



INTERNATIONAL CIVIL AVIATION ORGANIZATION
Fourth Meeting of the APIRG Communication, Navigation and Surveillance Sub-Group
(CNS/SG/4)

(Dakar, Senegal, 24 to 29 July 2011)

Agenda Item 4: Aeronautical Fixed Service (AFS)

Rationalized AFTN circuits implementation and Performances

(Note presented by ASECNA)

Summary

This working paper aims to assess the operational and the implementation status of rationalized AFTN Plan within ASECNA area and between ASECNA and the adjacent centers. It calls also for cooperative actions in order to overcome the shortcomings and deficiencies still existing and improve the availability of the service.

1. Introduction

The continuous improvement of aeronautical telecommunications in AFI Region and particularly in the Aeronautical Fixed Service (AFS) field remains a permanent challenge for ASECNA to support the Air Navigation Services provision. ASECNA pursued the improvement of the performances of the existing circuits as well as the implementation of new AFTN circuits using AFISNET and the interconnection the other regional VSAT networks: NAFISAT, SADC and CAFSAT.

2. Discussion

The figure 1, in appendix A shows the status of implementation of rationalized AFTN circuits within ASECNA area and between ASECNA and the adjacent centers.

➤ ***Implementation of rationalized AFTN circuits***

The table in Appendix B below shows the status of implementation of rationalized AFTN which indicates that all the 51 AFTN required circuits for the rationalized AFTN Plan regarding ASECNA are implemented that is 100%. Additionally, about 61 of bilateral circuits have been implemented to improve continuity of service.

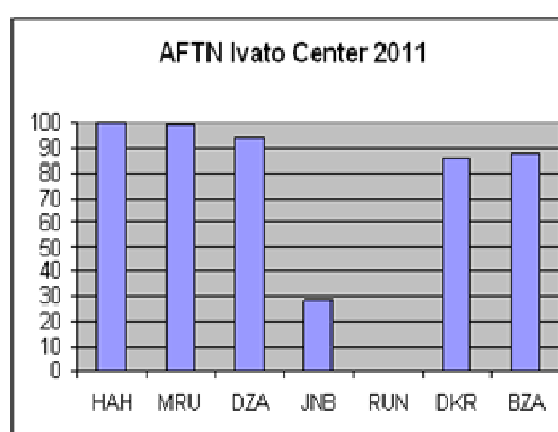
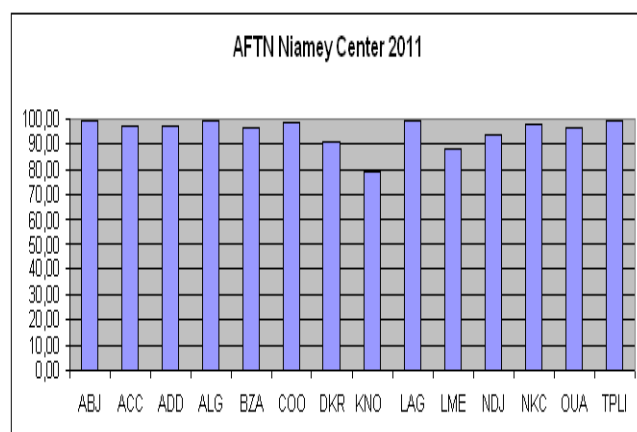
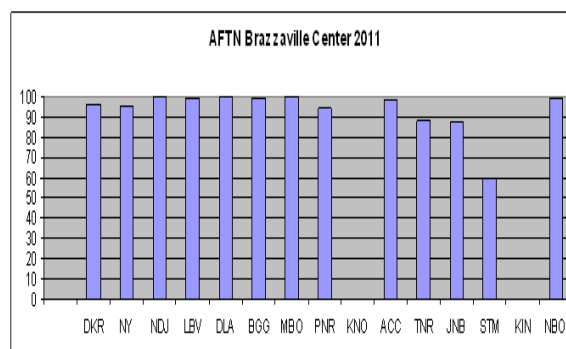
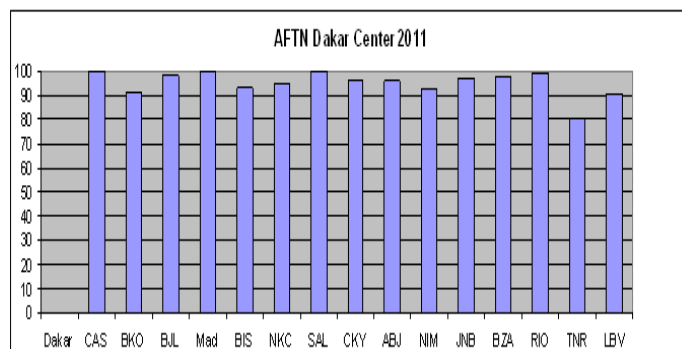
➤ ***AFTN circuits Performances***

The AFTN circuits Performances for ASECNA AFI main centers are summarized below and the details for the ASECNA other sites are available. Regarding, the performances, the AFTN circuits recorded in 2011, good availability, even efforts are to be pursued to bring all the circuits to the minimum availability to 97% required by ICAO.

