

SESAR		Active							ECAC+	
COM12		New Pan-European Network Service (NewPENS)								
REG	ASP	MIL	APO	USE	INT	IND	NM	MET	AIS	USP

Subject matter and scope

PENS (Pan-European Network Service) is an international ground/ground communications infrastructure jointly implemented by EUROCONTROL and European ANSPs in order to meet existing and future ATM communication requirements. NewPENS builds on PENS and aims at providing a new framework, with an adapted governance, to reap the benefits of having a single IP backbone for all ATM services in the ICAO EUR/NAT region.

NewPENS will support SESAR deployment and, in particular, the implementation of the PCP Regulation (Regulation (EU) No 716/2014) which in Para. 5.5 of its Annex states that "to support the blue SWIM Technical Infrastructure (TI) Profile, very high and high capacity centres shall be connected to Pan-European Network Services (PENS)". The Blue SWIM TI profile includes the exchange of flight object (FO) information and therefore, civil and military ANSPs planning to implement FO information will have to become NewPENS users.

The aim of NewPENS is to support information exchanges for all ATM services, not only for ANSPs and the Network Manager, but also supporting interactions with military, airport and aircraft operator. It is up to these stakeholders, depending on their requirements, to join NewPENS or use public Internet Protocol network

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)

App. Area 1 (ANSPs signatories of the NewPENS Common Procurement Agreement: AL (Albcontrol), AT (Austrocontrol), BA (BHANSA), BE (BELGOCONTROL), BG (BULATSA), CH (Skyguide), CY (DCA), CZ (ANS CZ), DE (DFS), DK (Naviair), EE (EANS), ES (ENAIRE), FI (Finavia), FR (DSNA), HR (Crocontrol), HU (Hungarocontrol), IE (IAA), IT (ENAV), LU (ANS Luxembourg), LV (LGS), MK (M-NAV), MT (MATS), MUAC, NL (LVNL, RNLAf), NO (AVINOR), PL (PANSa), PT (NAV Portugal), RO (ROMATSA), RS (SMATSA), SE (LFV), SK(LPS SR), UA (UKASTE), UK(NATS))	All EU+ States except: Georgia, Greece, Lithuania, Moldova, Slovenia. Plus: Ukraine, United Kingdom
App. Area 2 (Stakeholders from the ECAC States not listed in Applicability Area 1.)	Armenia, Azerbaijan, Georgia, Greece, Israel, Lithuania, Moldova, Slovenia, Türkiye

Timescales:	From:	By:	Applicable to:
Initial operational capability	01/01/2018		App. Area 1 + App. Area 2
Full operational capability (33 ANSPs)		31/12/2020	App. Area 1
Full operational capability (Other stakeholders)		31/12/2024	App. Area 2

References

European ATM Master Plan

OI step -	- No OI Link -
Enablers -	CTE-C06b

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
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Applicable legislation

Regulation (EU) No 716/2014 on the establishment of the Pilot Common Project
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Essential Operational Changes

COM12	New Pan-European Network Service (NewPENS)
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- none -

SESAR Solution

- none -

ICAO GANP - ASBUs

B1-SWIM	Performance Improvement through the application of System Wide Information Management (SWIM)
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Deployment Programme

- none -

European Plan for Aviation Safety

- none -

Operating Environments

Airport
 En-Route
 Network
 Terminal Airspace

Stakeholder Lines of Action (SLoAs)

SloA ref.	Title	From	By
COM12-ASP01	Provide NewPENS connectivity infrastructure	01/01/2018	31/12/2020 31/12/2024
COM12-ASP02	Migrate to NewPENS	01/01/2018	31/12/2020 31/12/2024
COM12-APO01	Migrate to NewPENS, if deemed beneficial	01/01/2018	31/12/2024
COM12-USE01	Migrate to NewPENS, if deemed beneficial	01/01/2018	31/12/2024
COM12-NM01	Adapt NM systems to allow stakeholders have access to existing datacentres via NewPENS	01/01/2018	31/12/2020 31/12/2024
COM12-NM02	Migrate to NewPENS	01/01/2018	31/12/2020 31/12/2024

