



International Civil Aviation Organization

The 3rd Meeting of the Future Air Navigation Systems Interoperability Team-Asia (FIT-Asia/3)

Pattaya , Thailand, 26–27 May 2014

Agenda Item 3: Review of ADS/CPDLC Operations

DATA LINK PERFORMANCE REPORT FOR SINGAPORE FIR

(Presented by SINGAPORE)

SUMMARY

This paper presents data link performance data for 2013 for the Singapore FIR

INTRODUCTION

1.1 This paper presents the data link performance for Singapore FIR for the period April 2013 to April 2014. Singapore FIR has been providing data link services since 1997. Data in this paper is presented based on performance monitoring guidance from the FANS Operations Manual (FOM) which has been superseded by RCP and RSP system performance criteria documented in the Global Operational Data Link Document (GOLD). It is anticipated that performance reporting will transition to the RCP, RSP format defined in GOLD Appendix D midterm in 2014 as the transition to new ground ATM system was recently completed in Oct 2013. System availability measurement is based on reported outages by the CSP and outages observed by the Air Navigation Service Provider.

DISCUSSION

2.1 Overall performance is similar to what was observed in the previous years (details shown in Appendix A).

2.2 For uplinks, the end-to-end round trip of 60 sec, the performance of 2 minutes of 95% of the messages and round trip time of 360 sec for 99% of the messages were achieved. Data shown in **Appendix A** are measured against FOM uplink and downlink performance requirements. It is anticipated that future reports will provide RCP240 performance data.

2.3 For downlinks, the end-to-end time for downlink of one-way time of 60 secs for 95% of the messages and one way time of 180 secs for 99% of the messages were achieved.

2.4 The total reject rate remained below 0.1%. One area of concern was the uplink success rate has dropped from more than 99% to about 96%. Investigations are still in progress.

2.5 Data link service availability remained high, although it was noted there was a noticeable drop in VHF data link availability.

2.6 Singapore had offered the funding of provision of CRA services for Problem reporting (supported by Boeing) for South East Asia region for 3 years in 2011 and this would end by September 2014. We will extend the funding for another year till September 2015. However there should be a sustainable model in place for CRA funding in the near future.

