International Civil Aviation Organization

FIFTH MEETING OF THE SOUTHEAST ASIA SUB-REGIONAL ADS-B IMPLEMENTATION WORKING GROUP (SEA ADS-B WG/5)

Jakarta, Indonesia, 21 – 22 January 2010

Agenda Item 4: Updating States' activities and issues on regional trials

UPDATE ADS-B PROGRAMME IN INDONESIA

(Presented by Indonesia)

SUMMARY

This paper presents the progress of deployment of ADS-B programme in Indonesia.

1. INTRODUCTION

1.1 Directorate General of Civil Aviation - Indonesia have been installed 27 ADS-B Ground stations with dual system at (Makassar, Sorong, Natuna, Kupang, Merauke, Banda Aceh, Matak, Cilacap, Soekarno Hatta Airport-Jakarta, Tarakan, Pangkalan Bun, Palu, Kintamani - Bali, Waingapu, Alor, Galela, Ambon, Saumlaki, Medan, Pakanbaru, Palembang, Pontianak, Timika, Biak, Kendari, Manado, and Surabaya. (see Attachment, Figure 1).

1.2 The 18 ADS-B Ground Stations in the Eastern part of Indonesia have been connected to ATC system in MAATS-Makassar and 9 ADS-B Ground Station in the Western part of Indonesia have been connected to RCMS in JAATS-Jakarta.

1.3 Test-Bed system at DGCA Headquarters Office in Jakarta be able to monitor and control the ADS-B Data from 27 ADS-B Ground Station that installed in Western and Eastern part of Indonesia.

1.4 DGCA Indonesia have been upgrade MAATS from Eurocat-X version 2.4 to version 3.15 with ADS-B Capabilities and already commissioned on December 2009.

2. ADS-B PLANNING IN INDONESIA

2.1 According to ICAO ADS-B Implementation and Operations Guidance Document (AIGD), before to implement ADS-B, Airservices Australia assist DGCA Indonesia to conduct a Gap Analysis of the planning and implementation processes to support of ADS-B services.

2.2 ADS-B Program in Indonesia :

- DGCA will develop ADS-B Implementation Team Task Force to socialize ADS-B Planning.

- DGCA will legalize some regulations, such as Operational Concept, Safety Assessment, ADS-B Procedure into CASR.

- In short Term, DGCA Indonesia have a plan to use of ADS-B for ATC Situational Awareness in Makkasar Air Traffic Service Center (MATSC).

- Cross FIR Operational Data sharing as the initial application of ADS-B Services in Indonesia.

- After succesfully implement ADS-B for situational awareness, Indonesia will be implement ADS-B for provision of separation services.

- Familiarization of ADS-B for Air Traffic Controller and Technician.

3. OPERATIONAL AND TECHNICAL CONCEPT

3.1 After commissioning activities at MAATS, controller can monitor 4 kind of track (radar, ADS-B, ADS-C, and flight plan). It shown in Figure 2.

3.2 MAATS will be implemented ADS-B gradually for ATC Situational Awareness, Safety Alert, and Separation purposes.

3.3 RCMS in DGCA be able to monitor and control all ground station from Thales, Era, and Sensis, as shown in Figure 3, Figure 4, and Figure 5.

4. ACTION BY MEETING

4.1 The Meeting is invited to note the contents of this information paper.

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ATTACHMENT

Figure 1 . Installation of ADS-B Ground Station at 27 locations in 2009.

