



# AO-0327 — Reduction of Wake Turbulence Risk through Wake Risk Monitoring

*In the cockpit, detection of wake encounters using on-board data and traffic positions broadcast by surrounding aircraft will increase safety by allowing to objectively characterise wake turbulence risk as a function of e.g. location, traffic mix or separation rules. Additional detection of wake turbulence using direct measurements from the ground (RADAR and/or LiDAR) may improve the monitoring at critical locations at ground level. This will provide additional objective information for monitoring of suitability of separations.*

**Rationale** Long term wake turbulence risk monitoring can be part of the deployment phase of the concepts providing the regulation authority with a direct means to verify that all identified safety objectives and safety requirements have been met during its operational life. Additionally direct measurements of wake encounter risk can be a safety net for all the concepts developed in the area of Wake Turbulence Separation Optimization.

**Forecast V3 end date** 31-08-2019

**Benefits start date (IOC)** 19-06-2025

**Full benefits date (FOC)** 31-08-2029

**Current Maturity Level** V2 finalised

**Solution Data Quality Index** -

**Current Maturity Phase** R&D

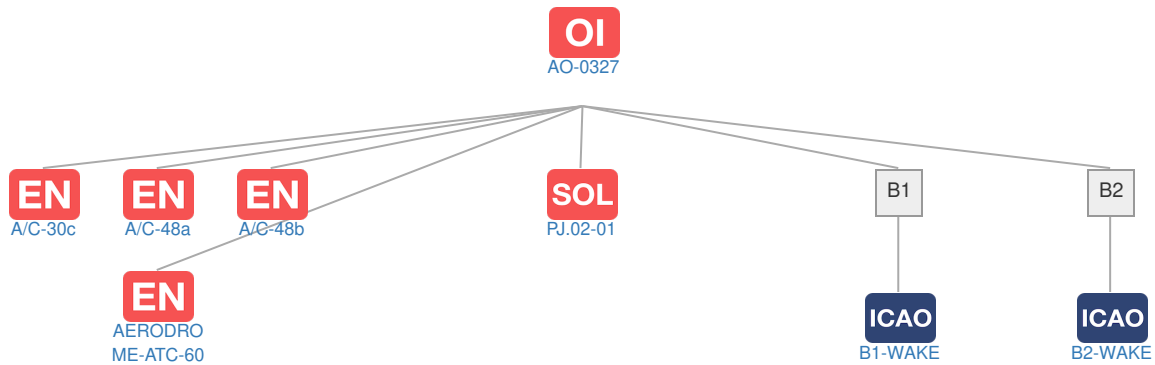
**Scope** -

**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-0327																											
A/C-30c																											
A/C-48a																											
A/C-48b																											
AERODROME-ATC-60																											

**OI** Dependent OI Steps: No associated data

## SOL SESAR Solutions

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

**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	<span>SOL</span> <span>OI</span> <span>PCP</span>
B2		
B2-WAKE	Advanced Wake Turbulence Separation (Time Based)	<span>SOL</span> <span>OI</span> <span>PCP</span>