C	<b>P</b> 1		Active ECAC+					CAC+	
FCI	<b>M</b> 10	Interactive Rolling NOP							
REG	ASP	MIL	APO USE	INT	IND	NM	MET	AIS	USP

## Subject matter and scope

The rolling view of the network situation and the support to the collaborative processes is based on an information management platform, accessible online by all stakeholders for consultation, (not only passive but including dialogue opportunities) and updated as and when needed, in a secure and tailored way.

An initial implementation of the Interactive Rolling NOP was achieved through the deployment of the NOP Portal. The scope of this objective consists of the implementation of a platform that uses the state-of-the-art technologies.

This platform supports the network collaborative rolling processes from strategic to real-time operations, including capabilities for online performance monitoring integrated and feeding back into the collaborative network planning. The platform provides both a workplace tool, as well as system interfaces to allow integration in the stakeholders' own systems. Access to information is provided in a secure way, tailored according to the stakeholders needs and subject to access control rules, so that only those who have an operational need to access particular information are able to do so.

The platform allows building the Rolling NOP through a continuous exchange between the Network Manager and the operational stakeholders.

The Target Time (TT) management is an important part of Collaborative NOP. NM systems shall be able to derive the TT from the trajectory and the constraint and adjust calculated take-off times ('CTOT') based on refined and agreed TTs. NM shall assess the network impact of TT proposals, facilitate the coordination process if required, and transmit (updated) CTOT/TT messages to operational stakeholders. This process will be limited to the planning phase and transmission of updated CTOT. Operational Stakeholders need to be capable of receiving and processing these TT's.

ANSPs/AUs might foresee some adaptation of their systems for reception and handling of TTs. Where agreed, TT information will be used by flight crew and ATC in executive operations.

System requirements:

For NM:

- Provision of the NM technical platform and services for supporting collaborative NOP;
- Development of required NM B2B Services;
- Develop procedures handling the collaborative NOP updates (e.g. capacities values, runway configurations);
- Provision of TT by slot allocation and revision messages.

For ANSPs, Airports and AUs:

- Use of NM technical platform and services for supporting collaborative NOP;
- Use of the NM B2B Services (if required) for interaction with collaborative NOP;
- Develop procedures to provide updates to collaborative NOP (e.g. capacities values, runway configurations);
- Reception and handling of TT for ATFCM purposes.

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 Albania, Montenegro,		, Serbia, Türkiye, United Kingdom					
Timescales:		From:	By:	Applicable to:			
Initial Operational Capability		01/01/2021		Applicability Area 1 + Applicability Area 2			
Full Operational Capability / Target Date		31/12/2023	Applicability Area 1 + Applicability Area 2				
· _ ·							

#### References

#### European ATM Master Plan

OI step - [DCB-0102]-Interactive Rolling NOP

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### Interactive Rolling NOP

	Enablers -	AAMS-06a	AIMS-21	PRO-035							
OI step -	[DCB-0208]	-DCB in a trajec	tory managen	nent context							
	Enablers -	AOC-ATM-11	AOC-ATM-1	3 AOC-ATM-2	20 ER APP ATC 17	NIMS-21a	NIMS-	38	-	1-APS- 3a	SWIM-APS- 04a
		SWIM-INFR- 05a	SWIM-NET- 01a								
Logond:	WXYZ-001	Covered by S		VXYZ-002	Covered by SLoA(s) in another objective WXYZ- Not covered i			vered in the			
Legend:	VVATZ-001	this objective z		zz	Objective covering the enabler			003		Implem	entation Plan

## Applicable legislation

Regulation	EU) 2021/116 on the establishment of the Common Project O	ne
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Interactive Rolling NOP

### **Essential Operational Changes**

ATM Interconnected Network

### **SESAR Solution**

#18 - CTOT and TTA, #20 - Collaborative NOP for Step 1	
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### ICAO GANP - ASBUs

