



International Civil Aviation Organization

The Combined Sixth Meeting of the FANS Implementation Team, Bay of Bengal (FIT-BOB/6) and the Third Meeting of the FANS Implementation Team, South-East Asia (FIT-SEA/3)

Bangkok, Thailand, 22 - 25 November 2005

Agenda Item 3: Review ADS/CPDLC Implementation Bay of Bengal and South East Asia

**ADS/CPDLC EQUIPAGE AND PARTICIPATION OF STATES IN
OPERATIONAL TRIALS OF ADS/CPDLC**

(Presented by the Secretariat)

SUMMARY

The FIT-BOB/3 meeting (2-6 February 2004) authorised an operational trial of ADS/CPDLC the Bay of Bengal area, commencing 19 February 2004. The initial meeting of FIT-SEA (FIT-SEA/1, 24-28 May 2004) established the FIT-SEA in order to establish integrated ADS and CPDLC services in the South-East Asia area.

This paper seeks an update to the equipage status of providers in the BOB and SEA areas and encourages additional States to participate in the BOB trial. The paper also notes the concerns raised by APANPIRG and the Commission regarding the slower than anticipated implementation of CNS/ATM.

1. INTRODUCTION

1.1 An ADS/CPDLC operational trial commenced in the Bay of Bengal area on AIRAC date 19 February 2004. The States participating in the trial are India, Indonesia and Thailand. During the FIT-BOB/3 meeting (February 2004) it was noted that all States responsible for the airspace over the Bay of Bengal area and adjacent oceanic airspace should be part of the implementation trial. Of these, Malaysia, Myanmar and Sri Lanka had not confirmed when they would be in a position to commence the trial.

1.2 With regard to the south-east Asia area, APANPIRG/14 (August 2003) noted that in recognition of the effectiveness of the FANS Interoperability Teams (FIT) operating in the Pacific Region under ISPACG and IPACG (PAC-FIT) and the FANS Implementation Team operating in the Bay of Bengal area (FIT-BOB), a similar mechanism should be established to progress FANS issues in the South-East Asia area. Accordingly, in order to establish integrated ADS and CPDLC services for the provision of ATS services in the South-East Asia area, the FIT-SEA was established at the FIT-SEA/1 meeting in May 2004.

2. DISCUSSION

2.1 The FIT-SEA/1 meeting recognized that as a result of the low level of equipage amongst SCS States, there would be some delay in commencing an integrated operational trial of ADS/CPDLC in the SCS area, probably not until 2006/2007. In light of the delays expected, the meeting agreed that the development of the main work programme would be deferred until such time

as further information was available regarding the status of the facility upgrades of a number of States which were currently at an early stage, and the consequent preparedness of States to commence a trial.

2.2 The APANPIRG/15 meeting (August 2004) noted that planning and implementation of some elements of the “Asia/Pacific Regional Plan for the New CNS/ATM Systems” such as the ADS-C, ATN, AIDC, automated AIS systems, GNSS and ADS-B were progressing slowly. States were urged to give appropriate priority to progressing their implementation planning, in particular in the area of data link communications and ATM automated systems.

2.3 APANPIRG/15 also noted that the Air Navigation Commission recognised that work related to air navigation systems and, in particular, development and implementation continue to rank amongst the highest priority items on ICAO’s work programme. During its ongoing review of global and regional developments in the modernisation of air navigation system, the Commission noted that although good progress had been made with implementation of certain elements of CNS/ATM systems, the overall pace of implementation was slower than originally expected. In this context, the Commission recalled with interest that the deliberations and recommendations of the Eleventh Air Navigation Conference had been helpful in the planning and implementation of air navigation systems. The Commission requested the Secretary General to invite PIRGs and States to enhance their activities in the area of planning and implementation of CNS/ATM systems.

2.4 In the period since these matters had been raised by APANPIRG/15, further delays had been incurred in progressing the Bay of Bengal operational trial and some States had fallen behind anticipated equipage schedules.

