



# ER APP ATC 104b — Adapt Controller Conflict Detection and Resolution Tools to Use Enhanced Trajectory Prediction

Controller tools are adapted to use an enhanced Trajectory Prediction model obtained through the use of improved data (e.g. extended flight plan, downlinked aircraft parameters [Mode-S or ADS-B], extended projected profile, met data).

Current and frequently changing aircraft kinematic parameters and aircraft intent data shall be used to improve the 4D trajectory prediction. The resulting improvement in the 4D trajectory prediction provides greater accuracy of information used by conflict detection and resolution tools.

The trajectory prediction algorithm is improved through the use of ADD such as:

- Selected altitude and vertical rate: to improve modelling of vertical maneuvers
- Short term intent: to improve modelling of the immediate future route intent and ETOs.
- Air speed, true air speed: to improve modelling of ground speed and ETO calculation.
- Magnetic heading, roll angle and track angle rate: to improve modelling of turn maneuvers.

Conflict detection (aircraft to aircraft and aircraft to airspace) and resolution is adapted to the variable degree of reliability of the different sources of trajectory information.

**Category** SYSTEM

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

**V3 End** 30-12-2022

**V4 Start** 30-12-2024

**V5 Start** 30-12-2027

**V4 End** 30-12-2027

**V5 End** 30-12-2029

**Air Navigation Service Provider: 30-12-2029**

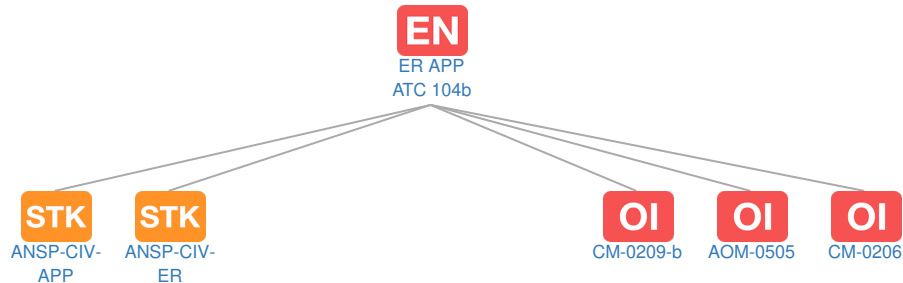
Civil  
Civil ATS Approach Service Provider: 30-12-2029  
Civil ATS En-Route Service Provider: 30-12-2029

**IOC** 30-12-2029

**FOC** 30-12-2033

## Context

### Related Elements







**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													
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🔒 CM-0209-b																																							
➔ AOM-0505																																							
➔ CM-0206																																							

**EN** Dependent Enablers: No associated data

**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