



INTERNATIONAL CIVIL AVIATION ORGANIZATION WESTERN AND CENTRAL AFRICA OFFICE

Twenty-fifth Meeting of the AFI Satellite Network Management Committee (SNMC/25) (Freetown, Sierra Leone, 18-22 December 2017)

Agenda Item 2: 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 AFISNET links to international

1. INTRODUCTION

1.1 This working paper reports on the AFTN and ATS/DS circuit availability status with NAMA from January to November, 2017

2.0 DISCUSSIONS

- 2.1 SATCOM circuits status and performance.
- 3.0 ACTIONS REQUIRED BY THE MEETING.

Table1: LAGOS CENTER ATS/DS CIRCUIT AVAILABILITY FROM JAN' - NOV' 2017

STATION	ACCRA	DOUALA	LIBREVILLE	сотомои	NIAMEY	LOME	MALABO	AVERAGE	4 level reportin g index
Month	%	%	%	%	%	%	%		
Jan	28.7	100	100	100	100	99.9	0	88.1	1, 2
Feb	76.7	100	100	100	100	100	0	96.12	1, 2
Mar	100	89.5	89.5	89.5	37.8	90.3	0	82.77	1,2
Apr	92.4	100	99.4	99.4	99.4	99.2	0	98,30	2, 3
May	99.3	99.5	99.7	99.5	99.7	99.7	0	99.56	2,3
June	96.23	99.8	99.8	99.8	99.6	99.8	0	99.20	1, 2, 3, 4
July	96.7	97.5	99.1	99.9	98.4	92.9	0	97.42	1, 2, 3
August	100	100	100	100	100	95.6	0	99.27	2, 3
Sept	99.3	73.5	97.2	97.2	98.6	98.7	0	94,08	1, 2, 3
Oct	86.3	96.1	90.8	99.8	100	99.4	0	95.5	1, 2, 3
Nov	74.8	99.7	100	100	100	100	0	96.73	1, 2, 3
			_			•	_	95.19	

FOUR LEVEL REPORTING INDEX

LEVEL 1: (CO + NO)/NO

LEVEL 2: Eb/NO

LEVEL 3: BASE BAND EQUIPMENT





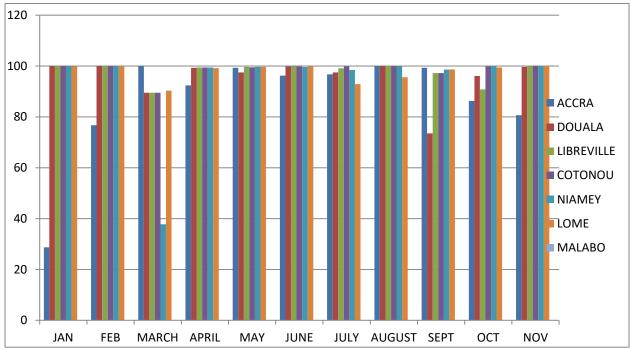


Figure 1: ATS/DS CIRCUIT AVAILABILITY FOR LAGOS CENTER FROM JAN' - NOV' 2017

Table 2: LAGOS CENTER AFTN CIRCUIT AVAILABILITY FROM JAN' - NOV' 2017

STATION	ACCRA	DOUALA	LIBREVILLE	COTONOU	NIAMEY	LOME	MALABO	AVERAGE	4 level reporting index
Month									
	%	%	%	%	%	%	%	%	
Jan	28.7	100	100	100	100	99.9	0	88.1	1, 2
Feb	76.7	100	100	100	100	100	0	96.12	1, 2
Mar	100	89.5	89.5	89.5	37.8	90.3	0	82.77	1,2
Apr	92.4	99.3	99.4	99.4	99.4	99.2	0	98,30	2, 3
May	99.3	97.5	99.7	99.5	99.7	99.7	0	99.56	2,3
June	98.1	99.5	99.5	100	99.4	88.9	0	99.20	1, 2, 3, 4
July	97.7	96.2	99.6	99.8	99.8	96.6	0	97.42	1, 2, 3
August	89.5	96.4	97.6	99.2	99.6	99.6	0	99.27	2, 3
Sept	99.3	73.5	97.2	98.7	98.6	98.7	0	94.08	1, 2, 3
Oct	89.8	98.1	92,3	99.9	99.9	99.9	0	95.5	1, 2, 3
Nov	77.7	99.7	99.7	100	100	100	0	96.73	1, 2, 3
	•	•	•	•	•	•	•	95 19	

