С	P1	Initial						EU		
AT	C25	Initial Trajectory Information Sharing ground distribution								
REG	ASP	MIL	APO	USE	INT	IND	NM	MET	AIS	USP

# Subject matter and scope

Trajectory information data coming from airborne systems is distributed on the ground to ATS units and NM in order to minimise the air-ground data transmissions. The trajectory data shall be processed and displayed to the controllers in a harmonised way as set out in section 6.1.2.

### System requirements:

- ADS-C/EPP trajectory shall be made available to ATS units and the Network Manager systems. The ground communication infrastructure shall be reliable, fast, secure and efficient to support initial trajectory information sharing.
- Ground systems must ensure that trajectory data downlinked from the aircraft is distributed to ATS units and to Network Manager systems.

NOTE: Implementation of this Objective can only be done in conjunction with Objective ATC22, which is providing the corresponding aircraft functionalities; and 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)					
Applicability Area 2					
Timescales:		From:	Ву:	Applicable to:	
Initial Operational Capability		01/01/2024		Applicability Area 1	
Full Operational Capability / Target Date			31/12/2027	Applicability Area 1	

### References

## **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 ATC22	AGDLS-ATC- AC-1	AGDLS-ATC- AC-11a	AGDLS-ATC- AC-11c	CTE-C02c	ER APP ATC 100	ER APP ATC 119
		ER APP ATC 149a	REG-0100	STD-004					

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) 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 - ASBUs**

- none -

## **Deployment Programme**

# Implementation Plan Edition 2022

ATC25 Initial Trajectory Information Sharing ground distribution	
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6.3.1	Initial Trajectory Information Sharing ground distribution

# **European Plan for Aviation Safety**

	RMT.0682	Implementation of the regulatory needs of the SESAR common projects	
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# **Operating Environments**

Network

# Stakeholder Lines of Action (SLoAs)

SloA ref.	Title	From	Ву
ATC25-ASP01	Ground distribution Architecture definition	01/01/2024	31/12/2027
ATC25-ASP02	Ground Infrastructure deployment	01/01/2024	31/12/2027
ATC25-ASP03	ATS Units systems connected to Ground distribution Infrastructure	01/01/2024	31/12/2027
ATC25-ASP04	Safety Assessment	01/01/2024	31/12/2027
ATC25-ASP05	Training	01/01/2024	31/12/2027
ATC25-ASP06	Operational use	01/01/2024	31/12/2027
ATC25-NM01	Ground distribution Architecture definition	01/01/2024	31/12/2027
ATC25-NM02	Ground Infrastructure deployment	01/01/2024	31/12/2027
ATC25-NM03	NM systems receiving the EPP data	01/01/2024	31/12/2027

Description of finalised and deleted SLoAs is available on the eATM Portal @ <a href="https://www.eatmportal.eu/working/depl/essip">https://www.eatmportal.eu/working/depl/essip</a> objectives

# **Expected Performance Benefits**

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

**Detailed SLoA Descriptions** 

Detailed SLOA Descriptions								
		From:	By:					
ATC25-ASP01	Ground distribution Architecture definition	Applicability Area 1: 01/01/2024	Applicability Area 1: 31/12/2027					
Action by:	ANS Providers							
Description & purpose:	Ensure that Ground distribution architecture is defined to meet the required performance levels as defined in the applicable standards.							
Supporting material(s):	SDM - Standardisation and Regulation support to CP1 deployment 202	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	[ER APP ATC 100]-4D Trajectory Management by Synchronization of Air and Ground Trajectories through EPP							
relationship:	[ER APP ATC 119]-Air/Ground Datalink Communication/Protocols for i4D and Controlled Time of Arrival							
	[ER APP ATC 149a]-Air-Ground Datalink Exchange to Support i4D - Exchan	ktended Projected Profile	<u>(EPP)</u>					
Finalisation criteria:	1 - Applicable standards, definitions and technologies are ready and th defined.	e ground distribution arc	nitecture has been					
		From:	Ву:					
ATC25-ASP02	Ground Infrastructure deployment	Applicability Area 1: 01/01/2024	Applicability Area 1: 31/12/2027					
Action by:	ANS Providers							
Description & purpose:	The ground infrastructure, following the architecture defined in DM1, has to be deployed throughout Europe, tested and prepared for connecting ANSPs.							
Supporting material(s):	SDM - Standardisation and Regulation support to CP1 deployment 202	21, Deliverable D1.1.1 07	/2021					
	Url: https://www.sesardeploymentmanager.eu/publications/deploymen	t-programme						

