



Twenty-seventh Meeting of AFI Satellite Network Management Committee

Accra, Ghana, 25-29 November, 2019

Agenda Item 2: Operational Statistics

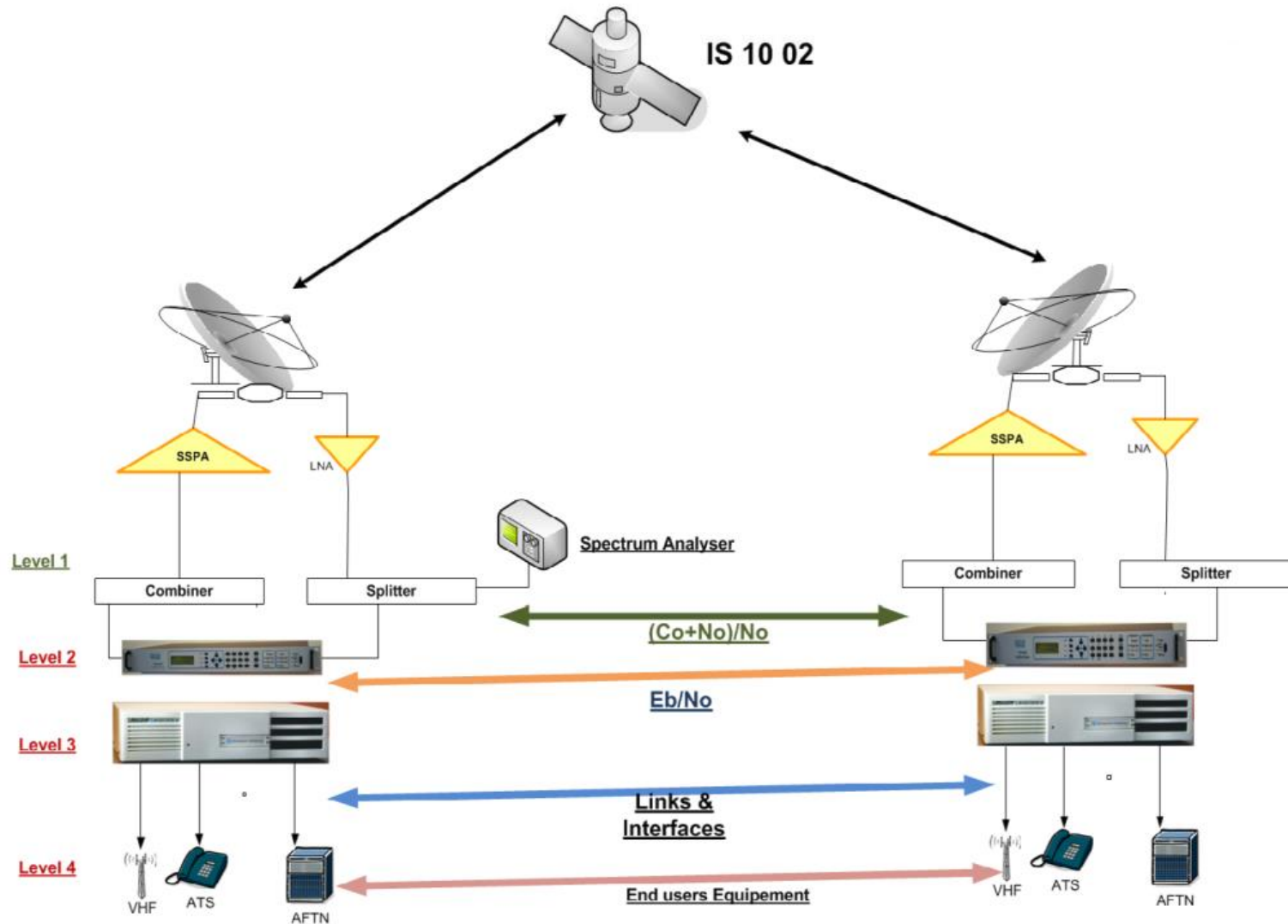
(Presented by ASECNA)

1. INTRODUCTION

This Working Paper provides

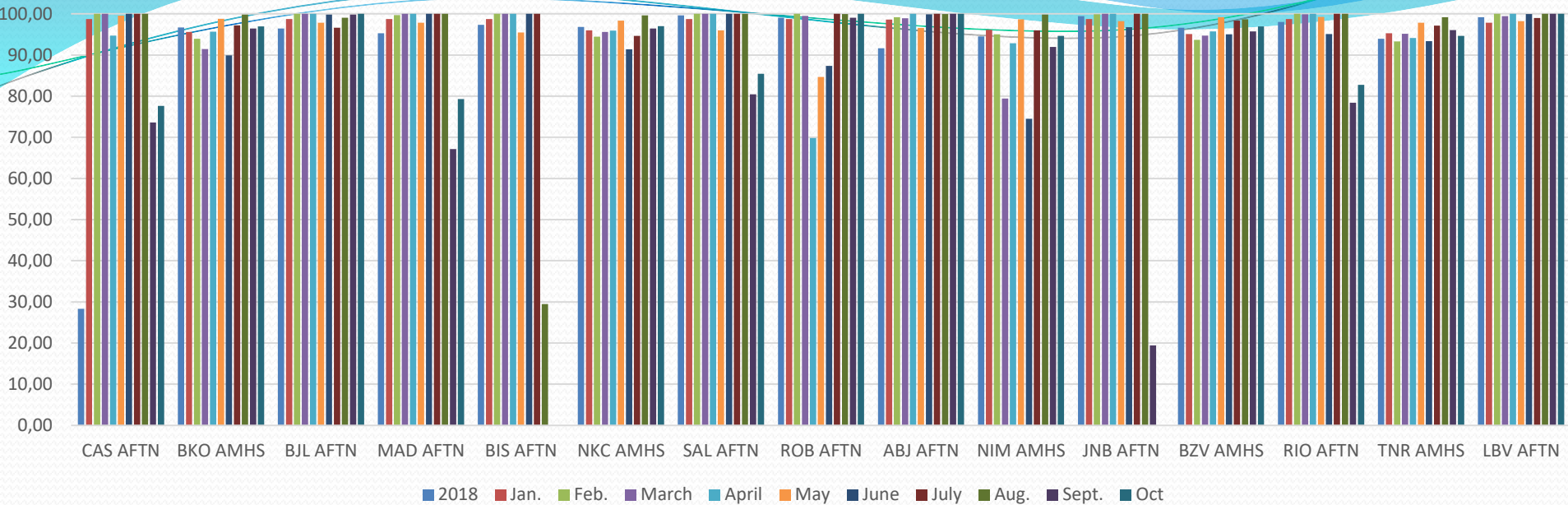
- ❖ A progress report on the availability of the AFTN circuits of SNMC COM centres in ASECNA area from January to October 2019.
- ❖ A view for the migration of AMHS towards AMHS in SNMC centers;
- ❖ A view for the situation of ATS/DS links

2. AFTN/AMHS availability in ASECNA centers



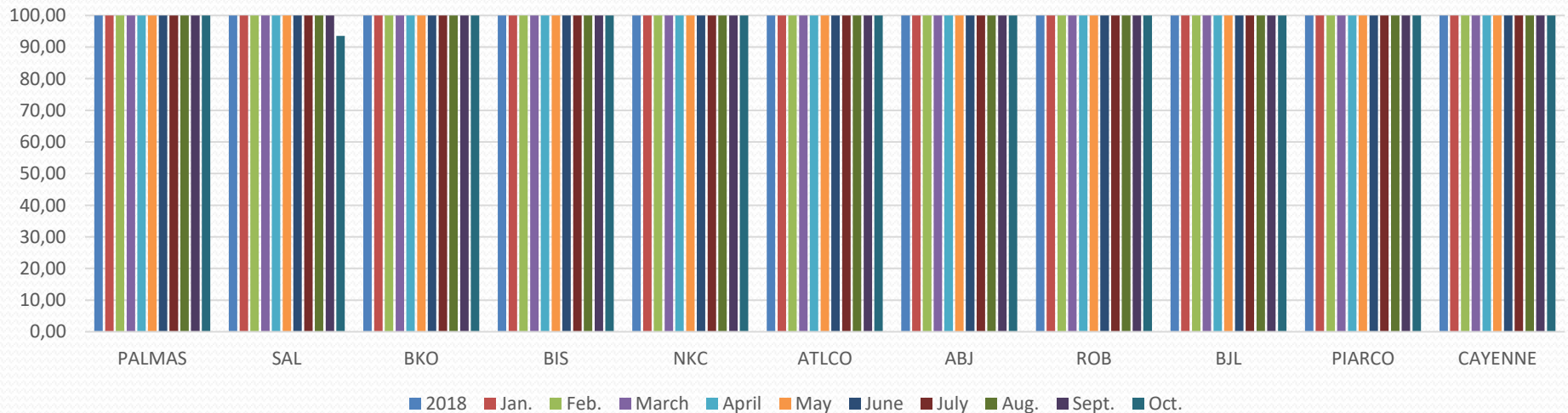
AFTN/AMHS AVAILABILITY: 2018- 2019 (Jan.-Oct.)

