



CM-0200-B — Flight-centric ATC in Non-Geographically-Constrained, Low and Medium complexity environments

In Low and Medium complexity environments above a certain Altitude / Flight Level, depending on local organization and applicable working methods, non-geographical flight-centric method of ATC could be applied. A flight (trajectory) remains under the control of the same ATCO throughout the whole, or a significant part of its route segment, within the designated Airspace (e.g. sector family as defined in 4.2 S2 DOD).

A number of flights are assigned to an ATCO, unconstrained by geographical location, sector or national boundaries including in full Free Routing environment, where ATC operations became less dependent to structured route organisation and much more on flight monitoring, conflict detection and resolution tools. The systems will allow distribution of Flight related workload between controllers in the same airspace entity, e.g. ATSU, on the basis of 'next-suitable controller', i.e. each new flight entry within the ATSU will be considered against the existing ATCO workloads.

Advanced, workload prediction, conflict detection and resolution tools are needed for the effective distribution of trajectories, reducing the number of potential conflicts through Extended ATC Planning and for assisting the ATCOs in resolving conflicting situations when they occur. Since the working method is quite unique, it will require completely new approach to HMI which is traditionally based on geographically organised operations. In addition, new procedures for handling the transition between different modes of ATC operations have to be put in place.

Rationale In Trajectory based operations, the Dynamic Airspace Management will provide for optimal use of the airspace and in combination with flight centred ATC, effective use of human resources-ATCOs above a certain altitude / flight level and in low complexity environment. This method provides for flight-centric ATC as being part of the overall improved planning envisaged for Trajectory based operations. It relays on stable, well distributed and strategically de-conflicted trajectories in order to avoid unnecessary trajectory revisions for separation purposes and therefore contributes to the flight efficiency. It could also contribute to the reduction of the cockpit workload in that respect. The major benefit is that the method could be used as an ATCO workload balancing technique and secure optimal use of the ATCO workforce in certain traffic situations and environments. Different Service Providers may decide on different levels and areas of application of this method in line with their operational needs in order to improve overall ATM performance.

Forecast V3 end date -

Benefits start date (IOC) -

Full benefits date (FOC) -

Current Maturity Level V1

Solution Data Quality Index -

Current Maturity Phase R&D

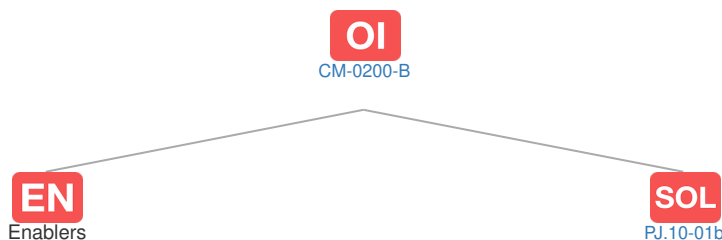
Scope -

Release -

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															
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➔ A/C-37a																																									
➔ AAMS-19																																									
➔ CTE-C01b																																									
➔ NIMS-36																																									

OI Dependent OI Steps

Relationship	Code	Title	Related Elements
Has successor	CM-0200-C	Flight-centric ATC in Non-Geographically-Constrained High and very High Complexity environment	SOL OI EN DS

SOL SESAR Solutions

Code	Title	Program	Related Elements
PJ.10-01b	Flight-Centric ATC	SESAR 2020 Wave 1	SOL PJ OI DS EOC

PCP PCP Elements: No associated data

OBJ Implementation Objectives: No associated data

ICAO ICAO Block Modules: No associated data