



*International Civil Aviation Organization*

**The Thirteenth Meeting of the FANS Implementation Team for the Bay of Bengal (FIT-BOB/13) and the Fifth Meeting of the Bay of Bengal Reduced Horizontal Separation Implementation Task Force (BOB-RHS/TF/5)**

Bangkok, Thailand, 07 – 11 February 2011

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- Agenda Item 3: Review Bay of Bengal ADS/CPDLC Operations**  
**Agenda Item 4: Review Arabian Sea ADS/CPDLC Operations**

**UPDATE ADS/CPDLC STATUS AND CAPACITY ENHANCEMENTS TABLES**

(Presented by the Secretariat)

**SUMMARY**

This paper seeks assistance from FIT-BOB/13 to update the tables of ADS/CPDLC Status, and Capacity Enhancements, respectively.

**1. INTRODUCTION**

1.1 FIT-BOB maintains two important data tables:

- a) *Indian Ocean, Bay of Bengal, Arabian Sea Including ASIOACG, Indonesia - ADS/CPDLC Equipage and ATS Status; and*
- b) *The Data Link Capacity Planning Table.*

**2. ACTION BY THE MEETING**

2.1 The tables of ADS/CPDLC Equipage and ATS Status, and the Data Link Capacity Planning are included as **Attachments A and B**, respectively.

2.2 The meeting is invited to review and update the two tables presented in the attachments.

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**Indian Ocean, Bay of Bengal, Arabian Sea Including ASIOACG, Indonesia- ADS/CPDLC Equipage and ATS Status**

(last updated FIT-BOB/12, 22 March 2011)

STATE/ ORGANIZATION	FIR	LOGON CODE	Ground Station Manuf- acturer	DSP	ADS	CPDLC	AIDC	FDP	Test, Ops Trial or Operational	Procedures Published	BOB TRIAL	CONTACTS ATM contacts in bold text	REMARKS
<b>AUSTRALIA</b> Airservices Australia	Melbourne Brisbane	YMMM YBBB	Thales	SITA	YES	YES	YES	YES	Operational	YES	NO	<b>Warren Beeston</b> National ATC Systems Manager Tel,+61 7 3866 3720 Mobile, +61 403 274 701 Fax,+61 7 3866 3833 E-mail: warren.beeston@airservicesaus tralia.com	Integrated System, ADS - B in 2006/07
<b>INDIA</b> Airport Authority of India	Chennai	VOMF	ECIL	SITA	YES	YES	NO	YES	Ops Trial	A1783/03, NOTAM A0700/03 A1177/03 A1796/05, updated 3 monthly AIP SUP 7/2006 published 2006	YES	<b>Mr. N. Ganesh</b> General Manager (ATM) Airports Authority of India Tel: +91 44 22561740 Fax: +91 44 22561740 E-mail: akrao@aai.aero	ADS-C Integrated with DPS, work in progress to integrate with RDPS
	Kolkata	VECF	ECIL	SITA	YES	YES	NO	YES	Ops Trial	A1278/00 NOTAM A0700/03 A1177/03 A1276/05, updated 3 monthly AIP SUP 6/2006 published 2006	YES	<b>Mr. Chandan Sen</b> General Manager (ATM) Airports Authority of India Tel: +91 33 2511 9966 Fax: +91 33 2511 8873 E-mail: gmatmkol@aai.aero	ADS-C Integrated with DPS, work in progress to integrate with RDPS
	Mumbai	VABF	Raytheon	SITA	YES	YES	NO	YES	Ops Trial commenced from 1st July 2006	A0894/06	Arabian Sea/Mumbai FIR Trial YES	<b>Mr. M. G. Junghare</b> General Manager (ATM) Airports Authority of India Telfax: +91 22 26828010  E-mail: gma.mumbai@gmail.com	India commenced Ops Trial in Arabian Sea portion of Mumbai FIR from 1st July 2006

