



REDDIG RCC/22

INTERNATIONAL CIVIL AVIATION ORGANIZATION

RLA/03/901

**TWENTY SECOND MEETING OF THE
COORDINATION COMMITTEE
(RCC/22)**

PRELIMINARY REPORT

(Lima, Peru, 5 to 7 March 2019)

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HISTORY OF THE MEETING

ii-1. PLACE AND DURATION OF THE MEETING

The Twenty Second Meeting of the Coordination Committee of Project RLA/03/901 - *REDDIG Management System and Satellite Segment Administration*, was carried out in the ICAO South American Regional Office, in Lima, Peru, from 5 to 7 March 2019.

ii-2. OPENING

Mr. Francisco Almeida, CNS Regional Officer of the ICAO South American Regional Office, welcomed the participants, pointing out the importance of the topics to be dealt with and wishing success in the deliberations. Thereafter, he inaugurated the meeting.

ii-3. WORKING LANGUAGES

The meeting working languages for the discussions and documentation were Spanish and English. Documentation was presented in both languages.

ii-4. PARTICIPANTS AND ORGANIZATION

The Meeting counted with the assistance of 9 member States (Bolivia, Brazil, Chile, Guyana, Paraguay, Peru, Trinidad & Tobago, Uruguay and Venezuela), making a total of 16 participants, including ICAO officers. The list of participants is being presented in page iii-1.

Mr. Francisco Almeida, CNS Regional Officer acted as Secretary, assisted by Mrs. Veronica Chávez, Technical Assistance Officer and by Mr. Javier Vittor, REDDIG Administrator.

ii-5. LIST OF CONCLUSIONS

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LISTA DE PARTICIPANTES / LIST OF PARTICIPANTS**BOLIVIA**

1. Javier Osvaldo Campos González

BRASIL / BRAZIL

2. Marcelo Cirelle Lucas de Melo
3. Bruno Pacheco Santos Azevedo Costa

CHILE

4. Christian Vergara Leyton

GUYANA

5. Mortimer Salisbury

PARAGUAY

6. Ronald Benítez
7. Aldo Pereira

PERÚ

8. Arnaldo Guardamino Cavezas
9. Romel Isaías Tito Paredes
10. Ricardo Arteaga Chávez
11. Luis Silva Gárate

TRINIDAD & TOBAGO

12. Richard Brumant

URUGUAY

13. Miguel E. Vera
14. Ricardo Clavijo

VENEZUELA, REP. BOLIVARIANA DE

15. Jarumy Castillo
16. Willy Rojas

OACI / ICAO

17. Francisco Almeida
18. Verónica Chávez
19. Javier Vittor

Agenda Item 1: Approval of the agenda and of the meeting schedule

1.1 Under this Agenda Item, the Meeting reviewed and approved the agenda and meeting schedule included as **Appendixes A and B** to this part of the Report.

APPENDIX A

- Agenda Item 1: Approval of the agenda and of the meeting schedule
- Agenda Item 2: Review of the report of the Twenty First Meeting of the Coordination Committee
- Agenda Item 3: Report of the activities carried out to date since the last Coordination Committee meeting
- Agenda Item 4: Work plan for 2019
- Agenda Item 5: Financial situation of the project and approval of the budget
- Agenda Item 6: Annual project evaluation
- Agenda Item 7: Other matters

EXPLANATORY NOTES

Agenda Item 1: Approval of the agenda and of the meeting schedule

The Coordination Committee will consider and approve the provisional agenda and meeting schedule proposed by the Secretariat for its Twenty Second Meeting.

Agenda Item 2: Review of the report of the Twenty First Meeting of the Coordination Committee

The Committee will review, for approval, the report of its Twenty First Meeting (RCC/21) held in Lima from 14 to 16 May 2018. Likewise, the Committee will analyse the status of implementation of conclusions formulated during said meeting, as well as of conclusions in force from previous meetings.

Agenda Item 3: Report of the activities carried out to date since the last Coordination Committee meeting

The Committee will analyse the activities carried out since its last meeting regarding:

- a) Follow-up to REDDIG II performance;
- b) REDDIG II training programme; and
- c) New REDDIG II services and activities.

Agenda Item 4: Work plan for 2019

The Committee will analyse the work programme for 2019:

- a) New REDDIG II activities and services;
- b) New MEVAIII / REDDIG II activities and interconnection services; and,
- c) Training programme for 2019

Agenda Item 5: Financial situation of the project and approval of the budget

The Committee will consider the status of the cost-sharing contributions to the project and a summary of the obligations assumed during 2018, as well as the project budget for 2019 for approval.

Agenda Item 6: Annual project evaluation

The Committee will take note of the project's situation at the end of the year, including the management and outputs indicators, as well as the monitoring and control of the project with regard to the approved work plan for 2018, shown in the corresponding forms, concluding with the review of the survey conducted among participant States concerning their annual project evaluation.

Agenda Item 7: Other matters

Under this agenda item, the Committee could analyse any other related issue deemed appropriate.

APPENDIX B**PROVISIONAL TIMETABLE**

HOUR	Tuesday 05 March 2019	HOUR	Wednesday 06 March 2019	HOUR	Thursday 07 March 2019
08:30 09:00	Registration of participants	09:00 10:30	Review of Agenda Item 4	10:00 10:30	Review of Report
09:00 09:15	Opening				
09:15 09:30	<i>Coffee break</i>	10:30 11:00	<i>Coffee break</i>	10:30 10:45	<i>Coffee break</i>
09:30 12:30	Review of Agenda Items 1 and 2	11:00 12:30	Review of Agenda Item 5	10:45 12:00	Approval of the Report
12:30 13:30	<i>Lunch break</i>	12:30 13:30	<i>Lunch break</i>	12:00	Closing Ceremony
13:30 15:00	Review of Agenda Item 3	13:30 15:00	Review of Agenda Items 6 and 7		

Agenda Item 2: Review of the report of the Twenty First Meeting of the Coordination Committee

2.1 Under this Agenda Item, the Meeting discussed and approved the report of the Twenty First meeting of the REDDIG Coordination Committee, the (RCC/21) held in Lima, Peru, on 14-16 May 2018, with the participation of 10 member States (Argentina, Brazil, Chile, Colombia, Guyana, Paraguay, Peru, Trinidad & Tobago, Uruguay and Venezuela), making a total of 19 participants, including ICAO officers.

2.2 The RCC/21 meeting reviewed the report of the Twentieth Meeting of the REDDIG Coordination Committee (RCC/20), the report on the activities carried out since the last meeting, the work plan for 2018, the financial situation of the project, the approval of the budget for year 2019, the annual project assessment since the RCC/19, and other matters.

2.3 During the RCC/20, the following conclusions were formulated:

RCC/21-1 *Technical-Economic study for the installation of security
REDDIG II Node*

RCC/21-2 *Approval of the budget of the RLA/03/901 Project Rev. T*

2.4 The RCC/21 meeting examined the list of valid conclusions and, in this respect, considered that Conclusions 8/8, 19/1, 19/3 and 20/1 remain valid, and Conclusions 20/2, 20/3, 20/4 and 20/5 as completed. During the Meeting, two conclusions were formulated, Conclusions 21/1 and 21/2. The **Appendix** to this part of the Report presents the status of conclusions.

2.5 Upon analysing Conclusions 19/3, 20/1, 21/1 and 21/2, the Meeting deemed them as completed.

2.6 In relation to Conclusions 8/8 and 19/1, the Meeting considered them as still valid.

APPENDIX

CONCLUSIONS ADOPTED BY THE REDDIG COORDINATION MEETINGS THAT REMAIN VALID AND THEIR STATUS OF IMPLEMENTATION

No.	Title	Content	Status	Remarks
8/8	REDDIG Administration	That, until such time that the institutional aspects related to the management of multinational systems for the provision of air navigation services are more clearly defined, the States agree that, for the next two years, starting 15 October 2005, the REDDIG will continue to be managed through the ICAO technical cooperation mechanism, as an extension of Regional Project RLA/03/901.	Valid	Whereas the establishment of the South American Air Navigation and Safety Organization, multinational system with ability to manage the REDDIG continues undefined, RCC/20 meeting (Lima, Peru, 21-23 March 2017) approved the RLA/03/901 project document substantive revision S, extending the management of REDDIG until 2023.
19/1	Suriname cost-sharing contributions payment schedule	That, Suriname with the aim of complying with full payment of its 2012 to 2016 cost-sharing contributions, present a payment schedule in this regard, in order to avoid the application of the payment delay procedure indicated by the ICAO SAM Regional Office through letters SA5033 and SA5192 of 21 January and 7 March 2016, respectively.	Valid	Suriname presented a payment schedule and has carried out the following payments: July 2016: USD 80,00.00 March 2017: 80,000.00 No payment was made in 2018. At the present date the debit is USD 185,174.00, not including the 2019 contribution.

Agenda Item 3: Report of the activities carried out to date since the last meeting of the Coordination Committee

3.1 Under this Agenda Item, the Meeting reviewed the following working paper:

- WP/03 - *Report of the activities carried out to date since the last meeting of the Coordination Committee* (presented by the Secretariat).

Report of the activities carried out to date since the last meeting of the Coordination Committee

3.2 The Meeting analysed the following activities agreed upon at the Twenty First Coordination Committee meeting (RCC/21):

- a) REDDIG II training programme;
- b) Preventive maintenance programme; and
- c) REDDIG II operation and analysis of the implementation of new services

REDDIG II training programme

3.3 Regarding training activities, the following courses have been delivered since the SAM/IG/21 meeting:

- a) Training on the use and applications of the Flue network certifier (Model DTX-1800), for the Manaus NCC personnel;
- b) Training on the operation and maintenance of the Maiquetía REDDIG node;
- c) Course on the operation, setting up, and maintenance of the Skywan 7000 and 1070 modems, delivered in Germany on 8-12 October 2018; and
- d) Training on the operation, setting up, and maintenance of the Skywan 1070 modem, for REDDIG node technicians, conducted in Curitiba, Brazil, on 6-9 November 2018.

Training on the use and applications of the Flue network certifier (Model DTX-1800) for the Manaus NCC personnel.

3.4 In May, the REDDIG Administrator provided training at the Manaus NCC on the use of the structured-cable Fluke DTX-1800 certifier. Following this training, all cables interconnecting the various devices of the station were certified.

Training on the operation and maintenance of the Maiquetía REDDIG node

3.5 On 6-10 August 2018, the REDDIG Administrator (Mr. Cristian Javier Vittor) delivered a training course for 17 technicians of Venezuela. On this occasion, the network Administrator prepared the node inventory and reviewed the equipment as well as the settings and condition of cables.

Course on the operation, setting up, and maintenance of the Skywan 7000 and 1070 modems

3.6 A course on the operation, setting up, and maintenance of the Skywan 7000 and 1070 modems was delivered in Germany, on 8-12 October 2018, with the participation of the REDDIG Administrator, one technician from the Manaus NCC, and one technician from the Ezeiza NCC.

Training on the operation, setting up, and maintenance of the Skywan 1070 modem

3.7 In Curitiba (Brazil), on 6-9 November 2018, the network Administrator delivered a training course on the operation, setting up, and maintenance of the Skywan 1070 modem used in the REDDIG, for two technicians of each node.

3.8 Training focused on the description of the equipment and its parts, troubleshooting, and measurement of parameters.

3.9 During training, online tools--Line Up Manager and WhatsUp Gold--, which are used in the network on a daily basis, were run to familiarise the participants with the reading of parameters that are essential for modem operation.

Preventive maintenance programme

3.10 Throughout 2018, preventive maintenance activities were carried out in all the nodes (**Appendix A**¹ to this part of the Report), which helped identify and solve a number of issues that had been left pending since the installation phase. Likewise, a procedure was established to keep a photographic record of tasks carried out in the nodes, in order to create a database at the NCC and, subsequently, at the ICAO/REDDIG website, to be available to REDDIG focal points in all nodes through the respective log-ins and passwords for consultation.

