

# Roberts FIR, AFISNET Links Operational Statistics



Circuit and Service Availability Statistics

***SNMC 27 MEETING, NOVEMBER 25 – 29,  
2019 GCAA, ACCRA GHANA***



# Overview of the Network

The Roberts FIR connects the three international airports shown below to the **AFISNET VSAT** network.

- **Freetown Lungi International Airport (Lungi, Sierra Leone)**
- **Gbessia International Airport (Conakry, Guinea)**
- **Roberts International Airport (Monrovia, Liberia)**



# Overview of the Network

The VSAT station in Robertsfield Monrovia is directly connected to the **AFISNET** VSAT network and serves as the hub for Conakry and Lungi.

The Roberts FIR connect to **AFISNET** via two VSAT links

1. Robertsfield Earth station - Dakar Earth station VSAT link
2. Robertsfield Earth station - Abidjan Earth VSAT link



# Connected Services

The AFISNET links carries the following services :

<b>Service</b>	<b>Purpose</b>
ATS/DS	Operations
AMHS/AFTN	Operations
Service Line ( <i>Maintenance Phone line</i> )	Maintenance



# Challenges

#	Challenges	Affected AFISNET services	Remedy
01	Between April and June 2019, the AMHS link between Roberts FIR and Dakar was unserviceable several times due to issues with the AMHS connectivity between the two stations.	AMHS/AFTN	The link was restored to full functionality after maintenance coordination between Dakar and Roberts FIR maintenance teams. And from July 2019, the link is fully functional.
02	The Inverter, which forms part of the solar plant that powers the VSAT and other communication equipment at the Robertsfield station in Liberia, disconnect several times between May and July 2019, thereby shutting down the VSAT station on these occasions.	<input type="checkbox"/> ATS/DS <input type="checkbox"/> AMHS/AFTN <input type="checkbox"/> Service lines	After extensive tests on the inverter, it was deduced that one of the power modules was faulty, resulting in the inverter to shut down. The defective module was replaced.



# Challenges

#	Challenges	Affected AFISNET Services	Remedy
03	On August 22, 2019, the power amplifier for the VSAT station in Conakry had a significant fault that prevented it from operating.	AMHS/AFTN	The station was restored on September 15, 2019, after replacing the faulting amplifier.
04	The ATS/DS telephone link between Roberts FIR and BISSAU went out of service on August 14, 2019.	ATS/DS ROBERTS FIR - BISSAU	The service is still unavailable



