AOP20 — Wake Turbulence Separations for Departures based on Static Aircraft Characteristics (S-PWS-D)

This objective represents optimization of the ICAO wake turbulence separation classes by use of longitudinal wake turbulence static pair-wise separation minima for departures (S-PWS-D), applicable in all operating conditions.

The Static PairWise Separation for Departures concept optimizes wake separations between departures on the initial departure path by moving to a scheme defined between aircraft type pairs for the 96 aircraft types frequently at ECAC major airports, together with a scheme defined by a larger number of wake categories (20-CAT (6-CAT + 14-CAT)) for other aircraft type combinations.

The S-PWS-D is applied using a separation delivery tool, where the pairwise separations will be used as input into the separation delivery tool.

S-PWS-D requires the Optimised Separation for Departure (OSD) tool to be integrated at CWP and the wind measurement or forecast on the final approach path.

This objective targets capacity-constrained runways during high-intensity runway operations and applies to very large, large and possibly medium airports.

NOTE: This is an "Initial" objective to provide advance notice to stakeholders. Some aspects of the objective require further validation.

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 / International Organisations and Regional Bodies
Type	SESAR
Scope	Airport
Status	Initial

Context

Related Elements

OBJ
AOP20

OI
AO-0323

Applicability Area(s) and Timescales

Applicability Area: See list of airports in MP Level 3 Implementation Plan - Annexes
(Not yet defined)

Timescales	From	By	Applicable to
IOC used for Analytics functioning only - not for implementation planning	01-01-2020	-	
FOC used for Analytics functioning only - not for implementation planning	-	31-12-2030	

Links to ATM Master Plan Level 2

OI Operational Improvment Steps

Code	Title	IOC	FOC	Related Elements
AO-0323	Wake Turbulence Separations (for Departures) based on Static Aircraft Characteristics	-	-	SOL OI EN DS 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 Block Modules: No associated data

References

Applicable legislation
None
Applicable ICAO Annexes and other references
None
Deployment Programme 2022
-
Operating Environments
-

Expected Performance Benefits

Safety	Safety maintained while increasing capacity
Capacity	Increased airport capacity
Operational efficiency	-
Cost efficiency	-
Environment	-
Security	-

Stakeholder Lines of Action

Code	Title	From	By	Related Enablers
ASP01	Install ATC tool to support static pair-wise wake separation for departures			
ASP02	Adapt ATC system (DMAN) to use static pair-wise wake separation for departures	21-06-2021		
ASP03	Develop procedures for application of static pair-wise wake separation on final approach	21-06-2021		
ASP04	Safety Assessment	21-06-2021		
ASP05	Training	21-06-2021		
ASP06	System in use	21-06-2021		
INT01	Regulatory provisions (AMC) for static pair-wise wake separation minima	21-06-2021		

Supporting Material

Title	Related SLoAs
No record found	

Consultation & Approval

Working Arrangement in charge	-
Outline description approved in	-
Latest objective review at expert level	-
Commitment Decision Body	-
Objective approved/endorsed in	-
Latest change to objective approved/endorsed in	-