

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

**UNDP/ICAO REGIONAL PROJECT RLA/98/019
IMPLEMENTATION OF THE SAM DIGITAL NETWORK (REDDIG)**

**FIRST MEETING OF THE TASK GROUP FOR THE
MANAGEMENT OF THE REDDIG NETWORK (GT/1)**

(Lima, Peru, 4 to 5 November 2002)

Agenda item 2: **Management of the REDDIG**

(Working paper presented by Brazil)

SUMMARY

This Working Paper presents a proposal of the Administration of Brazil for the management of the network after the initial period administered from the Lima node.

Reference:

- Summary of Conclusions and Decisions of the Second Meeting of the Coordination Committee of the REDDIG (RCC/2)
- Summary of Conclusions and Decisions of the Fourth Meeting about Planning and Implementation of the SAM Digital Network (REDDIG/4)
- Technical Specifications Document of the REDDIG

1 GENERAL CONSIDERATIONS

1.1 In the initial period of the operation of the REDDIG, the management of the network should be done from the Lima node, through personnel hired by the Technical Cooperation Project RLA/98/019.

1.2 In the REEDIG/4 meeting, the administration discussed the item and five working papers were presented to the meeting regarding the item. As result of the analysis of said working papers, the following options were identified:

- Option 1: The REDDIG managed through an ICAO technical cooperation project;
- Option 2: The REDDIG managed through services provided by a State;
- Option 3: The REDDIG managed through a rotation mechanism among different States; and
- Option 4: The REDDIG managed through a contractor or an engineering services company.

1.3 There was consensus about considering only options 1 and 2 as the most convenient for the States. The meeting agreed that the election of the management nodes would be decided later, depending of the administrations offering.

1.4 Later, during the Second Meeting of the Coordination Committee (RCC/2), the administrations decided by choosing option 1, with the possibility that one or more than one States contribute with resources to reduce the project costs.

2 SPECIFIC CONSIDERATIONS

2.1 According to the TSD, there should exist two nodes, one principal and other reserve node, with the capacity of carrying out the network management. According to alternative 1, the expert hired by the project would be in charge of the following tasks:

- Configuration management, making the necessary modifications in the REDDIG operation;
- Fault management, to be able to re-establish the circuits/nodes having faults;
- Technical support, in Spanish, Portuguese and English to the technicians of the States;

- Operation of the REDDIG, with a proactive management, to avoid errors and to be able to elaborate periodical reports for the States regarding the operation of the REDDIG and the provision of services;
- Management of the use and payment of the satellite segment;
- Update of necessary technology to improve the REDDIG;
- Management and supervision of the warranty services and technical assistance to be provided by the contractor.

2.2 The Administration of Brazil will be responsible for approximately 60% of the communications of the region, since it has 10 adjacent FIR's and maintains OPMET and BIA Banks that generate great part of the communication within the region.

2.3 Brazil has a satellite network with approximately one hundred stations, maintained and operated by local personnel, who have training and experience in the operation and maintenance of said network. Such experience could be provided by the Administration of Brazil to contribute to the success of the REDDIG, decrease of the response time (MTTR – medium time for the recuperation of fault), with the provision of supplies during 24 hours a day and the consequent reduction of shared costs among the States.

2.4 Regarding latitudinal separation between stations, in order to avoid simultaneous periods of solar interference, the station in Manaus has a separation which is most effective that the Lima node (where the management will be kept during the assisted operation of the network), considering the secondary node in Ezeiza.

2.5 The present installations in the Vigilance Centre in Amazônia (CVA), site of the SIVAM project, are ample and offer excellent technical conditions and trained personnel to operate as management node of the REDDIG. Likewise, the Manaus station is located in a site that is not affected by risks of natural environment, such as seismic movements and hurricanes.

2.6 Brazil will provide an important support, with the purpose of decreasing shared costs among the States, in conformity with paragraph 3.2 of this working paper.

3 RECOMMENDED ACTION

3.1 Based in the reasons presented above, the Brazilian Administration offers the Manaus node as the principal management node of the REDDIG, under option 1.

3.2 In order to decrease the shared costs among the States, Brazil will provide to the States an effective and periodic support in:

- Personnel for the operation and first intervention, with supervision during 24 hours a day, 365 days per year, and supplied in Spanish and English;
- Adequate premises for the installation of the office of the expert to be hired by the cooperation project;

4 CONCLUSION

4.1 The Administration of Brazil invites the meeting to discuss the possibility of using the installations in Manaus as the principal management node of the network, considering the contribution offered by Brazil, pointed out in paragraph 3.1 of this working paper.