NIGERIAN COMMUNICATIONS COMMISSION

2022 SUBSCRIBER/NETWORK DATA ANNUAL REPORT

POLICY COMPETITION AND ECONOMIC ANALYSIS DEPARTMENT

DRAFT REPORT

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CHAPTER ONE
INTRODUCTION AND EXECUTIVE SUMMARY

The Nigeria Communications Commission is charged with the responsibility of providing timely, accurate and latest telecom industry statistics in line with the obligations enshrined in the Nigerian Communications Act 2003, which empowers the Commission to amongst other functions:

- Facilitate private investment and entry into the Nigerian telecoms Market for the provision of telecoms services as well as supply of equipment and facilities.
- License and Authorize Companies to provide Communications Services in Nigeria.
- Provide the enabling and conducive environment for Telecom Investors to thrive in locally in Nigeria and Internationally.
- Ensure fair competition amongst players in the industry.
- Protect all Critical Stakeholders (Consumers, Operators etc.) from unfair telecom practices.

The collection, collation, and analysis of the 2022 Year End Subscriber/ Network Report for the period January–December 2022 provides the following comprehensive and analyzed reports from questionnaires administered to six (6) Categories of Operators:

i. ***Mobile (GSM)***

ii. ***Fixed Telephony Operators (Fixed/ Fixed Wireless)***

iii. ***Internet Service Providers (ISPS)***

iv. ***Value Added Service (VAS)***

v. ***Collocation and Infrastructure Sharing and***

vi. ***Other Operators (Operators Other than the License categories stated in i – v above)***

A. INDUSTRY PERFORMANCE REPORT

1. **Telecoms Industry Active Subscriber Statistics** – The number of Active Subscribers increased from **195,463,898** subscriptions in 2021 to **222,571,568** active voice subscriptions as at December 2022. Active Subscriptions increased by 27,107,670 subscriptions representing a **13.86%** increase in Active Subscriptions Year on Year.

   The increase in the Operators' subscriber base was attributed to a number of reasons which includes subscriber loyalty, promos, seasonal effects, aggressive consumer acquisition drive, and competitive product offerings across all the networks. The increase in Active Subscription impacted positively on other derived telecom indicators such as Teledensity, Internet Penetration as well as Broadband Penetration.

2. **Teledensity –**Nigeria's Teledensity **increased** from 102.40% as at December 2021 to 116.60% by December 31st 2022. Teledensity also increased by 13.86% indicating that over a tenth of persons per 100 subscribers were connected Year on Year.

3. The number of **Internet Subscribers** increased from 141,971,560 subscription as at December 2021 to 154,847,901 Subscriptions as at December 2022 representing an increase of 9.06%.

4. **Broadband Penetration –** increased from 40.88% as at December 2021 to 47.36% as at December 2022. Similarly, Broadband Subscriptions increased from 78,041,883 subscriptions in December 2021 to 90,398,960 subscriptions as at December 2022.

5. **Data Usage in Terabytes** – There was an increase in the volume of data consumed in the year end December 2022 when compared with the year-end December 2021. The total volume of data consumed by subscribers increased to 518,381.78TB as at December 2022 from 353,118.89TB as at December 2021. This represents an increase of 46.77% in data consumption within the period.

6. **Percentage of the population covered by mobile-cellular network** (2G, 3G and LTE/WiMAX 4G): Captured below is the statistics representing coverage of population using the different existing mobile technologies in the country.
   - i. % of Population covered by 2G mobile- cellular network – **93.90%**
   - **ii.** % of Population covered by 3G mobile- cellular network – **86.82%**

iii. % of Population covered by LTE/WiMAX mobile- cellular network – **80.86%**

B. INDUSTRY FINANCIAL REPORT

1. **Finance –** This collation was based on the submissions received from responsive service providers in the industry and includes the following.
   i. **CAPEX (Domestic Investment):** reported was ₦ **785,771,028,960.36** as at December 2022.
   ii. **Operating cost:** reported was ₦ **2,092,815,085,166.00** as at December, 2022.
   iii. **Revenue:** recorded in 2022 was ₦**3,856,026,156,380.29**.

2022 YEAR END TELECOM PROVIDER'S FINANCIAL DATA IN NAIRA (₦)				
	CATEGORY	**CAPEX**	**OPERATING COST**	**REVENUE**
1.	**GSM**	**718,350,570,000.00**	**1,996,659,000,000.00**	**3,329,241,000,000.00**
2.	**FIXED WIRED**	**61,326,000.00**	**841,738,077.00**	**385,071,346.00.00**
3.	**INTERNET SERVICE PROVIDER**	**5,243,381,710.22**	**71,200,884,440.55**	**92,079,251,596.26**
4.	**VALUE ADDED SERVICE**	**417, 336,278.14**	**14,914,146,598.00**	**40,742,900,243.50**
5.	**COLLOCATION & INFRASTRUCTURE SHARING**	**326,949,832.00**	**3,183,579,969.37**	**3,294,738,734.59**
6.	**OTHER TELECOM OPERATORS**	**524,127,418.14**	**6,015,736,081.20**	**5,596,919,805.94**
	TOTAL	**785,771,028,960.36**	**2,092,815,085,166.00**	**3,856,026,156,380.29**

Table 1. Telecom Provider's CAPEX (Domestic Investment), Operating Cost and Revenue – 2022

iv. **Capital Inflow (Foreign Direct Investment)** into the Nigerian Telecoms Industry in Year 2022 was approximately (**USD 399,905,531.38)** Three Hundred and Ninety Nine Million, Nine Hundred and Five Thousand, Five Hundred and Thirty One US Dollars Thirty Eight Cents against (**USD 753,044,446.35)** Seven Hundred and Fifty Three Million, Forty Four Thousand, Four Hundred and Forty Six US Dollars Thirty Five cents as at year 2021 (Source CBN).

v. **Contribution to the Gross Domestic Product (GDP) –** Telecoms industry contribution to the Nigerian Gross Domestic Products increased from 12.61% in the Fourth Quarter, 2021 to 13.55% in the Fourth Quarter of 2022.

C. INDUSTRY INFRASTRUCTURAL DEVELOPMENT

A substantial telecom infrastructure deployment was recorded in 2022 by Telecoms providers, as indicated below:

1. A total of **34,862** Towers were recorded from telecom operators across the country.
2. The operators also reported a total number of **127,294** Base Stations.
3. **Microwave** coverage recorded in Year 2022 stood at **289,270.48km**.
4. A total number of **125 Gateways** in use in the telecom industry as at December 2022.
5. Fiber Optics Deployment stood at **96,198 km** (terrestrial fiber & submarine cable) as at December 2022.

D. STAFF HEAD COUNT IN THE INDUSTRY- 2022

GSM	FIXED	ISP	VAS	C&I	OTHERS	TOTAL
7,451	260	4,481	560	1,762	993	15,507

Table 2: Staff Head Profile as at Year End 2022

The Total number of staff from responsive licensees as at Year end 2022 stands at 15,507. A breakdown of the staff categories is disaggregated in the report of each category.

CHAPTER TWO

ANALYSIS OF 2022 YEAR END SUBSCRIBER / NETWORK DATA– MOBILE AND VOIP MARKET SEGMENT

A. NETWORK DATA

1. **Base Stations for Mobile:** As at December, 2022 the total Base Stations owned by Mobile telecoms operating companies increased to 127,294 from 114,412 in December, 2021 across all states of the Federation representing an increase of 11.25% from the previous year.

2. **Infrastructure Deployment in the Mobile Segment**; There are several telecom infrastructures deployed by Operators as seen below.

2a. Fibre Optics Deployment (KM):

i. As at December, 2022 the total on land fiber deployment was **49,367.20km** as against 47,128.7km in Year 2021. The on-land fiber deployment was reported as follows; - MTN – 14,612km; GLO - 13,813km; AIRTEL – 16,112.2km; EMTS - 4,650km and NTEL - 180km.

OPERATOR	2021 (KM)	2022 (KM)
MTN	14,612	14,612
GLO	13,233	13,813
AIRTEL	14,454	16,112.2
EMTS	4,650	4,650
NTEL	180	180
TOTAL	47,128.7	49,367.2

Table 1: Fibre outlay by Operators in Year 2021-2022

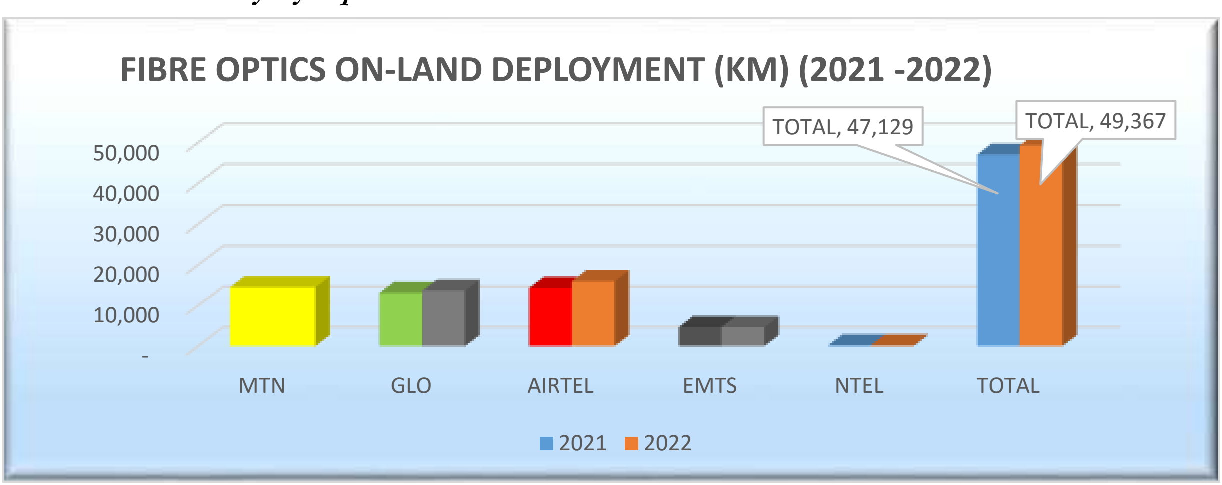

Figure 1. Fibre Optics On-Land Deployment in KM (2021- 2022)

ii. As at December, 2022 the total submarine fiber deployment in kilometers was **27,868.3km** as against **27,818.3km** in year 2021. This is an increase of 0.17% within the year under consideration. The fiber deployment by four Operators are as follows: - MTN -17,984km; GLO - 9,800km; AIRTEL -14.3km and NTEL - 70km.