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ATM Master Plan relationship:	[ER APP ATC 100]-4D Trajectory Management by Synchronization of A [ER APP ATC 119]-Air/Ground Datalink Communication/Protocols for i4 [ER APP ATC 149a]-Air-Ground Datalink Exchange to Support i4D - Ex	D and Controlled Time	of Arrival
Finalisation criteria:	1 - The ground infrastructure has been deployed.	F	D.
ATC25-ASP03	ATS Units systems connected to Ground distribution Infrastructure	From: Applicability Area 1: 01/01/2024	By: Applicability Area 1: 31/12/2027
Action by:			
Description & purpose:	The ATS systems have to be connected to the ground distribution infras C/EPP information, ensuring a harmonised ground data distribution.	structure in order to rece	ive and process ADS-
Supporting material(s):	SDM - Standardisation and Regulation support to CP1 deployment 202 Url : https://www.sesardeploymentmanager.eu/publications/deployment	•	/2021
ATM Master Plan relationship:	[ER APP ATC 100]-4D Trajectory Management by Synchronization of A [ER APP ATC 119]-Air/Ground Datalink Communication/Protocols for i4 [ER APP ATC 149a]-Air-Ground Datalink Exchange to Support i4D - Ex	D and Controlled Time	of Arrival
Finalisation criteria:	1 - ATS systems are tested and connected to the ground infrastructure		
ATC25-ASP04	Safety Assessment	From: Applicability Area 1: 01/01/2024	By: Applicability Area 1: 31/12/2027
Action by:			
Description & purpose: Supporting material(s):	Ensure a safety assessment is done and approved by the appropriate a SDM - Standardisation and Regulation support to CP1 deployment 2020	<u> </u>	/2021
	Url: https://www.sesardeploymentmanager.eu/publications/deployment		
Finalisation criteria:	1 - Submission of a safety case to the competent authority before putting	g into service.	
ATC25-ASP05	Training	From: Applicability Area 1: 01/01/2024	By: Applicability Area 1: 31/12/2027
Action by:	ANS Providers		
Description & purpose:	All relevant staff (technical and operational) shall be duly trained.		
Supporting material(s):	SDM - Standardisation and Regulation support to CP1 deployment 202 Url :		

ATC25	Initial Trajectory Information Sharing ground distribution
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		Applicability Area	Applicability Area 1:				
		01/01/2024	31/12/2027				
Action by:	NM						
Description & purpose:	The ground infrastructure, following the architecture defined in DM1, has prepared for connecting ANSPs.	he ground infrastructure, following the architecture defined in DM1, has to be deployed throughout Europe, tested and repared for connecting ANSPs.					
Supporting material(s):	SDM - Standardisation and Regulation support to CP1 deployment 2021, Deliverable D1.1.1 07/2021						
	1 : https://www.sesardeploymentmanager.eu/publications/deployment-programme						
ATM Master Plan	TER APP ATC 1001-4D Trajectory Management by Synchronization of All and Ground Trajectories infough EPP						
relationship:							
	[ER APP ATC 149a]-Air-Ground Datalink Exchange to Support i4D - Extended Projected Profile (EPP)						
Finalisation criteria:	1 - The ground infrastructure has been deployed.						
		From:	By:				
ATC25-NM03	NM systems receiving the EPP data	Applicability Area 1: 01/01/2024	Applicability Area 1: 31/12/2027				
Action by:	NM						
Description & purpose:	Upgrade NM system for reception of EPP data. The received EPP data end to end trajectory.	might be used for the up	date of portion of NM's				
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>					
ATM Master Plan	[ER APP ATC 100]-4D Trajectory Management by Synchronization of Ai	r and Ground Trajectori	es through EPP				
relationship:	[ER APP ATC 119]-Air/Ground Datalink Communication/Protocols for i4D and Controlled Time of Arrival						
	[ER APP ATC 149a]-Air-Ground Datalink Exchange to Support i4D - Extended Projected Profile (EPP)						
Finalisation criteria:	1 - The NM interface for EPP data reception is available.		· ·				