



International Civil Aviation Organization

**The Twentieth Meeting of the Regional Airspace Safety Monitoring
Advisory Group (RASMAG/20)**

Bangkok, Thailand, 26-29 May 2015

Agenda Item 2: Review Outcomes of Related Meetings

FIT-ASIA 4 MEETING OUTCOMES

(Presented by the Secretariat)

SUMMARY

This paper presents the Meeting Report of the 4th Meeting of the FANS Interoperability Team Asia (FIT-Asia/4).

1. INTRODUCTION

- 1.1 FIT-Asia/4 was held on Monday 25 May 2015.

2. DISCUSSION

- 2.1 The Report of the FIT-Asia/4 meeting is appended at **Attachment A** for review by RASMAG/20.

- 2.2 FIT-Asia/4 formulated the following Draft Decision and Draft Conclusions:

Draft Decision FIT-Asia/4-X: Data Link Performance Reporting Template and Guidance

That, the revised Data Link Performance Reporting Template and Guidance at **Appendix D** replaces the Data Link Performance Reporting Template on the ICAO Asia/Pacific Regional Office website.

Draft Conclusion FIT-Asia/4-X – Data Link Performance Guidelines

That, FIT-Asia States are urged to:

- a) Monitor data link performance against the RCP240 and RSP180 criteria specified in Appendix B of the Global Operational Data Link Document (GOLD); and
- b) apply the guidelines specified in the GOLD Appendix D to determine whether fleet performance either:
 - i. Meets the 99.9% performance level; or
 - ii. Requires submission of CRA problem reports and/or investigation that will attempt to determine the cause of the degradation.

Note: Gold Version 2.0 Appendix D Paragraph D.2.4.7.5.2 refers.

**Draft Conclusion FIT-Asia/4-X: ANS Deficiencies Relating to Data Link
Performance Monitoring and Analysis**

That, an Air Navigation Deficiency should be raised against non-implementation of the provisions of Annex 11 Paragraph 2.27.5 when any FIT-Asia administration has implemented operational ADS-C/CPDLC services and:

1. Has not made arrangements for the reporting and analysis of data link problems to a competent CRA as identified by the Regional Airspace Safety Monitoring Advisory Group (RASMAG); or
2. Does not report data link problems to the CRA; or
3. Does not provide data link problem analysis reports to a recognized FANS Interoperability/Implementation Team (FIT); or
4. Does not provide data-link performance analysis reports to a recognized FIT.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information contained in this paper; and
- b) discuss any relevant matters as appropriate.

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REPORT ON AGENDA ITEMS – FIT-Asia/4

Agenda Item 1: Adoption of Agenda

1.1 The provisional agenda (WP/01) was adopted by the meeting.

Agenda Item 2: Central Reporting Agency Report

FIT-Asia CRA Arrangements, Problem Reports, and Performance Data Analysis Reporting (WP/02)

2.1 The Secretariat provided information following-up on discussions at FIT-Asia/3 relating to data link problem and performance reporting by FIT-Asia Administrations.

2.2 The FIT-Asia Terms of Reference (TOR) required that it support FIT-Asia participant States' compliance with ICAO Annex 11 – *Air Traffic Services* and Global Operational Data-Link Document (GOLD) requirements for data-link performance.

2.3 FIT-Asia/3 had been informed that there was a considerable lack of data-link problem reporting among FIT-Asia States and airspace users, and few FIT-Asia States had arrangements in place for the analysis of problem reports by a competent Central Reporting Agency (CRA)¹. While the number of States making arrangements for the analysis of problem reports had improved, overall there had been little reporting of both problems and performance data analysis.

2.4 The meeting was informed that 25th Meeting of the Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG/25, Kuala Lumpur, Malaysia, 8 – 11 September 2014), adopted ***Conclusion APANPIRG 25/2 – APAC Regional Air Navigation Priorities and Targets***, endorsing ten regional priorities and targets including the implementation of data-link (**Table 1**), in line with the performance objectives of the Asia/Pacific Seamless ATM Plan.

Priority	ASBU Module or Seamless Element	Targets	Target Date
Trajectory-Based Operations-Data Link En-Route	B0-TBO	Within Category R airspace, ADS-C surveillance and CPDLC should be enabled to support PBN-based separations.	12 November 2015

Table 1: Regional Priority and Target – ADS-C and CPDLC

2.5 The meeting was reminded that the FIT-Asia TOR required, *inter-alia*, that it conducted activities to support FIT-Asia participant States' compliance with ICAO Annex 11 – *Air Traffic Services* and Global Operational Data-Link Document (GOLD) requirements for data-link performance

¹ The Asia/Pacific Regional Airspace Safety Monitoring Advisory Group (RASMAG) was responsible for updating and distributing the Regional list of competent airspace safety monitoring organizations for use by States requiring airspace safety monitoring services, including CRA.

