



**INTERNATIONAL CIVIL AVIATION ORGANIZATION
WESTERN AND CENTRAL AFRICA OFFICE**

**Draft Plan of Action for the cancellation of the
lack of VHF coverage in the continental
Airspace of Luanda FIR**

I- Scope of the Project

I-1 Objectives of the Project

The Angola Air Navigation Provider ENANA is experiencing a lack of VHF coverage in the continental airspace despite the implementation of remote VSAT VHF stations.

This critical situation requires immediate planned mitigating actions to clear out this major lack of air/ground communication.

I-2 Consistency of the Plan of Action

The Plan of Action consists on the planning, implementation of remedial actions and follow up/assessment of their status of implementation in order to restore the operation of the current unserviceable VSAT remote VHF network.

I-3 Expected benefit

- Improved safety, Reduced incidents/accidents risks, increased Access, Equity and Capacity
- Availability of and improved Controller to Pilot Communication Service through reliable and clear air/ground VHF voice communication;
- Improved situational awareness with ability to ensure the predictability and Efficiency in Luanda continental airspace,
- Compliance with Global and AFI Regional air navigation requirements and AFI objectives Safety Targets agreed by the Ministerial Conference of Abuja;
- Global interoperability, participation to the ATM community
- Decreased workload for Air Traffic Controllers

II- Detail of the Draft Plan of actions

II-1 Current status

The whole VSTA VHF network is unserviceable despite the recent actions taken by ENANA with the provider. It appears that both lacks of headset, mismatched connectors on the controller position may have caused the disruption of VHF service on the continental airspace of the Luanda FIR.

Among the measure undertaken, ENANA is purchasing a VCCS to be installed in the ACC and this equipment is supposed to cancel the unavailability of the VHF functions.

II-2 Short and Medium term planned Actions.

The ongoing critical lack of VHF coverage in the continental airspace of Luanda requires immediate coordinated and organized measures action s under the oversight of the highest level of ENANA. The actions to be conducted in a very short time frame should be clearly identified and planned with responsible tasked to ensure their implementation within this timeline.

1. Formal establishment *as a matter of urgency* of a Joint Team involving operational and technical personnel (ATM and ATSEP) to regularly (daily/weekly/monthly) assess the status of implementation of the actions and propose appropriate additional actions if any;
2. Development of detailed actions within a time frame including check points in particular;
3. Immediate and regular assessment of the operational status of the VSAT remote VHF stations (availability, reliability, Quality of Service....);
4. Immediate actions if necessary to stabilize and sustain the power supply of the VSAT remote VHF stations;

5. Immediate listing of all the necessary missing or additional components to be installed in the Luanda ACC (headset, connectors, VCCS...) and spare parts with a procurement plan ;
6. At least a weekly review of the status of implementation of the plan by the Joint Team, proposal of additional remedial actions if necessary and report to the board;
7. Weekly monitoring of the Plan by the ENANA CEO or by a board member;
8. Report to INAVIC, the Angola CAA on the evolving status of the plan;
9. Information to the users, to APIRG Community with copy to SAT members and to ICAO on the progress made by ENANA in the resolution of this deficiency.
10. Factory acceptance of the VCCS to be scheduled;
11. Shipping and transport of the VCCs in accordance with the schedule agreed with the provider
12. Taxes exemption and Custom clearance to be initiate prior to the arrival of the equipment
13. Site preparation
14. Installation with participation of technical team;
15. On-site maintenance and operational training;
16. On site acceptance at the date agreed with the provider
17. Trials and operation

II-3 Long term planned Actions

The actions during this period should be formally and regularly notified to the ICAO (ESAF and WACAF Offices) IATA and SAT Chairman through the Regulator (CAA):

- Informing airlines and SAT community on the establishment of the availability of VHF coverage in Luanda continental airspace;
- Operational assessment
- Sustainable maintenance policy Plan and Programme to be developed

II-4 Timeframe of the project

Appendix to be developed by the Project Manager, ENANA by the end of May 2013

III- Operational prerequisites

III-1 Operational Manual

Update of the Operational Manual including the contingency plan and taking into consideration the availability of VHF coverage in the Luanda continental airspace;
Development of an appropriated maintenance measures subsequent to the contingency plan

III-2 Safety Risk Studies

Safety assessment and Development of the Safety Risks Document

III-3 Training of Technical Personnel

- Training policy
- Training Plan
- Training programme
- Training schedule
- Eventual maintenance contract

IV-Other suggested actions

- Sharing VHF coverage with continental neighboring FIRs (Kinshasa, Lusaka, Windhoek and Brazzaville).
- Plan to evolve the remote VHF stations with VHF datalink capability in accordance with the AFI air navigation Plan
- Familiarization visit to understand basic technical principles prior to the operation of the station;
- Effective participation of ENANA at the SAT meeting (ICAOWACAF, Dakar, 15-19 July, 2013) with a working Paper on the status of implementation of the project.

Summary of the draft Plan of Actions for the cancellation of the lack of VHF coverage in the continental Airspace of Luanda FIR

Short and medium Term : 20 May -30 June 2013					
Order	Action	Responsible	Priority	Deadline	Status
1	Formal establishment of a Joint Team involving operational and technical personnel (ATM and ATSEP	CEO/Board	High	20 May 2013	
2	Development of detailed actions within a time frame including check points in particular	Team Leader/Technical Director	High	25 May 2013	
3	Immediate and regular assessment of the operational status of the VSAT remote VHF stations (availability, reliability, Quality of Service....)	Joint Team	High	30 May 2013	
4	Immediate listing of all the necessary missing or additional components to be installed in the Luanda ACC (headset, connectors, VCCS...) and spare parts with a procurement plan	Technical Director	High	30 May 2013	
5	Immediate actions to stabilize and sustain the power supply of the stations	Technical Director	High	15 June 2013	
6	Weekly review of the status of implementation of the plan, proposals of additional remedial actions and report to the board;	Joint Team	High	21 May - beyond	
7	Weekly monitoring of the Plan by the ENANA CEO or by a board member	CEO/Board	High	21 May - beyond	
8	Report to INAVIC, the Angola CAA on the evolving status of the plan	CEO/Board		21 May - beyond	
9	Information to users, APIRG, SAT and ICAO on the progress made by ENANA in the resolution of this deficiency.	CEO/Board	Medium	21 May - beyond	
10	Factory acceptance of the VCCS to be scheduled	Technical Director	High	TBD	
11	Shipping and transport of the VCCs in accordance with the schedule agreed with the provider	Provider	High	TBD	
12	Initiation of Taxes exemption and Custom clearance process prior to the arrival of the equipment	Logistic Division		TBD	
13	Site preparation	Technical Director	High	TBD	
14	Installation with participation of technical team	Provider	High	TBD	
15	On-site maintenance and operational training	Provider	High	TBD	
16	On site acceptance at the date agreed with the provider	Provider/Technical Director	High	TBD	
17	Trials and operation	Operational Director	High	TBD	
Long Term: 1st July 2013 and beyond					
Order	Action	Responsible	Priority	Deadline	Status
18	Information to airlines and SAT on the establishment of the availability of VHF coverage in Luanda continental airspace;	Operational Director	Medium	1 st July 2013	
19	Operational assessment	Operational Director	High	1st July 2013	
20	Development of a sustainable maintenance policy Plan and Programme		High	1st July 2013	

TBD: To Be Determined based on the project schedule