

International Civil Aviation Organization



**AUTOMATIC DEPENDENT SURVEILLANCE –
BROADCAST SEMINAR AND ELEVENTH MEETING
OF AUTOMATIC DEPENDENT SURVEILLANCE –
BROADCAST (ADS-B) STUDY AND
IMPLEMENTATION TASK FORCE (ADS-B SITF/11)**



Jeju, Republic of Korea, 24-27 April 2012

Agenda Item 6: Review States' activities and interregional issues on trials and implementation of ADS-B and multilateration

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

(Presented by Indonesia, Singapore and Viet Nam)

SUMMARY

This paper updates the Task Force on the progress of the collaborative effort of Indonesia, Singapore and Viet Nam to achieve a seamless ADS-B surveillance coverage over 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/10 meeting held in April 2011, Indonesia, Singapore and Vietnam updated the meeting on an agreed ADS-B collaboration project over the South China Sea area. This would involve the installation of various ADS-B receivers and VHF radio transceivers to achieve a seamless ADS-B / radar surveillance coverage with the eventual aim of providing ADS-B / radar-like separation over the South China Sea area. See **Annex A-1** of this working paper.

1.2 Since then, progress was made. This paper serves to provide a brief update to the meeting on the significant progress to date. The updated timeline of task and milestones can be found in **Annex A-2** of this working paper.

2. DISCUSSION

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

Between Indonesia and Singapore

2.2 On 18 November 2011, Singapore received the data from Matak and Natuna ADS-B stations, provided by Indonesia. Indonesia also received the data from Singapore.

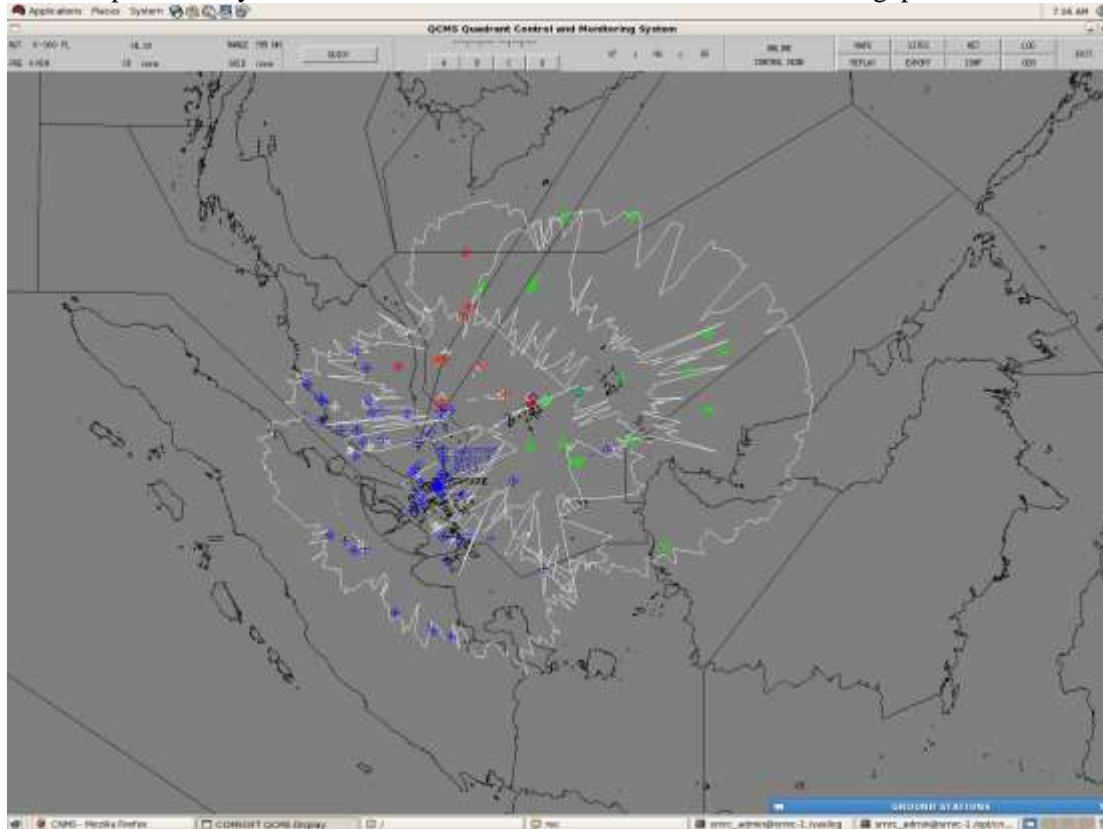


Fig1: ADS-B coverage by Natuna, Matak and Singapore stations as seen in Singapore.



Fig2: Singapore ADS-B data displayed in Jakarta.

2.3 Apart from the ADS-B ground stations, the other essential element towards reaping the full benefit of flight efficiency and enhancing safety will be the installation of VHF ground stations. The VHF ground station at Natuna is installed in January 2012. The VHF at Matak (or another suitable location nearby) is expected to complete by August 2012.