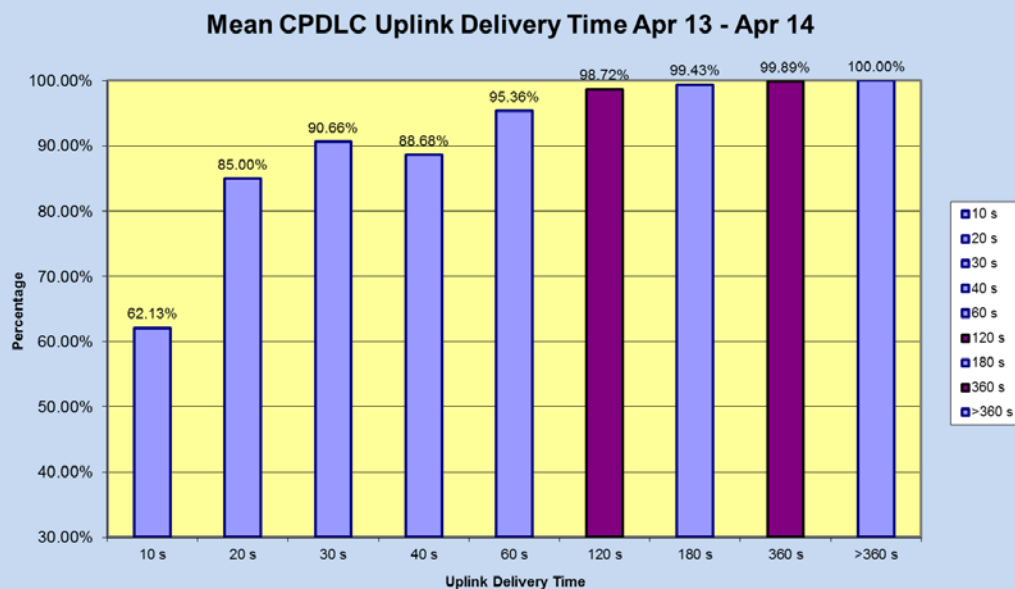
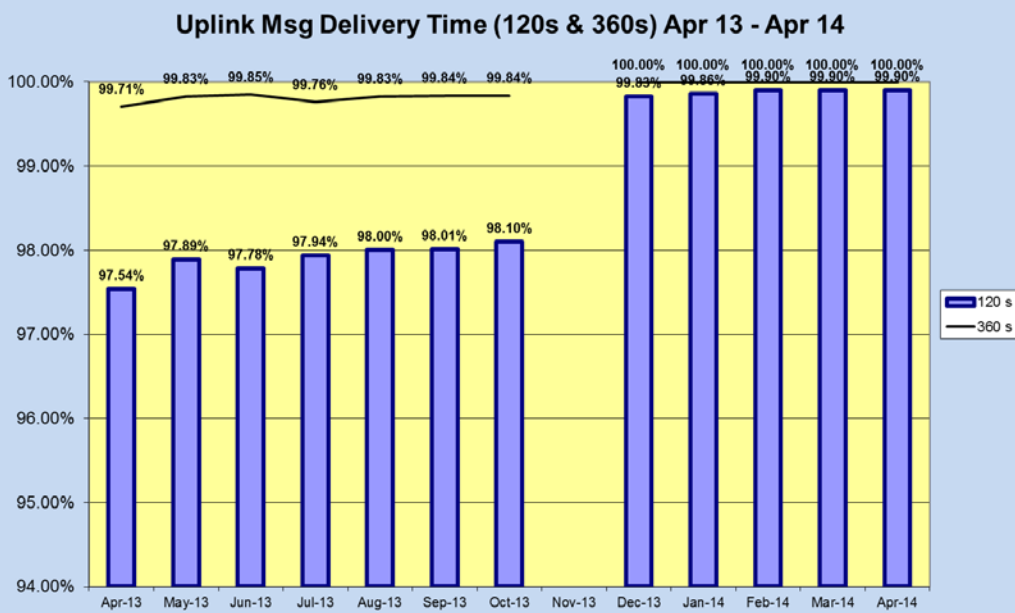
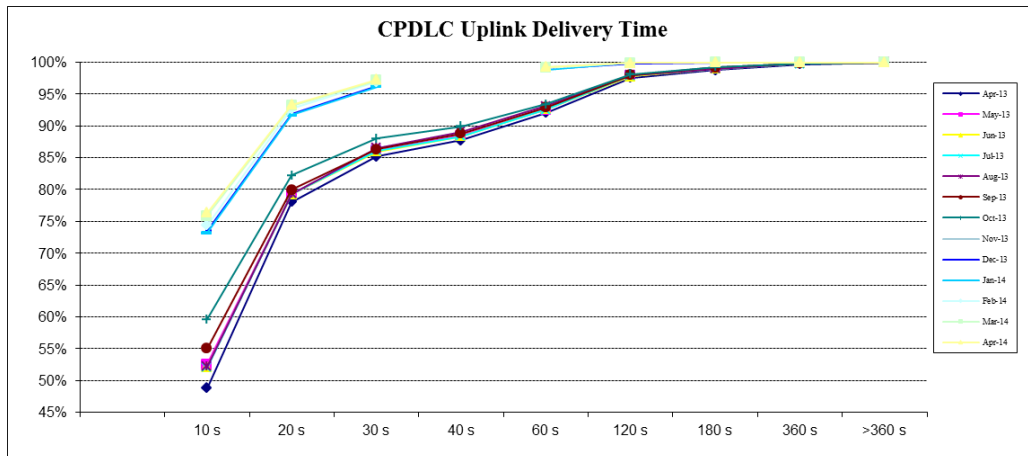
ACTION BY THE MEETING