3.11 Furthermore, the Meeting took note of the visits carried out by the network Administrator to the La Paz and Maiquetía nodes, highlighting the importance of pursuing this activity, with at least two visits per year for purposes of maintenance and on-site training of the technical personnel. In this regard, the Meeting formulated the following conclusion:

Conclusion RCC/22-1		TECHNICAL VISITS BY THE REDDIG ADMINISTRATOR TO THE NETWORK NODES	
That the Secretariat: a) Make the necessary arrangements for the REDDIG Administrator to visit at least two network nodes per year.		Expected impact: <input type="checkbox"/> Politician / Global <input type="checkbox"/> Inter-regional <input checked="" type="checkbox"/> Economic <input type="checkbox"/> Environmental <input checked="" type="checkbox"/> Technical/Operational	
Why: To carry out corrective and preventive maintenance, a general review of the station, an inventory of the equipment, and a review of the main operational and maintenance concepts with the technical personnel of the nodes.			
When: Starting in 2019		Status: Ongoing	

¹ Refer to RCC/22-WP/03, Appendix A

3.12 The Meeting took note that RTO/7 meeting agreed to propose the RCC to conduct a seminar/workshop on the basic concepts of the services provided through REDDIG II, such as: RADAR, AMHS, AIDC, CPDLC, ADS-C, ADS-B, etc. The objective would be to analyse voice and data transmitted through the network in each node, using available computer-based tools, in order to better analyse network service issues. It is suggested that a training workshop be delivered together with the RTO/08 meeting.

3.13 The Secretariat noted that, based on an agreement with EASA, States could obtain support for the conduction of workshops, seminars, and training courses for their personnel. In this regard, the Meeting formulated the following conclusion:

Conclusion RCC/22-2		TRAINING IN TECHNOLOGICAL TOOLS FOR ANALYSING VOICE AND DATA APPLICATIONS CARRIED OVER REDDIG	
That the Secretariat: a) At the request of REDDIG member States, organise training courses on the use of tools for analysing information (voice and data) carried over REDDIG.		Expected impact: <input type="checkbox"/> Politician / Global <input type="checkbox"/> Inter-regional <input checked="" type="checkbox"/> Economic <input type="checkbox"/> Environmental <input checked="" type="checkbox"/> Technical/Operational	
Why: To train maintenance technicians of REDDIG member States in the use of advanced technological tools for analysing information derived from the aeronautical applications that use REDDIG as their transport platform.			
When: 2019/2020		Status: Underway	
Who: RCC/22 Secretariat and REDDIG Administrator.			

3.14 In addition, the Meeting noted that RTO/7 formulated two conclusions: **Conclusion RTO/7-1 - Consider the possibility of upgrading the router IOS and replacing the equipment**, and **Conclusion RTO/7-2 - Study the possibility of replacing Netgear switches with Cisco switches**. In this respect, Conclusion RCC/22-3 was formulated:

Conclusion RCC/22-3		STUDY FOR REPLACING REDDIG II CONNECTIVITY EQUIPMENT AND UPDATING THE IOS OF NETWORK ROUTERS	
That the REDDIG II Administrator: a) Coordinate the conduction of a study to replace connectivity equipment, mainly the NETGEAR, and to update the IOS of network routers.		Expected impact: <input type="checkbox"/> Politician / Global <input type="checkbox"/> Inter-regional <input type="checkbox"/> Economic <input type="checkbox"/> Environmental <input checked="" type="checkbox"/> Technical/Operational	
Why: To prevent equipment obsolescence and keep the operational systems of network routers up to date.			
When: 2019/2020		Status: Underway	
Who: REDDIG Administrator			

Operation of REDDIG II and analysis of the implementation of new services

3.15 The Meeting was informed of the REDDIG II availability, shown in **Appendix B²** to his part of the Report.

3.16 In addition, the Meeting took note of the AMHS interconnections (P1) and RADAR data exchange that have been implemented and commissioned in REDDIG II:

AMHS interconnections

Asunción – Ezeiza (30/11/2018)
Asunción – Brasilia (30/11/2018)
Brasilia – Paramaribo (11/10/2018)
Brasilia – Atlanta (SITA) (16/08/2018)
Brasilia – Madrid (25/10/2018)
Caracas – Quito (11/10/2018)
Georgetown – Paramaribo (11/10/2018)

RADAR data exchange

Corrientes radar – Asunción ACC (operational)
Asunción radar – Resistencia ACC (operational)
Foz de Iguazú – Guaraní APP

² Refer to RCC/22-WP/03, Appendix B

REDDIG II security analysis

3.17 The Meeting was informed that on 25 June 2018, a teleconference was held on price quotes for security equipment (firewalls) for REDDIG, with the participation of the REDDIG Administrator and representatives of ENGIE – INEO. The request for quotes for redundant firewall equipment should include:

- Provision of redundant equipment for 17 REDDIG II nodes;
- Provision of 19 switches (1 per node + 2 spare);
- Provision of a centralised monitoring system, using a separate system, or built-in into the NMS WhatsUp Gold system;
- Updating of node diagrams;
- Basic training on general security policies, to be provided in Lima for 20 participants;
- Training on configuration settings, to be provided in Lima for 20 participants, to enable each participant to configure the equipment of its node; and
- Training on administration, to be provided in Lima for 3 participants (REDDIG Administrator, one person from the Manaus NCC and one person from the Ezeiza NCC).

3.18 Regarding firewalls, two referential quotes were submitted, of USD 402,417.00; and USD 293, 458.00.

3.19 The cost of providing 19 24-port switches would be USD 40,060.00.

3.20 The Meeting was informed that at the RTO/7 meeting (Curitiba, 5-9 November 2018), an *ad-hoc* group was established with representatives of Argentina, Brazil, Chile, Colombia, and Paraguay to assess the quotes. By means of teleconferences, the *ad-hoc* group discussed this issue and formulated a recommendation indicating that both options were adequate.

3.21 Furthermore, the Ad-hoc group members agreed with the followings requirements:

- Equipment for all nodes + Spares.
- Centralized management system.
- All equipment sent to Lima (DAP, no local taxes).
- Basic training on security policies.
- Configuration training in Lima.
- Management training (Administrator and NCC technicians).
- Acquisition of Cisco WS-C2960X-24TS-LL equipment (19 unities - without any associated services, except DAP shipment towards Lima/Peru).

3.22 In this regard, the Meeting formulated Conclusion RCC/22-4:

Conclusion RCC/22-4		ACQUISITION OF FIREWALL EQUIPMENT FOR REDDIG II	
That the Secretariat:		Expected impact:	
a) At the request of REDDIG member States, and together with the ICAO TCB, purchase firewall equipment for REDDIG II;		<input type="checkbox"/> Politician / Global	
b) The initial budget assigned for this acquisition would be USD 375,000.00.		<input type="checkbox"/> Inter-regional	
		<input type="checkbox"/> Economic	
		<input type="checkbox"/> Environmental	
		<input checked="" type="checkbox"/> Technical/Operational	
Why: To better protect the network against cyber attacks and unauthorised access.			
When: 2019/2020		Status: Underway	
Why: RCC/22 Secretariat			

3.23 The Meeting took note of coordination with the Technical Cooperation Bureau (TCB) at ICAO Headquarters for the acquisition of an antivirus licence, the transfer of the REDDIG station of Bogota, the installation of the new station in Ezeiza, and the acquisition of spare parts for REDDIG. The antivirus licence (Kaspersky Endpoint Security for Business) was renewed and updated in all network nodes. The transfer of the REDDIG station of Bogota, the installation of the new station in Ezeiza and the acquisition of spare parts for REDDIG are in the phase of procurement between TCB and ENGIE – INEO.

Connection to SITA datalink services through the REDDIG

3.24 Under this agenda item, the representative of Chile presented a working paper (RCC/22-WP/08) explained what had occurred in this regard since the SAM/IG/14 meeting.

3.25 The contract between Chile and SITA will end on 30 April 2019. Consequently, the future contract will contemplate the connection with the SITA infrastructure in Brazil through REDDIG, thus reducing last-mile link rental costs.

3.26 The Meeting took note that the SAM/IG/19 meeting approved a connection configuration, as shown in **Appendix C**³ to this part of the report. No access for equipment configuration through REDDIG would be given to SITA, and internal arrangements for monitoring ANSP equipment would be subject to contractual provisions with SITA.

3.27 Furthermore, those States that wished to take advantage of this connection possibility in the future would sign an operational agreement with Brazil, specifying the purpose and scope of the connection and payment responsibilities concerning satellite transmission, when the primary means is used.

³ Refer to RCC/22-WP/03, Appendix E

3.28 The Secretariat noted that, in order to implement this connection, SITA would install points of presence (circuits) and connectivity equipment (routers) in nodes of Brazil, prior coordination with the administration of Brazil and the REDDIG II Administrator.

Proposal to add a REDDIG II node to the backup network (MPLS) at the ICAO Regional Office in Lima

3.29 The Meeting was informed that SAM/IG/22 meeting was presented with working paper WP/12, containing a proposal to add a node to the backup network (MPLS) of REDDIG II at the ICAO Regional Office in Lima, with a view to restoring communication between the nodes in the States and the Regional Office, which was interrupted following the relocation of airport units to the current premises of the Regional Office in San Isidro.

3.30 Subsequently, the SAM Regional Office had circulated a State Letter requesting States to analyse the proposal and provide comments, in order to discuss this issue at the RCC/22 meeting. Since some States had not send their response and only one disagreed with the proposal, the Meeting requested the Secretariat to circulate another State Letter so that the issue could be addressed in more detail at the RTO/08 meeting.

Level 3 (now CenturyLink) ground network

3.31 The Meeting was informed that, on 4 March 2019, representatives of Centurylink (former Level 3) visited the SAM Regional Office to meet with the SAM CNS Regional Officer and the REDDIG Administrator.

3.32 The main issues discussed were the increase in link availability, mainly for the Manaus node, which was frequently below the contracted level; the possibility of increasing the bandwidth of the contracted links; and future projects and opportunities.

3.33 Regarding the Manaus node, the company informed that it was hiring another local provider (EMBRATEL) for the last-mile circuit, and expected to resolve the problem of low availability of the link. Likewise, the company offered to improve the availability of other nodes that sometimes have an availability below the contracted level, as is the case of Cayenne and Recife.

3.34 The SAM CNS Regional Officer and the REDDIG II Administrator told the representatives of Centurylink about the possibility for the MPLS network to become primary, since REDDIG users would need more bandwidth in the future, which would be more expensive via satellite. In this regard, they highlighted the importance for the company to provide REDDIG users with better-quality services, improving the perception of trust for future decision-making.

REDDIG logistics

3.35 The Meeting took note of the extensive period of time that the equipment remains in the respective customs and the importance for focal points to support logistic activities in order to avoid this. Accordingly, the list of REDDIG II focal points (**Appendix D** to this part of the Report) must be updated, since some States still show as focal points persons who are no longer in that position due to termination of office or retirement.

3.36 Since the RCC/21 meeting, two (2) logistic operations have been carried out with the new REDDIG II

3.37 **Appendix E**⁴ to this part of the Report presents statistical information on the main actions taken in response to failures in network nodes, as well as their distribution by type of equipment that required such action, since the RCC/21 meeting.

3.38 **Appendix F** to this part of the Report shows the availability of the MPLS network (CenturyLink) in 2018.