2.6 Monitoring, reporting and analysis of data-link performance and problems is essential for the achievement and maintenance of system performance required for the application of RNP based separation standards.

2.7 In order to conduct these activities, arrangements for the reporting and analysis of data-link problems must be made between FIT-Asia administrations and a competent CRA.

2.8 The Informal South Pacific ATS Coordinating Group/FANS Implementation Team (ISPACG/FIT) was recognized by RASMAG as a competent CRA, and provided a CRA service for FIT/Asia States.

2.9 The meeting was reminded of the following Conclusion, drafted by FIT-Asia/2 (Bangkok, Thailand, 26 – 27 May 2014) was agreed by APANPIRG/24 in June 2013:

Conclusion 24/24: ADS/C and CPDLC Problem Reporting and Analysis

That, FIT-Asia States are requested to:

- *register on the FIT-Asia website (<http://www.ispacg-cra.com>), and report their registration to the ICAO Asia/Pacific Regional Office by 31 December 2013;*
- *report problems relating to Automatic Dependent Surveillance-Contract (ADS-C) and Controller Pilot Data-Link Communications (CPDLC) services to the Central Reporting Agency (CRA) for analysis, utilizing the FIT-Asia website; and*
- *ensure the CRA analysis is reported to FIT-Asia.*

2.10 FIT-Asia was comprised of the 23 Asia/Pacific Region administrations that were not included in any other sub-Regional FIT.

2.11 The data link service status of 11 FIT-Asia States was unknown. 11 FIT-Asia administrations were either providing ADS-C/CPDLC services, or expected to do so by November 2015 under the performance objectives of the Seamless ATM Plan. 6 FIT-Asia administrations were registered for FIT-Asia CRA. 3 administrations were registered for CRA through the South East Asia Safety Monitoring Agency (SEASMA), with their CRA service uncertain beyond September 2015.

2.12 **Appendix C** lists all FIT-Asia administrations and their:

- a) data link service status;
- b) Seamless ATM expectation to implement ADS-C/CPDLC (where known);
- c) FIT-Asia CRA registration status;
- d) Record of submission of problem reports to the FIT-Asia CRA; and
- e) Record of provision of ADS-C/CPDLC performance data analysis to FIT-Asia.

2.13 **Table 2** lists the FIT-Asia administrations that have either implemented ADS-C/CPDLC, or are expected to do so under the Asia/Pacific Seamless ATM Plan, and their FIT-Asia CRA registration status.

Administration	Data-Link (ADS-C/CPDLC) Service Status	Seamless ATM Expectation (Nov 2015)	FIT-Asia CRA Registration
China	Implemented	YES	YES
India	Implemented	YES	YES
Indonesia	Implemented	YES	YES
Malaysia		YES	YES
Myanmar	Implemented	YES	YES
Maldives	Implemented	YES	YES
Philippines		YES	SEASMA*
Singapore	Implemented	YES	SEASMA*
Sri Lanka	Implemented	YES	
Thailand			
Viet Nam	Implemented	YES	SEASMA*
* The South East Asia Safety Monitoring Agency (SEASMA) provides CRA service for Philippines, Singapore and Viet Nam. Current SEAMA CRA arrangements expire September 2015.			

Table 2: FIT-Asia ADS-C/CPDLC Implementation and CRA Registration Status.

2.14 Since FIT-Asia/3 only 2 administrations had submitted problem reports to FIT-Asia CRA. The FIT-Asia CRA website administrator had noted that several problem reports could not be assessed, as the data link service provider only retains logs for 90 days.

2.15 Only 3 administrations had submitted performance data analysis to FIT-Asia/4.

2.16 FIT-Asia administrations present at the meeting updated their current and intended data link implementation status, as recorded in **Appendix C**.

2.17 It was noted by the meeting that Pakistan, not present at the meeting, had separately notified the recently held 3rd Meeting of the Ad-Hoc Afghanistan Contingency Group (AHACG/3) that installation of ADS-CPDLC capability had been completed, and it was likely to be operational in the July/August 2015 period.

CRA Services for South Asia (WP/06)

2.18 IATA provided an update on continuation of the CRA services for India and South Asia FIRs.

2.19 IATA had contracted Boeing on behalf of Airports Authority of India to provide CRA services for India and the South Asia area. IATA was in the process of renewing the CRA service contract with Boeing through to Dec 31st 2016, and expected to continue this arrangement to at least 2018 or until AAI indicated a wish to take over the CRA service for the future.

2.20 The service covered the airspace of India, Maldives, Myanmar and Sri Lanka, and would also cover Bangladesh when implemented there.

