



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

REPORT ON ACTIVITIES CARRIED OUT SINCE THE LAST MEETINGS OF THE COORDINATION COMMITTEE

(Presented by the Secretariat)

| SUMMARY | |
|---|--|
| This working paper presents information on the progress made in the conduction of activities agreed upon at the last REDDIG Coordination Committee meetings (RCC/21 and RCC/23 Extraordinary), as part of the 2019 work plan. | |
| REFERENCES | |
| <ul style="list-style-type: none">• REDDIG Contract 22501200;• Report of the Twenty-second meeting of the REDDIG Coordination Committee (RCC/22) (Lima, Peru, 5-7 March 2019);• Twenty-third Workshop/Meeting of the SAM Implementation Group (SAM/IG/23) (Lima, Peru, 20-24 May 2019);• Report of the Twenty-third (Extraordinary) meeting of the REDDIG Coordination Committee (RCC/23) (Teleconference, 21 August 2019);• Eighth Meeting on the technical-operational implementation of REDDIG II (RTO/8) (Santiago, Chile, 14-18 October 2019); and• Twenty-fourth Workshop/Meeting of the SAM Implementation Group (SAM/IG/24) (Lima, Peru, 4-8 November 2019). | |
| ICAO Strategic Objectives: | <i>A – Safety</i> <i>B – Air navigation capacity and efficiency</i> |

1. Background

1.1 The main activities that the last meetings of the REDDIG Coordination Committee (RCC/22 and RCC/23 Extraordinary) agreed to include in the 2019 work plan, in addition to operation, support and maintenance of the network, were as follows:

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

1.2 This working paper also presents REDDIG logistics during 2019.

2. Description

REDDIG II TRAINING PROGRAMME

2.1 Regarding training activities, the following courses have been delivered since the RCC/22 meeting:

- a) Recurrent training on REDDIG II operation and maintenance;
- b) Seminar/workshop on basic concepts on services carried over REDDIG
- c) On-the-job training in Cayenne and Ezeiza; and
- d) Workshop on RF equipment measurement tools for the Manaus NCC staff.

Recurrent training on REDDIG II operation and maintenance

2.2 A regular task of the REDDIG Administrator is to provide this training during his annual visits to the nodes. On this occasion, the recurrent training was provided during the visit to the Ezeiza alternate NCC. Technical personnel from EANA (Empresa Argentina de Navegación Aérea Sociedad del Estado - service provider) and CNS inspectors from ANAC (National Administration of Civil Aviation – civil aviation authority) participated.

Seminar/workshop on basic concepts of services provided by REDDIG

2.3 This event took place during the RTO/8 meeting. Due to the short time available, only the basic content was delivered.

On-the-job training (OJT) in Cayenne and Ezeiza

2.4 Taking advantage of the REDDIG Administrator's visit to Cayenne and Ezeiza, OJT was provided to local staff on the fundamentals regarding network operation and maintenance.

Workshop on RF equipment measurement tools for NCC Manaus staff

2.5 The Manaus NCC technicians received training on tools for measuring the RF equipment used at the REDDIG II VSAT station.

PREVENTIVE MAINTENANCE PROGRAMME

2.6 Preventive maintenance for all the nodes was planned for implementation throughout 2019, which made it possible to identify and solve the problems encountered. Likewise, a procedure was established for keeping photographic records of all node components, in order to generate a database hosted at the NCC and make this information available through the Web.

2.7 During the RTO/08 meeting, videos and pictures of the various preventive maintenance tasks performed at the network nodes and NCCs were presented.

2.8 Cleaning of IBUCs, antennae and RF components was carried out, and also of different parts of the indoor installation of some stations, according to the preventive maintenance programme.

Visit to the Cayenne and Ezeiza nodes

2.9 The REDDIG II Administrator made two service missions in 2019, one, to Cayenne, French Guiana, to solve various malfunctions, check the facilities and condition of the station, and to provide OJT to the staff working at the node.

2.10 The other visit was to the Ezeiza node (alternate NCC), Argentina, to conduct corrective and preventive maintenance and for a general inspection of the station. Recurrent training on REDDIG and the operation of the regional NCC was also provided.

OPERATION OF REDDIG II AND ANALYSIS OF THE IMPLEMENTATION OF NEW SERVICES

2.11 **Appendix A** to this working paper shows the availability of REDDIG II.

Implementation of new AMHS interconnections

2.12 **Appendix B** to this working paper shows the status of AMHS interconnections planned for the SAM Region.

Exchange of surveillance data

2.13 **Appendix C** shows the circuits established on REDDIG II for the exchange of surveillance data.

REDDIG II Technical-Operational Meeting (RTO/8)

2.14 The eighth technical-operational meeting of REDDIG II (RTO/8) was held in Santiago, Chile, on 14-16 October 2019. Training sessions were conducted on 17 and 18 October 2019. Both events were held at the facilities of the *Escuela Técnica Aeronáutica* (ETA).