NOPS-B1/2	Enhanced Network Operations Planning
NOPS-B1/9	Target Times for ATFM purposes

#### **Deployment Programme**

4.2.1

## **European Plan for Aviation Safety**

- none -

#### **Operating Environments**

Airport	
En-Route	
Network	
Terminal Airspace	

# Stakeholder Lines of Action (SLoAs)

SloA ref.	Title	From	Ву
FCM10-ASP01	Use of NM technical platform and NM B2B service	01/01/2021	31/12/2023
FCM10-ASP02	Develop and implement procedures for interaction with the NOP	01/01/2021	31/12/2023
FCM10-ASP03	Adapt systems to receive TT for ATFCM purposes	01/01/2021	31/12/2023
FCM10-ASP04	Safety assessment	01/01/2021	31/12/2023
FCM10-ASP05	Training	01/01/2021	31/12/2023
FCM10-ASP06	Operational use	01/01/2021	31/12/2023
FCM10-APO01	Use of NM technical platform and NM B2B service	01/01/2021	31/12/2023
FCM10-USE01	Implement procedures and processes in reception of Target Time	01/01/2021	31/12/2023
FCM10-NM01	Enhance the NM technical platform and services	01/01/2021	31/12/2023
FCM10-NM02	Develop Network Manager B2B services	01/01/2021	31/12/2023
FCM10-NM03	Implement the Collaborative NOP procedures	01/01/2021	31/12/2023
FCM10-NM04	Adapt NM systems to support Target Time sharing	01/01/2021	31/12/2023
FCM10-NM05	Safety Assessment	01/01/2021	31/12/2023
FCM10-NM06	Training	01/01/2021	31/12/2023
FCM10-NM07	Operational use	01/01/2021	31/12/2023

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## Interactive Rolling NOP

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

## **Expected Performance Benefits**

Safety:	Improved information sharing. Enhanced safety.
Capacity:	Enhanced predictability. Increased capacity.
Operational Efficiency:	-
Cost Efficiency:	Improved situational awareness.
Environment:	-
Security:	-

