

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

3.2) Progress on deployment and implementation planning – Bay of Bengal

ADS-B IMPLEMENTATION PLAN IN BANGLADESH

(Presented by CAA Bangladesh)

SUMMARY

This paper presents ADS-B Implementation Plan in Bangladesh

1. Introduction

1.1 Bangladesh wishes to inform the meeting that CAA Bangladesh has taken a Public Private Partnership (PPP) project that includes a Multi-Mode Surveillance System (RADAR, ADS-B and Multilateration (MLAT)) along with CNS/ATM system. The installation of ADS-B ground stations throughout the country as back up to the present and proposed new Mode S radars and as a means of filling the gap in radar coverage over the Bay of Bengal area.

2. Discussion

- 2.1 **Primary objective:** One of the primary safety objectives of ADS-B implementation is to provide surveillance coverage over the Bay of Bengal including the FIR boundary of Dhaka, Kolkata and Yangon ACC's.
- 2.2 **ADS-B implementation plan:** The ADS-B implementation plan includes installation of 4 (four) ADS-B ground stations at 4 (four) locations: Dhaka, Cox's Bazar, Saidpur and Barisal Airports.

2.3 **ADS-B Coverage:**

Each ADS-B station shall provide coverage of at least 250NM line of site.

(a) **ADS-B Dhaka FIR Coverage**: To provide 250 NM LOS surveillance coverage over the Dhaka FIR and as a supplement to radar systems. And to share data with Agartala, India to extend Dhaka ACC-U coverage.

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- (b) **ADS-B Cox's Bazar Coverage**: To provide coverage over the Bay of Bengal and a seamless continuation of Sittwe, Myanmar ADS-B coverage at flight level 290 and above..
- (c) **ADS-B Barisal Coverage**: ADS-B low level coverage is required for:
 - i. Routes between Agartala Kolkata, India Westbound FL 060 and East Bound FL 070
 - ii. Routes between Agartala Guwahati, India at FL 050 & 060
- (d) **ADS-B Saidpur Coverage**: To provide low level coverage, 1000-2000 feet, is required for Galaxy Flying School located at Rajshahi, Shah Makhdum Airport (VGRJ).

THE ADS-B IMPLEMENTATION PLAN IN BANGLADESH
PPP project is expected to be completed by December 2019



2.4 ADS-B Data Sharing Plan:

Bangladesh is willing to share ADS-B data and VHF RCAG communications with neighboring States to enhance the safety and surveillance capability in the sub-region.

2.5 **MLAT implementation plan :** The PPP project also includes installation of number of MLAT stations to provide surface movement control at HSIA, Dhaka as well as TMA coverage as a backup and complimentary RADAR coverage to the Dhaka MSSR.

2.6 **Radar implementation Plan:**

Bangladesh will replace the existing Mode A/C radars by installing new Mode S Radars in Hazrat Shahjalal International Airport, Dhaka. Another installation work of new Mode S Radar is in going on at Shah Amanat International Airport, Chittagong.

2.7 **System Integration:**

The ADS-B ground stations, MLAT and Radar systems will be integrated with the new ATM Automation system to be installed at Dhaka.

2.8 **Project Completion Date:**

The PPP project is expected to be completed by December 2019.

3. Action by the meeting

- 3.1 The meeting is invited to:
 - a) note the ADS-B implementation plan in Bangladesh; and
 - b) discuss any relevant matters as appropriate.

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