2.15 The report of the RTO/8 meeting (English and Spanish) is available on the ICAO SAM Regional Office website.

<https://www.icao.int/SAM/Documents/2019-REDDIG-RTO8/REDDIG%20RTO8%20Final%20Report.pdf> (English)

<https://www.icao.int/SAM/Documents/2019-REDDIG-RTO8/REDDIG%20RTO8%20Informe%20Final.pdf> (Spanish)

2.16 The main issues addressed at the RTO/8 meeting were the following:

- Router IOS upgrading and replacement of NETGEAR switches;
- Logistic procedures;
- Node status and failure statistics;
- Review and upgrading for REDDIG II maintenance and operation;
- Renewal of antennae;
- Coordination improvements;
- Support to the coordination of extra-regional interconnections (AMHS); and
- Solar interference and explosions.

New Ezeiza REDDIG node

2.17 In this regard, although processes had been initiated and were underway, they were temporarily suspended at the request of EANA, civil aviation service provider of Argentina.

Transfer of the Bogota REDDIG node

2.18 Amendment VII to the contract refers to the new Ezeiza node and to the transfer of the Bogota node. In this regard and due to the aforementioned reasons, both processes were interrupted in May 2019. In the case of the transfer of the Bogota node, the amendment was signed on 28 June 2019.

2.19 A teleconference was held on 24 July 2019 between INEO, Colombia and ICAO, in which INEO introduced the staff assigned to the project, together with the provisional timetable, points of contact were designated, and details regarding the transfer of the node were discussed.

2.20 Since then and until December 2019, teleconferences have been carried out to follow up on the intended activities based on the defined timetable. The transfer is to be completed in 13 months.

2.21 It was decided that any coordination, communication, doubt or any other subject related to the transfer should be addressed by e-mail and copies sent to the intervening parties (INEO, Colombia and ICAO). In those cases in which other types of documents were required, coordination took place with the parties involved in order to meet the requirement.

2.22 Colombia stated that it was ready to support in any issue related with the transfer of the node.

2.23 In December, Colombia informed of difficulties it had with the import and clearance of the equipment to be sent by INEO. Consequently, and at the request of Colombia, ICAO, as an exception, is carrying out the bidding process to hire a company to conduct the import and clearance of all the material that INEO will be sending to Colombia from France and United States. Due to delays, the material is currently in storage at both of these States. Storage costs will be covered by Colombia through its annual fee under the Project.

Acquisition of spare parts for REDDIG

2.24 The REDDIG spare part procurement process carried out by the ICAO Technical Cooperation Bureau (TCB) was completed, and the equipment was received and stored at the ICAO SAM Regional Office.

REDDIG logistics

2.25 It should be noted that equipment remains in the respective customs office for a long time, and that it is important for focal points to support logistics to avoid this. Accordingly, the list of REDDIG II focal points (**Appendix D**) must be updated, since some individuals listed as focal points are no longer in that position due to termination of office or retirement.

2.26 Logistics, mainly for resolving failures at the nodes, include the delivery of equipment or parts from the REDDIG spare parts stock stored at the ICAO Regional Office in Lima, or from some other node to the nodes that so require it. It also includes coordination with factories for equipment repairs, payment for transportation and other associated costs, as well as coordination and support to States for the related import and export operations.

2.27 Two member States of Regional Project RLA/03/901 have encountered many issues with customs, resulting in delays in repairs and putting other States at risk due to unavailability of spare parts when needed.

2.28 States are responsible for expediting customs clearance in their own country, so that the REDDIG II spare part framework may serve all participating States equally.

Additional ground network nodes (MPLS)

2.29 The twenty-third (Extraordinary) meeting of the REDDIG Coordination Committee (RCC/23) was held on 21 August 2019 via teleconference, to address a request of the United States Federal Aviation Administration (FAA) to implement additional REDDIG II ground network nodes (MPLS), by hiring the provider, CenturyLink, directly to access REDDIG, at no additional cost for the participants of Regional Project RLA/03/901.

2.30 Subsequently, requests were also received from Panama (by e-mail) and COCESNA to access the network through the REDDIG II MPLS service. In turn, Bolivia expressed its intention to implement an “additional” REDDIG II node in Cochabamba. **Appendix E** to this working paper shows the letters sent by Bolivia and COCESNA. Official communication from Panama is still pending.

2.31 The United States and Panama will contract directly with the REDDIG II MPLS service provider. Since Bolivia and COCESNA are already REDDIG II members, the Cochabamba and Honduras MPLS node costs will be added to their respective annual fees.

2.32 Another ground network node to be implemented is that at the ICAO SAM Regional Office, which was approved by the members of Regional Project RLA/03/901 and the cost of which will be shared by all the participants of the project.

