

CP1		Initial							EU	
ATC25		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:	By:	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
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ICAO GANP - ASBUs

- none -

Deployment Programme

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6.3.1	Initial Trajectory Information Sharing ground distribution
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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	By
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 @ https://www.eatmportal.eu/working/depl/essip_objectives

Expected Performance Benefits

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

Detailed SLoA Descriptions

ATC25-ASP01	Ground distribution Architecture definition	From: Applicability Area 1: 01/01/2024	By: 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 2021, Deliverable D1.1.1 07/2021 Url : https://www.sesardeploymentmanager.eu/publications/deployment-programme		
ATM Master Plan relationship:	[ER APP ATC 100]-4D Trajectory Management by Synchronization of Air and Ground Trajectories through EPP [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 - Applicable standards, definitions and technologies are ready and the ground distribution architecture has been defined.		
ATC25-ASP02	Ground Infrastructure deployment	From: Applicability Area 1: 01/01/2024	By: 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 2021, Deliverable D1.1.1 07/2021 Url : https://www.sesardeploymentmanager.eu/publications/deployment-programme		

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ATM Master Plan relationship:	[ER APP ATC 100]-4D Trajectory Management by Synchronization of Air and Ground Trajectories through EPP [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 ground infrastructure has been deployed.		
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 infrastructure in order to receive and process ADS-C/EPP information, ensuring a harmonised ground data distribution.		
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:	[ER APP ATC 100]-4D Trajectory Management by Synchronization of Air and Ground Trajectories through EPP [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 - 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:	Ensure a safety assessment is done and approved by the appropriate authority.		
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		
Finalisation criteria:	1 - Submission of a safety case to the competent authority before putting 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 2021, Deliverable D1.1.1 07/2021 Url : https://www.sesardeploymentmanager.eu/publications/deployment-programme		
Finalisation criteria:	1 - Training has been completed.		
ATC25-ASP06	Operational use	From: Applicability Area 1: 01/01/2024	By: Applicability Area 1: 31/12/2027
Action by:	ANS Providers		
Description & purpose:	Once the procedures are in place, systems have been upgraded, safety assessment delivered and approved, training has been completed, Initial Trajectory Information Sharing ground distribution is ready for operational use		
Finalisation criteria:	1 - ATS systems distributing operational data are put into service.		
ATC25-NM01	Ground distribution Architecture definition	From: Applicability Area 1: 01/01/2024	By: Applicability Area 1: 31/12/2027
Action by:	NM		
Description & purpose:	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 2021, Deliverable D1.1.1 07/2021 Url : https://www.sesardeploymentmanager.eu/publications/deployment-programme		
ATM Master Plan relationship:	[ER APP ATC 100]-4D Trajectory Management by Synchronization of Air and Ground Trajectories through EPP [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 - Applicable standards, definitions and technologies are ready and the ground distribution architecture has been defined		
ATC25-NM02	Ground Infrastructure deployment	From:	By:

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		Applicability Area 1: 01/01/2024	Applicability Area 1: 31/12/2027
Action by:	NM		
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 2021, Deliverable D1.1.1 07/2021 Url : https://www.sesardeploymentmanager.eu/publications/deployment-programme		
ATM Master Plan relationship:	[ER APP ATC 100]-4D Trajectory Management by Synchronization of Air and Ground Trajectories through EPP [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 ground infrastructure has been deployed.		
ATC25-NM03	NM systems receiving the EPP data	From: Applicability Area 1: 01/01/2024	By: Applicability Area 1: 31/12/2027
Action by:	NM		
Description & purpose:	Upgrade NM system for reception of EPP data. The received EPP data might be used for the update of portion of NM's end to end trajectory.		
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:	[ER APP ATC 100]-4D Trajectory Management by Synchronization of Air and Ground Trajectories through EPP [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.		

