



AFI SATELLITE NETWORK MANAGEMENT COMMITTEE MEETING

(22nd MEETING)

TOGO, LOME 15th TO 19th December, 2014

Review of AFISNET operational and Technical statistics of availability

(Presented by Nigerian Airspace Management Agency, NAMA)

SUMMARY

This paper gives the circuit availability statistics of
NAMA SATCOM links on AFISNET

1. INTRODUCTION

1.1 This working paper reports on the AFTN and ATS/DS circuit availability status with NAMA from January to November, 2014

2.0 DISCUSSIONS

2.1 SATCOM circuits status and performance.

Table1: LAGOS CENTER ATS/DS CIRCUIT AVAILABILITY FROM JAN' – NOV' 2014

STATION	NIAMEY	DOUALA	LIBREVILLE	ACCRA	COTONOU	AVERAGE %	4 LEVEL REPORTING INDEX
Month							
Jan. 2014	100	100	100	100	80.4	96.08	3
Feb. 2014	75	75	75	100	71.5	79.3	1 & 2 (LOS)
Mar. 2014	100	97.7	100	34.1	93.8	85.1	3, (1 & 2 for Accra link)
Apr. 2014	100	100	100	100	100	100	
May. 2014	99.6	99.5	99.6	98.8	98.5	99.2	3
June 2014	99.5	100	93.3	100	100	98.6	3
July 2014	100	94.7	100	100	97.3	98.4	3
August 2014	100	100	100	100	100	100	
Sep. 2014	100	100	100	100	100	100	
Oct. 2014	100	100	100	100	100	100	
Nov. 2014	99.6	99.6	97.9	99.9	99.6	99.3	3
						96	

FOUR LEVEL REPORTING INDEX

LEVEL 1: (CO + NO)/NO

LEVEL 2: Eb/NO

LEVEL 3: BASE BAND EQUIPMENT

LEVEL 4: USER EQUIPMENT

(Note: The month of Feb., 2014 as a result of power outage D/C have a fault and it was replaced. Date u/s: 14 Feb., to 21 Feb., 2014 and in March 2014, Accra VSAT was changed by Engr. From Accra. Date u/s: 1st March to 20th March 2014).

**LAGOS CENTER ATS/DS CIRCUIT AVAILABILITY FROM JAN-
NOV 2014 WITH % OF AVAILABILITY PLOTTED AGAINST
MONTH**

Figure 1

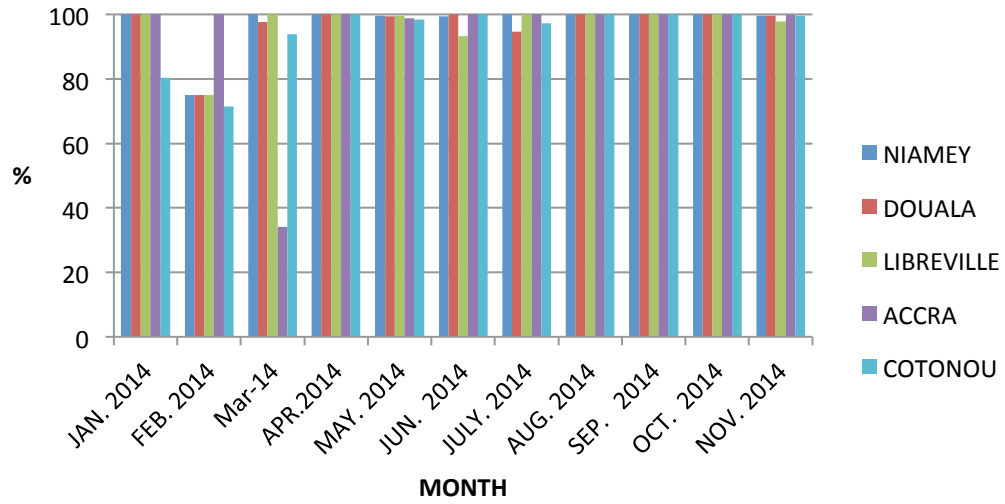


Table 2: LAGOS CENTER AFTN CIRCUIT AVAILABILITY FROM JAN' – NOV' 2014

STATION	NIAMEY	DOUALA	LIBREVILLE	ACCRA	COTONOU	AVERAGE	4 LEVEL REPORTING INDEX
Month	%	%	%	%	%	%	
Jan. 2014	100	100	100	100	80.4	96.1	
Feb. 2014	75	75	75	100	71.5	79.3	3
Mar. 2014	100	97.7	100	34.1	93.8	85.1	3
Apr. 2014	100	100	100	100	100	100	
May.2014	93.6	93.6	93.6	93.6	93.6	93.6	4
June 2014	99.5	100	93.3	100	100	98.56	3
July 2014	100	94.7	100	100	97.3	98.4	3
Aug. 2014	100	100	100	100	100	100	
Sep. 2014	100	100	100	100	100	100	
Oct. 2014	100	100	100	100	100	100	
Nov. 2014	99.6	99.6	97.7	99.9	99.6	98.7	
						86.46	