CRA Problem Reports Analysis (Presentation 1)

2.21 The Boeing CRA presented an analysis of data link problem reports analyzed since FIT-Asia/3.

2.22 It was noted by Boeing CRA that there 10 problem reports that were not analyzed during the last year as the log data was no longer retrievable due to the lateness of the submission of the problem report. States were urged to go to the website and enter the problem report immediately, to allow for timely data retrieval and analysis.

2.23 It was also noted that most of the problems reported related to fundamental errors, indicating a lack of familiarity with GOLD procedures and guidance. While States should be familiar with GOLD, it was recognized that it would be more beneficial to provide a short video presentation of known problem areas, particularly CPDLC hand-off processes.

2.24 The Boeing CRA informed the meeting that any new ATS unit coming on line or making automation system changes could contact Boeing CRA to arrange data link functional and performance testing using the test-bed facilities.

2.25 The meeting noted that there were occasional difficulties in logging on to the CRA website. Boeing CRA was requested to provide further information on the CRA workflow, and more clarity on how to use the website.

Agenda Item 3: Review of ADS/CPDLC Operations

Data Link Performance Report for ATS Route L888 (WP/03)

3.1 China provided data link performance data for the period October 2014 to March 2015, for the L888 FANS route. Data link services had been provided on ATS route L888 in remote western China since 2001, using a variety of ground systems that may provide services to FANS 1/A aircraft.

3.2 The performance data was collected from the Chengdu (ZUUU), Lanzhou (ZLLL) and Urumqi (ZWWW) FIRs. The performance data was measured against Required Communication Performance (RCP) 400 specification, and presented using the FIT-Asia performance reporting template.

3.3 CPDLC Actual Communications Performance (ACP) for messages sent within three centres (ZUUU, ZLLL, ZWWW) per media type media type (Satellite, VHF and HF) was measured against the 95% 320 second and 99.9% 370 second requirements for RCP400, using the 4274 CPDLC transactions recorded during the period of Oct. 2014 to Mar. 2015. 100.00% performance was achieved for all three media types.

3.4 **Table 3** summarizes overall ADS-C Downlink Latency for messages sent within three centres (ZLLL, ZUUU, ZWWW). **Figure 1** graphs ADS-C Downlink Latency measurement by media type (Satellite, VHF and HF) against the 95% 300 second and 99.9% 400 second requirements for surveillance performance type 400 specification during the period Oct. 2014 to Mar. 2015.

ADS-C Downlink Latency				
Messages		% < 300 sec	% < 400 sec	Remarks
Satellite	528,680	99.55%	99.70%	-
VHF	344,795	99.77%	99.85%	-
HF	2,494	87.89%	93.44%	-
Total	875,969	99.61%	99.74%	-

Table 3: ADS-C Downlink Latency per Media Type of L888 Route

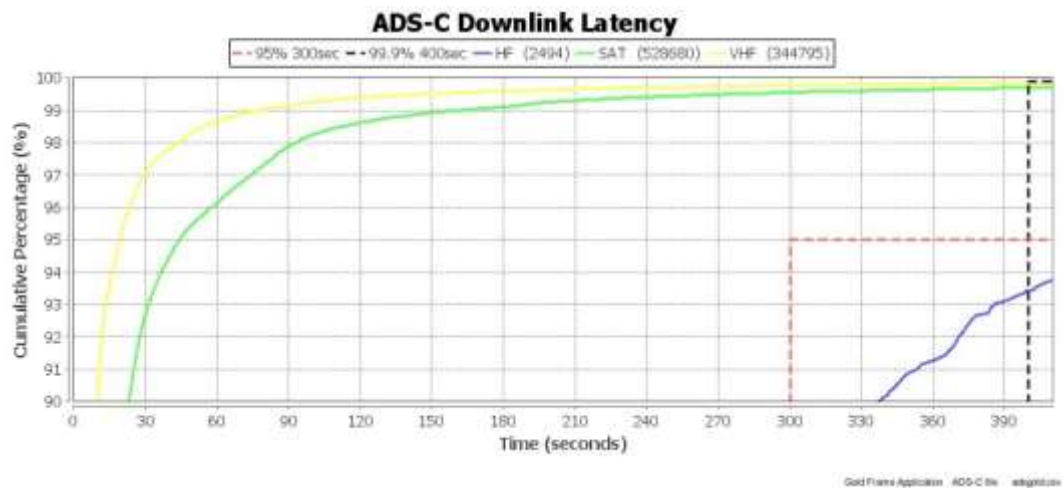


Figure 1: ADS-C Downlink Latency of L888 route.

3.5 The ADS-C Downlink Latency of HF failed to meet the 95% target. The reason was that messages from some HF stations has long Latency (**Figures 2 and 3**).