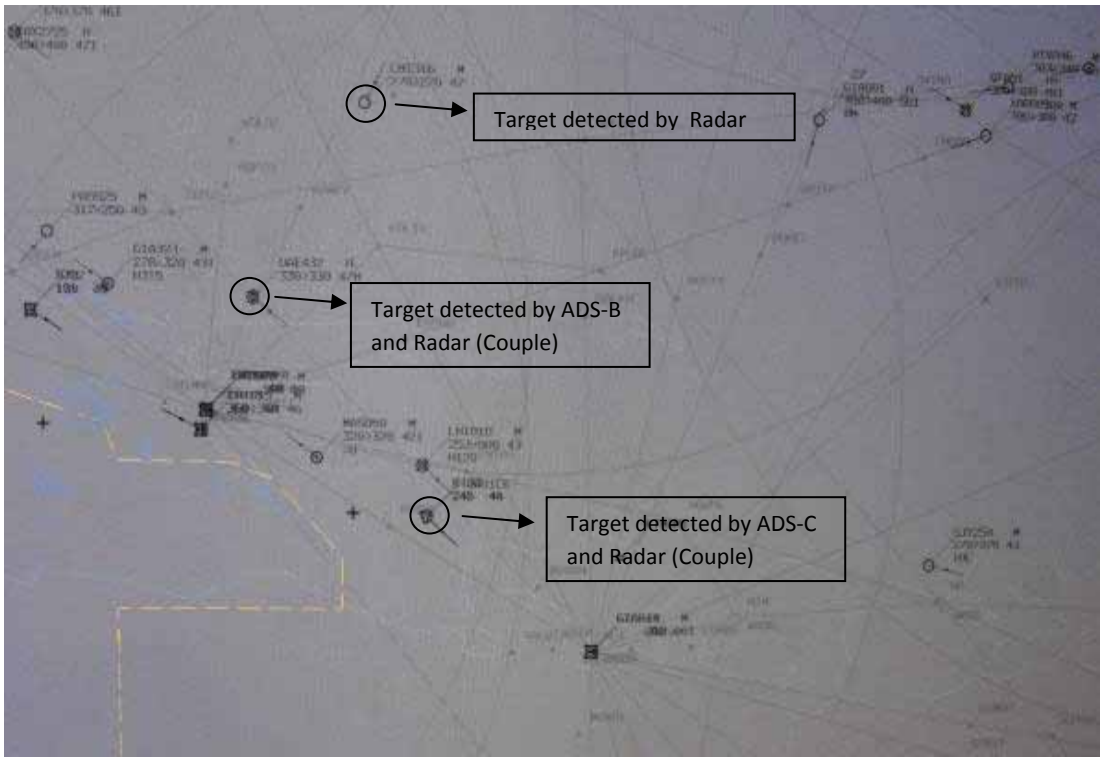

Figure 2 . Aircraft from ADS-B, ADS-C, and Radar displayed at Eurocat-X system.

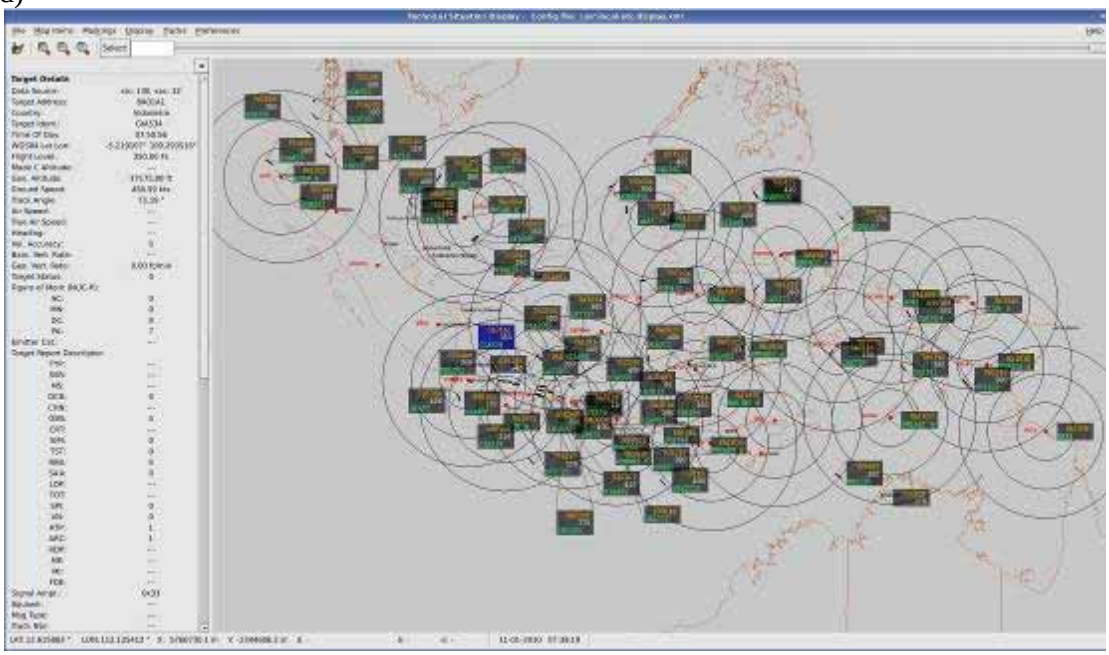

Figure 3. Aircraft detected from Thales and Sensis Groundstations.