FOUR LEVEL REPORTING INDEX

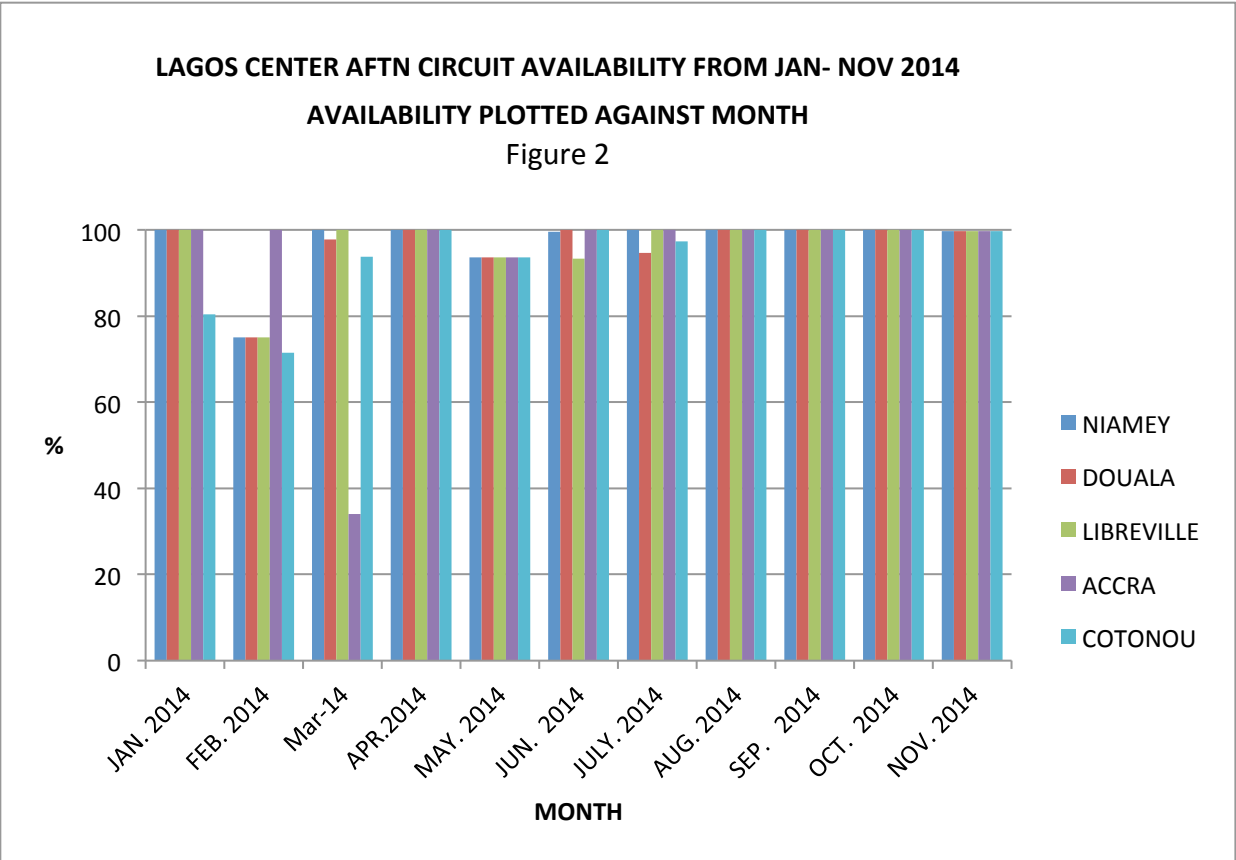
LEVEL 1: (CO + NO)/NO

LEVEL 2: Eb/NO

LEVEL 3: BASE BAND EQUIPMENT

LEVEL 4: USER EQUIPMENT

Note: In May 2014, the AFTN switches in Lagos and Kano failed and were changed. The low % is due to this transition period.



On the average, the ATS/DS and AFTN circuits at Lagos center performed below the ICAO recommended level.

