



International Civil Aviation Organization
South American Regional Office - Regional Project RLA/03/901
REDDIG Management System and Satellite Segment Administration
Fifteenth Meeting of the Coordination Committee (RCC/15)
Lima, Peru, 15-17 August 2012

Agenda item 6: Work plan for years 2012 and 2013

ACTIVITIES FORESEEN FOR THE PERIOD 2012-2013

(Working paper by the Secretariat)

Summary	
This working paper presents information about the activities to be carried out by Project RLA/03/901, REDDIG Management System and Satellite Segment Administration, during the period 2012-2013.	
References	
<ul style="list-style-type: none">• Report of the Fourteenth REDDIG Coordination Meeting (Lima, Peru, 16-18 March 2011).• Action plan for the implementation of REDDIG II.	
ICAO strategic objectives:	<i>A – Safety; and C – Environmental protection and sustainable development of air transport</i>

1. Background

1.1 The main activities scheduled for the period 2012-2013 are as follows:

- Implementation of REDDIG II
- Technical and operational meeting between the REDDIG Administration and member States to coordinate the installation process of REDDIG II
- 2012-2013 training programme.

2. Description

Implementation of REDDIG II

2.1 The main activities for the implementation of REDDIG II are listed in **Appendix A** to this working paper. The list is part of the action plan for the implementation of REDDIG II, which appears in

Working Paper 3 of this meeting, but providing a more detailed description of the activities.

2.2 The main activities to be carried out during the period 2012-2013 are:

- Negotiation process with the winning company,
- Coordination meeting with the winning company to review the process of installation of REDDIG II,
- Signing of the contract between ICAO and the winning company,
- Training courses for REDDIG II.

Negotiation process with the winning company

2.3 Upon reviewing the winning bid, the evaluation group formulated some observations and additional requirements that the winning company would have to meet to supplement the requirements established for REDDIG II. The main requirements include:

- Replacement of a satellite MODEM in the Manaus and Ezeiza nodes;
- Movement of the antennae at the Asunción and Santiago nodes;
- Confirmation of technical aspects for amplifiers and the network management system;
- Presentation of details of the training manual; and
- Acquisition of IP telephones to support voice service requirements for regional flow control.

2.4 Regarding training, the winning company presents the delivery of three courses in Spanish and one in English in Brazil, one course at the factory site (France) and on-the-job training. The total cost of this training is considered to be high and there could be other options to reduce the cost, such as conducting the training in other locations.

2.5 The REDDIG II evaluation group also noted that the winning company had included an optional offer concerning additional VSAT equipment (amplifiers), which were deemed necessary. The optional offer also includes a visit by the winning company to the 16 nodes to do preventive maintenance. In this regard, the evaluation group considers that the technical personnel responsible for maintaining each node in REDDIG member States could perform this activity.

2.6 All of the aforementioned aspects will be addressed during the negotiations initially scheduled for 25-27 August 2012 at the ICAO Technical Cooperation Bureau in Montreal, Canada. This process would follow technical cooperation procedures, with the participation of ICAO, the winning company, and REDDIG member States willing to participate as observers. Negotiations are aimed at making sure that the winning bid meets equipment and service requirements at the most favourable cost, in alignment with the budget foreseen for REDDIG II.

Coordination meeting with the winning company to review the installation of REDDIG II

2.7 The purpose of this meeting is to review the activities foreseen for the installation of REDDIG II in accordance with the technical specifications. The REDDIG Administration, the winning company, and representatives of REDDIG member States interested in participating would attend the meeting, which would tentatively be held in Lima, Peru, on 8-10 October 2012. It is expected that the meeting will produce all the information required for drafting an installation manual describing in detail all the activities to be carried out, the parties responsible for the installation, installation dates, and the monitoring of activities by the REDDIG Administration and member States.

Signing of the contract between ICAO and the winning company

2.8 The contract would be signed once all REDDIG member States have paid their respective fees for the implementation of REDDIG II. States are expected to deposit their contributions before 31 December 2012. The offer of the winning company is valid for one year as of its submission (15 June 2012). The contract would be signed during the first quarter of 2013. All the activities described below would be carried out on the specified dates, provided the contract is signed according to schedule.

REDDIG II training courses

2.9 The training programme defined in the technical specifications is to be completed before and during the REDDIG II installation phase, as described in the corresponding section of the 2012-2013 training programme.

Technical and operational meeting between REDDIG Administration and member States to coordinate the installation process of REDDIG II

2.10 In order to coordinate the technical and administrative aspects during the installation of REDDIG II, the REDDIG Administration will present member States with the activities to be carried out during the installation period.

2.11 The technical and operational meeting is scheduled for October 2013 in Lima, Peru, immediately after the meeting with the winning company, to coordinate the installation of REDDIG II.

2012-2013 Training Programme

2.12 The training programme envisaged for 2012-2013 will support the activities foreseen in the action plan for the implementation of the new REDDIG II digital network, in addition to the COM-AMHS course held in Lima, on 16-20 July 2012.

2.13 In accordance with the technical specifications for the implementation of REDDIG II, the training programme shall include:

- A theoretical and practical training sub-programme of, at least, ten (10) working days, at a place to be determined, in Spanish, for no more than thirty (30) participants.
- A theoretical and practical training sub-programme of, at least, ten (10) working days, at a place to be determined, in English, for no more than six (6) participants.
- An on-the-job training sub-programme at each REDDIG node.
- A theoretical and practical training sub-programme at the factory site for six (6) participants, on network design, configuration, and operation (for NCC personnel).

2.14 Upon completion of the aforementioned courses, it is expected that participants will have *updated* their knowledge on VSAT systems, IP networks, MPLS service, and network management, and *learned* about the technical and functional operation of REDDIG II components.

