



International Civil Aviation Organization

**The Fourteenth Meeting of the Regional Airspace Safety Monitoring
Advisory Group (RASMAG/14)**

Bangkok, Thailand, 21 – 25 February 2011

**Agenda Item 5: Airspace Safety Monitoring Activities/Requirements in the Asia/Pacific
Region**

Data Link Performance Monitoring Requirements

(Presented by New Zealand)

SUMMARY

Performance monitoring is an important element of data link applications such as CPDLC and ADS-C. Monitoring should be carried out by air navigation service providers and the results passed to the appropriate Central Reporting Agency for analysis. However, many ANSPs are not meeting their obligations in this respect.

This paper relates to

Strategic Objectives:

- A. Safety – Enhance global civil aviation safety
- C. Environmental Protection and Sustainable Development of Air Transport – Foster harmonized and economically viable development of international civil aviation that does not unduly harm the environment

Global plan initiatives:

GPI-17 Data-link applications

1 Introduction

- 1.1 The Guidance Material for End-To-End Safety and Performance Monitoring of Air Traffic Service (ATS) Data Link Systems in the Asia/Pacific Region was prepared by the RASMAG and adopted by APANPIRG/16 in 2005. The current version of the document is Version 3, dated May 2008.
- 1.2 The material indicates the information that should be collected by air navigation service providers (ANSPs) for analysis by the Central Monitoring Agencies (CRAs).

2 Discussion

- 2.1 Monitoring of data link performance is a most important element of the provision of data link applications such as CPDLC, ADS-C and AIDC, especially where these applications are used as a basis for reduced separation minima. The efficiency benefits arising from reduced separation can only be achieved if specific data link performance criteria are met, and this can only be determined by regular monitoring of data link traffic and analysis of the resulting data.

- 2.2 The guidance material indicates that performance data is gathered by ANSPs and passed to the appropriate CRA for analysis. CRAs have specialist staff and equipment to undertake the detailed analysis that can identify the causes of performance problems. Once the causes are identified, solutions can be developed and implemented.
- 2.3 While the guidance material includes information on the performance data that ANSPs are expected to provide to the CRAs, to date the CRAs have received very little such data. Consequently, little is known of data link performance in much of the Region, with the inevitable corollary that poor performance may not be detected or corrected.
- 2.4 It is therefore most important that all ANSPs, whether state agencies or independent organisations, collect the required data link performance data and pass it to the appropriate CRA for analysis, investigation and initiation of any required corrective action.

3 Recommendation

- 3.1 The meeting is invited to:
 - a. Consider and discuss the information presented in this working paper; and
 - b. Recommend appropriate action to encourage ANSPs to provide data link performance data to the CRAs.

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