



INTERNATIONAL CIVIL AVIATION ORGANIZATION

**AFI PLANNING AND IMPLEMENTATION REGIONAL GROUP
COMMUNICATIONS, NAVIGATION AND SURVEILLANCE SUB-GROUP THIRD MEETING
CNS/SG/3**

(Nairobi, Kenya, 26-30 April 2010)

(Presented by ASECNA)

SUMMARY

This present Working Paper gives a progress report on the implementation of rationalized AFTN Plan in ASECNA area. It calls also for cooperative actions to be undertaken in order to overcome the remaining shortcomings and deficiencies still existing.

Agenda Item 4.: Aeronautical Fixed Service (AFS)

Rationalised AFTN circuits achievement and Performances

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 proving.

According to the RAN AFI/7 recommendations 5/23 and 9/2 , relating to the use of VSAT technology for the implementation and improvement of the AFS circuits, ASECNA pursued the implementation of new AFTN circuits taking advantage AFISNET extension and interconnection with the other regional VSAT networks.

2. Discussion

The figure 1, below shows the situation of the physical links regarding ASECNA AFTN centres.

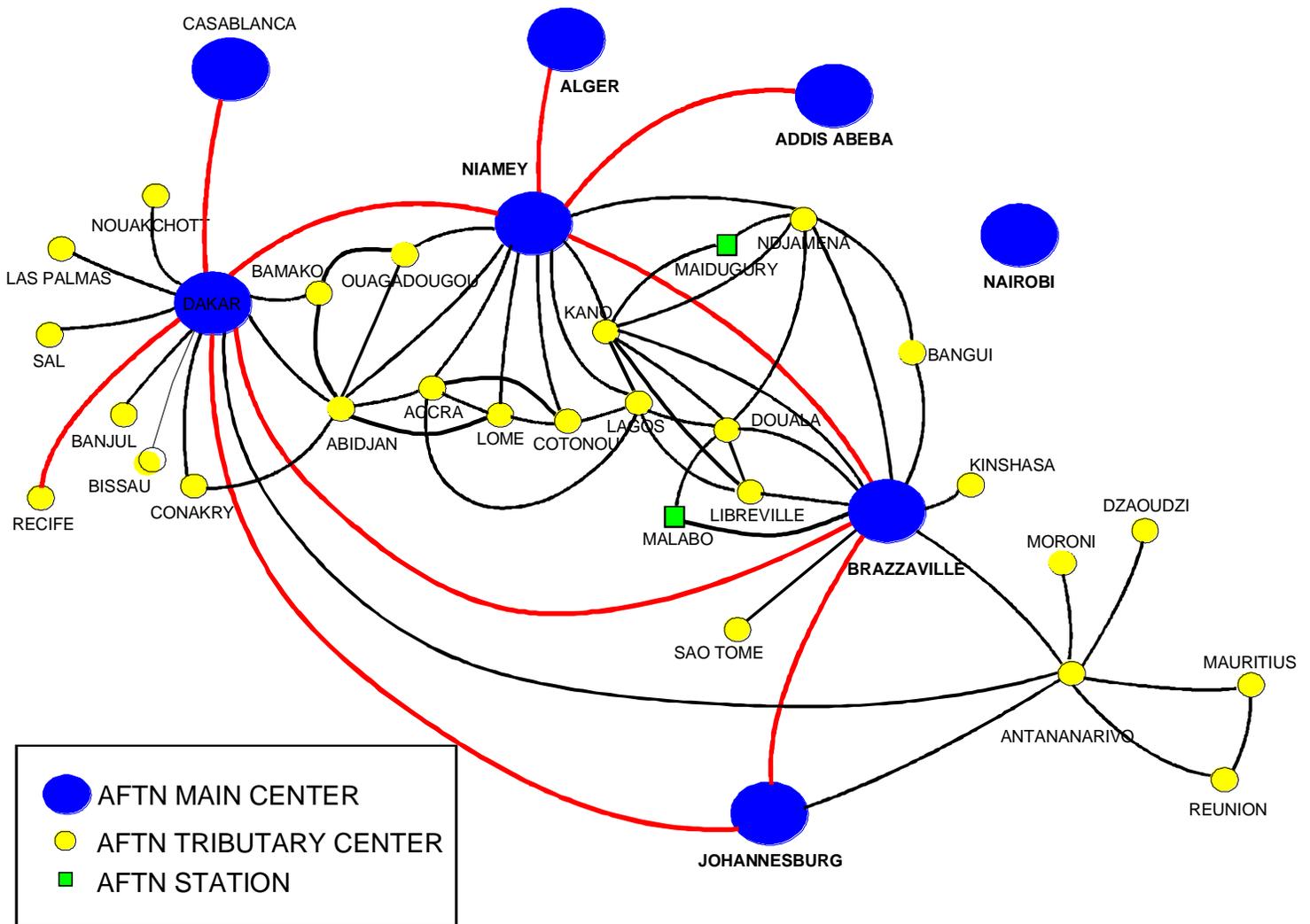


FIGURE 1: Physical links implemented in ASECNA area

It can be noted that all the links are implemented via AFISNET, CAFSAT, or AFISNET/NAFISAT & SADC-2 networks interconnection, except for the link Brazzaville/Kinshasa