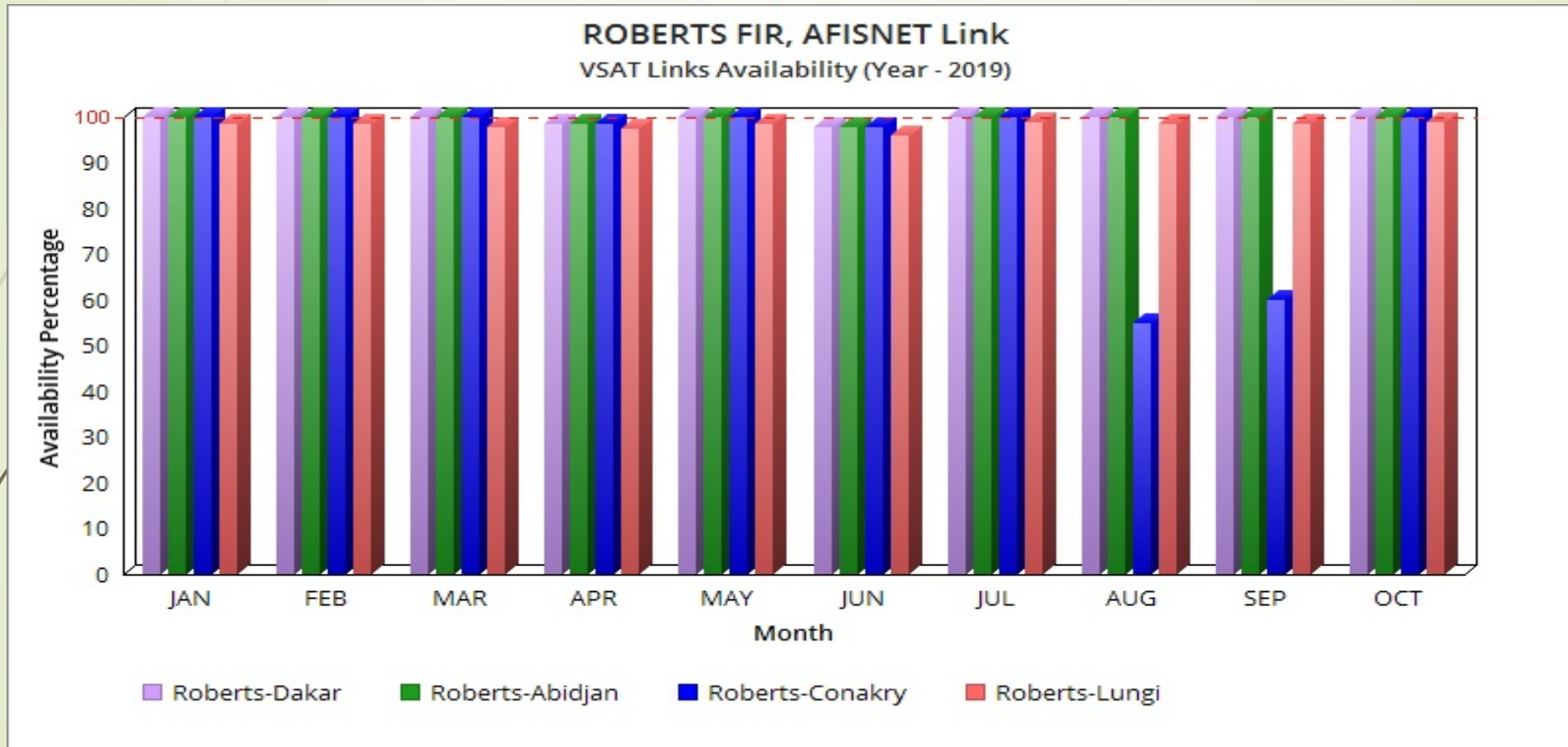
# VSAT Link Availability

<i>Link → Month</i>	Roberts – Dakar	Roberts- Abidjan	Roberts- Conakry	Roberts- Lungi
	<i>Availability %</i>	<i>Availability %</i>	<i>Availability %</i>	<i>Availability %</i>
January	100	100	100	98.5
February	100	100	100	98.5
March	100	100	100	98
April	98.5	98.5	98.5	97.5
May	100	100	100	98.6
June	98	98	98	96
July	100	100	100	98.8
August	100	100	55	98.5
September	100	100	60	98.5
October	100	100	100	98.8
November				
December				
<b>AVERAGE</b>	<b>99.65</b>	<b>99.65</b>	<b>91.15</b>	<b>98.17</b>