⁴ Refer to RCC/22-WP/03, Appendix I

APPENDIX D / APENDICE D**REDDIG II FOCAL POINTS / PUNTOS FOCALES REDDIG II**

STATE / ESTADO	Name / Nombre	Position/ Cargo	E-Mail / Correo-e	Telephone / Teléfono	Address / Dirección
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STATE / ESTADO	Name / Nombre	Position/ Cargo	E-Mail / Correo-e	Telephone / Teléfono	Address / Dirección
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GUY	Mortimer Salisbury, Guyana Civil Aviation Authority	Supervisor - AN & T	mbsalisbury2000@yahoo.com	(592) 261-2569	Control Tower complex, Cheddi Jagan International Airport, Timehri, East Bank Demerara, Guyana
	Sewchan Hemchan, Guyana Civil Aviation Authority	Electrical Engineer	sewchan_hemchan@yahoo.com	(592) 261-2569	Control Tower complex, Cheddi Jagan International Airport, Timehri, East Bank Demerara, Guyana

STATE / ESTADO	Name / Nombre	Position/ Cargo	E-Mail / Correo-e	Telephone / Teléfono	Address / Dirección
PAR	Víctor Morán Maldonado, DINAC	Gerente de Telecomunicaciones	moranchu@gmail.com	(595 21) 758 5208	Centro de Control Unificado, Gral. Artigas y Fernando de Mompox, Mariano Roque Alonso, Paraguay
	Aldo Pereira Alcaraz, DINAC	Jefe Departamento Comunicaciones	apereira@dinacia.gov.py aldopereira26@gmail.com	(595-21) 758-5201	
	Ronald Benítez, DINAC	Jefe Sección USAT	ronaldbenitez@gmail.com	(59521) 758-5201	
PER	Luis Silva Gárate, CORPAC	Jefe del Equipo encargado de la Operac. y Mantto. del Nodo REDDIG-Lima	lsilva@corpac.gob.pe	(511) 515-3015; (511) 414-1514	Aeropuerto Internacional Jorge Chávez, Callao, Perú
SUR	Mitchell Themen Ministry of Transport, Communication and Tourism, Civil Aviation Department	CNS Technical Division	mickiano@live.com	(597) 325-123 (597) 325-172 (597) 497-143	J. A. Pengel International Airport, Zanderij, district Para, Zorg en Hoop Airport, Paramaribo
TRI	Rohan Garib, Civil Aviation Authority	Executive Manager Air Navigation Services	rgarib@caa.gov.tt	(1-868) 669-4806 (1-868) 669-4706,	Trinidad and Tobago Civil Aviation Authority Complex, Caroni North Bank Road, Piarco
	Veronica Ramdath, Civil Aviation Authority	Manager Telecommunications and Electronics	vramdath@caa.gov.tt vramdath@gmail.com		

STATE / ESTADO	Name / Nombre	Position/ Cargo	E-Mail / Correo-e	Telephone / Teléfono	Address / Dirección
URU	Miguel Vera, DINACIA	Técnico de la División Comunicaciones	miguelvera@adinet.com.uy	(5982) 6040408, Ext. 4520	Aeropuerto Internacional de Carrasco Av. Wilson Ferreira Aldunate 253 Paso Carrasco, Canelones
	Ricardo Clavijo, DINACIA	Director de Electrónica	rclavijo@dinacia.gub.uy		
VEN	Jarumy Castillo, INAC, INAC	Coordinadora CNS	ja.castillo@inac.gob.ve	(58212) 355-2143; (58424) 354-9924	Edificio ATC, 2do piso, Dpto. de Comunicaciones, Maiquetía, Edo. Vargas, Venezuela

APPENDIX F / APENDICE F

**AVAILABILITY OF THE MPLS NETWORK (CENTURYLINK) IN 2018
 DISPONIBILIDAD DE LA RED MPLS (CENTURYLINK) PARA AÑO DE 2018**

	January 2018		February 2018		March 2018		April 2018		May 2018		June 2018		July 2018		August 2018		September 2018		October 2018		November 2018		December 2018		TOTAL	
	Availability	USD Credit	Availability	USD Credit	Availability	USD Credit	Availability	USD Credit	Availability	USD Credit	Availability	USD Credit	Availability	USD Credit	Availability	USD Credit	Availability	USD Credit	Availability	USD Credit	Availability	USD Credit	Availability	USD Credit	USD Credit	
SAEZ					98,52%	\$ 9,79																				9,79
SBBR																										0
SBCT																		99,17%	2,73	97,19 %	20,83					20,83
SBMN	98,30%	\$ 17,98	96,36%	\$ 47,14	88,92%	\$ 158,70	78,32%	317,64	98,39%	16,70	84,95%	218,00	91,20%	124,55	90,61%	133,43	97,24%	33,98			97,97 %	22,95	95,80 %	55,50		1146,57
SBRF	99,37%	\$ 3,50	99,41%	\$ 3,08			99,37%	3,50			99,65%	0,56	99,17%	5,61			99,12%	6,1	95,73%	41,64	96,85 %	29,93				52,28
SCEL																										0
SEGU																							99,39%	2,57		2,57
SGAS											99,68%	0,45			99,41%	5,17	98,53%	21,11								26,73
SKED																										0
SLLP													99,47%	6,13												6,13
SMPM	99,22%	\$ 27,84													98,59%	64,15										91,99
SOCA					83,76%	\$ 860,98			95,46%	228,85					99,64%	3,51	98,86%	45,20								1138,54
SPIM					97,06%	\$ 21,95	99,63%	0,61							94,79%	40,72										63,28
SUMU			99,47%	\$ 4,19																						4,19
SVMI	93,82%	\$ 128,77								99,69%	0,26	97,23%	54,03			99,55%	3,24	98,90%	17,61	99,47%	5,08					208,99
SYGC	99,34%	\$ 13,71			99,35%	\$ 13,32											99,63%	2,66								29,69
TTZP			97,40%	\$ 37,89													98,97%	9,58								47,47

Note: SLA-Availability for all nodes: 99.70%
 Except for SBMN and TTZP : 99.50%

TOTAL USD 2849,05

Agenda Item 4: Work plan for year 2019

4.1 Under this Agenda Item, the following working paper was presented:

- WP/04 – *Activities foreseen for 2019* (Presented by the Secretariat).

4.2 The Meeting reviewed the following activities scheduled for 2019:

- a) REDDIG II training programme;
- b) Preventive maintenance programme, and
- c) REDDIG II operation and analysis of the implementation of new services.

REDDIG II training and meeting programme

4.3 The Meeting approved the following trainings and meetings for 2019:

Recurrent training on REDDIG II operation and maintenance

4.3.1 This training is addressed to technical personnel responsible for the operation and maintenance of a REDDIG station. Among the aspects to be covered, emphasis will be placed on new implementations, the preventive maintenance work plan, the use of WUG tools, and troubleshooting of station components.

Seminar/workshop on the basics of the services delivered through REDDIG

4.3.2 This workshop is addressed to technical personnel operating REDDIG stations, and will focus on the basics of the services delivered through REDDIG II, such as: RADAR, AMHS, AIDC, CPDLC, ADS-C, ADS-B, etc.

Course on security policies and firewall settings

4.3.3 Subject to the purchase of firewall equipment, training would be provided to the technical personnel of the REDDIG nodes, NCC personnel and the Administrator.

Advanced course on firewall management and monitoring

4.3.4 This course will be addressed to NCC personnel and the REDDIG Administrator. As in the above item, this training is also subject to the purchasing of the firewall equipment.

Training for the Manaus NCC personnel on analysis of IP packages using sniffer (radar, AMHS, etc.)

4.3.5 This training is addressed to the Manaus NCC personnel responsible for network support and data transport and integrity.

Eighth meeting on the technical-operational implementation of REDDIG II

4.3.6 The Eighth meeting on the technical-operational implementation of REDDIG II will be held in Santiago, Chile, on a date to be defined at the RCC/22 meeting. For this event, one fellowship per node and simultaneous interpretation services are foreseen.

Preventive maintenance programme

4.4 Just like for 2018, the REDDIG Administration has established for 2019 a preventive maintenance programme of all REDDIG II equipment at the NCCs and all REDDIG II nodes. The preventive maintenance programme is shown in **Appendix B** to this working paper.

Visit to REDDIG nodes

4.4.1 The REDDIG Administration, as part of REDDIG II maintenance and training activities, has seen the need for the REDDIG Administrator to visit two nodes per year in order to conduct a complete assessment of the node and provide training to the personnel responsible for node maintenance. The Secretariat will select the two nodes to be visited in 2019. Visits will last one week.

Operation of REDDIG II and analysis of the implementation of new services

Spare parts for REDDIG II, transfer of the Bogotá node, and new node in Ezeiza

4.5 The Meeting took note of the progress made in the acquisition of spare parts for REDDIG II, the transfer of the REDDIG II node of Bogotá, and the installation of the new REDDIG II node in Ezeiza. All the procedures concerning the SAM Regional Office had been completed. The Technical Cooperation Bureau (TCB) at ICAO Headquarters was in charge of the process, and the contracting of Engie-Ineo was underway.

Procedure for replacing faulty equipment in the nodes

4.6 The Secretariat informed the Meeting about the process for replacing and delivering faulty equipment to the factory for repair:

- The REDDIG II Administration sends from the SAM Regional Office in Lima the equipment or spare part to the State where the failure occurred;
- The State concerned sends to the SAM Regional Office the faulty equipment or part, which, upon receipt, will be sent to the factory for repair;
- Once repaired, the equipment or part will be sent back to the ICAO SAM Office to be stored in the spare part storage room; and
- All coordination will take place between the REDDIG II Administration, the focal points, and the Regional Office.

4.6.1 The Secretariat requested the States to keep the list of REDDIG II focal points duly updated.

Implementation of new REDDIG II services

4.7 The Meeting took note that new AMHS circuits were foreseen for implementation in 2019. The **Appendix**¹ to this report contains a table showing AMHS connections already implemented (green and yellow) and to be implemented (no colour).

4.7.1 The Secretariat highlighted the importance for States to plan the migration of all ATN users to the AMHS environment, providing the proper means for processing the new XML message formats. The migration of all users to the AMHS environment will also permit the future elimination of the AFTN/AMHS Gateway.

¹ Refer to RCC/22-WP4, Appendix F

Agenda Item 5: Financial situation of the project and approval of the budget

5.1 Under this Agenda Item, the Meeting received information on the finances of the Project, and of the revision to the Project's budget, through working papers:

- WP/05 - *Financial situation of the project and approval of the budget for 2019*; and
- WP/07 - *MEVA III 100 KHZ bandwidth increment payment scheme*.

Summary of expenditures incurred by Project RLA/03/901 between 2003 and 2018

5.2 Table # 1 shows the expenditures incurred by Project RLA/03/901. The Project spent **USD 1,760,571** in 2018, and a total of **USD 15,110,088** from 2003 to 2018.

5.3 Table # 2 contains a bar chart with the distribution of project expenditures by year, as well as a pie chart showing the percentage of implementation of each budget component.

Status of cost sharing contributions

5.4 The Meeting took note of the status of cost-sharing contributions, as shown in Table # 3. To date, total contributions amounted to **USD 17,157,382**. Subtracting costs of **USD 15,110,088**, there was a positive balance of **USD 2,047,294**, still pending the collection of the cost corresponding to the transfer of the Paraguay antenna, the installation of the Brasilia node, which have not been charged to the 2018 financial statements, in addition to the charges pertaining to the transfer of the Bogota and Buenos Aires nodes.

5.5 With regard to outstanding contributions from Argentina and Suriname, the following conclusion was formulated:

CONCLUSION	
RCC/22-5 DELAYS IN THE COST SHARING CONTRIBUTIONS TO RLA/03/901 PROJECT – ARGENTINA AND SURINAME	
That the Secretariat: a) Carry out actions necessary to inform Argentina and Suriname on the need to comply with the payment of the REDDIG quotas, with the aim that the Project count with the funds necessary for the management of the network; and b) Among the actions to carry out, consider sending a letter to this effect, or making a high authority visit to the State.	Expected impact: <input type="checkbox"/> Politician / Global <input type="checkbox"/> Inter-regional <input checked="" type="checkbox"/> Economic <input type="checkbox"/> Environmental <input checked="" type="checkbox"/> Technical/Operational
Why: To guarantee the normal operation of REDDIG and avoid the application of the approved default in payment procedure.	
When: As of 2019	Status: Pending
Who: REDDIG Secretariat	

5.6 **Appendix A¹** to this part of the Report shows the afore indicated Tables 1, 2 and 3.