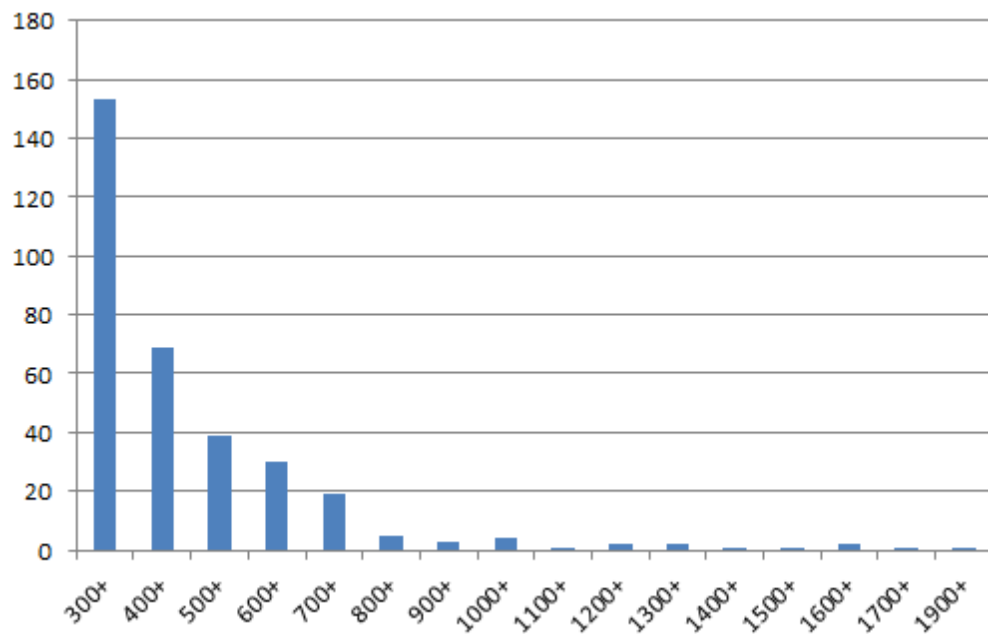


Figure 2: Count of ADS-C Downlink Messages Latency over 300 second

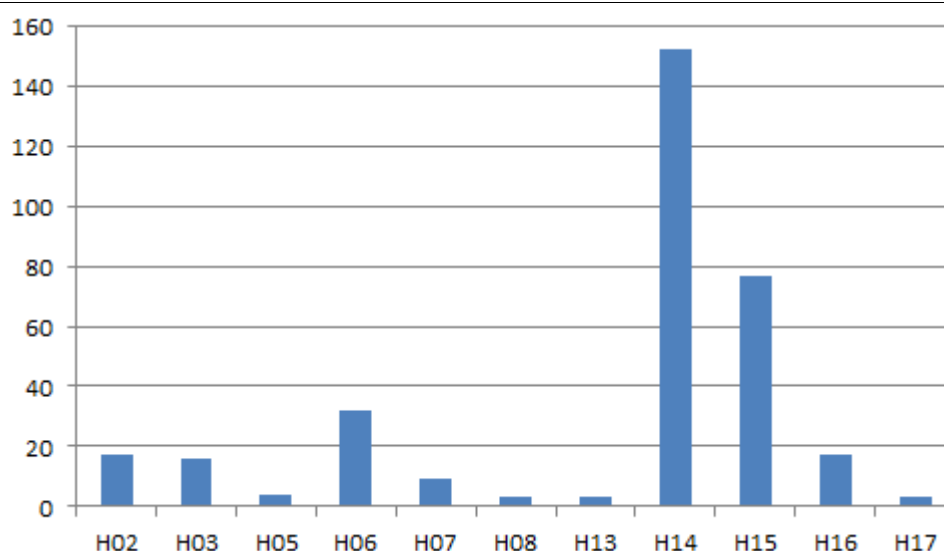


Figure 3: Count of ADS-C Downlink Messages Latency over 300 second by HF Station

3.6 CPDLC Actual Communications Performance (ACP) per Operator was measured against the 95% 320 second and 99.9% 370 second requirements for RCP400, using the 4274 CPDLC transactions with 23 operators during the period of Oct. 2014 to Mar. 2015. 100.00% performance was achieved in all cases.

3.7 In discussing the HF ADS-C Downlink Message Latency, it was agreed that China would provide information on which aircraft types were reverting to HF, and Boeing CRA would then endeavour to determine why.

3.8 China applied data link ground station information (station identifier and media type) to perform the analysis, but each year it was difficult to obtain a complete list containing all the ground stations. Boeing CRA agreed to provide a list of INMARSAT GES and HF ground station identifiers for future reference.

3.9 In response to a query, China advised that performance was measured against the RCP400 standard as reduced separation was not currently applied in the airspace concerned.

