| CP1 Initial | | | | | | EU | | |
|---|-----|--------------------------------|--|-------------|--------|----|-----|-----|
| ATC22 Initial Air-Ground Trajectory Information Sharing (Airborne | | | | Airborne Do | omain) | | | |
| REG | ASP | MIL APO USE INT IND NM MET AIS | | | | | AIS | USP |

Subject matter and scope

Trajectory information shall be enhanced by using air-ground trajectory exchange. The preliminary steps for the deployment of Initial Trajectory Information Sharing consists of the downlink of Extended Projected Profile (EPP) data from the aircraft and processing of this data by the ATC systems and NM systems.

Aircraft operators shall equip aircraft intending to operating aircraft above FL285 (with an individual certificate of airworthiness first issued on or after 31st December 2027) with ADS-C/EPP compliant avionics that down-link trajectory information using ADS-C Extended Projected Profile (EPP) as part of the ATS B2 services. The trajectory data will be automatically downlinked from the airborne system in accordance with the contract terms and will be used by the ground system.

System requirements:

• Aircraft operators shall ensure that aircraft operating GAT flights in ICAO EUR region above FL 285 with an individual certificate of airworthiness first issued on or after 31st December 2027 are equipped with ADS-C/EPP as part of ATS B2 capability, in accordance with the applicable standards in order to downlink aircraft trajectory.

• Aircraft equipped with ADS-C/EPP compliant avionics shall down-link trajectory information using ADS-C Extended Projected Profile (EPP) as part of the ATS B2 services. The trajectory data will be automatically downlinked from the airborne system in accordance with the contract terms.

NOTE: Implementation of this Objective can only be done in conjunction with Objective ATC23, which is providing the corresponding system functionalities on the ground.

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 (All EU SES States) All EU SES States | | | | |
|--|--|------------|------------|----------------------|
| Applicability Area 2 | | | | |
| Timescales: | | From: | By: | Applicable to: |
| Initial Operational Capability | | 01/01/2024 | | Applicability Area 1 |
| Full Operational Capability / Target Date | | | 31/12/2027 | Applicability Area 1 |

European ATM Master Plan

| OI step - | [IS-0303-A]-Downlink of on-board 4D trajectory data to enhance ATM ground system performance: initial and time based implementation | | | | | | | | | | |
|-----------|---|------------------------------------|---------|----------|-----------|----------------------|----------------------|----------|------------|-----------------------------------|-----------------------------------|
| | Enablers - | A/C-33a COM13 | A/C-37a | | ATC- 1 | AGDLS-ATC- AC-11a | AGDLS-ATC- AC-11c | CTE-CO |)2c | ER APP ATC 100 ATC23, ATC25 | ER APP ATC 119 ATC23, ATC25 |
| | | ER APP ATC 149a ATC23, ATC25 | REG-010 |)0 STD-(| 004 | | | | | | |
| Legend: | WXYZ-001 Covered by SLoA(s) in this objective WXYZ-002 | | | | | overed by SLoA | | bjective | WXY 003 | | vered in the nentation Plan |

Applicable legislation

Regulation (EU) 2021/116 on the establishment of the Common Project One

Essential Operational Changes

Trajectory Based Operations

SESAR Solution

| #115 - Extended Projected Profile (EPP) availability on ground | | | | | |
|--|-----|--|--|--|--|
| ICAO GANP - ASI | BUs | | | | |
| - none - | | | | | |

Deployment Programme

| 6.1.1 | Initial Air-Ground Trajectory Information Sharing (Airborne Domain) |
|-------------------|---|
| European Plan for | · Aviation Safety |

| RMT.0682 |
|----------|
|----------|

Operating Environments

En-Route

Stakeholder Lines of Action (SLoAs)

| SloA ref. | Title | From | Ву |
|-------------------------|--|---|------------------|
| ATC22-USE01 | New aircraft configuration definition | 01/01/2024 | 31/12/2027 |
| ATC22-USE02 | Prepare training procedures | 01/01/2024 | 31/12/2027 |
| ATC22-USE03 | Training | 01/01/2024 | 31/12/2027 |
| ATC22-USE04 | Perform A/C Acceptance Process & Obtain Operational Approval | 01/01/2024 | 31/12/2027 |
| ATC22-USE05 | Operational use | 01/01/2024 | 31/12/2027 |
| Dependenties of finally | and and deleted SLAAs is sucilable on the sATM Dertal @ https://www.astmportel | and the solution of all and the solution of | a far a ffisiana |

