



REDDIG RCC/23

INTERNATIONAL CIVIL AVIATION ORGANIZATION

RLA/03/901

**TWENTY THIRD EXTRAORDINARY
MEETING OF THE
COORDINATION COMMITTEE
(RCC/23)**

FINAL REPORT

(Teleconference, 21 August 2019)

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HISTORY OF THE MEETING

ii-1. MEETING DETAILS

The Twenty Third (extraordinary) Meeting of the Coordination Committee of Project RLA/03/901 - *REDDIG Management System and Satellite Segment Administration*, was carried out by means of a teleconference (GoToMeeting), on Wednesday – 21 August 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 representatives of 12 States participants of RLA/03/901 Project Coordination Committee (Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, France, Guyana, Paraguay, Peru, Uruguay and Venezuela), 2 States non participants of REDDIG project, 1 Organization (COCESNA), the REDDIG MPLS provider (CenturyLink) and ICAO Officials, totalizing 39 persons. 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

No.	Title	Page
RCC/23-1	IMPLEMENTATION OF ADDITIONAL NODES OF THE REDDIG II TERRESTRIAL NETWORK (MPLS)	3-2

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

1. Sergio Alberto Vallone
2. Fabian Romero
3. Hernán Aguirre

BOLIVIA

4. Remigio Blanco Flores
5. Hernan Tito

BRASIL / BRAZIL

6. Wallace Gutemberg Medeiros Luz
7. Bruno Pacheco Santos Azevedo Costa

CHILE

8. Christian Vergara Leyton

COLOMBIA

9. Andrés Colmenares
10. Robinson Quintero
11. Diego Giraldo

ECUADOR

12. María Fernanda Rodríguez Limones
13. Nancy Karina Tapia Yagual

ESTADOS UNIDOS / UNITED STATES

14. Al O'Neill (observador/observer)
15. Dulce M. Rosés (observador/observer)

FRANCIA / FRANCE (French Guiana)

16. Serge Cupoli

GUYANA

17. Mortimer Salisbury
18. Troy Gavin Gittens

PANAMÁ

19. Daniel de Ávila (observador/observer)

PARAGUAY

20. Víctor Moran
21. Aldo Omar Pereira Alcaraz
22. Ronald Gabriel Benítez Florentín

PERÚ

23. Giuliano Guzman Vera
24. Jorge Garcia Villalobos
25. Luis Silva

SURINAM / SURINAME

26. Orlando Kofi
27. Marcel Mendelzoon
28. Maria Boobe

URUGUAY

29. Miguel E. Vera

VENEZUELA, REP. BOLIVARIANA DE

30. Jarumy Castillo
31. Luis Escobar
32. Genesis González

COCESNA

33. Moisés Cukier Morán (observador/observer)
34. Roger Pérez Serrano (observador/observer)

CENTURYLINK

35. Jorge Nano
36. Christian Vera

OACI / ICAO

37. Francisco Almeida
38. Verónica Chávez
39. 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 included as **Appendix A** to this part of the Report.

**Regional Project RLA/03/901
Management System and Administration of the Satellite Segment**

**TWENTY THIRD MEETING OF THE REDDIG COORDINATION COMMITTEE
(RCC/23)
(Teleconference, 21 August 2019)**

PROVISIONAL AGENDA

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

Agenda Item 2: Proposal for additional nodes in the MPLS network of the REDDIG II

Agenda Item 3: Administrative arrangements

Agenda Item 4: Technical aspects

Agenda Item 4: Other matters

EXPLANATORY NOTES TO THE PROVISIONAL AGENDA

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 Third Extraordinary Meeting (Teleconference).

Agenda Item 2: Proposal for additional nodes in the MPLS network of the REDDIG II

The Committee will review, for approval, the request made by the Federal Aviation Administration (FAA) of the United States to implement additional nodes of the REDDIG II MPLS network, contracting directly from the telecommunications provider CenturyLink for access to the network, without involve costs for the participants of Project RLA/03/901, with the objective of establishing communications with States of the SAM Region (Brazil, Peru and Venezuela) in a more direct and better quality way, providing redundancy to the connection that is currently implemented, through the MEVA III - REDDIG II interconnection.

Agenda Item 3: Administrative arrangements

Under this agenda item, the necessary administrative measures for the implementation of additional nodes to the MPLS network of the REDDIG II will be analyzed.

