

International Civil Aviation Organization



**AUTOMATIC DEPENDENT SURVEILLANCE –
BROADCAST SEMINAR AND ELEVENTH MEETING
OF AUTOMATIC DEPENDENT SURVEILLANCE –
BROADCAST (ADS-B) STUDY AND
IMPLEMENTATION TASK FORCE (ADS-B SITF/11)**



Jeju, Republic of Korea, 24-27 April 2012

Agenda Item 6: Review States' activities and interregional issues on trials and implementation of ADS-B and multilateration

**POTENTIAL ADS-B GROUNDSTATION
TO BE SHARED IN INDONESIA**

(Presented by Indonesia)

SUMMARY

This paper provide information of the predictive coverage of ADS-B Groundstation near Indonesia FIR Boundary.

1. Introduction

1.1 In August 2004, Conclusion 15/26 of APANPIRG/15 meeting has decide to encourage all countries to share the ADS-B data with adjacent FIR's and build mechanism and infrastructur to achieve its goal.

1.2 On 20 September 2010 Australia and Indonesia signed an ADS-B data sharing agreement for two years, which is automatically extended by a further two years unless the parties given written notice to terminate the agreement. At this time, ADS-B data from Australia has been displayed in ATC Center Makassar (MATSC)

1.3 On 22 December 2010 Singapore and Indonesia signed an ADS-B data sharing agreement for five years, which is automatically extended by a further five years unless the parties given written notice to terminate the agreement. ADS-B data from Singapore has been successfully displayed in Emergency ATC Center Jakarta (E-JAATS)

1.4 As agreed in the ADSB data sharing agreement with Singapore, Indonesia has completed installation of VHF-ER facilities in Natuna, while VHF-ER facilities in Matak are on working.

1.5 At the SEA ADS-B WG/6 meeting, Indonesia and Australia has reported that display of the foreign ADS-B data increases situational awareness and supports safety nets. It is used to support procedural separation standards, earlier detection of ATC and pilot errors (coordination errors, incorrect flight level, etc), reduced numbers of coordination incidents at the FIR boundary.

1.6 Indonesia has also successfully built an Emergency Jakarta Automated Air Traffic Services (E-JAATS) as a backup system for existing ATC Automation system. E-JAATS will have new functionalities such as mode-S processing, ADS-B processing, etc and will be in a fully operation on June 2012.

2. Coverage of ADS-B GS Near FIR Boundary

2.1 Continuing the success of ADS-B data sharing program between Indonesia-Singapore and Indonesia-Australia, following are another potential ADSB GS from Indonesia to be shared:

Note : Red line are the maximum range of the ADSB Groundstation at FL250 and FL460.



Fig. 1 : Potential site to be shared with Chennai FIR, Colombo FIR, and Kualalumpur FIR.



Fig. 2 : Potential site to be shared with Manila FIR.



Fig. 3 : Potential site to be shared with Port Moresby FIR.



Fig. 4 : Potential site to be shared with Kota Kinabalu FIR.

3. Recommendation

3.1

It is recommended that

- a) the meeting note the success of ADS-B data sharing between Indonesia, Australia, and Singapore.
- b) the meeting note the coverage of ADSB GS around Indonesia FIR and consider deployment of ADS-B data sharing to achieve its benefits.
