

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 PROGRESS IN VIET NAM

(Presented by the Viet Nam)

## SUMMARY

This paper presents information on the progress of ADS-B implementation in the Viet Nam.

### 1. INTRODUCTION

1.1 ADS-B is a surveillance technology supporting Radar like separation standards to enhance the flight safety and efficiency in Viet Nam. As part of the effort to enhance the efficiency and safety of the air traffic services, Viet Nam has completed installation and commissioning of 11 ADS-B ground stations.

1.2 Viet Nam published AIRAC AIP SUP 14/10 on 31 October 2013 to inform airspace users on VietNam's plan to implement the use of ADS-B on 12 December 2013 within the Ho Chi Minh FIR.

### 2. **DISCUSSION**

#### ADS-B based surveillance airspace

2.1 Viet Nam has installed 11 ADS-B ground stations (07 stations within Ha Noi FIR and 04 stations within Ho Chi Minh FIR). Viet Nam also plans to install additional 12 ADS-B ground stations to fulfill the coverage of Ho Chi Minh FIR in 2016-2018.

2.2 The implementation of Automatic Dependent Surveillance - Broadcast (ADS-B) within Ho Chi Minh FIR at and above FL 290 within the oceanic area of South China Sea under the Sectors 4 and 5 on the ATS routes: L625, M771, N892, L642, M765, M768, N500 and L628.

2.3 ADS-B service is provided by Ho Chi Minh ACC for those aircraft equipped with ADS-B transmitters that has been certified as meeting EASA (European Aviation Safety Agency) Acceptable Mean of Compliance to AMC 20-24 (Certification Considerations for the Enhanced ATS in Non-radar areas using ADS-B Surveillance 'ADS-B NRA') or meets equipment configuration

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standards in Appendix XI of Civil Aviation Order 20.18 of the Civil Aviation Safety Authority of Australia.

2.4 The separation minimum based on ADS-B coverage area (out of radar coverage) to be applied in Ho Chi Minh FIR is 30 miles (NM).

#### **Collaboration with adjacent States in South China Sea**

2.5 Viet Nam and Singapore signed MOU to share ADS-B data and VHF facilities in 2012. Singapore has been receiving the ADS-B data from Con Son Island via VSAT links since August 2013. Viet Nam provided access of the VHF radio facilities at Con Son Island to Singapore for ATS.

2.6 The other side, Viet Nam and Singapore have agreed on a progressive phased approach to reduce longitudinal separation to allow airspace users to reap the full benefits of ADS-B surveillance on the respective ATS routes. A revised operational letter of agreement (LOA) between Singapore and Viet Nam, incorporating the use of ADS-B as part of ATC procedures, was signed on 24 July 2014.

2.7 Viet Nam, Singapore and Malaysia are cooperating to reduce minimum longitudinal separation, for suitably equipped aircraft, to 20NM following phased approach to reduce longitudinal separation;

a) 30 NM commenced on 24 July 2014; and;

b) 20 NM planned in 2016.

#### 3. ACTION REQUIRED BY THE MEETING

3.1 The meeting is invited to:

- a) note the implementation of ADS-B in Viet Nam; and
- b) discuss any relevant matters as appropriate.

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