ATC02.7 — Implement ground based safety nets - Approach Path Monitor - level 2

Implement and make operational use of the Approach Path Monitor (APM) ground based safety net.

An approach path monitor (APM) is a ground based Safety Net intended to warn the controller about increased risk of controlled flight into terrain accidents by generating, in a timely manner, an alert of aircraft proximity to terrain or obstacles during final approach.

Terrain and traffic characteristics can lead to a significant safety risk that can be mitigated by this tool.

An explanation of the difference between Level 1 and 2 is described below.

Before starting first operations, air traffic controllers must receive training, aimed at creating an appropriate level of trust in the concerned safety net. The time-criticality of alerts and the need for immediate attention or action must be well understood, but also the situations in which safety nets are less effective.

Safety nets performance must be monitored and regularly analysed, not only to improve the safety nets but also to identify other safety improvement opportunities. For example, "hot spots" could be identified and removed by making changes to airspace structure or procedures.

In order to avoid the "Cry Wolf" syndrome, the number of nuisance and false alerts must be reduced to a minimum. Air traffic controllers should be encouraged to report unexpected and unwanted safety nets behaviour and feedback should always be provided.

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 MIL Authorities.

Military ATC units are invited to consider implementation of APM level 2 when providing ATS surveillance services to GAT

Existing draft EUROCONTROL Specification for APM could be used as guidance material (ref. supporting material of individual SLoAs).

Edition	2022
Stakeholders	Air Navigation Service Provider
Type	SESAR
Scope	ECAC
Status	Removed

Context

Related Elements

OBJ
ATC02.7

OI
CM-0801

Applicability Area(s) and Timescales

Applicability Area: All ECAC States except: Georgia, Greece, Slovak Republic

Timescales	From	By	Applicable to
Initial operational capability	01-01-2009	-	Applicability Area
Full operational capability	-	31-12-2016	Applicability Area

Links to ATM Master Plan Level 2

OI Operational Improvment Steps

Code	Title	IOC	FOC	Related Elements
CM-0801	Ground Based Safety Nets (TMA, En-Route)	31-12-2006	31-12-2010	EN OBJ ICAO

SOL Links to SESAR Solutions

Code	Title	Program	Related Elements
No record found			

PCP Links to PCP ATM Sub-Functionalities

Code	Title	Related Elements
No record found		

ICAO ICAO Block Modules: No associated data

References

Applicable legislation
None
Applicable ICAO Annexes and other references
None
Deployment Programme 2022
-
Operating Environments
Terminal Airspace
En-Route

Expected Performance Benefits

Safety	The systematic presentation of deviations from the glide path to controllers, as provided by APM, is a major safety contribution.
Capacity	N/A
Operational efficiency	-
Cost efficiency	Standardisation of APM enables cost-effective use of resources and is in particular a critical success factor for smaller ANSP.
Environment	N/A
Security	N/A

Stakeholder Lines of Action

Code	Title	From	By	Related Enablers
REG01	Approve EUROCONTROL Specification for APM	DELETED		
ASP01	Implement the APM function	01-01-2009	31-12-2016	EN
ASP02	Align ATCO training with the use of APM ground-based safety tools	01-01-2009	31-12-2016	
INT01	Amend ICAO documentation if required	DELETED		
AGY01	Produce EUROCONTROL Specification for APM and related guidance material	DELETED		

Supporting Material

Title	Related SLoAs
EUROCONTROL - GUID-162 - EUROCONTROL Guidelines for Approach Path Monitor - Part I to III - Edition 1.0 / 01/2017 https://www.eurocontrol.int/publication/eurocontrol-guidelines-approach-path-monitor	ASP01
EUROCONTROL - Safety Nets - A guide for ensuring effectiveness - August 2017 https://www.eurocontrol.int/sites/default/files/publication/files/safety-nets-guide-august-2017.pdf	ASP01, ASP02

Consultation & Approval

Working Arrangement in charge	SAFETY / SPIN SG
Outline description approved in	03/2012
Latest objective review at expert level	04/2012
Commitment Decision Body	Provisional Council (PC)
Objective approved/endorsed in	07/2006
Latest change to objective approved/endorsed in	07/2013