New process for hiring the MPLS service

2.33 The REDDIG II MPLS ground network services were being paid through Contract No. 22501200 signed by ICAO, INEO/ENGIE and Level 3 (today, CenturyLink). With the ending of this Contract, there is a need to sign a specific contract with the REDDIG II ground network telecommunication provider (MPLS). In this sense, the TCB has stated that it would extend the current contract until 30 June 2020, but a new process should begin soon for hiring the service, starting 1 July 2020, for a period of 30 months.

2.34 The ICAO SAM Regional Office, together with the member States of Regional Project RLA/03/901, have drafted the technical specifications for the new REDDIG II MPLS service contract, which were delivered to the TCB on 10 February 2020.

2.35 Figure 1 shows the ground network configuration contemplated in the specifications. **Appendix F** to this working paper contains a list of the nodes that shall be implemented with the new contract.

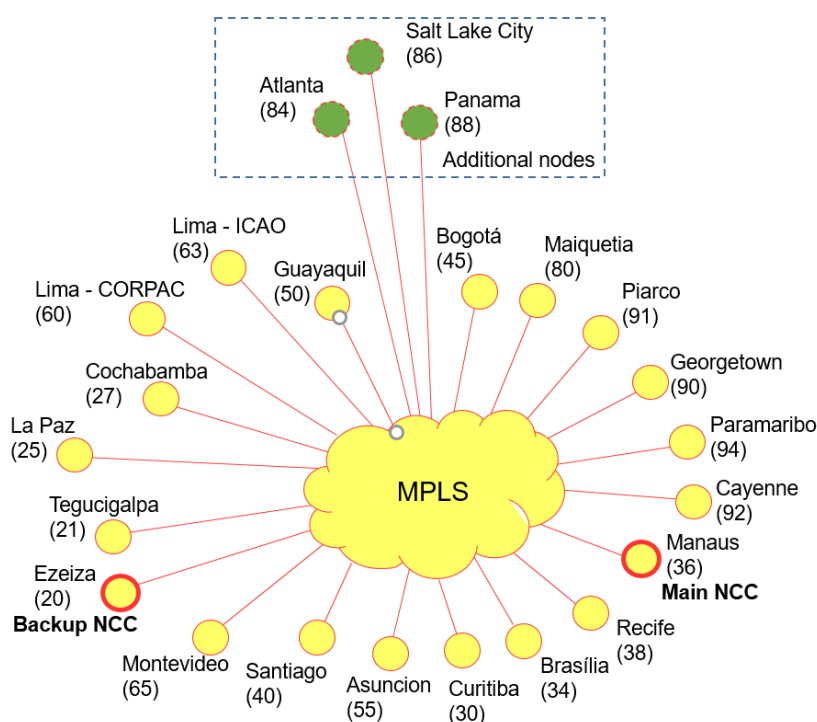


Figure 1 – REDDIG II Ground Network (MPLS)

Donation of REDDIG I cards and equipment to CORPAC Peru

2.36 During the nineteenth meeting of the REDDIG Coordination Committee (RCC/19) (Lima, Peru, 7-9 March 2016), CORPAC requested the donation of REDDIG I MEMOTEC cards and equipment, which was approved by the member States.