SUBMARINE (KM)	2021 (KM)	2022 (KM)
MTN	17,934	17,984
GLO	9,800	9,800
AIRTEL	14.3	14.3
NTEL	70	70
TOTAL	27,818.3	27,868.3

Table 2: Fibre outlay by Operators in Year 2021-2022 (Submarine)

iii. A further analysis of the **fibre Optics** deployed illustrates that of the total **77,235.5** KM of fibre (On-land and Submarine) deployed as at December, 2022; 49,367.2km was on-land while 27,868.3km was submarine. MTN had the largest on-land and submarine deployment of 14,612KM and 17,984KM respectively as at December, 2022.

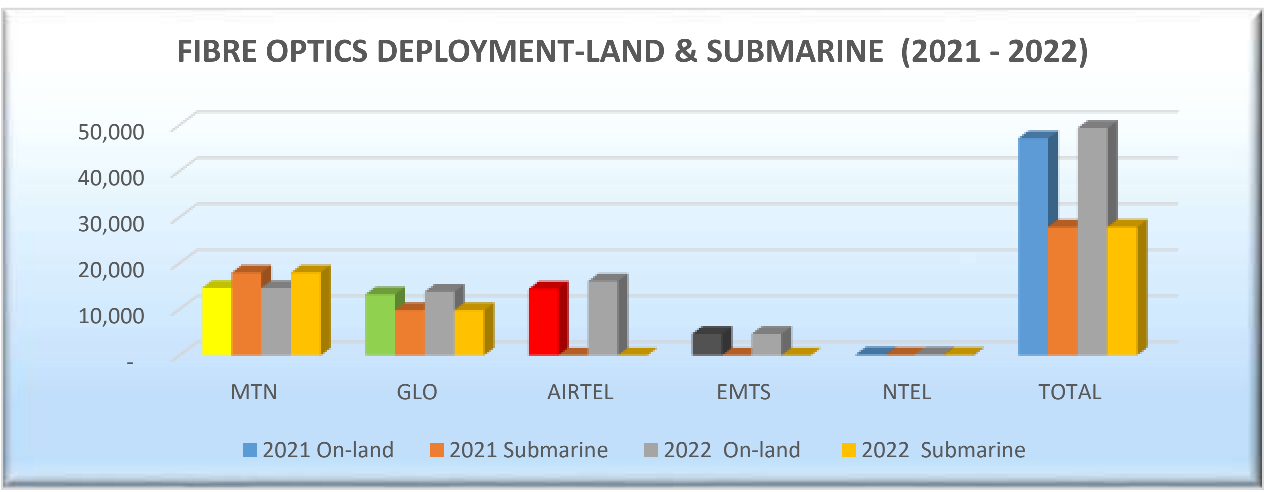

Figure 2. Fibre Optic On-Land and Submarine Deployment in KM (2021 – 2022)

2b. **<u>Microwave Radio in (KM)</u>**: As at December, 2022 the Mobile Operators had deployed a total of **288,947.48 KM** of Microwave Radio Links as against the **290,625.69 KM** of Microwave Radio Links reported for 2021. This is a decrease of 0.57%.

	MICROWAVE RADIO (KM)	2021	2022
1.	MTN	85,551	80,074.59
2.	GLO	71,540	71,061.46
3.	AIRTEL	77,095	81,352.00
4.	EMTS	48,958	48,957.69
5.	SMILE	2,948	2,948.00
6.	NTEL	4,534	4,553.74

	TOTAL	**290,625.69**	**288,947.48**

Table 3: Microwave Radio by Operators in Year 2021-2022 (Microwave)

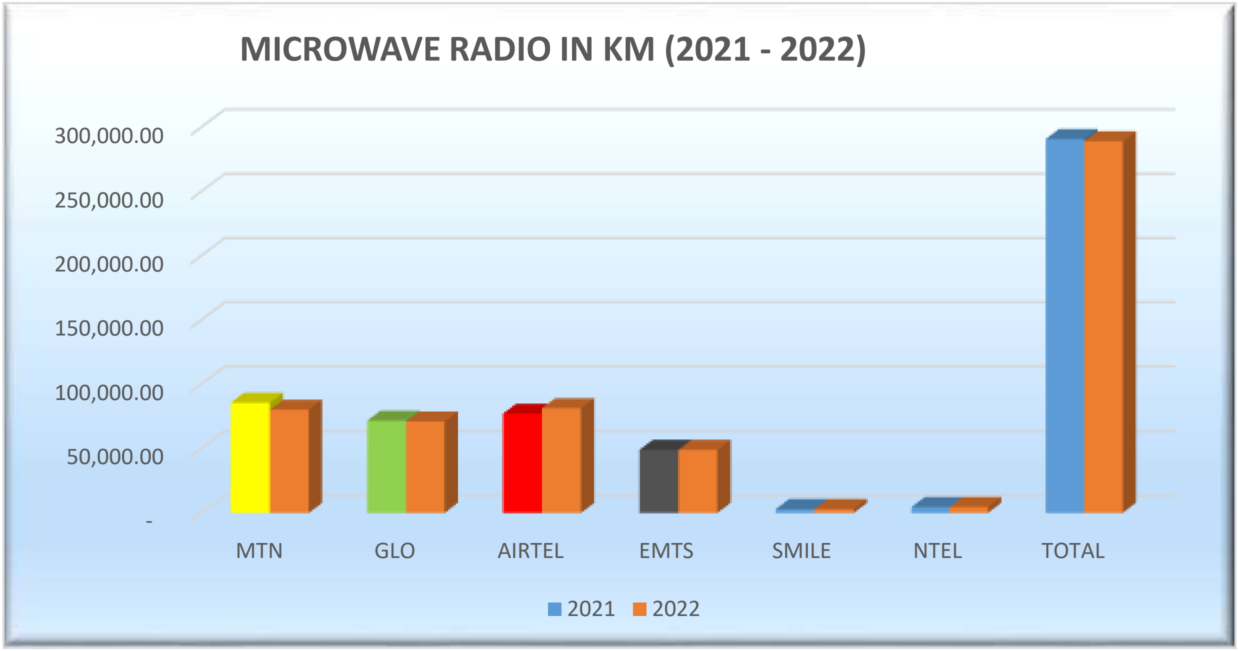

Figure 3. Microwave Radio in KM (2021 – 2022)

2c. **Trunks in Use**: MTN, AIRTEL, GLO and EMTS have a total number of 41,395 Trunks (E1) in use as at December, 2022 indicating a decline from 59,048 Trunks (E1) reported as at December 2021. Most Operators have implemented and evolved IP Capacities to carry volumes of data traffic hence the perceived reduction in E1 which was experienced in the previous year. Thus, the reduction was due to changes in technology.

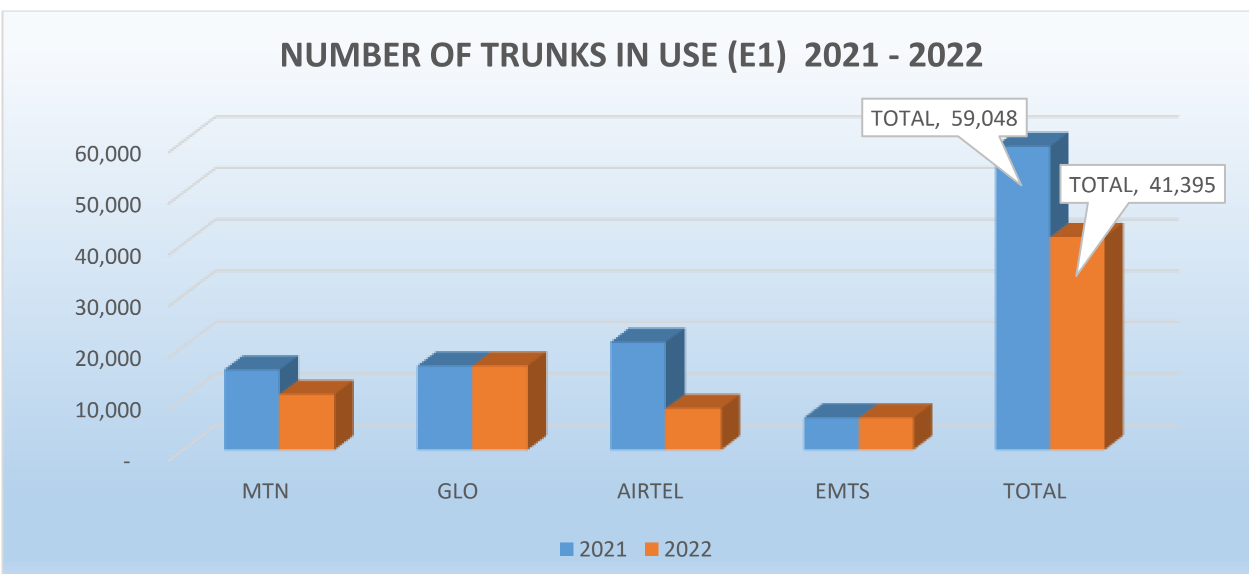

Figure 4. Number of Trunks (E1) in use (2021– 2022)

2d. **Gateways in Use:** MTN, GLO, AIRTEL, SMILE and NTEL have a total number of 62 Gateways in use as at December, 2022. A summary shows, MTN had 1; GLO -3; AIRTEL -16, EMTS – 39, SMILE -2 and NTEL -1.