DAKAR CENTER

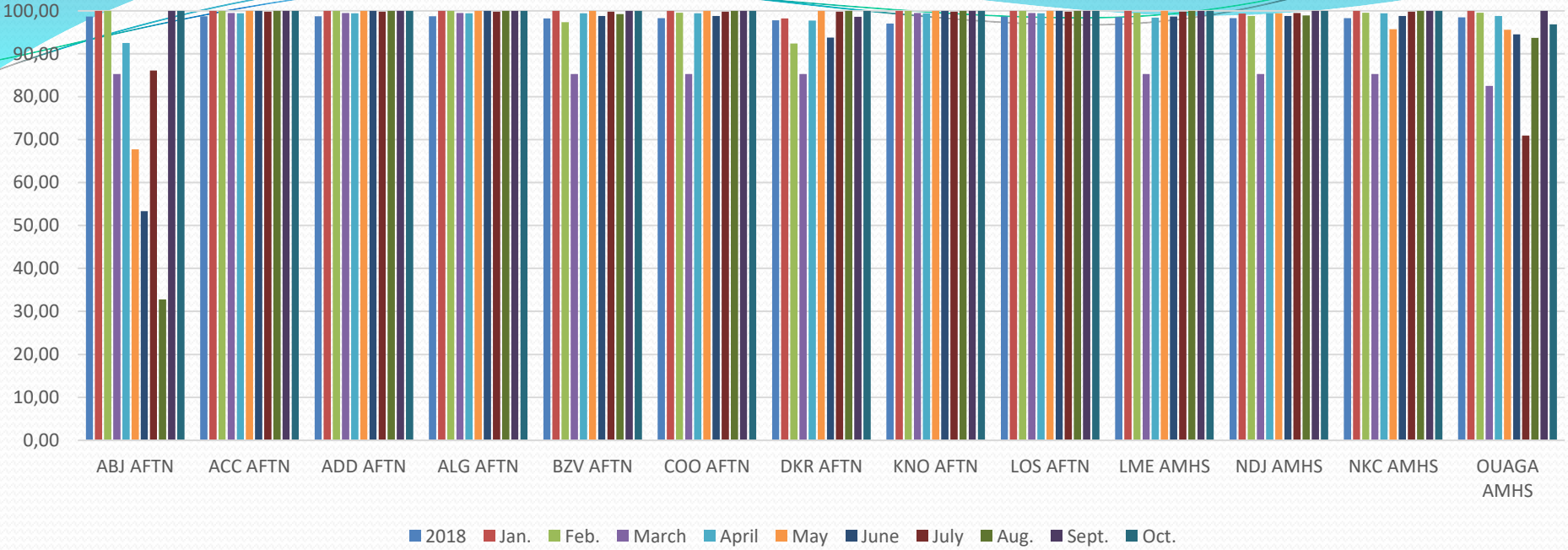


ATS/DS AVAILABILITY: 2018 - 2019 (Jan.-Oct.)

