

INTERNATIONAL CIVIL AVIATION ORGANIZATION

TWENTY EIGHTH MEETING OF THE ASIA/PACIFIC AIR NAVIGATION PLANNING AND IMPLEMENTATION REGIONAL GROUP (APANPIRG/28)

Bangkok, Thailand, 11 to 14 September 2017

Agenda Item 3: Performance Framework for Regional Air Navigation Planning and

Implementation

3.3: RASMAG

APANPIRG MONITORING OF DATA LINK PERFORMANCE AND PROBLEM REPORTING

(Presented by the Secretariat)

SUMMARY

This paper discusses the need for APANPIRG to ensure that all States providing data link services report the results of performance monitoring and analysis, and forward problem reports, to an authorized monitoring agency.

Strategic Objectives:

- A: Safety Enhance global civil aviation safety
- B: Air Navigation Capacity and Efficiency—Increase the capacity and improve the efficiency of the global aviation system
- E: *Environmental Protection* minimize the adverse environment effects of civil aviation activities.

1. INTRODUCTION

- 1.1 The Regional Airspace Safety Monitoring Advisory Group (RASMAG) is the APANPIRG Sub-Group required under its Terms of Reference to maintain the *List of Competent Airspace Safety Monitoring Organizations*. The List identifies *inter alia*:
 - <u>CRA</u> Central Reporting Agency technical performance of data link systems (i.e. ADS/CPDLC); and
 - <u>FIT</u> FANS 1/A Interoperability/Implementation Team parent body to a CRA.
- 1.2 **Table 1** summarizes the FIT and CRA organizations for the Asia/Pacific Region.

Organization	Competency	Assessed Airspace
FIT-Asia	FIT	FIRs in the Asian Region
		not covered by IPACG/FIT
		and ISPACG/FIT
IPACG/FIT	FIT & CRA	North and Central Pacific
		(Oceanic airspace within
		Fukuoka FIR, and
		Anchorage & Oakland FIRs)
ISPACG/FIT	FIT & CRA	South Pacific FIRs and
		members of the Informal
		South Pacific ATS
		Coordination Group
		(ISPACG)

Table 1: Asia/Pacific Region FIT and CRA Organizations

- 1.3 FIT-Asia is a formal group established by APANPIRG and reporting to RASMAG. FIT-Asia States provide analysis of their data link performance monitoring to FIT-Asia, and provide problem reports to the appropriate CRA.
- 1.4 The Informal Pacific ATC Coordinating Group (IPACG) and Informal South Pacific ATS Coordinating Group (ISPACG) do not formally report to APANPIRG or any of its Sub-Groups or technical bodies.

2. DISCUSSION

2.1 APANPIRG/26 (Bangkok, Thailand, 7 to 10 September 2015) agreed to the following Conclusion:

Conclusion APANPIRG/26/25 – 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:

- a) 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
- b) does not report data link problems to the CRA; or
- c) does not provide data link problem analysis reports to a recognized FANS Interoperability/Implementation Team (FIT); or
- d) does not provide data-link performance analysis reports to a recognized FIT.
- 2.2 FIT-Asia, and therefore also RASMAG and APANPIRG, have no visibility of the activities of IPACG and ISPACG States relating to data link performance monitoring, analysis and problem reporting.

2.3 The meeting is invited to consider the following Draft Conclusion:

Draft Conclusion APANPIRG/28/X: Pacific Region Data Link Performance Monitoring				
What: That, IPACG/FIT and ISPACG/FI to provide to the RASMAG meeting each year a list ISPACG States that have: 1) made arrangements for the reporting and analyproblems to a competent CRA as identified Airspace Safety Monitoring Advisory Group (I	st of IPACG and ysis of data link by the Regional	Expected impact: ☐ Political / Global ☐ Inter-regional ☐ Economic ☐ Environmental ☐ Ops/Technical		
2) Reported data link problems to the CRA; and				
3) provided data link problem analysis reports to a recognized FANS Interoperability/Implementation Team (FIT); and				
4) provided data-link performance analysis recognized FIT.	reports to a			
Why: To ensure APANPIRG and its relevant technical Sub-Groups have visibility of data link performance monitoring and analysis activities conducted by all APAC Administrations providing data link services	Follow-up:	⊠Required from States		
When: 14-Sep-17	Status:	Draft to be adopted by PIRG		
Who: □Sub groups ⊠APAC States □Io and ISPACG/FIT	CAO APAC RO	□ICAO HQ ⊠Other: IPACG/FIT		

- Annex 6 Operation of Aircraft and Doc 4444 Procedures for Air Navigation Services Air Traffic Management (PANS/ATM) now include standards and procedures for Performance-Based Communications and Surveillance (PBCS), detailing requirements for data link performance monitoring and analysis. These provisions, applicable from November 2016, are expected to be implemented in the Asia/Pacific Region by not later than 29 March 2018 (*Conclusion APANPIRG/27/9 Asia/Pacific Region PBCS Transition Strategy*)
- 2.5 The meeting is invited to consider the following Draft Conclusion, updating Conclusion APANPIRG/26/25 to reflect the ICAO publications supporting new PBCS provisions and providing the mechanism for APANPIRG to review data link activities for the whole Asia/Pacific Region each year. The updates to the Conclusion are executive in nature, and do not require analysis by a technical body.

2.6

Draft Conclusion APANPIRG/28/X – ANS Deficiencies Relating to Data Link Performance Monitoring and Analysis			
What: That, an Air Navigation Deficiency should be raised against non-implementation of the relevant provisions of Annex 6, Annex 11and PANS/ATM when any Asia/Pacific Administration has implemented operational ADS-C/CPDLC services and:		Expected impact: ☐ Political / Global ☐ Inter-regional ☐ Economic ☐ Environmental ☒ Ops/Technical	
a) 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		23 Op. 7 centiled	
does not report data link problems to the CRA; or			
 does not provide data link problem analysis reports to a recognized FANS Interoperability/Implementation Team (FIT); or 			
d) does not provide data-link performance analysis reports to a recognized FIT at least once annually.			
This Conclusion supersedes Conclusion APANPIRO	G/26/25.		
Why: To ensure APANPIRG and its relevant technical Sub-Groups have visibility of data link performance monitoring and analysis activities conducted by all APAC Administrations providing data link services	Follow-up:	⊠Required from States	
When: 14-Sep-17	Status:	Draft to be adopted by PIRG	
Who: \square Sub groups \boxtimes APAC States \boxtimes ICAO APAC RO \square ICAO HQ \boxtimes Other: IPACG/FIT and ISPACG/FIT			

3. ACTION BY THE MEETING

- 3.1 The Meeting is invited to:
 - a) Note the information in this paper;
 - b) Agree to the Draft Conclusions; and
 - c) Discuss any other relevant matters as appropriate.