2.15 The theoretical and practical courses to be provided in the SAM Region are scheduled for October 2013. The theoretical and practical courses to be provided at the factory site are scheduled for November 2013, and on-the-job training during the REDDIG II installation phase is scheduled for

December 2013 to March 2014.

3. **Suggested action**

3.1 The Coordination Committee is invited to:

- a) Take note of the information provided herein;
- b) Review the activities foreseen for the 2012-2013 period described in Section 2 and in **Appendix A** to this working paper; and
- c) Review any other matter related to the activities of project REDDIG RLA/03/901 for the period 2012-2013 it may deem necessary.

ACTIVITIES FOR THE IMPLEMENTATION OF REDDIG II

Activities	Action by	Deliverable	Deadline	Remarks
1	2	3	4	5
1 Evaluation of bids to select the winning company	Experts of REDDIG member States and REDDIG Administration	Bids evaluated	18-29 Jun 2012	Completed The evaluation group was made up by experts from Argentina, Brazil, French Guiana (France), Paraguay, and Peru. The REDDIG Administration (ICAO Secretariat, SAM Office, and the REDDIG administrator) also participated.
2 Determination of the winning company and post-evaluation requirements for the winning company	Experts of REDDIG member States and REDDIG Administration	Determination of the winning company Post-evaluation requirements for the winning company	29 Jun 2012	Completed The post-evaluation requirements will be delivered to the winning company so that it may submit its respective proposal.
3 Response of winning company to post-evaluation requirements	Winning company	Proposal on post-evaluation requirements	11 Jul 2012	Completed The response to post-evaluation requirements will be presented at the coordination meeting.
4 Review and approval of analysis of bids evaluation and approval of the winning company	REDDIG Coordination Committee meeting (RCC/15)	Comments and approval of the evaluation of bids and the selected winning company	15-17 Aug 2012	Pending All REDDIG members that have not been able to participate in the evaluation will have a chance to review and approve the evaluation and selection of the winning company.
5 Negotiation with the winning company	Technical Cooperation Bureau and REDDIG Administration	Negotiation with the winning company	27-29 Aug 2012	Pending Negotiation with the winning company at the headquarters of the ICAO Technical Cooperation Bureau in Montreal to improve the value of the bid.

Appendix A

Activities	Action by	Deliverable	Deadline	Remarks
1	2	3	4	5
6 Meeting with the winning company to review the process for the installation of REDDIG II	REDDIG Administration, winning company, and representatives of REDDIG member States	Document describing all activities to be carried out for the installation and start up of REDDIG II	8 -10 Oct 2012	Pending The meeting would be held in Lima, Peru, at the ICAO Regional Office.
7 Signing of the contract with the winning company	Technical Cooperation Bureau, REDDIG Administration, and winning company	Contract signed by all the parties	First quarter of 2013	Pending The contract would be signed once all REDDIG member States have deposited their corresponding contributions in ICAO. All contributions should be paid by the end of 2012.
8 Sixteenth REDDIG coordination meeting	REDDIG Administration	2014 plan of activities. Approval of budget revision "R". Plan of activities for the implementation of ATN ground-ground applications	March 2013 in Lima, Peru	Pending For one week, REDDIG members, together with REDDIG Administration, will review the activities carried out since RCC/15. The 2014 plan of activities and budget revision "R" for Project RLA/03/901 will be approved. The meeting will follow-up ATN ground-ground applications.
9 Start-up of the manufacturing of equipment	Winning company	Equipment to be installed in REDDIG II nodes	Second quarter of 2013	Pending Equipment will start being manufactured once the contract with the winning company has been signed.
10 Factory acceptance of equipment	REDDIG Administration, representatives of REDDIG member States that wish to participate	Factory acceptance of REDDIG II equipment to be installed in the nodes	End of third quarter of 2013	Pending Will depend on the date the contract is signed.

Activities	Action by	Deliverable	Deadline	Remarks
1	2	3	4	5
11 Technical and operational meeting to coordinate the activities for the installation of REDDIG II	REDDIG Administration and REDDIG member States	Timetable of activities for supervising the installation of REDDIG II	October 2013	Pending The meeting would be held in Lima, Peru, with all REDDIG members. The date of the meeting will depend on the date the contract is signed.
12 Start-up of REDDIG II installation	Winning company	Installation of REDDIG II	November 2013	Pending The date for the start-up of the installation of REDDIG II will depend on the date the contract is signed.
13 Supervision of the installation of REDDIG II	REDDIG Administration and REDDIG member States	Supervision of the installation of REDDIG II	November 2013-May 2014	Pending REDDIG member States together with REDDIG Administration will supervise the installation of REDDIG II.
14 Theoretical and practical training for REDDIG II	Winning company, REDDIG Administration and REDDIG member States	Personnel involved of REDDIG member States duly trained	October 2013	Pending
15 On-site training	Winning company, REDDIG Administration and REDDIG member States	Personnel involved of REDDIG member States duly trained	December 2013-March 2014	Pending
16 Specialised in factory theoretical and practical training	Winning company, REDDIG Administration and REDDIG member States	Personnel involved of REDDIG member States duly trained	November 2013	Pending
17 REDDIG II provisional acceptance tests	REDDIG Administration, REDDIG member States, and winning company	Provisional acceptance of REDDIG II	March 2014	Pending REDDIG member States, together with REDDIG Administration, will conduct the REDDIG II provisional acceptance tests.

Appendix A

Activities	Action by	Deliverable	Deadline	Remarks
1	2	3	4	5
18 REDDIG II final acceptance tests	REDDIG Administration, REDDIG member States, and winning company	Final acceptance of REDDIG II	May 2014	Pending
19 Operation of REDDIG II	Winning company	Operation of REDDIG II	May 2014	Pending All services operative throughout REDDIG II.
