

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

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

**FOURTH MEETING OF THE COORDINATION COMMITTEE**

(Lima, Peru, 30 – 31 January 2003)

Agenda Item 4.2: **Coordination for the activation of the new project for the management of the REDDIG**

(Paper presented by ICAO)

**Summary**

This working paper presents the conclusions of RCC/3 Meeting, which established the bases for the new technical cooperation project for the management of the REDDIG.

**1. Background**

1.1 The South American Digital Network (REDDIG) being implemented under the Regional Technical Cooperation Project RLA/98/019 will be in operation by April 2003 and, under the same, ICAO will manage the network for six months.

1.2 REDDIG is a regional effort designed to meet the current and future communication requirements in support to the implementation of ICAO CNS/ATM systems recommended in the CAR/SAM FASID.

1.3 During the REDDIG implementation period, a series of meetings of the Technical and Coordination Committees supervised and decided the most important events for the implementation process and the future maintenance, operation and administration of the network.

1.4 In this regard, the Third Meeting of the Coordination Committee (RCC/3), held in Lima, from 6 to 7 November 2002, agreed that for the future and once the RLA/98/019 Project terminates, the REDDIG should be managed using a multinational mechanism and that ICAO

should assist States in defining such mechanism. In this sense, RCC/3 meeting formulated Conclusion RCC 3/1 as follows:

**CONCLUSION RCC3/1 ICAO TECHNICAL COOPERATION  
PROJECT FOR THE MANAGEMENT OF  
THE REDDIG**

That ICAO prepare and present to the States for revision and comments a technical cooperation project document which objective would be that of assisting in the creation, as earliest as possible, of a multinational mechanism for the definite management of the REDDIG, and to facilitate the operation of the network while this scheme is being developed.

**2. Analysis**

2.1 For the formulation of the above Conclusion SAM States noted that REDDIG is a facility suitable to be managed under the new concept of multinational mechanisms in accordance with the characteristics of the CNS/ATM ICAO systems concept. However it was noted that prior the establishing of this multinational mechanism, further studies should be performed to find the more suitable arrangement to the States interests among the different alternatives.

2.2 In this regard, and recognizing the capability of ICAO Technical Cooperation, the States requested the Organization to assist them, as an transitory measure, on the administration of the REDDIG, during such period ICAO should carry out the studies for the drafting of a proposal for the establishment of this multinational mechanism.

2.3 Furthermore, it was requested that this proposal should be drafted and presented for the States approval, as soon as possible and in any case within the first two years of the project. Based on this considerations the RCC/3 formulated the Conclusion RCC3/2, which is reproduced below:

**CONCLUSION RCC3/2 DEFINITE MULTINATIONAL AGREEMENT**

That the States of the SAM region take the necessary steps to support the ICAO technical cooperation project for the establishment of a definite multinational agreement for the management of the REDDIG in order that this objective could be achieved as soon as possible and within a period of no more than two (2) years.

2.3 RCC/3 meeting also discussed several issues on the way to implement the transitory administration of the REDDIG by ICAO such as: satellite segment administration, Network Control Centres (NCCs) operation, as well as future condition to implement terrestrial CNS/ATM application such as AMHS and AIDC.

2.4 All these aspects and the required actions by ICAO/States indicated in the above Conclusion RCC 3/1 and RCC 3/2 were taken into account for the preparation by ICAO of the

corresponding draft technical cooperation project document, which was circulated for revision and comments to SAM States with State Letter Ref. SA5065 dated 16 January 2003. The draft project document, named RLA/03/901 is attached as **Appendix A**

2.4 It is expected that the feedback received from States during the meeting will allow ICAO to obtain an initial agreement regarding the new Regional Technical Cooperation Project to start the formal approval of the project document and the collection of States contributions.

2.5 Initial cost sharing contributions from SAM States is urgently required for the establishment with PanamSat of a new contract for the satellite segment that is a vital element for the future operation of the REDDIG and its consequential benefits for the States.

1. **Action suggested**

3.1 The meeting is invited to review **Appendix A** to this working Paper and to formulate the following Conclusion

**Conclusion RCC 4/XX - New Regional Technical Cooperation Project  
RLA//03/901**

That the States involved in the operation, maintenance and administration of the REDDIG, approve in principle the Project Document for the new Regional Technical Cooperation Project RLA/03/901, attached as **Appendix A** to this report, and request ICAO to proceed with its formal approval, and with the collection of the yearly cost-sharing contributions in order to activate the Project as soon as possible.

- END -

## ANNEX A

to the letter of Agreement among the South American Regional States and  
the International Civil Aviation Organization  
for the provision of technical cooperation financed by trust funds

## PROJECT DOCUMENT

Project Number:	RLA/03/901
Title:	System for the Management of the REDDIG
Duration:	4 years extendable
Sector and sub-sector:	Air Navigation - Communications
Executing Government:	Civil Aviation Authorities
Executing agency	ICAO
Start date:	July 2003
Project cost:	US \$ 2,064,000
<b>Participant States:</b>	Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Guyana, Peru, Surinam, Uruguay, Venezuela, Paraguay and France.

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**Brief description:** The objective of this project is to establish a multinational mechanism for the Administration of the South American Digital Network (REDDIG), taking into consideration the regional developments in this matter. Also the project, and while this multinational mechanism settles down, will manage the REDDIG temporarily and it implement CNS/ATM applications according with the CAR/SAM FASID.

Approved on behalf of:

State/Agency	Name	Signature	Position	Dates
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ICAO

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## **A. CONTEXT**

### **1 Description of the sub-sector**

1.1 The Convention on International Civil Aviation, signed at Chicago on 7 December 1944 (Chicago Convention), stipulates certain principles and arrangements so international civil aviation may be developed in a safe and orderly manner and that the international services of air transport may be established on the basis of equality of opportunities and operated soundly and economically.

1.2 The Chicago Convention gave origin to the International Civil Aviation Organization (ICAO) which aims and objectives are to develop the principles and techniques of international air navigation and to foster the planning and development of international air transport to ensure the safe and orderly growth of international civil aviation throughout the world.

1.3 The Convention provides the adequate reference frame to identify and define the responsibilities of States with regard to the administration of civil aviation and the organic way and methods to be followed in order to comply with their mandate.

1.4 All States participating in this regional project are parties of the Chicago Convention and members of ICAO.

### **2 SAM States strategy**

2.1 As ICAO contracting States and signatories to the Convention on International Civil Aviation participant State in this project have accepted specific obligations in respect of the implementation of internationally agreed Standards and Recommended Practices governing international civil aviation. The Director of Civil Aviation or similar administrative authority in each State is responsible for ensuring that the civil aviation administration observed and complies with these international obligations.

2.2 Among such obligations, civil aviation administrations are currently responsible for the development and implementation of facilities, services and procedures necessary for the safety, regularity and efficiency of air operations. The orderly and timely implementation of such facilities, services and procedures is agreed by contracting States and coordinated by ICAO by means of air navigation regional plans.

2.3 Air navigation plans determine in detail the facilities, services and procedures necessary for international air navigation within a specified area. These plans contain recommendations that may be followed by governments in their programmes for the provision of air navigation facilities and services, ensuring that both, if provided in accordance with the plan, will form, together with those of other States, a general network that will be adequate for a long period of time.

2.4 Each contracting State is responsible for the provision of facilities and services within its territory, in accordance with Article 28 of the Convention. The ICAO Council has recommended that such facilities and services include those specified in the air navigation plans. With regard to the Caribbean (CAR) and South American (SAM) regions, the planning of such facilities and services is contained in Doc 8733, Air Navigation Plan – Caribbean and South American Regions, Volume II-FASID.

2.5 The air navigation plan for the CAR and SAM regions present in a concise manner ICAO plans for the provision of facilities, services and procedures of international air navigation in the Caribbean and South American Regions. Certain facilities and services are included outside of the prescribed regional limits, in order to maintain the integrity of the systems and of ensuring, insofar as possible, that all the facilities and services facilitated by any State figure in an air navigation plan document. Most of the plan is originated in the recommendations of the concerning air navigation regional conferences summoned by ICAO, mainly and in the case of the CAR/SAM Regions, the recommendations formulated by the Third CAR/SAM Regional Air Navigation Meeting (RAN CAR/SAM/3).

2.6 It corresponds to each State the task of providing facilities and services foreseen in the plan within its territory. Since financial and technical resources substantially vary from one State to another, an unequal execution of certain parts of the plan can be given. Therefore, ICAO makes all the possible effort to ensure the homogeneous execution of the plans and to assist the governments in the implementation of the facilities and services foreseen, including those systems that require of mechanisms of multinational type for its operation and maintenance, taking into consideration, the guidance material included in the CARSAM FASID and the pertinent recommendations on this matter of the RAN CAR/SAM/3 Meeting.

