



AO-0321 — Enhanced Arrival Procedures using Adaptive Increased Glide Slope (A-IGS)

Enhanced arrival procedures using Adaptive Increased Glide Slope (A-IGS) will allow inbound aircraft to reduce noise footprint (environmental benefit) while optimizing, thanks to an on-board feature, the vertical flight profile. The use of A-IGS aims at flying a more suitable glide slope that the aircraft is able to fly naturally according to its state (weight and landing configuration chosen by pilots), considering the external environment, i.e. the destination airfield weather (wind, temperature, pressure).

The A-IGS function can be activated as soon as a gain of 0.1° (steeper) can be achieved in comparison with the slope of the published procedure. In practice, the A-IGS function aims at targeting gains which will depend on the tuning of the function (up to 3.5°).

The expected benefits will particularly show in the following cases: light aircraft, high air density, headwind situation. From an implementation perspective, the A-IGS glide slope is based on a published procedure whose final glide slope is slightly increased at on-board system level.

Rationale There is a need for reducing the noise in the airport environment during approach while optimizing the arrival flight profile. This can be done with adaptive increased glide slope (A-IGS). Compared to IGS, the increased glide slope in the context of A-IGS is optimized for the aircraft, depending on its own performance capability and taking into account the environmental conditions. Extended tuning capacity of the function offer a reasonable and smart method to cope with operational constraints (wake vortex separation), pilots acceptance, landing (flare) operations, deceleration capacity robustness.

Forecast V3 end date 31-08-2019

Benefits start date (IOC) 31-08-2023

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	
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➔ A/C-02a																											
➔ A/C-02b																											
➔ A/C-04																											
➔ A/C-04a																											
➔ A/C-05a																											
➔ A/C-06																											
➔ A/C-56a																											
➔ A/C-56b																											
➔ AERODROME-ATC-72																											
➔ APP ATC 113																											
➔ CTE-N06																											
➔ CTE-N07																											
➔ CTE-N07a																											
➔ CTE-N07b																											
➔ CTE-N07c																											
➔ METEO-04c																											
➔ METEO-05c																											

OI Dependent OI Steps

Relationship	Code	Title	Related Elements
Has predecessor	AO-0328	Optimised Runway Delivery on Final Approach	SOL OI EN DS ICAO

SOL SESAR Solutions

Code	Title	Program	Related Elements
PJ.02-02	Enhanced Arrival Procedures	SESAR 2020 Wave 1	SOL PJ OI DS EOC ICAO

PCP PCP Elements: No associated data



Implementation Objectives: No associated data



ICAO Block Modules: No associated data