



# INF10.5 — Aeronautical Information Exchange - Airspace Reservation (ARES)

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SWIM comprises standards, infrastructure and governance enabling the management of information and its exchange between operational stakeholders via interoperable services.

This implementation objective is addressing one of the services in support of Airspace Management and Advanced Flexible Use of Airspace

- ASM Level 1 is the strategic level of FUA, with the involvement of relevant civil and military stakeholders. ASM Level 1 establishes airspace structures and defines their conditions of use, it includes exchange of long-term airspace planning e.g. major exercises and events. The management of airspace structures are applied during pre-tactical and tactical phases
- ASM Level 2 deals with the pre-tactical reservation of the airspace structures. The following services support the ASM level 2:
  - o Airspace Structure Service - Management of the AUP/UUP by the local ASM support systems requires that the same airspace data is used by both NM and the ASM support systems. The airspace data is available via NM B2B Airspace Structure Service, which allows to obtain in AIXM 5.1 all the airspace data needed by the local ASM support systems for the management of the AUP (AIRAC data and the live updates)
  - o Airspace Availability Service - part of the NM B2B Services, allows the local ASM support systems to provide the AUP and its dynamic updates (UUP) to NM in a timely manner; it also allows NM to share the local AUPs/UUPs with all stakeholders involved in the ASM Level 2. It also allows also the publication of the consolidated European AUP/UUP (EAUP/EUUP) to all stakeholders, AUs, for use in the flight planning systems
  - o Airspace Reservation (ARES) information: this service allows the exchange of information regarding ARES between local ASM support systems, in particular to support cross-border operations
- ASM Level 3 deals with the tactical activation and deactivation of the airspace structures. The following services support the ASM level 3:
  - o Notification of the activation of an Airspace Reservation/Restriction (ARES)
  - o Notification of the de-activation of an Airspace Reservation/Restriction (ARES)
  - o Pre-notification of the activation of an Airspace Reservation/Restriction (ARES)
  - o Notification of the release of an Airspace Reservation/Restriction (ARES)
  - o Query Airspace Reservation/Restriction (ARES) information

## System requirements

- Local ASM support systems shall exchange ARES information with relevant civil and military stakeholders at local and FAB level via SWIM Services
- Local ASM support systems shall provide the AUP/UUP information to NM via the NM B2B Airspace Availability Service
- Local ASM support systems shall consume the airspace information required for interoperability with NM via the NM B2B Airspace Structure Service
- The AU systems shall use the EAUP/EUUP published by NM via the NM B2B Airspace Availability Service
- The NM system shall make the NM B2B Airspace Availability Service SWIM compliant
- The NM system shall make the NM B2B Airspace Structure Service SWIM compliant
- ATC systems shall consume the information related to real-time activation and deactivation of ARES provided by the local ASM support systems

The current implementation objective is addressing the Airspace Reservation (ARES) service.

*NOTE: For a full description of the services as well as of the associated system requirements, see the Family 5, in the SESAR Deployment Programme edition 2022, Approved by the European Commission.*

*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.*

<b>Edition</b>	2022
<b>Stakeholders</b>	Air Navigation Service Provider
<b>Type</b>	CP1
<b>Scope</b>	ECAC+
<b>Status</b>	Active

## Context

### Related Elements

**OBJ**  
INF10.5

**OI**  
IS-0901-A

## Applicability Area(s) and Timescales

**Applicability Area 1:** All EU SES States  
(All EU SES States )

**Applicability Area 2:** United Kingdom

Timescales	From	By	Applicable to
Initial Operational Capability	01-01-2021	-	Applicability Area 1 + Applicability Area 2
Full Operational Capability / Target Date	-	31-12-2025	Applicability Area 1 + Applicability Area 2

## Links to ATM Master Plan Level 2

### **OI** Operational Improvement Steps

Code	Title	IOC	FOC	Related Elements
<a href="#">IS-0901-A</a>	<a href="#">SWIM for sharing G/G data, traffic flow management information and aeronautical information</a>	31-12-2023	31-12-2029	<b>SOL</b> <b>OI</b> <b>EN</b> <b>OBJ</b> <b>DS</b> <b>PCP</b> <b>ICAO</b>

### **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** ICAO Block Modules: No associated data

## References

### Applicable legislation

Regulation (EU) 2021/116 on the establishment of the Common Project One

### Applicable ICAO Annexes and other references

None

### Deployment Programme 2022

Family 5.3.1 - Aeronautical Information Exchange

### Operating Environments

-

## Expected Performance Benefits

Safety	-
Capacity	-
Operational efficiency	-
Cost efficiency	-
Environment	-
Security	-

## Stakeholder Lines of Action

Code	Title	From	By	Related Enablers
ASP01	Adapt/ Implement ASM system to Provide ARES information to local civil/military stakeholders	01-01-2021	31-12-2025	
ASP02	Publish ARES service in the Registry	01-01-2021	31-12-2025	
ASP03	Consume ARES information	01-01-2021	31-12-2025	
ASP04	Operational use	01-01-2021	31-12-2025	

## Supporting Material

Title	Related SLoAs
SDM - Standardisation and Regulation support to CP1 deployment 2021, Deliverable D1.1.1 07/2021 <a href="https://www.sesardeploymentmanager.eu/publications/deployment-programme">https://www.sesardeploymentmanager.eu/publications/deployment-programme</a>	ASP01, ASP02, ASP03, ASP04

## Consultation & Approval

Working Arrangement in charge	-
Outline description approved in	-
Latest objective review at expert level	-
Commitment Decision Body	-
Objective approved/endorsed in	-
Latest change to objective approved/endorsed in	-

