

International Civil Aviation Organization

TWELFTH MEETING OF THE SOUTH EAST ASIA AND BAY OF BENGAL SUB-REGIONAL ADS-B IMPLEMENTAITON WORKING GROUP (SEA/BOB ADS-B WG/12)



Guangzhou, China, 08 – 10 November 2016

Agenda Item 3: Review implementation and co-ordination activities and subregional implementation plans

3.3) Updates by other States

THE IMPLEMENTATION OF ADS-B IN INDONESIAN AIRSPACE

(Presented by Indonesia)

Summary

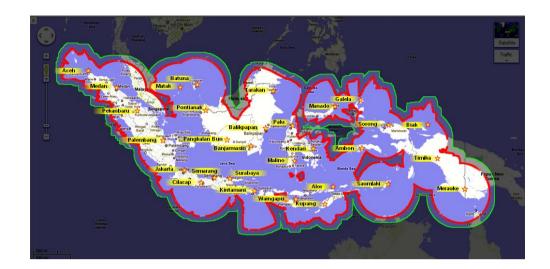
This Information Paper contains the implementation of ADS-B in Indonesian Airspace. Refer to AIRAC AIP SUPPLEMENT Nr : 08/15 30 Apr 2015

1. INTRODUCTION

- 1.1. Areas of ADS-B implementation are in Jakarta FIR and Ujung Pandang FIR Class A airspace, from FL290 up to FL460 within ADS-B coverage.
- 1.2. From June 2015 until 31 December 2017 carriage of ADS-B equipment for flight from FL290 up to FL460 is optional. However with ADS-B only surveillance coverage, priority will be given to aircraft which are ADS-B equipped over non-equipped aircraft.
- 1.3. Starting 1 January 2018 the implementation of ADS-B in Class A airspace from FL290 up to FL460 is mandatory.

2. DISCUSSION

- 2.1 Ujung Pandang FIR (MATSC) has 21 ADS-B ground stations. 4 ADS-B ground stations along the boundaries are data sharing with Australia Air Services (ASA), in return ASA also shares ADS-B data from 4 of their stations along the boundaries.
- 2.2 Jakarta FIR (JATSC) has 9 ADS-B ground stations. 2 ADS-B ground stations along the boundaries are data sharing with Civil Aviation Authority of Singapore (CAAS).
- 2.3 Indonesia Airspace was covered by 70% of surveillance (35 RADARs), but since the implementation of ADS-B (30 ground stations), Indonesia Airspace is now covered by more than 90% of surveillance.



- 2.4 90% of the aircraft operating in Indonesia Airspace are equipped with ADS-B transmitter. (see attachment).
- 2.5 To improve Level of Safety, Airnav Indonesia proposed the implementation of ADS-B can be use below FL290 as well within controlled airspace.
- 2.6 During the implementation phase, we found there was a problem with aircraft of B787 which triggered a false alarm (transponder 7700) in MATSC ATC System.

3. CONCLUSION

- 3.1 Indonesia has 30 ADS-B ground stations, some of them had been shared to Singapore and Australia.
- 3.2 Indonesia plans to add another 7 location in Papua.
- 3.3 One and half year period given to the Airlines to prepare their aircraft for establishing ADS-B equipment seems to be adequate.
- 3.4 As an archipelago country, using ADS-B gives us more benefit better than RADAR, a few blank spot of RADAR now already covered by ADS-B.
- 3.5 After more than one year using ADS-B as surveillance, we found that ADS-B coverage also reliable below FL290, in the future we are looking forward for more extensive use of ADS-B.
- 3.6 To response the issue about false alarm, Airnav Indonesia conducted the internal investigation where the result of the internal investigation is to upgrade ADS-B ground stations in 10 site from type DO260A into DO260B THALES product that will be completed by the end of 2016. 4 of 10 upgraded ground stations had been prepared for data sharing between Indonesia and Australia (Ujung Pandang and Brisbane.

4. ACTION REQUIRED BY THE MEETING

- 4.1. The meeting is invited to:
 - a) note the information contained in this papers; and
 - b) discuss any relevant matters as appropriate.

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