

|       |     |                                            |     |     |     |     |    |     |       |     |
|-------|-----|--------------------------------------------|-----|-----|-----|-----|----|-----|-------|-----|
| 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)

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| <b>App. Area 1</b><br>(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.<br>Plus: Ukraine, United Kingdom |
| <b>App. Area 2</b><br>(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 -  | <a href="#">- No OI Link -</a> |  |  |  |  |  |  |
| Enablers - | CTE-C06b                       |  |  |  |  |  |  |

|         |          |                                      |                 |                                                                           |          |                                        |
|---------|----------|--------------------------------------|-----------------|---------------------------------------------------------------------------|----------|----------------------------------------|
| Legend: | WXYZ-001 | Covered by SLoA(s) in this objective | WXYZ-002<br>zzz | Covered by SLoA(s) in another objective<br>Objective covering the enabler | WXYZ-003 | Not covered in the Implementation Plan |
|---------|----------|--------------------------------------|-----------------|---------------------------------------------------------------------------|----------|----------------------------------------|

### Applicable legislation

|                                                                              |
|------------------------------------------------------------------------------|
| Regulation (EU) No 716/2014 on the establishment of the Pilot Common Project |
|------------------------------------------------------------------------------|

### Essential Operational Changes

|              |                                                   |
|--------------|---------------------------------------------------|
| <b>COM12</b> | <b>New Pan-European Network Service (NewPENS)</b> |
|--------------|---------------------------------------------------|

- none -

**SESAR Solution**

**ICAO GANP - ASBUs**

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

**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<br>31/12/2024 |
| COM12-ASP02 | Migrate to NewPENS                                                                     | 01/01/2018 | 31/12/2020<br>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<br>31/12/2024 |
| COM12-NM02  | Migrate to NewPENS                                                                     | 01/01/2018 | 31/12/2020<br>31/12/2024 |

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>                 | -                                                                                                                                                                                                                                                                                          |
| <b>Capacity:</b>               | -                                                                                                                                                                                                                                                                                          |
| <b>Operational Efficiency:</b> | -                                                                                                                                                                                                                                                                                          |
| <b>Cost Efficiency:</b>        | Significant cost savings for the international communications of all connected stakeholders compared to:<br>- Keeping the inter-stakeholder connections separate from the network.<br>- Continuing to run all international communications on bilateral international links.               |
| <b>Environment:</b>            | -                                                                                                                                                                                                                                                                                          |
| <b>Security:</b>               | 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. |

**Detailed SLoA Descriptions**

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

|              |                                                   |
|--------------|---------------------------------------------------|
| <b>COM12</b> | <b>New Pan-European Network Service (NewPENS)</b> |
|--------------|---------------------------------------------------|

|                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                            |                                                                                      |
|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|--------------------------------------------------------------------------------------|
| <b>Description &amp; purpose:</b>    | 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.<br><br>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. |                            |                                                                                      |
| <b>ATM Master Plan relationship:</b> | <a href="#">[CTE-C06b]-PENS - Phase 2</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                            |                                                                                      |
| <b>Finalisation criteria:</b>        | 1 - Connectivity with NewPENS is enabled                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                            |                                                                                      |
| <b>COM12-ASP02</b>                   | <b>Migrate to NewPENS</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <b>From:</b><br>01/01/2018 | <b>By:</b><br><b>App. Area 1:</b><br>31/12/2020<br><b>App. Area 2:</b><br>31/12/2024 |
| <b>Action by:</b>                    | <b>ANS Providers</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                            |                                                                                      |
| <b>Description &amp; purpose:</b>    | 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.                                                                                                                                                                                                                                                                                        |                            |                                                                                      |
| <b>ATM Master Plan relationship:</b> | <a href="#">[CTE-C06b]-PENS - Phase 2</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                            |                                                                                      |
| <b>Finalisation criteria:</b>        | 1 - NewPENS contract has been signed<br>2 - Selected applications and services have been migrated to NewPENS                                                                                                                                                                                                                                                                                                                                                                                                      |                            |                                                                                      |
| <b>COM12-APO01</b>                   | <b>Migrate to NewPENS, if deemed beneficial</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <b>From:</b><br>01/01/2018 | <b>By:</b><br>31/12/2024                                                             |
| <b>Action by:</b>                    | <b>Airport Operators</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                            |                                                                                      |
| <b>Description &amp; purpose:</b>    | According to local needs and requirements, migrate to NewPENS for communications with ANSPs and NM (e.g. CDM, messages).                                                                                                                                                                                                                                                                                                                                                                                          |                            |                                                                                      |
| <b>ATM Master Plan relationship:</b> | <a href="#">[CTE-C06b]-PENS - Phase 2</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                            |                                                                                      |
| <b>Finalisation criteria:</b>        | 1 - NewPENS contract has been signed<br>2 - Selected applications and services have been migrated to NewPENS                                                                                                                                                                                                                                                                                                                                                                                                      |                            |                                                                                      |
| <b>COM12-USE01</b>                   | <b>Migrate to NewPENS, if deemed beneficial</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <b>From:</b><br>01/01/2018 | <b>By:</b><br>31/12/2024                                                             |
| <b>Action by:</b>                    | <b>Airspace Users</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                            |                                                                                      |
| <b>Description &amp; purpose:</b>    | According to local needs and requirements, migrate to NewPENS for communications with ANSPs and NM (e.g. CDM, messages).                                                                                                                                                                                                                                                                                                                                                                                          |                            |                                                                                      |
| <b>ATM Master Plan relationship:</b> | <a href="#">[CTE-C06b]-PENS - Phase 2</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                            |                                                                                      |
| <b>Finalisation criteria:</b>        | 1 - NewPENS contract has been signed<br>2 - Selected applications and services have been migrated to NewPENS                                                                                                                                                                                                                                                                                                                                                                                                      |                            |                                                                                      |
| <b>COM12-NM01</b>                    | <b>Adapt NM systems to allow stakeholders have access to existing datacentres via NewPENS</b>                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>From:</b><br>01/01/2018 | <b>By:</b><br><b>App. Area 1:</b><br>31/12/2020<br><b>App. Area 2:</b><br>31/12/2024 |
| <b>Action by:</b>                    | <b>NM</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                            |                                                                                      |
| <b>Description &amp; purpose:</b>    | Adapt NM systems to allow stakeholders have access to existing datacentres (e.g. EAD) via NewPENS.                                                                                                                                                                                                                                                                                                                                                                                                                |                            |                                                                                      |
| <b>ATM Master Plan relationship:</b> | <a href="#">[CTE-C06b]-PENS - Phase 2</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                            |                                                                                      |
| <b>Finalisation criteria:</b>        | 1 - NM systems have been adapted.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                            |                                                                                      |
| <b>COM12-NM02</b>                    | <b>Migrate to NewPENS</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <b>From:</b><br>01/01/2018 | <b>By:</b><br><b>App. Area 1:</b><br>31/12/2020<br><b>App. Area 2:</b><br>31/12/2024 |
| <b>Action by:</b>                    | <b>NM</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                            |                                                                                      |
| <b>Description &amp; purpose:</b>    | 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.                                                                                                                                                                                                                                                                                                                    |                            |                                                                                      |
| <b>ATM Master Plan relationship:</b> | <a href="#">[CTE-C06b]-PENS - Phase 2</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                            |                                                                                      |
| <b>Finalisation criteria:</b>        | 1 - NewPENS contract has been signed<br>2 - Selected applications and services have been migrated to NewPENS                                                                                                                                                                                                                                                                                                                                                                                                      |                            |                                                                                      |

