

CP1		Active							ECAC+	
FCM10		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

Ol step - [\[DCB-0102\]-Interactive Rolling NOP](#)

<b>FCM10</b>	<b>Interactive Rolling NOP</b>							
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	Enablers -	AAMS-06a	AIMS-21	PRO-035					
Ol step -	<a href="#">[DCB-0208]-DCB in a trajectory management context</a>								
	Enablers -	AOC-ATM-11	AOC-ATM-13	AOC-ATM-20	ER APP ATC 17	NIMS-21a	NIMS-38	SWIM-APS-03a	SWIM-APS-04a
		SWIM-INFR-05a	SWIM-NET-01a						
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
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Essential Operational Changes

ATM Interconnected Network
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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	Interactive Rolling NOP
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European Plan for Aviation Safety

- none -	
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Operating Environments

Airport
En-Route
Network
Terminal Airspace

Stakeholder Lines of Action (SLoAs)

SloA ref.	Title	From	By
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

FCM10	Interactive Rolling NOP
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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

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

### Detailed SLoA Descriptions

FCM10-ASP01	Use of NM technical platform and NM B2B service	From: <b>Applicability Area 1:</b> 01/01/2021	By: <b>Applicability Area 1:</b> 31/12/2023
<b>Action by:</b>	<b>ANS Providers</b>		
<b>Description &amp; purpose:</b>	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).		
	<a href="#">Note :This SLoA needs to be synchronised between ANSPs and NM</a>		
<b>Supporting material(s):</b>	SDM - Standardisation and Regulation support to CP1 deployment 2021, Deliverable D1.1.1 07/2021 Url : <a href="https://www.sesardeploymentmanager.eu/publications/deployment-programme">https://www.sesardeploymentmanager.eu/publications/deployment-programme</a>		
<b>Finalisation criteria:</b>	1 - Technical connection to NM platform has been established.		
FCM10-ASP02	Develop and implement procedures for interaction with the NOP	From: <b>Applicability Area 1:</b> 01/01/2021	By: <b>Applicability Area 1:</b> 31/12/2023
<b>Action by:</b>	<b>ANS Providers</b>		
<b>Description &amp; purpose:</b>	Definition, validation and deployment of the new/changed operational procedures related to information updates to collaborative NOP.		
	<a href="#">Note :This SLoA needs to be synchronised between ANSPs and NM</a>		
<b>Supporting material(s):</b>	SDM - Standardisation and Regulation support to CP1 deployment 2021, Deliverable D1.1.1 07/2021 Url : <a href="https://www.sesardeploymentmanager.eu/publications/deployment-programme">https://www.sesardeploymentmanager.eu/publications/deployment-programme</a>		
<b>ATM Master Plan relationship:</b>	<a href="#">[PRO-035]-FCM Procedures for on-line access/update to the NOP and notification of updates</a>		
<b>Finalisation criteria:</b>	1 - Operational procedures for the interaction with the NOP have been established.		
FCM10-ASP03	Adapt systems to receive TT for ATFCM purposes	From: <b>Applicability Area 1:</b> 01/01/2021	By: <b>Applicability Area 1:</b> 31/12/2023
<b>Action by:</b>	<b>ANS Providers</b>		
<b>Description &amp; purpose:</b>	Adapt ATC systems for handling of SAM/SRM messages and extraction of Target Times (TTs).		
	<a href="#">Note :This SLoA needs to be synchronised between ANSPs and NM</a>		
<b>Supporting material(s):</b>	SDM - Standardisation and Regulation support to CP1 deployment 2021, Deliverable D1.1.1 07/2021 Url : <a href="https://www.sesardeploymentmanager.eu/publications/deployment-programme">https://www.sesardeploymentmanager.eu/publications/deployment-programme</a>		
<b>Finalisation criteria:</b>	1 - Systems have been updated to receive TT.		
FCM10-ASP04	Safety assessment	From: <b>Applicability Area 1:</b> 01/01/2021	By: <b>Applicability Area 1:</b> 31/12/2023
<b>Action by:</b>	<b>ANS Providers</b>		
<b>Description &amp; purpose:</b>	The safety assessment of the changes must be developed and delivered to the competent authority.		
<b>Supporting material(s):</b>	SDM - Standardisation and Regulation support to CP1 deployment 2021, Deliverable D1.1.1 07/2021 Url : <a href="https://www.sesardeploymentmanager.eu/publications/deployment-programme">https://www.sesardeploymentmanager.eu/publications/deployment-programme</a>		
<b>Finalisation criteria:</b>	1 - Safety assessment has been developed and delivered to the competent authority.		
FCM10-ASP05	Training	From: <b>Applicability Area 1:</b> 01/01/2021	By: <b>Applicability Area 1:</b> 31/12/2023
<b>Action by:</b>	<b>ANS Providers</b>		

