CP1	Active		EU
INF10.14	**Cooperative Network Information Exchange – Flight Management Service (Slots and NOP/AOP integration)**		
REG	ASP	MIL	APO	USE	INT	IND	NM	MET	AIS	USP

Subject matter and scope

The Cooperative Network Information will be exchanged between the systems of the operational stakeholders and the Network Manager by means of cooperative network information SWIM services, using the Yellow SWIM TI Profile, for Air Traffic Flow and Capacity Management (ATFCM) purposes.

Operational stakeholders use the NM B2B Services, which support the exchange of the following cooperative network information:

• Slots
This information exchange is supported by the Flight Management Service, which publishes flight information, including the ATFCM slots for flights subject to regulations.

• Synchronisation of network operations plan (NOP) and all airport operations plans (AOP)
This information exchange is supported by the Flight Management Service, which publishes flight information (Flight update messages) and allows the provision to NM of the Predicted Departure Planning Information (P-DPI) and Arrival Planning Information. This service also supports the provision of the Departure Planning Information (DPI).

Airspace Users are not mandated to but recommended to upgrade Airspace Users systems to use the NM B2B Services in order to consume the flight updates on own flights.

System requirements:

The Network Manager shall support all operational stakeholders in exchanging data electronically for cooperative network management activities, by providing the necessary SWIM services.

The access to NOP via the NM HMIs is covered by Objectives FCM11.1 and FCM11.2. This objective covers only the information exchanges between the stakeholders' local systems and the NM system. The Network Manager system and operational stakeholder systems shall be upgraded to support the exchange of information in compliance with the EUROCONTROL SWIM Specifications, either through the Public Internet and/or NewPENS. The choice of communication service depends on a business criticality assessment from where minimum performance requirements are identified.

ANSP systems shall be upgraded to use the NM B2B Services in order to:
• Consume the flight update information (FUM)
• If applicable, provide the Predicted and the normal Departure Planning Information (DPI) to NM
• If applicable, provide the Arrival Planning Information to NM

Airport systems shall be upgraded to use the NM B2B Services in order to:
• Consume the flight update information (FUM)
• Provide the Predicted and normal Departure Planning Information (DPI) to NM
• Provide the Arrival Planning Information to NM

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

Applicability Area(s) & Timescale(s)

Applicability Area 1	All EU SES States			
Applicability Area 2	Türkiye			

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

References

European ATM Master Plan

INF10.14	Cooperative Network Information Exchange – Flight Management Service (Slots and NOP/AOP integration)

OI step -	[IS-0901-A]-SWIM-TI Yellow Profile for Ground/Ground (G/G) information sharing					
	Enablers -	REG-0519	SWIM-GOV-05a	SWIM-INFR-05a	SWIM-NET-01a	SWIM-SUPT-01a	SWIM-SUPT-03a		

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

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

Essential Operational Changes

ATM Interconnected Network

SESAR Solution

#46 - SWIM Yellow Profile

ICAO GANP - ASBUs

- none -	

Deployment Programme

5.5.1	Cooperative Network Information Exchange

European Plan for Aviation Safety

- none -	

Operating Environments

Airport
En-Route
Network
Terminal Airspace

Stakeholder Lines of Action (SLoAs)

SloA ref.	Title	From	By
INF10.14-ASP01	Consume NM flight update information	01/01/2021	31/12/2025
INF10.14-ASP02	Operational use	01/01/2021	31/12/2025
INF10.14-APO01	Provide the Predicted Departure Planning Information to NM	01/01/2021	31/12/2025
INF10.14-APO02	Provide the Arrival Planning Information to NM	01/01/2021	31/12/2025
INF10.14-APO03	Consume NM flight update information	01/01/2021	31/12/2025
INF10.14-APO04	Operational use	01/01/2021	31/12/2025
INF10.14-USE01	Consume NM flight update information	01/01/2021	31/12/2025
INF10.14-NM01	Upgrade NM systems for SWIM compliance	01/01/2021	31/12/2025

Description of finalised and deleted SLoAs is available on the eATM Portal @ https://www.eatmportal.eu/working/depl/essip_objectives

Expected Performance Benefits

Safety: -
Capacity: -
Operational Efficiency: -
Cost Efficiency: -
Environment: -
Security: -

Detailed SLoA Descriptions

INF10.14	**Cooperative Network Information Exchange – Flight Management Service (Slots and NOP/AOP integration)**