¹ Refer to RCC/22-WP/5, Rev. 1

5.7 The Meeting was informed that Revision T to the budget had not yet been approved by ICAO, as per Conclusion RCC/21-2 – Approval of the budget for Project RLA/03/901 Rev T, since it was necessary to update the Project’s administrative expenses. Therefore, budget Revision T was modified, also including the band width increase for the MEVA / REDDIG interconnection, the MEVA / REDDIG interconnection costs up to 2023, the increase in fellowships up to USD60,000 for 2019, and the updating of 2018 expenses, formulating the following Conclusion:

CONCLUSION RCC/22-6		APPROVAL OF THE BUDGET FOR PROJECT RLA/03/901 REV T	
That the Secretariat: Take relevant action to allow for the approval by ICAO Headquarters of RLA/03/901 Revision T, shown in Appendix B to this part of the report, for its subsequent submission to REDDIG member States.		Expected impact: <input type="checkbox"/> Political / Global <input type="checkbox"/> Inter-regional <input checked="" type="checkbox"/> Financial <input type="checkbox"/> Environmental <input checked="" type="checkbox"/> Technical/Operational	
Why: To carry out REDDIG management activities, which include corrective and preventive maintenance, equipment inventory, review of the main operational and maintenance concepts with the technical personnel at the nodes, training, etc.			
When: As of 2019		Status: Ongoing	
Who: REDDIG Secretariat			

5.8 Likewise, taking into account that approval had been granted for the procurement of firewall equipment in the amount of USD 375,000 and the need to increase budget provision for fellowships in the amount of USD 30,000 from 2020 to 2023 in view of the increase in United Nations’ daily subsistence allowance (DSA), the Secretariat was tasked with preparing a new budget proposal as follows:

Conclusion RCC/22-7		BUDGET PROPOSAL FOR PROJECT RLA/03/901 REV U FOR APPROVAL BY THE STATES	
That the Secretariat: a) Develop a budget proposal Rev U for Project RLA/03/901 that includes: a. The acquisition of firewall equipment in the amount of USD 375,000; and b. An increase in the fellowship budget in the amount of USD 30,000 from 2020 to 2023 b) Conduct a round of consultations with the States for comments and approval of the proposed budget U. Subsequently, hold a virtual meeting of the Coordination Committee to report on the results of the round of consultations and approve the steps for its approval by ICAO.		Expected impact: <input type="checkbox"/> Political / Global <input type="checkbox"/> Inter-regional <input checked="" type="checkbox"/> Financial <input type="checkbox"/> Environmental <input checked="" type="checkbox"/> Technical/Operational	

País		Presupuesto del Proyecto (en dólares de los EEUU)																
Proyecto		Fecha de inicio: 1 Julio 2003																
Título		Fecha de finalización: 31 Diciembre 2023																
		TOTAL	*-----	2003	*-----	2004	*-----	2005	*-----	2006	*-----	2007	*-----	2008	*-----	2009	*-----	2010
		USD	M/H	USD	M/H	USD	M/H	USD	M/H	USD	M/H	USD	M/H	USD	M/H	USD	M/H	USD
	SMPM	1,350										1,350						
	TTZP	3,503												1,723		1,780		
	SUMU	37,741										36,031	1,710					
	SVMI	5,179						2,242				2,697				240		
	Sub Total	350,645		0		-12,752		59,541		36,311		71,637		33,997		108,509		12,507
45-02	Equipo para oficina REDDIG	25,336		82										-30				
	Laptop REDDIG	3,965						1,829										
	LINDY COMPU PO 50534 SBMN	254						254										
	Sub Total	29,555		82		0		2,083		-30		0		0		0		0
45-03	Operación/Mantenimiento equipo de oficina	18,725				1,716												
	PO 50522 VIASAT Reparación modem SYGC	1,603						1,603										
	CB LIMA	179						179										
45-04	Transferencia del NCC de SPIM a SBMN																	
	P.O. 040694 VIASAT	8,250				8,250												
	P.O. 040687 MEMOTEC	4,250				4,250												
45-05	Extensión de contrato SEEE (P.O. 40489)	50,000				50,000												
45-06	Red de respaldo SEEE (P.O. 04090)	24,820				24,820												
45-07	Ajuste de auditoría	0																
45-08	P.O. 40683 Reparación modem SPIM	0																
45-09	Equipo de interconexión MEVA-REDDIG	9,439																
45-10	Adquisición de la REDDIG II	0																
	SAEZ	289,753																
	SAEZ (Nodo)	463,050																
	SLLP	289,753																
	SBRF-SBMN-SBCT	289,753																
	SBMN	289,753																
	SBCT	289,753																
	SBBR	396,571																
	SCEL	289,753																
	SKED	467,632																
	SEGU	289,753																
	SOCA	289,753																
	SYGC	289,753																
	SGAS	374,501																
	SPIM	289,753																
	SMPM	289,753																
	TTZP	289,753																
	SUMU	289,753																
	SVMI	289,753																
45-98	Seguro de responsabilidad profesional	2,213				444		284		246				130		1,109		
45-99	Sub-Total	5,877,775		0		89,480		2,066		246		0		130		1,109		0
49	Total del Componente	6,257,975		82		76,728		63,690		36,527		71,637		34,127		109,617		12,507
50	VARIOS																	
53-01	Gastos Varios	206,631		643		4,726		4,475		1,150		8,688		4,632		3,703		9,157
53-02	Cargos del PNUD	4,278				118		505		337						3,318		
53-99	Sub-Total	210,909		643		4,844		4,980		1,487		8,688		4,632		7,021		9,157
55	Costos administrativos	1,331,655		6,439		28,795		35,817		37,372		34,601		39,503		55,621		33,357
59	Total del Componente	1,542,564		7,082		33,639		40,797		38,859		43,289		44,135		62,642		42,514
99	TOTAL DEL PROYECTO	21,036,763		96,108		399,341		534,381		517,027		612,343		567,187		444,309		859,829

Appendix B to the Report on Agenda Item 5
 Apéndice B al Informe sobre la Cuestión 5 del Orden del Día

		Presupuesto del Proyecto (en dólares de los EEUU)										Fecha de inicio: 1 Julio 2003		Fecha de finalización: 31 Diciembre 2023				
País	Regional para Sudamerica																	
Proyecto	RLA/03/901/T																	
Título	Sistema de Gestión de la REDDIG y Administración del Segmento Satelital																	
		TOTAL	*-----	2003	*-----	2004	*-----	2005	*-----	2006	*-----	2007	*-----	2008	*-----	2009	*-----	2010
		USD	M/H	USD	M/H	USD	M/H	USD	M/H	USD	M/H	USD	M/H	USD	M/H	USD	M/H	USD
100	COSTOS COMPARTIDOS																	
101	Costos compartidos Gobiernos																	
101-01	Argentina	2,109,197		50,329		34,231		36,123		46,800		65,423		77,660		85,559		0
101-02	Bolivia	1,143,814		0		22,090		45,632		56,421		0		54,595		52,460		48,039
101-03	Brasil	4,138,359		123,780		77,954		74,346		113,775		58,035		81,444		118,039		142,700
101-04	Chile	1,092,659		40,003		80,066		76,724		10,430		0		29,500		29,500		1,000
101-05	Colombia	1,510,962		24,269		0		162,094		0		0		150,000		7,441		0
101-06	Ecuador	1,124,496		40,903		19,559		21,151		29,100		19,000		40,865		51,589		35,000
101-07	Francia	1,054,143		33,941		12,112		20,910		26,400		25,000		45,795		51,371		24,092
101-08	Guyana	1,046,077		0		44,203		10,006		10,278		27,854		35,378		29,119		43,870
101-09	Paraguay	1,165,408		42,550		5,503		21,910		30,700		25,600		46,160		53,262		0
101-10	Perú	1,485,166		49,603		29,660		35,140		39,700		40,010		71,372		77,820		0
101-11	Suriname	1,047,669		0		41,693		18,505		0		0		28,670		18,330		0
101-12	Uruguay	1,197,355		47,478		16,166		28,854		27,985		77,156		52,871		39,729		29,970
101-13	Venezuela	1,521,986		44,203		15,790		27,220		45,800		38,700		71,774		81,664		88,967
101-14	Intereses / Ajustes / Otros	132,162		1,447		4,765		9,685		16,157		17,065		8,630		1,948		770
101-15	Trinidad y Tabago	941,869						40,110		5,274		15,500		37,787		48,776		29,980
101-16	COCESNA	325,440														0		0
101-99	Sub-Total	21,036,763		498,506		403,792		628,410		458,820		409,343		832,501		746,607		444,388
109	Total del Componente	21,036,763		498,506		403,792		628,410		458,820		409,343		832,501		746,607		444,388

Appendix B to the Report on Agenda Item 5
 Apéndice B al Informe sobre la Cuestión 5 del Orden del Día

País Proyecto Título		Presupuesto del Proyecto (en dólares de los EEUU)														
		Fecha de inicio: 1 Julio 2003 Fecha de finalización: 31 Diciembre 2023														
		TOTAL	*-----	2011	*-----	2012	*-----	2013	*-----	2014	*-----	2015	*-----	2016	*-----	2017
		USD	M/H	USD	M/H	USD	M/H	USD	M/H	USD	M/H	USD	M/H	USD	M/H	USD
10	PERSONAL DEL PROYECTO															
11	Profesionales Internacionales															
11-01	Administrador de la Red	3,339,810	12.0	209,250	12.0	232,544	12.0	212,112	12.0	211,011	12.0	197,472	12.0	194,720	12.0	180,813
11-51	Aspectos Institucionales	0														
11-97	Consultores	75,785		9,200		0	0	0		0		0				
11-99	Sub-Total	3,415,595		218,450		232,544		212,112		211,011		197,472		194,720		180,813
13	APOYO ADMINISTRATIVO	395,835	6	19,086	6	19,443	6	17,183	6	17,571	6	15,864	6	19,991	6	22,778
13-01	Secretaria bilingüe	25,297														
13-02	Técnico REDDIG	0														
13-03	Técnico REDDIG 2	7,516														
13-04	Secretaria bilingüe (liquidación)	48,263	4	10,670	4	12,831	4	15,508	4	9,254						
13-05	Asistente administrativo financiero	151,242	4	8,931	4	107	3	11,425	3	7,798	4	11,366	4	11,046	4	12,697
13-06	Auxiliar de tecnología de la información	0														
13-99	Sub-Total	628,153	14	38,687	14	32,381	13	44,116	13	34,623	10	27,230	10	31,037	10	35,475
15	VIAJES OFICIALES															
15-01	Viajes oficiales	1,745				0		0		0						
15-99	Sub-total	1,745		0		0		0		0		0		0		0
16	MISIONES															
16-01	Gastos de misiones	374,373		10,250		36,747		5,075		20,306		15,372		15,115		21,120
16-99	Sub-total	374,373		10,250		36,747		5,075		20,306		15,372		15,115		21,120
17	PROFESIONALES NACIONALES															
17-01	Profesionales Nacionales	4,810		961								1,769				
17-99	Sub-total	4,810		961		0		0		0		1,769		0		0
19	Component total	4,424,676		268,348		301,672		261,303		265,940		241,843		240,872		237,408
20	SUBCONTRATOS															
21-01	Alquiler del segmento satelital (P.O. 40670)															
	P.O. 30473 (1 Oct 2003 a 31 Dic 2003)	62,727														
	P.O. 40670 (1 Ene 2005 a 31 Dic 2008)	1,093,905														
	Alquiler 2009-2011	462,528														
	Alquiler 2012-2014	696,354				233,826		231,264		231,264						
	Alquiler 2015-2018	925,056										462,528		231,264		
	Alquiler 2019-2023	1,156,320														
21-02	Acceso a la Red (Contract 22501528)	516,456		32,831		24,650		77,518		45,039		56,269		46,348		33,817
21-03	MEVA/REDDIG Recurrente Brazil	22,113										1,454		1,699		3,160
21-04	MEVA/REDDIG Recurrente Caracas	76,507										5,154		6,025		10,888
21-05	MEVA/REDDIG Recurrente Bogota	75,807										5,155		6,026		10,771
21-06	MEVA/REDDIG Recurrente Lima	22,113										1,454		1,699		3,160
21-07	MEVA/REDDIG No Recurrente	75,071														
21-08	Incremento Banda Satelital MEVA REDDIG	7,600														
	Total Servicio Terrestre	0														
	Servicio Terrestre SAEZ	166,974												23,798		23,950
	Servicio Terrestre SLLP	166,974												23,798		23,950
	Servicio Terrestre SBCT	166,974												23,798		23,950
	Servicio Terrestre SBMN	166,973												23,798		23,949
	Servicio Terrestre SBRF	166,973												23,798		23,949
	Servicio Terrestre SBBR	166,973												23,798		23,949
	Servicio Terrestre SCEL	166,973												23,798		23,949
	Servicio Terrestre SKED	166,973												23,798		23,949
	Servicio Terrestre SEGU	166,973												23,798		23,949
	Servicio Terrestre SOCA	166,973												23,798		23,949
	Servicio Terrestre SYGC	166,973												23,798		23,949
	Servicio Terrestre SGAS	166,973												23,798		23,949
	Servicio Terrestre SPIM	166,973												23,798		23,949
	Servicio Terrestre SMPM	166,973												23,798		23,949
	Servicio Terrestre TTZP	166,973												23,798		23,949
	Servicio Terrestre SUMU	166,973												23,798		23,949