### 3. **Prior or ongoing assistance addressed to the same sub-sector**

3.1 The ICAO Regional Project RLA/90/900 on implementation of the ATS Speech Circuits Networkd in South America, executed between 1991 and 1993, provided assistance to Argentina, Brasil, Chile, Colombia and Peru to start up the trunk network of the air traffic services speech circuits plan assisting in overcoming the problems confronted by participant States for the interconnection of the main automatic switching centres of the network.

3.2 In order that the region can attend the requirements formulated in the CAR/SAM FASID for the AFS, the UNDP/ICAO Regional Project RLA/98/019 on the Implementation of SAM Digital Network (REDDIG), executed between 1998 and 2003, provided assistance to the States of the Region in the acquisition, installation, setting in operation and mange during six months the South American Digital Network (REDDIG) which was, dedicated to modernize the communications of the aeronautical fixed service and to establish a digital platform for the installation of CNS/ATM applications.

### 4. **Regional institutional framework for the sub-sector**

4.1 ICAO maintains a Regional Office in Lima, accredited to the States participating in this project, in charge of promoting and fostering the application of the international standards, recommended practices and international procedures established in the Annexes to the Convention on International Civil Aviation and implementation of the regional plan of air navigation.

4.2 The Regional Air Navigation Planning and Implementation Group for the Caribbean and South America (GREPECAS) is the regional mechanism in charge of ensuring the continuing implementation of the regional air navigation plan and determine the specific problems affecting air navigation suggesting the appropriate solutions. Some States participants in this project are members of the GREPECAS.

4.3 GREPECAS has recommended States and the ICAO's South American Regional Office to carry out, based on specifications provided by that mechanism, the implementation of a Digital

Network in the SAM Region (REDDIG). The recommendation is contained in Conclusion 6/27 of the GREPECAS/6 Meeting. In consideration to this Conclusion ICAO organized and coordinated with interested States the implementation of the South American Digital Network (REDDIG) through the Technical Cooperation Project RLA/98/019.

4.4 The ICAO Technical Cooperation Bureau (TCB) at ICAO's headquarters in Montreal, through the South American Regional Office, maintains contacts with States contracting parties that require or receive technical cooperation in the field of civil aviation and coordinates the administration and execution of the agreed assistance.

## **B. PROJECT JUSTIFICATION**

### **1 Problems to be faced: present situation**

#### **1.1 Problem identification**

1.1.1 At the end of the Technical Cooperation Project RLA/98/019 the participating States will obtain a modern, effective, reliable and efficient network, implemented homogeneously in the SAM region to satisfy in the medium-term the requirements of the aeronautical fix services and to support those of the aeronautical mobile services. The REDDIG, as all modern VSAT digital networks designed to support automated systems using distributed data processing, is based in the sharing by its users of satellital segment and network resources in order to establish a management and control system for the network. This management and control system should be operational based on clear procedures and in accordance to the interests of the user States. Likewise and with the purpose of being able to maintain the efficiency of the exploitation costs, it is necessary to count with an administration that can control the satellital resources and the use of the bandwidth in benefit all the parties involved.

1.1.2 On the other hand, the REDDIG, which has been conceived as an installation capable of satisfying the global concepts of ICAO CNA/ATM global concepts, would require of an entity that can harmonize and conduct the implementation of CNS/ATM applications that would permit inter-operability of data processing systems existing in the region.

1.1.3 The above mentioned matters permit to clearly determine that the REDDIG operation characteristics and the communications provision to the users, are such that perfectly fit within the concepts of the need to count for this installation with a management system that would allow, on behalf of participating States and network owners, to manage the same in benefit of the air navigation services to be provided by the States in agreement with the requirements of the Regional Air Navigation Plan, and to progressively conduct the transition to the ICAO CNS/ATM systems within the region, with the corresponding inter-regional interfaces.

1.1.4 In consideration of the above, the Second Meeting of the Coordination Committee of the REDDIG, held in Lima, Peru, from 31 July to 2 August 2002, while examining the existing background information on the options for the REDDIG management, it was decided that the network management carried out through a multinational mechanism, and that ICAO (Conclusion RCC 3/1) provide support to assist the States in the creation of this mechanism and its establishment in a term of no more that 2 years. Likewise, the mentioned Meeting established the basis for the technical management system of the REDDIG as well as the scheme of cost-sharing distribution, payment of satellital segment and implementation of CNS/ATM applications.

1.1.5 In this sense and within the framework of this project, ICAO assistance will be provided to the States as required by the Third Meeting of the Coordination Committee of the REDDIG, having in consideration regional developments of multinational mechanisms.

## 2. **End-of-project situation**

2.1 The REDDIG, constituted by 15 nodes will be operational and transferred to States after finalizing the work of Technical Cooperation Regional Project RLA/98/019.

2.2 It is expected that, when finalizing this project, States will count with a multinational mechanism activated for the network management, and the corresponding ICAO assistance regarding the management of the same while this mechanism is established. Likewise, ATM/CNS applications identified by this project and agreed with the States would have to be implemented.

## 3. **Need for future assistance**

3.1 In accordance with project progress, it is possible that participating States require additional assistance.

## 4. **Target beneficiaries**

4.1 Beneficiaries of the results of this project will be civil aviation administrations, air operators and services users. Also a sensible improvement of air communications systems will be achieved, which will redound in the increase of air operation safety, reduction of fuel cost, decrease of flight delays and increase of the capacity of voice and data communications of the air navigation system.

## 5. **Project strategy and institutional arrangements**

5.1 The strategy of the project is based in the participation of the civil aviation organisms and personnel from the States who have been participating in all the stages of its development with the advisory and technical support through missions of experts and follow up of support actions aiming to achieve the objective.

5.2 The civil aviation administrations of States where management nodes are established will provide the installations, services, supplies and personnel with the appropriate experience to ensure the satisfactory progress of the project activities, while this project administers the network.

## 6. **Reasons for the assistance of ICAO**

6.1 The States, through the different stages of analysis in several meetings about the implementation and administration of the REDDIG, have agreed on the need to formulate an institutional agreement to operate and manage this network. Within these lines, they agreed that a multinational mechanism would be most appropriate mechanism for this matter.

6.2 As it is known in the international air community, ICAO is from more than half century ago the organism of the United Nations system specialized in civil aviation and, as such, it is responsible of providing the referential framework for virtually all the civil aviation regulations of its contracting States. The same experts that provide assistance for the development and maintenance of this referential framework provide technical support to the ICAO Technical Cooperation Programme. On this basis, since 1952, ICAO has been executing technical assistance projects for its contracting States in a neutral, non-profitable manner, and therefore more positive with relation to costs.

## 7. **Special considerations**

7.1 The regional project will maintain links with the technical cooperation national programmes that have under execution participating States for the same sub-sector, with the purpose of coordinating and complementing the activities required at country level with the support of its national projects.

## **8. Coordination arrangements**

8.1 Project coordination will be centralized in ICAO Technical Cooperation Bureau in Montreal, which will designate the International Coordinator and will inform participating States of this nomination.

8.2 ICAO Regional Office in Lima will support the International Coordinator nominated by ICAO Technical Cooperation Bureau in the supervision of the project activities in its technical and operational aspect.

8.2 Regarding the technical aspect, the ICAO Regional Office for South America will make the necessary arrangements for the control and follow-up of the activities and results of the project, taking into account, among other aspects, conclusions and recommendations adopted by States in the framework of the GREPECAS in items related to the objectives of the project.

8.3 The management of the REDDIG will be carried out the network administrator hired by ICAO Technical Cooperation Bureau.

## **9. Counterpart support capacity**

9.1 Participating States should assume a full participation commitment in all the project activities and accept the technical and supervisory missions to be programmed to visit the installations and air navigation services involved. They convene, likewise, in applying or executing the results and recommendations of the project in aspects in which they are concerned.

9.2 The civil aviation administrations of participating States will provide the necessary counterpart support for the successful execution of the project and to ensure the maintenance of its results. This support could include the participation of professionals or other personnel at full or partial time, as well as the provision of offices, classrooms, furniture, equipment, expendable material, local transport, telephone, telephone/fax and other essential services for the effective performance of the activities of personnel assigned for the project during the period of their mission.

**C. DEVELOPMENT OBJECTIVE**

The project will contribute to support the operation and expand the services of a modern regional aeronautical communication system in benefit of the international air transport, as means to support the social, economic and cultural development of the region.

**D. IMMEDIATE OBJECTIVES, OUTPUTS AND ACTIVITIES**

They are described on the following pages.