# **Detailed SLoA Descriptions**

		From:	By:				
FCM10-ASP01	Use of NM technical platform and NM B2B service	Applicability Area 1: 01/01/2021	Applicability Area 1: 31/12/2023				
Action by:	ANS Providers	01/01/2021					
Description & purpose:	Utilisation of NM technical platform for collaborative NOP (for manual access to NM platform) and NM B2B services (if system to system data exchange is deemed necessary).						
	Note :This SLoA needs to be synchronised between ANSPs and NM						
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 - Technical connection to NM platform has been established.						
		From:	By:				
FCM10-ASP02	Develop and implement procedures for interaction with the NOP	Applicability Area 1: 01/01/2021	Applicability Area 1: 31/12/2023				
Action by:	ANS Providers						
Description & purpose:	Definition, validation and deployment of the new/changed operational procedures related to information updates to collaborative NOP.						
	Note :This SLoA needs to be synchronised between ANSPs and NM						
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						
ATM Master Plan relationship:	[PRO-035]-FCM Procedures for on-line access/update to the NOP and r	notification of updates					
Finalisation criteria:	1 - Operational procedures for the interaction with the NOP have been	established.					
	From: By:						
FCM10-ASP03	Adapt systems to receive TT for ATFCM purposes	Applicability Area 1:	Applicability Area 1: 31/12/2023				
		01/01/2021					
Action by:	ANS Providers	· · · · · · · · · · · · · · · · · · ·					
Description & purpose:	Adapt ATC systems for handling of SAM/SRM messages and extraction	of larget limes (IIs).					
	Note :This SLoA needs to be synchronised between ANSPs and NM	Dellassekie D4.4.4.07	/0004				
Supporting material(s):	SDM - Standardisation and Regulation support to CP1 deployment 2021, Deliverable D1.1.1 07/2021						
			2021				
Einalisation critoria:	Url : https://www.sesardeploymentmanager.eu/publications/deployment-						
Finalisation criteria:		programme					
Finalisation criteria:	Url : https://www.sesardeploymentmanager.eu/publications/deployment- 1 - Systems have been updated to receive TT.	programme From:	By:				
Finalisation criteria: FCM10-ASP04	Url : https://www.sesardeploymentmanager.eu/publications/deployment-	programme					
	Url : https://www.sesardeploymentmanager.eu/publications/deployment- 1 - Systems have been updated to receive TT.	From: Applicability Area	By: Applicability Area 1:				
FCM10-ASP04	Url : https://www.sesardeploymentmanager.eu/publications/deployment- 1 - Systems have been updated to receive TT.	From: Applicability Area 1:	By: Applicability Area 1:				
	Url : https://www.sesardeploymentmanager.eu/publications/deployment- 1 - Systems have been updated to receive TT. Safety assessment	From: Applicability Area 1: 01/01/2021	By: Applicability Area 1: 31/12/2023				
FCM10-ASP04 Action by:	Url : https://www.sesardeploymentmanager.eu/publications/deployment- 1 - Systems have been updated to receive TT. Safety assessment ANS Providers	From: Applicability Area 1: 01/01/2021 d to the competent author , Deliverable D1.1.1 07	By: Applicability Area 1: 31/12/2023				
FCM10-ASP04 Action by: Description & purpose:	Url : https://www.sesardeploymentmanager.eu/publications/deployment-         1 - Systems have been updated to receive TT.         Safety assessment         ANS Providers         The safety assessment of the changes must be developed and delivered         SDM - Standardisation and Regulation support to CP1 deployment 2021	From: Applicability Area 1: 01/01/2021 d to the competent author, Deliverable D1.1.1 07, programme	By: Applicability Area 1: 31/12/2023				
FCM10-ASP04 Action by: Description & purpose: Supporting material(s):	Url : https://www.sesardeploymentmanager.eu/publications/deployment-         1 - Systems have been updated to receive TT.         Safety assessment         ANS Providers         The safety assessment of the changes must be developed and delivered         SDM - Standardisation and Regulation support to CP1 deployment 2021         Url : https://www.sesardeploymentmanager.eu/publications/deployment-	From: Applicability Area 1: 01/01/2021 d to the competent author, Deliverable D1.1.1 07, programme	By: Applicability Area 1: 31/12/2023				
FCM10-ASP04 Action by: Description & purpose: Supporting material(s):	Url : https://www.sesardeploymentmanager.eu/publications/deployment-         1 - Systems have been updated to receive TT.         Safety assessment         ANS Providers         The safety assessment of the changes must be developed and delivered         SDM - Standardisation and Regulation support to CP1 deployment 2021         Url : https://www.sesardeploymentmanager.eu/publications/deployment-	From: Applicability Area 1: 01/01/2021 d to the competent authority.	By: Applicability Area 1: 31/12/2023 prity. /2021				