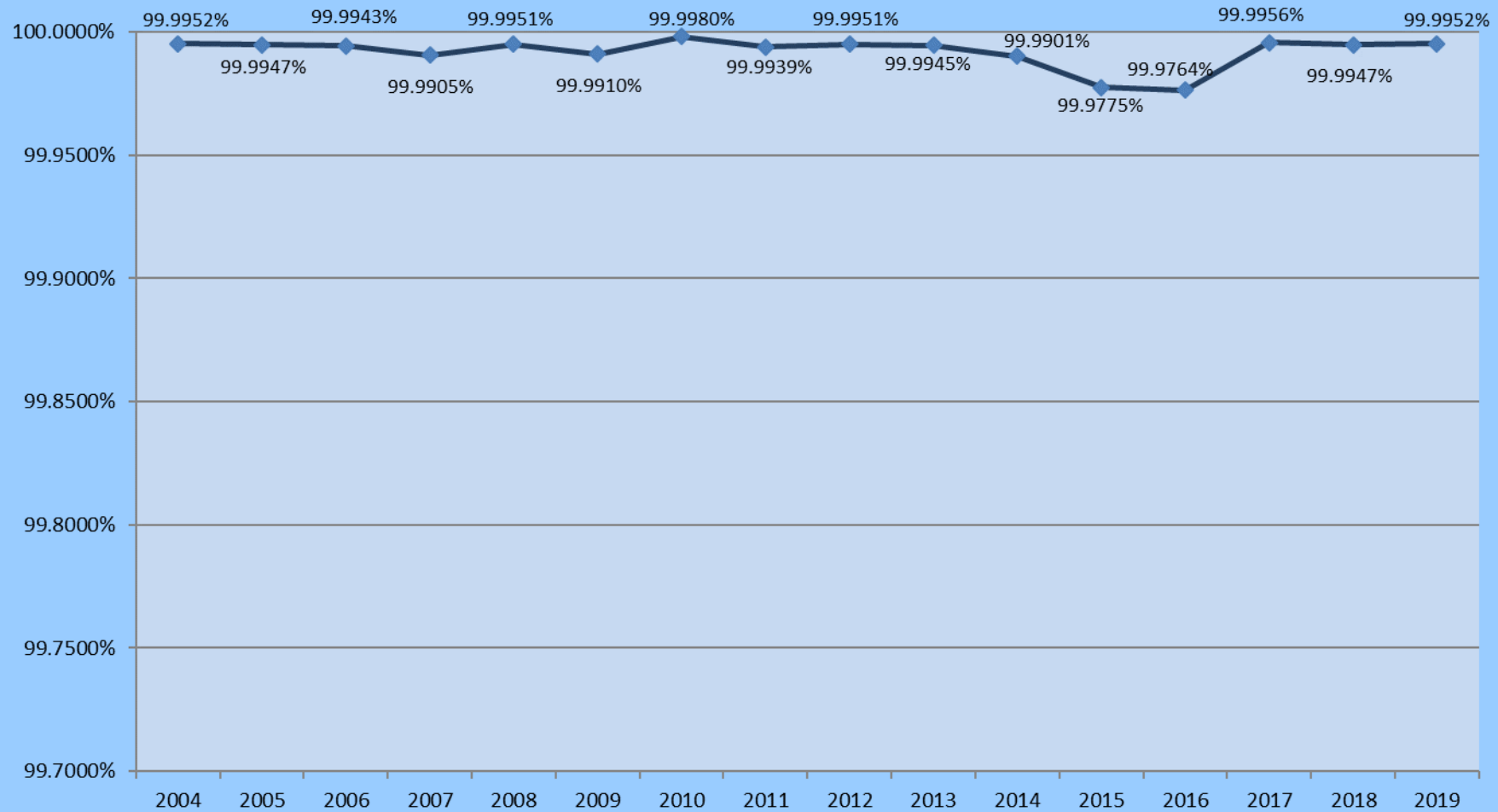
2.37 On 3 June 2019, CORPAC formally submitted its request to the ICAO SAM Regional Office. On 7 June 2019, the material listed in **Appendix G** to this working paper was delivered to said entity.

3 Suggested action

3.1 The Coordination Committee is invited to:

- a) take note of the information provided herein;
- b) review the activities carried out since RCC/22, as presented in section 2 and in the appendices to this working paper; and
- c) discuss the issues presented herein, as well as any other topic it might deem appropriate.

REDDIG Network Availability



Interconexiones AMHS – Región SAM / AMHS Interconnection – SAM Region

(22 Enero 2020 / 22 January 2020)

| | Conexión P1 / P1 Connection | Situación / Situation | Operativa en / Operational in | Observaciones / Notes |
|----|--------------------------------|---------------------------------|----------------------------------|---|
| 1 | SAEZ – SBBR | Operativa / Operational | 04/04/2018 | |
| 2 | SAEZ – SCSC | Operativa / Operational | 21/01/2020 | |
| 3 | SAEZ – SGAS | Operativa / Operational | 30/11/2018 | |
| 4 | SAEZ – SLLP | Pre operativa / Pre-operational | | Operacional en Feb 2020 / <i>Operational in Feb 2020</i> |
| 5 | SAEZ – SPIM | Operativa / Operational | 10/05/2019 | |
| 6 | SAEZ – SUMU | | | Segundo semestre de 2020 / <i>Second semester of 2020</i> |
| 7 | SBBR – SGAS | Operativa / Operational | 30/11/2018 | |
| 8 | SBBR – SLLP | Operativa / Operational | 30/07/2019 | |
| 9 | SBBR – SKBO | Operativa / Operational | 22/05/2017 | |
| 10 | SBBR – SMJP | Operativa / Operational | 06/09/2018 | |
| 11 | SBBR – SOCA | Operativa / Operational | 22/01/2020 | |
| 12 | SBBR – SPIM | Operativa / Operational | 14/12/2015 | |
| 13 | SBBR – SUMU | | | Segundo semestre de 2020 / <i>Second semester of 2020</i> |
| 14 | SBBR – SVCA | Operativa / Operational | 28/02/2018 | |
| 15 | SBBR – SYCJ | Operativa / Operational | 06/07/2017 | |
| 16 | SCSC – SPIM | Operativa / Operational | 14/12/2015 | |
| 17 | SEQU – SKBO | Operativa / Operational | 16/01/2020 | |
| 18 | SEQU – SPIM | Operativa / Operational | 14/07/2012 | |
| 19 | SEQU – SVCA | Operativa / Operational | 11/10/2018 | |
| 20 | SKBO – SPIM | Operativa / Operational | 15/11/2010 | |
| 21 | SKBO – SVCA | Operativa / Operational | 01/12/2017 | |
| 22 | SLLP – SPIM | Operativa / Operational | 10/05/2019 | |
| 23 | SMJP – SVCA | Operativa / Operational | 31/03/2019 | |
| 24 | SMJP – SYCJ | Operativa / Operational | 11/10/2018 | |
| 25 | SOCA – SVCA | Operativa / Operational | 22/01/2020 | |
| 26 | SPIM – SVCA | Operativa / Operational | 01/12/2017 | |
| 27 | SVCA – SYCJ | Operativa / Operational | 27/08/2019 | |