Data Link Performance Report for Singapore FIR (IP/03)

3.10 Singapore presented data link performance for the Singapore FIR for the period May 2014 to April 2015. The performance data was measured against GOLD RCP and RSP requirements.

3.11 Data link performance in the Singapore FIR generally met the RCP 240 and RSP 180 performance requirements, either meeting or just falling below the 99.9% performance targets and meeting the 95% targets.

3.12 It was noted that the Pilot Operational Response Time (PORT) performance was higher than normally experienced in other regions, where it was common for a few operators' performance to be below the required level.

FANS1/A Performance in Chennai FIR (WP/04)

3.13 India provided the meeting with analysis of the observed performance of the ADS/CPDLC data link within the Chennai Flight Information Region during a twelve month period from January 2014 to December 2014.

3.14 The India Bay of Bengal Arabian Sea Indian Ocean Safety Monitoring Agency (BOBASMA) had endeavored to collect the ADS & CPDLC data as per the Global Operational Data Link Document (GOLD) from the four ground systems at Chennai, Mumbai, Delhi and Kolkata. The ATM automation systems at Mumbai, Delhi and Kolkata were being upgraded so as to enable collection of ADS & CPDLC data for performance monitoring of the ground systems at these three stations. The GPAT tool version 3 was used for monitoring Chennai FIR data link performance for 12 months starting from January 2014 to December 2014.

3.15 **Table 4 and Figure 4** provides ACP for SAT-COM and VHF media, measured against the RCP-240 requirement of 99.9% transactions to be completed within 210 seconds and 95% to be completed within 180 seconds. The ACP met the 95 percentage but fall just below the 99.9 percentage criteria.

VOMF FIR CPDLC ACP				
Messages		% >180 sec (Target 95%)	% >210 sec (Target 99.9%)	Remarks
SAT	33541	99.29%	99.64%	
VHF	55544	99.67%	99.77%	
ALL	89085	99.53%	99.72%	

Table 4: VOMF FIR CPDLC ACP per Media Type

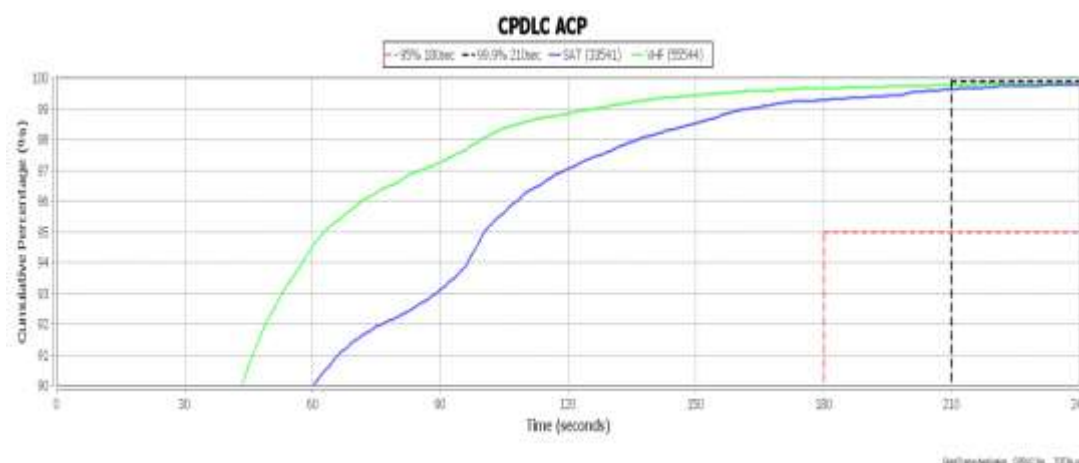


Figure 4: VOMF FIR ACP by Data Link Media Type

3.16 **Table 5 and Figure 5** summarize ADS- C downlink latency of Chennai FIR for SAT-COM and VHF media for the period of January 2014 to December 2014, measured against the GOLD describes the RSP-180 criteria. The ADS-C data link messages sent via satellite and VHF met the 95 percentage but fell below the 99.9 percentage criteria.

VOMF FIR ADS-C Downlink Latency			
Messages	% >90 sec (Target 95%)	% >180sec (Target 99.9%)	Remarks

SAT	2,19,861	96.71%	98.90%	
VHF	2,71,388	98.24%	99.45%	
All	4,91,249	97.56%	99.20%	