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	Delhi	VIDF	Raytheon	SITA	YES	YES	NO	YES	Ops Trial commenced from 1st July 2006	A0403/06	Delhi FIR Trial YES	<b>Mr. Bakhshish Singh</b> General Manager (ATM) Airports Authority of India Telfax: +91 11 2565 4367 E-mail: gmatmpalam@aai.aero		India commenced Ops Trial in portion of Delhi FIR from 1st July 2006
<b>INDONESIA</b> Directorate General of Civil Aviation Note: All datalink matters for the Jakarta and Ujung Pandang FIRs are managed by the FIT- BOB and BOB-CRA	Jakarta	WIIF	Raytheon		YES	YES	NO	NO	Ops trial planned from late 2008			<b>Novie Riyanto</b> Deputy Director System & Procedure of Air Navigation Directorate of Aviation Safety DGCA Indonesia E-mail: novierianto@telkom.net <b>Mr. Asoka Wardhana</b> ATC System Specialist Soeta Itnl Airport Tel: 62 21 5506152 E-mail: asoka.wardhana@angkasapura 2.co.id <b>Mr. Marzuki Battung</b> CNS System Specialist Soeta Itnl Airport Tel: 62 21 5505086 E-mail: marzuki.batung@angkasapura2 .co.id		
	Ujung Pandang	WAAF	Thales	SITA	YES	YES	Trial	YES	Test May 2008; Ops Trial from 3 July 2008	YES, AIP SUPP 07/2008	NO	<b>Mr. Eddy Amiruddin</b> General Manager MAATS E-mail: maats@angkasapura1.co.id <b>Mr. Wahyundi Tuggiyono</b> Manager ATC, MAATS E-mail: maats@angkasapura1.co.id, wahyundi13@angkasapura1.co. id, tuggiyono_w@yahoo.co.id		

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<b>MALAYSIA</b> Department of Civil Aviation	Kuala Lumpur	WMFC	SELEX	SITA	YES	YES	NO	YES	Limited operational trials commenced 1 June 2008	YES, AIC 03/2008	Apr-09	<b>Mr. Ahmad Nizar Zolfakar</b> Director ATM Tel: 603-88714000 Fax: 603-88714290 6012-330-3752 E-mail: ahmadnizar@dca.gov.my <b>Mr Omran Zakaria</b> Deputy Director ATM Email:omran@dca.gov.my		Malaysia does not expect to implement datalink for Kota Kinabalu FIR due existing extensive radar coverage.
<b>MALDIVES</b>	Male		NO	SITA	NO	NO	NO	NO	NO	NO	NO	<b>Mr. Abdulla Zakariyya</b> Senior Air Traffic Control Officer Maldives Airports Company Limited Male International Airport Hulhule'2200 Maldives Tel: +960 777 1384 Fax: +960 331 3258		
<b>MYANMAR</b> Department of Civil Aviation	Yangon	VYYF	Thales	SITA	YES	YES	NO	NO	Ops Trial	AIC A1/99 (10.1.99)	NO	<b>U Yoa Shu</b> Director of ATS, DCA Myanmar Tel: 95 1 663838 Fax: 95 1 665124 E-mail ats@dca.gov.mm		Stand alone. Moved to new ATS Centre 2006, intermittent participation in BOB trial
<b>SINGAPORE</b> Civil Aviation Authority of Singapore	Singapore	WSJC	Thales	SITA	YES	YES	NO	YES	Operational	YES	NO	<a href="mailto:yeo_cheng_nam@caas.gov.sg">yeo_cheng_nam@caas.gov.sg</a>		Ops Trial completed 1999, integrated system
<b>SRI LANKA</b> Airport & Aviation Services (AASL) Ltd	Colombo	VCCC	Thales	SITA	YES	YES	NO	YES	Operational	YES	NO	<b>Mr. P. Ranjith Perera</b> Senior Air Traffic Controller Colombo Airport, ratmalana Sri Lanka Mobile Tel: 94 71 2730661 Tel/Fax: 94 11 2635105 E-mail: ranpravi@slt.lk		Stand alone system, intermittent participation in BOB trial

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THAILAND AEROTHAI	Bangkok	VTBB	ARINC	ARINC	YES	YES	YES	YES	Ops Trial	3 monthly NOTAM	DEFER	<b>Mr. Tinnagorn Choowong</b> Tel: 66-2-285 9975 Mobile: 66-09-816 6486 Fax: 66-2-285 9077 E-mail: tinnagorn.ch@aerothai.co.th	Stand alone system, intermittent participation in BOB trial. Further study on the suitable ADS/CPDLC equipage for the new ACC in progress.
OMAN												<b>Mr Abdullah Nasser Al-Harthy</b> Senior Air Traffic Controller, Directorate General of Civil Aviation and Meteorology, Sultanate of Oman E-mail: abdullah_nasser@dgcam.gov.o m	
YEMEN													
SEYCHELLES												<b>Mr. David Labrosse</b> General Manager Air Navigation Services Seychelles Civil Aviation Authority P.O. Box 181 Victoria, Mahe Seychelles Tel: 248 384042 Fax: 248 527204 E-mail: dlabrosse@scaa.sc	
MAURITIUS			Thales		YES	YES	YES	YES	Operational		NO	<b>Mr. Rajanah K. Guruvadoo</b> Chief Officer Department of Civil Aviation Sir Seewoosagur Ramgoolam International Airport Plaine Magnien Republic of Mauritius Tel: +230-603 2000 Fax: +230-637 3164 E-mail: civil- aviation@mail.gov.mu	