Between Singapore and Vietnam

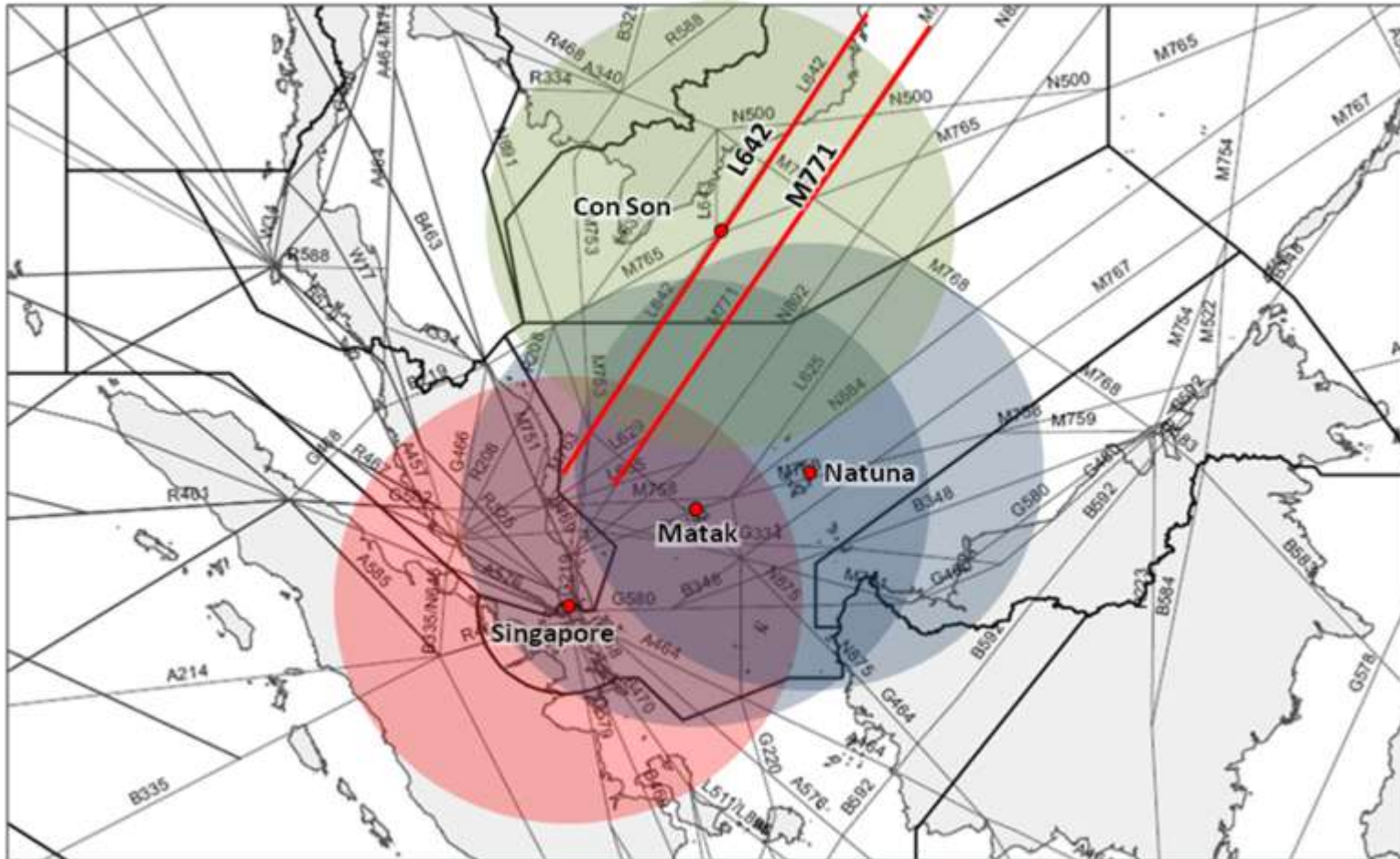
2.4 On 24 November 2011, Singapore and Viet Nam signed the ADS-B Collaboration Agreement in Singapore. The installation and setting up of ADS-B and VHF stations and the necessary links is targeted to complete by 2nd half of 2012.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the progress of the project and the cooperation between the States involved in working towards enhancing safety and improving flight efficiency in this sub region.
- b) note the tasks and proposed milestones as shown in Annex A-2; and
- c) explore the need for DO-260B for L642 and M771.

ADS-B COLLABORATION PROJECT OVER THE SOUTH CHINA SEA AREA



Annex A-2**ADS-B Collaboration over the South China Sea**
Tasks and Proposed Milestones

Item	Description	Status	Target Completion
A	Installation of ADS-B ground stations and links		
	i) Natuna and Matak	Completed	
	ii) Singapore	Completed	
	iii) Con Son	On-Going	2H2012
B	Installation of VHF station and links		
	i) Natuna	Completed	
	ii) Matak	On-Going	2H2012
	iii) Conson	On-Going	2H2012
C	Signing of ADS-B data and VHF radio facility sharing agreement		
	i) Between Indonesia and Singapore	Completed	
	ii) Between Vietnam and Singapore	Completed	
D	Signing of ATS Operational LOA between Ho Chi Minh and Singapore ACCs		2H2012
E	Issue AIC on aircraft equipage mandate	Completed	
F	Technical Monitoring of ADS-B		2H2012
G	Operational trial and Implementation	See Annex A-3	

ADS-B Operational Trial and Implementation In Singapore FIR

