



CM-0811 — Enhanced STCA for TMA specific operations

STCA enhancements aim at reducing nuisance alert rate while maintaining or increasing the genuine alert rate and increasing alert warning times.

STCAs enhancement will be based on advanced algorithms as enablers for greater warning times, lower false and nuisance alert rates for steady and manoeuvring aircraft, either horizontally or vertically by the implementation and the use of curved or multi-hypothesis predictions (i.e. computed extrapolations).

For example, depending on parameter setting:

1 -The main hypothesis : the trajectory expected to be followed which can be a straight line, or curved taking into account things like: Cleared Flight Level (CFL), Standard Arrival Routes (STAR), Holding pattern etc.

2 -The backup hypothesis: a straight line extrapolation (computed only if the main hypothesis is not a straight line

Rationale Safety Nets are not yet implemented or not operationally useable in some specific ATC control operations e.g. dense TMA operations as well as complex relief or hazard configurations, because of poor alerting performance. Because the nuisance alert rate is too high; there is a real risk that controllers do not trust Safety Nets and therefore do not use those functions.

Forecast V3 end date 04-07-2011

Benefits start date (IOC) 31-12-2017

Full benefits date (FOC) 31-12-2027

Current Maturity Level V3 finalised

Solution Data Quality Index -

Current Maturity Phase R&D Finalised

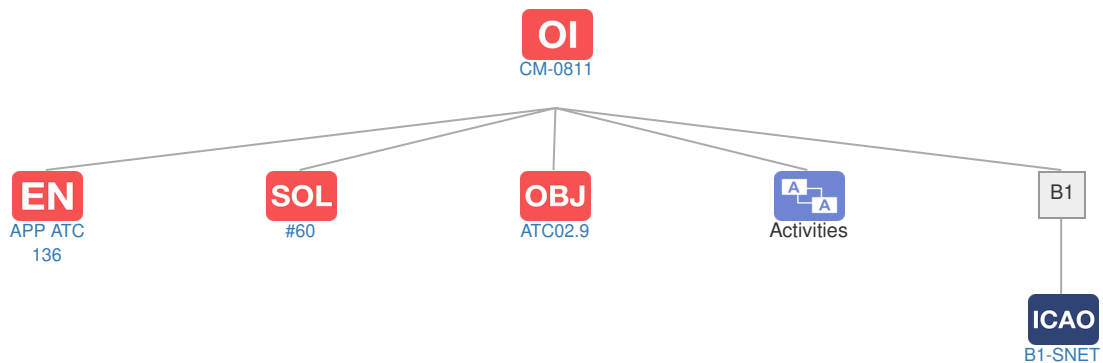
Scope -

Release R1

PCP Status -

Context

Related Elements



EN Enablers

Code	Dates																													
	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				
CM-0811				[Yellow bar]																										
APP ATC 136	4	V5	IOC - FOC																											

OI Dependent OI Steps: No associated data

SOL SESAR Solutions

Code	Title	Program	Related Elements
#60	Enhanced Short Term Conflict Alert (STCA) for Terminal SESAR1 Manoeuvring Areas (TMAs)		OI OBJ DS EOC ICAO

PCP PCP Elements: No associated data

OBJ Implementation Objectives

Code	Title	Related Elements
ATC02.9	Short Term Conflict Alert (STCA) for TMAs	STK SOL OI ICAO

ICAO Block Modules

Designator	Title	Related Elements
B1	B1-SNET Ground-based Safety Nets on Approach	SOL OI OBJ PCP