FCM10	Interactive Rolling NOP						
Description & purpose:	All relevant staff must be duly trained.						
Supporting material(s):	SDM - Standardisation and Regulation support to CP1 deployment 2021, Deliverable D1.1.1 07/2021						
supporting material(o).	Url : https://www.sesardeploymentmanager.eu/publications/deployment-						
Finalisation criteria:	1 - Training has been completed.	programmo					
mansation criteria.		From:	By:				
FCM10-ASP06	Operational use	Applicability Area 1:	Applicability Area 1: 31/12/2023				
• •		01/01/2021					
Action by:	ANS Providers						
Description & purpose:		ng NOP is ready for operational use once the procedures are in place, the systems have been upgraded, essment has been delivered and approved, and the training has been completed.					
Supporting material(s):	SDM - Standardisation and Regulation support to CP1 deployment 2021	and Regulation support to CP1 deployment 2021, Deliverable D1.1.1 07/2021					
	Url : https://www.sesardeploymentmanager.eu/publications/deployment-	programme					
Finalisation criteria:	1 - Interactive rolling NOP is put into service.						
		From:	By:				
FCM10-APO01	Use of NM technical platform and NM B2B service	01/01/2021	31/12/2023				
Action by:	Airport Operators						
Description & purpose:	Utilisation of NM technical platform for collaborative NOP (for manual ac system-to-system data exchange is deemed necessary).	Itilisation of NM technical platform for collaborative NOP (for manual access to NM platform) and NM B2B services (if ystem-to-system data exchange is deemed necessary).					
	Note :This SLoA needs to be synchronised between AOs and NM						
Supporting material(s):	SDM - Standardisation and Regulation support to CP1 deployment 2021						
•••pp•••••••••••••••••••••••••••••••••	Url : https://www.sesardeploymentmanager.eu/publications/deployment-						
Finalisation criteria:	1 - Technical connection to NM platform has been established.						
mansation enteria.		From:	By:				
		Applicability Area	Applicability Area 1:				
FCM10-USE01	Implement procedures and processes in reception of Target Time	1: 01/01/2021	31/12/2023				
Aation kuu		01/01/2021					
Action by:	Airspace Users						
Description & purpose:	Receive Target Times and inform the crew.						
	Note :This SLoA needs to be synchronised between ANSPs, AUs and N						
Supporting material(s):	SDM - Standardisation and Regulation support to CP1 deployment 2021		/2021				
Finalisation criteria:	Url : https://www.sesardeploymentmanager.eu/publications/deployment- 1 - Procedures and processes for the reception and transmission of TT h		nd implemented.				
		From:	By:				
FCM10-NM01	Enhance the NM technical platform and services	Applicability Area	Applicability Area 1: 31/12/2023				
		01/01/2021	0.1, 12,2020				
Action by:	NM						
Description & purpose:	The enhancement of NM's technical platform and services will address the following: - Improvement and integration of the different functionalities/interfaces in support of the Interactive Rolling NOP - Improved usability - Technical support for the capabilities required by the other families - Enhancements of post-analysis tools and process.						
Supporting material(s):	SDM - Standardisation and Regulation support to CP1 deployment 2021 Url : <u>https://www.sesardeploymentmanager.eu/publications/deployment-</u>		/2021				
Finalisation criteria:	<ol> <li>Imperior integration of technical platform and services upgrades is complete 1 - Implementation of technical platform and services upgrades is complete technical platform and ser</li></ol>						
			By:				
FCM10-NM02	Develop Network Manager B2B services	1: 31/12/2023					
		01/01/2021	51/12/2025				
Action by:	NM	01/01/2021	31/12/2023				
Action by: Description & purpose:	Development and implementation of NM B2B Services in support of the	•					
Description & purpose:	Development and implementation of NM B2B Services in support of the objective. SDM - Standardisation and Regulation support to CP1 deployment 2021	information exchanges , Deliverable D1.1.1 07	required by this				
Description & purpose: Supporting material(s):	Development and implementation of NM B2B Services in support of the objective. SDM - Standardisation and Regulation support to CP1 deployment 2021 Url : https://www.sesardeploymentmanager.eu/publications/deployment-	information exchanges , Deliverable D1.1.1 07 programme	required by this				
Description & purpose:	Development and implementation of NM B2B Services in support of the objective. SDM - Standardisation and Regulation support to CP1 deployment 2021	information exchanges , Deliverable D1.1.1 07 programme	required by this				