		Presupuesto del Proyecto (en dólares de los EEUU)														
		Fecha de inicio: 1 Julio 2003														
		Fecha de finalización: 31 Diciembre 2023														
Pais	Regional para Sudamerica															
Proyecto	RLA/03/901/T															
Título	Sistema de Gestión de la REDDIG y Administración del Segmento Satelital															
		TOTAL	*-----	2011	*-----	2012	*-----	2013	*-----	2014	*-----	2015	*-----	2016	*-----	2017
		USD	M/H	USD	M/H	USD	M/H	USD	M/H	USD	M/H	USD	M/H	USD	M/H	USD
SCEL (C. Vergara)		1,014		1,014												
SVM I (J. Castillo)		1,014		1,014												
SYGC (S. Hemchan)		1,014		1,014												
SLLP (H. Huaylla)		1,014		1,014												
SMPM (S. Radjje)		1,405				1,405										
SUMU (W. Pelayo)		1,413				1,413										
SKED (O. Alfonso Bravo)		1,416				1,416										
SVM I (O. Guillén)		1,416				1,416										
SEGU (V. Yépez)		1,416				1,416										
SEGU (L. Pazos)		1,416				1,416										
SYGC (R. Suresh)		1,416				1,416										
SYGC (M. Barrington)		1,416				1,416										
SCEL (E. Demanet)		1,416				1,416										
SLLP (R. Cusi)		1,416				1,416										
SGAS (V. Morán)		1,416				1,416										
SUMU (M. Vera)		1,405						1,405								
SKED (M. Zamudio)		1,416						1,416								
SMPM (K.Goercharan)		1,405						1,405								
SVM I (R. Canales)		1,405						1,405								
SYGC (M.Maycock)		1,405						1,405								
SGAS (A.Torres)		1,405						1,405								
SGAS (A.Noguera)		1,405						1,405								
SGAS (W.Davalos)		1,405						1,405								
SUMU (R.Pesce)		1,405						1,405								
SYGC (S. Gopaul)		1,337								1,337						
SUMU (M. Vera)		1,336								1,336						
SGAS (A. Pereira)		1,336								1,336						
SEGU (R. Avellana)		1,336								1,336						
SBCT (R. Rodrigues)		1,336								1,336						
SBCT (F. Almeida)		1,337								1,337						
TTZP R. Brumant		1,446									1,446					
SVM I G. Zoino		11									11					
SUMU W. Pelayo		1,446									1,446					
SUMU M. Vera		11									11					
SPIM A. Arango		1,001									1,001					
SMPM M. Henk		1,446									1,446					
SGAS R. Benitez		1,435									1,435					
SGAS A. Pereira		1,001									1,001					
SEGU W. Quinde		1,446									1,446					
SEGU R. Avellan		1,001									1,001					
SCEL C. Vergara		1,091									1,091					
SBRF C. Ferreira		1,446									1,446					
SBMN J. Miecznikowski		2,446									2,446					
SBMN E. Menezes		1,446									1,446					
SBMN B Azevedo		1,001									1,001					
SBCT E. Da Paixao		1,080									1,080					
SAEZ S. Vallone		1,001									1,001					
SAEZ H. Canna		1,446									1,446					
TTZP R. Brumant		1,435												1,435		
TTZP J. Small		125												125		
SVM I G Zoino		2,211												2,211		
SUMU W. Pelayo		1,435												1,435		
SUMU L. Rodriguez		2,211												2,211		
SOCA J Pichon		1,501												1,501		
SMPM O. Kofi		1,435												1,435		
SLLP L. Mamani		2,211												2,211		
SKED W. Fonseca		1,208												1,208		
SGAS R. Cardozo		2,211												2,211		
SGAS R. Benitez		1,435												1,435		
SEGU W. Quinde		1,435												1,435		
SEGU M. Rodriguez		2,211												2,211		
SCEL L. Camilo		2,211												2,211		

		Presupuesto del Proyecto (en dólares de los EEUU)														
		Fecha de inicio: 1 Julio 2003														
		Fecha de finalización: 31 Diciembre 2023														
Pais	Regional para Sudamerica															
Proyecto	RLA/03/901/T															
Título	Sistema de Gestión de la REDDIG y Administración del Segmento Satelital															
		TOTAL	*-----	2011	*-----	2012	*-----	2013	*-----	2014	*-----	2015	*-----	2016	*-----	2017
		USD	M/H	USD	M/H	USD	M/H	USD	M/H	USD	M/H	USD	M/H	USD	M/H	USD
	SMPM	1,350														
	TTZP	3,503														
	SUMU	37,741														
	SVMI	5,179														
	Sub Total	350,645		2,896		635		2,307		5,057		0		0		0
45-02	Equipo para oficina REDDIG	25,336		1,266		757		4,421				1,820				
	Laptop REDDIG	3,965		2,136												
	LINDY COMPU PO 50534 SBMN	254														
	Sub Total	29,555		3,402		757		4,421		0		1,820		0		0
45-03	Operación/Mantenimiento equipo de oficina	18,725		2,009				0		0						
	PO 50522 VIASAT Reparación modem SYGC	1,603														
	CB LIMA	179														
45-04	Transferencia del NCC de SPIM a SBMN															
	P.O. 040694 VIASAT	8,250														
	P.O. 040687 MEMOTEC	4,250														
45-05	Extensión de contrato SEEE (P.O. 40489)	50,000														
45-06	Red de respaldo SEEE (P.O. 04090)	24,820														
45-07	Ajuste de auditoría	0														
45-08	P.O. 40683 Reparación modem SPIM	0														
45-09	Equipo de interconexión MEVA-REDDIG	9,439		9,439												
45-10	Adquisición de la REDDIG II	0														
	SAEZ	289,753						17,841		94,908		134,755				
	SAEZ (Nodo)	463,050														
	SLLP	289,753						17,841		94,908		134,755				
	SBRF-SBMN-SBCT	289,753						17,841		94,908		134,755				
	SBMN	289,753						17,841		94,908		134,755				
	SBCT	289,753						17,841		94,908		134,755				
	SBBR	396,571														
	SCEL	289,753						17,841		94,908		134,755				
	SKED	467,632						17,841		94,908		134,755				
	SEGU	289,753						17,841		94,908		134,755				
	SOCA	289,753						17,841		94,908		134,755				
	SYGC	289,753						17,841		94,908		134,755				
	SGAS	374,501						17,841		94,908		134,755				
	SPIM	289,753						17,841		94,908		134,755				
	SMPM	289,753						17,841		94,908		134,755				
	TTZP	289,753						17,841		94,908		134,755				
	SUMU	289,753						17,841		94,908		134,755				
	SVMI	289,753						17,841		94,908		134,755				
45-98	Seguro de responsabilidad profesional	2,213				0										
45-99	Sub-Total	5,877,775		11,448		0		285,455		1,518,534		2,156,081		0		0
49	Total del Componente	6,257,975		17,746		1,392		292,183		1,523,591		2,157,901		0		0
50	VARIOS															
53-01	Gastos Varios	206,631		13,351		11,518		29,889		10,698		13,592		11,471		13,248
53-02	Cargos del PNUD	4,278						0		0		0				
53-99	Sub-Total	210,909		13,351		11,518		29,889		10,698		13,592		11,471		13,248
55	Costos administrativos	1,331,655		36,539		157,229		140,757		41,566		68,461		64,082		55,473
59	Total del Componente	1,542,564		49,890		168,747		170,646		52,264		82,053		75,553		68,721
99	TOTAL DEL PROYECTO	21,036,763		373,945		763,878		1,071,336		2,141,829		3,067,054		1,071,660		829,290

Appendix B to the Report on Agenda Item 5
 Apéndice B al Informe sobre la Cuestión 5 del Orden del Día

		Presupuesto del Proyecto (en dólares de los EEUU)														
		Fecha de inicio: 1 Julio 2003														
		Fecha de finalización: 31 Diciembre 2023														
Pais	Regional para Sudamerica															
Proyecto	RLA/03/901/T															
Título	Sistema de Gestión de la REDDIG y Administración del Segmento Satelital															
		TOTAL	*-----	2011	*-----	2012	*-----	2013	*-----	2014	*-----	2015	*-----	2016	*-----	2017
		USD	M/H	USD	M/H	USD	M/H	USD	M/H	USD	M/H	USD	M/H	USD	M/H	USD
100	COSTOS COMPARTIDOS															
101	Costos compartidos Gobiernos															
101-01	Argentina	2,109,197		167,402		0		487,132		0		0		73,193		554,077
101-02	Bolivia	1,143,814		43,924		43,105		344,060		63,265		52,959		45,776		39,874
101-03	Brasil	4,138,359		148,003		993,893		235,239		501,508		150,672		128,044		167,976
101-04	Chile	1,092,659		45,000		44,791		354,930		52,360		50,593		52,496		36,496
101-05	Colombia	1,510,962		67,201		412,394		0		73,166		60,388		46,842		46,842
101-06	Ecuador	1,124,496		35,000		328,951		65,598		62,116		58,880		0		93,853
101-07	Francia	1,054,143		42,178		323,572		0		62,951		177,634		44,776		33,725
101-08	Guyana	1,046,077		63,148		328,347		21,696		57,173		66,041		58,555		12,457
101-09	Paraguay	1,165,408		87,148		41,848		434,406		0		0		107,978		78,925
101-10	Perú	1,485,166		155,271		349,287		76,474		0		58,961		127,088		59,719
101-11	Suriname	1,047,669		111,164		29,983		281,233		0		0		80,000		80,000
101-12	Uruguay	1,197,355		29,971		333,134		66,541		63,516		58,240		51,869		42,649
101-13	Venezuela	1,521,986		80,000		87,033		382,230		70,580		56,119		43,626		43,626
101-14	Intereses / Ajustes / Otros	132,162		847		2,612		6,819		6,640		6,644		7,768		15,188
101-15	Trinidad y Tabago	941,869		0		318,528		91,605		47,731		52,454		45,584		29,289
101-16	COCESNA	325,440		65,145		19,178		19,178		19,185		0		49,124		38,393
101-99	Sub-Total	21,036,763		1,141,402		3,656,656		2,867,141		1,080,191		849,585		962,719		1,373,089
109	Total del Componente	21,036,763		1,141,402		3,656,656		2,867,141		1,080,191		849,585		962,719		1,373,089