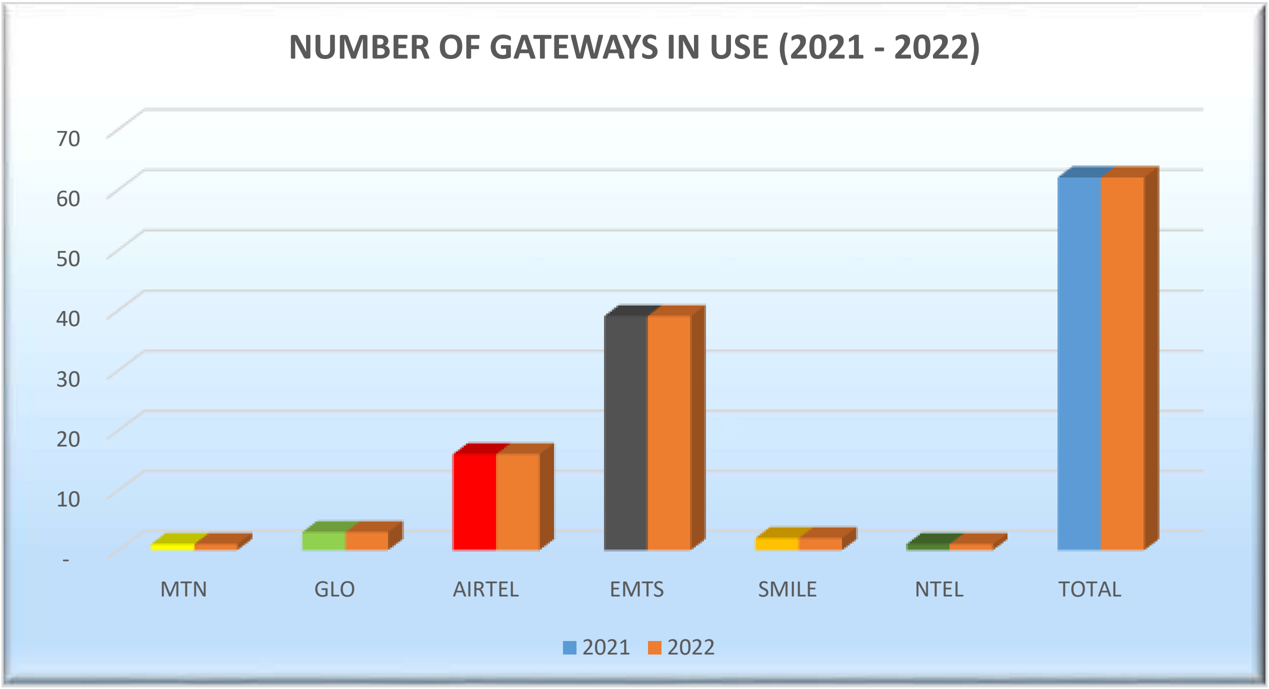

Figure 5. Number of Gateways in use (2021– 2022)

B. <u>SUBSCRIBER & SERVICE DATA – VOICE SUBSCRIPTIONS</u>

1a. **Subscriber Voice Data & Teledensity (All Segments):** As at December, 2022 total active voice subscriptions for the entire market segments was **222,571,568** as against **195,463,898** recorded as at December, 2021. This indicates an increase of **13.86%** in 2022.

Teledensity was **116.60%** in 2022 as against **102.40%** recorded in 2021, which indicates an increase of **13.86%** in Teledensity as at December 2022.

The increase in Operators' subscriber base was attributed majorly to the effect of the directive from NCC in April 2021 to all GSM Operators lifting the ban on the sale and registration of new SIMs, SIM swaps and all porting activities following the conclusion of the Commissions nationwide audit of Subscriber Registration Database.

The objective of the audit exercise was to verify and ensure compliance by Mobile Network Operators with the set quality standards and requirements of SIM Card Registration as issued by the Federal Ministry of Communications and Digital Economy and the Commission.

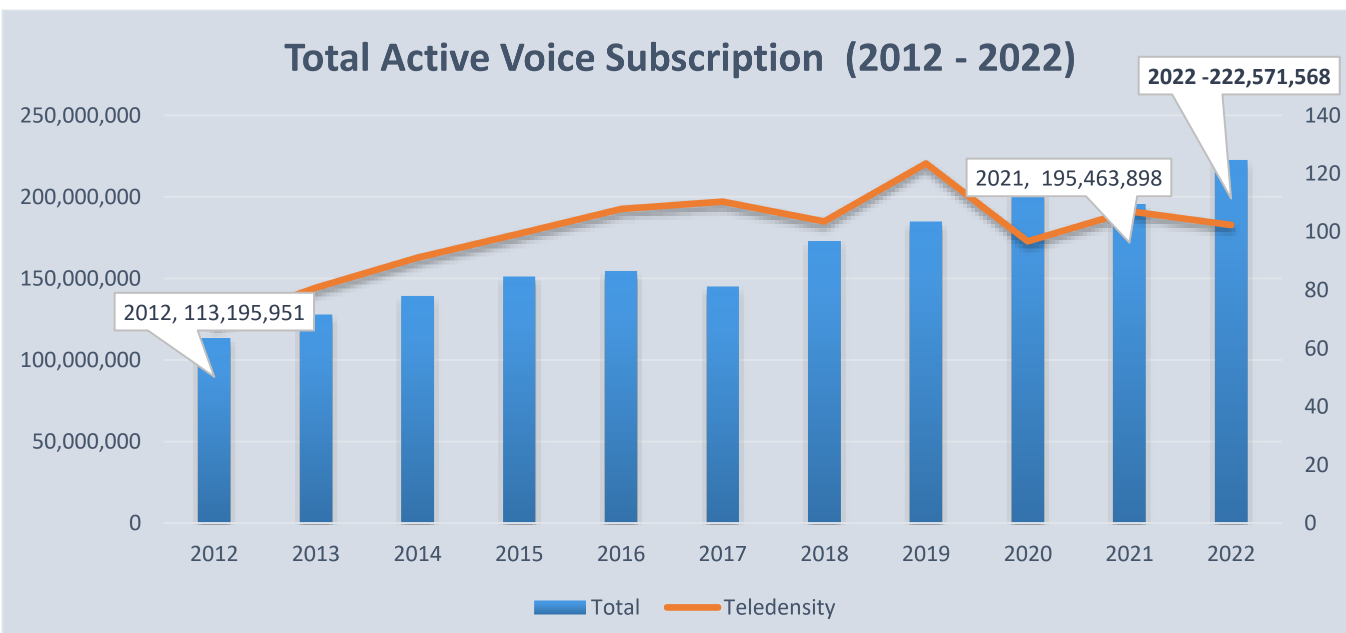

Figure 6. Subscriber Data- Active Voice Subscriptions & Teledensity (2012 - 2022)

1b. **Subscriber Voice, Data & Teledensity (Mobile GSM- 2022):** In analyzing the annual Active Voice Subscription for Mobile (GSM) Segment, total active voice subscriptions increased from **195,128,265** subscriptions as at December 2021 to **222,225,300** subscriptions as at December 2022. This indicates a 13.88% gain in GSM Active Voice Subscriptions year on year.

1c. **<u>Market Share of Active Voice Subscriptions (Mobile GSM Segment 2022):</u>**

Market Share of Mobile Operators were analyzed through the breakdown of each Operator`s subscription; **MTN; GLO; AIRTEL and EMTS** each recorded **89,016,678; 60,290,012; 60,065,904** and **12,852,706** Subscribers respectively. In that order **MTN; GLO; AIRTEL** and **EMTS** had **40.06%; 27.13%; 27.03%** and **5.78%** share of the Mobile GSM market respectively of the Mobile GSM Market Segment.