Abbreviations used in the third column mean:

RO	ICAO South American Regional office in Lima
CAAs	Civil Aviation Administrations or equivalent authorities
TCB	ICAO Technical Cooperation Bureau in Montreal
PRO	Procurement Unit of the Technical Cooperation Bureau in Montreal
NA	Network Administrator
IAC	Institution Aspects Consultant
RCC	REDDIG Coordination and Technical Committee

**Immediate Objective No. 1**

Elaborate a proposal for the establishment of a multinational mechanism for the definitive administration of the network, considering the studies on this subject to be carried out by GREPECAS.

**Success criteria**

A harmonized proposal based on the SAM Region States' interests will be available for the establishment of a multinational mechanism for the administration of the network.

<b>Outputs</b>	<b>Activities</b>	<b>Party responsible for each activity</b>
1.1 Analysis of the possible multinational mechanisms to provide air navigation services in order to determine an arrangement for the administration of the network.	1.1.1 Compile information from the existing multinational mechanisms for the provision of air navigation services, such as: a) COCESNA b) Eurocontrol c) Iceland Agreement d) Others	IAC
	1.1.2 Prepare a comparative chart on the advantages and disadvantages of the possible multinational mechanisms in order to determine an arrangement on this matter for the administration of the network .	IAC
	1.1.3 Analyze the best alternatives for a definitive arrangement that allows the establishment of a multinational mechanism for the administration of the network.	IAC, RO
1.2 Proposal for the establishment of a multinational mechanism for the administration of the network elaborated.	1.2.1 Considering the CAR/SAM FASID guidance material, and the study of the previous output, prepare a multinational mechanism project for the administration of the network.	IAC, RO, NA

**Immediate Objective No. 1**

Elaborate a proposal for the establishment of a multinational mechanism for the definitive administration of the network, considering the studies on this subject to be carried out by GREPECAS.

**Success criteria**

A harmonized proposal based on the SAM Region States' interests will be available for the establishment of a multinational mechanism for the administration of the network.

<b>Outputs</b>	<b>Activities</b>	<b>Party responsible for each activity</b>
1.3 Proposal on the definitive multinational mechanism for the administration of the network, approved.	1.3.1 Project of proposal on the multinational mechanism presented to the following interested parties requesting their comments: a) SAM States; b) GREPECAS; and c) Meeting of Civil Aviation Authorities in the SAM Region .	RO
	1.3.2 Evaluate the comments received and consider them in the preparation of the final proposal.	IAC, NA, RO
	1.3.3 Circulate the final proposal to the States requesting its approval	RO
	1.3.4 Approval of the proposal on a multinational mechanism for the administration of the network	CAAs
1.4 Arrangements to activate the multinational mechanism for the administration of the network, prepared	1.4.1 Based in the result of 1.3, coordinate with the States the necessary arrangements for the implementation of the approved mechanism.	RO, TCB, CAAs
	1.4.2 Based in activity 1.4.1 prepare a working programme and determine the date of activation of the multinational mechanism.	RO, IAC; NA

**Immediate Objective No. 2****Success criteria**

Administration of the network under the conditions established by the Third Meeting of the Coordination Committee (RCC/3)

Adequate Administration of the network under the direct management of the project.

<b>Outputs</b>	<b>Activities</b>	<b>Party responsible for each activity</b>
2.1 Administration of the network under the direct management of the project.	2.1.1 Management the network during the transition period to the definitive multinational mechanism providing the following services to keep the network operating:	TCB, NA, RO
	a) Assist the States and provide the necessary training for the correct operation of the network nodes	NA
	b) Supervise and control in an efficient manner the network operation, providing the appropriate assistance to the nodes for the identification and solution of operation problems that might arise.	NA
	c) Manage the network configuration keeping the system data base updated with the corresponding information of the nodes bandwidth.	NA
	d) Prepare monthly reports on the activities of the network administration and the operating status of the system and circulate them to the States.	NA, RO
	e) Follow up the aspects of the guarantee contracted for the network.	NA, TCB
	f) Verify periodically the network maintenance programmes improving them.	NA, RO
	g) Establish the corresponding procedures to duly coordinate the operation of the NCC's (Manaus/Ezeiza).	NA
	h) Establish a spare part policy for the network to guarantee its support and continuous supply.	NA, TCB

**Immediate Objective No. 2****Success criteria**

Administration of the network under the conditions established by the Third Meeting of the Coordination Committee (RCC/3)

Adequate Administration of the network under the direct management of the project.

<b>Outputs</b>	<b>Activities</b>	<b>Party responsible for each activity</b>
	2.1.2 Coordinate with the States other administrative aspects established for the operation of the network, as follows: <ul style="list-style-type: none"> <li>a) Supplies provided by the States.</li> <li>b) Quantity and quality of the human resources to be provided by the States for the operation and maintenance of the network.</li> <li>c) Facilities, access to site, transportation/mobilization, personnel assistance, telecommunication means, etc.</li> </ul>	NA, RO
2.2 REDDIG Budget approved.	2.2.1 Prepare and present annually to ICAO Lima Office a budget on the network administration for its approval.	NA
	2.2.2 Prepare an annual activity report of the network administration and the programme of activities for the next year including the budgetary provisions.	NA
	2.2.3 Prepare the annual budget of the network	RO
	2.2.4 Convene to the Network Coordination and Technical Committee in August of each year	RO
	2.2.5 Approve the annual budget of the network	RCC
	2.2.6 Verify and approve the annual activities presented by the network administrator	RCC
	2.2.7 Verify and approve the expenses and accounts of the network administration.	RCC

**Immediate Objective No. 2****Success criteria**

Administration of the network under the conditions established by the Third Meeting of the Coordination Committee (RCC/3)

Adequate Administration of the network under the direct management of the project.

<b>Outputs</b>			<b>Activities</b>	<b>Party responsible for each activity</b>
2.3	Space Segment Leased	Satellital	2.3.1 Based on Conclusion RCC 3/7 of the Third Meeting of the Coordination Committee, establish the most convenient arrangement for the leasing of the Panamsat satellital segment.	TCB; RO; NA
			2.3.2 Approve the arrangement proposed by Panamsat	CAAs
			2.3.3 Collect the funds for the lease of the satellital segment space and sign the contract.	TCB; RO

**Immediate Objective N° 3****Success Criteria**

In accordance with the CAR/SAM FASID requirements and in coordination with project RLA/98/003, plan the regional development of CNS/ATM applications and implement them.

Elaborate an action plan for the implementation of CNS/ATM applications on the REDDIG network platform in coordination with the States.

<b>Outputs</b>	<b>Activities</b>	<b>Party responsible for each activity</b>
3.1 Identified CNS/ATM applications.	3.1.1 Study the available CNS/ATM applications successfully implemented for the aeronautical fixed service by recognized companies.	RO, NA
	3.1.2 From the technical point of view study their implementation in the network and select them..	RO, NA; CAAs
3.2 Implementation plan of the CNS/ATM applications, approved	3.2.1 Coordinate with the States the technical aspects required for the implementation of the selected CNS/ATM applications.	NA, CAAs
	3.2.2 In coordination with RLA/98/003 Project activities, prepare an implementation plan for the CNS/ATM applications including among other things the following: <ul style="list-style-type: none"> <li>a) Interoperability with the conventional applications;</li> <li>b) general technical specifications for hardware and software;</li> <li>c) requirements of the system and functionalities;</li> <li>d) costs; and</li> <li>e) coordination arrangements and responsible parties.</li> </ul>	RO, NA
	3.2.3 Approve plan developed in 3.2.2.	RCC

### 3.3 CNS/ATM

Applications for the fixed service implemented in the REDDIG platform

3.3.1 Based on the approved plan in 3.2.4 execute the following:

- a) propose an amendment to the project budget in order to develop the action plan for the implementation of the applications. TCB
- b) Approve the mentioned amendment. CAAs
- c) Develop an action plan for the implementation of CNS/ATM applications in the network platform. TCB
- d) Approve the action plan. CAAs

## **E. INPUTS**

### **1. Inputs of the participating Governments**

#### **1.1 Personnel**

1.1.1 The States with Network Management nodes (NCCs), Brazil and Argentina will provide:

- a) The necessary national personnel to guarantee the monitoring of the network situation during the 24 hours of the day and that will support the work of the network Administrator.
- b) The administrative support to the project's follow up missions, as necessary.

#### **1.2 Facilities and equipment**

1.2.1 The equipment rooms, furniture, REDDIG equipment, local transportation and external communications facilities for the REDDIG management nodes and the Network Administrator will be provided by the States with management nodes. The project's International Coordinator will timely communicate the details of these requirements.