Table 5: VOMF FIR ADS-C Downlink latency per Media Type

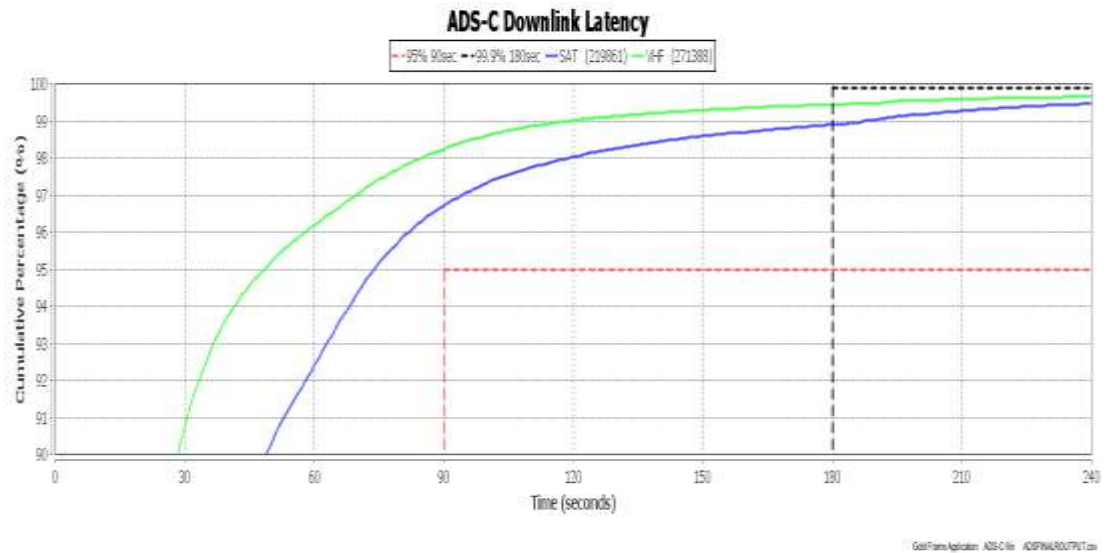


Figure 5: VOMF FIR ADS-C Downlink Latency

3.17 **Table 6 and Figure 6** present CPDLC ACP per operator within Chennai FIR for the period of January 2014 to December 2014. All operators satisfied RCP-240 criteria of 95 percent of transactions within 180 seconds, but only few operators met the criteria of 99.9 percentage transitions within 210seconds.

VOMF FIR CPDLC ACP per Operator				
Operator	Messages	% >180 sec (Target 95%)	% >210 sec (Target 99.9%)	Remarks
AO1	21,394	99.72%	99.81%	
AO2	16,608	99.39%	99.67%	
AO3	12,685	99.33%	99.59%	
AO4	9,198	99.82%	99.92%	
AO5	8,880	99.62%	99.80%	
AO6	3,209	99.35%	99.60%	
AO7	3,154	99.23%	99.56%	
AO8	1,378	99.42%	99.60%	
AO9	1,102	99.43%	99.60%	
A10	1,100	99.61%	99.72%	
Total	78708	99.53%	99.73%	

Table 6: VOMF FIR CPDLC ACP per operator

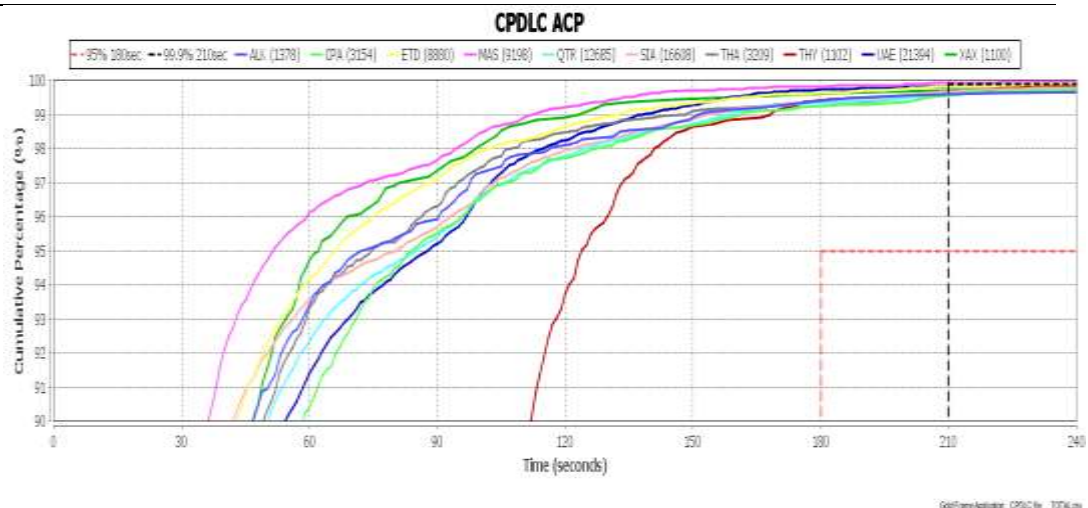


Figure 6: VOMF FIR CPDLC ACP per operator

3.18 India advised the meeting that approximately 62% of the traffic in the Chennai FIR was data link equipped.

Data Link Implementation in Indonesian FIRs (IP/04)

3.19 Indonesia presented the history of data link implementation in the Indonesia FIRs, and information on planned integration of ADS-C/CPDLC with the Jakarta Air Traffic Services Center (JATSC).