# VSAT Link Availability Graph

8 of  
13



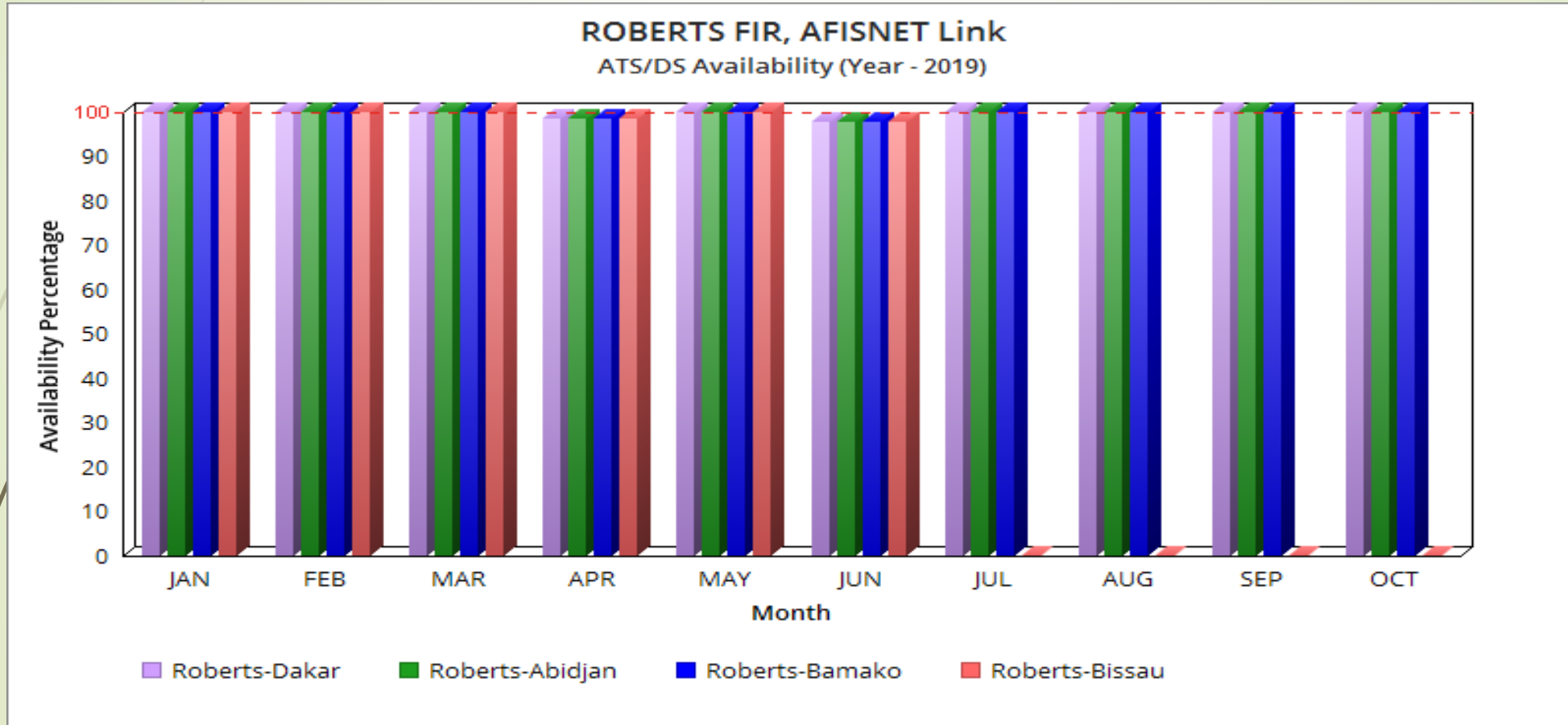


# ATS/DS Availability

<i>Link</i> →	Roberts - Dakar	Roberts - Abidjan	Roberts - Bamako	Roberts - Bissau
<i>Month</i>	<i>Availability %</i>	<i>Availability %</i>	<i>Availability %</i>	<i>Availability %</i>
January	100	100	100	100
February	100	100	100	100
March	100	100	100	100
April	98.5	98.5	98.5	98.5
May	100	100	100	100
June	98	98	98	98
July	100	100	100	0
August	100	100	100	0
September	100	100	100	0
October	100	100	100	0
November				
December				
<b>AVERAGE</b>	99.65	99.65	99.65	59.65