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:	<p>Significant cost savings for the international communications of all connected stakeholders compared to:</p> <ul style="list-style-type: none"> - Keeping the inter-stakeholder connections separate from the network. - Continuing to run all international communications on bilateral international links.
Environment:	-
Security:	<p>NewPENS will further enhance security protection, detection and remediation capabilities with respect to PENS. It shall be compliant with the Security levels requested by the applications it will support. Security will be handled on multiple levels: technical, processes and people.</p>

Detailed SLoA Descriptions

COM12-ASP01	Provide NewPENS connectivity infrastructure	From:	By:
		01/01/2018	App. Area 1: 31/12/2020 App. Area 2: 31/12/2024
Action by:	ANS Providers		

COM12	New Pan-European Network Service (NewPENS)
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Description & purpose:	Adapt communications systems and infrastructure to enable connectivity between NewPENS and the ANSP's network according to technical requirements established by the NewPENS governance arrangements. NOTE: This SLoA applies both to ANSPs who provide COM services using their own infrastructure and to those who subcontract the service to other COM service providers; these will have to ensure the appropriate contractual and technical arrangements are made to provide connectivity to NewPENS.		
ATM Master Plan relationship:	[CTE-C06b]-PENS - Phase 2		
Finalisation criteria:	1 - Connectivity with NewPENS is enabled		
COM12-ASP02	Migrate to NewPENS	From: 01/01/2018	By: App. Area 1: 31/12/2020 App. Area 2: 31/12/2024
Action by:	ANS Providers		
Description & purpose:	Migrate the selected services and applications to NewPENS. This shall include, when and where applicable, the exchange of Flight Object information as described in Section 5 of the Annex to Regulation (EU) No 716/2014.		
ATM Master Plan relationship:	[CTE-C06b]-PENS - Phase 2		
Finalisation criteria:	1 - NewPENS contract has been signed 2 - Selected applications and services have been migrated to NewPENS		
COM12-APO01	Migrate to NewPENS, if deemed beneficial	From: 01/01/2018	By: 31/12/2024
Action by:	Airport Operators		
Description & purpose:	According to local needs and requirements, migrate to NewPENS for communications with ANSPs and NM (e.g. CDM, messages).		
ATM Master Plan relationship:	[CTE-C06b]-PENS - Phase 2		
Finalisation criteria:	1 - NewPENS contract has been signed 2 - Selected applications and services have been migrated to NewPENS		
COM12-USE01	Migrate to NewPENS, if deemed beneficial	From: 01/01/2018	By: 31/12/2024
Action by:	Airspace Users		
Description & purpose:	According to local needs and requirements, migrate to NewPENS for communications with ANSPs and NM (e.g. CDM, messages).		
ATM Master Plan relationship:	[CTE-C06b]-PENS - Phase 2		
Finalisation criteria:	1 - NewPENS contract has been signed 2 - Selected applications and services have been migrated to NewPENS		
COM12-NM01	Adapt NM systems to allow stakeholders have access to existing datacentres via NewPENS	From: 01/01/2018	By: App. Area 1: 31/12/2020 App. Area 2: 31/12/2024
Action by:	NM		
Description & purpose:	Adapt NM systems to allow stakeholders have access to existing datacentres (e.g. EAD) via NewPENS.		
ATM Master Plan relationship:	[CTE-C06b]-PENS - Phase 2		
Finalisation criteria:	1 - NM systems have been adapted.		
COM12-NM02	Migrate to NewPENS	From: 01/01/2018	By: App. Area 1: 31/12/2020 App. Area 2: 31/12/2024
Action by:	NM		
Description & purpose:	Migrate the selected services and applications to NewPENS. This shall include the exchange of Flight Object information as described in Section 5 of the Annex to Regulation (EU) No 716/2014.		
ATM Master Plan relationship:	[CTE-C06b]-PENS - Phase 2		
Finalisation criteria:	1 - NewPENS contract has been signed 2 - Selected applications and services have been migrated to NewPENS		