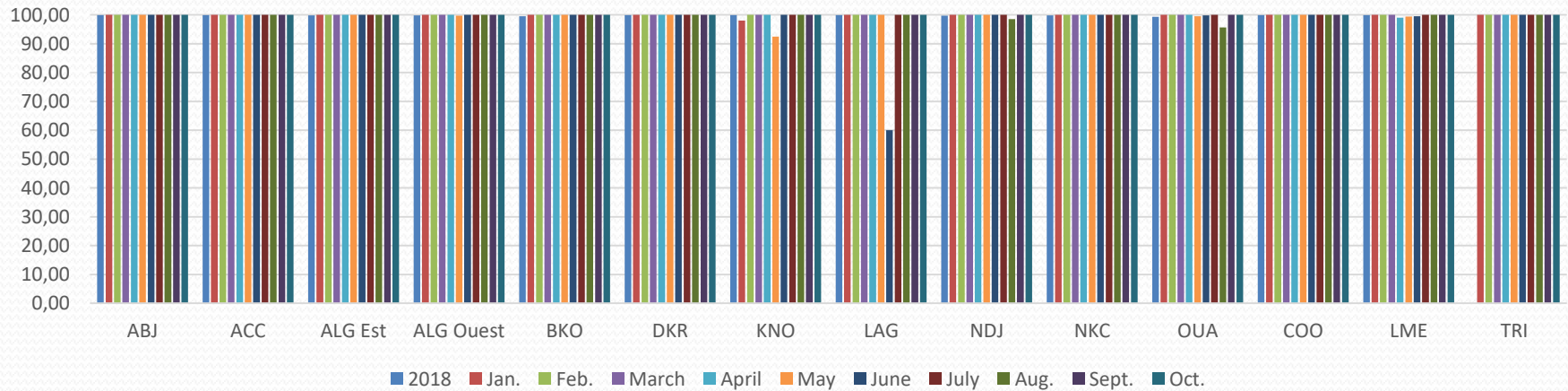
DAKAR CENTER



AFTN/AMHS AVAILABILITY: 2018 - 2019 (Jan.-Oct.)
NIAMEY CENTER

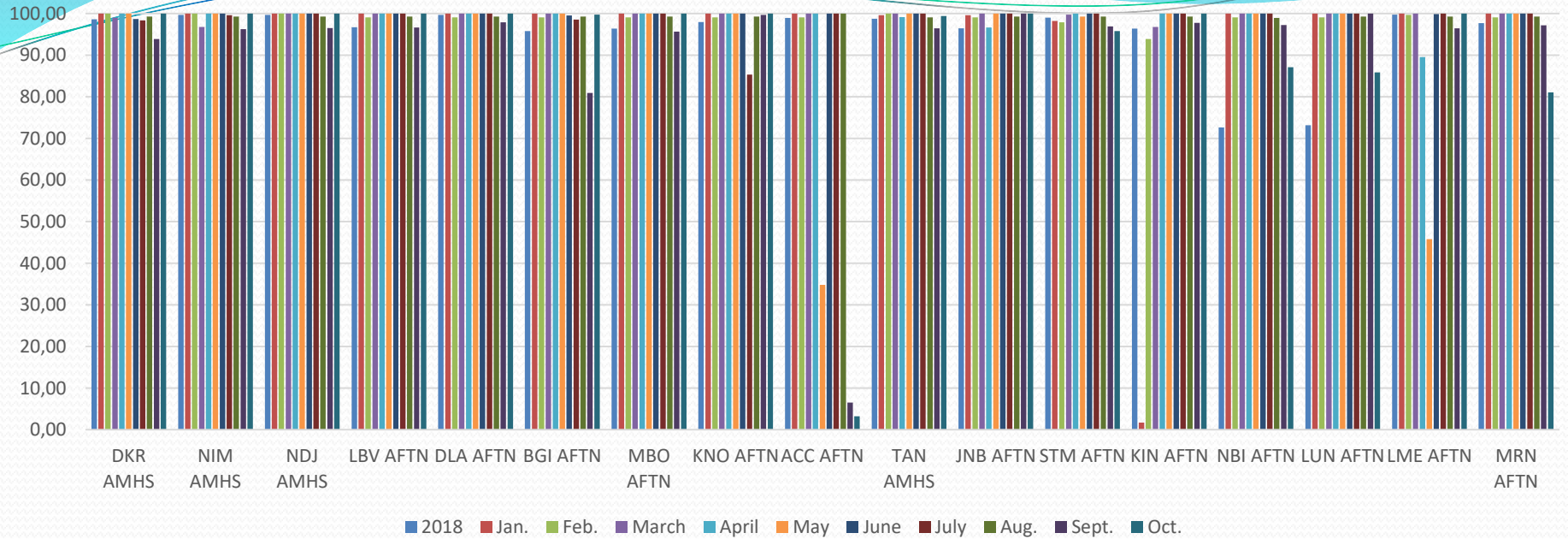


ATS/DS AVAILABILITY: 2018 - 2019 (Jan.-Oct.)
NIAMEY CENTER



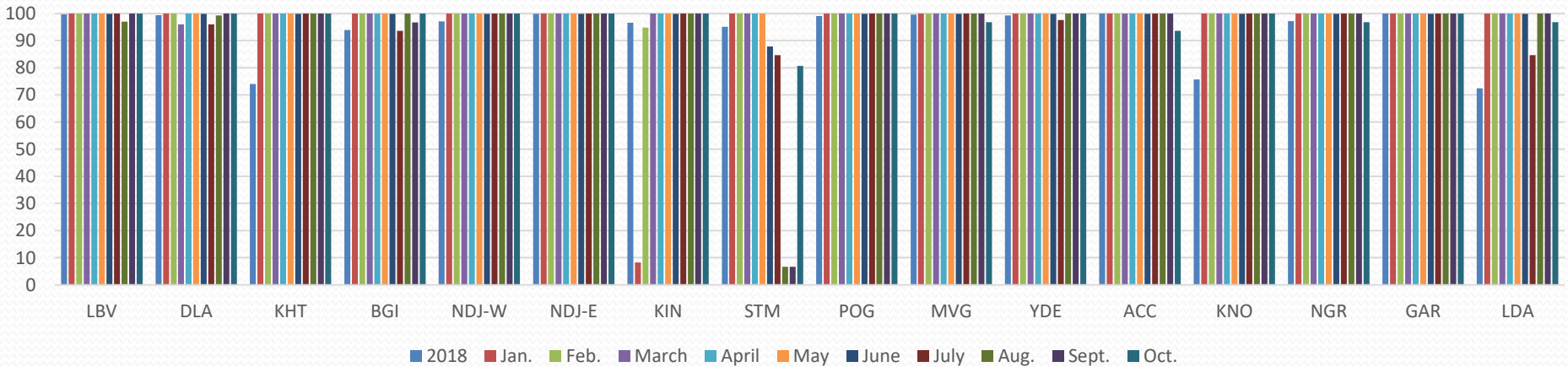
AFTN/AMHS AVAILABILITY: 2018 - 2019 (Jan.-Oct.)

BRAZZAVILLE CENTER



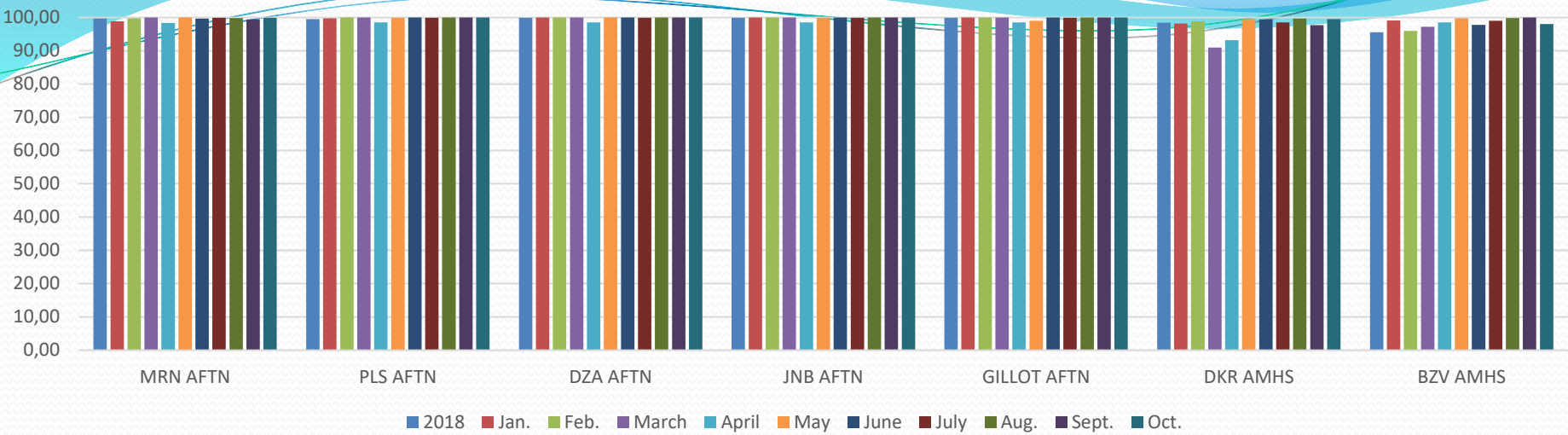
ATS/DS AVAILABILITY: 2018 - 2019 (Jan.-Oct.)

BRAZZAVILLE CENTER



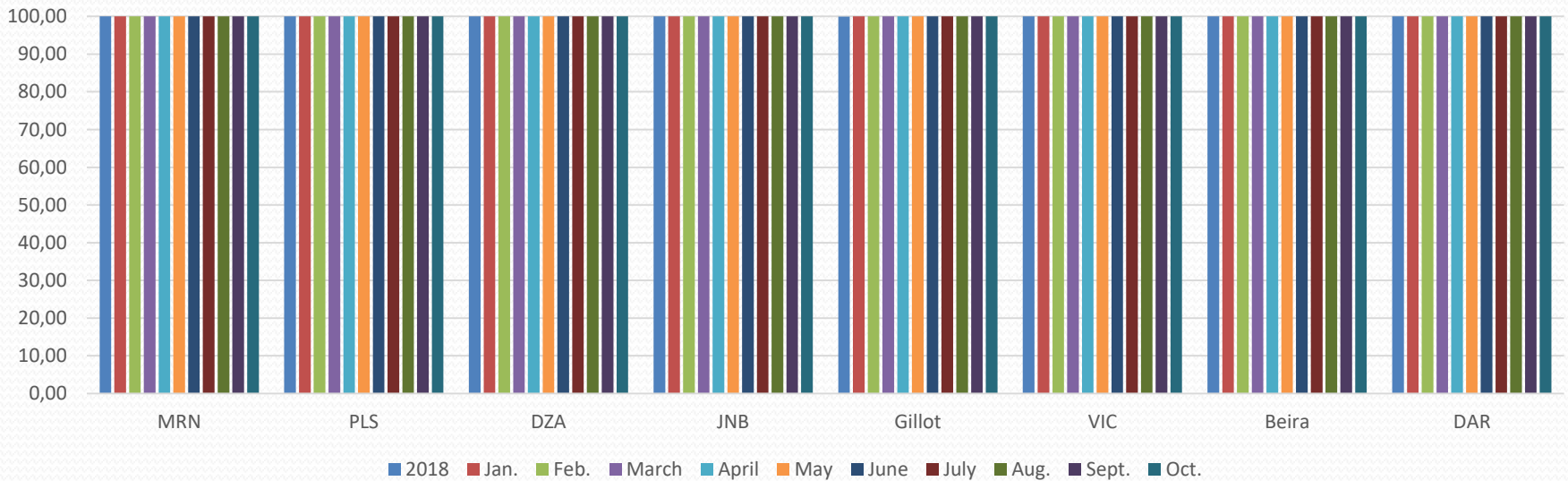
AFTN/AMHS AVAILABILITY: 2018 - 2019 (Jan.-Oct.)

ANTANANARIVO CENTER



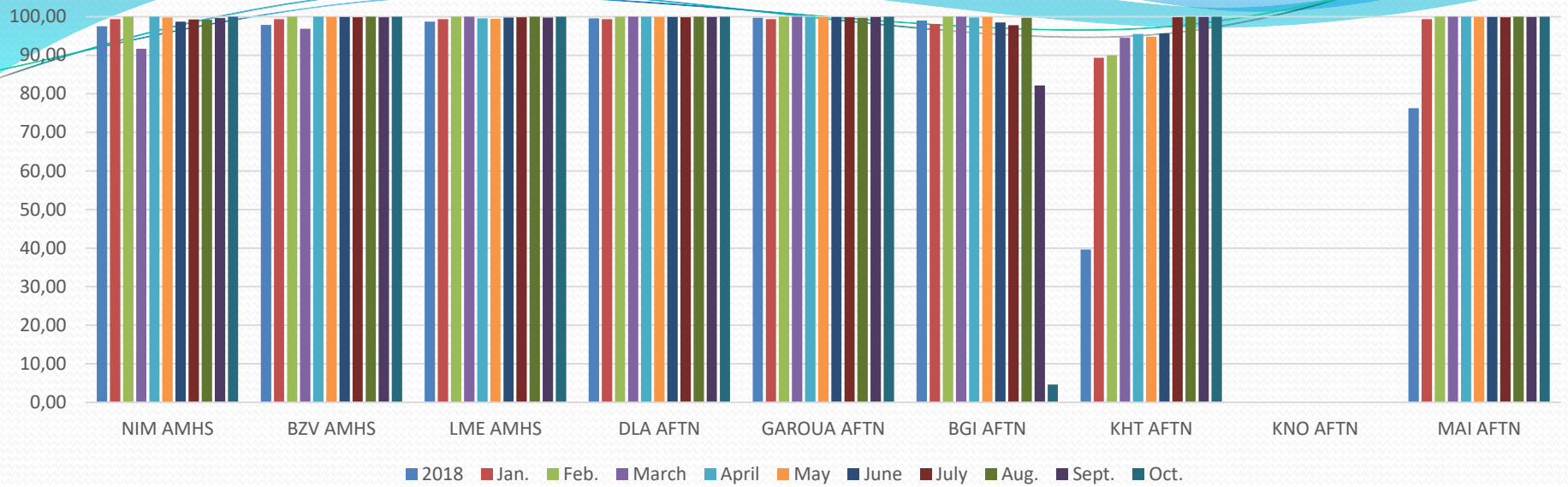
ATS/DS AVAILABILITY: 2018 - 2019 (Jan.-Oct.)