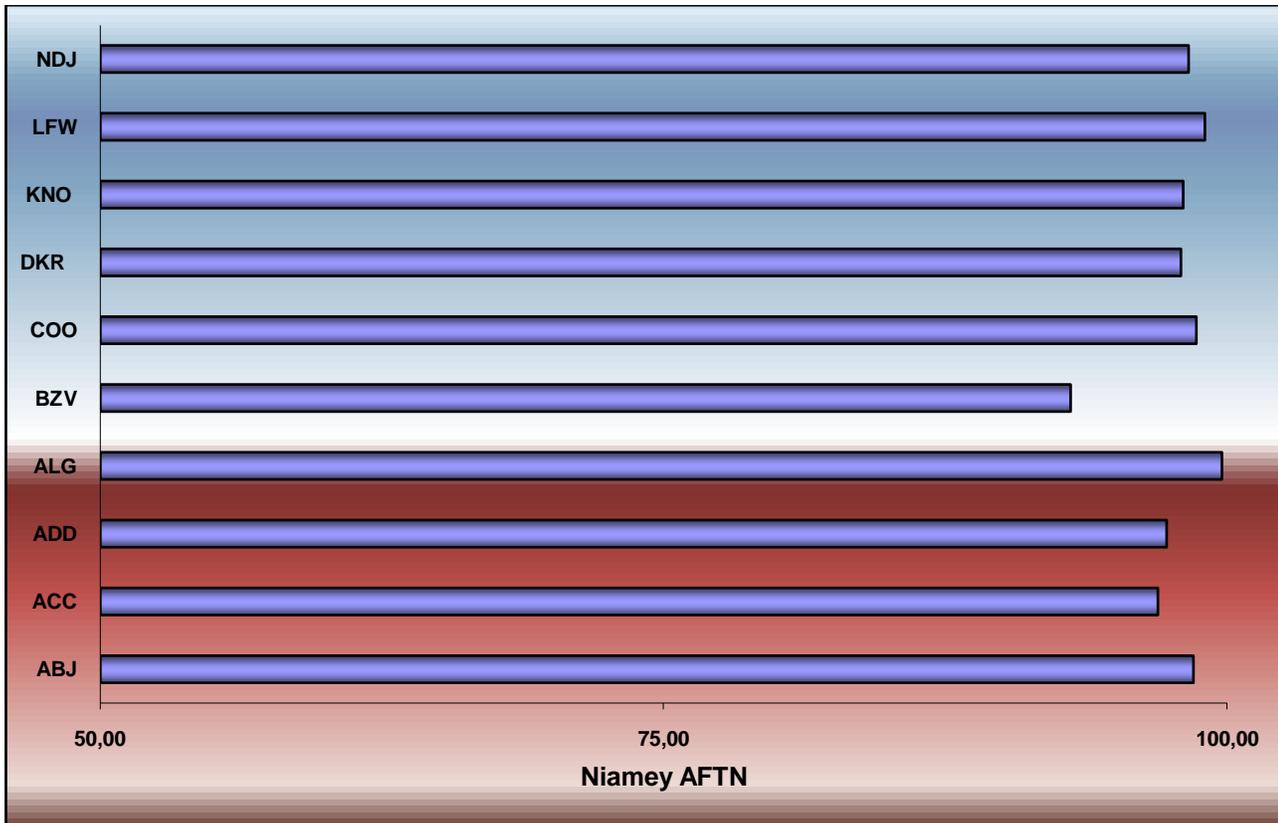
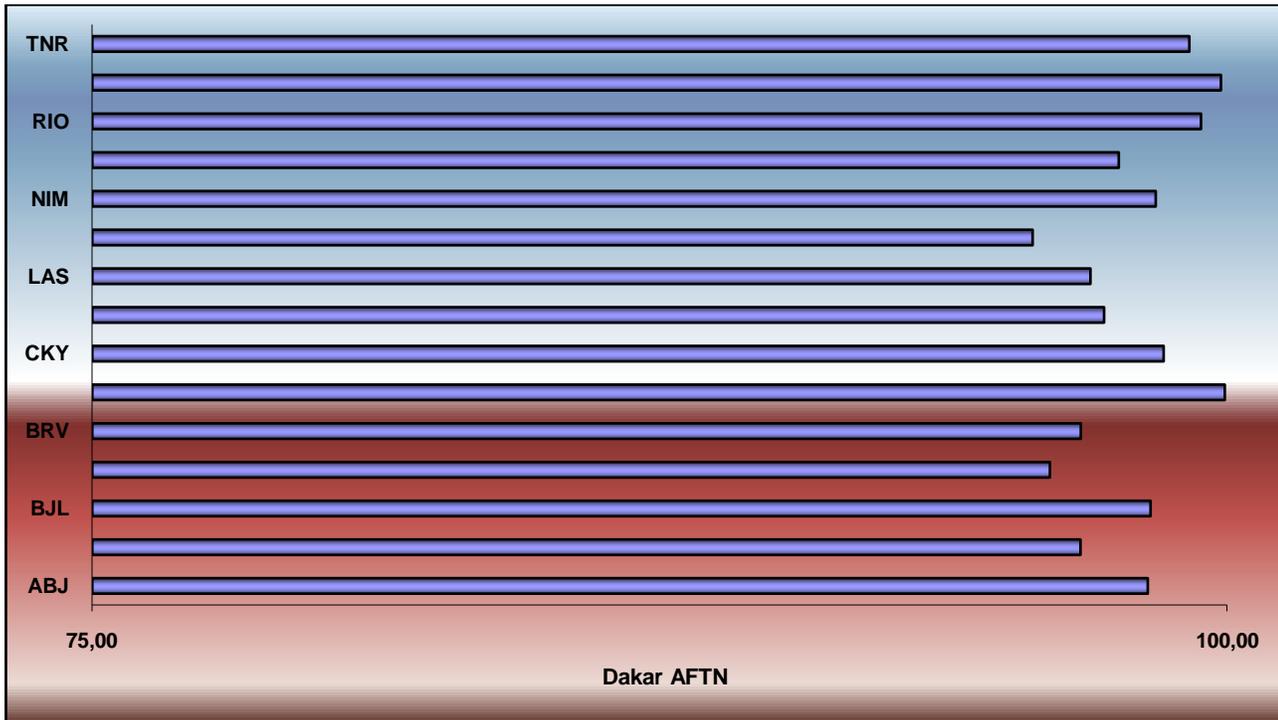
□ **Implementation of rationalised AFTN circuits**