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## Interactive Rolling NOP

		Applicability Area 1: 01/01/2021	Applicability Area 1: 31/12/2023
Action by:	NM	01/01/2021	
Description & purpose:	Definition, validation and deployment of the new/changed operational procedures related to information updates to collaborative 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		
ATM Master Plan relationship:	[PRO-035]-FCM Procedures for on-line access/update to the NOP and notification of updates		
Finalisation criteria:	1 - Operational procedures related to information updates to collabor	ative NOP have been imple	emented.
		From:	By:
FCM10-NM04	Adapt NM systems to support Target Time sharing	Applicability Area 1: 01/01/2021	Applicability Area 1: 31/12/2023
Action by:	NM		
Description & purpose:	NM to provide the Target Times related to the most penalised regulation as part of the Slot Allocation Message (SAM) sent to ATSUs concerned by the flight and to the airline's Flight Operations Center. NM to include the Target Times information as part of SAM/SRM messages via the NM B2B Services (e.g. flight updates).         Note :This SLoA needs to be synchronised between ANSPs, AUs and NM.		
	SDM - Standardisation and Regulation support to CP1 deployment 2021, Deliverable D1.1.1 07/2021		
Supporting material(s):	Url : https://www.sesardeploymentmanager.eu/publications/deployment-programme		
ATM Master Plan	[NIMS-21a]-Initial Flight Planning management enhanced to support 4D for Step 1		
relationship:	[NIMS-38]-Calculation and dissemination of the TTO & TTA		
	[NIMS-46]-Integrated local DCB working position		
Finalisation criteria:	1 - Target times have been incorporated into SAM and equivalent NI	A B2B services	
FCM10-NM05		From:	By:
	Safety Assessment	Applicability Area	Applicability Area 1
		1: 01/01/2021	31/12/2023
Action by:	NM		
Description & purpose:	The safety assessment of the changes must be developed and delivered to the competent authority.		
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 - Safety assessment has been developed and delivered to the corr	petent authority.	
FCM10-NM06	Training	From:	By:
		Applicability Area	Applicability Area 1 31/12/2023
		1:	
· ·		01/01/2021	
Action by:	NM		
	All relevant staff must be duly trained.		
	SDM - Standardisation and Regulation support to CP1 deployment 2		/2021
Supporting material(s):	SDM - Standardisation and Regulation support to CP1 deployment 2 Url : <u>https://www.sesardeploymentmanager.eu/publications/deploym</u>		/2021
Supporting material(s):	SDM - Standardisation and Regulation support to CP1 deployment 2	ent-programme	
Supporting material(s):	SDM - Standardisation and Regulation support to CP1 deployment 2 Url : <u>https://www.sesardeploymentmanager.eu/publications/deploym</u>	ent-programme From:	By:
Supporting material(s):	SDM - Standardisation and Regulation support to CP1 deployment 2 Url : <u>https://www.sesardeploymentmanager.eu/publications/deploym</u>	ent-programme	By:
Supporting material(s): Finalisation criteria: FCM10-NM07	SDM - Standardisation and Regulation support to CP1 deployment 2 Url : <u>https://www.sesardeploymentmanager.eu/publications/deploym</u> 1 - Training has been completed.	Ent-programme From: Applicability Area 1:	By: Applicability Area 1:
Supporting material(s): Finalisation criteria: FCM10-NM07 Action by:	SDM - Standardisation and Regulation support to CP1 deployment 2 Url : <u>https://www.sesardeploymentmanager.eu/publications/deploym</u> 1 - Training has been completed. <b>Operational use</b>	ent-programme From: Applicability Area 1: 01/01/2021 rres are in place, the system	By: Applicability Area 1: 31/12/2023
Description & purpose: Supporting material(s): Finalisation criteria: FCM10-NM07 Action by: Description & purpose: Supporting material(s):	SDM - Standardisation and Regulation support to CP1 deployment 2 Url : https://www.sesardeploymentmanager.eu/publications/deploym 1 - Training has been completed. Operational use NM Interactive rolling NOP is ready for operational use once the procedu	ent-programme From: Applicability Area 1: 01/01/2021 ures are in place, the system ining has been completed. 021, Deliverable D1.1.1 07	By: Applicability Area 1: 31/12/2023 ns have been upgraded