recommended Practices (SARPs) for the ATSMHS application are specified in ICAO Annex 10 to the Convention on International Civil Aviation (Annex 10 Volume II, Chapter 4.6 and Volume III, Part I, Chapter 3.5.3). These SARPs refer to detailed specifications in the relevant technical Manual (ICAO Doc 9880 Part IIB).
Deployment Programme 2022
-
Operating Environments
Airport
Terminal Airspace
En-Route
Network

Expected Performance Benefits

Safety	Benefits resulting from the application of a harmonised set of safety requirements.
Capacity	-
Operational efficiency	-
Cost efficiency	Use of COTS messaging systems will de-facto reduce the cost of messaging services and support any kind of message format including the exchange of new binary data leading to lower ANS provision costs.
Environment	-
Security	AMHS security services may help to protect against safety hazards such as accidental or deliberate message corruption and can provide protection against undetected misdelivery.

Stakeholder Lines of Action

Code	Title	From	By	Related Enablers
ASP01	Implement AMHS capability (Basic ATSMHS) and gateway facilities to AFTN	01-01-2002	31-12-2011	EN
ASP02	Implement regional boundary gateways	01-01-2002	31-12-2011	
ASP03	Enhance AMHS capability (Extended ATSMHS)	01-01-2012	31-12-2018	
ASP04	Ensure the conformity of AMHS systems and associated procedures	01-01-2002	31-12-2018	
ASP05	Organise personnel awareness and training	01-01-2002	31-12-2018	
ASP06	Participate in AMC activities for ATS Messaging Management	01-01-2007	31-12-2018	
IND01	Ensure the conformity of AMHS systems	01-01-2002	31-12-2018	
AGY01	Provide AMC (ATS Messaging Management Centre) Service	01-01-2007	31-12-2018	
AGY02	Implement AMHS capability (Basic ATSMHS) and gateway facilities to AFTN	FINALISED		
AGY03	Enhance AMHS capability (Extended ATSMHS)	01-01-2012	31-12-2018	
AGY04	Develop further relevant elements of the Extended ATSMHS in AMHS Community Specification	01-01-2010	31-12-2018	
AGY05	Implement AMHS-Community Specification compliance testing methodology and tools	01-01-2010	31-12-2018	
AGY06	Support personnel training	01-01-2002	31-12-2018	

Supporting Material

Title	Related SLoAs
EUROCONTROL - IANS-COM-AMHS - IANS-COM-AMHS Course https://trainingzone.eurocontrol.int	ASP05
EUROCONTROL - SPEC-0136 - EUROCONTROL Specification on the Air Traffic Services Message Handling System (AMHS) - Edition 2.1 / 09/2018 https://www.eurocontrol.int/publication/eurocontrol-specification-air-traffic-services-message-handling-system-amhs	AGY03, AGY04, AGY05, ASP01, ASP02, ASP03, ASP04, ASP05, IND01
ICAO - Doc 9880-Part II - Manual on Detailed Technical Specifications for the Aeronautical Telecommunication Network (ATN) using ISO/OSI Standards and Protocols - Part II - Ground-Ground Applications - Air Traffic Services Message Handling Services (ATSMHS) - Edition 1 / 12/2010 https://store.icao.int/	AGY03, ASP01, ASP02, ASP03
ICAO - Doc 9880-Part IV - Manual on Detailed Technical Specifications for the Aeronautical Telecommunication Network (ATN) using ISO/OSI Standards and Protocols - Part IV - Directory Services, Security and Systems Management - Edition 1 / 12/2010 https://store.icao.int/	ASP04, IND01
ICAO - EUR-Doc 020 - EUR AMHS Manual - Version 16 / 10/2021 https://www.icao.int/EURNAT/EUR%20and%20NAT%20Documents/EUR%20Documents/EUR%20Documents/020%20-%20EUR%20AMHS%20Manual/EUR%20Doc%20020%20-%20EUR%20AMHS%20Manual_v16_0.pdf	ASP01, ASP02, ASP03, ASP05
ICAO - EUR-Doc 021 - ATS Messaging Management Manual - Version 16 / 04/2014 https://www.icao.int/EURNAT/EUR%20and%20NAT%20Documents/EUR%20Documents/EUR%20Documents/021%20-%20ATS%20Messaging%20Management%20Manual/EUR%20Doc%20021%20-%20ATS%20Messaging%20Management%20Manual_v16_0.pdf	AGY01, ASP01, ASP02, ASP05, ASP06

Consultation & Approval

Working Arrangement in charge	CNS / COM SG
Outline description approved in	01/2009
Latest objective review at expert level	05/2010
Commitment Decision Body	Provisional Council (PC)
Objective approved/endorsed in	07/2010
Latest change to objective approved/endorsed in	09/2016