| P   | СР   | Removed  |  |  |  |  | i | EU+ |
|-----|------|--|--|--|--|--|---|-----|
| INF | 08.2 | Information Exchanges using the SWIM Blue TI Profile |  |  |  |  |   |     |
| REG | ASP  | MIL APO USE INT IND NM MET AIS USP                   |  |  |  |  |   | USP |

#### Subject matter and scope

System wide information management (SWIM) concerns the development of services for information exchange. SWIM comprises standards, infrastructure and governance enabling the management of information and its exchange between operational stakeholders via interoperable services. Initial system wide information management (iSWIM) supports information exchanges that are built on standards and delivered through an internet protocol (IP)-based network by SWIM enabled systems. It consists of:

- Common infrastructure components;
- SWIM technical infrastructure and profiles;
- Aeronautical information exchange;
- Meteorological information exchange;
- Cooperative network information exchange;
- Flight information exchange.

The scope of this objective is addressing the exchange of flight information related to the flight object using the blue SWIM Technical Infrastructure Profile, as defined in the Annex 5.1.6 of the PCP Regulation No 716/2014.

The objective assumes the availability of SWIM Governance (as addressed by Family 5.1.3 of Deployment Programme 2016) and is without prejudice to the evolution and establishment of this Governance as addressed in the Action Plan currently under development. This evolution may imply changes to the objective in the subsequent editions of the Plan.

NOTE: This is an "Initial" objective to provide advance notice to stakeholders. Some aspects of the objective require further validation.

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             |            |            |                    |
|--------------------------------|------------|------------|--------------------|
| Timescales:                    | From:      | Ву:        | Applicable to:     |
| Initial operational capability | 01/06/2018 |            | Applicability Area |
| Full operational capability    |            | 01/01/2027 | Applicability Area |

#### References

# **European ATM Master Plan**

| OI step - | [CM-0201-A]-Automated Assistance to Controller for Seamless Coordination, Transfer and Dialogue through improved trajectory data sharing |                   |                  |                   |                  |         |  |  |  |
|-----------|--|-------------------|------------------|-------------------|------------------|---------|--|--|--|
|           | Enablers -   | ER APP ATC<br>160 | SWIM-APS-<br>05a | SWIM-INFR-<br>01a | SWIM-NET-<br>01a |         |  |  |  |
| OI step - | [IS-0901-A]-   | SWIM-TI Yellow    | Profile for Gro  | und/Ground (G     | (G) information  | sharing |  |  |  |
|           | Enablers - REG-0519 SWIM-GOV- 05a SWIM-INFR- SWIM-NET- SWIM-SUPT- 05a 01a 03a  |                   |                  |                   |                  |         |  |  |  |
|           |  |                   |                  |                   |                  |         |  |  |  |

| Legend: | WXYZ-001  | Covered by SLoA(s) in | WXYZ-002 | Covered by SLoA(s) in another objective |     | Not covered in the  |
|---------|-----------|-----------------------|----------|---|-----|---------------------|
| Legena. | VVX12-001 | this objective        | ZZZ      | Objective covering the enabler          | 003 | Implementation Plan |

# Applicable legislation

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

#### **Essential Operational Changes**

- none -

#### **SESAR Solution**

#28 - Automated Assistance to Controller for Seamless Coordination, Transfer and Dialogue through improved trajectory data sharing, #46 - SWIM Yellow Profile

## Implementation Plan Edition 2022

| INF08.2 | Information Exchanges using the SWIM Blue TI Profile |
|---------|--|
|---------|--|

#### **ICAO GANP - ASBUs**

| SWIM-B3/1 | Air/Ground SWIM for safety critical information                        |
|-----------|--|
| TBO-B3/1  | Network based on-demand synchronization of trajectory based operations |