## **2. Inputs**

### **2.1 Assignment of National Professionals**

2.1.1 The following international professionals will be provided:

11-01	REDDIG Administrator	24.0 months
11-97	Institutional Aspects	2.0 months
11-98	Other Consultants	4.0 months

2.1.2 The project tentative work plan is presented in **Attachment 1** and the description of the posts in **Attachment 3**.

### **2.2 Transportation of the Lima Management Node and Replacements**

2.2.1 Funds for an amount of USD 115,000.00 are foreseen for the transference of the Lima NCC to Manaus. The NCC was initially located in Lima by RLA/98/019 project.

2.2.2 Likewise, funds for an amount of USD 100,000.00 are foreseen for the acquisition of the necessary replacements for the correct operation of the REDDIG.

2.2.3 The States requesting replacements should deposit in the project's account the costs of these replacements and the expenses to be incurred by the project for its shipment and internationalization.

### **2.2 Administrative support**

2.2.1 Argentina with its management node in Ezeiza and Brazil with the management node in Manaus will provide the necessary administrative support personnel to ensure the development of the project activities.

### 2.3 Official travels and missions

2.3.1 Funds to cover the costs of official travels of the project's personnel and coordination, follow up and project revision missions are provided as necessary.

### 2.5 Premises, furniture and equipment

2.5.1 The States with REDDIG management nodes will provide the project premises, furniture and the necessary equipment, according to the list presented in **Attachment 4**.

### 2.6 Miscellaneous

2.6.1 Budgetary provisions to cover project miscellaneous expenses, preparation of reports and translation of documents are included.

### 2.7 Cost sharing

2.7.1 The costs of the leasing of the satellital segment will be initially distributed taking into consideration the band width used by each node shown in **Attachment 5** and furtherly based in the real traffi of each node.

2.7.2 The inputs cost balance, estimated in the project budget, will be equally distributed among participant States for each node.

2.7.3 Participating States undertake to make the deposit of their cost sharing contributions according to the deposit schedule shown in **Attachment 6**.

## F. RISKS

1. Los factores que podrían ser causa de demora o impedir el logro de los resultados y objetivos del proyecto son la falta de pago oportuno de las contribuciones de costos compartidos de los Estados participantes.

2. Un probable factor que con el tiempo podría ser causa de demoras graves o impedir el logro de los resultados y objetivos del proyecto sería un cambio drástico de la situación política o económica en los Estados participantes.

## G. PREVIOUS OBLIGATIONS AND REQUIREMENTS

1. The funds corresponding to cost sharing contributions of participating Governments should be deposited immediately after the project approval, in the dates foreseen in the deposit schedule shown as **Attachment 4**, so that the executing agency could perform the activities adequately.

2. Host Governments of project activities will provide project's international personnel with all the reference material and background available regarding the activities to be developed, as well as the authorizations, approvals, licences and logistics support required for the development of their functions.

3. Participating Governments will provide the necessary counterpart support so that the project could obtain an efficient development, reach its objectives and keep its results. To that effect, technical cooperation recipient agencies, matter of this project, will participate with the assignment of the counterpart personnel required and will provide the necessary premises, office equipment, vehicles, materials and services.

4. Participating Governments will ensure the application of the legal dispositions necessary to retain in service the personnel trained by the project for at least two years.

## **H. SURVEILLANCE, PRESENTATION OF REPORTS AND PROJECT REVISIONS**

1. The project will be monitored at least once every 12 months in the REDDIG Technical Committee and Coordination meetings, and the first of such monitoring meeting will be held within the first 12 months from the beginning of the complete execution and that will preferably be made in the month of August of each year. The project's international coordinator will prepare and submit a project monitoring report to each of the examination meetings using the format for the preparation of the annual monitoring report included in **Attachment 7**. During the project execution other additional reports of this kind may be required, as necessary.

2. A project final report will be prepared for its consideration in the final examination meeting. The draft of such report will be prepared with enough anticipation so that the executing agency may review it and adjust the technical aspects at least four months before the final examination. A description of the project reports and examinations is included in **Attachment 3**.

3. ICAO could perform the following kinds of revisions to the present project document, which will be presented to the REDDIG Coordination Committee for its consideration and to ensure that the undersigned of the project document have no objections to the proposed changes.

- a) Revisions of any of the attachments to the project document or additions to them;
- b) Revisions that do not imply significant changes in the immediate objectives, the results or project activities, but are due to a redistribution of the inputs already agreed or to the increase of the expenses, due to the inflation; and
- c) An obligatory annual revision through which the delivery of the project inputs agreed are spread out or the expenses increased due to the inflation or the flexibility margin of the executing agency regarding the expenses is considered.

## **J. BUDGET**

The project budget is presented in the following pages.

**BUDGET CORRESPONDING TO TRUST FUND CONTRIBUTIONS**  
(In U.S. Dollars)

Country: Regional for Southamerica  
Project: RLA/03/901/A  
Title: System for the Management of the REDDIG

Start date: 1 July 2003

Termination date: 31 December 2007

	Execut. Agency	*----- M/M	TOTAL US\$	*----- M/M	2003 US\$	*----- M/M	2004 US\$	*----- M/M	2005 US\$	*----- M/M	2006 US\$	*----- M/M	2007 US\$
10	PROJECT PERSONNEL												
11	International Professionals												
11.01	ICAO	24.0	219,300	6.0	52,900	12.0	109,900	6.0	56,500				
11.97		6.0	108,100	2.0	34,300	2.0	35,000	1.0	19,200	1.0	19,600		
11.99	Sub-Total	30.0	327,400	8.0	87,200	14.0	144,900	7.0	75,700	1.0	19,600	0.0	0
15	Official travel		27,000		5000		5,200		5,400		5,600		5,800
16	Missions costs		60,500		12,100		12,100		12,100		12,100		12,100
19	<b>COMPONENT TOTAL</b>		414,900		104,300		162,200		93,200		37,300		17,900
20	SUB-CONTRACTS												
21.01	Leasing of Satellital Segment		1,156,500		231,300		231,300		231,300		231,300		231,300
29	<b>COMPONENT TOTAL</b>		1,156,500		231,300		231,300		231,300		231,300		231,300
40	EQUIPMENT												
45.01	Expendable Equipment	ICAO	100,000		100,000								
45.02	Non-expendable equipment	ICAO	130,800		39,600		22,800		22,800		22,800		22,800
45.03	Operation & maintenance of equipment	ICAO	8,000		2,000		2,000		2,000		2,000		
45.04	Transfer of the NCC of SPIM to SBMN		115,000		115,000								
45.99	Sub-Total		353,800		256,600		24,800		24,800		24,800		22,800
49	<b>COMPONENT TOTAL</b>		353,800		256,600		24,800		24,800		24,800		22,800
50	MISCELLANEOUS												
53.01	Miscellaneous expenses	ICAO	24,800		14,800		4,600		2,900		1,500		1,000
55.01	Administrative Costs	ICAO	114,000		48900		28,500		19,000		9,900		7,700
53.99	Sub-Total		138,800		63,700		33,100		21,900		11,400		8,700
59	<b>COMPONENT TOTAL</b>		138,800		63,700		33,100		21,900		11,400		8,700
99	<b>PROJECT TOTAL</b>		2,064,000		655,900		451,400		371,200		304,800		280,700

**BUDGET CORRESPONDING TO TRUST FUND CONTRIBUTIONS**  
(In U.S. Dollars)

Country: Regional for Southamerica  
Project: RLA/03/901/A  
Title: System for the Management of the REDDIG