Agenda Item 4: Technical aspects

The possibility of technical implementation of the additional nodes of REDDIG II (MPLS), with the details of IP address assignment, routing, security measures and other technical aspects, will be presented to the Committee for consideration.

Agenda Item 5: Other matters

Under this agenda item, the Committee could analyze any other related issues deemed appropriate.

Agenda Item 2: Proposal for additional nodes in the MPLS network of REDDIG II

2.1 Under this Agenda Item, the Committee reviewed the request made by the Federal Aviation Administration (FAA) of the United States to implement additional nodes of the REDDIG II MPLS network, contracting directly from the telecommunications provider CenturyLink for access to the network, without involving costs for the participants of Project RLA/03/901, with the objective of establishing communications with States of the SAM Region (Brazil, Peru and Venezuela) in a more direct and better quality way, providing redundancy to the connection that is currently implemented, through the MEVA III - REDDIG II interconnection.

2.2 The Meeting also recognized the benefits of implementing additional nodes by other States/Organizations, providing better communications to the air navigation services, especially, in the CAR/SAM interface. In this respect the meeting formulated the following conclusion:

<p>Conclusion RCC/23-1 IMPLEMENTATION OF ADDITIONAL NODES OF THE REDDIG II TERRESTRIAL NETWORK (MPLS)</p>	
<p>That the Secretariat:</p> <p>a) Make the necessary arrangements for implementation of the REDDIG II terrestrial network additional nodes requested by United States (FAA), with no cost for the RLA/03/901 Project participants.</p> <p>b) Analyze requests of other States/Organizations interested to implement REDDIG II additional nodes and propose to the Coordination Committee for approval.</p>	<p>Expected impact:</p> <p><input type="checkbox"/> Politician / Global <input checked="" type="checkbox"/> Inter-regional <input type="checkbox"/> Economic <input type="checkbox"/> Environmental <input checked="" type="checkbox"/> Technical/Operational</p>
<p>Why: To provide better communications for the air navigation services, especially with States/Organizations of other regions.</p>	
<p>When: Immediately</p>	<p>Status: Ongoing</p>

2.3 All additional node implementation must comply with the administrative measures and technical aspects established by this Meeting, according to Agenda Items 3 and 4.

2.4 The States/Organizations implementing additional nodes do not participate in the Project RLA/03/901 and cannot use the resources and services offered to the project participants.

Agenda Item 3: Administrative Provisions

- 3.1 The Meeting, under this agenda item, analyzed the following working paper:
- WP/02 *Additional nodes of the REDDIG support network (MPLS)* (presented by the Secretariat).
- 3.2 The Meeting noted that, for the implementation of additional node(s), the State or Organization must formalize a request, by letter addressed to the ICAO South American Regional Office, stating that agrees with the administrative measures and technical aspects, formulated in this Report, in accordance with Agenda Items 3 and 4.
- 3.3 The Secretariat will analyze the request and make a proposal to be approved by the Regional Project (RLA/03/90) Coordination Committee.
- 3.4 Upon approval, the State/Organization must provide the contracting of a 1 Mbps (minimum) link with the CenturyLink provider.
- 3.5 All coordinations for the implementation of the additional nodes will be carried out by the ICAO South American Regional Office, with the support of the REDDIG II Administrator.

Agenda Item 4: Technical aspects

4.1 The Meeting, under this agenda item, analyzed the following working paper:

- WP/03 *Technical aspects for the implementation of Additional Nodes* (presented by the Secretariat)

4.2 The Meeting agreed to adopt the following technical aspects for the implementation of additional node (s) of the REDDIG terrestrial network:

- The acquisition, installation and maintenance of the equipment used in the REDDIG II additional node of the terrestrial network, will be the sole responsibility of the State/Organization interested in accessing the network;
- The States/Organizations interested in the implementation of additional nodes, must acquire the equipment of the models (or of superior performance) indicated by the ICAO South American Regional Office and by the REDDIG II Administrator;
- It is the responsibility of the States/Organizations interested in implementing additional nodes, the implementation of network security measures (Cybersecurity) for node protection, and such measures must be demonstrated to the ICAO South American Regional Office to access the network; and
- The REDDIG II Administrator must have access to the CPE (Customer Premise Equipment) for the purpose of visualizing the equipment parameters (not configuration). See Figure 1 for reference.
- Depending on the services that will be loaded (voice or data), the States/Organizations must acquire the necessary interfaces that must be configured under the guidance of the REDDIG II Administrator.