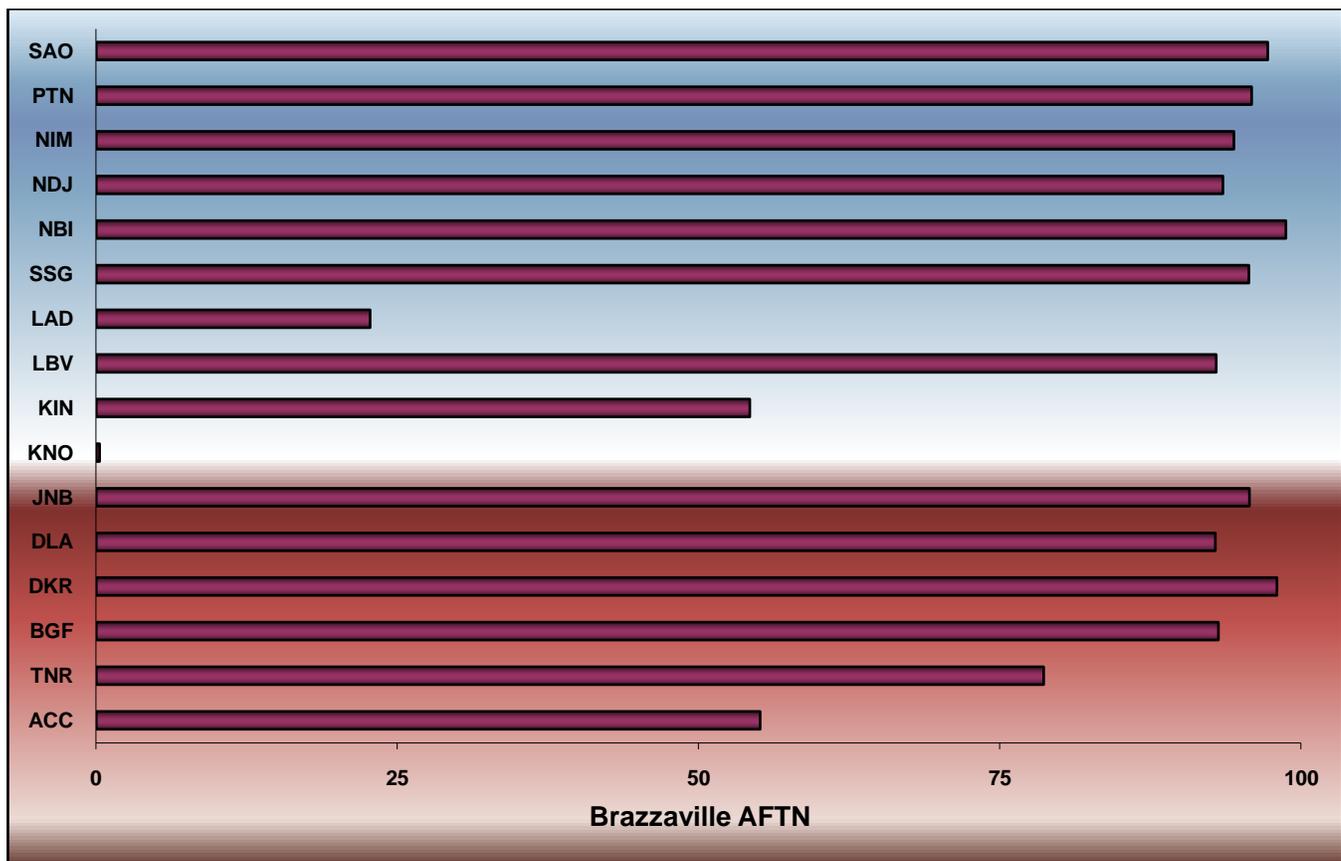
Table1 in appendix indicates that:

- All the AFI 51 planned AFTN circuits, are fully carried out (100% realization rate) through the SATCOM facilities;
- About 57 bilateral circuits have been implemented to satisfy the routing dictionary table in contingency context. These bilateral circuits are currently serviceable and take into account the flexibility due to emerging technologies.