The low rates are related to facilities dysfunctions and cooperative actions should be reinforced to clear these dysfunctions. Coordination efforts with the neighboring centers of Kano, Lagos and Accra are still continuing to ensure continuous service levels in line with ICAO recommendations. Up today, Accra/Brazzaville and Kano/Brazzaville circuits have been improved and are working well. But ASECNA and Angola should coordinate to restore the Brazzaville/Luanda circuit unserviceable for a

long time. Also the AFTN circuit Johannesburg/Antananarivo is still down due to a failure in Johannesburg and ATNS and ASECNA are in coordination to restore the circuit.

However, the coordination between ASECNA, ATNS and RVA is in a final stage for the implementation of the Kinshasa/Brazzaville Circuit via AFISNET and SADC interconnection.



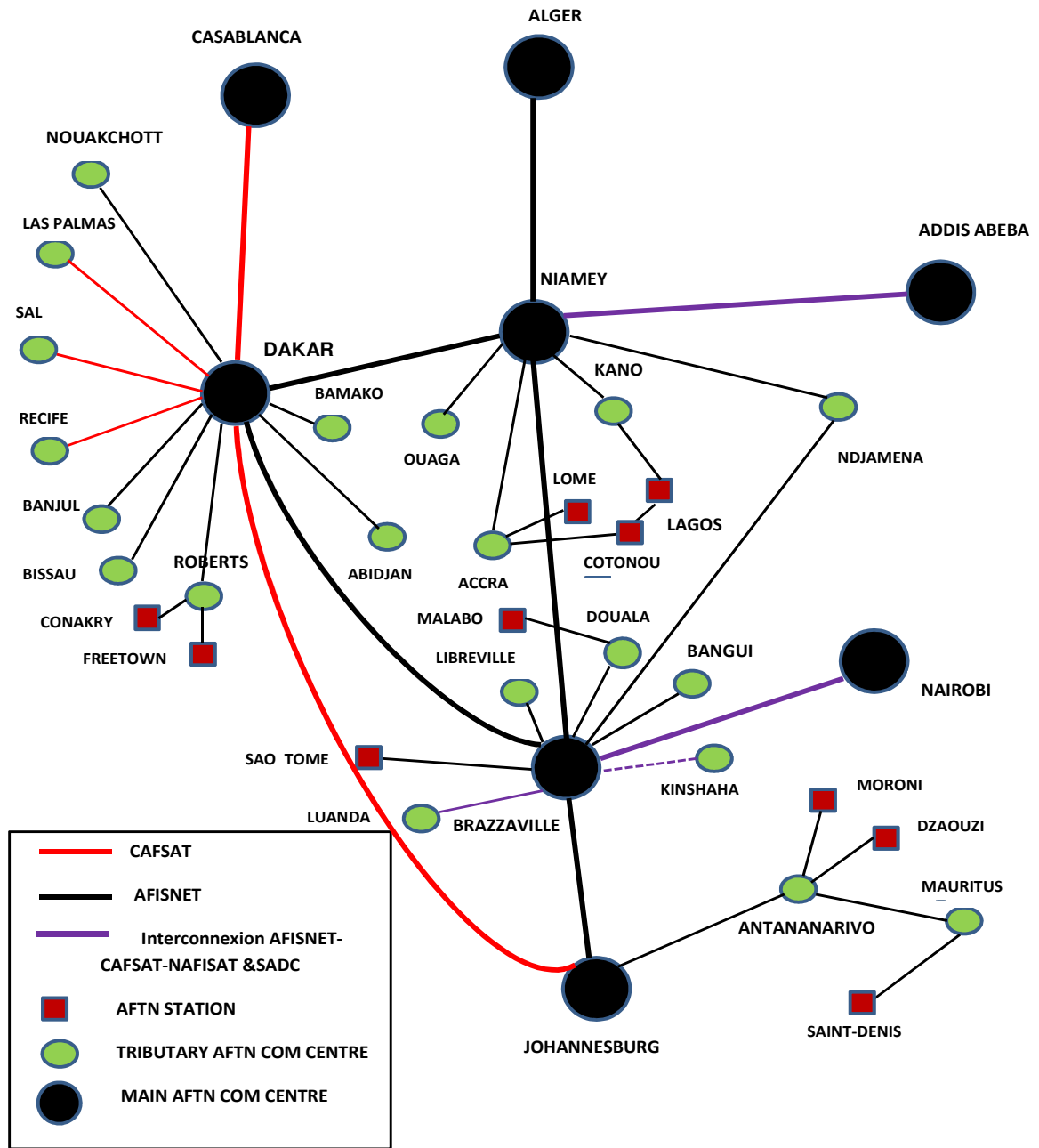
3. Conclusion

The meeting is invited to:

- ❑ Note that the AFTN circuits provided in AFI are fully implemented in ASECNA area, which are of importance for air navigation services;
- ❑ Analyze and address the bilateral circuits implemented to meet the requirements of the ATC for the ATM;
- ❑ Encourage parties to work together to improve the channels whose availability rates are still below 97% (standard ICAO).
- ❑ Recommend to reinforce the cooperation between parties including exchange of personnel to improve the performances of AFTN in the AFI region

APPENDIX-A

FIGURE1: RATIONALIZED AFTN CIRCUITS IMPLEMENTATION IN ASECNA AREA



APPENDIX -B