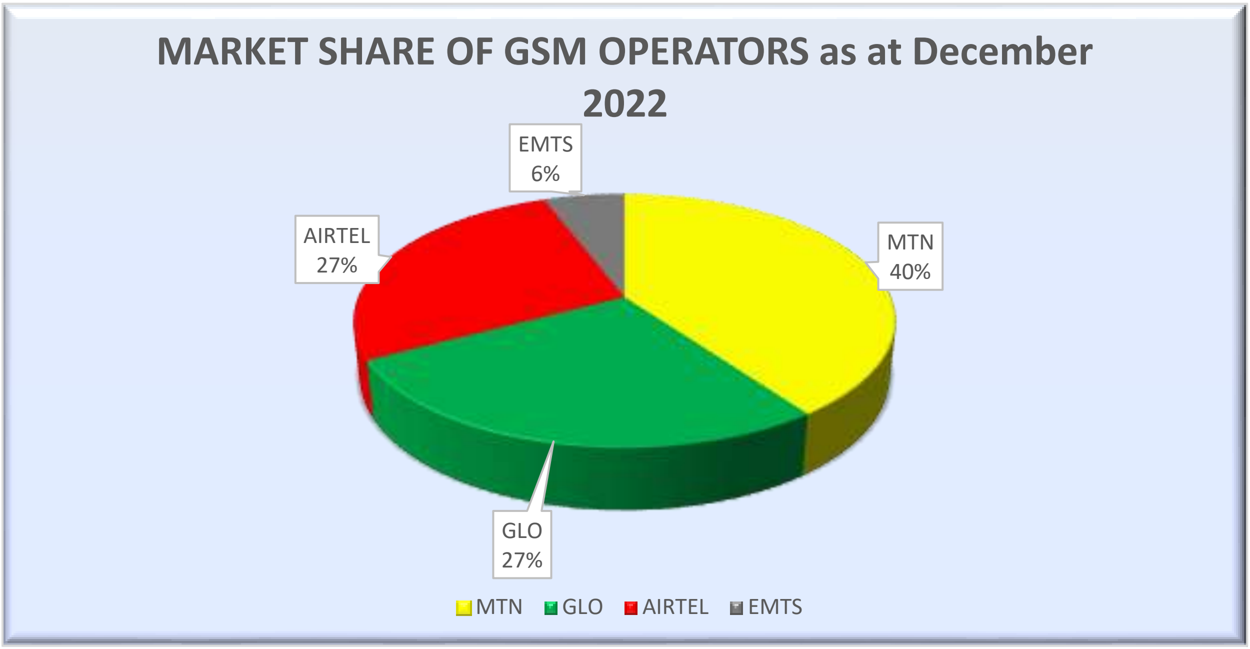

Figure 7. Market Share of Mobile GSM Operators – December 2022

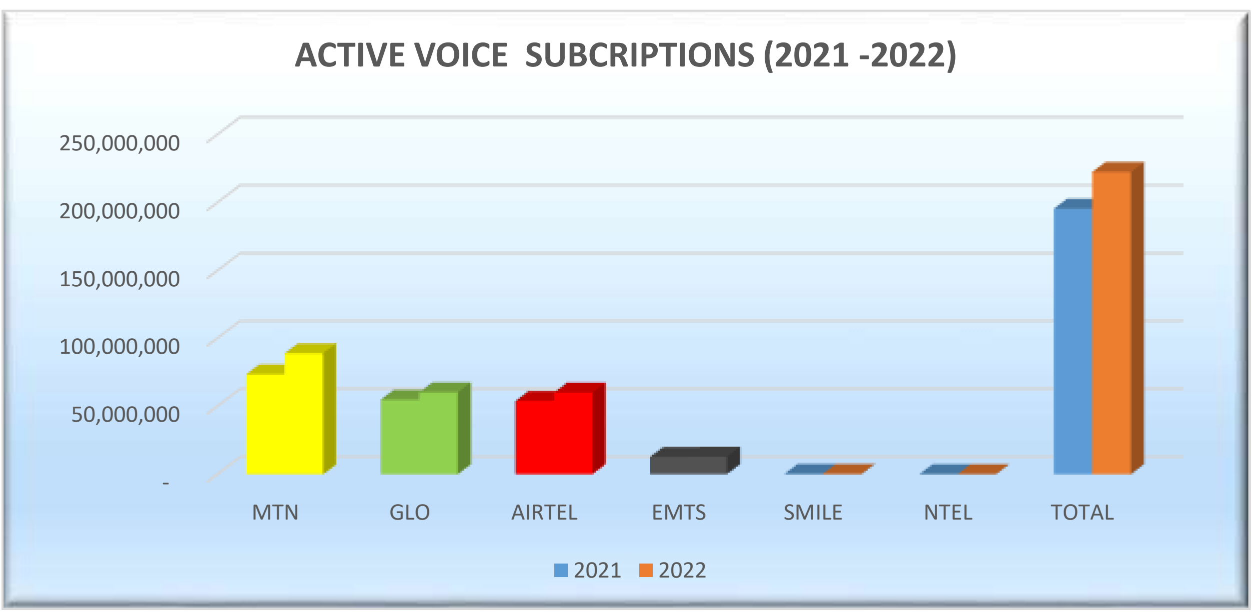

Figure 8. Active Voice Subscriptions of Mobile Segment, 2021 – 2022

1d. In analysing the annual trend of the ***Active Voice Subscription Services in the country, for all market segments***; the growth in voice subscription was ultimately driven by the mobile (GSM) market segment which accounted for 99.8%, while, Fixed Wired/Wireless and VOIP market segments each accounted for 0.1% each of the entire market share in terms of technology deployment as illustrated in:-Table 4 and figure 9 below;

MOBILE (GSM)	***FIXED WIRED/WIRELESS***	***VOICE OVER INTERNET PROTOCOL (VoIP)***
99.8%	0.1%	0.1%

Table 4: Percentage of Market Share of Service Deployment by Technology as at December, 2022

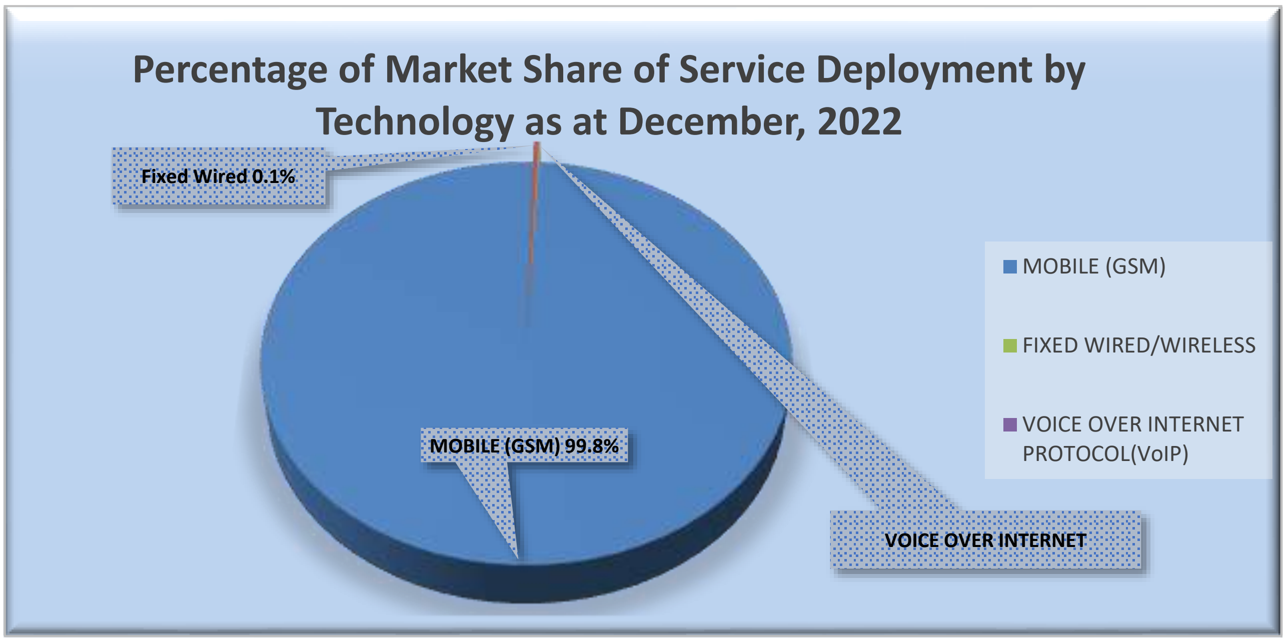

Figure 9: Percentage of Market Share of Service Deployment by Technology as at December, 2022

1e. **<u>Prepaid & Postpaid Mobile Voice Subscriptions 2022:</u>**

i. Total prepaid Mobile Voice subscriptions increased from 189,509,350 in December, 2021 to **215,345,361** in December, 2022 indicating an increase of 13.63% in prepaid Mobile Voice Subscriptions.

ii. Postpaid Mobile Voice Subscriptions increased from **5,848,163** in December, 2021 to **7,129,211** as at December, 2022 indicating an increase of **21.9%** growth in postpaid Mobile Voice Subscriptions as at year end 2022.

iii. In summary, the above analysis indicates that about 96.8% of Mobile subscribers are prepaid subscribers while only about 3.2% are postpaid. See representation in figure 10 below for each of the Operators.

iv. In Fig 11 below, the Southwest (SW) and Northcentral (NC) zones recorded the highest number of subscriptions while the Northeast (NE) zone recorded the least number of subscriptions due to the continuous insecurity situation experienced in the zone.

v. 28.64% of the active subscription is in the Southwest (SW) zone, while the Northeast has the least percentage of Active Voice subscription of 9.6%.