Although the circuits became stable later in the year. Strategies to avoid this type of failures should be discussed.

Table 3: KANO CENTER ATS/DS CIRCUIT AVAILABILITY FROM JAN' - NOV' 2014

STATION MONTH	ACCRA	BRAZZAVILLE	DOUALA	LIBREVILLE	LAGOS	NDJEMENA	NIAMEY	4 LEVEL REPORTING INDEX
JAN'2014	0	100	100	100	100	100	100	
FEB'2014	0	100	100	100	60	100	100	
MAR'2014	0	100	100	100	100	100	100	
APR'2014	0	100	100	100	100	100	100	
MAY'2014	0	100	100	100	100	100	100	
JUN'2014	0	100	100	80	100	100	100	
JULY'2014	0	100	100	80	100	100	100	
AUG'2014	0	90	90	90	90	90	90	
SEP'2014	0	80	100	100	100	100	100	
OCT'2014	0	100	100	100	100	100	100	
NOV'2014	0	100	100	0	100	90	100	
AVERAGE %	0	97.2	99	95	95.4	98.1	99	

KANO CENTER ATS/DS CIRCUIT AVAILABILITY FROM JAN' – NOV' 2014 WITH PERCENTAGE OF AVAILABILITY PLOTTED AGAINST MONTH

Figure 3

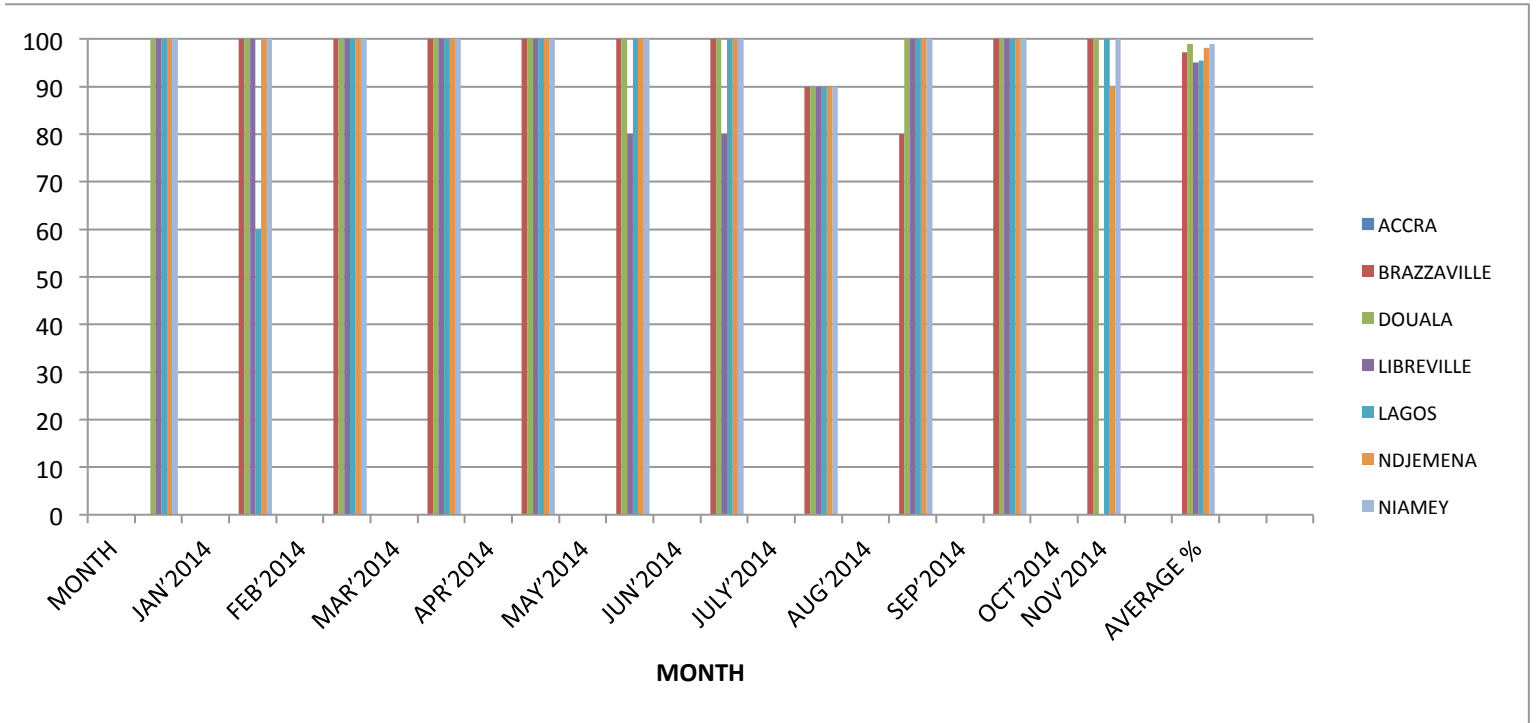
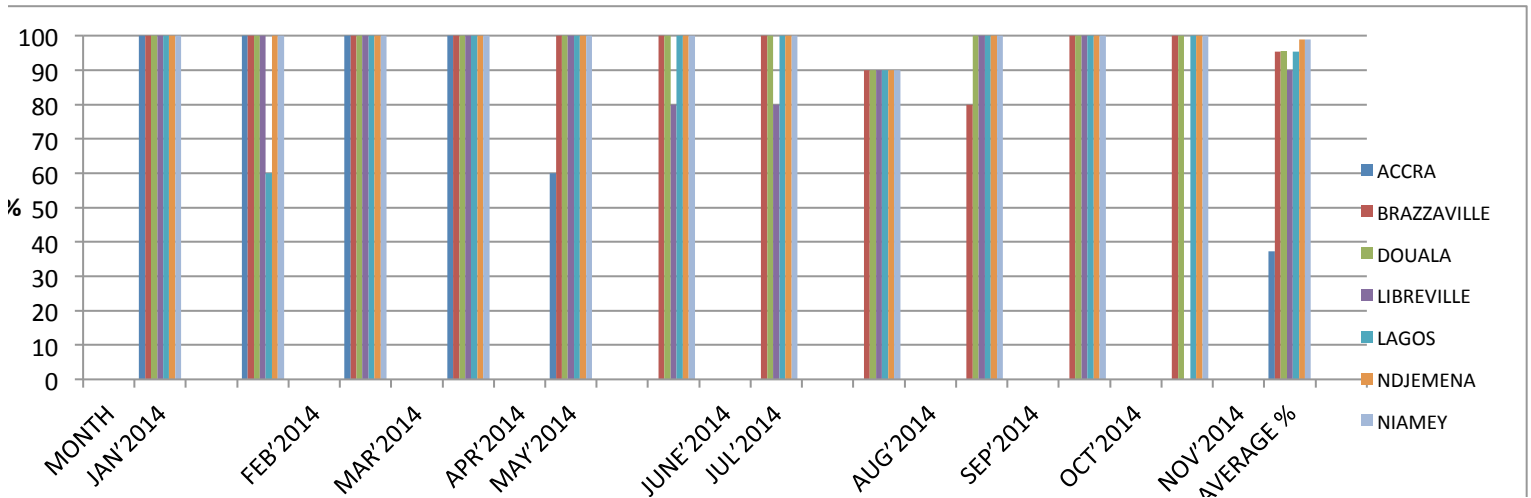


