



International Civil Aviation Organization
South American Regional Office - Regional Project RLA/03/901
REDDIG Management System and Administration of the Satellite Segment
Third Meeting on the Technical-Operational Implementation of the New
REDDIG II Digital Network (RTO/3)
BOGOTÁ, COLOMBIA, 28 TO 29 JULY 2014

Agenda Item 3: Activities required to be undertaken by REDDIG member States for REDDIG II implementation

(Presented by the Secretariat)

SUMMARY	
This paper presents information related with the follow up on the activities to be carried out by REDDIG member States for the execution of REDDIG II implementation, Phase 2.	
References	
<ul style="list-style-type: none">• Second Meeting on the Technical-Operational Implementation of the New REDDIG II Digital Network (RTO/2), (Lima, Peru, 26 to 28 March 2014)• Action plan for REDDIG II implementation (Contract 22501200 – Phase 2) chronogram presented by the INEO & Level 3 Consortium.	
ICAO strategic objective:	<i>A – Safety</i> <i>B – Air navigation capacity and efficiency</i>

1. **Background**

1.1 The RTO/2 Meeting analysed the activities that were required to REDDIG member States to be carried out for the execution and fulfilment by INEO & Level 3 Consortium of the tasks indicated in the implementation schedule of Phase 2 stated in Contract 22501200.

1.2 INEO & Level 3 Consortium sent on 11 July 2014 to the ICAO SAM Regional Office, the tentative schedule for the implementation of Contract 22501200

2. **Activities**

2.1 Even though the implementation and start-up of REDDIG II is a turnkey contract, there are activities requiring previous actions to be conducted by the REDDIG member States, for INEO & Level 3 Consortium's execution and compliance of the tasks indicated in the latest implementation chronogram of Contract 22501200.

2.2 These activities are classified into:

- a) Administrative/Logistical; and
- b) Technical.

2.2.2

Administrative/logistical activities

- a) For the drafting of the goods' shipment documentation (equipment and parts), responsibility of INEO & Level 3 Consortium, each of the REDDIG member States and COCESNA is to submit to the ICAO SAM Regional Office as soon as possible and by 15 April 2014, the "SHIP TO" information, as well as any other relevant information to be included in the shipment documentation (commercial invoice, packing list, AWB, B/L), for their proper importation and customs clearance.
Activity completed.
- b) To obtain the "SHIP TO" information, REDDIG II focal points were recommended to consult and request it from the areas responsible for this in their respective States, explaining the importance of counting with this information within the target date.
Activity completed.
- c) The ICAO SAM Regional Office consolidated the "SHIP TO" information received from States and COCESNA and will submit it to INEO & Level 3 Consortium.
Activity completed.
- d) As per the latest INEO chronogram, Task No. 53 to 68, INEO has estimated 45 days (from 15 August to 29 September 2014) for the import and customs clearance of the goods at each State and COCESNA. Therefore, according to the above, the goods should arrive and each State and COCESNA are to receive the complete shipping documentation no later than 14 August 2014.
- e) Once all States and COCESNA receive the complete set of shipment documents, they will review and verify they are correct, in order to immediately start with the goods customs clearance and importation. In the event that the information contained in the documentation is incorrect as regards the information submitted in activity a), the ICAO SAM Regional Office is to be immediately informed of it, so INEO is duly notified for the issuance of the respective rectification.
- f) All States and COCESNA will have, once activity e) is completed, forty five (45) days for the goods' clearance, import and local transfer to the respective installation site. The target date is 29 September 2014.
- g) With the aim of complying with activity f), States and COCESNA are requested to carry out all necessary previous arrangements (submittance of explanatory letters, coordination meetings) in order to receive appropriate support from the institutions and authorities responsible for the goods' customs clearance, import and local transport, with the aim of completing this process in forty five (45) days, maximum.

