

International Civil Aviation Organization

### AIR NAVIGATION SYSTEMS IMPLEMENTATION GROUP

First Meeting (ANSIG/1) (Cairo, Egypt, 10 – 12 February 2015)

#### **Agenda Item 4:** Performance Framework for Regional Air Navigation Implementation

#### IMPLEMENTATION OF B0-ACAS

(Presented by the Secretariat)

#### **SUMMARY**

This paper proposes the table for monitoring the status of implementation of the B0-ACAS. The paper highlights also the need to develop/maintain a database related to the carriage of TCAS v7.1.

Action by the meeting is at paragraph 3.

#### REFERENCES

- MID Region Air Navigation Strategy
- MSG/4 Report

#### 1. Introduction

1.1 MID Region Air Navigation Strategy was endorsed by the Fourth meeting of the MIDANPIRG Steering Group (MSG/4, Cairo, Egypt, 24-26 November 2014) as the framework identifying the regional air navigation priorities, performance indicators and targets. The Strategy includes Tables for all twelve priority 1 Modules along with their associated elements, applicability, performance Indicators, supporting Metrics and performance Targets.

#### 2. DISCUSSION

- 2.1 B0-ACAS (ACAS Improvements) provides short-term improvements to existing Airborne Collision Avoidance Systems (ACAS) to reduce nuisance alerts while maintaining existing levels of safety. This will reduce trajectory deviations and increase safety in cases where there is a breakdown of separation. The Safety and operational benefits increase with the increase in the proportion of equipped aircraft.
- 2.2 The meeting may wish to note that for the implementation of B0-ACAS only the Aircraft need to be equipped with TCAS version 7.1.
- 2.3 The Performance Indicators/Supporting Metrics, applicability and target included in the MID Region Air Navigation Strategy, are reproduced here below:

Elements	Applicability	Performance Indicators/Supporting Metrics	Targets
Avionics	All States	Indicator: % of States requiring carriage of ACAS (TCAS v 7.1) for aircraft with a max certificated take-off mass greater than 5.7 tons  Supporting metric: Number of States requiring carriage of ACAS (TCAS v 7.1) for aircraft with a max certificated take-off mass greater than 5.7 tons	80% by Dec. 2015 100% by Dec. 2016

- 2.4 The meeting may wish to note that States need to have the necessary regulation for the carriage of TCAS v7.1 for the aircraft with a max certificated take-off mass greater than 5.7 tons, and to provide its reference to the ICAO MID Regional Office. **Appendix A** is proposed for the monitoring and reporting purpose.
- 2.5 The meeting may wish to note that necessary procedures related to ACAS are defined in PANS-ATM, Doc 4444 and in PANS-OPS, Doc 8168. The required Avionics related to the carriage of TCAS v7.1 are defined in: (RTCA DO185B / EUROCAE DO143 and RTCA DO325 Annex C).
- 2.6 The meeting may wish to recall that Amendment 85 to ICAO Annex 10 volume IV, published in October 2010, introduced the following provisions:
  - all new ACAS installations after 1 January 2014 shall be compliant with version 7.1;
  - all ACAS units shall be compliant with version 7.1 after 1 January 2017.
- 2.7 States need to develop/maintain a database related to the carriage of the TCAS v7.1, in accordance with their national regulations.

#### 3. ACTION BY THE MEETING

- 3.1 The meeting is invited to:
  - a) review and update the status of implementation of the B0-ACAS in **Appendix A**;
  - b) take necessary measures for the follow-up with the users for the implementation of the necessary avionics as described in B0-ACAS;
  - c) identify the difficulties faced in the implementation of B0-ACAS; and
  - d) recommend measures to expedite the implementation process and meet the agreed performance targets; and
  - e) urge States to develop/maintain a database related to the carriage of the TCAS v7.1, in accordance with their national regulations.

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## APPENDIX A

# ACAS V7.1 Status and regulation reference

State	ACAS V7.1 requirement	Regulation Reference	Remarks
1	2	3	4
Bahrain			
Egypt			
Iran			
Iraq			
Jordan			
Kuwait			
Lebanon			
Libya			
Oman			
Qatar			
Saudi Arabia			
Sudan			
Syria			
UAE			
Yemen			