ANTANANARIVO CENTER



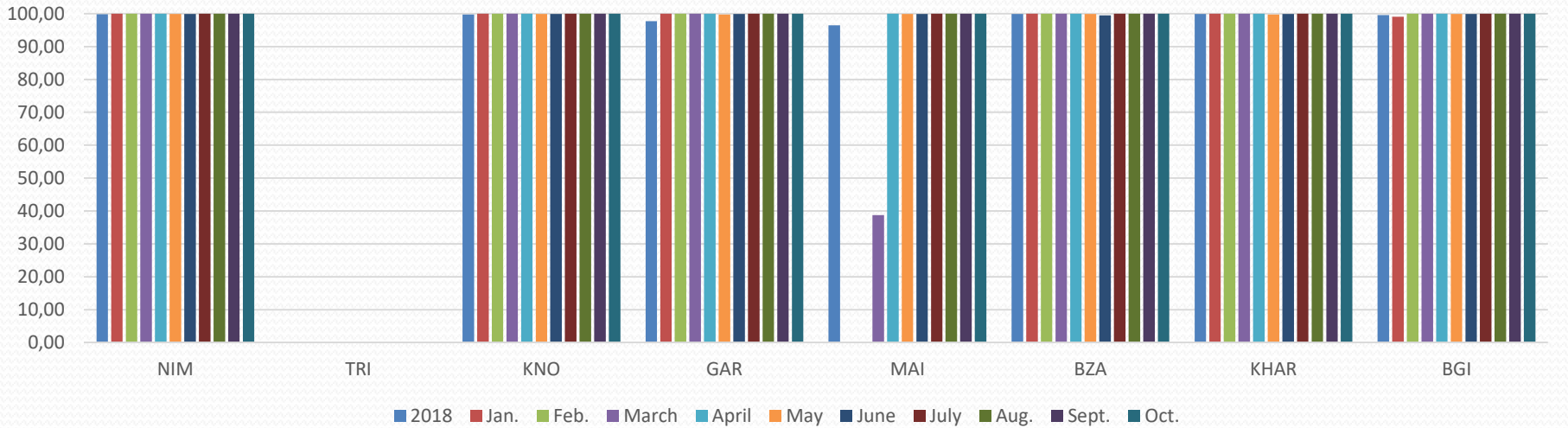
AFTN/AMHS AVAILABILITY: 2018 - 2019 (Jan.-Oct.)

NDJAMENA CENTER



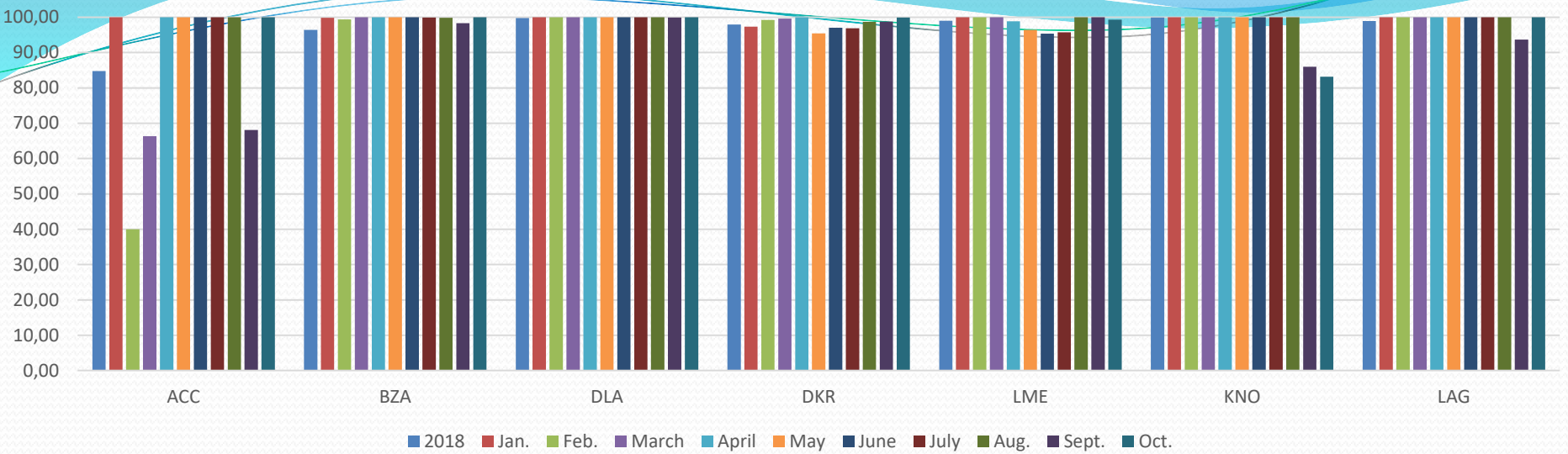
ATS/DS AVAILABILITY: 2018 - 2019 (Jan.-Oct.)

NDJAMENA CENTER



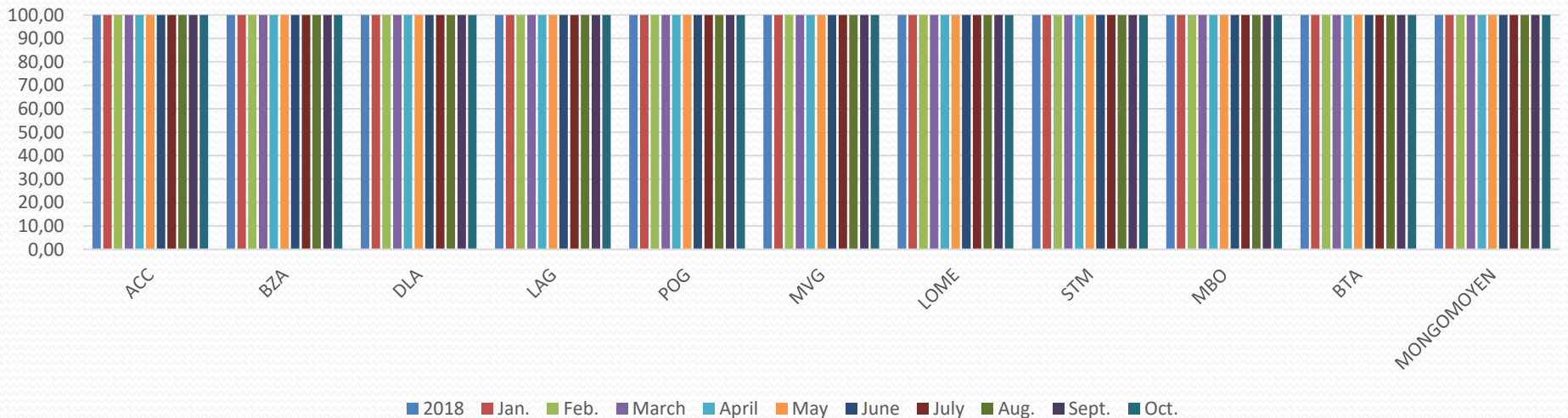
AFTN AVAILABILITY: 2018 - 2019 (Jan.-Oct.)