## **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                            | Ву                             |
|---------------------------------------|--|---------------------------------|--------------------------------|
| INF08.2-ASP01                         | Implement the appropriate infrastructure components in accordance with the SWIM TI Blue Profile  | 01/06/2018                      | 01/01/2027                     |
| INF08.2-ASP02                         | Implement Flight information exchanges   | 01/06/2018                      | 01/01/2027                     |
| INF08.2-NM01                          | Implement the appropriate infrastructure components in accordance with the SWIM TI Blue Profile  | 01/06/2018                      | 01/01/2027                     |
| INF08.2-NM02 Description of finalised | Implement Flight information exchanges and deleted SLoAs is available on the eATM Portal @ <a href="https://www.eatmportal.eu/work">https://www.eatmportal.eu/work</a> | 01/06/2018<br>ing/depl/essip_ob | 01/01/2027<br><u>ojectives</u> |

# **Expected Performance Benefits**

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

**Detailed SLoA Descriptions** 

|                                  |   |                  | Detailed SEOA Descriptions |  |  |  |  |  |  |
|----------------------------------|---|------------------|----------------------------|--|--|--|--|--|--|
| INF08.2-ASP01                    | Implement the appropriate infrastructure components in accordance with the SWIM TI Blue Profile   | From: 01/06/2018 | By: 01/01/2027             |  |  |  |  |  |  |
| Action by:                       | ANS Providers   |                  |                            |  |  |  |  |  |  |
| Description & purpose:           | Implement the SWIM TI Blue Profile local component in a way that:  - Deals with the necessary Internet Protocol compliance;  - Is consistent with the provision and/or consumption as appropriate of the related flight information exchange services;  - Complies with security requirements established for the purpose of the implementation of such services. |                  |                            |  |  |  |  |  |  |
| ATM Master Plan<br>relationship: | [SWIM-INFR-01a]-High Criticality SWIM Services infrastructure Support and Connectivity.  [SWIM-INFR-05a]-General SWIM Services infrastructure Support and Connectivity.   |                  |                            |  |  |  |  |  |  |
|                                  | [SWIM-NET-01a]-SWIM Network Point of Presence   |                  |                            |  |  |  |  |  |  |
|                                  | [SWIM-SUPT-01a]-SWIM Supporting Registry Provisions   |                  |                            |  |  |  |  |  |  |
|                                  | [SWIM-SUPT-03a]-SWIM Supporting Security Provisions   |                  |                            |  |  |  |  |  |  |
|                                  | [SWIM-SUPT-05a]-SWIM Supporting IP Network Bridging Provisions  |                  |                            |  |  |  |  |  |  |
| Finalisation criteria:           | 1 - Systems have been adapted so as the local infrastructure component: - Is compliant with the required Internet Protocol standard; - Allows the provision and consumption of SWIM Blue Profile flight information exchange services, - Responds to the security requirements set up for the provision of the SWIM Blue Profile exchange services.               |                  |                            |  |  |  |  |  |  |
|                                  |   | From:            | By:                        |  |  |  |  |  |  |
| INF08.2-ASP02                    | Implement Flight information exchanges  | 01/06/2018       | 01/01/2027                 |  |  |  |  |  |  |

| INF08.2 | Information Exchanges using the SWIM Blue TI Profile |
|---------|--|
|---------|--|

