



*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**

**UPDATE ON THE ADS-B COLLABORATION PROJECT IN THE SOUTH CHINA SEA**

(Presented by Indonesia, Singapore and Viet Nam)

**SUMMARY**

This paper updates the Working Group on the progress of the collaborative efforts of Indonesia, Singapore and Viet Nam to achieve a seamless ADS-B surveillance coverage over a portion of the South China Sea area with the eventual aim of improving flight efficiency and enhancing safety.

**1. INTRODUCTION**

1.1 At the ADS-B SITF/12 meeting held in April 2013, Indonesia, Singapore and Viet Nam updated the meeting on the ADS-B collaboration project over the South China Sea area. The purpose of the collaboration is to provide ADS-B coverage over a portion of the South China Sea area spanning two main ATS routes (L642 and M771). See **Annex A-1** of this working paper.

1.2 For the collaboration with Indonesia, it was then updated that Singapore had received ADS-B data from the Indonesian islands of Matak and Natuna while Indonesia received ADS-B data from Singapore. It was also updated that the VHF radios are being installed and tested.

1.3 For the collaboration with Viet Nam, it was updated that Singapore was receiving ADS-B information from Viet Nam for technical evaluation.

1.4 This paper serves to provide an update to the meeting on the significant progress since then. The updated timeline of tasks and milestones is attached at **Annex A-2**.

**2. DISCUSSION**

2.1 The following progress was made since the last update to the Task Force.

Collaboration between Indonesia and Singapore

2.2 The four VHF radio sets for DCPC (two frequencies with redundancy) and the VSAT links have been installed at Matak. Due to technical limitations at Matak, the equipment is yet to be in operational use. The two VHF radio sets for DCPC (two frequencies without redundancy) and the VSAT links have also been installed at Natuna. The remaining two VHF radio sets will be installed at Natuna by end of 2013.

Collaboration between Singapore and Viet Nam

2.3 The VSAT links between Con Son and Singapore have been up and running. Singapore can now receive ADS-B data directly from Con Son. The four VHF radio sets at Con Son for DCPC (two frequencies with redundancy) have also been commissioned and ready for operational use. Some minor issues such as interference are being addressed at the moment.

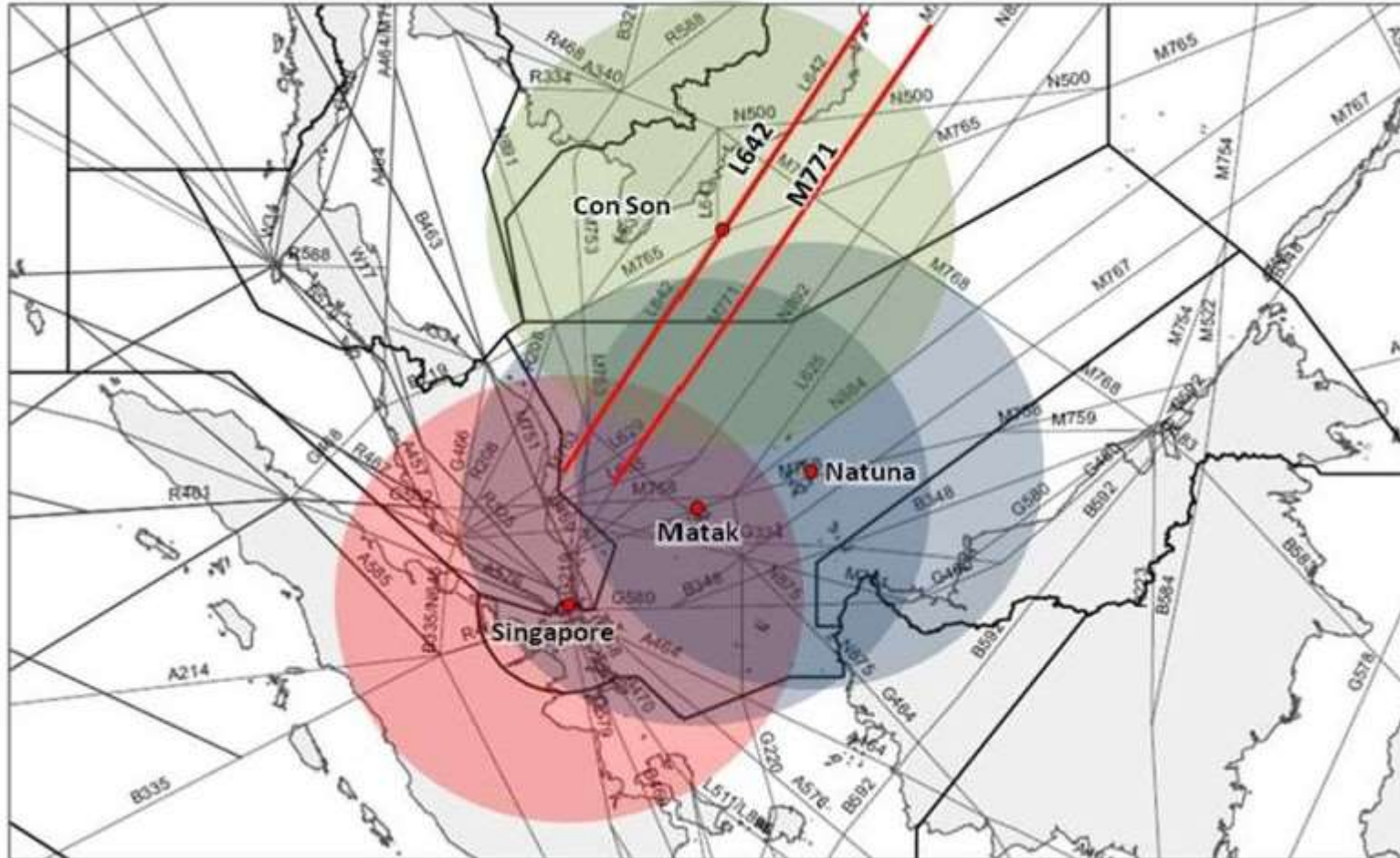
**3. ACTION BY THE MEETING**

3.1 The meeting is invited to:

- a) note the progress of the project and the collaborations between the States involved in working towards enhancing safety and flight efficiency in this sub region;
- b) note the tasks and proposed milestones as shown in **Annex A-2**; and
- c) discuss any potential issues.

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ADS-B Collaboration Project over the South China Sea Area



**Tasks and Proposed Milestones**  
**for the ADS-B Collaboration over the South China Sea**

<b>Item</b>	<b>Description</b>	<b>Status</b>	<b>Target Completion</b>
A	Signing of ADS-B data and VHF radio facility sharing agreement		
	i) Between Indonesia and Singapore	Completed	
	ii) Between Viet Nam and Singapore	Completed	
B	Installation of ADS-B ground stations and links		
	i) Singapore	Completed	
	ii) Matak and Natuna	Completed	
	iii) Con Son	Completed	
C	Installation of VHF station and links		
	i) Matak and Natuna	In progress	4Q 2013
	ii) Con Son	Completed	