



FCM06 — Traffic Complexity Assessment

The traffic load management tool addressed by SESAR OI step CM-0101 (Automatic support for traffic load density management) is the predecessor of traffic complexity tools. The traffic complexity tools continuously monitor sector demand and evaluate traffic complexity (by applying predefined complexity metrics) according to a predetermined qualitative scale. The predicted complexity coupled with traffic demand enables ATFCM to take timely action to adjust capacity, or request the traffic profile changes in coordination with ATC and airspace users.

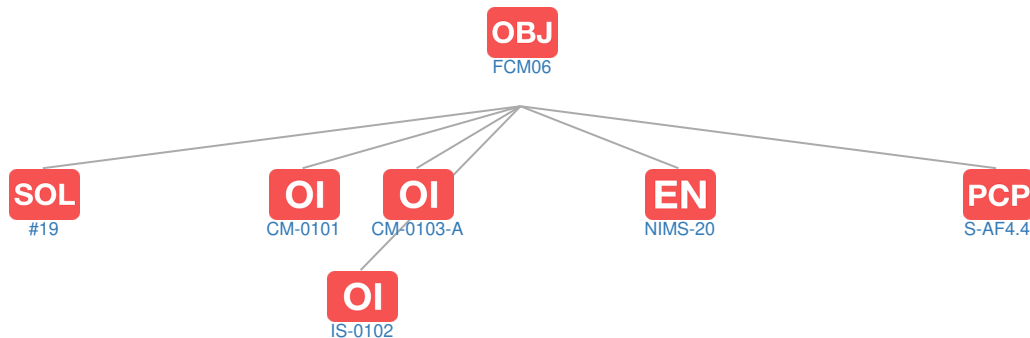
The rigid application of ATFCM regulations based on standard capacity thresholds as the pre-dominant tactical capacity measure needs to be replaced by a close working relationship between ANSPs and Network Manager, which would monitor both the real demand, the effective capacity of sectors having taken into account the complexity of expected traffic situation.

NOTE FOR MILITARY AUTHORITIES: It is the responsibility of each military authority to review this Objective IN ITS ENTIRETY and address each of the SLoAs that the military authority considers RELEVANT for itself. This has to be done on top and above of the review of "MIL" SLoAs which identify actions EXCLUSIVE to military authorities.

Edition	2022
Stakeholders	Air Navigation Service Provider / Network Manager
Type	PCP
Scope	ECAC+
Status	Removed

Context

Related Elements




Applicability Area(s) and Timescales

Applicability Area 1:	All EU SES States except: Luxembourg, Malta. Plus: United Kingdom
Applicability Area 2:	Albania, Armenia, Azerbaijan, Bosnia and Herzegovina, Georgia, Israel, Moldova, Montenegro, North Macedonia, Serbia, Türkiye, Ukraine

Timescales	From	By	Applicable to
Initial operational capability	01-01-2015	-	Applicability Area 1
Full operational capability	-	01-01-2022	Applicability Area 1 + Applicability Area 2

Links to ATM Master Plan Level 2

OI Operational Improvement Steps

Code	Title	IOC	FOC	Related Elements
CM-0101	Automated Support for Traffic Load (Density) Management	-	-	OI EN OBJ ICAO
CM-0103-A	Automated Support for Traffic Complexity Assessment	31-12-2020	01-10-2025	SOL OI EN OBJ DS PCP ICAO 
IS-0102	Improved Management of Flight Plan After Departure	31-12-2011	31-12-2015	EN OBJ ICAO

EN Enablers

Code	Title	IOC	Related Elements
NIMS-20	Provision, reception and processing of ATFCM flight progress messages	31-12-2011	STK OI OBJ

SOL Links to 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 Links to PCP ATM Sub-Functionalities

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

ICAO ICAO Block Modules: No associated data

References

Applicable legislation

Regulation (EU) No 677/2011 laying down detailed rules for the implementation of air traffic management (ATM) network functions and amending Regulation (EU) No 691/2010
Regulation (EU) No 716/2014 on the establishment of the Pilot Common Project

Applicable ICAO Annexes and other references

None

Deployment Programme 2022

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Operating Environments

Terminal Airspace
En-Route
Network

Expected Performance Benefits

Safety	The better ATCO workload predictability via deployment of the traffic complexity assessment tool will lead to safety gains. Enhancement also through reduction in controller workload.
Capacity	Increased through the better resource utilisation to enhance productivity and reduce controller workload.
Operational efficiency	Increased through use of more optimal routes leading to fuel saving and lower CO2 emissions.
Cost efficiency	-
Environment	Reductions in emissions through use of more optimal routes.
Security	-

Stakeholder Lines of Action

Code	Title	From	By	Related Enablers
ASP01	Implement Local Traffic Load Management tool	01-01-2015	01-01-2022	EN
ASP02	Receive, process and integrate ETFMS Flight Data (EFD)	01-01-2015	01-01-2022	EN
ASP03	Implement Local Traffic Complexity tools and procedures	01-01-2018	01-01-2022	EN
NM01	Provide EFD to the local traffic complexity tools	01-01-2015	01-01-2022	EN
NM02	Improved trajectory in NM systems	01-01-2015	01-01-2022	EN
NM03	Network Traffic Complexity Assessment	01-01-2015	01-01-2022	EN

Supporting Material

Title	Related SLoAs
EUROCONTROL - Flight Progress Messages (FPM) document - 2.501 / 03/2019 https://www.eurocontrol.int/publication/flight-progress-messages-fpm-document	ASP02, NM01
SJU - SESAR Solution 19: Data Pack for automated support for traffic complexity detection and resolution https://www.sesarju.eu/sesar-solutions/automated-support-traffic-complexity-detection-and-resolution	ASP02, ASP03, NM01, NM02, NM03

Consultation & Approval

Working Arrangement in charge	NETOPS
Outline description approved in	-
Latest objective review at expert level	-
Commitment Decision Body	Provisional Council (PC)
Objective approved/endorsed in	10/2015
Latest change to objective approved/endorsed in	10/2015