Start date: 1 July 2003

Termination date: 31 December 2007

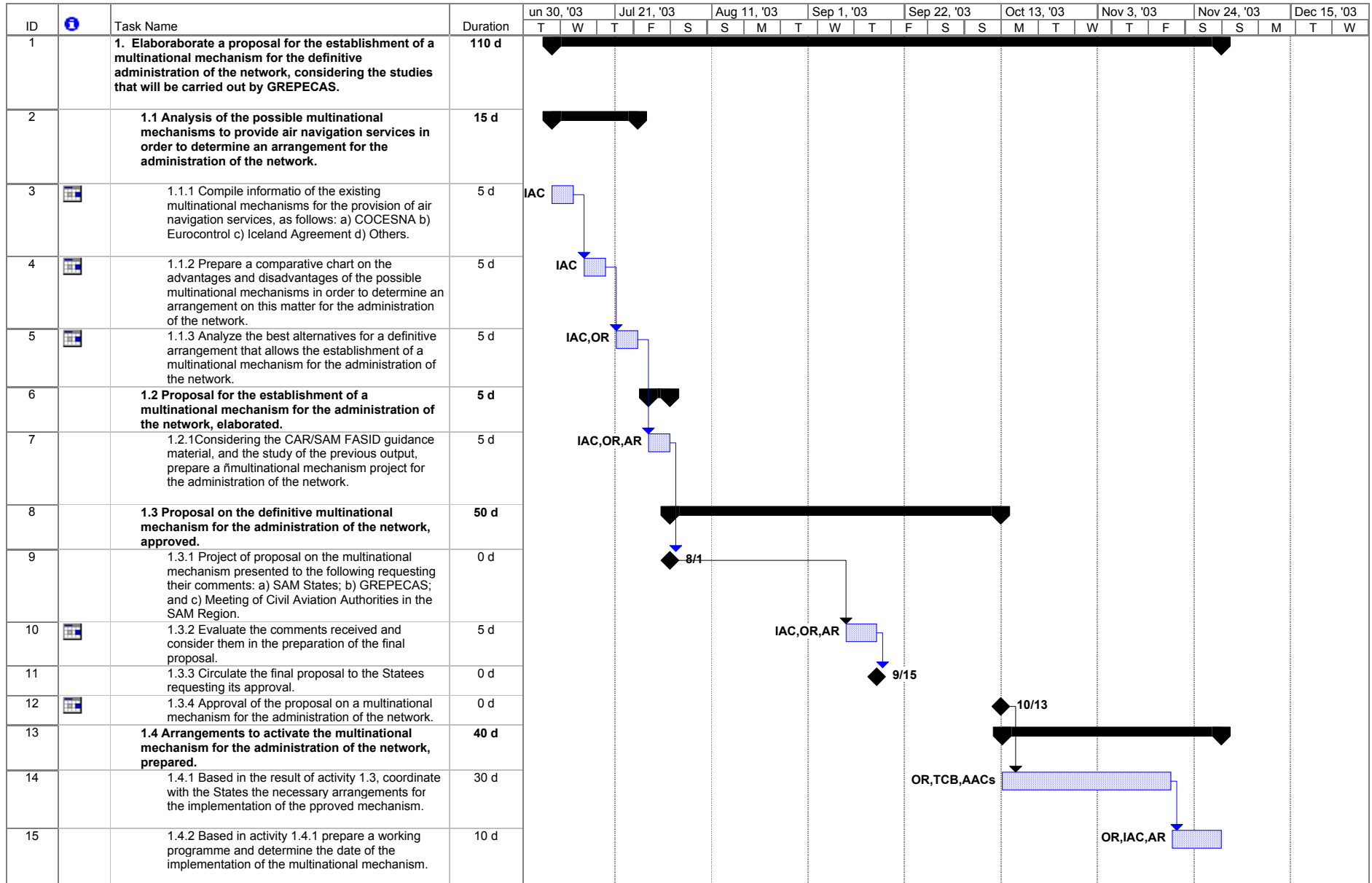
	Execut. Agency	*----- M/M	TOTAL US\$	*----- M/M	2003 US\$	*----- M/M	2004 US\$	*----- M/M	2005 US\$	*----- M/M	2006 US\$	*----- M/M	2007 US\$
100	COSTS SHARING CONTRIBUTIONS												
101	Government Cost Sharing Contributions												
101.01	Argentina		191,309		57,562		41,081		34,912		29,804		27,950
101.02	Bolivia		137,309		46,762		30,281		24,112		19,004		17,150
101.03	Brazil		296,309		78,562		62,081		55,912		50,804		48,950
101.04	Chile		139,559		47,212		30,731		24,562		19,454		17,600
101.05	Colombia		178,559		47,212		40,481		34,312		29,204		27,350
101.06	Ecuador		144,059		48,112		31,631		25,462		20,354		18,500
101.07	Guyana		111,059		41,512		25,031		18,862		13,754		11,900
101.08	Perú		187,559		56,812		40,331		34,162		29,054		27,200
101.09	Suriname		111,057		41,510		25,031		18,862		13,754		11,900
101.10	Uruguay		177,058		54,712		38,230		32,062		26,954		25,100
101.11	Venezuela		160,557		51,412		34,931		28,760		23,654		21,800
101.12	Paraguay		116,304		42,560		26,080		19,910		14,804		12,950
101.13	Francia		113,302		41,960		25,480		19,310		14,202		12,350
101.99	Sub-Total		2,064,000		655,900		451,400		371,200		304,800		280,700
109	TOTAL DEL COMPONENTE		2,064,000		655,900		451,400		371,200		304,800		280,700

## **ATTACHMENTS**

1. Project Tentative Work Plan
2. Project Revisions and Reports
3. Posts descriptions
4. Furniture and equipment
5. Band width used by each node
6. Deposit Schedule
7. Format for the preparation of the annual report



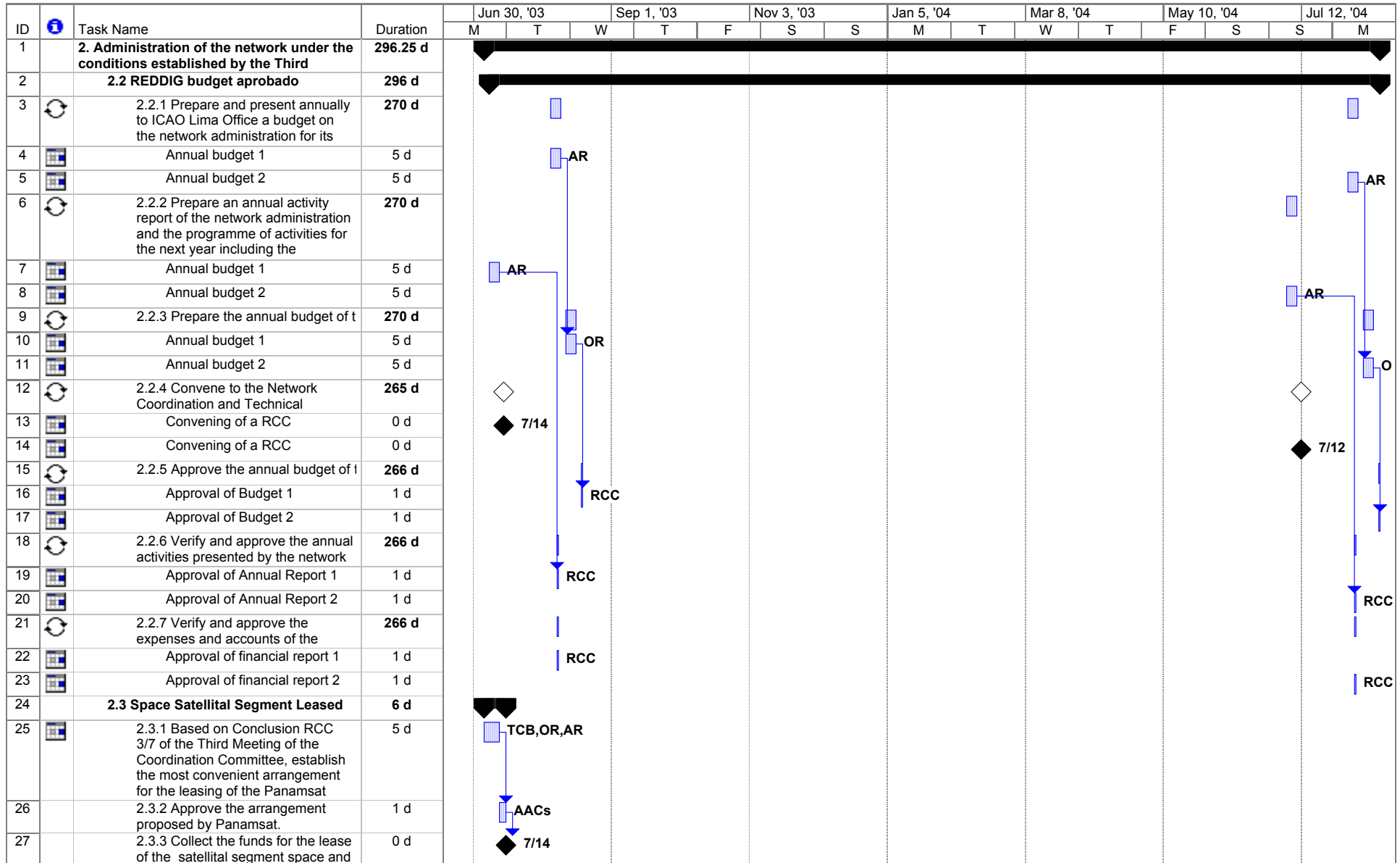
# Gantt Chart RLA/03/901 Project Administration System of the REDDIG Objective 1





