



*International Civil Aviation Organization*

**The Eleventh Meeting of the FANS Implementation Team for South-East Asia (FIT-SEA/11) and the Eighteenth Meeting of the South-East Asia ATM Coordination Group (SEACG/18)**

Bangkok, Thailand, 3 – 6 May 2011

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**Agenda Item 2: Review of ADS/CPDLC Implementation**

**ADS/CPDLC operational  
Implementation in Ho Chi Minh FIR**

(Presented by Viet Nam)

**SUMMARY**

This Information Paper presents the status of ADS/CPDLC operational implementation in Ho Chi Minh FIR since FIT-SEA/9.

**1. INTRODUCTION**

- 1.1 Viet Nam has officially started providing data link services on 08 ATS/RNAV routes L625, L628, L642, M765, M768, M771, N500 and N892 in the oceanic area of Ho Chi Minh FIR since 0001UTC April 2008.
- 1.2 ADS/CPDLC services are available 24/24hours per day and conducted with appropriate FAN1/A equipped aircraft of all airlines. The detailed procedures for operations have been developed basing on the FANS 1/A Operations Manual.

**2. OPERATION STATUS**

- 2.1 The status of ADS/CPDLC operations:
  - Based on the daily records, there are more than 300 aircraft overflying the above ATS routes, more only half of them have been equipped with both ADS and CPDLC applications.
  - There are about 100 aircraft having ADS/CPDLC connection with Ho Chi Minh system. The remaining aircraft have used voice communication (VHF) in the radar environment.
- 2.2 Technical status:
  - Ground system: There is no modification to ground system, and the system is working satisfactorily.
  - ACARs link: With dual link provided by ARINC, there is no unplanned interruption and the connection between our system and service provider's server is stable.
  - Data link transfers between Ho Chi Minh ACC and Singapore ACC have been taking place smoothly.
- 2.3 CPDLC Uplink/Downlink messages: Based on our statistic, we noted as follow:
  - CPDLC Up link Performance is met the FOM criteria.

- Downlink messages: 95 Percentile having duration of 01: 00 minute and 99 Percentile having duration of 01: 43 minutes.
- Uplink messages: 95 Percentile having duration of 01: 00 minute and 99 Percentile having duration of 02: 20 minutes.
- Success rate: 99 percent.

2.4 Periodic Status Reports: The reports have been made monthly and sent to CRA-Japan for analysis up to February 2011. There is no recommendation for any correction received from CRA.

2.5 Problem Reports: There was no problem report being made and forwarded to CRA.

### **3. FURTHER IMPROVEMENT**

3.1 Further cooperation amongst ICAO, IATA, Vietnam, Singapore, Japan, and others concerning should be enhanced in supporting the implementation of ADS/CPDLC in the area.

3.2 Future actions of improvement would be required as follows:

- Maintenance of stable operation of data link.
- Improvement of quality of data link.
- Reduction of Uplink time and Downlink time in order to allow the improvement on ADS/CPDLC separation application.
- Continued CRA service provision in the area to support ADS/CPDLC operations.
- Expansion of ADS/CPDLC operation into other FIRs in our area.

### **4. ACTION BY THE MEETING**

4.1 The meeting is invited to note the information presented in this paper.

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