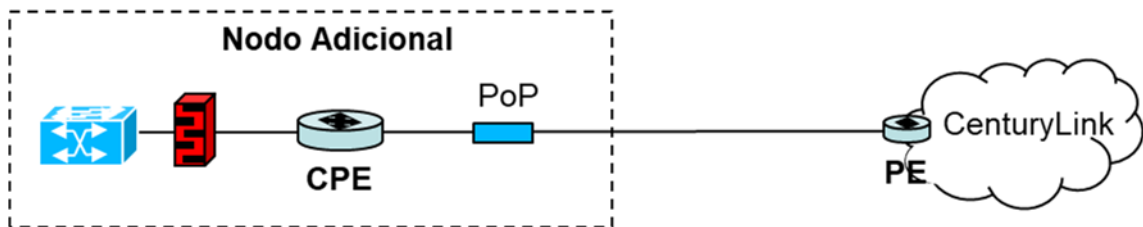


Figure 1 – Implementation of additional node

4.3 The details of the supported services and necessary interfaces will be described in a guidance document for the implementation of additional nodes, to be prepared by the REDDIG Administrator in conjunction with the States/Organizations interested in the nodes implementation and representatives of CenturyLink.

4.4 The configuration of the node equipment is the responsibility of the States/Organizations that implement the additional nodes, under the guidance of the REDDIG Administrator.

Agenda Item 5: Other business

5.1 Under this agenda item, the Meeting noted that CenturyLink has sent a letter to the ICAO South American Regional Office, stating that it will provide the increase in bandwidth of all nodes in the REDDIG II terrestrial network (MPLS) of 256 kbps for 1 Mbps, maintaining the same cost of the contracted service. **Appendix A** of this part of the Report presents the referred letter (only in Spanish).

5.2 Likewise, the Secretariat informed that a significant increase in the availability of the service provided by CenturyLink was observed since the meeting held at the Regional Office on 4 March 2019, when the company stated its commitment to provide the network participants with the highest level of service possible.

5.3 In the month of July, all the nodes had a higher availability than the contracted one, except for the Maiquetia node (Venezuela) that presented an availability of 99.52%, when the contracted one would be 99.70%. Figure 1 presents the availability value, measured by the REDDIG Administrator, for the Maiquetia node.

CIRCUITS	Measured	Offered	Difference	MRC USD	Credit USD	
SVMI	99,52 %	99,70 %	0,19 %	2.190,00	4,05	
					4,05	TOTAL CREDIT USD
						July 2019

Figure 1 – Maiquetia node availability (July 2019)



Lima, 2 de agosto del 2019

Para:

Fabio Faizi Rahnemay Rabbani
Regional Director
ICAO South American Office

Estimado Señor

CenturyLink está comprometido en convertirse en un aliado estratégico para nuestros clientes, para ello nos mantenemos siempre atento a las necesidades y requerimientos, como parte de este compromiso el día 04 de marzo del presente realizamos una reunión en la Oficina Regional Sudamericana de OACI con el Sr. Francisco Almeida y conversamos sobre la necesidad actual de realizar una modificación (upgrade) del ancho de banda actual de los enlaces pertenecientes a la REDDIG.

Entendiendo la necesidad de OACI y llegando al entendimiento común que esto contribuiría a mejorar la comunicación y monitoreo de REDDIG, ofrecemos por medio de este documento la propuesta de realizar un UPGRADE del ancho de banda de 256K a 1Mbps en cada uno de los puntos que conforman REDDIG; esto sin involucrar costos adicionales o extensión de contratos para los participantes del Proyecto Regional RLA/03/901.

En tal sentido quedamos a la espera que OACI remita la adenda respectiva al contrato que rige nuestra relación contractual a fin de formalizar nuestro ofrecimiento.

Agradecemos la confianza en nuestros servicios y esperamos este ofrecimiento pueda tener su aprobación para poder iniciar el proceso de upgrade a la brevedad posible.

Atentamente

Gianni Hanawa Makabe
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CenturyLink Perú S.A.

Gianni M. Hanawa
Representante Legal
CenturyLink Perú