



# ER APP ATC 167 — ATC Planned Trajectories improvement with new ADS-C reports, eFPL and surveillance information.

TP&M Functional Block will improve the planned trajectories thanks to the usage of Aircraft Data (new ADS-C reports and Surveillance parameters from Mode-S & ADS-B) and eFPL data. This data provides useful hints to the TP&M about high-level Airspace User navigation strategy/preferences on how to close the degrees of freedom. In particular: which are the FMS preferred manoeuvres (among all the possible ones) to follow the FMS known route and restrictions. Then, the TP&M will take into account those high-level preferences to make better assumptions on the preferred manoeuvres to follow the ground current view of the route and restrictions (which, in most cases, will include some discrepancies when compared to the FMS ones). In addition, the TP&M will have a more precise view on aircraft current conditions, improving the accuracy of its calculations.

The following data will be considered:

- ¿ Current gross mass of the A/C, to improve predictions of A/C performances.
- ¿ A/C preferred speeds per flight phase, as well as A/C predicted speeds in cruise points to improve ETO calculation and predictions of aircraft performance-limited vertical maneuvers.
- ¿ Predicted TopOfClimb and TopOfDescent points, allowing a better identification of the aircraft perceived climb/cruise/descent phases scope, and so, allowing a better selection of the scheduled speed to be used
- ¿ Current A/C speed, to deduce selected speeds and/or de-facto preferred speeds for all flights (even if not ATN B2 equipped).

Additionally, the TP&M will improve the Planned Trajectories prediction thanks to a default better modelling of common aircraft preferences during the descent phase, concerning:

- ¿ Catch-up manoeuvres from current position to the optimal descent profile
- ¿ Geometric manoeuvres in-between consecutive descending restrictions

**Category** SYSTEM

**Stakeholder** Air Navigation Service Provider  
Civil  
Civil ATS Approach Service Provider  
Civil ATS En-Route Service Provider

**V3 End** 31-12-2019

**V4 Start** 31-12-2021

**V5 Start** 31-12-2024

**V4 End** 31-12-2024

**V5 End** 31-12-2026

**Air Navigation Service Provider: 31-12-2026**

Civil  
Civil ATS Approach Service Provider: 31-12-2026  
Civil ATS En-Route Service Provider: 31-12-2026

**IOC** 31-12-2026

**FOC** 31-12-2030

## Context

### Related Elements



**STK**  
ANSP-CIV-  
APP

**STK**  
ANSP-CIV-  
ER

**OI**  
POI-0012-IS

**EN**  
ER APP  
ATC 119

**EN**  
ER APP  
ATC 149a

## **OI** Operational Improvement Steps

Code	Benefits start date (IOC) - Full benefit date (FOC)																																						
	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40													
ER APP ATC 167					▲			V4	V5	IOC - FOC																													
🔒 POI-0012-IS																																							

## **EN** Dependent Enablers

Relationship	Code	Title	Related Elements
Enabled by	ER APP ATC 119	Air/Ground Datalink Communication/Protocols for i4D and Controlled Time of Arrival	<b>STK</b> <b>OI</b> <b>EN</b> <b>DS</b> <b>PCP</b>
Enabled by	ER APP ATC 149a	Air-Ground Datalink Exchange to Support i4D - Extended Projected Profile (EPP)	<b>STK</b> <b>OI</b> <b>EN</b> <b>DS</b> <b>PCP</b>

**PCP** PCP Elements: No associated data

## **STK** Stakeholders

Code	Title	Related Elements
ANSP	Air Navigation Service Provider	<b>EN</b>
ANSP-CIV-APP	Civil ATS Approach Service Provider	<b>EN</b>
ANSP-CIV-ER	Civil ATS En-Route Service Provider	<b>EN</b>

Standards: No associated data

**OBJ** Implementation Objectives: No associated data

Stakeholder Lines of Action (SLoAs): No associated data

**PJ** SESAR Workpackages: No associated data