| Action by:              | ANS Providers   |                           |                            |  |  |  |
|-------------------------|---|---------------------------|----------------------------|--|--|--|
| Description & purpose:  | The service providers shall implement services which support the exchange of flight information related to the Flight Object using the Blue SWIM TI profile. These services shall allow various operations and as well the sharing of the Flight Object, as fully described in Annex 5.1.6 of Commission Regulation (EU) 716/2014.                                |                           |                            |  |  |  |
| Supporting material(s): | EUROCONTROL - SPEC-168 - EUROCONTROL Specification for SV   | VIM Service Descripti     | on - Edition 1.0 / 12/2017 |  |  |  |
| .,                      | Url: https://www.eurocontrol.int/publication/eurocontrol-specifications   | system-wide-informa       | tion-management-swim       |  |  |  |
|                         | EUROCONTROL - SPEC-169 - EUROCONTROL Specification for SV   | VIM Information Defir     | nition - 1.0 / 12/2017     |  |  |  |
|                         | Url: https://www.eurocontrol.int/publication/eurocontrol-specifications   | system-wide-informa       | tion-management-swim       |  |  |  |
| ATM Master Plan         | [ER APP ATC 160]-ATC to ATC Flight Data Exchange Using The Flig   | ht Object                 |                            |  |  |  |
| relationship:           | [SWIM-APS-05a]-Provision and Consumption of Flight Object Sharing   | services                  |                            |  |  |  |
| Finalisation criteria:  | 1 - Services are provided in order to allow the manipulation of the Flig Regulation (EU) 716/2014.  | ht Object information     | as required by the         |  |  |  |
|                         | Implement the appropriate infrastructure components in  | From:                     | Ву:                        |  |  |  |
| INF08.2-NM01            | accordance with the SWIM TI Blue Profile  | 01/06/2018                | 01/01/2027                 |  |  |  |
| Action by:              | NM  |                           |                            |  |  |  |
| Description & purpose:  | Implement the SWIM TI Blue Profile local component in a way that:  - Deals with the necessary Internet Protocol compliance;  - Is consistent with the provision and/or consumption as appropriate of the related flight information exchange services;  - Complies with security requirements established for the purpose of the implementation of such services. |                           |                            |  |  |  |
| ATM Master Plan         | [SWIM-INFR-01a]-High Criticality SWIM Services infrastructure Support and Connectivity.   |                           |                            |  |  |  |
| elationship:            | [SWIM-INFR-05a]-General SWIM Services infrastructure Support and Connectivity.  |                           |                            |  |  |  |
|                         | [SWIM-NET-01a]-SWIM Network Point of Presence   |                           |                            |  |  |  |
|                         | [SWIM-SUPT-01a]-SWIM Supporting Registry Provisions   |                           |                            |  |  |  |
|                         | [SWIM-SUPT-03a]-SWIM Supporting Security Provisions   |                           |                            |  |  |  |
|                         | [SWIM-SUPT-05a]-SWIM Supporting IP Network Bridging Provisions  |                           |                            |  |  |  |
| Finalisation criteria:  | Systems have been adapted so as the local infrastructure compon Protocol standard; - Allows the provision and consumption of SWIM B Responds to the security requirements set up for the provision of the   | lue Profile flight inforr | nation exchange services   |  |  |  |
|                         |   | From:                     | By:                        |  |  |  |
| INF08.2-NM02            | Implement Flight information exchanges  | 01/06/2018                | 01/01/2027                 |  |  |  |
| Action by:              | NM  |                           |                            |  |  |  |
| Description & purpose:  | The Network Manager shall implement services which support the exchange of flight information related to the Flight Object using the Blue SWIM TI profile. These services shall allow various operations and as well the sharing of the Flight Object, as fully described in Annex 5.1.6 of Commission Regulation (EU) 716/2014.                                  |                           |                            |  |  |  |
| Supporting material(s): | EUROCONTROL - SPEC-168 - EUROCONTROL Specification for SWIM Service Description - Edition 1.0 / 12/2017   |                           |                            |  |  |  |
|                         | Url: https://www.eurocontrol.int/publication/eurocontrol-specifications-system-wide-information-management-swim   |                           |                            |  |  |  |
|                         | EUROCONTROL - SPEC-169 - EUROCONTROL Specification for SWIM Information Definition - 1.0 / 12/2017  |                           |                            |  |  |  |
|                         | Url: https://www.eurocontrol.int/publication/eurocontrol-specifications-system-wide-information-management-swim   |                           |                            |  |  |  |
| ATM Master Plan         | [ER APP ATC 160]-ATC to ATC Flight Data Exchange Using The Flight   |                           |                            |  |  |  |
| relationship:           | [SWIM-APS-03a]-Provision of G/G ATFCM Information Services  |                           |                            |  |  |  |
|                         | [SWIM-APS-05a]-Provision and Consumption of Flight Object Sharing   | services                  |                            |  |  |  |
| Finalisation criteria:  | [SWIM-APS-05a]-Provision and Consumption of Flight Object Sharing services  1 - Services are provided in order to allow the manipulation of the Flight Object information as required by the Regulation (EU) 716/2014.  |                           |                            |  |  |  |