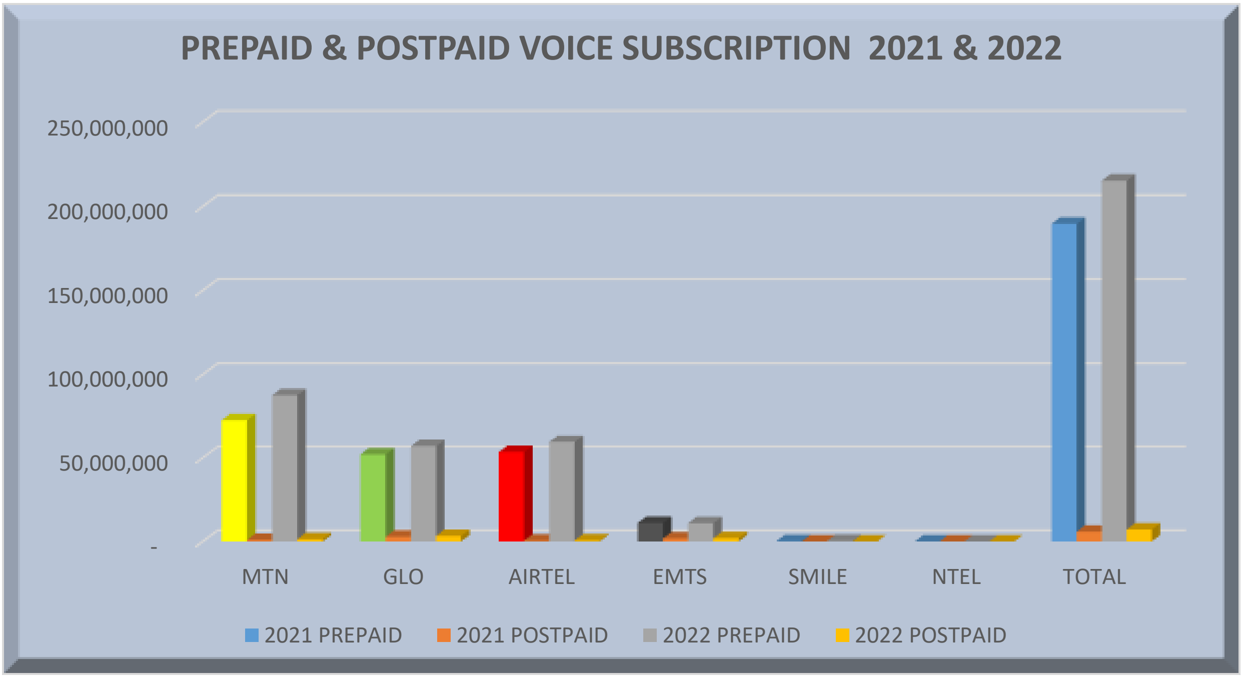

Figure 10: Prepaid & Postpaid Voice Subscriptions- Mobile 2021 – 2022

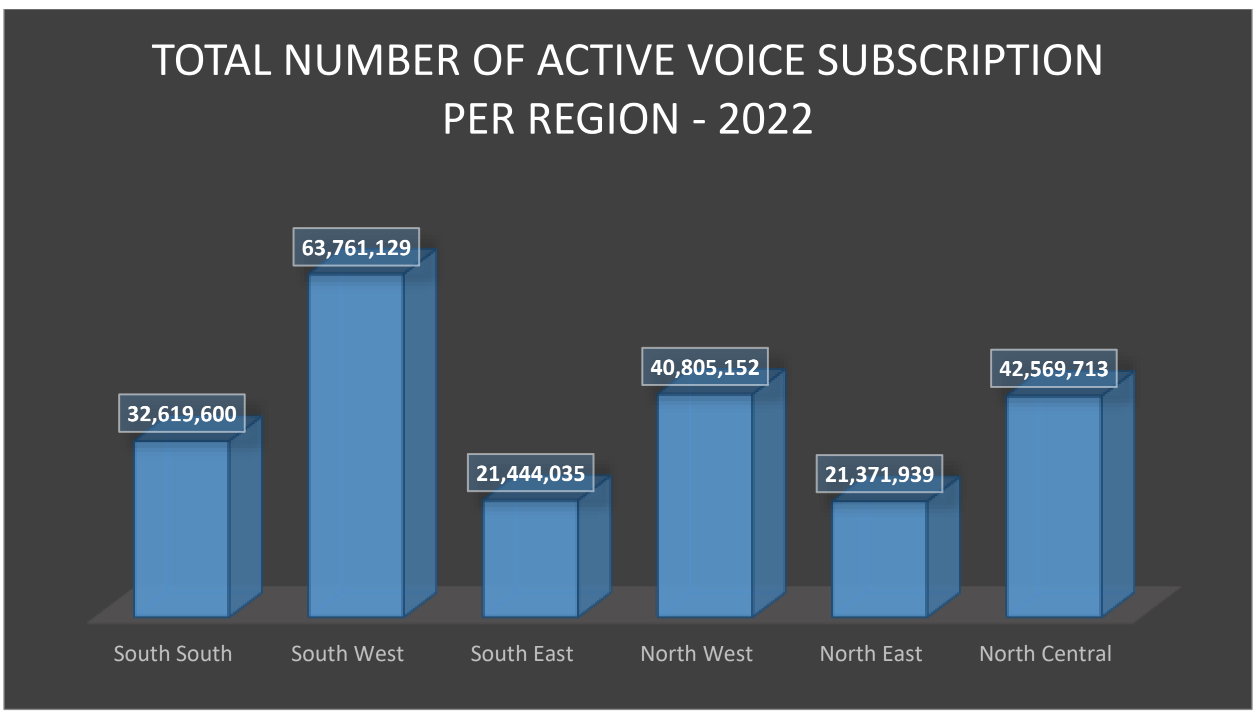

Figure 11a: Number of Active Voice Subscriptions per Region (2022)

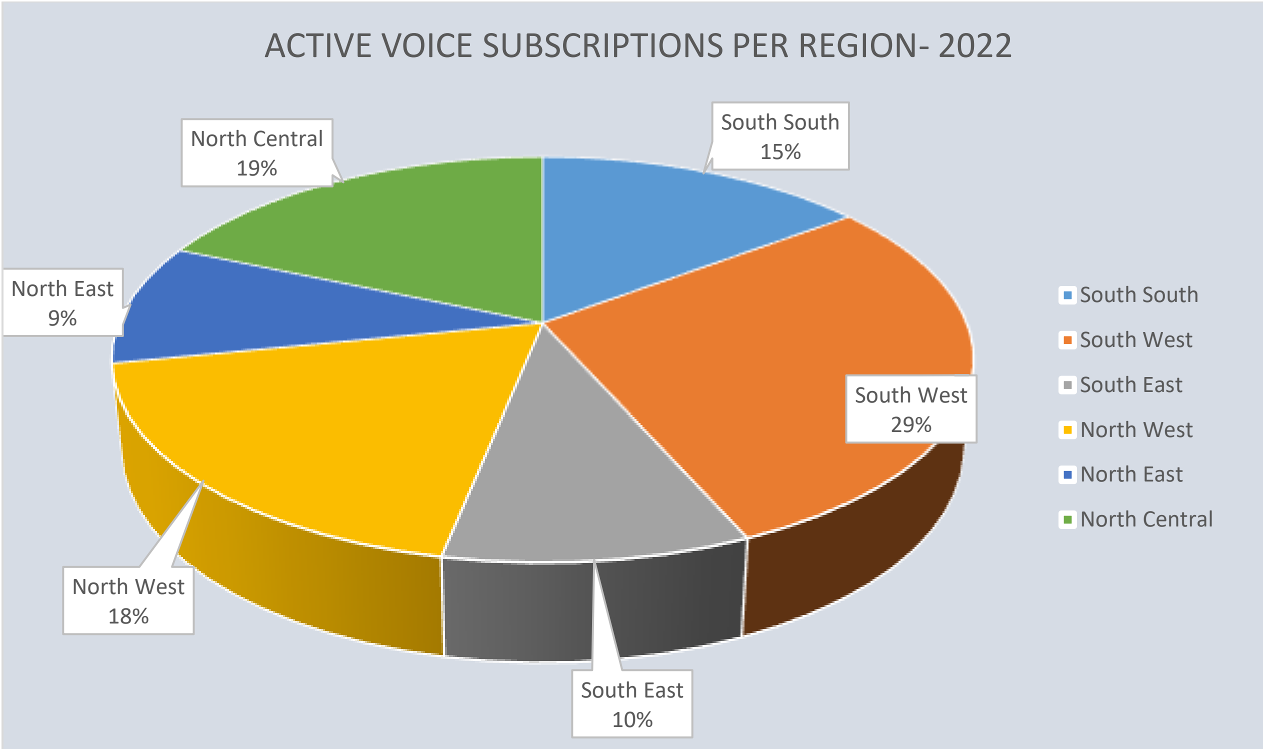

Figure 11b: Number of Active Voice Subscriptions per Region (2022)

1f. <u>Total Number of Registered Mobile SIM-Based Subscribers:</u> In line with the SIM Card registration exercise mandated by the Commission, Mobile Operators as at December, 2022 had registered a total of **301,283,030** subscribers in the country.

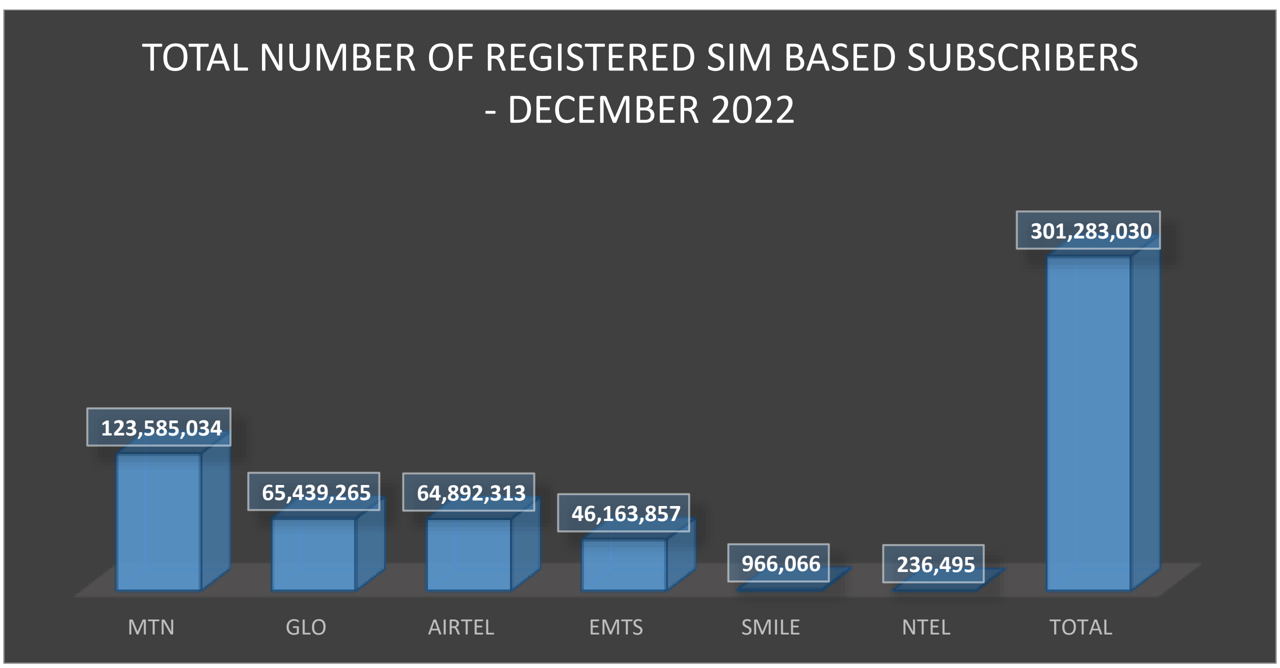

Figure 12: Total Number of Registered SIM- Based Subscribers (2022)

1h. Mobile & VoIP Voice Traffic Trend (2022):

The call traffic activities contained in the year 2022 as reported by Mobile operators in the county.

i. **Local and National Telephone Traffic in 2022:** As at December, 2022 total outgoing Local and National Traffic was **204,091,441,469.16** minutes while Total incoming Local and National Traffic was **194,762,361,239.19** minutes. MTN had the highest total outgoing and incoming Traffic of 119,491,996,074 and 123,372,737,697 minutes respectively in 2022.