2.5 Accordingly, the Regional Office encourages States to continue the implementation of data link systems in accordance with the regional ANP and urges States in the Bay of Bengal area to assign a high priority towards participating in the Bay of Bengal ADS/CPDLC operational trial to the maximum extent possible. In this regard, **Attachments A and B** include tables recording the levels of ADS/CPDLC equipage and ATS status of States in the Indian Ocean/ Bay of Bengal and South–East Asia/ South China Sea areas respectively. The meeting is encouraged to update the information in the tables to reflect the current circumstances.

3 ACTION BY THE MEETING

3.1 The meeting is invited to

- a) note the information contained in this paper, including comments from APANPIRG/15 and the Air Navigation Commission regarding continuing the implementation of CNS/ATM systems, and
- b) review and update the tables of ADS/CPDLC equipage and ATS status included in the attachments to this paper..

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Indian Ocean, Bay of Bengal - ADS/CPDLC equipage and ATS Status

STATE/ ORGANIZATION	FIR	LOGON CODE	Ground Station Manuf- acturer	DSP	ADS	CPDLC	AIDC	FDP	Test, Ops Trial or Operational	Procedures Published	BOB TRIAL	CONTACTS	REMARKS
AUSTRALIA Airservices Australia	Melbourne Brisbane	YMMM YBBB	Thales	SITA	YES	YES	YES	YES	Operational	YES	NO	Geoff Whitely, Operations Manager Melbourne Centre, Tel 61 3 9235 7378, Fax 61 3 9235 2471, E-mail: geoff.whitely@airservicesaustrali a.com	Integrated System, ADS - B in 2005/06
INDIA Airport Authority of India	Chennai	VOMF		SITA	YES	YES	NO	YES	Ops Trial	A1783/03, NOTAM A0700/03 and A1177/03	YES	Sh. B.M.N. Rao GM (CNS) ACS, Chennai Tel: 044-22560444; E-mail: gmcnschen_aai@vsnl.net Sh. N.U.B. Rao GM (ATC) Chennai Tel: 044-22561740; E-mail: gmasr_aai@vsnl.net	ADS-C Integrated with DPS, work in progress to integrate with RDPS LOGON Code to be changed to the FIR code
	Kolkata	VECF	ECIL	SITA	YES	YES	NO	YES	Ops Trial	A1278/00 NOTAM A0700/03 and A1177/03	YES	Sh. P.K. Bandopadhaya Addl. G.M. (CNS) ACS, Kolkata Tel: 33-25118722 E-mail: gmce_aai@vsnl.net Sh. Raj Kumar Addl. G.M. (ATC) Kolkata Tel: 033-25119428; Mob: 9830354337 E-mail: gmae_aai@vsnl.net agm_snp_kol@indiatimes.com	ADS-C Integrated with DPS, work in progress to integrate with RDPS Logon Code to be changed to the FIR code
	Mumbai								India will wait until ADS/CPDLC issues are fully resolved for the Chennai and Kolkata FIRS before proceeding with ADS/CPDLC in the Mumbai FIR.		NO		

