



AUO-0403 — Reducing Landing Minima in Low Visibility Conditions using Enhanced Flight Vision Systems (EFVS)

'Out of the window' positional awareness is improved through the application of visual enhancement technologies thereby reducing the difficulties of transition from instrument to visual flight operations. The direct operational consequence is that the applied landing operation minima can then be of Type B (100 ft DH ; RVR 300m) instead of Type A (300 ft DA/DH ; RVR 800m), preventing as much as possible traffic disruption in Low Visibility Conditions. This operational improvement is intended for flight crews, and corresponds to the use of Enhanced Flight Vision System (EFVS) technologies displayed in HUD to provide operational credit in approach as permitted per EASA EU 965/2012 to face Low visibility conditions.

From a global ATM network standpoint, the EFVS operations allow to retain traffic at most of secondary aerodromes by providing operational credit at most of runway ends with precision or non-precision landing minima (LPV, LNAV/ VNAV, ILS CAT1;). The operational credit provided by EFVS is particularly important regarding secondary aerodromes because they usually have CAT1 or higher than CAT 1 RVR ; DA/DH minima and are therefore potentially more frequently impacted by adverse weather conditions.

Rationale While key main airports are capable of Type B landing operations (CAT II or CAT III) with typical published minima of 100ft DH - RVR 300m, which allows facing to most adverse weather conditions that can be encountered in day to day operations, most of small/ medium airports are only capable of Type A landing operations with typical 300ft DA/ DH - RVR 800m minima, which potentially limit their access during winter period and early in the morning. There is therefore a need for an Enhanced Flight Vision System (EFVS) on board capability that it is mainly supported by the aircraft system (instead of complex and costly ground infrastructures as those implemented in CATII/III airports), enabling in a transparent way the transition from IMC (head in) to visual flight operations (out the window).

Forecast V3 end date 31-12-2016

Benefits start date (IOC) 31-12-2017

Full benefits date (FOC) 31-12-2023

Current Maturity Level V3 finalised

Solution Data Quality Index -

Current Maturity Phase R&D Finalised

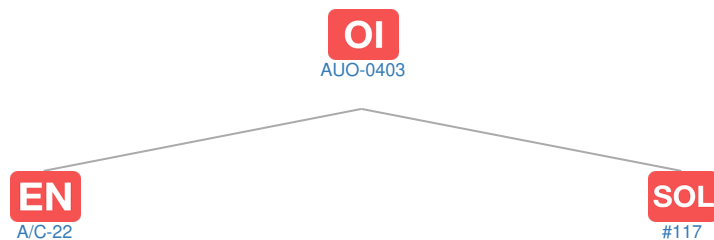
Scope -

Release R5

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												
AUO-0403																																						
A/C-22																																						

OI Dependent OI Steps

Relationship	Code	Title	Related Elements
Has successor	AUO-0404	Synthetic Vision for the Pilot in Low Visibility Conditions	OI EN

SOL SESAR Solutions

Code	Title	Program	Related Elements
#117	Reducing Landing Minima in Low Visibility Conditions using Enhanced Flight Vision Systems (EFVS)	SESAR1	OI DS EOC

PCP PCP Elements: No associated data

OBJ Implementation Objectives: No associated data

ICAO ICAO Block Modules: No associated data