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ARINC											YES	<b>Mr. Sarawut Assawachaichit</b> Program Manager, Globalink Asia Tel: 66 2 2859435-6 Fax: 66 2 2859437 E-mail: sassawac@arinc.com		
CENTRAL REPORTING AGENCY (CRA)											YES	<b>Mr. Bradley Cornell</b> Boeing Tel: 1 425 2946520 E-mail: bradley.d.cornell@boeing.com		
IATA											YES	<b>Mr Geoff Hounsell</b> Assistant Director ATM, Safety Operations & Infrastructure Tel: 65 64992253 Fax: 65 62339286 E-mail: hounsellg@iata.org		
IFALPA											YES	<b>Capt. Korn Mansumitchai</b> Regional Vice President Asia East Tel:66-81-3446055 E-mail: captainkorn@gmail.com		
SITA											YES	<b>Mr. Philip Koh</b> AIRCOM CNS Manager, Asia & Pacific SITA 11, Loyang Way Singapore 508723 Tel: 65-81633696 E-mail: philip.koh@sitaaero		
ICAO											YES	<b>Mr. Andrew Tiede</b> <b>Kyotaro Harano</b> Regional Officer ATM Tel: 66 2 5378189, ext. 1529 Fax: 66 2 537 8199 E-mail: atiede kharano@bangkok.icao.int icao_apac@bangkok.icao.int		

**DATALINK CAPACITY PLANNING TABLE**

**Arabian Sea, Bay of Bengal and Indian Ocean data link implementation**

*(last updated FIT-BOB/12, 22 February 2010)*

STATES	FIR	ESTIMATED DATE	DATE COMPLETED	NOTES
<b>Implement CPDLC – Controller Pilot Data Link Communications</b>				
India	Chennai Kolkata Delhi Mumbai	2004 2004 2006 2006	Commenced 19 Feb 2004 Commenced 19 Feb 2004 Commenced 1 July 2006 Commenced 1 July 2006	All FIRs partially operational, Mumbai: H24 from October 2008.  Chennai: H24, Route Specific as per NOTAM
Indonesia	Ujung Pandang  Jakarta	2008  2008	Commenced 3 July 2008	Ujung Pandang (Makassar) commenced operational trials 3 July 2008, AIP Supp 07/08  Jakarta has stand alone system, will attempt to join BOB trials late 2008, new ATS Centre in Jakarta under construction & will include integrated equipment,
Malaysia	Kuala Lumpur	First quarter 2008		Commenced limited operational trials for Kuala Lumpur FIR from 1 June 2008 using integrated equipment.  No data link planned for Kota Kinabalu FIR due extensive radar coverage
Maldives	Male	TBA		
Mauritius	Mauritius		Operational from 2004	As of July 2008 was arranging ‘voiceless’ coordination trials with Australia
Myanmar	Yangon	Intermittent from 2006		Conducting intermittent activity as part of BOB Trial
Seychelles	Seychelles	Target 2010		
Sri Lanka	Colombo		Operational H24 from January 2007	

STATES	FIR	ESTIMATED DATE	DATE COMPLETED	NOTES
Singapore	Singapore		Operational	
Thailand	Bangkok	2008		Had previously participated in BOB trials, some equipment issues. New ACC under construction for commissioning 2008/09
<b>Implement 50 NM longitudinal separation based on RNP 10</b> <i>(Note: BBACG established target date 2009 for large areas of Bay of Bengal)</i>				
India	Delhi Mumbai Chennai Kolkata	2010, all FIRs		
Indonesia	Ujung Pandang Jakarta	TBA TBA		To be reviewed after implementation of ADS/CPDLC
Malaysia	Kuala Lumpur	TBA		
Maldives	Male	TBA		
Mauritius	Mauritius	TBA		Using RNAV 80 NM longitudinal
Myanmar	Yangon	TBA		
Seychelles	Seychelles	TBA		With regional implementation within AFI region
Sri Lanka	Colombo	TBA		
Singapore	Singapore	2008, in South China Sea	50/50 operations on L642 & M771 commenced on 3 July 2008	
Thailand	Bangkok	TBA		
<b>Implement 30/30 NM lateral/longitudinal separation based on RNP 4</b>				
India	Delhi Mumbai Chennai Kolkata	TBA		
Indonesia	Ujung Pandang Jakarta	TBA TBA		
Malaysia	Kuala Lumpur	TBA		



<b>STATES</b>	<b>FIR</b>	<b>ESTIMATED DATE</b>	<b>DATE COMPLETED</b>	<b>NOTES</b>
Maldives	Male	TBA		
Mauritius	Mauritius	TBA		
Myanmar	Yangon	TBA		
Seychelles	Seychelles	TBA		
Sri Lanka	Colombo	TBA		
Singapore	Singapore	2010, in South China Sea		
Thailand	Bangkok	TBA		