STATE/ ORGANIZATION	FIR	LOGON CODE	Ground Station Manuf- acturer	DSP	ADS	CPDLC	AIDC	FDP	Test, Ops Trial or Operational	Procedures Published	BOB TRIAL	CONTACTS	REMARKS
INDONESIA Directorate General of Air Communications	Jakarta	WIIZ	ARINC	ARINC	YES	YES	NO (Sep 04)	YES	Ops Trial	AIP Sup Nr:03/01 17May01	YES	Mr. Nanang S. Taruf Deputy Director System & Procedure Air Navigation Directorate of Aviation Safety E-mail: cns-atm@telkom.net Wi Yono Tel: 6221 5506178 E-mail: dss97@centrin.net.id	
MALAYSIA Department of Civil Aviation	Kuala Lumpur	WMFC		ARINC			NO	YES	Malaysia is installing new off the shelf equipment and will commission as stand alone in mid/late 2005. Will integrate after commissioning.		NO	Mr.Harizan Mohammad Yatim Director ATS Tel: 603-78465233 Fax: 603-78472997 E-mail: accwmfc@tm.net.my harizan@atsdca.gov.my	2005 New Equip Stand alone
	Kota Kinabalu	WBKK		ARINC			NO	YES			NO		2005 New Equip Stand alone
MALDIVES	Male		NO	NO	NO	NO	NO	NO	NO	NO	NO		
MYANMAR Department of Civil Aviation	Yangon	VYYF	Thales	SITA	YES	YES	NO	NO	Ops Trial	AIC A1/99 (10.1.99)	NO	U Yoa Shu Director ATS Myanmar Tel: 95 1 663838 E-mail dca.myanmar@mptmail.net.mn	Stand alone. Moving to new facilities, consider trial after mid 205.
SINGAPORE Civil Aviation Authority of Singapore	Singapore	WSJC	Thales	SITA	YES	YES	NO	YES	Operational	YES	NO	yeo_cheng_nam@caas.gov.sg	Ops Trial completed 1999, integrated system

Combinbed FIT-BOB/5, FIT-SEA/2, ATFM/TF/1 and Seminar
Appendix B to the Report of the FIT-BOB/5 & FIT-SEA/2 Meetings

FIT-BOB/6 & FIT-SEA/3-WP/4
ATTACHMENT A

STATE/ ORGANIZATION	FIR	LOGON CODE	Ground Station Manuf- acturer	DSP	ADS	CPDLC	AIDC	FDP	Test, Ops Trial or Operational	Procedures Published	BOB TRIAL	CONTACTS	REMARKS
SRI LANKA Airport & Aviation Services (AASL) Ltd	Colombo	VCCC	Thales	SITA	YES	YES	NO	YES	Ops Trial	AIC-A020F- 2001	NO	Mr. Ajith Nandana Wickremarachchi Senior Air Traffic Controller Airport & Aviation Services (Sri Lanka) Limited Bandaranaike International Airport, Colombo, Katunayake Sri Lanka Tel: 94 777344338 Fax: 94 11 2635105 E-mail: wickram1@yahoo.com	Stand alone
THAILAND AEROTHAI	Bangkok	VTBB	ARINC	ARINC	YES	YES	YES	YES	Ops Trial	3 monthly NOTAM	YES	Bangkok ACC Director	
ARINC												Mr. Sarawut Assawachaichit Program Manager, Globalink Asia Tel: 66 2 2859435-6 Fax: 66 2 2859437 E-mail: sassawac@arinc.com	
CENTRAL REPORTING AGENCY (CRA)												Mr. Bradley Cornell Boeing Tel: 1 425 2946520 E-mail: bradley.d.cornell@boeing.com	
IATA												Soon Boon Hai Assistant Director Safety Operations & Infrastructure Tel: 65 62397267 Fax: 65 65366267 E-mail: soonbhd@iata.org	

STATE/ ORGANIZATION	FIR	LOGON CODE	Ground Station Manuf- acturer	DSP	ADS	CPDLC	AIDC	FDP	Test, Ops Trial or Operational	Procedures Published	BOB TRIAL	CONTACTS	REMARKS
IFALPA												Capt. Toby Gursansky Regional Vice President South Pacific Tel: 61 2 99487532 E-mail: gursansky@bigpond.com	
SITA												Mr. David Fung SITA Regional Manager, Asia AIRCOM CNS Services Room 1201, 12/F Centre Point 181-185 Glovcester Road Wanchai Hong Kong, China Tel: 852-9400 7979 E-mail: david.fung@sita.aero	
ICAO												Mr. Andrew Tiede Regional Officer ATM Tel: 66 2 5378189, ext. 152 Fax: 66 2 537 8199 E-mail: atiede@bangkok.icao.int icao_apac@bangkok.icao.int	