NATIONAL TELEPHONE TRAFFIC 2022		
	Outgoing	**Incoming**
MTN	**119,491,996,074.00**	**123,372,737,697.00**
GLO	**27,754,386,924.25**	**12,378,398,658.25**
AIRTEL	**52,820,950,088.00**	**55,494,797,100**
EMTS	**2,986,473,195.91**	**3,414,387,809.94**
SMILE	**307,807,803**	**38,327,292**
NTEL	**729,827,384.00**	**63,712,682.00**
TOTAL	**204,091,441,469.16**	**194,762,361,239.19**

Table 5: Local and National Traffic in 2022

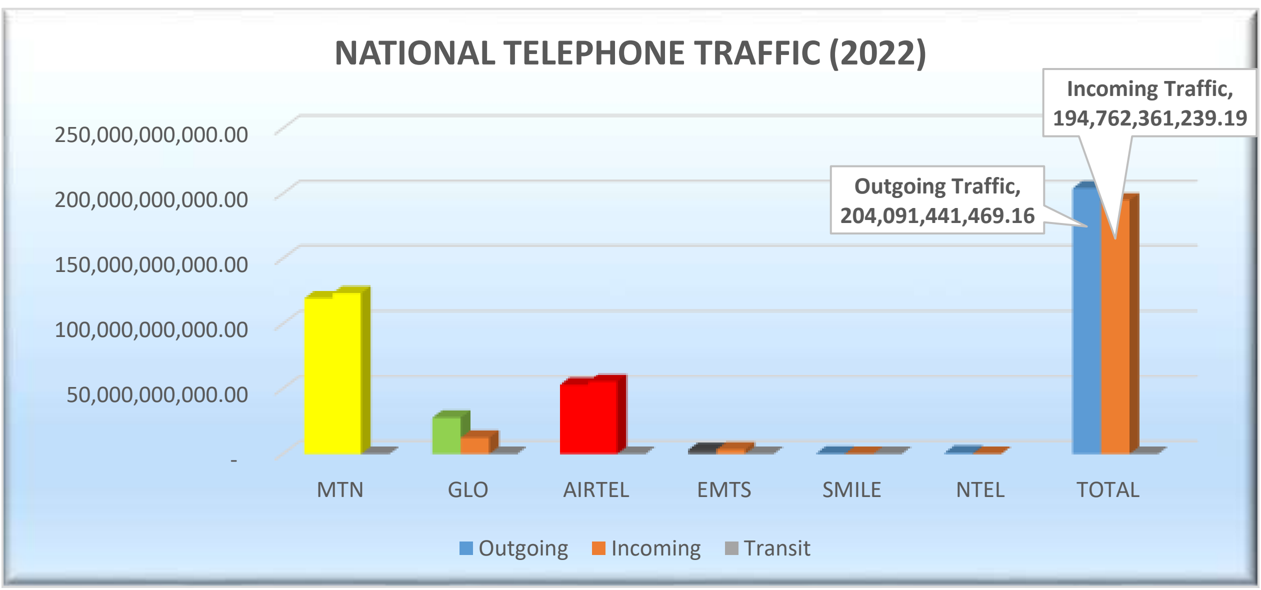

Figure 13: Local and National Telephone traffic – 2022

ii. **Outgoing and Incoming Mobile & VoIP to (and) from International Traffic in 2022:** As at December, 2022 Total Outgoing Mobile International Traffic was **204,554,015.71** minutes while Total Incoming International Traffic to Mobile was **1,520,570,473**. AIRTEL reported the highest Outgoing Traffic of 90,734,427.70 and MTN had the highest Incoming Traffic of 1,100,826,119 for the period under review.

OUTGOING/ORIGINATING & INCOMING MOBILE TO/FROM INTERNATIONAL TRAFFIC- 2022			
	Outgoing	Incoming	Total
MTN	28,800,071.00	1,100,826,119	1,129,626,190.00
GLO	60,733,269.00	98,794,832	159,528,101.00
AIRTEL	90,734,427.70	251,406,460	342,140,887.70
EMTS	24,089,159.87	69,374,072	93,463,231.58
SMILE	110,913.00	780	111,693.00
NTEL	86,175.14	168,210	254,385.15
TOTAL	204,554,015.71	1,520,570,472.72	1,725,124,488.43

Table 6: Outgoing and Incoming Mobile to/ from International Traffic in December 2022

iii. **Mobile to Mobile Voice Call Traffic in 2022: -** As at December, 2022 total outgoing traffic Mobile to Mobile minutes was **165,838,079,848.57** while total incoming Mobile to Mobile minutes was **125,930,793,287.89** MTN reported the highest Outgoing Traffic of 119,779,996,772.00 and the highest incoming Traffic of 83,092,958,675.00 for the period under review.

MOBILE TO MOBILE TRAFFIC 2022			
	Outgoing	Incoming	Total
MTN	119,779,996,772.00	83,092,958,675.00	202,872,955,447.00
GLO	17,189,088,501.38	12,302,101,414.55	29,491,189,915.93
AIRTEL	25,432,603,211	27,858,667,949	53,291,271,160.00
EMTS	2,337,694,205.19	2,575,658,960.34	4,913,353,165.53
SMILE	307,807,803	38,327,292	346,135,095
NTEL	790,889,356.00	63,078,997.00	853,968,353.00
TOTAL	165,838,079,848.57	125,930,793,287.89	291,768,873,136.46

Table 7: Mobile to Mobile Voice Traffic December 2022

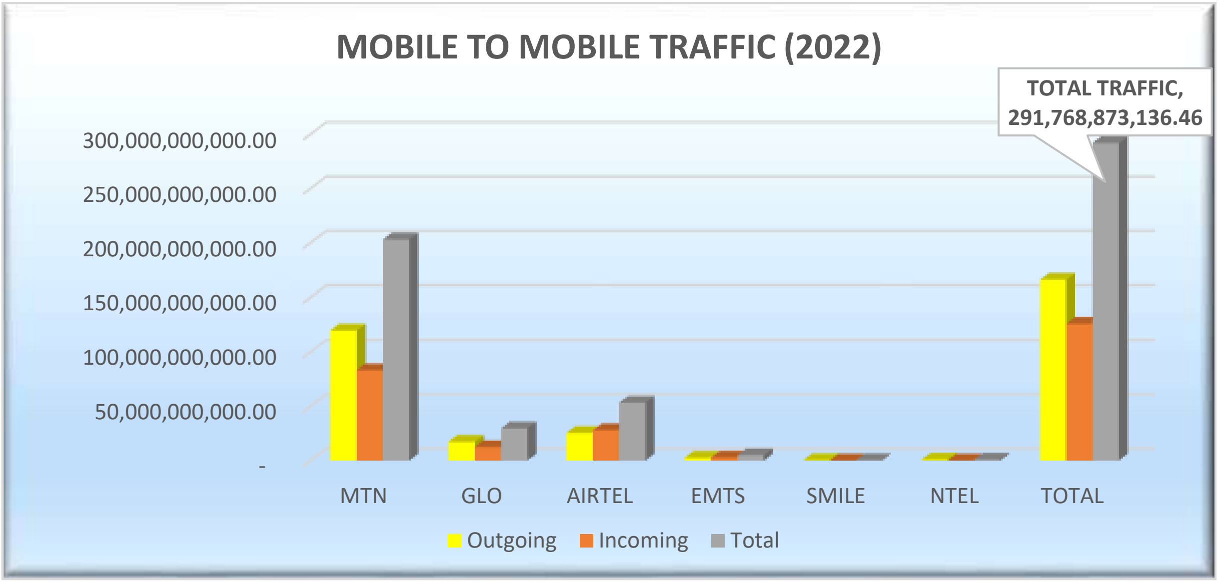

Figure 14: Mobile to Mobile traffic – December 2022

iv. **<u>Mobile to Fixed Voice Call Traffic in 2022: -</u>** As at December, 2022 Total Outgoing Mobile to Fixed minutes was **10,002,899,016.81** while Total incoming Mobile to Mobile minutes was **10,763,982,050.97** MTN reported the highest Outgoing Traffic of 9,899,085,953.00 and the highest Incoming Traffic of 10,568,857,360.00 for the period under review.

