



International Civil Aviation Organization

The 10th Meeting of the FANS Implementation Team for South-East Asia (FIT-SEA/10) and the 17th Meeting of the South-East Asia ATS Coordination Group (SEACG/17)

Singapore, 24 – 27 May 2010

Agenda Item 3: Review of ADS/CPDLC Implementation

ADS/CPDLC EQUIPAGE AND ATS STATUS

(Presented by the Secretariat)

SUMMARY

FIT-SEA/2 (April 2005, Bangkok) developed the table of ADS/CPDLC Equipage and ATS Status to facilitate equipping the ADS/CPDLC systems by States. This paper presents the historical background of the development of the table, seeks an update to the equipage status of ATS providers in the area and encourages additional States to start another Southeast Asia ADS/CPDLC trial.

Action by FIT-SEA/10 is at paragraph 3.

1. INTRODUCTION

1.1 In order to establish ADS/CPDLC services for the provision of air traffic services in Southeast Asia, FIT-SEA was established in May 2004. FIT-SEA/2 (April 2005, Bangkok) developed the table of ADS/CPDLC Equipage and ATS Status to facilitate equipping the ADS/CPDLC systems by States. Subsequent meetings of FIT-SEA have worked towards the phased implementation of ADS/CPDLC operational trials, commencing with Viet Nam together with Singapore.

2. DISCUSSION

2.1 To put the operational trial in place, it is necessary to know the status of the ADS/CPDLC systems operated by States or being brought into operational service in time to participate in the operational trial, based on the present and future functional capability of the ATM systems to operate the ADS/CPDLC systems. By doing this, the States capable of participating in operational trials are identified. A matrix of the States' functional availability was provided for the first time to the third meeting of FIT, Bay of Bengal (FIT-BOB/3, February 2004).

2.2 The 15th meeting of the Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG/15, August 2004) urged States to give appropriate priority to progressing their implementation planning, in particular in the area of data link communications and ATM automated systems. Consequently, the Regional Office encouraged States to continue the implementation of data link systems, and urged States in both the Bay of Bengal and the Southeast Asia areas to assign a high priority towards participating in ADS/CPDLC operational trials to the maximum extent possible.

2.3 The Combined FIT-BOB/7 & FIT-SEA/4 (July 2006, Bangkok) reviewed and updated the tables of ADS/CPDLC Equipage and ATS Status for the Bay of Bengal/Arabian Sea/Indonesian flight information regions (FIRs) and the South China Sea/Southeast Asia, respectively. In reviewing and updating the tables, the Combined Meeting felt that the primary purpose of the current tables was to identify the status of systems and equipment installation, and in some cases, the listed contact officers were not for coordination of operational trials of ADS/CPDLC. Thus, FIT-SEA/4 identified additional officers as the primary State contact responsible both for coordination of ADS/CPDLC operational trials in the South China Sea area and coordination with Central Reporting Agency – Japan (CRA-Japan). These contacts are shown with **bold** letters at the table of ADS/CPDLC Equipage and ATS Status.

2.4 In response to a query raised at FIT-SEA/4, the Secretariat studied the background of the development of the table in preparation for FIT-SEA/5 (January 2007, Ho Chi Minh City). Even though the specific basis on which each item has been established could not be found, it was felt that the Ground Station Manufacturer, for example, was included in order that the end-to-end capability as a total system was ensured and ATM automated systems were progressed as urged by APANPIRG/15. FIT-SEA/5 considered that the current format is appropriate for the Southeast Asia region.

2.5 The latest table of the ADS/CPDLC Equipage and ATS Status reviewed and updated by FIT-SEA/9 (May 2009, Bangkok) is at **Attachment** to this paper.

3. ACTION BY THE MEETING

3.1 The meeting is invited to

- a) note the background information as above;
- b) update the table in Attachment to this paper; and
- c) encourage additional States to participate in the Southeast Asia ADS/CPDLC trials.

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Southeast Asia - ADS/CPDLC Equipage and ATS Status

(last update - May 2008 2009)

| 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 (ATM contact in bold) | REMARKS |
|--------------------------------------------------------------------------------|------------------|---------------|----------------------------------------|------------------------------|--------------------------|--------------------------|----------------------------------------------------------------|-----|-----------------------------------|-------------------------|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|
| CHINA CAAC - General Administration of Civil Aviation of China | Sanya FIR | | | | | | | | | | | | |
| HONG KONG, CHINA CAD - Civil Aviation Department | Hong Kong FIR | | | | YES (trial equipment) | YES (trial equipment) | YES | YES | Stopped | NO | conducted from 1997 to 2002 | Mr. P F Wong Assistant Director-General of Civil Aviation (Air Traffic Engineering and Standards) Tel: (852)2591 5000 Fax: (852)2845 7160 Email: phwong@cad.gov.hk | |
| JAPAN JCAB - Civil Aviation Bureau of Japan | Fukuoka FIR | RJJJ | | SITA | YES | YES | YES (with Oakland & Anchorage, trial with Incheon) | YES | Operational | PUBLISHED | completed in July 2006 | Mr. Takahiro Morishima Special Assistant to the Director, JCAB ATS Systems Planning Division, Tel: +81-3-5253- 8111 ext 51128 Fax: +81-3-5253-1663 E-mail: morishima- t2zq@milit.go.jp | FUKUOKA FIR Oceanic participating in the IPACG FIT |