South China Sea/South-East Asia - ADS/CPDLC equipage and ATS Status

STATE/ ORGANIZATION	FIR	LOGON CODE	Ground Station Manuf- acturer	DSP (e.g. SITA, ARINC)	ADS	CPDLC	AIDC	FDP	Test, Ops Trial or Operational	Procedures Published	ADS/CPDLC TRIAL	CONTACTS	REMARKS
CHINA	Sanya AOR												State to provide information for FIT-SEA/3
HONG KONG, CHINA CAD - Civil Aviation Department	Hong Kong												State to provide information for FIT-SEA/3
INDONESIA Directorate General of Air Communications	Jakarta	WIIZ	ARINC	ARINC	YES	YES	NO (Sep 04)	YES	Ops Trial	AIP Sup Nr:03/01 17May01	YES	Mr. Nanang S. Taruf Deputy Director System & Procedure Air Navigation Directorate of Aviation Safety E-mail: cns-atm@telkom.net Wi Yono	
JAPAN JCAB - Civil Aviation Bureau of Japan	Naha Tokyo												Tokyo FIR Oceanic participating in the IPACG FIT State to provide information for FIT-SEA/3
MALAYSIA Department of Civil Aviation	Kuala Lumpur	WMFC		ARINC			NO	YES	Malaysia is installing new off the shelf equipment and will commission as stand alone in mid/late 2005. Will integrate after commissioning.		NO	Mr.Harizan Mohammad Yatim Director ATS Tel: 603-78465233 Fax: 603-78472997 E-mail: accwmfc@tm.net.my harizan@atsdca.gov.my	2005 New Equip Stand alone
	Kota Kinabalu	WBKK		ARINC			NO	YES			NO		2005 New Equip Stand alone
PHILIPPINES	Manila												State to provide information for FIT-SEA/3

STATE/ ORGANIZATION	FIR	LOGON CODE	Ground Station Manuf- acturer	DSP (e.g. SITA, ARINC)	ADS	CPDLC	AIDC	FDP	Test, Ops Trial or Operational	Procedures Published	ADS/CPDLC TRIAL	CONTACTS	REMARKS
SINGAPORE Civil Aviation Authority of Singapore	Singapore	WSJC	Thales	SITA	YES	YES	NO	YES	Operational	YES	NO	yeo_cheng_nam@caas.gov.sg	
THAILAND AEROTHAI	Bangkok	VTBB	ARINC	ARINC	YES	YES	YES	YES	Ops Trial	3 monthly NOTAM	YES, Bay of Bengal	Bangkok ACC Director	
VIETNAM	Hanoi Ho Chi Minh												State to provide information for FIT-SEA/3
ARINC												Mr. Sarawut Assawachaichit Program Manager, Globalink Asia Tel: 66 2 2859435-6 Fax: 66 2 2859437 E-mail: sassawac@arinc.com	
CENTRAL REPORTING AGENCY (CRA)												Proposed CRA Japan	CRA status to be confirmed by Regional Office with States not present at FIT-SEA/2
IATA												Soon Boon Hai Assistant Director Safety Operations & Infrastructure Tel: 65 62397267 Fax: 65 65366267 E-mail: soonbhd@iata.org	
IFALPA												Capt. Suresh Menon Regional Vice President ASIA/East Tel: 61 2 99487532 Fax:(65) 6584 8869 E-mail: menon@pacific.net.sg	

STATE/ ORGANIZATION	FIR	LOGON CODE	Ground Station Manuf- acturer	DSP (e.g. SITA, ARINC)	ADS	CPDLC	AIDC	FDP	Test, Ops Trial or Operational	Procedures Published	ADS/CPDLC TRIAL	CONTACTS	REMARKS
SITA												Mr. David Fung SITA Regional Manager, Asia AIRCOM CNS Services Room 1201, 12/F Centre Point 181-185 Glovcester Road Wanchai Hong Kong, China Tel: 852-9400 7979 E-mail: david.fung@sita.aero	
ICAO												Mr. Andrew Tiede Regional Officer ATM Tel: 66 2 5378189, ext. 152 Fax: 66 2 537 8199 E-mail: atiede@bangkok.icao.int icao_apac@bangkok.icao.int	