INF10.14-ASP01	**Consume NM flight update information**	From: **Applicability Area 1:** 01/01/2021	By: **Applicability Area 1:** 31/12/2025
Action by:	**ANS Providers**		
Description & purpose:	The ANSP system is upgraded to consume the flight updates relative to the flights in their AOR/AOI (including the ATFM slot), which are published by NM via the NM B2B Services. There is a link to objective FCM10 (Interactive rolling NOP).		
Supporting material(s):	SDM - Standardisation and Regulation support to CP1 deployment 2021, Deliverable D1.1.1 07/2021 Url : https://www.sesardeploymentmanager.eu/publications/deployment-programme		
Finalisation criteria:	1 - The ANSP consumes flight update information.		
INF10.14-ASP02	**Operational use**	From: **Applicability Area 1:** 01/01/2021	By: **Applicability Area 1:** 31/12/2025
Action by:	**ANS Providers**		
Description & purpose:	The system is used to support daily operations once the systems have been implemented, the procedures are in place, capability assessment has been delivered, and the training has been completed.		
Supporting material(s):	SDM - Standardisation and Regulation support to CP1 deployment 2021, Deliverable D1.1.1 07/2021 Url : https://www.sesardeploymentmanager.eu/publications/deployment-programme		
Finalisation criteria:	1 - Information Exchanges are used for daily operations.		
INF10.14-APO01	**Provide the Predicted Departure Planning Information to NM**	From: **Applicability Area 1:** 01/01/2021	By: **Applicability Area 1:** 31/12/2025
Action by:	**Airport Operators**		
Description & purpose:	Systems in the airport are upgraded to send both the Predicted and the normal Departure Planning Information (P-DPI and DPI) to NM via the NM B2B Services. This SLoA supports the SLoA FCM11.1-APO02 (Implement Network Manager B2B services).		
Supporting material(s):	SDM - Standardisation and Regulation support to CP1 deployment 2021, Deliverable D1.1.1 07/2021 Url : https://www.sesardeploymentmanager.eu/publications/deployment-programme		
Finalisation criteria:	1 - The P-DPI and DPI is sent to NM via the NM B2B Services.		
INF10.14-APO02	**Provide the Arrival Planning Information to NM**	From: **Applicability Area 1:** 01/01/2021	By: **Applicability Area 1:** 31/12/2025
Action by:	**Airport Operators**		
Description & purpose:	Systems in the airport are upgraded to send the Arrival Planning Information (API) to NM via the NM B2B Services. This SLoA supports the SLoA FCM11.1-APO02 (Implement Network Manager B2B services).		
Supporting material(s):	SDM - Standardisation and Regulation support to CP1 deployment 2021, Deliverable D1.1.1 07/2021 Url : https://www.sesardeploymentmanager.eu/publications/deployment-programme		
Finalisation criteria:	1 - The API is sent to NM via the NM B2B Services.		
INF10.14-APO03	**Consume NM flight update information**	From: **Applicability Area 1:** 01/01/2021	By: **Applicability Area 1:** 31/12/2025
Action by:	**Airport Operators**		
Description & purpose:	Systems in the airport are upgraded to consume the flight update information made available via the NM B2B Services. This SLoA supports the SLoA FCM11.1-APO02 (Implement Network Manager B2B services).		
Supporting material(s):	SDM - Standardisation and Regulation support to CP1 deployment 2021, Deliverable D1.1.1 07/2021 Url : https://www.sesardeploymentmanager.eu/publications/deployment-programme		
Finalisation criteria:	1 - Systems in the airport consume the NM flight update information published via the NM B2B Services.		
INF10.14-APO04	**Operational use**	From: **Applicability Area 1:** 01/01/2021	By: **Applicability Area 1:** 31/12/2025
Action by:	**Airport Operators**		
Description & purpose:	The system is used to support daily operations once the systems have been implemented, the procedures are in place, capability assessment has been delivered, and the training has been completed.		
Supporting material(s):	SDM - Standardisation and Regulation support to CP1 deployment 2021, Deliverable D1.1.1 07/2021 Url : https://www.sesardeploymentmanager.eu/publications/deployment-programme		

INF10.14	Cooperative Network Information Exchange – Flight Management Service (Slots and NOP/AOP integration)		

Finalisation criteria:	1 - Information Exchanges are used for daily operations.		
		From:	By:
INF10.14-USE01	**Consume NM flight update information**	**Applicability Area 1:** 01/01/2021	**Applicability Area 1:** 31/12/2025
Action by:	**Airspace Users**		
Description & purpose:	The Airspace User flight planning system is upgraded to consume the flight updates relative to their flights (including the ATFM slot), which are published by NM via the NM B2B Services. There is a link to objective FCM10 (Interactive rolling NOP).		
Supporting material(s):	SDM - Standardisation and Regulation support to CP1 deployment 2021, Deliverable D1.1.1 07/2021 Url : https://www.sesardeploymentmanager.eu/publications/deployment-programme		
Finalisation criteria:	1 - The Airspace User system consumes the updates of their flights.		
		From:	By:
INF10.14-NM01	**Upgrade NM systems for SWIM compliance**	**Applicability Area 1:** 01/01/2021	**Applicability Area 1:** 31/12/2025
Action by:	**NM**		
Description & purpose:	The NM system is upgraded in order to make the NM B2B Services SWIM compliant. This SLoA supports the SLoA FCM11.1-NM03 (Develop Network Manager B2B services) and FCM06.1-NM02 (Provide flight update information).		
Supporting material(s):	SDM - Standardisation and Regulation support to CP1 deployment 2021, Deliverable D1.1.1 07/2021 Url : https://www.sesardeploymentmanager.eu/publications/deployment-programme		
Finalisation criteria:	1 - The NM B2B Services are SWIM compliant and available in the SWIM Registry as an operational SWIM compliant service.		