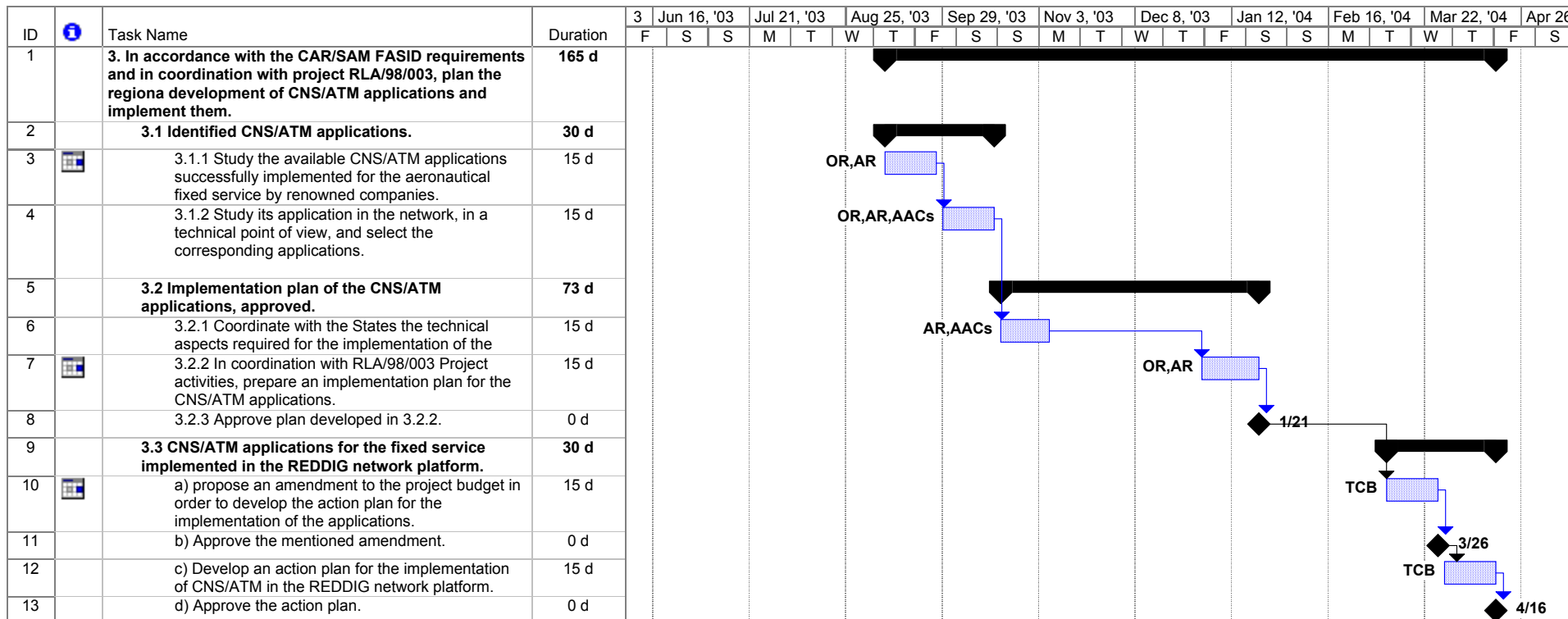


# Gantt Chart RLA/03/901 Project Administration System of the REDDIG Results 2.2 & 2.3





# Gantt Chart RLA/03/901 Project Administration System of the REDDIG Objective # 3



**PROJECT MONITORING REPORTING AND EVALUATION**

1. Annual meetings of the REDDIG Technical and Coordination Committees will be made together with ICAO to monitor the advances of the project and for the approval of next year budget.
2. The revisions will be made against the Document of Project and of the project annual monitoring report to be prepared by the International Coordinator according to the established procedures for this type of reports.
3. When beginning the project activities and every time that it is deem necessary, the International Coordinator will revise and upgrade the project work plan to remit it to the Technical Cooperation Bureau and ICAO Regional Office.
4. The project experts will prepare reports on the missions made to participant States these will be presented to the ICAO Regional Office for their later transmission to the respective authorities.
5. The International Coordinator will prepare a Project Final Report for ICAO's revision four months before the termination of the project. The final version of this report will be considered in the final revision meeting.

**JOB DESCRIPTION**

**Project No.:** RLA/03/901  
**Post No.:** 11-01  
**Title:** Administrator of the network  
**Place:** Manaus, Brazil  
**Start date:** 1 July 2003  
**Duration:** 24 months  
**Language requirements:** Spanish and English  
**Level** P4

**Qualifications:**

1. University degree in Electronic Engineering with specialty in telecommunications.
2. Experience in the planning, preparation of technical specifications for digital VSAT networks, their installation and setting in operation; knowledge of handling of databases, calculation and computer science.
3. Five years of professional experience in the operation and maintenance of digital networks.
4. Experience acquired in a position of superior level in the administration of the pertinent services of electronic engineering and presentation of reports.
5. Knowledge of the industry regulations and international regulations applicable to digital nets.
6. Knowledge of ICAO rules and recommended practices, procedures, manuals and regional planning.
7. It is desirable to be familiar with ICAO administrative procedures, coordination requirements, guidelines and regulations that govern the Program of Technical Cooperation and experience in the handling of technical cooperation projects, including the coordination of their activities.
8. To possess initiative, tact, good judgment and ability to foster and maintain harmonious working relationships.

**Duties:**

Under the technical coordination of the ICAO South American Regional Office:

1. Considering the CAR/SAM FASID guidance material, and the study of output 1.1, prepare a multinational mechanism project for the administration of the network.
2. Evaluate the comments received and consider them in the preparation of the final proposal.
3. Based in activity 1.4.1, prepare a working programme and determine the date of the implementation of the multinational mechanism.

4. Administrate the network during the transition period to the definitive multinational mechanism providing the following services to keep the network operating:
  - a) Assist the States and provide the necessary training for the correct operation of the network nodes.
  - b) Supervise and check the network operation, seeking the optimum efficiency, and providing the appropriate assistance to the nodes for the identification and solution of the operation problems that will arise.
  - c) Administrate the network settings keeping the system database updated with the corresponding information of the bandwidth node.
  - d) Prepare monthly reports on the activities of the network administration and the operating status of the system and circulate them to the States.
  - e) Follow up the aspects of the guarantee contracted for the network.
  - f) Verify periodically the network maintenance programmes improving them.
  - g) Establish the corresponding procedures to duly coordinate the operation of the NCC's (Manaus/Ezeiza).
  - h) Establish a spare part policy for the network to guarantee its support and continuous supply.
5. Coordinate with the States other administrative aspects established for the operation of the network as follows:
  - a) Supplies provided by the States.
  - b) Quantity and quality of the human resources to be provided by the States for the operation and maintenance of the network.
  - c) Facilities, access to site, transportation/mobilization, personnel assistance, telecommunications, etc.
6. Prepare and present annually to ICAO Lima Office a budget of the network administration for its approval.
7. Prepare an annual activity report of the network administration and the programme of activities for the next year, including the budgetary previsions.
8. Based on Conclusion RCC 3/7 of the Third Meeting of the Coordination Committee, establish a more convenient arrangement for the leasing of the Panamsat satelittal segment.
9. Study the available CNS/ATM applications successfully implemented for the aeronautical fixed service by renowned companies.

10. Study in a technical point of view, the CNS/ATM application in the network and select the corresponding applications.
11. In coordination with RLA/98/003 Project activities, prepare an implementation plan for the CNS/ATM applications including the following:
  - a) Interoperability with the conventional applications;
  - b) General technical specifications for hardware and software;
  - c) Requirements of the system and functionalities;
  - d) Costs, and
  - e) Coordination arrangements and responsible parties.
12. To develop other relevant activities.

-----

**JOB DESCRIPTION**

**Project No:** RLA/03/901  
**Post No:** 11-51  
**Title:** Institutional Aspects  
**Place:** Lima, Peru  
**Start date:** 1 July 2003  
**Duration:** 6 months  
**Language requirements:** Spanish and English

**Qualifications:**

1. Professional or equivalent title in one or more main branches of the civil aviation.
2. Minimum 15 years of experience with an administration of civil aviation at managerial level, responsible for the planning of the development of a national civil aviation or equivalent professional experience.
3. Substantial experience with political multi-disciplines and strategic formulation and planning in the atmosphere of civil aviation.
4. Be familiar with the main economic and technological currents in civil aviation, such as: commercialization of civil aviation organizations and airports; economic liberalization, consolidation of airlines, ICAO CNS/ATM concepts; and harmonization of the regulations of air safety.
5. Experience in the structuring of a civil aviation organization and in the planning and development of human resources, including personnel requirements, evaluations and training in civil aviation.
6. Knowledge of UNDP regulations, of ICAO manuals: Field Operations Manual, interrelation of ICAO's Regional Office with ICAO's field work.
7. Familiarity with developing States needs, and proven organizational ability, managerial to propitiate good labor relationships with the personnel of the Civil Aviation Department.
8. To possess initiative, tact, good trial and ability to foment and to maintain harmonious labor relationships.
9. Knowledge of ICAO's documents and pertinent procedure requirements.