Interconexiones AMHS – Región SAM / AMHS Interconnection – SAM Region

(22 Enero 2020 / 22 January 2020)

| | Conexión P1 / P1 Connection | Situación / Situation | Operativa en / Operational in | Observaciones / Notes |
|----|--------------------------------|-----------------------------------|----------------------------------|--|
| 28 | SAEZ – FAOR | | | |
| 29 | SAEZ – SITA | Operativa / Operational | 18/07/2019 | |
| 30 | SAEZ – SVCA | En coordinación / In coordination | | Extra plan |
| 31 | SBBR – GOOO | En coordinación / In coordination | | |
| 32 | SBBR – KATL | Operativa / Operational | 06/08/2019 | |
| 33 | SBBR – LEEE | Operativa / Operational | 11/10/2018 | |
| 34 | SBBR – SITA | Operativa / Operational | 16/08/2018 | |
| 35 | SKBO – MPPA | En coordinación / In coordination | | |
| 36 | SPIM – KATL | Pre operativa / Pre-operational | | Operacional en MAR 2020 / <i>Operational in MAR 2020</i> |
| 37 | SPIM – SUMU | | | Extra plan |
| 38 | SVCA – KATL | En coordinación / In coordination | | |
| 39 | SVCA – LEEE | | | |
| 40 | SVCA – TNCC | | | |
| 41 | SVCA – TTPP | En coordinación / In coordination | | |
| 42 | SYCJ – TTPP | | | |
| 43 | MPPA – KATL | Operativa / Operational | 2018 | |

INTERCAMBIO DE DATOS DE VIGILANCIA VÍA REDDIG II / SURVEILLANCE DATA INTERCHANGE VIA REDDIG II

| Desde/From | Hacia/To | RADAR | ADS-B | Situación/Situation |
|------------------------|-------------------------|----------------|--------------|----------------------------|
| Asunción (Paraguay) | Resistencia (Argentina) | Asterix | | Operacional/Operational |
| Asunción (Paraguay) | Resistencia (Argentina) | | Asterix | Pruebas/Tests |
| Corrientes (Argentina) | Asunción (Paraguay) | Asterix | | Operacional/Operational |
| Posadas (Argentina) | Asunción (Paraguay) | Asterix | | Operacional/Operational |
| Foz de Iguazú (Brasil) | Guarany (Paraguay) | Asterix | | Operacional/Operational |
| Carrasco (Uruguay) | Ezeiza (Argentina) | Asterix | | Pruebas/Tests |
| Durazno (Uruguay) | Ezeiza (Argentina) | Asterix | | Pruebas/Tests |
| Ezeiza (Argentina) | Carrasco (Uruguay) | Asterix | | Pruebas/Tests |
| Paraná (Argentina) | Carrasco (Uruguay) | Asterix/serial | | Pruebas/Tests |
| Quilmes (Argentina) | Carrasco (Uruguay) | Asterix | | Pruebas/Tests |
| Santiago (Chile) | Ezeiza (Argentina) | Asterix | | Pruebas/Tests |
| Mendoza (Argentina) | Santiago (Chile) | Asterix | | Pruebas/Tests |
| Manaos (Brasil) | Maiquetia (Venezuela) | Asterix | | Coordinación/Coordination |

