



**INTERNATIONAL CIVIL AVIATION ORGANIZATION
South American Regional Office**

**REGIONAL PROJECT RLA/03/901
REDDIG Administration and Satellite Segment Management System**

THIRTEENTH MEETING OF THE COORDINATION COMMITTEE (RCC/13)

(Lima, Peru, 9-10 March 2010)

Agenda Item 3: 2010 Work Plan

**FOLLOW UP ON ACTIVITIES RELATED TO THE STUDY OF THE ADDITIONAL
BANDWIDTH REQUIREMENT FOR THE REDDIG**

(Presented by the Secretariat)

SUMMARY

This working paper contains a follow-up on the study of the additional bandwidth requirement for the REDDIG, in view of the implementation of new services in the coming years.

Reference

Report of the RCC/12 meeting (Lima, Peru, 9-10 March 2009)

Strategic Objective: D

1. Introduction

1.1 The RCC/12 meeting reported that the REDDIG had a total of 1,328 Kbps available for traffic among all the terminals of the network, equivalent to 83 bursts of 16 Kbits/s, and that the number of circuits implemented in the REDDIG was 42 for the dedicated ATS speech service, 49 for the ATS switched voice service, 39 speech circuits for administrative purposes, 58 AFTN circuits, 2 radar circuits, and 6 for meteorological data.

1.2 The RCC/12 meeting also reported that, during the peak period, the REDDIG used 976 Kbps, corresponding to 61 bursts, and equivalent to 73.5% utilisation of maximum available capacity.

1.3 In order to maintain a minimum reserve of 10% of total bursts in the REDDIG, the RCC/12 meeting noted that, in view of the need to maintain a “minimum reserve” of approximately 10% of total bursts before reaching maximum capacity, the total number of usable bursts would be 75 (83-8) to avoid saturation.

1.4 Taking into account the peak period in the REDDIG, the RCC/12 meeting informed that the bandwidth available in the REDDIG was adequate, since there was a reserve of 14 bursts.

1.5 Given the plans for the interconnection of AMHS systems, the interconnection of automated systems, as well as the implementation of new voice and data circuits for the MEVA II/REDDIG interconnection during the next three years, the RCC/12 meeting deemed it necessary to conduct a study to confirm the need for additional bandwidth in the REDDIG. In this sense, it formulated Conclusion RCC/12/2 *Study of the additional bandwidth requirement for the REDDIG*.

1.6 The meeting also considered that, regardless of the results of the study on bandwidth requirements, it would be advisable for the budget to contemplate a new carrier with a bandwidth of 1.25Msym/seg. starting in 2010

2. Analysis

2.1 The *ad-hoc* group designated to conduct a study on the REDDIG bandwidth requirements could not conclude said study because the trials to determine the minimum bandwidth for the interconnection of AMHS systems could not be completed. These trials would take place between the Ezeiza and Manaus MTAs, through the REDDIG, and should be completed by the end of March 2010.

2.2 Taking into account the cost in which the REDDIG would incur to increase the satellite bandwidth, the *ad-hoc* group felt that a study should be done on a regional ATN IP network initially made up by an IP ground network and the REDDIG.

2.3 Part of the initial study on a SAM ATN IP network is presented in WP/9 of this meeting. The initial study of a SAM regional ATN network should be completed by late 2010. Upon completion of the initial study on the Regional ATN IP network, more information would be available to analyse the need to request more satellite bandwidth for the REDDIG or to implement a SAM regional ATN IP network, initially made up by an IP ground network and the REDDIG.

2.4 It was also noted that the budget reserve for modifying the bandwidth of the current carrier from 0.625 Msym/sec to 1.25 Msym/sec would be maintained.

3 The Meeting is invited to:

- a) take note of the information provided;
- b) analyse the information contained in section 2, and approve the study of a SAM regional IP network to supplement the study on the REDDIG bandwidth requirement, and maintain the REDDIG budget reserve for the modification of the current bandwidth of the carrier from 0.625Msym/sec to 1.25Msym/sec; and
- c) analyse any other aspect related to this matter that the meeting may deem appropriate.