3.20 Data link services had been provided in the Ujung Pandang FIR since 23 September 2010. An operational trial had been running in the Jakarta FIR, and operational implementation was expected in September 2015.

Agenda Item 4: Data-Link Guidance Material

Revised Data Link Performance Reporting Template and Guidance (WP/05)

4.1 The Asia/Pacific Region Data Link Performance Reporting Template, developed by FIT-Asia/2, was found to be in need of further editorial and structural amendment. There was also a need for some brief guidance for the use of the template. The Secretariat provided an updated template and guidance for its completion, for consideration by the meeting.

4.2 The revised template ed corrections of a number of errors of content and format. It had been restructured, particularly in its *Attachment A – Additional Analysis* section, to present information in a more logical sequence. The changes were summarized as follows:

- Removal of yellow-highlights to reduce visual clutter, replaced in most cases by either [CONTENT] or [XXXX] to indicate where the State should add textual information;
- The Working Paper section now included provision for summary analysis of:
 - CPDLC Actual Communications Performance (ACP) for the entire analysis period, per data link media type (Satellite, VHF and HF);

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- CPDLC Actual Communications Technical Performance (ACTP) for the entire analysis period, per data link media type;
 - CPDLC ACP per Operator (de-identified) for the entire analysis period; and
 - ADS-C Latency for the entire analysis period, per data link media type.
- The *Attachment A – Additional Analysis* section provided for more detailed analysis of each of the above performance domains in a more logical sequence:

4.3 Basic guidance material for completion of the template included:

- Reference and a link to the *Global Operational Data-Link Guidance Document* (GOLD) and the GOLD Performance Analysis Tool (GPAT);
- The statement that all FIT-Asia States should register on the FIT-Asia CRA website, and report all data-link problems detected through performance analysis or other reports
- Reference and a link to the *Guidance Material for End-to-End Safety and Performance Monitoring of Air Traffic Service (ATS) Data Link Systems in the Asia Pacific Region (Version 4.0 – February 2011)*
- Information relating to the timeliness of submission of problem reports to the Central Reporting Agency (CRA)

4.4 The meeting agreed that a common data link performance reporting period of January to December (inclusive) each year should be used by FIT-Asia States. It was also suggested that reporting of outages should also be provided for in the template.

4.5 The meeting agreed to the following Draft Decision, for consideration by RASMAG/20:

Draft Decision FIT-Asia/4-X: Data Link Performance Reporting Template and Guidance

That, the revised Data Link Performance Reporting Template and Guidance at **Appendix D** replaces the Data Link Performance Reporting Template on the ICAO Asia/Pacific Regional Office website.

Operational Significance of 99.9% Performance Criteria (WP/09)

4.6 FIT-Asia Task 3/1 required the Secretariat to seek appropriate expert advice on the operational significance of the 99.9% data link performance criteria, and what could be done in cases of Actual Communication Performance (ACP), Actual Communication Technical Performance (ACTP) and ADS-C Downlink Latency “just” failing to meet the standard.

4.7 The meeting was provided with relevant references from GOLD, and from the *Guidance Material for the Asia/Pacific Region for ADS/CPDLC/AIDC Ground Systems Procurement and Implementation*. These documents provided the relevant specifications for performance measurement against 99.9% probability of the continuity and availability of data-link. The meeting was further informed that GOLD Appendix D paragraph D 2.4.7.5 **Setting guidelines** stated:

D.2.4.7.5.1 In airspace where procedural separation is being applied, it has been observed that complete withdrawal of data link may not be required even if performance is observed to fall below the RCP240/RSP180 criteria. While safety services such as reduced separation standards requiring RCP240/RSP180 would be withdrawn the observed performance may still meet RCP/RSP400 criteria and the local safety assessment may also conclude that maintaining the data link connection is viable.

D.2.4.7.5.2 Some ANSP have set monitoring guidelines to assist with their data analysis. These include:

- a) If the performance observed for a fleet by monthly monitoring at the 99.9% level is better than 99.75% then the fleet is considered to meet the 99.9% performance level.
- b) Observed fleet performance consistently falling below 99.0% will be subject to CRA problem reports and investigation that will attempt to determine the cause of the degradation.
- c) performance degradation (0.5%) by a fleet below observed historical performance will be subject to investigation.

