



AO-0323 — Wake Turbulence Separations (for Departures) based on Static Aircraft Characteristics

Optimization of the ICAO wake turbulence separation classes by use of longitudinal wake turbulence static pair-wise separation (S-PWS) minima on departures for the initial common departure path from the runway, applicable in all operating conditions. The specification is based on the comparison of wake generation and wake resistance between aircraft types, to reference pairs considered as acceptable baseline for wake turbulence risk, and using aircraft type characteristics. This allows reduction of separation minima for most aircraft pairs, enabling runway throughput increase compared to ICAO scheme, whilst maintaining acceptable levels of safety.

Rationale The demand is high for airport capacity and efficiency at some European airports, and in particular for increased runway throughput. Today's ICAO separations are based on certificated Maximum Take Off Mass (MTOM) and it includes three categories (i.e. HEAVY, MEDIUM or LIGHT) allocating all aircraft into one of them. Because the separations are defined based on the worst case in each category, this leads to over separation in many instances resulting in and a loss of runway throughput. Using knowledge gained with RECAT-EU development and refined analysis supported additional operational data, further optimization is possible.

Forecast V3 end date 31-08-2019

Benefits start date (IOC) -

Full benefits date (FOC) -

Current Maturity Level V2 finalised

Solution Data Quality Index -

Current Maturity Phase R&D

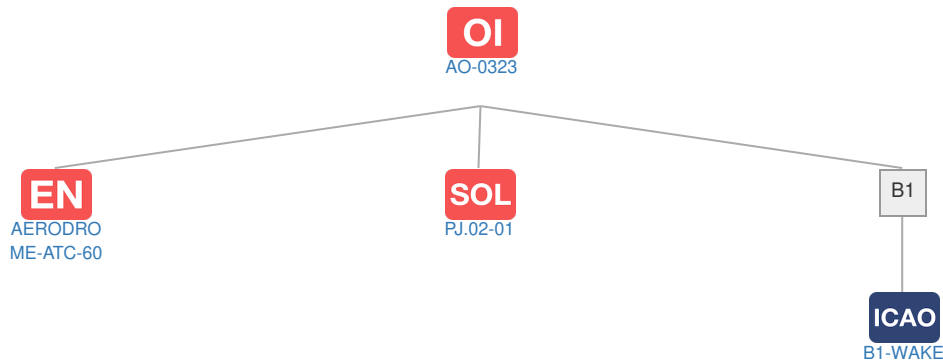
Scope -

Release R9

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	
AO-0323																											
→ AERODROME-ATC-60					▲																						

OI Dependent OI Steps

Relationship	Code	Title	Related Elements
Has predecessor	AO-0329	Optimised Separation Delivery for Departure	SOL OI EN DS ICAO
Has successor	AO-0324	Wake Turbulence separations (for departures) based on Dynamic Aircraft Characteristics	OI EN ICAO

SOL SESAR Solutions

Code	Title	Program	Related Elements
PJ.02-01	Wake Turbulence Separation Optimization	SESAR 2020 Wave 1	SOL PJ OI DS EOC ICAO

PCP PCP Elements: No associated data

OBJ Implementation Objectives: No associated data

ICAO ICAO Block Modules

Designator	Title	Related Elements
B1		
B1-WAKE	Increased Runway Throughput through Dynamic Wake Turbulence Separation	SOL OI PCP