**Duties:**

1. Compile information of the existing multinational mechanisms for the provision of air navigation services, as follows:
  - a) COCESNA
  - b) Iceland Agreement
  - c) Others
2. Prepare a comparative chart on the advantages and disadvantages of the possible multinational mechanisms in order to determine and arrangement on this matter for the administration of the network.
3. Analyze the best alternatives for a definitive arrangement that allows the establishment of a multinational mechanism for the administration of the network.
4. Considering the CAR/SAM FASID guidance material, and the study of the previous output, prepare a multinational mechanism project for the administration of the network.
5. Evaluate the comments received and consider them in the preparation of the final proposal
6. Based in activity 1.4.1, prepare a working programme and determine the date of the implementation of the multinational mechanism.
7. To develop other relevant activities.

-----

## Office, Furniture and Equipment for the Project

### 1. Characteristic of the building and rooms

1.1.1 The building should be of modern construction, with wide and clear atmospheres, and possess good illumination.

1.1.2 The location of the NCC room should allow the direct connection of the equipment from the NCC to the local equipment of the REDDIG node. In the event of remote location of the NCC regarding the local REDDIG node, means should be provided to establish a redundant communication through independent roads.

1.1.3 The building, as it corresponds, must be of appropriate construction for seismic area and to support the hydro-meteorological characteristic conditions of the area.

1.1.4 The electric feeding system of the NCC wings, should have a continuous supply of commercial energy whose voltage and frequency do not vary more than 10% and 5% of the nominal values, respectively, with a back up of generating group and UPS of the true-on line type.

1.1.5 The NCC rooms should have sockets differed for connection of the NCC equipment and computer and for the connection of devices appliances, with boards of electric distribution with thermo-magnetic keys located in one of the rooms. The system of illumination will be the appropriate one for a work atmosphere, and it should have switches inserted to cover the areas.

1.1.6 Security access to the building and NCC rooms should be made available. There should not exist under any circumstance, restrictions to the entrance of authorized people to the building and the NCC room.

1.1.7 The dimension of the NCC room should be inferior to 7x5 m<sup>2</sup>, and it should also have a storage place of 3x2 m<sup>2</sup>, this last preference area should be closed to the first one and have security access.

1.1.8 The NCC rooms should have a conditioned environmental system and pollution control, to maintain under control the temperature parameters, humidity, sterilization of the air and powder particles, within the conditions settled down in the category of bigger demand of ETSI norms.

1.1.9 The NCC room should be equipped with fire and control detection equipment, and have appropriate extinguishers manuals for the type of electric fire and office materials.

1.1.10 It should have two independent bathrooms, for ladies and gentlemen, in perfect state and operational conservation for the exclusive use of the NCC personnel.

1.1.11 Curtains or window shields should be available.

## **1.2 Communications**

1.2.1 The NCC rooms should count with wired points structured for all the connections required for the NCC equipment and two additional points for the connection of auxiliary additional equipment, and 4 points for the office computer system.

1.2.2 The NCC room should count with a PSTN phone line for contingencies and recovery; a dedicated line for coordination and upgrade among NCCs; two phone lines one for the office and another for the coordination of the administration, and access to high-speed INTERNET for office use.

1.2.3 The following communication equipment should be made available: four free hands telephones, a PABX 4x12, a fax, a wide band MODEM and a switch router.

## **1.3 Office furniture**

1.3.1 All the furniture should be fire resistant.

1.3.2 Anti-static floor for the office and NCC control room.

1.3.3 Two modular desks for the office with drawers, specially designed for the use of computer equipment consisting on a CPU, 17 inches screen and with an adherent board for a printer.

1.3.4 Two ergonomic chairs with wheels, shocks and height adjustment.

1.3.5 Table for meetings with four chairs,

1.3.6 Whiteboard, and an eraser;

1.3.7 Two tables for telephone and fax.

1.3.8 Two filing cabinets and two shelves for books.

1.3.9 Modular furniture for, three personnel, three 17 inches screens and 02 printers, and two positions for operators, including two ergonomic chairs with wheels.

## **1.4 Computer equipment and software**

1.4.1 Two latest top technology computers equipped with 100GB disks , disquette 1.44, port series, parallel port, USB, CDR/W, DVD, speakers, ZIP, 1024Mb minimum memory, mouse, Spanish keyboard. Time of life of the equipment 02 years.

1.4.2 A Laser Printer for work intermission cycle, high resolution and printing speed, a color printer with high resolution and printing speed. A high-resolution scanner. Time of life of the equipment 04 years.

1.4.3 Software: operating system Windows XP or superior, Office professional, Visual Studio, Project Manager, Visio, Acrobat, Antivirus. Upgrades of software operating system and of application every two years. Documentation of the software and consultation books.

1.4.4 A photocopier machine.

1.4.5 Expendables:

- a) two mice;
- b) cartridges laser for printing of 3000 sheets, monthly average, and cartridges for color printer color for printing of 300 sheets per month.
- c) Bond A4/letter paper 3500 sheets per month.
- d) 50 units white CDs per month.
- e) 20 Diskettes per month.
- f) 4 ZIP CDs per month.

1.5 **Office Stationary**

- a) Two two-holes punchers,
- b) Puncher for 3 and 4 holes configurable, professional type.
- c) Two desk staplers to hold up to 20 sheets or more.
- d) An adjustable stapler to hold up to 50, 100, 150 and 200 sheets.
- e) A guillotine,
- f) Two scissors,
- g) A magnifying glass with light.
- h) A set of squares and rules,
- i) A scientific calculator,
- j) 40 filing binder of three or four holes.

1.5.1 Other expendable equipment per year:

- a) 50 plastic folders,
- b) 05 binders,
- c) 08 notebooks squared size letter,
- d) 08 blocks for notes,
- e) 02 calendars,
- f) 04 boxes of staples for 20 sheets, 50, and 100, and a box of 150 and 200 paginate.
- g) 04 text liner highlighter;
- h) 04 sets of pencils;
- i) 04 sets of pencils and draft;
- j) 12 sets of markers adhesive plastics,
- k) 15 section separators for binder;
- l) (stick) text liner.
- m) 06 set of correctors for adhesive band.
- n) 06 tapes invisible scotch.
- o) 04 clips boxes,
- p) two pots of white glue.
- q) paper BOND monthly A4/letter 3000 sheets.
- r) others.

**1.6 Miscellaneous**

- 1.6.1 Spanish dictionary, English, and Spanish-English.
- 1.6.2 ICAO Documents, ITU-T, and ITU-R.
- 1.6.3 Large bottle of water, and base with cooler.
- 1.6.4 Coffeepot.
- 1.6.5 Glasses, cups, cutleries, sugar.
- 1.6.6 Expendables:
  - a) large water bottle every weekly;
  - b) Toilet paper and paper towels, biweekly,
  - c) soap.
  - d) Cleaning materials, biweekly.
  - e) Replacement of illumination lamps,

**1.7 Services**

- 1.7.1 Daily cleaning, of the NCC control rooms, office and bathrooms. The cleaning of the office and of the NCC control room, should be made under closed supervision of the NCC personnel.
- 1.7.2 Sporadic maintenance: plumbing, illumination, energy, and others.