MOBILE TO FIXED TRAFFIC 2022			
	Outgoing	**Incoming**	**Total**
MTN	**9,899,085,953.00**	**10,568,857,360.00**	**20,467,943,313.00**
GLO	**56,742,973.87**	**76,297,243.70**	**133,040,217.57**
AIRTEL	**43,909,922**	**117,087,893.00**	**160,997,815.00**
EMTS	**3,160,167.94**	**1,739,554.27**	**4,899,722.21**
TOTAL	**10,002,899,016.81**	**10,763,982,050.97**	**20,766,881,067.78**

Table 8: Table of Mobile to Fixed Traffic in 2022

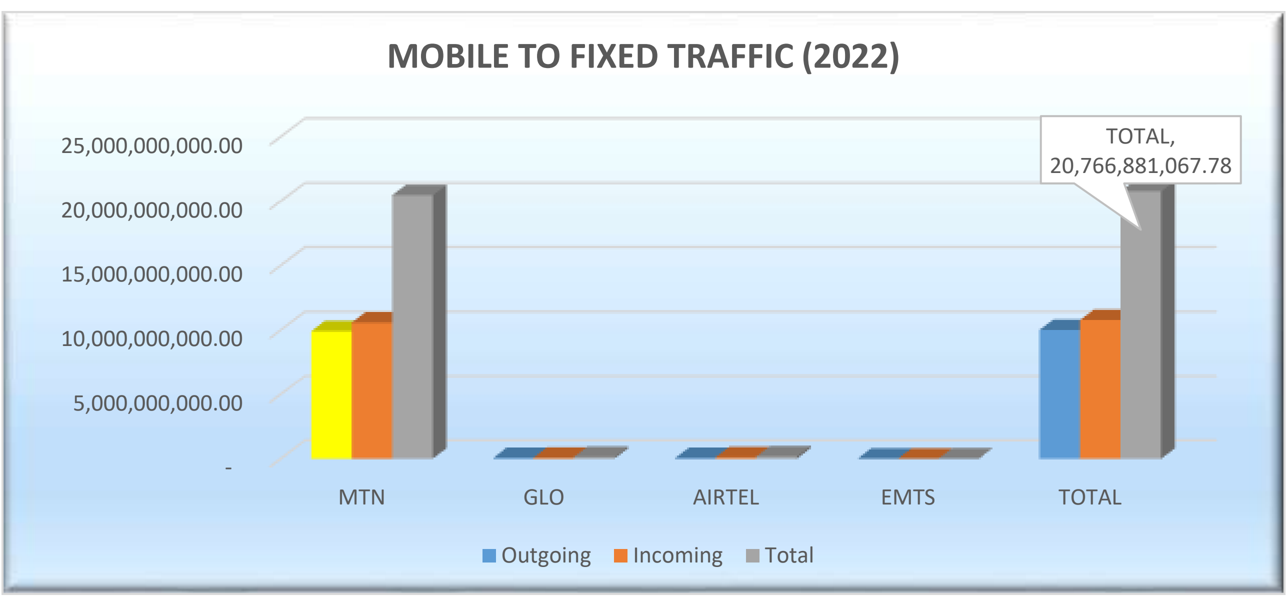

Figure 15: Mobile to Fixed traffic – December 2022

v. **<u>Number of Roaming Minutes in 2022:</u>** The Total Number of Mobile Roaming Minutes Outgoing and Incoming as at December 2022 for the Mobile Operators was **41,595,210.26** and **68,191,126.04** minutes respectively.

MTN posted the highest incoming and outgoing minutes of 51,642,575.00 and 29,276,904.00 respectively. See Table 9 & Figure 16 below;

NUMBER OF ROAMING MINUTES 2022			
	Outgoing	Incoming	Total
MTN	29,276,904.00	51,642,575.00	80,919,479.00
GLO	1,520,507.00	3,295,542.00	4,816,049.00
AIRTEL	9,888,649	4,509,034	14,397,683
EMTS	909,150.26	8,743,975.04	9,653,125.30
TOTAL	41,595,210.26	68,191,126.04	109,786,336.30

Table 9: Number of Roaming Minutes (2022)

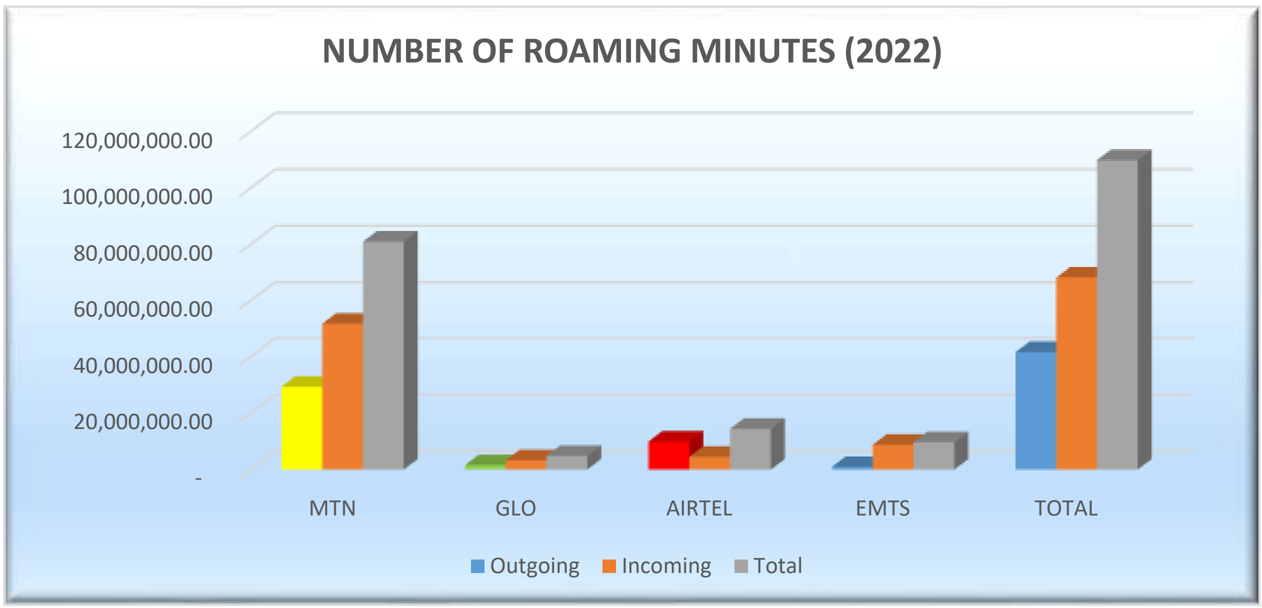

Figure 16: Number of Roaming Minutes-December 2022

vi. **<u>National SMS in 2022:</u>** The Total Number of national SMS both sent and received as at December 2022 was **25,924,511,108**. This is an increase of 28.81% from that of the total SMS sent and received in year 2021 that stood at **20,126,551,822** SMS.

- There was a 48.81% increase in the number of SMS Sent in year 2022 compared to year 2021.
- Conversely, the Year 2022 count of Received SMS also increased by 11.06% higher than that of Year 2021

In Year 2022, MTN recorded the highest count of SMS received and sent which stood at 8,738,690,150 and 8,323,722,485 respectively, this is as indicated in table 10 and in figure 17 below;

SMS MESSAGES NATIONAL 2022			
	SMS Sent	SMS Received	Total
MTN	8,323,722,485	8,738,690,150	17,062,412,635
GLO	3,638,401,509	777,235,958	4,415,637,467
AIRTEL	1,889,308,956	2,086,304,237	3,975,613,193
EMTS	234,868,66	235,038,953	469,907,618
SMILE	173,607	766,588	940,195
TOTAL	14,086,475,222.00	11,838,035,886.00	25,924,511,108.00

Table 17: Total number of Outgoing/Incoming Local/National SMS trend (2022)

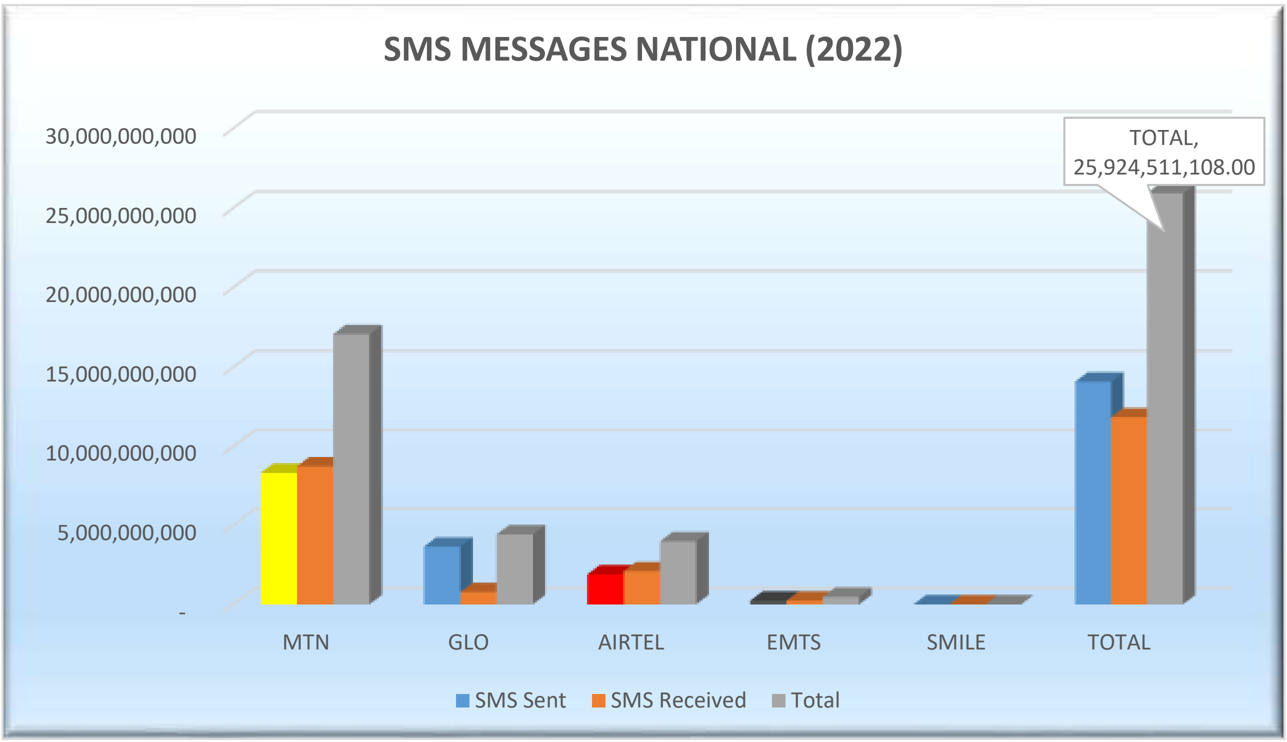

Figure 17: Total Outgoing/ Incoming SMS, Mobile December 2022

vii. **<u>International SMS in 2022:</u>** The Total Number of International SMS sent as at December 2022 was **59,571,547** while total number of SMS received was **459,329,782**. See Table 11 & Figure 18 below;