LIBREVILLE CENTER



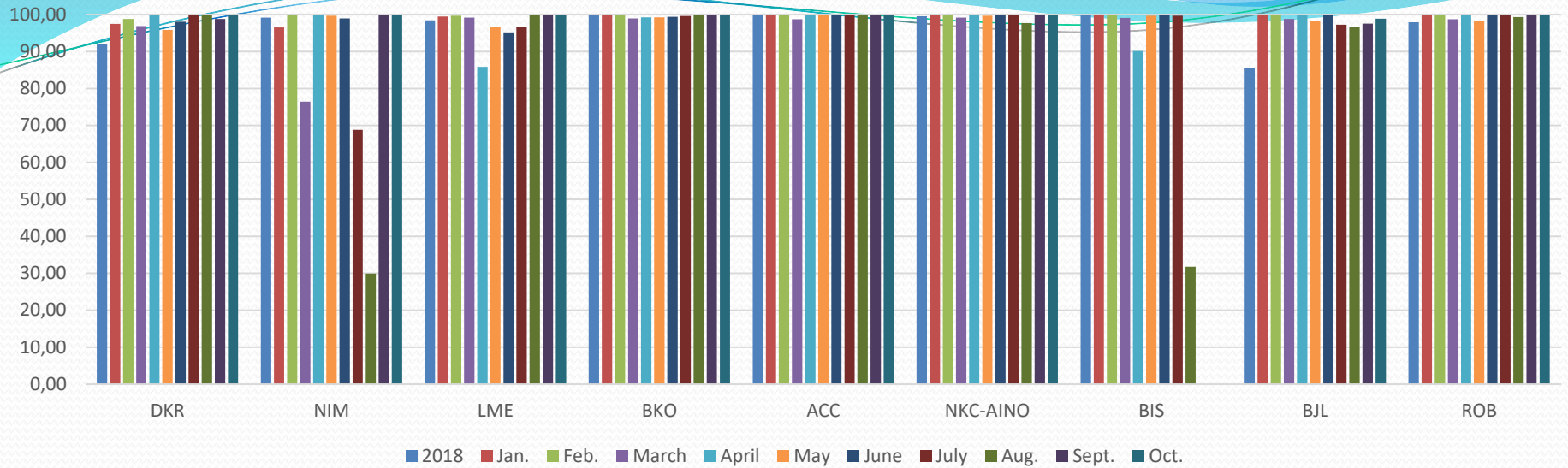
ATS/DS AVAILABILITY: 2018 - 2019 (Jan.-Oct.)

LIBREVILLE CENTER



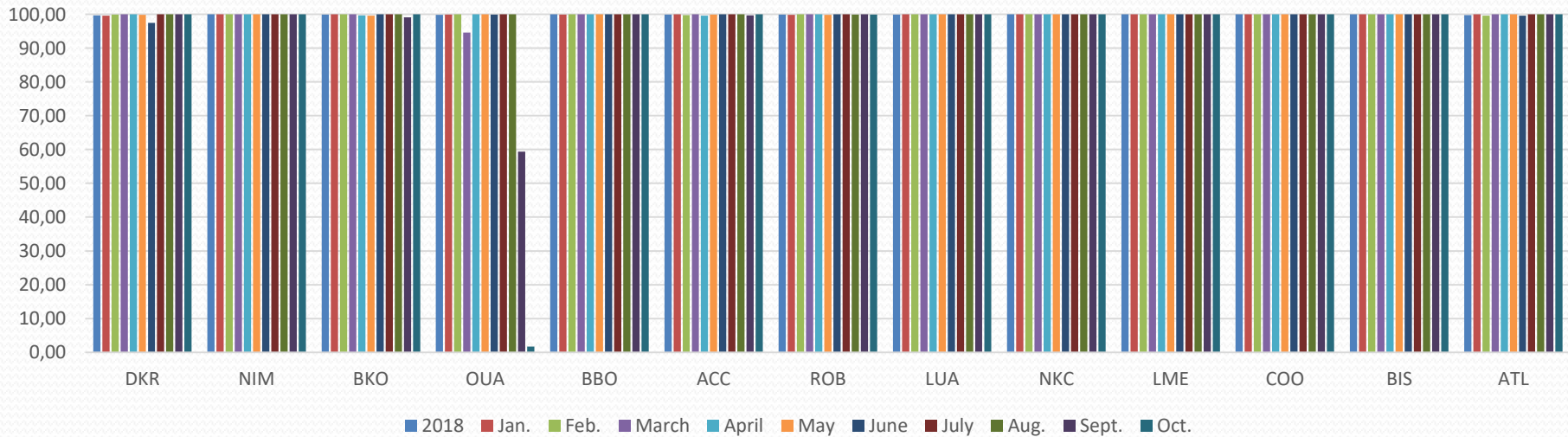
AFTN AVAILABILITY: 2018 - 2019 (Jan.-Oct.)

ABIDJAN CENTER



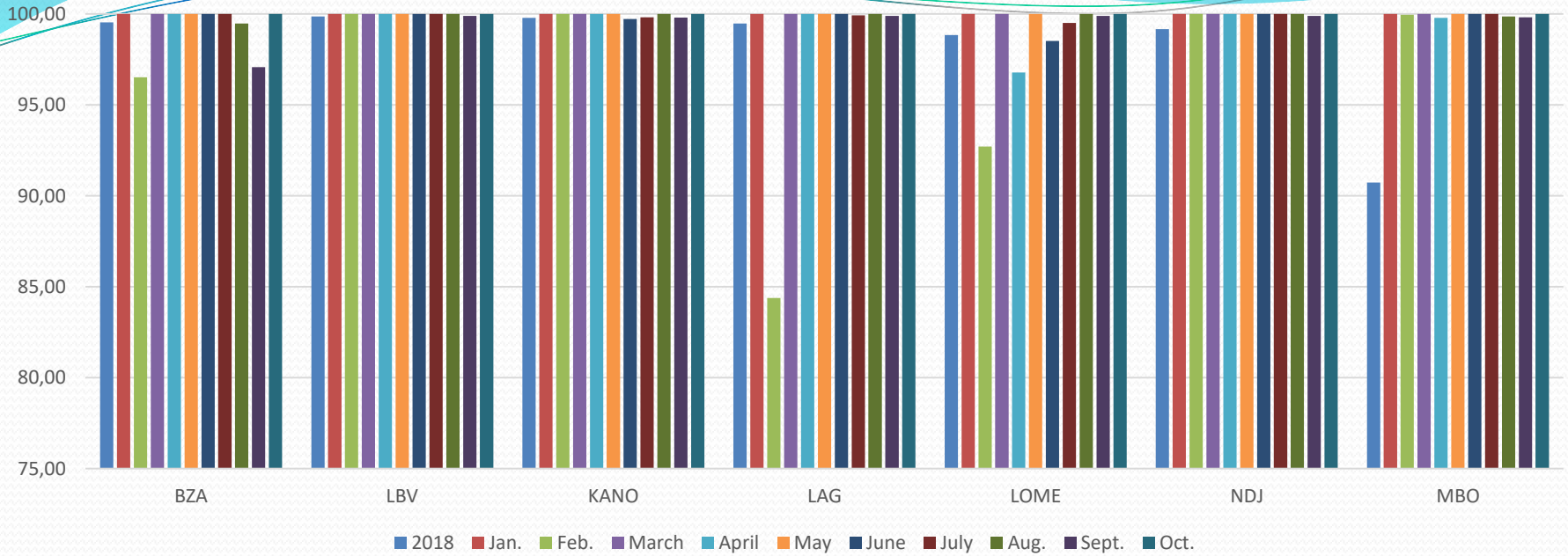
ATS/DS AVAILABILITY: 2018 - 2019 (Jan.-Oct.)

ABIDJAN CENTER



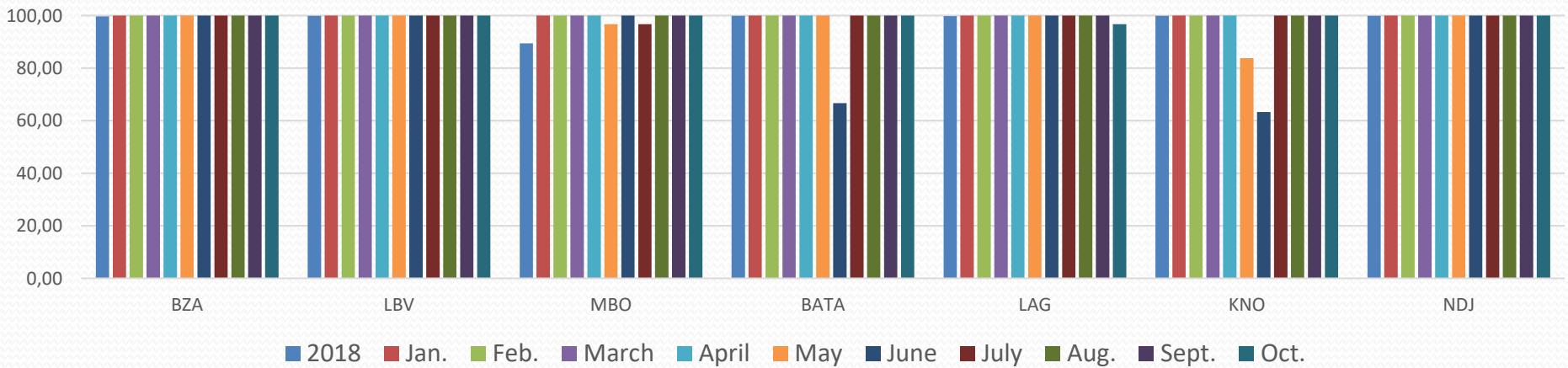
AFTN AVAILABILITY: 2018 - 2019 (Jan.-Oct.)