REDDIG II FOCAL POINTS / PUNTOS FOCALES REDDIG II

| STATE / ESTADO | Name / Nombre | Position/ Cargo | E-Mail / Correo-e | Telephone / Teléfono | Address / Dirección |
|----------------|--|--|--|---------------------------------------|---|
| ARG | Moirá Lidia Callegare, ANAC | Jefe Departamento Proyectos – DNSA | mcallegare@anac.gov.ar | (5411) 594-13097 | Edificio ANAC Central Paseo Colón 1452, Ciudad Autónoma de Buenos Aires, CP 1063 |
| | Sergio Alberto Vallone, ANAC | Inspector de Navegación Aérea, Depto. Regional Noroeste de Inspecciones de la Dirección Nacional de Navegación Aérea | svallone@anac.gov.ar | (54351) 475-6414 | Dirección Regional Noroeste Camino Pajas Blancas Km. 8.5, CP 5000, Córdoba Capital |
| | Fabian Romero, EANA | Gerente de Infraestructura y Tecnología EANA | fromero@eana.com.ar | (5411) 4320-2384 +54 911 5139-6316 | EANA S.E. Av. Rivadavia 578, Piso 5 Buenos Aires, Argentina |
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| BOL | Javier Osvaldo Campos Gonzáles, DGAC | Inspector CNS | jcampos@dgac.gob.bo | (5912) 7152-0131 | |
| | Hernando Lara, AASANA | Jefe Unidad Nacional CNS AASANA | nanos_24@hotmail.com | (5912) 212-7959 | Aeropuerto Internacional El Alto, Bloque Técnico AASANA |
| | Remigio Blanco, AASANA | Responsable de Telecomunicaciones AASANA | rblanco@asana.bo | (5912) 237-0340 | Aeropuerto Internacional El Alto, Bloque Técnico AASANA |
| CHI | Christian Vergara Leyton, DGAC | Supervisor de Mantenimiento Técnico Centro de Control de Santiago | cvergara@dgac.cl | (562) 836-4005; (562) 836-4011; (562) 644-8345 | Avenida San Pablo 8411, Comuna de Pudahuel, Santiago, Chile |
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| COL | Andrés Colmenares | Coordinador Grupo de Comunicaciones y Redes Aeronáuticas - Dirección de Telecomunicaciones y Ayudas a la Navegación Aérea | andres.colmenares@aerocivil.gov.co | (571) 296-2940 | Aeropuerto Internacional El Dorado, Av. El Dorado N° 112-09 Edif. C.N.A. (Centro Nacional de Aeronavegación) |
| | Robinson Quintero | Grupo de Sistemas de Comunicaciones | robinson.quintero@aerocivil.gov.co | (571) 296-2241 | Aeropuerto Internacional El Dorado, Av. El Dorado N° 112-09 Edif. C.N.A. (Centro Nacional de Aeronavegación) |
| ECU | Ing Nancy Tapia Yagual | Analista CNS para la Navegación Aérea 1 | ntapia@aviacioncivil.gob.ec nktapia@hotmail.com | 593-2 2947400 ext. 2197 0982347392 | Av. De las Américas, Edif. Servicio para la Navegación Aérea, Guayaquil |

| STATE / ESTADO | Name / Nombre | Position/ Cargo | E-Mail / Correo-e | Telephone / Teléfono | Address / Dirección |
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| FRA | Jean-François Corlosquet | Assistant de Subdivision Technique charge de la DO/QST | jean-francois.corlosquet@aviation-civile.gouv.fr | 594 594 359371 | Aviation Civile, Aeroport de Cayenne Félix Eboué, 97351 Matoury, Guyane Francaise |
| 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 |
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| | 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 | Cicilson Jurgen | Acting Chief of CADSUR CNS Division | jurmaja@hotmail.com and cns@cadsur.sr | (597) 531288; (597) 498898; (597) 325123, Mobile: (597) 8792810 | J. A. Pengel International Airport, Zanderij, district Para, Zorg en Hoop Airport, Paramaribo |

| STATE / ESTADO | Name / Nombre | Position/ Cargo | E-Mail / Correo-e | Telephone / Teléfono | Address / Dirección |
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| | Kofi Orlando | CNS Supervisor | oomken80@gmail.com | (597) 531288; (597) 498898; (597) 325123, Mobile: (597) 8531923 | 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 | | |
| 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 |



DIRECCIÓN GENERAL DE AERONÁUTICA CIVIL
Autoridad Aeronáutica Civil de Bolivia



La Paz, 15 de enero de 2020
DGAC-0141/2020
DNA-0052/2020

Señor
Fabio Faizi Rahnemay Rabbani
DIRECTOR REGIONAL
OFICINA SUDAMERICANA DE LA OACI
Dir.: Víctor Andrés Belaúnde No.147-Centro Empresarial Real
Vía Principal No. 102 –Edf. Real 4, piso 4 San Isidro
Email: icao@icao.int
Lima-Perú.-

REF.: NODO COCHABAMBA MPLS REDDIG II PROYECTO RLA/03/901

Señor Director:

Como es conocimiento de la Región, el Estado Boliviano se encuentra en proceso de implementación el sistema de vigilancia radar para el control de tránsito aéreo, en ese contexto, en el marco del proyecto RLA/03/901 y en atención a su nota LN 3/20.6 – SA5775, comunico a usted que nuestro Estado requiere la instalación de un nuevo nodo REDDIG II, en la ciudad de Cochabamba, mismo que se encontrará próximo al aeropuerto SLCB, para tal efecto y su inclusión en el nuevo contrato tengo a bien remitir la siguiente información:

LOC: 17° 25' 14, 5" S – 066° 10' 8.8" W

a.s.n.m: 2564 m

Dirección: Edificio COSDEA

Av. Del Cabildo N°150, esq. Calle Aguirre Gainsbord
Cochabamba, Bolivia

Enviamos esta información para la consideración en las nuevas actividades del mencionado proyecto.

