

International Civil Aviation Organization

FIFTEENH MEETING OF THE ADS-B STUDY AND IMPLEMENTATION TASK FORCE (ADS-B SITF/15)

Bangkok, Thailand, 18 - 20 April 2016

Agenda Item 4: Review States' activities and interregional issues on implementation of ADS-B and multilateration

ADS-B IMPLEMENTATION IN THE MALDIVES

(Presented by Maldives)

SUMMARY

This paper presents information on the efforts by Maldives to implement ADS-B for the provision of Air Traffic Services in Male FIR.

1. INTRODUCTION

- 1.1 In November 2012, 4 ADS-B stations (2 at Male' Ibrahim Nasir Intl Airport, 1 at Kulhudhuffushi Island in the North and 1 at Fuah Mulah Island in the south) were installed to enhance surveillance capability within Male FIR. Since then, ADS-B has been integrated with the ATM system; and is now available for use, covering up to 90% of Male FIR above FL290 (29,000 feet)
- 1.2 On 7th February 2016, Maldives started using ADS-B to enhance ATS surveillance capability in Male FIR.
- 1.3 At this stage, the carriage of ADS-B equipment is NOT mandatory. The provision of ATS using ADS-B is for capable aircraft. Radar remains the primary surveillance tool within 200NM from Male International Airport.

2. DISCUSSION

Aircraft Equipage for ADS-B Out

- 2.1 Maldives has not yet decided on a date to make the carriage of ADS-B Out mandatory.
- 2.2 However, IFR aircraft intending to use ADS-B Out in Male FIR are required to be certified as meeting:

- a) EASA AMC 20-24, or
- b) the equipment configuration standards in Appendix XI of Civil Aviation Order 20.18 of the Civil Aviation Safety Authority of Australia; and
- 2.3 If an IFR aircraft carries an ADS-B transmitting equipage which does not comply with the requirements of paragraph 2.2, the equipment shall be:
 - a) Deactivated; or
 - b) Set to transmit only a value of zero for the Navigation Uncertainty Category (NUC P) or Navigation Integrity Category (NIC).

Airworthiness approval for aircraft registered in Maldives

- 2.3 It has been agreed among the stakeholder in Maldives to complete the airworthiness approval for all locally registered aircraft already equipped with ADS-B by 30th December 2016
- 2.4 For aircraft which require retrofitting of ADS-B Out equipment, the local operators have agreed to obtain airworthiness approval for at least one aircraft every year until the process is complete.

VFR aircraft equipped with ADS-B

- 2.5 There are 51 seaplanes (Twin Otter aircraft with floats) conducting commercial air transport between Male International airport and resort islands. These aircraft have ADS-B out functionality combined with GPS to give highly accurate positional information.
- 2.6 Although there is no requirement for the installation of GPS equipment suitable for ADS-B in the APAC region, Maldives has decided to certify existing fleet of seaplanes for operation within control airspace before the end of 2016.
- 2.7 EASA AMC 20-24 will be the guideline, although some exemptions will be considered

3. ACTION REQUIRED BY THE MEETING

- 3.1 The meeting is invited to note the information contained in this papers; and
- 3.2 The meeting is invited to note that Maldives seeks support from ICAO and APAC States with significant experience in implementing ADS-B