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

Expected Performance Benefits

| eased ground situational awareness. |
|-------------------------------------|
| |
| |
| |
| |
| |
| |

Detailed SLoA Descriptions

| And the second | | | | | | |
|--|--|--|--------------------------------------|--|--|--|
| | | From: | By: | | | |
| ATC22-USE01 | New aircraft configuration definition | Applicability Area 1 : | Applicability Area 1 : 31/12/2027 | | | |
| | | 01/01/2024 | | | | |
| Action by: | Airspace Users | | | | | |
| Description & purpose: | In the scope of the aircraft configuration management process aircraft operators shall ensure the procurement of the ADS-C/EPP functionality and compliance according to ATS B2 services for aircraft intending to operate as GAT above FL285. | | | | | |
| 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: | [A/C-37a]-Downlink of trajectory data according to contract terms (ADS-C) compliant to ATN baseline 2 (FANS 3/C) | | | | | |
| Finalisation criteria: | 1 - Aircraft operators have taken into account the order of the ADS-C/EF aircraft configuration process (for aircraft that are affected by the manda | , , , , , , , , , , , , , , , , , , , | ATS B2 services) in the | | | |
| | | From: | By: | | | |
| ATC22-USE02 | Prepare training procedures | Applicability Area 1: 01/01/2024 | Applicability Area 1 : 31/12/2027 | | | |
| Action by: | Airspace Users | | | | | |
| Description & purpose: | Ensure the preparation of training material with regard to the new system and procedures. | | | | | |

| ATC22 | Initial Air-Ground Trajectory Information Sharing (Airborne Domain) |
|-------|---|
|-------|---|

| | SDM - Standardisation and Regulation support to CP1 deployment 2021 | Deliverable D1 1 1 07 | /2024 | | | |
|-------------------------|---|---|--------------------------------------|--|--|--|
| Supporting material(s): | Url : https://www.sesardeploymentmanager.eu/publications/deployment-programme | | | | | |
| Finalisation criteria: | 1 - Aircraft operator has ensured that appropriate procedures and trainin | | in due time. | | | |
| | | From: | By: | | | |
| ATC22-USE03 | Training | Applicability Area 1 : 01/01/2024 | Applicability Area 1 : 31/12/2027 | | | |
| Action by: | Airspace Users | | | | | |
| Description & purpose: | Perform flight crew training for the operational use of the new system | | | | | |
| 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- | | | | | |
| Finalisation criteria: | nalisation criteria: 1 - Aircraft operator has ensured that flight crew training is completed in order to operate equipped aircraft | | | | | |
| | | From: | By: | | | |
| ATC22-USE04 | Perform A/C Acceptance Process & Obtain Operational Approval | Applicability Area 1 : 01/01/2024 | Applicability Area 1 : 31/12/2027 | | | |
| Action by: | Airspace Users | | · | | | |
| Description & purpose: | Ensure that aircraft operators check the availability of the new functional process as well as the availability of the corresponding operational appro- operational approval is required. | , 0 | 1 2 | | | |
| 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- | <u>programme</u> | | | | |
| Finalisation criteria: | Aircraft operator has checked the availability of ADS-C/EPP installation during the aircraft acceptance/delivery process. | on and the operational a | approval (if required) | | | |
| | | From: | By: | | | |
| ATC22-USE05 | Operational use | Applicability Area 1 : 01/01/2024 | Applicability Area 1 : 31/12/2027 | | | |
| Action by: | Airspace Users | | | | | |
| Description & purpose: | The operational use of the ADS-C/EPP functionality (as part of ATS B2 capability) can start on equipped aircraft. | | | | | |
| Finalisation criteria: | 1 - Mandated aircraft are equipped with ADS-C/EPP compliant avionics and are down-linking trajectory information using ADS-C Extended Projected Profile (EPP). | | | | | |