Con este motivo, saludo a usted atentamente.



OFICINA CENTRAL LA PAZ
Avenida Arce N° 2631 Edif. Multisano - Piso 9
Tel/Fax: (591 2) 2444453 - 2119323

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Aeropuerto Internacional "El Alto"
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CORPORACIÓN CENTROAMERICANA DE SERVICIOS DE NAVEGACIÓN AÉREA
"Organismo Internacional de la Integración Centroamericana"

Presidencia Ejecutiva



Oficio PE-0048/2020

Tegucigalpa, Honduras,
28 de enero de 2020

Señor
Francisco Almeida da Silva
CNS Regional Officer
OACI SAM

Asunto: NODO REDDIG COCESNA

Estimado señor Almeida da Silva:

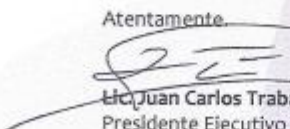
Reciba un cordial saludo en nombre de la Corporación Centroamericana de Servicios de Navegación Aérea (COCESNA) y del suscrito.

Como es de su conocimiento el acuerdo de Gestión de Servicios suscrito entre COCESNA y OACI para la interconexión MEVA – REDDIG fue suscrito originalmente en 2010 por un periodo de 5 años y renovado en 2015 por un periodo de 5 años más, dado los importantes beneficios de dicho medio de comunicación para la seguridad de las operaciones aéreas de COCESNA y los estados adyacentes de la Región SAM es de nuestro interés proceder con la renovación de dicho acuerdo por un tercer ciclo.

Así mismo, tal como se indicara el en la Vigésima Tercera Reunión (extraordinaria) del Comité de Coordinación (RCC/23), en la cual COCESNA participó vía teleconferencia, COCESNA solicita la autorización del Grupo de Administración de la REDDIG para que la Interconexión del Nodo MEVA de COCESNA a la REDDIG durante este tercer ciclo se realice mediante conexión MPLS a la nube REDDIG.

De resultar favorable nuestra solicitud, favor confirmar los requerimientos técnicos y operativos, las gestiones legales pertinentes, así como un desglose de los costos asociados a esta nueva interconexión y un posible roadmap de dicha conexión.

Atentamente,


Juan Carlos Trabanino
Presidente Ejecutivo



cc.: Ing. Gabriel Quirós/Director ACNA
Ing. Roger Pérez/Gerencia Técnica
Archivo

JCTA/aepd



NODES LOCATION / LOCALIDADES DE LOS NODOS

| Country | Node | Call Sign | Latitude | Longitude |
|---------------------|-------------|-----------|---------------|---------------|
| Argentina | Ezeiza | SAEZ | 34° 49' 25" S | 58° 31' 43" W |
| Bolivia | La Paz | SLLP | 16° 30' 29" S | 68° 11' 24" W |
| | Cochabamba | SLCB | 17° 25' 14" S | 66° 10' 8" W |
| Brazil | Manaus | SBMN | 03° 02' 19" S | 60° 02' 59" W |
| | Recife | SBRE | 08° 07' 36" S | 34° 55' 23" W |
| | Curitiba | SBCT | 25° 31' 43" S | 49° 10' 33" W |
| | Brasilia | SBBR | 15° 51' 27" S | 47° 54' 12" W |
| Chile | Santiago | SCEL | 33° 23' 26" S | 70° 47' 09" W |
| Colombia | Bogotá | SKED | 04° 42' 05" N | 74° 08' 48" W |
| Ecuador | Guayaquil | SEGU | 02° 09' 29" S | 79° 53' 02" W |
| French Guiana | Cayenne | SOCA | 04° 49' 11" N | 52° 21' 38" W |
| Guyana | Georgetown | SYGC | 06° 29' 56" N | 58° 15' 16" W |
| Honduras | Tegucigalpa | COCESNA | TBD | TBD |
| Paraguay | Asunción | SGAS | 25° 14' 24" S | 57° 31' 09" W |
| Peru | Lima | SPIM | 12° 01' 19" S | 77° 06' 52" W |
| | | ICAO | 12° 05' 46" S | 77° 02' 13" W |
| Suriname | Paramaribo | SMPM | 05° 27' 10" N | 55° 11' 16" W |
| Trinidad and Tobago | Piarco | TTZP | 10° 37' 48" N | 61° 31' 12" W |
| Uruguay | Montevideo | SUMU | 34° 50' 15" S | 56° 01' 49" W |
| Venezuela | Maiquetía | SVMI | 10° 36' 12" N | 66° 59' 26" W |



