



International Civil Aviation Organization

The Fourth Meeting of the Future Air Navigation Systems Interoperability Team-Asia (FIT-Asia/4)

Bangkok, Thailand, 25-26 May 2015

Agenda Item 6: Any Other Business

AIR NAVIGATION SERVICE DEFICIENCIES RELATING TO DATA LINK PERFORMANCE MONITORING AND ANALYSIS

(Presented by the Secretariat)

SUMMARY

This paper presents proposed APANPIRG Air Navigation Service Deficiencies in the ATM field relating to Data Link Performance Monitoring and Analysis

1. INTRODUCTION

1.1 Air Navigation Deficiencies are 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.

2. DISCUSSION

2.1 Annex 11 to the Convention on Civil Aviation includes 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.

2.2 Implementation of ADS-C and CPDLC are significant safety related changes, given their use in ATS surveillance and Direct Controller – Pilot Communications (DCPC) communications and the PANS/ATM requirement for their use to support certain separation standards. In the event that Administrations implement or have implemented data-link services without a competent CRA service and a robust program of post-implementation performance monitoring, the service does not comply with ICAO SARPS as defined in Annex 11. In these cases APANPIRG ANS Deficiencies may be raised.

2.3 As reported under WP/02, 8 FIT-Asia administrations have operationally implemented ADS-C/CPDLC services. 5 of those administrations have registered for the FIT-Asia Central Reporting Agency (CRA) service, and 2 others have a CRA service provided through the South East Asia Safety Monitoring Agency (SEASMA). Continuation of the SEASMA service beyond September 2015 is uncertain.

2.4 Only 1 administration has reported problems through the FIT-Asia CRA website facility, and only 2 administrations have provided data link performance analysis reports to FIT-Asia/4.

2.5 It is proposed 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 provided 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.

2.6 The deficiency will 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.

2.7 **Attachment A** provides a draft ANS deficiency list to be for discussion by the meeting, based on information provided to FIT-Asia meetings.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information contained in this paper;
- b) discuss, amend where necessary and agree to the ANS Deficiency raised in **Attachment A** and
- c) discuss any relevant matters as appropriate.

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ATM Deficiencies List

Identification		Deficiencies			Corrective Action			
Requirements	States/ facilities	Description	Date first reported	Remarks	Description	Executing body	Target date for completion	Priority for action**
<u>Data Link</u> <u>Performance</u> <u>Monitoring and</u> <u>Analysis</u>								
Requirements of Paragraph 2.27.5 of Annex 11	China	Post-implementation monitoring not implemented	29/5/2015	Problem Reports not provided to CRA		China	TBD	A
	Indonesia	Post-implementation monitoring not implemented	29/5/2015	Problem Reports not provided to CRA. Performance monitoring and analysis not reported to FIT.		Indonesia	TBD	A
	Malaysia	Post-implementation monitoring not implemented	29/5/2015	Problem Reports not provided to CRA. Performance monitoring and analysis not reported to FIT.		Malaysia	TBD	A
	Myanmar	Post-implementation monitoring not implemented	29/5/2015	Problem Reports not provided to CRA. Performance monitoring and analysis not reported to FIT.		Myanmar	TBD	A

Identification		Deficiencies			Corrective Action			
Requirements	States/ facilities	Description	Date first reported	Remarks	Description	Executing body	Target date for completion	Priority for action**
	Maldives	Post-implementation monitoring not implemented	29/5/2015	Problem Reports not provided to CRA. Performance monitoring and analysis not reported to FIT.		Maldives	TBD	A
	Sri Lanka	Post-implementation monitoring not implemented	29/5/2015	Not registered with competent CRA. Problem Reports not provided to CRA. Performance monitoring and analysis not reported to FIT.		Sri Lanka	TBD	A
	Singapore	Post-implementation monitoring not implemented	29/5/2015	Performance monitoring and analysis not reported to FIT.		Singapore	TBD	A
	Viet Nam	Post-implementation monitoring not implemented	29/5/2015	Performance monitoring and analysis not reported to FIT.		Viet Nam	TBD	A