# ATS/DS Availability

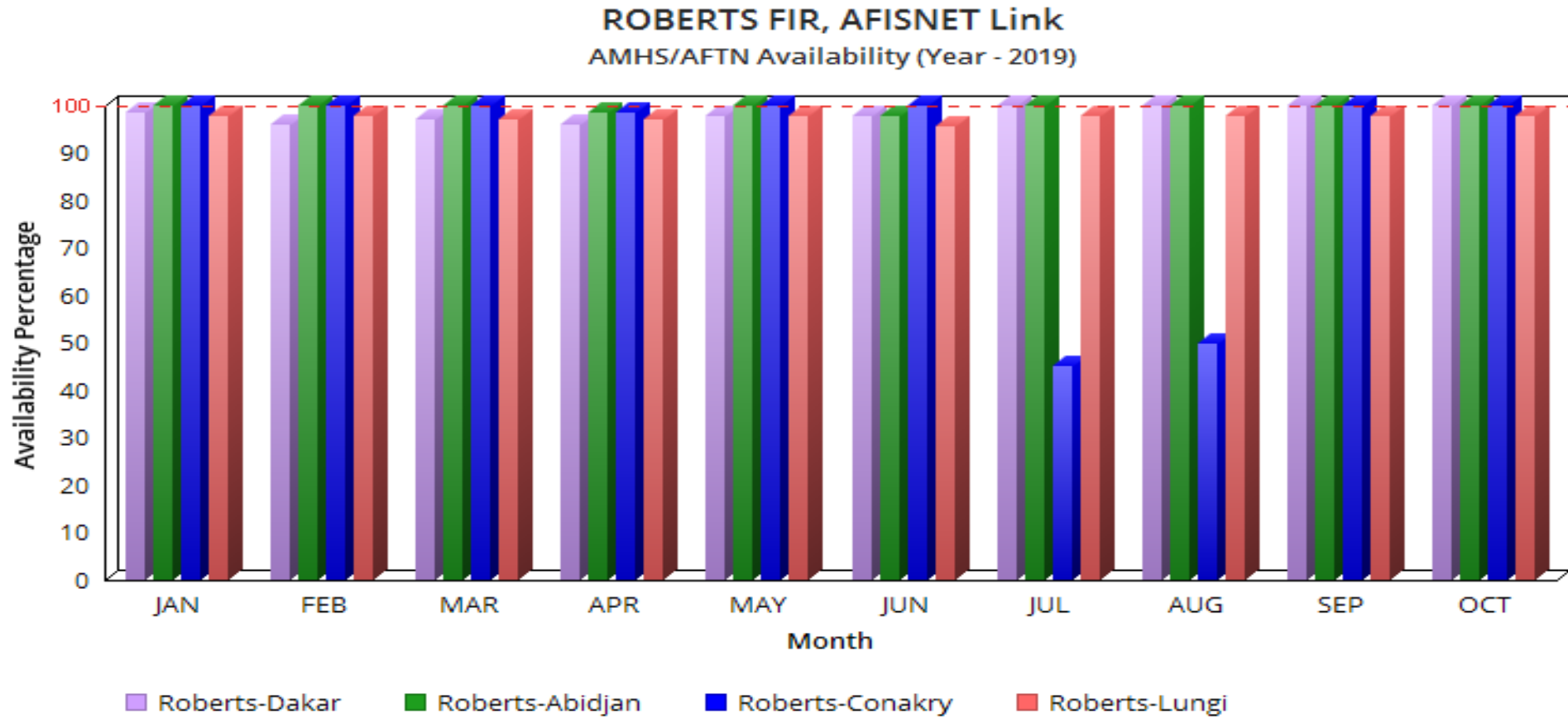


# AFTN/AMHS Availability

<i>Link →</i>	Roberts - Dakar	Roberts - Abidjan	Roberts - Conakry	Roberts - Lungi
<i>Month</i>	<i>Availability %</i>	<i>Availability %</i>	<i>Availability %</i>	<i>Availability %</i>
January	98.5	100	100	98
February	96	100	100	98
March	97	100	100	97
April	96	98.5	98.5	97
May	98	100	100	98
June	98	98	100	95.5
July	100	100	45	98
August	100	100	50	98
September	100	100	100	98
October	100	100	100	98
November				
December				
<b>AVERAGE</b>	<b>98.35</b>	<b>99.65</b>	<b>89.35</b>	<b>97.55</b>



# AFTN/AMHS Availability Graph



**Thank you for your attention.**