3.1 The meeting is invited to:

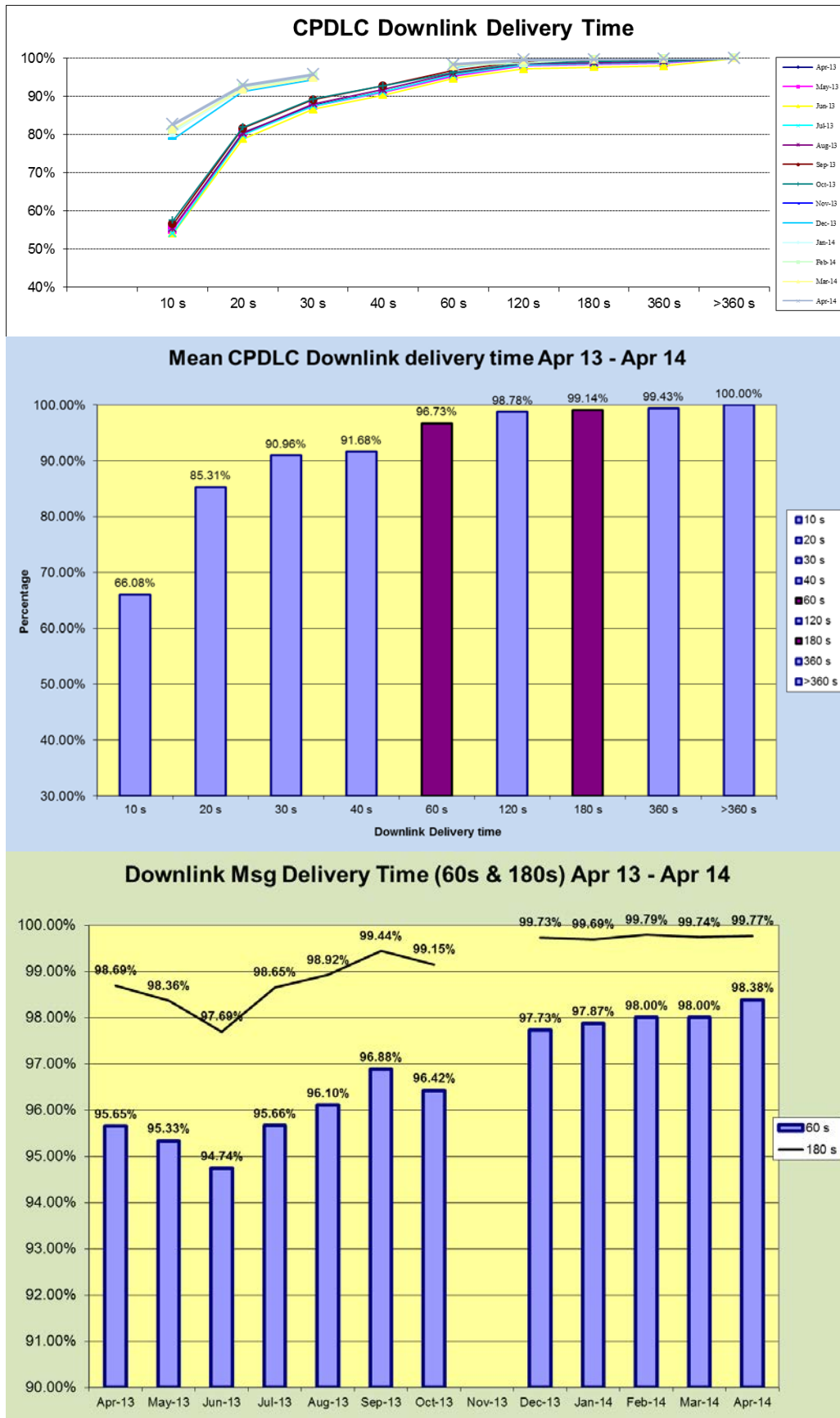
- a) note the information contained in this paper;
- b) discuss and develop a sustainable solution for CRA funding; and
- c) discuss any relevant matters as appropriate.