□ **AFTN circuits Performances**

The **AFTN circuits Performances** for ASECNA AFI main centres are summarized below. More details for each ASECNA site are available.





Most of the circuits (13/18) recorded an availability rate ($\geq 97\%$); the low rates are related to facilities dysfunctions and cooperative trials should be conducted to clear these dysfunctions.

3. CONCLUSION

The meeting is invited to:

- note that the AFI planned AFTN circuits are fully implemented in ASECNA area which are a question of vital importance for the air navigation service;
- analyse and take into account the bilateral circuits implemented to satisfy the real day to day ATC requirement for ATM;
- encourage the involved parties to take the appropriate cooperative measures to improve the circuits still under 97% of availability

**APPENDIX I
AFI AFTN PLAN IMPLEMENTATION STATUS IN ASECNA**

COUNTRY	COM CENTER	REQUIRED CIRCUITS		IMPLEMENTED CIRCUITS		BILATERAL IMPLEMENTED CIRCUITS	NEW CIRCUITS TO BE IMPLEMENTED	
BENIN	COTONOU	2	ACCRA, LAGOS	2	100%	2	NIAMEY - LOME	
BURKINA	OUAGA	1	NIAMEY	1	100%	3	ACCRA-BAMAKO-BOBO DIOULASSO	
CAMEROUN	DOUALA	2	BRAZZAVILLE - MALABO	2	100%	6	KANO LIBREVILLE LAGOS GAROUA NDJAMENA YAOUNDE	
CENTRAFRIQUE	BANGUI	1	BRAZZA	1	100%	1	NDJAMENA	
COMORES	MORONI	1	ANTANANARIVO	1	100%		DZAOUDZI, BEIRA	
CONGO	BRAZZAVILLE	11	BANGUI DAKAR DOUALA JOBURG KINSHASA LIBREVILLE LUANDA NDJAMENA NAIROBI NIAMEY SAO TOME	11	100%	4	ACCRA KANO POINTE NOIRE MALABO	
COTE D'IVOIRE	ABIDJAN	1	DAKAR	1	100%	5	NIAMEY ACCRA BAMAKO-LOME BISSAU	ROBERTS
GABON	LIBREVILLE	1	BRAZZAVILLE	1	100%	7	DAKAR KANO LAGOS ACCRA DOUALA MWENGUE PORT GENTIL	
GUINEE BISSAU	BISSAU	1	DAKAR	1	100%	1	ABIDJAN	
GUINEE EQUAT.	MALABO	1	DOUALA	1	100%	1	BRAZZAVILLE	
MADAGASCAR	ANTANANARIVO	4	DZAOUDZI JOBURG MORONI PLAISANCE	4	100%	2	DAKAR ST-DENIS	
MALI	BAMAKO	1	DAKAR	1	100%	4	OUAGADOUGOU ABIDJAN NIAMEY, NOUAKCHOTT	
MAURITANIE	NOUAKCHOTT	1	DAKAR	1	100%	5	ALGER, LAS PALMAS, CASABLANCA, BAMAKO NOUADHIBOU	
NIGER	NIAMEY	8	ACCRA ADDIS ALGER BRAZZA DAKAR KANO NDJAMENA OUAGA	8	100%	3	ABIDJAN COTONOU LOME, TRIPOLI	
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%	7	BANGUI KANO MAIDUGURI DOUALA, GAROUA, TRIPOLI KHARTOUM	
TOGO	LOME	1	ACCRA	1	100%	3	NIAMEY COTONOU ABIDJAN	
TOTAL		51		51	100%	57		