2.2.3

Technical activities

- a) Antenna maintenance. It is requested that a general cleaning and maintenance be carried out to every antenna at the REDDIG stations, as per the following chronogram:

SAEZ	16 July 2014
SBCT	17 July 2014
SBMN	18 July 2014
SBRF	29 July 2014
SCEL	22 July 2014

SEGU	23 July 2014
SGAS	24 July 2014
SKED	25 July 2014
SLLP	28 July 2014
SMPM	04 August 2014
SOCA	04 August 2014
SPIM	21 July 2014
SUMU	30 July 2014
SVMI	31 July 2014
SYGC	06 August 2014
TTZP	07 August 2014

- b) Update the information registered at the national entities administrating the radio frequency spectrum, regarding the new equipment and frequencies composing REDDIG II. The new REDDIG II frequencies are shown in **Appendix G** to WP/02, Agenda Item 1.

- c) In accordance with the latest INEO chronogram, Tasks No. 78 to 93, INEO has scheduled 29 September 2014 as the date to start with the installation at all the nodes (sites). Therefore, it is the responsibility of each State that the 16 REDDIG nodes have available, at the site designated for the installation of the new rack, the corresponding connector cabling of all services (voice and data) specified and detailed in the approved REDDIG II final design documents. Those nodes having a different site to the current one designated for the installation, must have the connector cabling in parallel up to the new rack installation site, of all services (voice and data). The target date is 28 September 2014.

- d) Ground Backbone Commissioning, Tasks n° 97 and 99 of the latest schedule submitted by INEO.
It is responsibility of each State to verify that each one of the services (voice and data) be operating normally in the terrestrial network (Ground Backbone) with all its respective counterparties. It is worth mentioning that the current REDDIG I satellite network will only be deactivated to start the installation of the new REDDIG II satellite network, and when all the services of the 16 nodes be normally operating in the terrestrial network (Ground Backbone).

- e) Commissioning, Tasks N° 100, 101 and 102 of the latest schedule submitted by INEO.
It is responsibility of each State to verify that INEO & Level 3 Consortium complies with the appropriate requirements previous to the commissioning of the PSAT tests, as it is the execution of the nine (9) phases of installation, described in document SDD, VSAT, Part 3, including the tests (“Pol Alignment” and Downlink Adjustment”) for the two (2) SSPA, which must be approved by Intelsat for each station. Please report to ICAO Regional SAM Office in case of a negative observation.

- f) Assembly and installation of equipment in COCESNA.
The ICAO SAM Regional Office will send a specialized technician to the COCESNA node in Tegucigalpa, Honduras from 17 to 20 October 2014 for the assembly of equipment ('router' plus satellite modem) using current band combiners/dividers type L type N (F). It must be taken into consideration the wiring (type, length and connectors) to be used for the “router” equipment and satellite mode, as well as between the satellite modem and the combiners/dividers of L band.

Also it must be taken into account the frequency of the local oscillator of the current RF amplifier of the station.

It is INEO's responsibility the commissioning of the COCESNA node in REDDIG II once it has been completed the assembly of the above equipment. For this, INEO must provide in advance the operational configuration files for the 'router' and the satellite modem so as to be locally 'loaded' in the COCESNA node by the technician sent by the ICAO SAM Office. Once this is done, all the tests listed in the schedule will be made.

- g) PSAT/NAT, tests, Tasks No. 103 and 104 of the schedule submitted by INEO. It is the responsibility of each State verifying the implementation and compliance of the protocols of the PSAT tests as well as its validation, and then the respective NAT tests under the coordination of the ICAO SAM Regional Office.
The ICAO SAM Regional Office shall verify that all the observations in the FAT be fully resolved this, being this a condition for the acceptance of the PSAT tests.
- h) FNAT tests, Tasks N° 106 and 107 of the schedule submitted by INEO.
The ICAO SAM Regional Office, together and in coordination with each of the States, will check that the INEO & Level 3 Consortium successfully meet all the PSAT/NAT tests that were not passed, and will evaluate the performance of the satellite and terrestrial networks during the period called "Operational Readiness Demonstration" (ORD). When all the indicated above is satisfactorily fulfilled, will proceed to sign the certificate of final acceptance, from which the warranty period of two (2) years will begin.

3. **Action suggested**

3.1 The Meeting is invited to:

- a) take note of the information provided;
- b) review the activities required to be undertaken, described in Section 2, and perform them as appropriate and in due time; and
- c) analyse any other aspect deemed necessary regarding this Agenda Item.

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