FOUR LEVEL REPORTING INDEX

LEVEL 1: (CO + NO)/NO

LEVEL 2: Eb/NO

LEVEL 3: BASE BAND EQUIPMENT





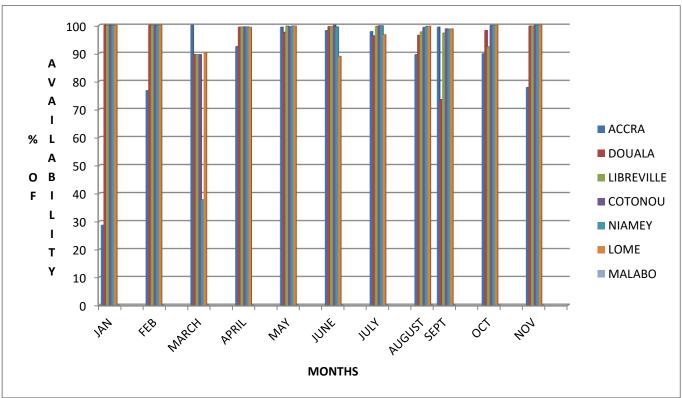


Figure 2: AFTN CIRCUIT AVAILABILITY FOR LAGOS CENTER FROM JAN' – NOV' 2017

Table 3: KANO CENTER ATS/DS CIRCUIT AVAILABILITY FROM JAN' - NOV' 2017

STATION								AVERAGE	4 level reporting index
	ACCRA	BRAZZA	DOUALA	LIBREV	LOME	NDJAM	NIAMEY	%	
Month									
	%	%	%	%	%	%	%		
Jan	0	100	100	100	100	100	100	100	2, 3
Feb	0	100	100	100	100	100	100	100	1, 2
Mar	0	100	99.86	99.73	100	99.87	100	99.91	2, 3
Apr	0	100	99.86	99.86	99.86	99.86	99.86	99.88	2, 3. 4
May	0	100	100	100	100	99.35	97.45	99.45	2,3
June	0	96.38	100	100	96.38	96.38	98.05	97.87	1, 2, 3, 4
July	0	100	96.51	99.46	99.46	100	98.79	99.04	1, 2, 3
August	0	90.00	90.00	90.00	90.00	90.00	90.00	90.00	1, 2, 3, 4
Sept	0	99.00	100	100	100	100	99.10	99.68	2, 3
Oct	0	100.00	99.86	98.99	100	97.84	99.46	99.36	2, 3
Nov	0	98.00	100	100	80.02	100	100	96.34	2, 3
	•	•	•	•	•	•	•	98.32	

FOUR LEVEL REPORTING INDEX

LEVEL 1: (CO + NO)/NO

LEVEL 2: Eb/NO

LEVEL 3: BASE BAND EQUIPMENT





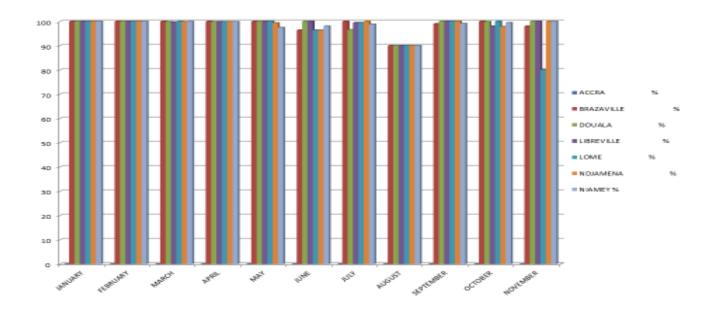


FIGURE 3: KANO CENTER ATS/DS CIRCUIT AVAILABILITY FROM JAN' - NOV' 2017

Table 4: KANO CENTER AFTN CIRCUIT AVAILABILITY FROM JAN' - NOV' 2017

STATION									4 level reporting index
	ACCRA	BRAZZA	DOUALA	LIBREV	LOME	NDJAM	NIAMEY	AVERAGE	
Month									
	%	%	%	%	%	%	%	%	
Jan	99.60	93.55	93.55	85.48	100	90.45	100	94.66	1, 2
Feb	98.21	100	100	96.43	97.17	98.36	100	98.60	1, 2
Mar	99.86	99.86	99.72	99.72	98.61	99.86	99.86	99.64	1,2
Apr	99.86	99.86	99.86	99.03	99.86	99.30	99.86	99.66	2, 3
May	99.73	100	99.87	100	99.87	99.73	100	99.89	2,3
June	83.33	100	100	100	100	99.40	100	97.53	1, 2, 3, 4
July	95.97	0	95.97	95.97	95.97	95.97	95.97	82.26	1, 2, 3, 4
August	90.00	0	90.00	90.00	90.00	90.00	90.00	77.14	2, 3, 4
Sept	100	0	100	100	100	100	100	85.71	2, 3
Oct	100	0	97.45	97.45	100	95.08	100	84.28	2, 3
Nov	100	0	99.59	100	80.00	99.50	100	83.72	2, 3
	•	•	•	•	•	•		91.10	

FOUR LEVEL REPORTING INDEX

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LEVEL 3: BASE BAND EQUIPMENT



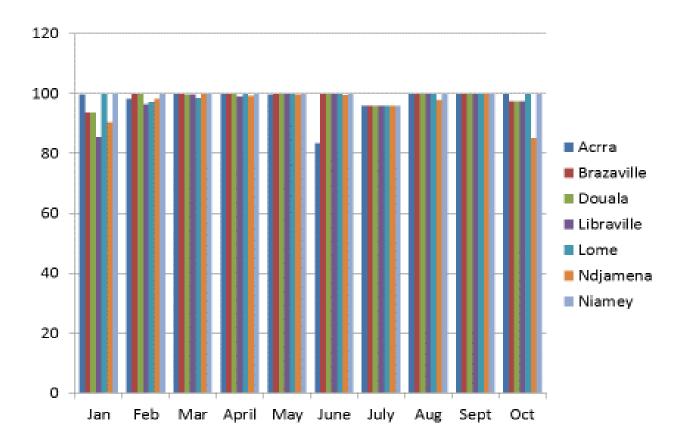


FIGURE 4: KANO CENTER AFTN CIRCUIT AVAILABILITY FROM JAN' - Oct' 2017

On the average, some ATS/DS and AFTN circuits performed below the ICAO recommended level. Malabo circuit with Lagos was not activated both on AFTN and ATS/DS.

3.0 ACTION REQUIRED

- 3.1 The meeting is invited to:
 - To take note of the information contained in this paper
 - Strategize on mitigation action against the noticeable under performance of some circuits.