Appendix A

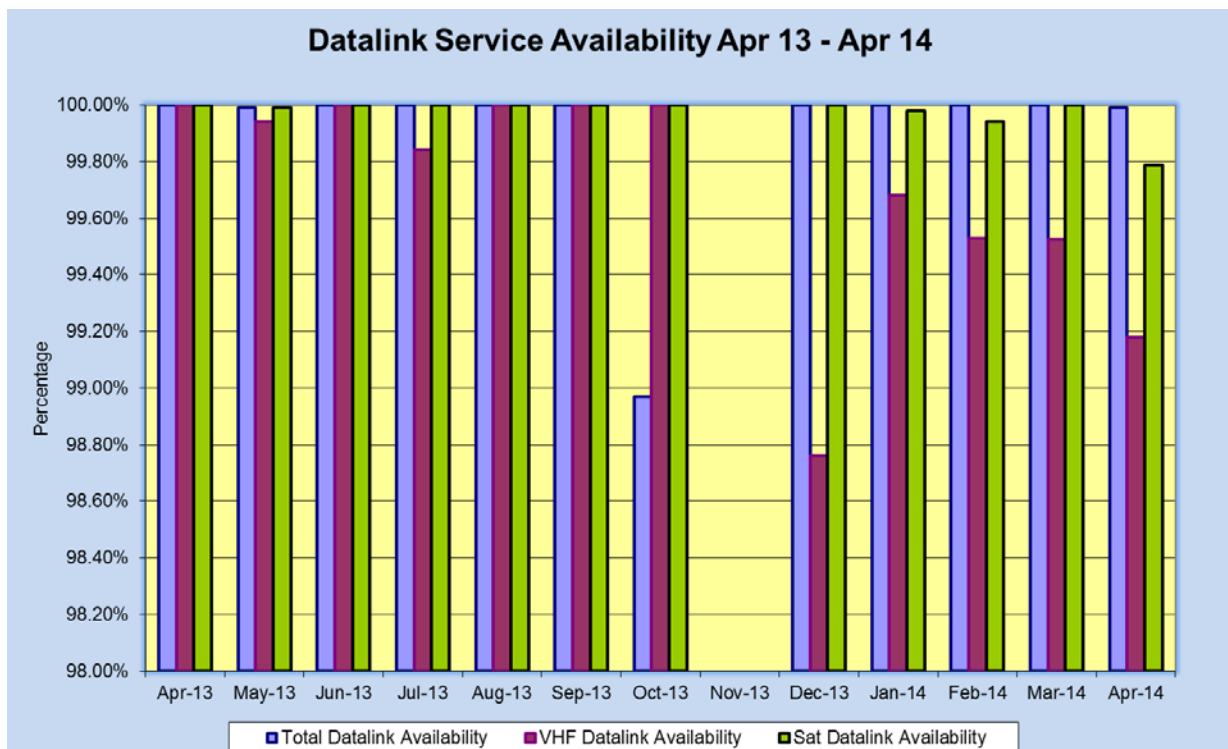
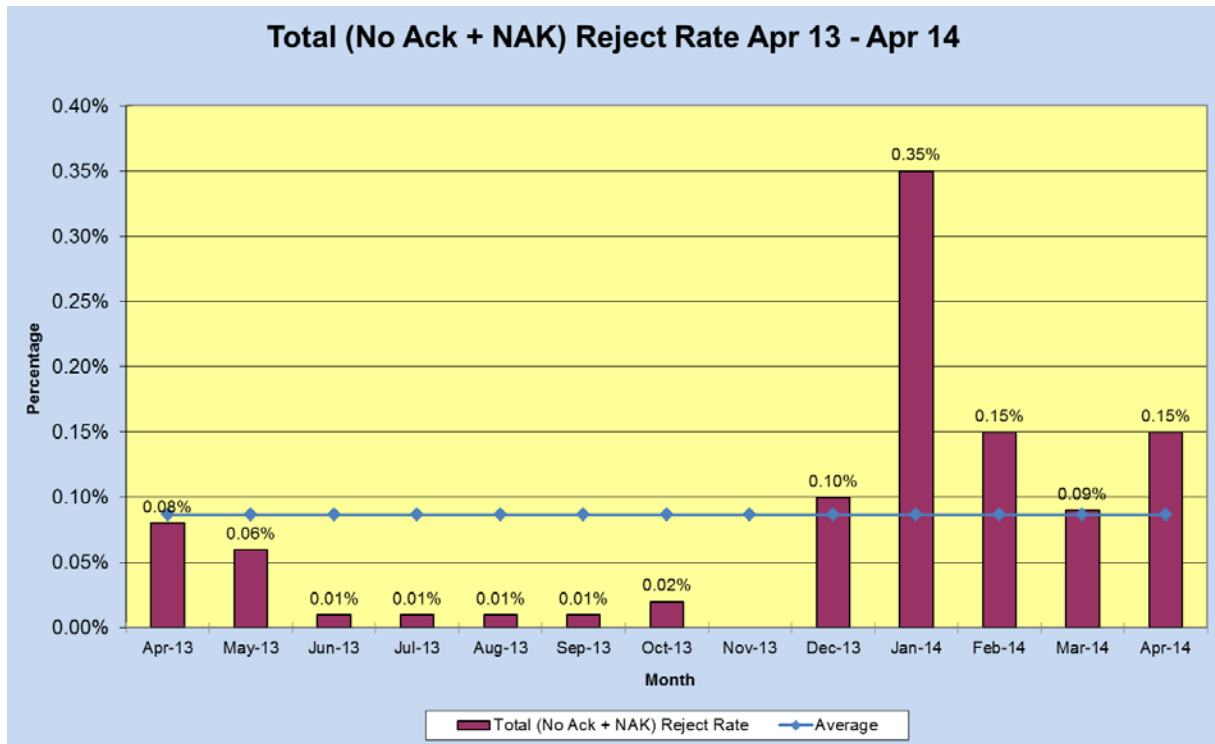
SINGAPORE FIR CPDLC Uplink Performance



SINGAPORE FIR CPDLC Downlink Performance



SINGAPORE FIR Network Availability



Note: data for mid Oct to mid Nov not available/complete – System transition