CM-0103-A — Automated Support for Traffic Complexity Assessment

Automated tools continuously monitor sector demand and evaluate traffic complexity (by applying predefined complexity metrics) according to a predetermined qualitative scale. Forecast complexity coupled with demand enables ATFCM to take timely action to adjust capacity, or demand profiles through various means, in collaboration with ATC and airspace users.

Rationale Complexity prediction for: Local Network Management. Analysing aircraft trajectories using SBT/RBT and other demand information, coupled with the use of validated complexity metrics, allows prediction of changes in traffic complexity and potential overload situations, allowing mitigation strategies to be applied. Such ability will support decision making processes such as:
- Determine the optimum organization of ATC sectors (including adjustment of sector AOR);
- Apply dynamic ATM constrains (on traffic flows (e.g. Level Cap)
- Modify individual trajectories by route, level or timing
- Local Traffic Management based on Complexity assessment is seen as a tool supported process to simplify/optimize the ATM situation through application of STAM so that separation provision can be efficiently applied by human intervention in a productive manner.

Forecast V3 end date -

Benefits start date (IOC) 31-12-2020

Full benefits date (FOC) 01-10-2025

Current Maturity Level V3

Solution Data Quality Index -

Current Maturity Phase R&D

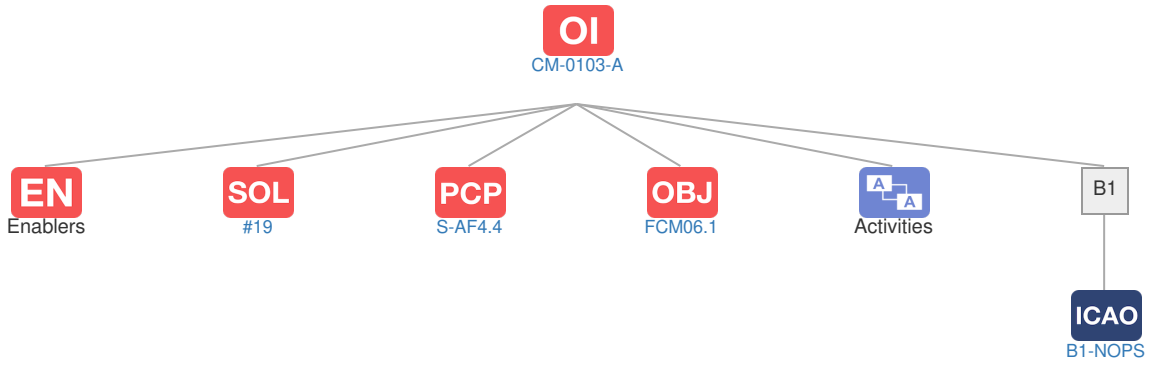
Scope Local

Release R5

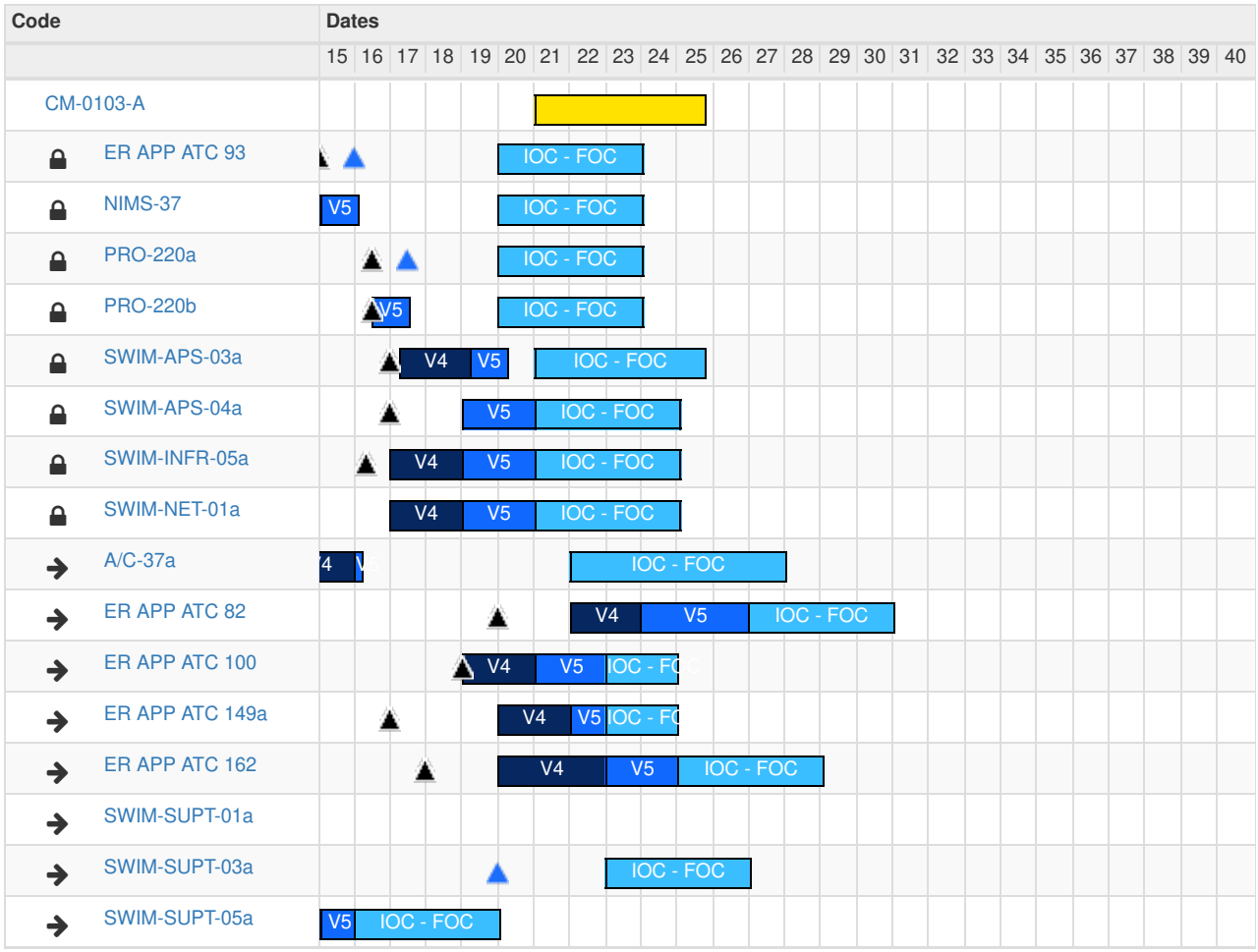
PCP Status PCP

Context

Related Elements



EN Enablers



OI Dependent OI Steps

Relationship	Code	Title	Related Elements
Has predecessor	CM-0101	Automated Support for Traffic Load (Density) Management	OI EN OBJ ICAO
Has successor	CM-0103-B	Automated Support for Traffic Complexity Assessment	SOL OI EN DS
Has successor	CM-0104-A	Automated Controller Support for Trajectory Management during the planning phase	SOL OI EN DS ICAO
Has successor	SDM-0401	Sub-Regional DCB Common Service (Business Improvement)	SOL OI EN DS

SOL SESAR Solutions

Code	Title	Program	Related Elements
#19	Automated support for Traffic Complexity Detection and Resolution	SESAR1	SOL OI OBJ DS EOC PCP ICAO

PCP Elements

Code	Title	Related Elements
S-AF4.4	Automated Support for Traffic Complexity Assessment	SOL OI EN OBJ ICAO

Implementation Objectives

Code	Title	Related Elements
FCM06.1	Automated Support for Traffic Complexity Assessment and Flight Planning interfaces	

ICAO Block Modules

Designator	Title	Related Elements
B1		
B1-NOPS	Enhanced Flow Performance through Network Operational Planning	SOL OI OBJ PCP