- end -

**COST DISTRIBUTION FOR THE LEASING OF THE SATELLITAL SEGMENT**  
(in U.S. Dollars)

Country: Regional for Southamerica  
Project: RLA/03/901/A  
Title: System for the management of the REDDIG

	<b>Band-width used by each node</b>	<b>Percentage per satellital segment</b>	<b>Segment annual leasing US\$ x year 231,300 x State</b>
Argentina	128.8	10.441	24,150
Bolivia	71.2	5.772	13,350
Brazil	112.0	9.079	21,000
Brazil	43.2	3.502	8,100
Brazil	85.6	6.939	16,050
Chile	73.6	5.966	13,800
Colombia	125.6	10.182	23,550
Ecuador	78.4	6.355	14,700
Guyana	43.2	3.502	8,100
Francia	45.6	3.696	8,550
Paraguay	48.8	3.956	9,150
Perú	124.8	10.117	23,400
Suriname	43.2	3.502	8,100
Uruguay	113.6	9.209	21,300
Venezuela	96.0	7.782	18,000
	<b>1233.6</b>	<b>100</b>	<b>231,300</b>

CALENDAR OF COST SHARING CONTRIBUTIONS  
 (In U.S. Dollars)

Country: Regional for Southamerica  
 Project: RLA/03/901/A  
 Title: System for the management of the REDDIG

Start date: 1 July 2003

Termination date: 31 December 2007

101	<u>GOVERNMENT COST SHARING CONTRIBUTIONS</u>		Year	Month	Day	Amount	Situation		
							Total to be deposit	Deposited	Balance
101-01	GOVERNMENT COST SHARING CONTRIBUTION	Argentina	2003	Julio	01	57,562			
			2004	Julio	01	41,081			
			2005	Julio	01	34,912			
			2006	Julio	01	29,804			
			2007	Julio	01	27,950	191,309	0	191,309
101-02	GOVERNMENT COST SHARING CONTRIBUTION	Bolivia	2003	Julio	01	46,762			
			2004	Julio	01	30,281			
			2005	Julio	01	24,112			
			2006	Julio	01	19,004			
			2007	Julio	01	17,150	137,309	0	137,309
101-03	GOVERNMENT COST SHARING CONTRIBUTION	Brazil	2003	Julio	01	78,562			
			2004	Julio	01	62,081			
			2005	Julio	01	55,912			
			2006	Julio	01	50,804			
			2007	Julio	01	48,950	296,309	0	296,309
101-04	GOVERNMENT COST SHARING CONTRIBUTION	Chile	2003	Julio	01	47,212			
			2004	Julio	01	30,731			
			2005	Julio	01	24,562			
			2006	Julio	01	19,454			
			2007	Julio	01	17,600	139,559	0	139,559

CALENDAR OF COST SHARING CONTRIBUTIONS  
 (In U.S. Dollars)

Country: Regional for Southamerica  
 Project: RLA/03/901/A  
 Title: System for the management of the REDDIG

Start date: 1 July 2003

Termination date: 31 December 2007

101 GOVERNMENT COST SHARING CONTRIBUTIONS									
			Year	Month	Day	Amount	Total to be deposit	Deposited	Balance
101-05	GOVERNMENT COST SHARING CONTRIBUTION	Colombia	2003	Julio	01	47,212			
			2004	Julio	01	40,481			
			2005	Julio	01	34,312			
			2006	Julio	01	29,204			
			2007	Julio	01	27,350	178,559	0	178,559
101-06	GOVERNMENT COST SHARING CONTRIBUTION	Ecuador	2003	Julio	01	48,112			
			2004	Julio	01	31,631			
			2005	Julio	01	25,462			
			2006	Julio	01	20,354			
			2007	Julio	01	18,500	144,059	0	144,059
101-07	GOVERNMENT COST SHARING CONTRIBUTION	Guyana	2003	Julio	01	41,512			
			2004	Julio	01	25,031			
			2005	Julio	01	18,862			
			2006	Julio	01	13,754			
			2007	Julio	01	11,900	111,059	0	111,059
101-08	GOVERNMENT COST SHARING CONTRIBUTION	Peru	2003	Julio	01	56,812			
			2004	Julio	01	40,331			
			2005	Julio	01	34,162			
			2006	Julio	01	29,054			
			2007	Julio	01	27,200	187,559	0	187,559

CALENDAR OF COST SHARING CONTRIBUTIONS  
(In U.S. Dollars)

Country: Regional for Southamerica  
Project: RLA/03/901/A  
Title: System for the management of the REDDIG

Start date: 1 July 2003

Termination date: 31 December 2007

101	GOVERNMENT COST SHARING CONTRIBUTIONS		Year	Month	Day	Amount	Situation		
							Total to be deposit	Deposited	Balance
101-09	GOVERNMENT COST SHARING CONTRIBUTION	Suriname	2003	Julio	01	41,510			
			2004	Julio	01	25,031			
			2005	Julio	01	18,862			
			2006	Julio	01	13,754			
			2007	Julio	01	11,900	111,057	0	111,057
101-10	GOVERNMENT COST SHARING CONTRIBUTION	Uruguay	2003	Julio	01	54,712			
			2004	Julio	01	38,230			
			2005	Julio	01	32,062			
			2006	Julio	01	26,954			
			2007	Julio	01	25,100	177,058	0	177,058
101-11	GOVERNMENT COST SHARING CONTRIBUTION	Venezuela	2003	Julio	01	51,412			
			2004	Julio	01	34,931			
			2005	Julio	01	28,760			
			2006	Julio	01	23,654			
			2007	Julio	01	21,800	160,557	0	160,557
101-12	GOVERNMENT COST SHARING CONTRIBUTION	Paraguay	2003	Julio	01	42,560			
			2004	Julio	01	26,080			
			2005	Julio	01	19,910			
			2006	Julio	01	14,804			
			2007	Julio	01	12,950	116,304	0	116,304

**CALENDAR OF COST SHARING CONTRIBUTIONS**  
 (In U.S. Dollars)

Country: Regional for Southamerica  
 Project: RLA/03/901/A  
 Title: System for the management of the REDDIG

Start date: 1 July 2003

Termination date: 31 December 2007

101		<u>GOVERNMENT COST SHARING CONTRIBUTIONS</u>				Situation		
101-13		Year	Month	Day	Amount	Total to be deposit	Deposited	Balance
		2003	Julio	01	41,960			
		2004	Julio	01	25,480			
		2005	Julio	01	19,310			
		2006	Julio	01	14,202			
		2007	Julio	01	12,350	113,302	0	113,302
		<b>TOTALES:</b>				2,064,000		2,064,000
		%						

**PROGRAMME OR PROJECT ANNUAL REPORT**

**Basic Information on the Programme or Project**

Number and title of the  
project:

Designated institution: ICAO

Project initiation date:  
Originally planned:  
Effective:

Project termination date:  
Originally planned:  
Effective:

Total budget (Dollars):  
Initial amount:  
Last approved revision:

Period covered by the report:

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SUBSTANTIVE FOCUS	ICAO	ARG	BOL	BRA	CHI	COL	ECU	FRA	GUY	PAR	PER	SUR	URU	VEN	AVERAGE	
<p>1. Using the following indicators, rate the contribution of the outputs to the achievement of the immediate objectives <u>a/</u>:</p> <p>(Indicator 1)</p> <p>(Indicator 2)</p> <p>(Indicator 3)</p>																
<p>2. Rate the production of target outputs.</p>																
<p>3. Are management arrangements of the programme or project appropriate?</p>																
<p>4. Are programme or project resources (financial, physical and manpower) adequate in terms of:</p> <p>a) quantity?</p> <p>b) quality?</p>																
<p>5. Are programme or project resources being used efficiently to produce planned results?</p>																

a/: The programme or project manager must list the indicators as reflected in the programme support document or project document or agreed on by the stakeholders.

6. Is the programme or project cost-effective compared to similar interventions?																		
7. Based on its work plan, how would you rate the timeliness of the programme or project in terms of:  a. Production of outputs and initial results?  b. Inputs delivery?																		

Please indicate your overall rating of the project using the following numbers:

1. Highly satisfactory
2. Satisfactory
3. Unsatisfactory, with some positive elements
4. Unsatisfactory
5. Not applicable

	<b>Target Group (s)</b>	<b>Programme or project Manager</b>	<b>Government</b>
<b>OVERALL RATING OF THE PROGRAMME OR PROJECT</b>			

Explain the basis of your rating, which need not be limited to, or which may be different from, the relevance and performance criteria rated above. For the last year of the programme or project, the overall rating should include an assessment of the potential success of the programme or project as well as its relevance and performance.



7 Provide any other information that may further support or clarify your assessment of the programme or project. You may include the annexes as you deem necessary.

**PART III: Programme/project summary table**

Programme or project title and number:	)	Management arrangement:	
Designated institution:		Period covered:	
<b>OVERALL ASSESSMENT</b>			
<b>Brief analysis of progress achieved in the contribution of the programme or project to the expected results.</b>			

FINANCIAL SUMMARY			
Sources of funds	Total budget (Thousand Dollars)	Estimated expenditure (Thousand Dollars)	Delivery Rate (%)
Participation in funding of expenditures: Governments of:  Argentina Bolivia Brazil Chile Colombia Ecuador Guyana Peru Suriname Uruguay Venezuela Paraguay France			

SUMMARY OF RESULTS			
Programme support objectives or immediate objectives		Indicators	Achievements
Obj. 1			
Obj. 2			
Obj. 3			

Annual goals	Products achievement	Proposed products goals for next year
<b>Objective 1</b>		
1.1		
1.2		
<b>Objective 2</b>		
2.1		
2.2		

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2.3		
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<b>Objective 3</b>		
3.1		
3.2		
3.3		

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