Table 4: KANO CENTER AFTN CIRCUIT AVAILABILITY FROM JAN' 2014- NOV' 2014

STATION MONTH	ACCRA	BRAZZAVILLE	DOUALA	LIBREVILLE	LAGOS	NDJEMENA	NIAMEY	4 LEVEL REPORTING INDEX
JAN'2014	100	100	100	100	100	100	100	
FEB'2014	100	100	100	100	60	100	100	
MAR'2014	100	100	100	100	100	100	100	
APR'2014	100	100	100	100	100	100	100	
MAY'2014	60	100	100	100	100	100	100	
JUNE'2014	0	100	100	80	100	100	100	
JUL'2014	0	100	100	80	100	100	100	
AUG'2014	0	90	90	90	90	90	90	
SEP'2014	0	80	100	100	100	100	100	
OCT'2014	0	100	100	100	100	100	100	
NOV'2014	0	100	100	0	100	100	100	
AVERAGE %	37.2	95.4	95.5	90	95.4	99	99	

KANO CENTER AFTN CIRCUIT AVAILABILITY FROM JANUARY 2014- NOVEMBER 2014 WITH PERCENTAGE OF AVAILABILITY PLOTTED AGAINST MONTH

Figure 4



Kano center circuits both for ATS/DS and AFTN on the yearly average also performed below ICAO recommended level. The performance of Kano – **Accra circuit is critical.**

3.0 ACTION REQUIRED

3.1 The meeting is invited to:

- To take note of the information contained in this paper
- Strategize on mitigation actions against the noticeable under performance of some circuits.