País	Regional para Sudamerica													
Proyecto	RLA/03/901/T													
Título	Sistema de Gestión de la REDDIG y Administración del Segmento Satelital													
		TOTAL	*-----	2018	*-----	2019	*-----	2020	*-----	2021	*-----	2022	*-----	2023
		USD	M/H	USD	M/H	USD	M/H	USD	M/H	USD	M/H	USD	M/H	USD
10	PERSONAL DEL PROYECTO													
11	Profesionales Internacionales													
11-01	Administrador de la Red	3,339,810	12.0	119,225	12.0	120,000	12.0	122,500	12.0	125,000	12.0	127,500	12.0	130,000
11-51	Aspectos Institucionales	0												
11-97	Consultores	75,785		31,389		10,000		10,000		10,000		10,000		
11-99	Sub-Total	3,415,595		150,614		130,000		132,500		135,000		137,500		130,000
13	APOYO ADMINISTRATIVO													
13-01	Secretaria bilingüe	395,835	6	18,327	6	27,500	6	30,000	6	32,500	6	35,000	6	37,500
13-02	Técnico REDDIG	25,297		478										
13-03	Técnico REDDIG 2	0												
13-04	Secretaria bilingüe (liquidación)	7,516												
13-05	Asistente administrativo financiero	48,263												
13-06	Auxiliar de tecnología de la información	151,242	4	15,372	4	13,500	4	14,000	4	14,500	4	15,000	4	15,500
13-99	Sub-Total	628,153	10	34,177	10	41,000	10	44,000	10	47,000	10	50,000	10	53,000
15	VIAJES OFICIALES													
15-01	Viajes oficiales	1,745												
15-99	Sub-total	1,745		0		0		0		0		0		0
16	MISIONES													
16-01	Gastos de misiones	374,373		38,600		20,000		20,000		20,000		20,000		20,000
16-99	Sub-total	374,373		38,600		20,000		20,000		20,000		20,000		20,000
17	PROFESIONALES NACIONALES													
17-01	Profesionales Nacionales	4,810												
17-99	Sub-total	4,810		0		0		0		0		0		0
19	Component total	4,424,676		223,391		191,000		196,500		202,000		207,500		203,000
20	SUBCONTRATOS													
21-01	Alquiler del segmento satelital (P.O. 40670)													
	P.O. 30473 (1 Oct 2003 a 31 Dic 2003)	62,727												
	P.O. 40670 (1 Ene 2005 a 31 Dic 2008)	1,093,905												
	Alquiler 2009-2011	462,528												
	Alquiler 2012-2014	696,354												
	Alquiler 2015-2018	925,056		231,264										
	Alquiler 2019-2023	1,156,320				231,264		231,264		231,264		231,264		231,264
21-02	Acceso a la Red (Contract 22501528)	516,456		30,899		33,817		33,817		33,817		33,817		33,817
21-03	MEVA/REDDIG Recurrente Brazil	22,113				3,160		3,160		3,160		3,160		3,160
21-04	MEVA/REDDIG Recurrente Caracas	76,507				10,888		10,888		10,888		10,888		10,888
21-05	MEVA/REDDIG Recurrente Bogota	75,807				10,771		10,771		10,771		10,771		10,771
21-06	MEVA/REDDIG Recurrente Lima	22,113				3,160		3,160		3,160		3,160		3,160
21-07	MEVA/REDDIG No Recurrente	75,071												
21-08	Incremento Banda Satelital MEVA REDDIG	7,600				1,200		1,600		1,600		1,600		1,600
	Total Servicio Terrestre	0												
	Servicio Terrestre SAEZ	166,974		24,034		23,798		23,798		23,798		23,798		23,798
	Servicio Terrestre SLLP	166,974		24,034		23,798		23,798		23,798		23,798		23,798
	Servicio Terrestre SBCT	166,974		24,034		23,798		23,798		23,798		23,798		23,798
	Servicio Terrestre SBMN	166,973		24,034		23,798		23,798		23,798		23,798		23,798
	Servicio Terrestre SBRF	166,973		24,034		23,798		23,798		23,798		23,798		23,798
	Servicio Terrestre SBBR	166,973		24,034		23,798		23,798		23,798		23,798		23,798
	Servicio Terrestre SCEL	166,973		24,034		23,798		23,798		23,798		23,798		23,798
	Servicio Terrestre SKED	166,973		24,034		23,798		23,798		23,798		23,798		23,798
	Servicio Terrestre SEGU	166,973		24,034		23,798		23,798		23,798		23,798		23,798
	Servicio Terrestre SOCA	166,973		24,034		23,798		23,798		23,798		23,798		23,798
	Servicio Terrestre SYGC	166,973		24,034		23,798		23,798		23,798		23,798		23,798
	Servicio Terrestre SGAS	166,973		24,034		23,798		23,798		23,798		23,798		23,798
	Servicio Terrestre SPIM	166,973		24,034		23,798		23,798		23,798		23,798		23,798
	Servicio Terrestre SMPM	166,973		24,034		23,798		23,798		23,798		23,798		23,798
	Servicio Terrestre TTZP	166,973		24,034		23,798		23,798		23,798		23,798		23,798
	Servicio Terrestre SUMU	166,973		24,034		23,798		23,798		23,798		23,798		23,798

País	Regional para Sudamerica													
Proyecto	RLA/03/901/T													
Título	Sistema de Gestión de la REDDIG y Administración del Segmento Satelital													
		TOTAL	*-----	2018	*-----	2019	*-----	2020	*-----	2021	*-----	2022	*-----	2023
		USD	M/H	USD	M/H	USD	M/H	USD	M/H	USD	M/H	USD	M/H	USD
	SMPM	1,350												
	TTZP	3,503												
	SUMU	37,741												
	SVMI	5,179												
	Sub Total	350,645		0		10,000		10,000		10,000		0		0
45-02	Equipo para oficina REDDIG	25,336		5,020		3,000		3,000		3,000		3,000		
	Laptop REDDIG	3,965												
	LINDY COMPU PO 50534 SBMN	254												
	Sub Total	29,555		5,020		3,000		3,000		3,000		3,000		0
45-03	Operación/Mantenimiento equipo de oficina	18,725				3,000		3,000		3,000		3,000		3,000
	PO 50522 VIASAT Reparación modem SYGC	1,603												
	CB LIMA	179												
45-04	Transferencia del NCC de SPIM a SBMN													
	P.O. 040694 VIASAT	8,250												
	P.O. 040687 MEMOTEC	4,250												
45-05	Extensión de contrato SEEE (P.O. 40489)	50,000												
45-06	Red de respaldo SEEE (P.O. 04090)	24,820												
45-07	Ajuste de auditoría	0												
45-08	P.O. 40683 Reparación modem SPIM	0												
45-09	Equipo de interconexión MEVA-REDDIG	9,439												
45-10	Adquisición de la REDDIG II	0												
	SAEZ	289,753		42,248.65										
	SAEZ (Nodo)	463,050				463,050.00								
	SLLP	289,753		42,248.65										
	SBRF-SBMN-SBCT	289,753		42,248.65										
	SBMN	289,753		42,248.65										
	SBCT	289,753		42,248.65										
	SBBR	396,571		42,248.65		354,322.00								
	SCEL	289,753		42,248.65										
	SKED	467,632		42,248.65		177,879.00								
	SEGU	289,753		42,248.65										
	SOCA	289,753		42,248.65										
	SYGC	289,753		42,248.65										
	SGAS	374,501		42,248.65		84,748.00								
	SPIM	289,753		42,248.65										
	SMPM	289,753		42,248.65										
	TTZP	289,753		42,248.65										
	SUMU	289,753		42,248.65										
	SVMI	289,753		42,248.65										
45-98	Seguro de responsabilidad profesional	2,213												
45-99	Sub-Total	5,877,775		718,227		1,082,999		3,000		3,000		3,000		3,000
49	Total del Componente	6,257,975		723,247		1,095,999		16,000		16,000		6,000		3,000
50	VARIOS													
53-01	Gastos Varios	206,631		15,690		10,000		10,000		10,000		10,000		10,000
53-02	Cargos del PNUD	4,278												
53-99	Sub-Total	210,909		15,690		10,000		10,000		10,000		10,000		10,000
55	Costos administrativos	1,331,655		82,532		180,923		69,474		61,461		61,011		40,641
59	Total del Componente	1,542,564		98,222		190,923		79,474		71,461		71,011		50,641
99	TOTAL DEL PROYECTO	21,036,763		1,760,571		2,256,748		1,031,200		1,028,687		1,023,737		586,301

País	Regional para Sudamerica													
Proyecto	RLA/03/901/T													
Título	Sistema de Gestión de la REDDIG y Administración del Segmento Satelital													
		TOTAL	*-----	2018	*-----	2019	*-----	2020	*-----	2021	*-----	2022	*-----	2023
		USD	M/H	USD	M/H	USD	M/H	USD	M/H	USD	M/H	USD	M/H	USD
100	COSTOS COMPARTIDOS													
101	Costos compartidos Gobiernos													
101-01	Argentina	2,109,197		0		171,489		64,945		64,945		64,945		64,945
101-02	Bolivia	1,143,814		39,874		48,491		35,812		35,812		35,812		35,812
101-03	Brasil	4,138,359		168,503		166,871		171,894		171,894		171,894		171,894
101-04	Chile	1,092,659		40,686		17,559		32,631		32,631		32,631		32,631
101-05	Colombia	1,510,962		223,887		34,937		50,375		50,375		50,375		50,375
101-06	Ecuador	1,124,496		41,861		36,033		36,259		36,259		36,259		36,259
101-07	Francia	1,054,143		33,725		29,399		31,340		31,340		31,340		31,340
101-08	Guyana	1,046,077		39,532		52,332		36,522		36,522		36,522		36,522
101-09	Paraguay	1,165,408		0		66,185		30,808		30,808		30,808		30,808
101-10	Perú	1,485,166		59,719		45,950		52,348		52,348		52,348		52,348
101-11	Suriname	1,047,669		0		220,492		34,400		34,400		34,400		34,400
101-12	Uruguay	1,197,355		42,649		37,714		37,716		37,716		37,716		37,716
101-13	Venezuela	1,521,986		69,474		43,366		57,954		57,954		57,954		57,954
101-14	Intereses / Ajustes / Otros	132,162		25,142		35		0		0		0		0
101-15	Trinidad y Tabago	941,869		0		60,698		29,638		29,638		29,638		29,638
101-16	COCESNA	325,440		19,178		19,287		19,193		19,193		19,193		19,193
101-99	Sub-Total	21,036,763		804,230		992,040		721,836		721,836		721,836		721,836
109	Total del Componente	21,036,763		804,230		992,040		721,836		721,836		721,836		721,836

Agenda Item 6: Annual project evaluation

6.1 Under this Agenda Item, the Meeting took note of the information provided in WP/06 regarding Project evaluation documents, namely:

- a) Status of the project as of 31 December of each year and management and outcome indicators (WP/06, Appendix A);
- b) Project monitoring and control, work plan for 2019 (WP/06, Appendix B); and,
- c) Survey on management and outcome indicators (WP/06, Appendix C).

6.2 The 2018 survey on management and outcome indicators was responded by Bolivia, Brazil, Chile, Colombia, Guyana, Paraguay, Peru, Trinidad and Tobago, Uruguay, and Venezuela. Their comments and ratings gave an average of 4.5 points out of a maximum of 5 (“exceeds requirements”) in the rating scale, with respect to the 2018 programme of activities. The consolidated information is shown in the **Appendix** to this Agenda Item.

6.3 The comments on compliance with project objectives and on project management highlighted the need to improve ground network services provided in some States, French Guiana (France) among them, the spare part delivery timeframe, and also spare part logistic management by both the Administrator and the States. Furthermore, the need to improve information security in the nodes was underlined. To this end, the procurement of firewall equipment was identified as a priority for the Project.

6.4 As to lessons learned, the planning of preventive maintenance, as well as visits by the Administrator to the nodes to support maintenance and training of the technical staff, was highlighted to be a good practice.