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LN 3/20.2 – SA5075

Lima, 7 de junio de 2019

Señor
Sr. Iván Besich Ponce
Gerente General
CORPAC S.A., Perú

Asunto: RLA/03/901 – Donación de tarjetas y equipos de la REDDIG I

Distinguido señor:

Tengo el honor de dirigirme en referencia a la carta GCNA.GTA.4.228.2019C de fecha 3 de junio de 2019, sobre la solicitud formal de donación de tarjetas y equipos requeridos por CORPAC correspondiente a la REDDIG I que fue discutida en la la Decimonovena Reunión del Comité de Coordinación (RCC/19 – Lima, Perú del 7 al 9 de marzo de 2016) del proyecto RLA/03/901 - *Sistema de Gestión de la REDDIG y Administración del Segmento Satelital*.

Al respecto, se está procediendo a la entrega del equipo detallado en la lista adjunta, los cuales servirán para realizar pruebas con circuitos de voz con equipos de radio.

Acepte, distinguido señor, el testimonio de mi mayor consideración y estima.

Fabio Faizi Rahnemay Rabbani
Director Regional
Oficina Sudamericana de la OACI
Lima

Adjunto

cc: Dr. Juan Carlos Pavic Moreno, Director General, DGAC, Perú
Puntos Focales REDDIG

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Adjunto

EQUIPO REDDIG I A SER ENTREGADO A CORPAC

| # | Descripción | Proveedor | Modelo | Nro. Serie | # Caja |
|----|---------------------------------------|-----------|----------|-------------|--------|
| 1 | Multiplexor CX950e Chasis+Placa Madre | Memotec | AC002010 | 092425306 | 1 |
| 2 | Multiplexor CX950e Chasis+Placa Madre | Memotec | AC002010 | 072298778 | 2 |
| 3 | Multiplexor CX950e Chasis+Placa Madre | Memotec | AC002010 | 082389428 | 3 |
| 4 | Dual Analog Voice Card | Memotec | AZ004010 | 052171060 | 4 |
| 5 | Dual Analog Voice Card | Memotec | AZ004010 | 052172487 | 4 |
| 6 | Dual Analog Voice Card | Memotec | AZ004010 | 052172484 | 4 |
| 7 | Dual Analog Voice Card | Memotec | AZ004010 | 052172486 | 4 |
| 8 | Dual Analog Voice Card | Memotec | AZ004010 | 1000339848 | 4 |
| 9 | Dual Analog Voice Card | Memotec | AZ004010 | 90030009411 | 4 |
| 10 | Dual Analog Voice Card | Memotec | AZ004010 | 9003000738 | 4 |
| 11 | Universal I/O | Memotec | AZ002320 | 082389450 | 5 |
| 12 | Universal I/O | Memotec | AZ002320 | 082389447 | 5 |
| 13 | Universal I/O | Memotec | AZ002320 | 092427151 | 5 |
| 14 | Universal I/O | Memotec | AZ002320 | 092427153 | 5 |
| 15 | Universal I/O | Memotec | AZ002320 | 92427152 | 5 |
| 16 | Universal I/O | Memotec | AZ002320 | 92427154 | 5 |
| 17 | 10 Base-T Ethernet Card | Memotec | AC004150 | 9002000306 | 6 |
| 18 | 10 Base-T Ethernet Card | Memotec | AC004150 | 9002000285 | 6 |
| 19 | Slim Card E&M | Memotec | AZ004025 | 1000370325 | 6 |
| 20 | Slim Card E&M | Memotec | AZ004025 | 1000370677 | 6 |
| 21 | Slim Card E&M | Memotec | AZ004025 | 052167044 | 6 |
| 22 | Slim Card E&M | Memotec | AZ004025 | 052167058 | 6 |
| 23 | Slim Card E&M | Memotec | AZ004025 | 052167029 | 6 |
| 24 | Fast Ethernet 10/100 Card | Memotec | AZ001011 | 05273174 | 6 |
| 25 | Fast Ethernet 10/100 Card | Memotec | AZ001011 | 052173175 | 6 |
| 26 | Fast Ethernet 10/100 Card | Memotec | AZ001011 | 061082686 | 6 |
| 27 | Fast Ethernet 10/100 Card | Memotec | AZ001011 | 061082680 | 6 |
| 28 | Ring Generator | Memotec | AZ009050 | 072294201 | 6 |
| 29 | Ring Generator | Memotec | AZ009050 | 052174923 | 6 |

Nombre:

Ricardo Antigua

Cargo:

TECNICO CNS

Firma:

Ricardo Antigua CH.

Fecha:

11/06/19

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