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 Url : <a href="https://www.sesardeploymentmanager.eu/publications/deployment-programme">https://www.sesardeploymentmanager.eu/publications/deployment-programme</a>		
Finalisation criteria:	1 - Training has been completed.		
FCM10-ASP06	Operational use	From: Applicability Area 1: 01/01/2021	By: Applicability Area 1: 31/12/2023
Action by:	ANS Providers		
Description & purpose:	Interactive rolling NOP is ready for operational use once the procedures are in place, the systems have been upgraded, the safety assessment has been delivered and approved, 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 : <a href="https://www.sesardeploymentmanager.eu/publications/deployment-programme">https://www.sesardeploymentmanager.eu/publications/deployment-programme</a>		
Finalisation criteria:	1 - Interactive rolling NOP is put into service.		
FCM10-APO01	Use of NM technical platform and NM B2B service	From: 01/01/2021	By: 31/12/2023
Action by:	Airport Operators		
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 AOs and NM		
Supporting material(s):	SDM - Standardisation and Regulation support to CP1 deployment 2021, Deliverable D1.1.1 07/2021 Url : <a href="https://www.sesardeploymentmanager.eu/publications/deployment-programme">https://www.sesardeploymentmanager.eu/publications/deployment-programme</a>		
Finalisation criteria:	1 - Technical connection to NM platform has been established.		
FCM10-USE01	Implement procedures and processes in reception of Target Time	From: Applicability Area 1: 01/01/2021	By: Applicability Area 1: 31/12/2023
Action by:	Airspace Users		
Description & purpose:	Receive Target Times and inform the crew.  Note :This SLoA needs to be synchronised between ANSPs, AUs and NM		
Supporting material(s):	SDM - Standardisation and Regulation support to CP1 deployment 2021, Deliverable D1.1.1 07/2021 Url : <a href="https://www.sesardeploymentmanager.eu/publications/deployment-programme">https://www.sesardeploymentmanager.eu/publications/deployment-programme</a>		
Finalisation criteria:	1 - Procedures and processes for the reception and transmission of TT have been developed and implemented.		
FCM10-NM01	Enhance the NM technical platform and services	From: Applicability Area 1: 01/01/2021	By: Applicability Area 1: 31/12/2023
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, Deliverable D1.1.1 07/2021 Url : <a href="https://www.sesardeploymentmanager.eu/publications/deployment-programme">https://www.sesardeploymentmanager.eu/publications/deployment-programme</a>		
Finalisation criteria:	1 - Implementation of technical platform and services upgrades is completed.		
FCM10-NM02	Develop Network Manager B2B services	From: Applicability Area 1: 01/01/2021	By: Applicability Area 1: 31/12/2023
Action by:	NM		
Description & purpose:	Development and implementation of NM B2B Services in support of the information exchanges required by this objective.		
Supporting material(s):	SDM - Standardisation and Regulation support to CP1 deployment 2021, Deliverable D1.1.1 07/2021 Url : <a href="https://www.sesardeploymentmanager.eu/publications/deployment-programme">https://www.sesardeploymentmanager.eu/publications/deployment-programme</a>		
Finalisation criteria:	1 - Implementation of additional NM B2B interfaces related to services in FCM10-NM01 is completed.		
FCM10-NM03	Implement the Collaborative NOP procedures	From:	By:

FCM10		Interactive Rolling NOP	
		<b>Applicability Area 1:</b> 01/01/2021	<b>Applicability Area 1:</b> 31/12/2023
<b>Action by:</b>	NM		
<b>Description &amp; purpose:</b>	Definition, validation and deployment of the new/changed operational procedures related to information updates to collaborative NOP.		
<b>Supporting material(s):</b>	SDM - Standardisation and Regulation support to CP1 deployment 2021, Deliverable D1.1.1 07/2021 Url : <a href="https://www.sesardeploymentmanager.eu/publications/deployment-programme">https://www.sesardeploymentmanager.eu/publications/deployment-programme</a>		
<b>ATM Master Plan relationship:</b>	<a href="#">[PRO-035]-FCM Procedures for on-line access/update to the NOP and notification of updates</a>		
<b>Finalisation criteria:</b>	1 - Operational procedures related to information updates to collaborative NOP have been implemented.		
<b>FCM10-NM04</b>	<b>Adapt NM systems to support Target Time sharing</b>	<b>From:</b> <b>Applicability Area 1:</b> 01/01/2021	<b>By:</b> <b>Applicability Area 1:</b> 31/12/2023
<b>Action by:</b>	NM		
<b>Description &amp; purpose:</b>	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).		
	<a href="#">Note :This SLoA needs to be synchronised between ANSPs, AUs and NM.</a>		
<b>Supporting material(s):</b>	SDM - Standardisation and Regulation support to CP1 deployment 2021, Deliverable D1.1.1 07/2021 Url : <a href="https://www.sesardeploymentmanager.eu/publications/deployment-programme">https://www.sesardeploymentmanager.eu/publications/deployment-programme</a>		
<b>ATM Master Plan relationship:</b>	<a href="#">[NIMS-21a]-Initial Flight Planning management enhanced to support 4D for Step 1</a> <a href="#">[NIMS-38]-Calculation and dissemination of the TTO &amp; TTA</a> <a href="#">[NIMS-46]-Integrated local DCB working position</a>		
<b>Finalisation criteria:</b>	1 - Target times have been incorporated into SAM and equivalent NM B2B services.		
<b>FCM10-NM05</b>	<b>Safety Assessment</b>	<b>From:</b> <b>Applicability Area 1:</b> 01/01/2021	<b>By:</b> <b>Applicability Area 1:</b> 31/12/2023
<b>Action by:</b>	NM		
<b>Description &amp; purpose:</b>	The safety assessment of the changes must be developed and delivered to the competent authority.		
<b>Supporting material(s):</b>	SDM - Standardisation and Regulation support to CP1 deployment 2021, Deliverable D1.1.1 07/2021 Url : <a href="https://www.sesardeploymentmanager.eu/publications/deployment-programme">https://www.sesardeploymentmanager.eu/publications/deployment-programme</a>		
<b>Finalisation criteria:</b>	1 - Safety assessment has been developed and delivered to the competent authority.		
<b>FCM10-NM06</b>	<b>Training</b>	<b>From:</b> <b>Applicability Area 1:</b> 01/01/2021	<b>By:</b> <b>Applicability Area 1:</b> 31/12/2023
<b>Action by:</b>	NM		
<b>Description &amp; purpose:</b>	All relevant staff must be duly trained.		
<b>Supporting material(s):</b>	SDM - Standardisation and Regulation support to CP1 deployment 2021, Deliverable D1.1.1 07/2021 Url : <a href="https://www.sesardeploymentmanager.eu/publications/deployment-programme">https://www.sesardeploymentmanager.eu/publications/deployment-programme</a>		
<b>Finalisation criteria:</b>	1 - Training has been completed.		
<b>FCM10-NM07</b>	<b>Operational use</b>	<b>From:</b> <b>Applicability Area 1:</b> 01/01/2021	<b>By:</b> <b>Applicability Area 1:</b> 31/12/2023
<b>Action by:</b>	NM		
<b>Description &amp; purpose:</b>	Interactive rolling NOP is ready for operational use once the procedures are in place, the systems have been upgraded, the safety assessment has been delivered and approved, and the training has been completed.		
<b>Supporting material(s):</b>	SDM - Standardisation and Regulation support to CP1 deployment 2021, Deliverable D1.1.1 07/2021 Url : <a href="https://www.sesardeploymentmanager.eu/publications/deployment-programme">https://www.sesardeploymentmanager.eu/publications/deployment-programme</a>		
<b>Finalisation criteria:</b>	1 - Interactive rolling NOP is put into service.		