AFI AFTN implementation status in ASECNA area

COUNTRY	COM CENTRE	REQUIRED CIRCUITS		IMPLEMENTED CIRCUITS		NON IMPLEMENTED CIRCUITS	BILATERAL IMPLEMENTED CIRCUITS		OSERVATIONS
BENIN	COTONOU	2	ACCRA, LAGOS	2	100%		2	NIAMEY LOME	
BURKINA	OUAGA	1	NIAMEY	1	100%		3	ACCRA, BAMAKO, BOBO	
CAMEROUN	DOUALA	2	BRAZZA, MALABO	2	100%		6	KANO, LIBREVILLE, LAGOS GAROUA, NDJAMENA, YAOUNDE	
CENTRAFRIQUE	BANGUI	1	BRAZZA	1	100%		1	NDJAMENA	
COMORES	MORONI	1	TANA	1	100%				
CONGO	BRAZZAVILLE	11	BANGUI DAKAR DOUALA JOBURG KINSHASA LIBREVILLE LUANDA NDJAMENA NAIROBI NIAMEY SAO TOME	11	100%		5	ACCRA, KANO, POINTE, NOIRE MALABO, TANA	
COTE D'IVOIRE	ABIDJAN	1	DAKAR	1	100%		5	NIAMEY ACCRA LOME NOUAKCHOTT BAMAKO	
GABON	LIBREVILLE	1	BRAZZAVILLE	1	100%		7	DAKAR KANO LAGOS ACCRA DOUALA MWENGUE PORT GENTIL	
GUINEE BISSAU	BISSAU	1	DAKAR	1	100%				
GUINEE EQUAT.	MALABO	1	DOUALA	1	100%		1	BRAZZA	
MADAGASCAR	IVATO	4	DZAOUDZI JOBURG MORONI PLAISANCE	4	100%		3	DAKAR ST-DENIS BRAZZA	
MALI	BAMAKO	1	DAKAR	1	100%		3	OUAGA ABIDJAN NOUAKCHOTT	
MAURITANIE	NOUAKCHOTT	1	DAKAR	1	100%		5	NOUADHIBOU LAS PALMAS CASABLANCA ABIDJAN NIAMEY BAMAKO	
NIGER	NIAMEY	8	ACCRA ADDIS ALGER BRAZZA DAKAR KANO NDJAMENA OUAGA	8	100%		5	ABIDJAN COTONOU LOME NOUAKCHOTT BAMAKO	
SENEGAL	DAKAR	12	ABIDJAN BAMAKO BANJUL BISSAU BRAZZA CASA CONAKRY JOBURG NIAMEY NOUAKCHOTT RIO SAL	12	100%		3	LAS PALMAS LIBREVILLE TANA	
TCHAD	NDJAMENA	2	BRAZZAVILLE NIAMEY	2	100%		9	BANGUI KANO MAIDUGURI DOUALA, GAROUA KHARTOUM TRIPOLI SAHR ABEICHE	
TOGO	LOME	1	ACCRA	1	100%		3	COTONOU NIAMEY ABIDJAN	

TOTAL**51****51****100%****61**