

**INTERNATIONAL CIVIL AVIATION ORGANIZATION
SOUTH AMERICAN REGIONAL OFFICE**

**FOURTH INFORMAL MEETING ON THE PLANNING AND
IMPLEMENTATION OF THE SAM DIGITAL NETWORK**

(REDDIG/4)

(Lima, 4 to 8 September 2000)

**Agenda Item 2: Technical and administrative aspects on the REDDIG backup
network**

(Presented by the Secretariat)

Summary

This working paper presents for the consideration of the meeting, matters regarding the REDDIG backup network as well as how it should be implemented in the States.

1. Introduction

1.1 This working paper is aimed at presenting to the meeting the matters considered during the REDDIG design, as well as those that should be analyzed by the States in regard to their local networks for the backup implementation.

1.2 During the network design phase, it was requested to the States a series of information on their communication systems in order to incorporate them in the REDDIG Technical specifications document, however most of the information received in this subject was partial, so it was omitted in the project of technical specifications (WP/1).

1.3 Based on the information presented in this working paper, and due to the project schedule, it would be of benefit for the project if the States can complete during the meeting, the particular technical information that should be included in the Technical specifications document.

2. **Technical aspects**

2.1 The REDDIG backup network is detailed in section 3.1.6. of the Technical specifications document. In this section it is specified that each REDDIG node will be switched to a digital mean of the public carriers in order to provide support in case of failure in the VSAT system.

2.2 The ideal mean to be used in each node is the ISDN BRI line for its resulting decrease in the operational costs of the network, due that the maintenance rate of this service is very similar to the commercial telephone line costs (less than 8 hours per year), and furthermore it allows to route the traffic to more than one node. As an alternative and when the ISDN service is not available, it has been considered the use of a dedicated digital line between two nodes. At locations where it is impossible to warrantee some of this possibilities, it should be used another means for the probable node contingency.

2.3 With regard to the backup circuits in each REDDIG node it is required only one line in each node, to support all communication services. It is not necessary a circuit with each State with which the node should establish communications. The backup circuits must be leased by each State and their availability should be assured before the beginning of the REDDIG node installation.

2.4 In section 3.1.6 of the Technical specifications document, appears a table of the alternate routing for consideration by the meeting.

3. **Action suggested**

3.1 The meeting is invited to take note of the information presented in this working paper regarding the backup circuits of the REDDIG network, and to make provisions well in advance, for the leasing of the backup lines in order to be available before the beginning of the node installation. Likewise, it is requested to the meeting to complete the information provided by the counterpart experts about the backup network.