4.8 It was noted that these performance monitoring criteria supported the performance objectives of the Asia/Pacific Seamless ATM Plan relating to the implementation of RNP-based separations in Category R² airspace. To further support the performance objectives of the Seamless ATM Plan, and to ensure consistency of performance monitoring, analysis and reporting and CRA problem reporting among FIT-Asia States, the agreed to the following Draft Conclusion:

Draft Conclusion FIT-Asia/4-X – Data Link Performance Guidelines

That, FIT-Asia States are urged to:

- a) Monitor data link performance against the RCP240 and RSP180 criteria specified in Appendix B of the Global Operational Data Link Document (GOLD); and
- b) apply the guidelines specified in the GOLD Appendix D to determine whether fleet performance either:
 - i. Meets the 99.9% performance level; or
 - ii. Requires submission of CRA problem reports and/or investigation that will attempt to determine the cause of the degradation.

Note: Gold Version 2.0 Appendix D Paragraph D.2.4.7.5.2 refers.

² The Asia/Pacific Seamless ATM Plan defines Category R airspace as remote en-route airspace within Air Traffic Services (ATS) communications and surveillance coverage dependent on a third-party Communication Service Provider (CSP)

4.9 It was confirmed that the meaning of *fleet* in the template was the aggregate fleet of all data link aircraft operating in the airspace concerned, except only where it related to analysis of individual operator performance.

Agenda Item 5: FIT-Asia Task List

FIT-Asia Task List (WP/08)

5.1 The meeting reviewed the task list, closing 3 tasks and raising 6 new tasks. 2 outstanding tasks remained open. The task list as updated by the meeting is provided at **Appendix E** to this report.

Agenda Item 6: Any Other Business

Air Navigation Service Deficiencies Relating to Data Link Performance Monitoring and Analysis (WP/07)

6.1 The Secretariat presented a proposed APANPIRG Air Navigation Service Deficiency in the ATM Field, relating to data link performance monitoring and analysis.

6.2 Air Navigation Deficiencies were raised to share among States information about deficiencies in a transparent manner, and to assist States to define their implementation priorities and to indicate remedial action required. Information on deficiencies from the Air Navigation Deficiencies database is provided to APANPIRG meetings for review under its terms of reference to, *inter alia*, make detailed assessment of the safety impact of the deficiencies as shown and propose remedial action required by States for subsequent review by the Air Navigation Commission and Council.

6.3 Annex 11 to the Convention on Civil Aviation included the following Standard:

2.27.5 Any significant safety-related change to the ATS system, including the implementation of a reduced separation minimum or a new procedure, shall only be effected after a safety assessment has demonstrated that an acceptable level of safety will be met and users have been consulted. When appropriate, the responsible authority shall ensure that adequate provision is made for post-implementation monitoring to verify that the defined level of safety continues to be met.

6.4 In the event that Administrations implemented data-link services without a competent CRA service and a robust program of post-implementation performance monitoring, the service did not comply with the Annex 11 standard. In these cases APANPIRG ANS Deficiencies could be raised.

6.5 As reported under WP/02, 8 FIT-Asia administrations had operationally implemented ADS-C/CPDLC services. 5 of those administrations had registered for the FIT-Asia Central Reporting Agency (CRA) service, and 3 others had a CRA service provided through the South East Asia Safety Monitoring Agency (SEASMA). Continuation of the SEASMA service beyond September 2015 was uncertain.

6.6 Since FIT-Asia/3 1 administration had reported problems through the FIT-Asia CRA website facility, and only 3 administrations provided data link performance analysis reports to FIT-Asia/4.

6.7 The meeting agreed to the following Draft Conclusion:

Draft Conclusion FIT-Asia/4-X: ANS Deficiencies Relating to Data Link Performance Monitoring and Analysis

That, an Air Navigation Deficiency should be raised against non-implementation of the provisions of Annex 11 Paragraph 2.27.5 when any FIT-Asia administration has implemented operational ADS-C/CPDLC services and:

1. Has not made arrangements for the reporting and analysis of data link problems to a competent CRA as identified by the Regional Airspace Safety Monitoring Advisory Group (RASMAG); or
2. Does not report data link problems to the CRA; or
3. Does not provide data link problem analysis reports to a recognized FANS Interoperability/Implementation Team (FIT); or
4. Does not provide data-link performance analysis reports to a recognized FIT.

6.8 The deficiency would be subject to the addition or removal of listed administrations on the basis of the establishment and use of arrangements for the monitoring, analysis and reporting of data link problems and performance, as reported to FIT-Asia.

6.9 The meeting was reminded that Deficiencies raised could be removed from the list at any time up until the week before APANPIRG/26, on receipt by the Secretariat of information on State compliance.

6.10 The meeting agreed to the deficiency list at **Appendix F** to the report.

Agenda Item 7: Date and Venue of the Next Meeting

7.1 The next FIT-Asia meeting would be held at a time and venue to be advised.

Closing of the Meeting

8.1 In closing the Meeting, the Chairman thanked delegates for their support and contributions for the duration of the meeting.