DOUALA CENTER

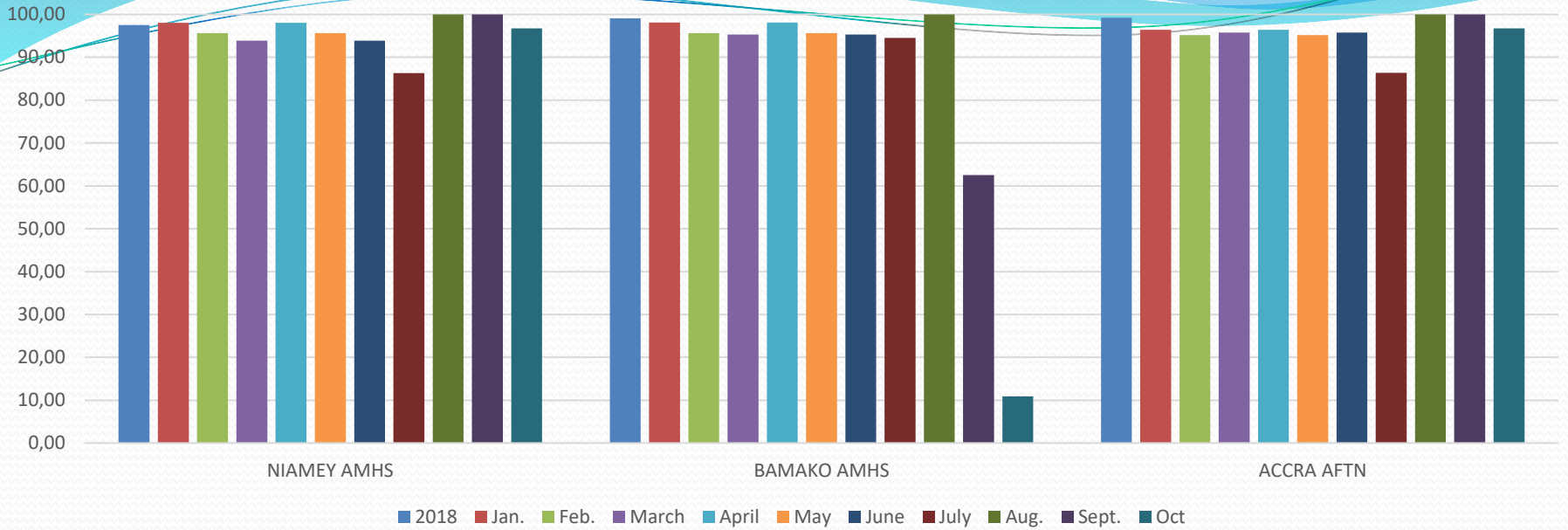


ATS/DS AVAILABILITY: 2018 - 2019 (Jan.-Oct.)