APPENDIX

3. SURVEY ON MANAGEMENT AND OUTCOME INDICATORS

Section I: Evaluation of current project

Section II: Assessment of compliance with objectives

Section III: Evaluation of implementation and delivery of services by ICAO

Section IV: Lessons learned

5.0	Exceptional results beyond project requirements
4.5	Exceeds requirements
4.0	Project objectives were achieved in all cases
3.5	Most of the project's objectives were achieved
3.0	Some quality results were achieved and implemented
2.5	Some quality results were achieved but are not implementable
2.0	Some results of low impact and quality were achieved
1.5	Below the expected results
1.0	Well below the expected results

Total	4.5
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3. SURVEY ON MANAGEMENT AND OUTCOME INDICATORS
I. EVALUATION OF CURRENT PROJECT

1.-Project objectives		Evaluation
Do you think the project's objectives are set correctly according to the development priorities of your State in relation to the National Air Navigation Plan to serve the reality of civil aviation?		
ARG		
BRA	The objectives of RLA/03/901 project are in agreement with DECEA SIRIUS Project, which is based on strategic solutions for a permanent evolution of the Brazilian air traffic management, associated with environmental needs.	4.5
CHI	Yes, the objectives of the Project are in accordance with our State's national navigation plan.	4.5
COL	---	4.5
FRA	Yes the project fits our objectives.	4
GUY	---	4.5
PAR	The objectives of the Project are aligned with our State's priorities with regard to the National Air Navigation Plan.	4.5
PER	Yes.	4.5
SUR		
T&T	Yes.	4.5
URU	The objectives of the Project take into account our State's priorities with regard to the national air navigation plan.	4.5
VEN	Yes, they are clearly established.	4
AVERAGE		4.4

2.- Support at regional and global level		Evaluation
Do you think that the project responds and supports your administration in its commitments <i>vis-a-vis</i> the regional and global air navigation plans?		
ARG		
BRA	The Project responds and supports DECEA regarding speech and data communications between Brazil and the South American States.	4.5
CHI	Yes, the Project supports our Administration's commitments regarding the NANP, both regionally and globally.	5
COL	---	5
FRA	Yes.	4.5
GUY	---	4.5
PAR	The Project firmly supports our State's commitments as regards the Regional and Global Air Navigation Plans.	4.5
PER	Yes.	4.5
SUR		
T&T	Yes.	4.5
URU	We consider that it responds and supports our Administration's commitments with respect to the regional and global air navigation plans.	4.5
VEN	It responds and supports our commitments with regard to the regional and global air navigation plans.	4
AVERAGE		4.6

3.-Comments of the State(s)		Evaluation
Do you have any comments on project management?		
ARG		
BRA	The management of the Project has kept the objective of 2003 RLA/03/901, Revision A, even though it has kept aligned with the new technologies available in the world market, through revisions to the agreement, equipment renewal, inclusion of new equipment, and training.	5
CHI	The management of the Project is satisfactory and is in accordance with planned objectives.	5
COL	---	5
FRA	No.	4
GUY	---	4.5
PAR	The management of the Project is fully committed with the objectives of the Project, and encourages participation.	4.5
PER	It is adequate.	4.5
SUR		
T&T	It is moving in a positive direction.	4.5
URU	The management of the Project complies with its objectives to the entire satisfaction of our Administration.	5
VEN	No, in total agreement with the conduct of the Project.	4
AVERAGE		4.6

4.-Strategy and vision		Evaluation
Do you consider that the project meets your institution's strategy and long-term vision?		
ARG		
BRA	REDDIG Project RLA/03/901 meets with DECEA objectives as an air navigation services provider (ANSP), and since the Project accompanies the new technological demands, by keeping updated with the needs of the providers and the market technology, it will continue being the communications network between DECEA and South American States.	5
CHI	The Project responds to the long term strategy and vision of our Administration.	4.5
COL	---	4.5
FRA	Yes, with this network, the utilisation of new services are permitted.	4.5
GUY	---	4.5
PAR	It fully responds to our State's requirements.	4.5
PER	Yes.	4.5
SUR		
T&T	Yes.	4.5
URU	The Project responds to the long term strategy and vision of our Administration.	4.5
VEN	It responds to our medium and long term strategies.	4
AVERAGE		4.5

5.-Project quality		Evaluation
What is your opinion about the content of this project for the achievement of its objectives?		
ARG		
BRA	The implementation of safety equipment and policies, the planned updating of equipment and technical staff will support the Project in achieving the objectives expected for the next two years.	4.5
CHI	It is appropriate and covers the requirements needed to achieve the objectives.	5
COL	---	4.5
FRA	Reactivity on sending spare equipment.	3.5
GUY	---	4.5
PAR	The contents of the Project are in total agreement with its objectives.	4.5
PER	---	4.5
SUR		
T&T	The content is good, but improvement of the network security is needed.	4
URU	The contents of the Project are within expectations for the desired objectives.	4.5
VEN	Continue with the meetings and coordination between States and the Administration.	4
AVERAGE		4.4

6- Project resources		Evaluation
Do you consider that the financial, physical and human resources considered for the attainment of the objectives set forth in the project document are adequate		
ARG		
BRA	The financial resources estimated for the Project have been updated since 2003. The physical resources are meeting all participant States' needs. The human resources used by the participating States and by ICAO show a close commitment with the objective of the Project.	4.5
CHI	Yes, they are adequate.	4.5
COL	---	4.5
FRA	Yes.	4
GUY	---	4.5
PAR	Yes.	4.5
PER	Keep and extend mechanisms to train staff of each REDDIG node.	4.5
SUR		
T&T	Yes.	4.5
URU	The financial, physical and human resources established for the Project are sufficient and adequate.	4.5
VEN	Yes, as long as the assessment dynamics is continued.	4.5
AVERAGE		4.5

7.-Project participants		Evaluation
Do you consider that all the parties that should be involved in the project are involved? If not, who should be participating?		
ARG		
BRA	All necessary parties are involved in the Project.	5
CHI	Yes.	4.5
COL	---	4.5
FRA	Yes.	4
GUY	---	4.5
PAR	Yes.	4.5
PER	---	5
SUR		
T&T	Yes.	4.5
URU	All parties involved are as necessary, and actively participate.	4.5
VEN	Yes.	4
AVERAGE		4.5

8.-Project effectiveness		Evaluation
Is the project cost-effective compared to similar programmes or projects?		
ARG		
BRA	RLA/03/901 Projects has shown effective as regards costs. In comparing with various contracts,taking into account the telecommunications operators and the time necessary for the hiring of personnel.	5
CHI	Yes	4.5
COL	---	4.5
FRA	---	4
GUY	---	4
PAR	Yes.	4.5
PER	It is effective.	5
SUR		
T&T	Yes.	4.5
URU	As regards costs, this Project makes adequate and effective compliance, as do other similar project.	4.5
VEN	Yes, totally.	4.5
AVERAGE		4.5

9.-Modification of project objectives	
What modifications to the objectives and scope of the project would you propose?	
ARG	
BRA	The objectives and scope of the Project meet current and planned needs.
CHI	None.
COL	---
FRA	Review the services passing through the terrestrial network.
GUY	---
PAR	None.
PER	---
SUR	
T&T	---
URU	The objectives and scope of the Project are appropriate.
VEN	Within the scope of the Project, being able to evaluate our national IP network, to implement all services and benefits from REDDIG II.
10.-Other information	
Please provide any other information that may support or better clarify your perception of the scope of the current project.	
ARG	
BRA	The main objective of the Project is the communications among participating States. Some companies are proposing that communications be conducted through REDDIG, with the aim of decreasing costs. Nevertheless, the Project Administration has not presented any related safety risks, an agreement proposal, nor the costs increase to the current Project, due to the data increase from the companies, even though they are meeting the needs of the participants to the Project.
CHI	None.
COL	---
FRA	---
GUY	---
PAR	---
PER	---
SUR	
T&T	---
URU	The excellent completion of this Project will serve as a basis for other future Projects.
VEN	---

3. SURVEY ON MANAGEMENT AND OUTCOME INDICATORS
II. ASSESSMENT OF ATTAINMENT OF OBJECTIVES

1.-Project objectives		Evaluation
In terms of project management by ICAO, do you think that project objectives are being met?		
ARG		
BRA	The objectives of the Project are being met by the ICAO Regional Office Administration in Lima.	4
CHI	Yes, they are being carried out with professionalism and excellent management.	4.5
COL	---	5
FRA	Yes.	4.5
GUY	---	4.5
PAR	Yes	4.5
PER	Yes, they are being complied with.	5
SUR		
T&T	Yes.	4.5
URU	We believe the ICAO's management is complying with the objectives of the Project, being currently successful.	4.5
VEN	Yes.	4.5
AVERAGE		4.6

2.- Project schedule		Evaluation
Do you consider that project objectives are being met or have been met on a timely basis in accordance with your		
ARG		
BRA	The objectives of the Project are being met by the ICAO Regional Office Administration in Lima.	4
CHI	Yes, and the delays in certain activities have been due to other factors.	4.5
COL	---	5
FRA	Yes.	4
GUY	---	4.5
PAR	Yes	4.5
PER	Affirmative.	4.5
SUR		
T&T	Yes.	4.5
URU	The objectives of the Project are being complied with, beyond expectations.	5
VEN	Yes, all activities are being complied with, as planned.	4.5
AVERAGE		4.5

3.-Use of resources		Evaluation
Do you consider that resources are being, or have been, used efficiently to meet the objectives?		
ARG		
BRA	All resources are being used efficiently, keeping the high availability indexes of the Project.	4.5
CHI	Yes.	4.5
COL	---	4.5
FRA	Yes.	4
GUY	---	4.5
PAR	Yes	4.5
PER	---	4.5
SUR		
T&T	Yes.	4.5
URU	The resources have been efficiently used, complying with the objectives	4.5
VEN	Yes.	4.5
AVERAGE		4.5

4.- Project cost		Evaluation
Do you consider that in meeting the objectives are being used, or have been used, resources efficiently?		
ARG		
BRA	The costs of the Project are being very well managed, so as to meet expected objectives.	4
CHI	Yes, they have been adequate.	4.5
COL	---	4.5
FRA	Yes.	4
GUY	---	4.5
PAR	Yes	4.5
PER	---	4.5
SUR		
T&T	Yes	4
URU	Costs related with objective compliance have been adequate.	4.5
VEN	Yes.	4.5
AVERAGE		4.4

5.-Major achievements		Evaluation
What are the main achievements of the project in relation to the expected results?		
ARG		
BRA	The high REDDIG availability and the REDDIG administration, which permit an excellent coordination between States, as well as the existance of new safer and faster services.	4
CHI	The international coordination for the solution of problems.	4.5
COL	---	
FRA	The availability of the network.	4
GUY	---	4.5
PAR	The availability, the qualified technical group, and the users' satisfaction.	4.5
PER	---	4.5
SUR		
T&T	The high level of availability of the services on the network.	4.5
URU	The expected results have been obtained, effectively overcoming any contingencies. All this through an adequate administration of the Project.	4.5
VEN	Interconnection of FIR SVMI with all States was achieved.	4.5
AVERAGE		4.4

6.-Major problems and their resolution		Evaluation
What are the main problems affecting the achievement of expected results and how should they be resolved?		
ARG		
BRA	The availability of the ground network is one of the main problems. Actions necessary have been taken by the REDDIG Administrator, together with the telecommunications operator.	4.5
CHI	The difference in times taken in each country's administrative process.	4
COL	Difficulty in carrying out coordinations among various States, mainly associated with the availability of human resources.	4.5
FRA	The different languages could be a problem to solve some problems.	4
GUY	---	4.5
PAR	The delays that have occurred at some moment during the customs period. They could be reduced by optimizing the management of the focal points.	4
PER	---	4.5
SUR		
T&T	---	4.5
URU	The problems have been logistics-related, due to delays in customs, and to unexpected technical problems due to causes unrelated to maintenance, which have been successfully overcome.	4
VEN	.Interconnection with the MEVA circuits, we require and evaluation and coordination for their use in both manners: satellite and ground (Level 3)	4
AVERAGE		4.3

7.- Other comments	
Please include other comments related to the attainment of project objectives.	
ARG	
BRA	The ICT market is pushing towards digital transformation, the growth in the adoption of cloud services, investments in security, big data, analytics, IoT, among others, to meet the agility required by the companies. The aviation related services are also transforming and, due to the various differences among the States participating in the Project, REDDIG requires having its security service implemented and keep it aligned with the market, so as to avoid information security incidents and equipment obsolescence.
CHI	The objectives have been achieved with professionalism and dedication of the States' staff, and the Administration.
COL	---
FRA	Currently, we have a trouble with the satellite transmitters and we have the feeling to be alone.
GUY	---
PAR	None.
PER	---
SUR	
T&T	---
URU	The objective is being complied with through the excellent management of the Administrator, and the attention paid by the administrations maintenance staff.
VEN	Carry out respective coordinations and support to achieve Item 6 above.