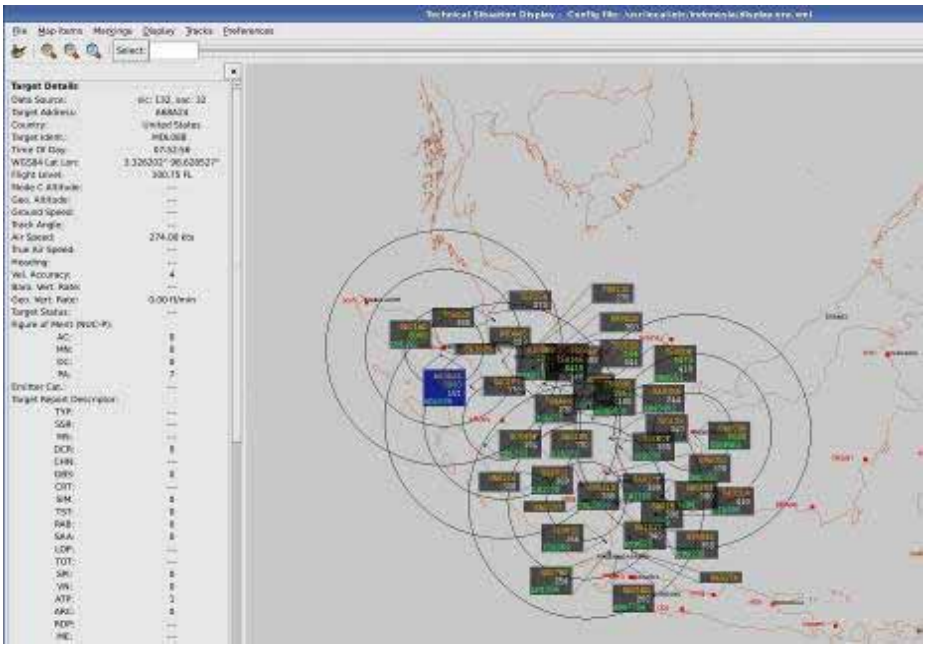

Figure 4. Aircraft detected from Era Groundstations and displayed at Thales RCMS.

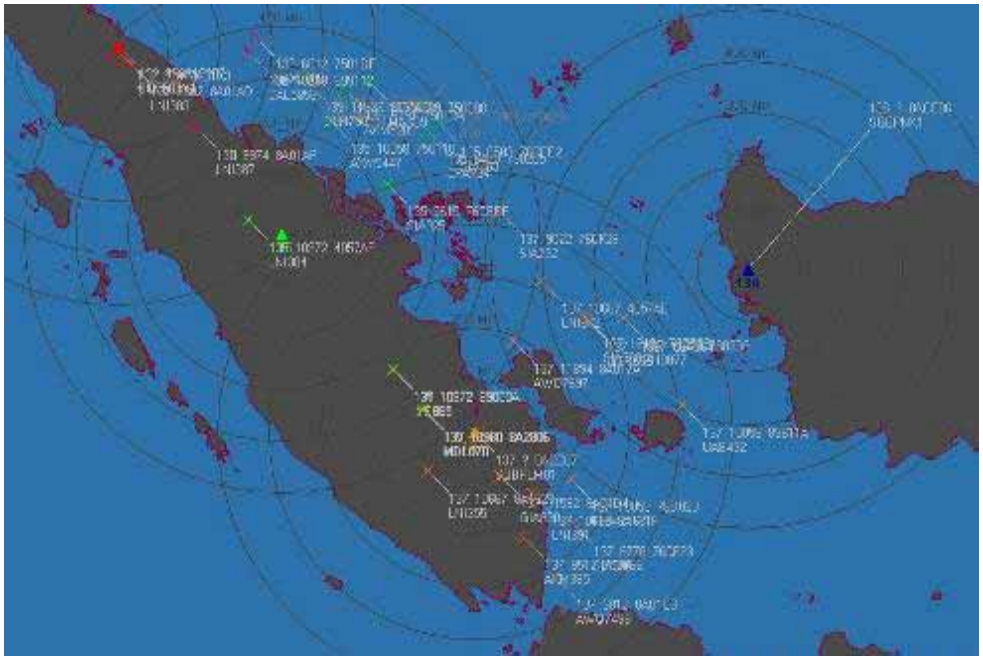

Figure 5. Aircraft detected from Era Groundstations and displayed at Era RCMS.