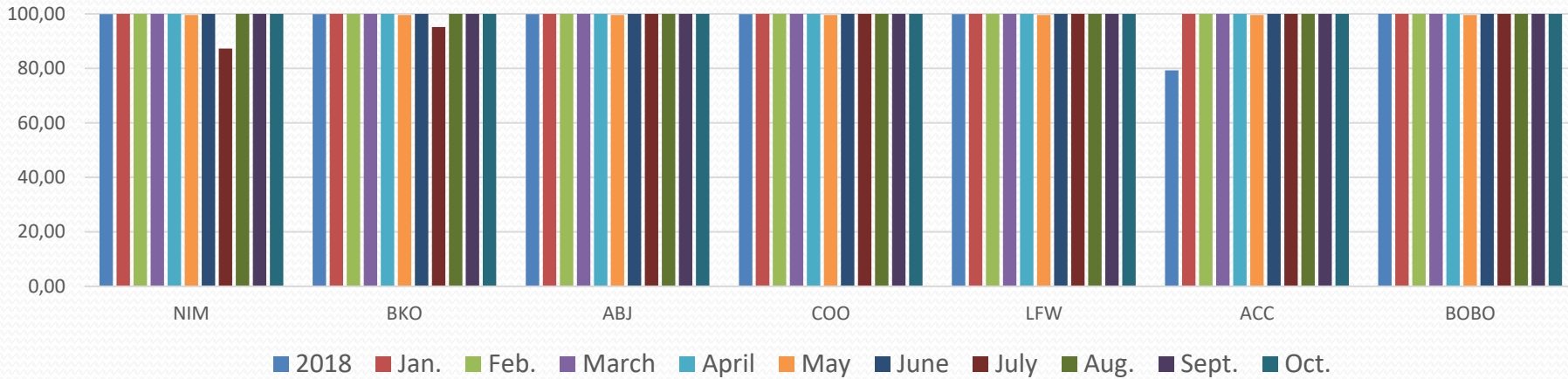
DOUALA CENTER



**AFTN /AMHS AVAILABILITY: 2018 - 2019 (Jan.-Oct.)
OUAGADOUGOU CENTER**

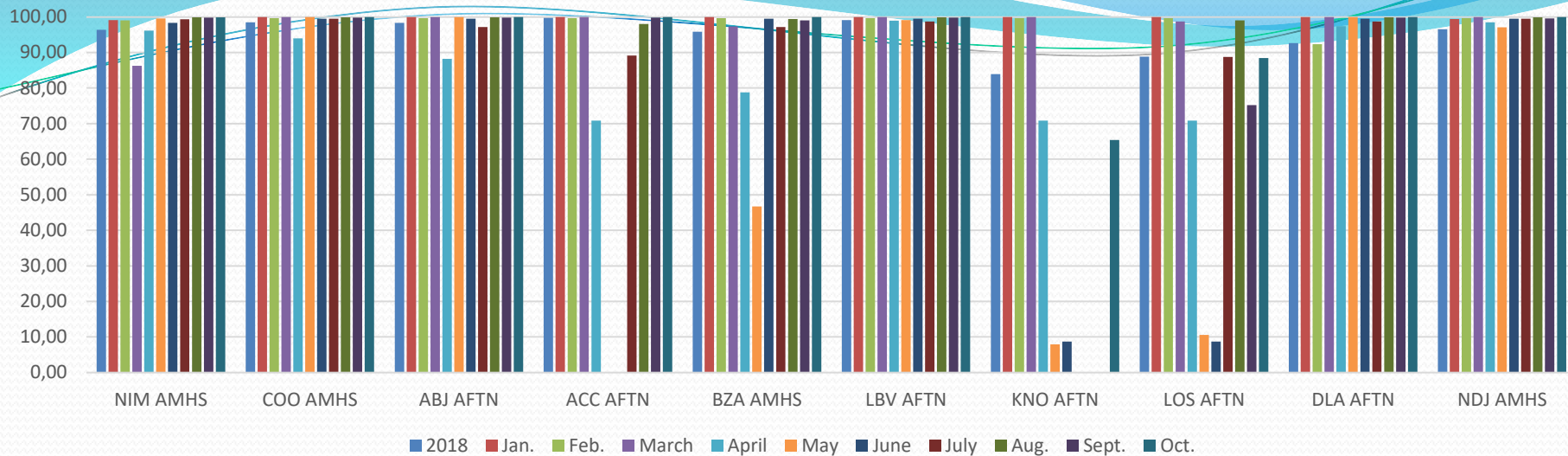


**ATS/DS AVAILABILITY: 2018 - 2019 (Jan.-Oct.)
OUAGADOUGOU CENTER**



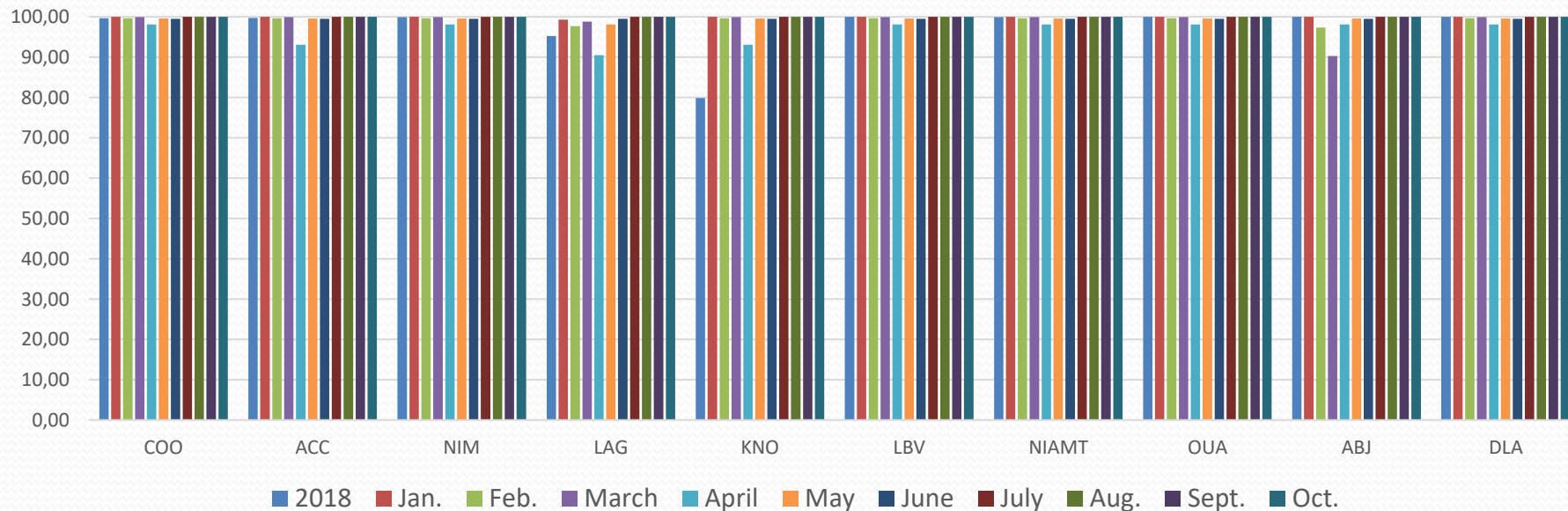
AFTN/AMHS AVAILABILITY: 2018 - 2019 (Jan.-Oct.)

LOME CENTER

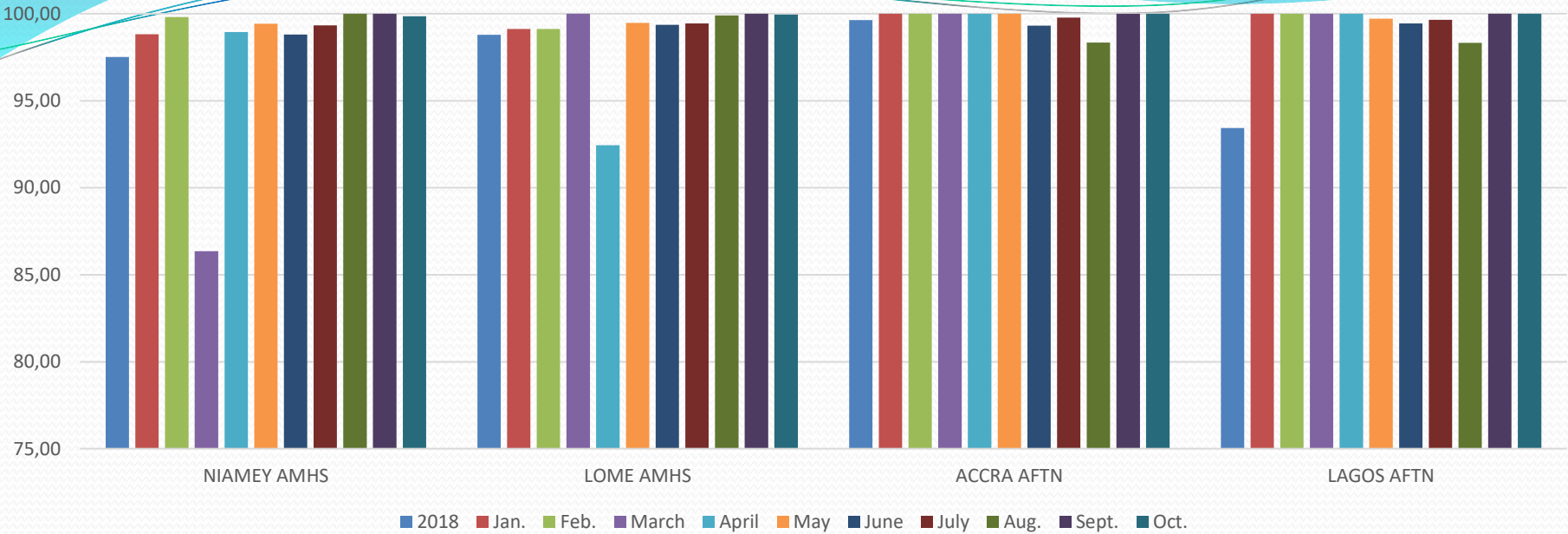


ATS/DS AVAILABILITY: 2018 - 2019 (Jan.-Oct.)

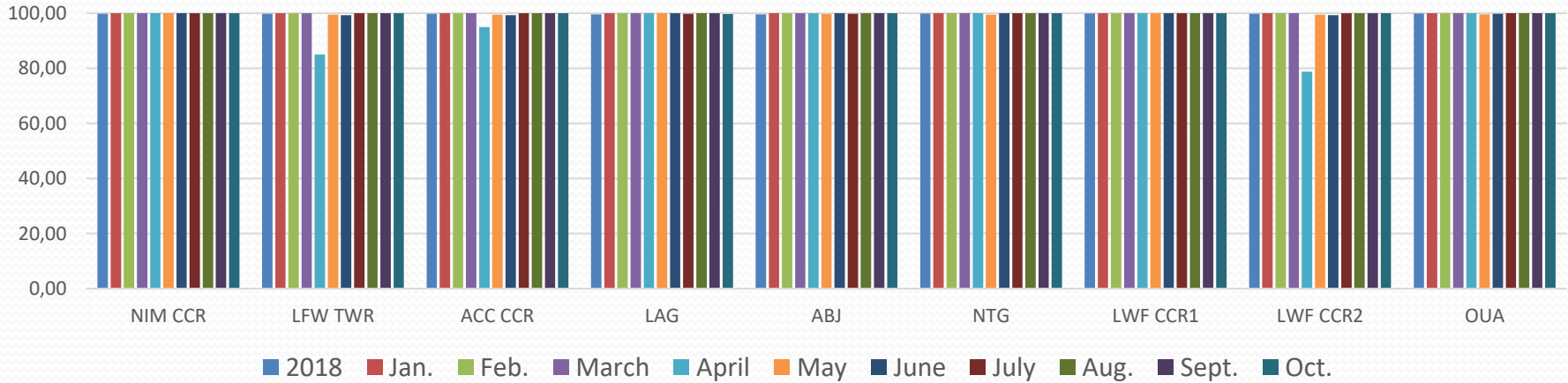
LOME CENTER



AFTN /AMHS AVAILABILITY: 2018 - 2019 (Jan.-Oct.)
COTONOU CENTER



ATS/DS AVAILABILITY: 2018 - 2019 (Jan.-Oct.)
COTONOU CENTER



3.COMMENTS (1)

- ❑ The Analysis of AFTN/AMHS circuits availability from January to October 2019 shows a relative good working of the circuits ;
- ❑ However, some instabilities affected the following circuits:
 - LFW/KNO, LFW/LOS, LFW/ACC
 - LBV/ACC, LBV/KNO,
 - NDJ/KNO, NDJ/KHA
 - BZV/ACC
- ❑ Some instabilities are due end systems or operational procedures

3.COMMENTS (2)

- ❑ The ATS/DS circuits operate well globally,
- ❑ However, some concerns are related to the unavailability of NDJ/MDG, OUA/ACC, DLA/NDJ BZV/ KNO and BZV/LDA circuits as showing the graphs above ;
- ❑ AIDC links are implemented between centres but certain circuit is not direct for example BZV/KHT.