8.- Risks	
What new events could affect the achievement of project outcomes? What do you recommend to respond to these events?	
ARG	
BRA	Currently, the major risk would be an information security incident, starting from a participating State, but to be mitigated with the current tools available to the network Administrator and NCC technicians, in addition to the firewall purchased for the REDDIG stations.
CHI	Renewal of suitable personnel to work with the REDDIG, taking over those who have retired.
COL	Electromagnetic interferences in the network, and recurrent training.
FRA	Spare equipment need to be sending faster.
GUY	---
PAR	The exposure of the network with regard to its security. We recommend accelerating the firewall implementation process.
PER	---
SUR	
T&T	---
URU	Absences due to retirement of ICAO specialists in communications will probably affect the results of the Project. We recommend searching for suitable and responsible people, to take their posts.
VEN	---

9.-Other information	
Please provide any other information that may support or further clarify your assessment regarding attainment of project objectives.	
ARG	
BRA	RLA/03/901 Project is very important for air navigation in South America, in addition to being a successful enterprise, which maintains a high communications availability and efficiency. It helps States, in keeping the means necessary for the required high availability communications.
CHI	None.
COL	---
FRA	---
GUY	---
PAR	None.
PER	---
SUR	
T&T	---
URU	Our compliance assessment is supported in the excellent communications among all parties, as well to their dedication and professionalism.
VEN	---

3. SURVEY ON MANAGEMENT AND OUTCOME INDICATORS
III. EVALUATION OF PROJECT IMPLEMENTATION AND PROVISION OF SERVICES BY ICAO

1.-Decision making		Evaluation
Do you think that the decision-making process within the project is appropriate?		
ARG		
BRA	The decision-taking is in agreement with RLA/03/901 Project RCC meetings.	4
CHI	Yes, it is adequate.	4.5
COL	---	4.5
FRA	Yes.	4.5
GUY	---	4.5
PAR	Yes.	4.5
PER	Yes, it is appropriate.	5
SUR		
T&T	Yes	4.5
URU	Decisions taken, most of all those unforeseen or of emergency, have been adequate.	4.5
VEN	Yes	4.5
AVERAGE		4.5

2.-Product quality		Evaluation
Do you think that the quality of the products obtained is appropriate?		
ARG		
BRA	All products, services, equipment and human resources serving the Project are of excellent quality.	5
CHI	Yes, it is adequate.	4.5
COL	---	4.5
FRA	Yes.	4.5
GUY	---	4.5
PAR	Yes.	4.5
PER	Yes	4.5
SUR		
T&T	Yes	4.5
URU	Yes, the quality of the product has been the result of an excellent study and analysis.	4.5
VEN	Yes	4
AVERAGE		4.5

3.-Orientation		Evaluation
Do you think that the orientation towards project outcomes is being complied with?		
ARG		
BRA	Participant States and the ICAO SAM Regional Office follow the guidelines to comply with the REDDIG objectives obtaining excellent results along the years.	4.5
CHI	Yes, it is being complied with.	4.5
COL	---	5
FRA	Yes.	4
GUY	---	4.5
PAR	Yes.	4.5
PER	Affirmative	4.5
SUR		
T&T	Yes	4.5
URU	Yes, it is being complied with, and we believe we are oriented towards excellent results.	4.5
VEN	Yes	4
AVERAGE		4.5

4.-Organization and prioritization		Evaluation
Do you think the organization and prioritization within the project is appropriate?		
ARG		
BRA	The organization and priorities within the Project are adequate to the objectives.	4
CHI	Yes, it is adequate.	4.5
COL	---	4.5
FRA	Yes.	4
GUY	---	4.5
PAR	Yes.	4.5
PER	Yes, it is appropriate	5
SUR		
T&T	Yes	4.5
URU	We believe that the agenda and prioritization are adequate and wise.	4.5
VEN	Yes	4
AVERAGE		4.4

5.-Change management		Evaluation
Do you think that change management and the degree of flexibility in managing the project are appropriate?		
ARG		
BRA	Change management and degree of flexibility in the management of the Project are within expectations.	4
CHI	Yes, they are appropriate.	4.5
COL	---	4.5
FRA	Yes.	4
GUY	---	4.5
PAR	Yes.	4.5
PER	Yes, they are appropriate.	4.5
SUR		
T&T	Yes.	4.5
URU	Change management and flexibility are good and appropriate.	4.5
VEN	Yes.	4
AVERAGE		4.4

6.-Service to the State		Evaluation
Do you think that the service provided to your State is appropriate?		
ARG		
BRA	The service provided by DECEA is meeting the needs required for the upkeep of the Project.	4
CHI	Yes, it is appropriate.	4.5
COL	---	5
FRA	Yes, except the question about the spare's equipment	3.5
GUY	---	4.5
PAR	Yes.	4.5
PER	Yes, it is appropriate	5
SUR		
T&T	Yes.	4.5
URU	Yes, it is appropriate and equal for all States.	4.5
VEN	Yes	4.5
AVERAGE		4.5

7.-Communication		Evaluación
Do you think that the level of communication within and outside the project is adequate?		
ARG		
BRA	The administrative-related comunicatins within the Project are within expectations.	4
CHI	Yes, is is adequate.	4.5
COL	---	5
FRA	Yes.	4.5
GUY	---	4.5
PAR	Yes.	4.5
PER	Yes, it is appropriate.	5
SUR		
T&T	Yes.	4.5
URU	Communicatins has been one of its strengths, cause for the success obtained to date.	5
VEN	Yes.	4
AVERAGE		4.6

8.-Conflicts		Evaluation
Do you believe that conflict management is adequate?		
ARG		
BRA	The measures carried out by the Regional Office and the REDDIG Administrator are efficient and facilitate the	4.5
CHI	Yes, it is adequate.	4.5
COL	---	4.5
FRA	Yes.	4
GUY	---	4.5
PAR	Yes.	4.5
PER	---	5
SUR		
T&T	Yes.	4.5
URU	Conflicts are solved appropriately, by their importance and priority.	4.5
VEN	Yes.	4
AVERAGE		4.5

9.-Use of resources		Evaluation
Do you think that project resources are being used efficiently to produce the expected results?		
ARG		
BRA	Resources are used efficiently and produce the expected results.	4.5
CHI	Yes, they are used efficiently.	4.5
COL	---	5
FRA	Yes.	4
GUY	---	4.5
PAR	Yes.	4.5
PER	---	5
SUR		
T&T	Yes.	4.5
URU	Yes, the are being used efficiently.	4.5
VEN	Yes	4.5
AVERAGE		4.6

10.-Relevance of mechanisms		Evaluation
Do you think that project management mechanisms are relevant?		
ARG		
BRA	The mechanism is necessary to keep the Project with high availability.	5
CHI	Yes, they are relevant.	4.5
COL	---	4.5
FRA	Yes.	4
GUY	---	4.5
PAR	Yes.	4.5
PER	---	5
SUR		
T&T	Yes.	4.5
URU	They are relevant and adequate.	4.5
VEN	Yes.	4
AVERAGE		4.5

11.-Opportunity of work plans		Evaluation
On the basis of its work plan, how would you rate the degree of opportunity of the project as regards the achievement of outputs, outcomes, and delivery of inputs?		
ARG		
BRA	The work plans presented have achieved a satisfactory result, and contribute towards a high network availability.	5
CHI	God, as regards delivery timeframe, products and results.	4.5
COL	---	4.5
FRA	Good.	4
GUY	---	4.5
PAR	Excellent.	4.5
PER	---	4
SUR		
T&T	Very good.	4.5
URU	The degree of opportunity has been appropriate, with a good management of resources and timeframes to obtain good results.	4.5
VEN	Yes	4
AVERAGE		4.4

12.-Orientation		Evaluation
Do you consider that the activities and products developed through the project are in line with the directives of ICAO, the regional offices and air navigation plans?		
ARG		
BRA	All Project activities and products are aligned with the Project's and participants' objectives.	5
CHI	Yes, they are.	4.5
COL	---	5
FRA	Yes.	4.5
GUY	---	4.5
PAR	Yes.	4.5
PER	---	5
SUR		
T&T	Yes.	4.5
URU	The activities and products are aligned with the ICAO air navigation plans, Regional Offices, and guidelines.	4.5
VEN	Yes.	4.5
AVERAGE		4.7

13.-Other information	
Please provide any other information that may support or further clarify your assessment on products and services provided through	
ARG	
BRA	The REDDIG Administrator, Mr. Javier Vittor, deserves mentioning for his excellent work during 2018, keeping an excellent working environment at the Manao NCC, committing himself to serve all States, keeping an optimum communication with all. He has successfully led the technical-operational meeting carried out in Curitiba, and attended all requests and demands from the participants during this event. Mr. Vittor has contributed towards the excellent results obtained in RLA/03/901 Project.
CHI	The products and services obtained through the Project have been appropriate, but the state of the art technology and increase in air operations should be always taken into account.
COL	We consider that the degree of communications conducted by the technical leader is adequate and timely. As for Colombia, we have felt a permanent support in the solving of technical issues. The Project has enabled an efficient voice and data communications, with States and adjacent States.
FRA	---
GUY	---
PAR	None.
PER	---
SUR	
T&T	
URU	The management of the products and services provided by REDDIG have been appropriate.
VEN	---

3. SURVEY ON MANAGEMENT AND OUTCOME INDICATORS
IV. LESSONS LEARNED

1.-Positive lessons learned from the project.	
Provide a brief description of the positive lessons learned from project implementation.	
ARG	
BRA	The team spirit among the States and network Administrator facilitate the solution of problems and failures at the stations. The meetings, courses and teleconferences have heightened the knowledge of the technical staff carrying out maintenance tasks at the stations.
CHI	Team work, with the active participation of States' and Regional Office's staff, through the available technological tools.
COL	The maintenance process should not only be informed in due time to the technical section, but also to the operational.
FRA	The cooperation between states and the Reddig Administrators.
GUY	---
PAR	The good communication through the use of teleconferences for the management of situations, and the coordination for the solution of problems.
PER	---
SUR	
T&T	---
URU	It would have been difficult to establish and carry out the Project among so many administrations, without the active mediation of ICAO, generating a close technical collaboration among all States.
VEN	The technical assistance and coordination at the moment required. The continuous training of technical personnel. The support and solution of conflicts during the technical visit of the network Administrator.
2.-Opportunities for improvement.	
Provide a brief description of the improvement opportunities identified during project implementation.	
ARG	
BRA	The continuous annual training of the technical staff upkeeping REDDIG, and the constant technical operational meetings.
CHI	Personnel rotation that thereafter does not continue in the Project.
COL	ICAO should negotiate services costs and goods provisions with future technology providers, with the aim of rapidly solving the implementation of a requirement needed by States.
FRA	---
GUY	---
PAR	The constant training, in order to count with an efficient technical team, prepared to face any problems.
PER	---
SUR	
T&T	---
URU	Improvement opportunities start with the close communication and support between the technical areas and the Project administration.
VEN	Improve the ground link with MEVA.
3.- Strategy to implement the improvement opportunities identified.	
Provide a brief description of the strategy that you would propose to implement the improvement opportunities identified.	
ARG	
BRA	Keep meetings and training plans in the annual work programme.
CHI	Keep the States working groups, to continue with the existing processes and start others for the renewal of personnel.
COL	The survey strategy implemented by ICAO is very appropriate; in addition, these types of initiatives and proposals are dealt with at technical meetings.
FRA	Review the services passing through the terrestrial network.
GUY	---
PAR	Keep the strategy currently used, since it has been perfected through the experience acquired during the course of the Project.
PER	---
SUR	
T&T	---
URU	Without doubt, to improve we must keep and add connections with the administrations participating staff, and support in the management and administration of REDDIG II.
VEN	Conduct respective studies and coordinations. Follow-up. Recommendations.

Agenda Item 7: Other matters***SELCAL 32 code***

7.1 The Meeting was informed that the SAM Regional Office had sent a State letter informing of the changes to be implemented in VHF or HF air-ground communications equipment using SELCAL, in order to comply with the new SELCAL 32 code.

7.2 The Secretariat requested the participants to enquire whether the letter had arrived at the relevant sections, so that a reply could be sent before 22 April 2019. To date, only French Guiana (France) had informed that the equipment used in the Cayenne FIR had been aligned with SELCAL 32.

Satellite ADS-B

7.3 The Meeting noted that the SAM Regional Office had also sent a State letter to REDDIG member States, containing the *Study on the convenience and feasibility of regional implementation of satellite ADS-B*, prepared at the request of the SAM Implementation Group (SAM/IG).

7.4 The Secretariat also requested the participants to advise the staff involved in analysing the document in their States, as regards the potential use of REDDIG II for the distribution of surveillance data, thus reducing communication link hiring costs (MPLS).