| 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 (ATM contact in bold) | REMARKS |
|---------------------------------------------------------------|----------------------------------|---------------|----------------------------------------|------------------------------|-----|-------|------|-----|-----------------------------------|-------------------------|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|
| MALAYSIA Department of Civil Aviation | Kuala Lumpur FIR (FIT-BOB) | WMFC | | ARINC | | | NO | YES | Ops trial from 1 June 2008 | | No | Mr. Ahmad Nizar Zofakar Director ATS Tel: 603-88714000 Fax: 603-88714290 E-mail: nizar@dca.gov.my Mr Omran Zakarina Deputy Director ATS Email:omran@dca.gov.my: | Control on-going, equipment , ops trial 1 Jun. |
| | Kota Kinabalu FIR | WBFC | | ARINC | | | NO | YES | | | No | | |
| PHILIPPINES Civil Aviation Authority of the Philippines | Manila FIR | RPHI | | | | | | | | | No | Mr. Salvador G. Rafael Chief, ATC Division Tel: 632-8799160 Fax: 632-8799160 E-mail: raffy_thunder92@yahoo.com u_whiskey52@yahoo.com | Ops Trial planned in Q3 or 4 2010 |
| SINGAPORE Civil Aviation Authority of Singapore | Singapore FIR | WSJC | Thales | SITA | YES | YES | NO | YES | Operational | PUBLISHED | Completed | Mr. Yeo Cheng Nam Senior Engineer (Surveillance) yeo_cheng_nam@caas.gov.sg Mr. Kwek Chin Lin ATC Manager (Systems) kwek_chin_lin@caas.gov.sg Mr. Kwek Chin Lin ATC Manager (Systems) E-mail: kwek_chin_lin@caas.gov.sg | Ops Trial completed 1999, integrated system |

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|-----------------------------------------------------------|----------------------------------------------------|---------------|----------------------------------------|------------------------------|-----|-------|------|-----|-----------------------------------|-----------------------------|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| THAILAND AEROTHAI | Bangkok FIR | VTBB | ARINC | ARINC | YES | YES | YES | YES | Ops Trial | NOTAM every three months | No | Mr. Choosit Kuptaviwat Tel: 66-285 9457 Fax: 66-228 59538 Email: choosit.ku@aerothermal.co.th Mr. Tinnagorn Choowong Tel: 66-2-287 8423 Mobile: 66-09-816 6486 Fax: 66-2-287 8424 E-mail: tinnagorn.ch@aerothermal.co.th | Pending an operational trial in the Bay of Bengal after six months period and will study CPDLC application over the continental area base on ATN protocol. |
| VIETNAM Civil Aviation Administraion of Viet Nam | Ho Chi Minh FIR | VVTS | Thales | ARINC | YES | YES | | | Operational | PUBLISHED | Completed | Mr. Nguyen Manh Quang Tel: (84-4) 8725272 Fax: (84-4) 8725281 e-mail: vatmats@n.vnn.vn | Phase 1 started in March 2007 and Phase 2 started in August 2008. Operational since 10 April 2008 |
| | Hanoi FIR | | | | | | | | | | No | | |
| CENTRAL REPORTING AGENCY (CRA) CRA-Japan | Ho Chi Minh, Manila and Singapore FIRs | | | | | | | | | | | Mr. Masahisa Hayashi K-1 Building, 3rd floor 1-6-6, Haneda Airport. Ota-ku, Tokyo 144-0041, Japan Telephone: +81-3-3747-1231 Fax: + +81-3-3747-1231 E-mail: crasa@cra-japan.org hayashi@atcaj.or.jp | FIT-SEA CRA, operated by CRA Japan |

N/A

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|------------------------|-----|---------------|----------------------------------------|------------------------------|-----|-------|------|-----|-----------------------------------|-------------------------|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| IATA | | | | | | | N/A | | | | | Mr. Soon Boon Hai Assistant Director Safety Operations & Infrastructure Tel: 65 62397267 Fax: 65 65366267 E-mail: soonbhd@iata.org | |
| IFALPA | | | | | | | N/A | | | | | Capt. Korn Masumitchtai 484 Rachadanivet Soi 12, Bangkok, Thailand 10320 Tel: +66-81-344-6055 Fax: +66-2-513-0030 Email: captainkorn@gmail.com | |
| ARINC | | | | | | | N/A | | | | | Mr. Sarawut Assawachaichit Program Manager, Globalink Asia Tel: 66 2 2859435-6 Fax: 66 2 2859437 E-mail: sassawac@arinc.com | |
| SITA | | | | | | | N/A | | | | | 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@sitaaero | |
| ICAO | | | | | | | N/A | | | | | Mr. Kyotaro Harano Regional Officer ATM Tel: 66 2 5378189, ext. 159 Fax: 66 2 537 8199 E-mail: kharano@bangkok.icao.int icao_apac@bangkok.icao.int | |