3.COMMENTS(3)

As improvement measures, ASECNA recommends:
Exchange the address and phone number of technical and operational focal point of every centre to improve the coordination ;

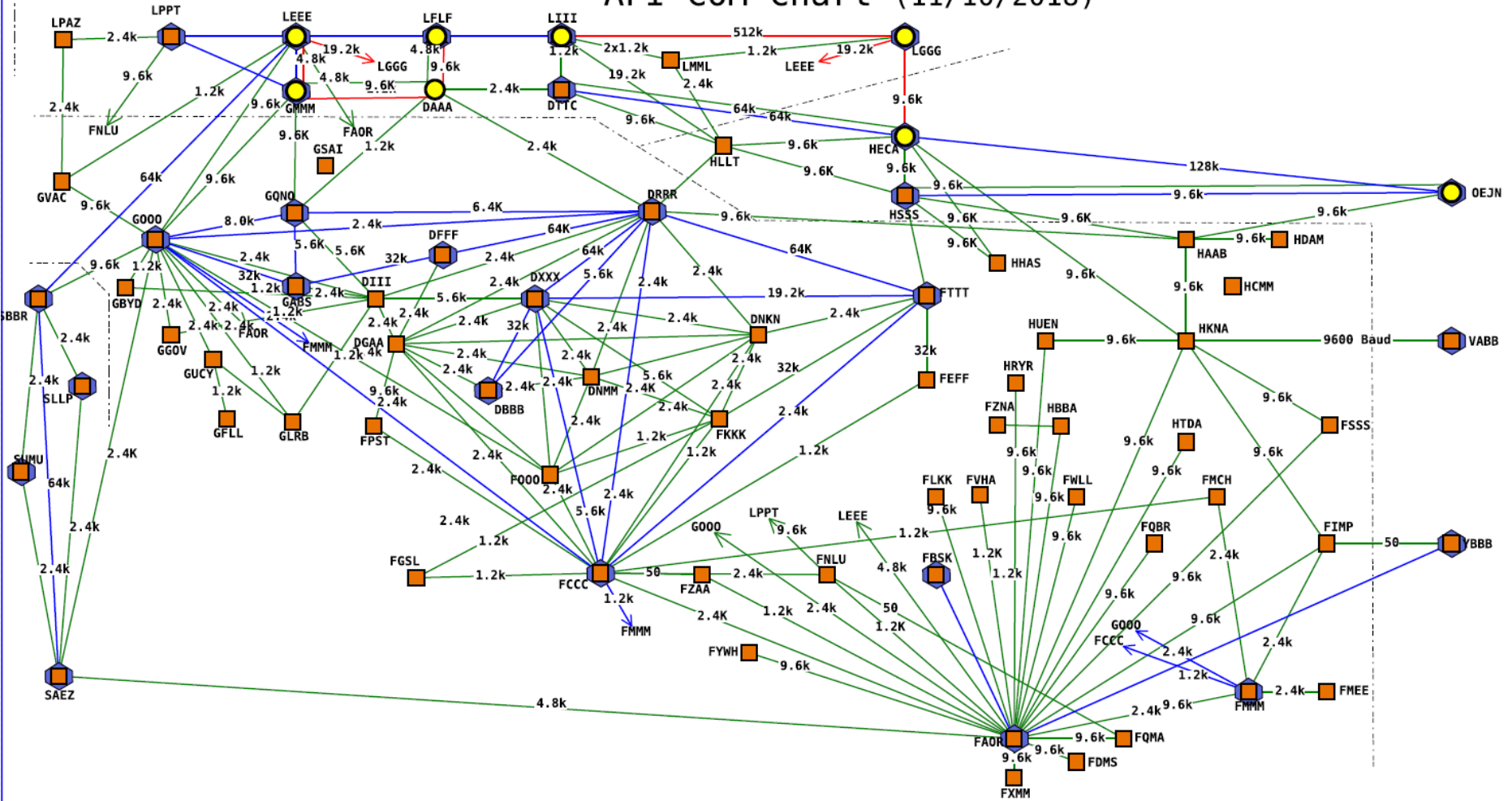
- ❑ To Improve the coordination between centres ;
- ❑ To restore or stabilize circuits still impacted by unavailabilities;
- ❑ Apply the diversion procedure as soon as the connection is unavailable until its recovery to avoid the delayed or the missing operational;
- ❑ Urge SNMC for the implementation of AFISNET re-engineering and modernization

4. AMHS and AIDC implementation in the AFI region

- ❑ The Chart below provides all correspondents the status on October 2018 of AMHS in AFI region;
- ❑ Ten (10) ASECNA centers are fully operational with AMHS circuits implemented according to the AFI COM Chart;
- ❑ ASECNA planned in 2019 to establish the AMHS links with other AFI centers as per table 1 below;
- ❑ Prior condition for the implementation AMHS link is to upgrade the Asynchronous circuit in IP circuit between centers.
- ❑ For AIDC link, it is necessary to establish a direct circuit between the centers;
- ❑ ASECNA planned in 2019 to establish the AIDC links with other AFI centers as per table 2 below;

5. The status of implementation of AMHS circuits in ASECNA area (3)

AFI COM Chart (11/10/2018)



- CIDIN/AFTN COM Centre
- AFTN COM Centre
- ◆ AMHS COM Centre
- 9.6k — CIDIN Link with Line Speed
- 9.6k — AFTN Link with Line Speed
- 9.6k — AMHS Link with Line Speed
- - 9.6k - - CIDIN-EUROCONTROL/NM Link with Line Speed
- - 9.6k - - AFTN-EUROCONTROL/NM Link with Line Speed
- - 9.6k - - AMHS-EUROCONTROL/NM Link with Line Speed
- Path
- ☁ Fully Meshed Island

6. AMHS circuits to be implemented

Centre 1 (ASECNA)	Centre 2	Capability AMHS (Source Wikipedia)	Focal point of ASECNA centre
Lomé (DXXX)	Accra (DGAA)	Yes	METOWOGO Komi Mawunyo
Niamey (DRRR)	Accra (DGAA)	Yes	IRO Mahamane
	Addis Ababa (HAAA)	Yes	
	Alger (DAAA)	Basic	
Ndjamena (FTTT)	Khartoum (HSSS)	Basic	Ahmat TOGOI
Brazzaville (FCCC)	Khartoum (HSSS)	Basic	PANDZOU Giscard
	Nairobi (HKNA)	Yes	
	Accra (DGAA)	Yes	
	Luanda (FNLU)	Yes	
	Johannesburg (FAOR)	Yes	
Ouagadougou (DFFF)	Accra (DGAA)	Yes	BANDE Aissata
Antananarivo (FMMM)	Johannesburg (FAOR)	Yes	ANDRIANIERENANA Nary
Cotonou (DBBB)	Accra (DGAA)	Yes	LOYA Koda

Table 1

7. AIDC circuits to be implemented or to be upgraded

Centre 1 (ASECNA)	Centre 2	Capability AIDC	Observations/ Prior condition
Lomé (DXXX)	Accra (DGAA)	Yes	ASECNA/GCAA/NAMA
	Lagos (DNMM)	Yes	
	Kano (DNKN)	Yes	
Niamey (DRRR)	Accra (DGAA)	Yes	Coordination to be carried out
	Kano (DNKN)	Yes	
	Alger (DAAA)	Yes	
	Lagos (DNMM)	Yes	
Ndjamena (FTTT)	Khartoum (HSSS)	Yes	Operational
Brazzaville (FCCC)	Khartoum (HSSS)	Yes	operational but to be improved by implementing a direct circuit
	Kano (DNKN)	Yes	Coordination to be carried out
	Accra (DGAA)	Yes	
	Luanda (FNLU)	Yes	
	Kinshasa (FZAA)		
Ouagadougou (DFFF)	Accra (DGAA)	Yes	

Table 2

7. AIDC circuits to be implemented or to be upgraded

Centre 1 (ASECNA)	Centre 2	Capability AIDC	Observations/ Prior condition
Antananarivo (FMMM)	Johannesburg (FAOR)	Yes	Coordination under going
	Beira		A direct circuit AFTN/AMHS to be implemented
	Dar es Salam		A direct circuit AFTN/AMHS to be implemented
	Victoria		A direct circuit AFTN/AMHS to be implemented
Cotonou (DBBB)	Accra (DGAA)	Yes	
	Lagos	Yes	

Table 2

8.CONCLUSION

The meeting is invited to:

- ❑ note the above information provided in this WP;
- ❑ continue and improve co-operation between COM Centers in technical and operational domain to restore circuits and to switch some AFTN circuits to AMHS;
- ❑ Encourage all SNMC COM centers to exchange on a regular basis(daily), the information on their circuit status and make a common analysis;
- ❑ Encourage States/Organization to exchange already the IOT document between centers in order to implement AMHS the connections listed in the table 1 ;
- ❑ Encourage States/Organization to implement AIDC the connections listed in the table 2 ;

THANK YOU !!!!!

