



*International Civil Aviation Organization*

**THE NINTH MEETING OF THE SOUTHEAST ASIA AND BAY OF BENGAL  
SUB-REGIONAL ADS-B IMPLEMENTATION WORKING GROUP  
(SEA/BOB ADS-B WG/9)**

Beijing, China, 30 October - 1 November 2013

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**Agenda Item 5: Review of sub-regional implementation plans**

**ADS-B COLLABORATION INITIATIVES**

(Presented by CANSO)

**SUMMARY**

This paper highlights the importance of close collaboration in ADS-B implementation and the need to maintain the momentum of on-going ADS-B initiatives over the South China Sea and the Bay of Bengal. The paper also reports on the status of ADS-B implementation over the Indian Ocean and proposes that the relevant States work together to collaborate on the sharing of ADS-B data and to optimize their ADS-B plans.

**1. INTRODUCTION**

1.1 Since the setting up of its Asia Pacific Office in 2008, CANSO has been working closely with ICAO, IATA and the ANSPs of this region to promote the implementation of ADS-B and the sharing of ADS-B data to enhance flight safety and efficiency

1.2 It is therefore encouraging to note that last year's ICAO 12<sup>th</sup> Air Navigation Conference made the following recommendation underlining the importance of ADS-B implementation and data sharing:

Recommendation 1/7 of the ICAO AN CONF/12:

That States:

- (a) recognize the effective use of automatic dependent surveillance - broadcast (ADS-B) and associated communication technologies in bridging surveillance gaps and its role in supporting future trajectory-based air traffic management operating concepts, noting that the full potential of ADS-B has yet to be fully realized; and
- (b) recognize that cooperation between States is key towards improving flight efficiency and enhancing safety involving the use of automatic dependent surveillance technology

That ICAO:

- (c) urge States to share automatic dependent surveillance-broadcast (ADS-B) data to enhance safety, increase efficiency and achieve seamless surveillance and to work closely together to harmonize their ADS-B plans to optimize benefits.

## **2. DISCUSSION**

2.1 In this region, many States are planning to implement or have implemented ADS-B but there is a need for greater collaboration among neighbours to harmonise implementation plans and to share ADS-B data to enhance safety and efficiency. This is the issue that Recommendation 1/7 of the AN Conf/12 is addressing – that while ADS-B can bridge surveillance gaps and support future ATM concepts close cooperation among States is the key to unlocking its full potential.

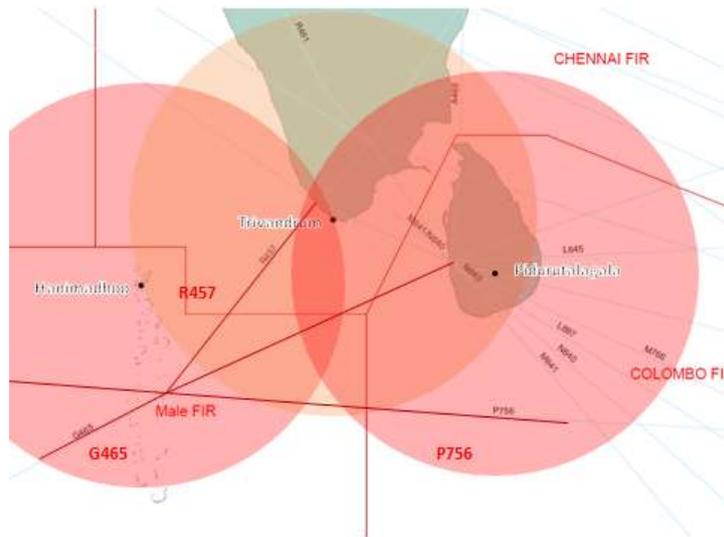
2.2 In this regard, the initial phase of ADS-B implementation over the South China Sea involving Indonesia, Singapore and Vietnam is a trail blazer and a great example of what can be achieved in other parts of the region.

2.3 At the SEA/BOB ADS-B WG/8 Meeting held in Yangon in December 2012 CANSO reported on its efforts to facilitate ADS-B collaboration and expand implementation in other parts of the region.

a) Specifically it was reported that following a CANSO facilitated focus group meeting last year, the ANSPs of India and Myanmar had agreed on ADS-B data sharing over the Bay of Bengal involving the following sites: Sittwe and Coco Island in Myanmar and Port Blair and Agartala in India. Both sides agreed to discuss and finalise the ADS-B Data Sharing Agreement as a next step.

b) CANSO also met the ANSPs of Singapore, the Philippines and Brunei to consider similar collaboration over the South China Sea. However while there were some positive indications to work together no firm plans had been announced so far.

c) The possibility of ADS-B collaboration among India, the Maldives and Sri Lanka over the Indian Ocean was also raised last year although the meeting among the relevant parties did not take place. An example of the basis of such collaboration is shown in Fig 1 below:



**Figure 1: Schematic of ADS-B coverage**

2.4 More recently, the ANSP of the Maldives informed CANSO that it had installed four ADS-B stations (one in the extreme north, two in Male and one in the extreme south). The plan is for the ADS-B data to be integrated into the ATM system by end October this year. The ANSP of Sri Lanka also informed CANSO that they were installing four ADS-B stations and that these would be commissioned by the first quarter of next year. These developments together with the existing Indian ADS-B station in Trivandrum provide a good basis for concrete and positive progress to be made for ADS-B collaboration over the Indian Ocean.

### 3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information contained in this paper;
- b) take stock of the progress of the on-going sub-regional ADS-B initiatives and discuss how momentum can be maintained;
- c) discuss the possibility of ADS-B data sharing and collaboration among relevant parties in the Indian Ocean; and
- d) discuss any relevant matters as appropriate

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