SMS MESSAGES INTERNATIONAL 2022			
	SMS Sent	SMS Received	Total
MTN	22,567,752	14,119,725	36,687,477
GLO	224,493	3,631,170	3,855,663
AIRTEL	35,383,723	380,774,725	416,158,448
EMTS	1,393,566	60,726,874	62,120,440
SMILE	2,013	77,288	79,301
TOTAL	59,571,547.00	459,329,782.00	518,901,329.00

Table 11: Total number of Outgoing/Incoming International SMS trend 2022

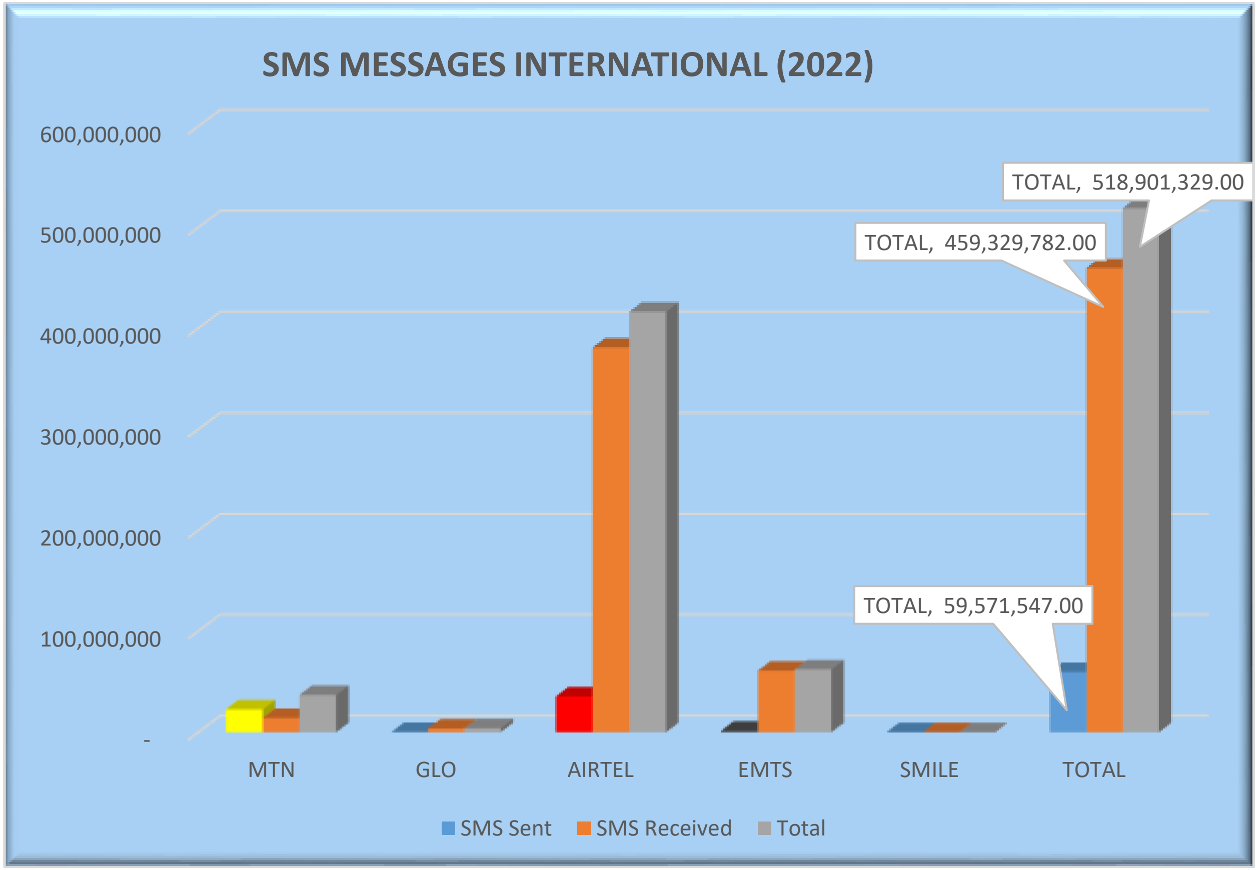

Figure 18: Total Outgoing/ Incoming SMS International, 2022

- Total Number of International SMS sent increased from 45,527,617 in year 2021 to 59,571,547 as at Year 2022; this indicates a 30.84% increase in SMS international received in year 2022.
- Similarly, the Number of international SMS received in year 2021 increased from 340,981,507 SMS to 459,329,782 SMS as at December 2022. This translated to a 34.7% increase.
- Airtel recorded the highest count of incoming and outgoing SMS at 389,774,725 and 35,383,723 respectively in year 2022. This is as shown in Table 11 above.

B. SUBSCRIBER & SERVICE DATA – INTERNET SUBSCRIPTIONS

1a. Mobile Subscriber Internet Data- 2022:

As at December, 2022 the total active internet subscriptions increased to 154,627,187 from 141,959,496 subscriptions reported in December 2021. This indicates a (8.9%) rise in Total Active Internet Subscriptions Year on Year.

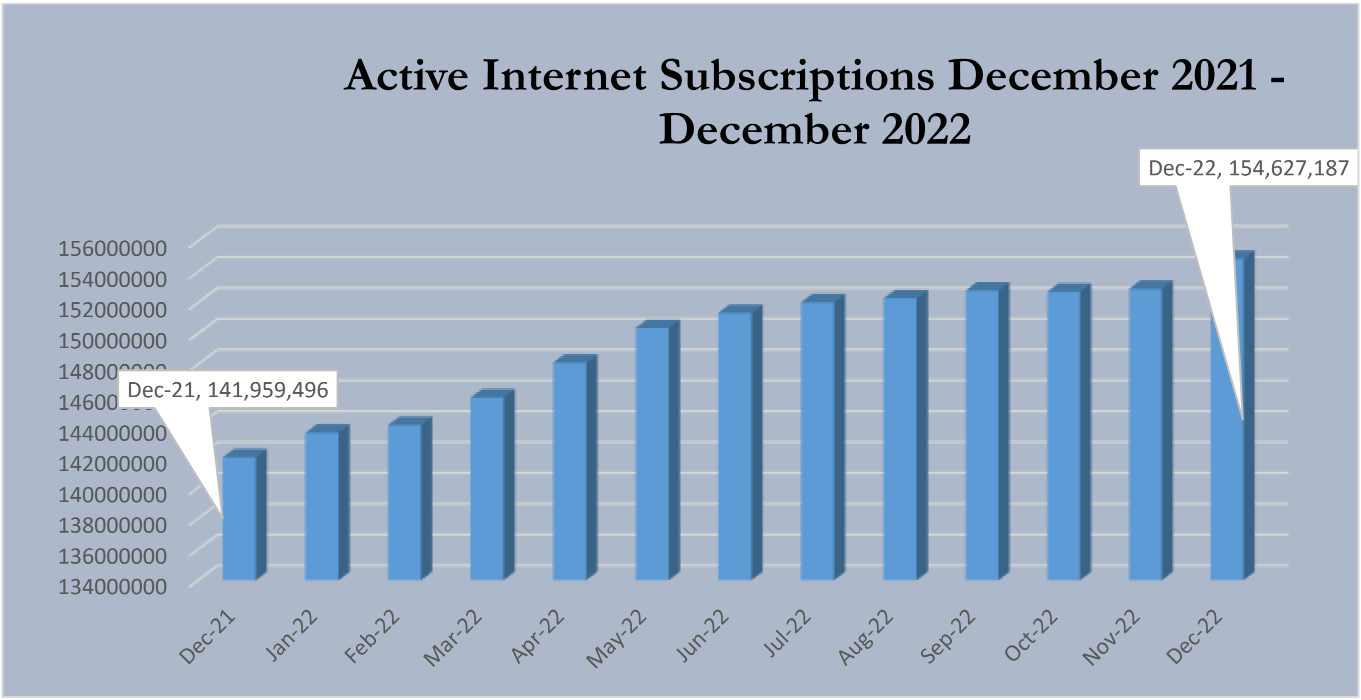

Figure 19: Active Internet Subscriptions: December, 2021 to December, 2022

For the Mobile GSM Operators the Active Internet as at December 2022 is as shown below:

Operators (GSM)	Active Internet Subscriptions December'21(GSM)	Active Internet Subscriptions December'22 (GSM)	Difference	% Change
MTN	58,812,428	65,619,610	6,807,182	11.6
GLO	39,525,269	43,050,005	3,524,736	8.9
AIRTEL	37,526,624	41,174,942	3,648,318	9.7
EMTS	5,752,702	4,432,816	(1,319,886)	(22.9)
SMILE	314,674	331,071	16,397	5.2
NTEL	27,799	18,743	(9,056)	(32.6)
TOTAL	141,959,496	154,627,187	12,667,691	8.9

Table 12: Active Internet Subscription (GSM) Operators 2021-2022

- In view of the Figure 19 and Table 12 above, EMTS and NTEL experienced loss in subscriptions during the period reviewed.

- MTN recorded the highest percentage increase of Active Internet Subscription of 11.6%.

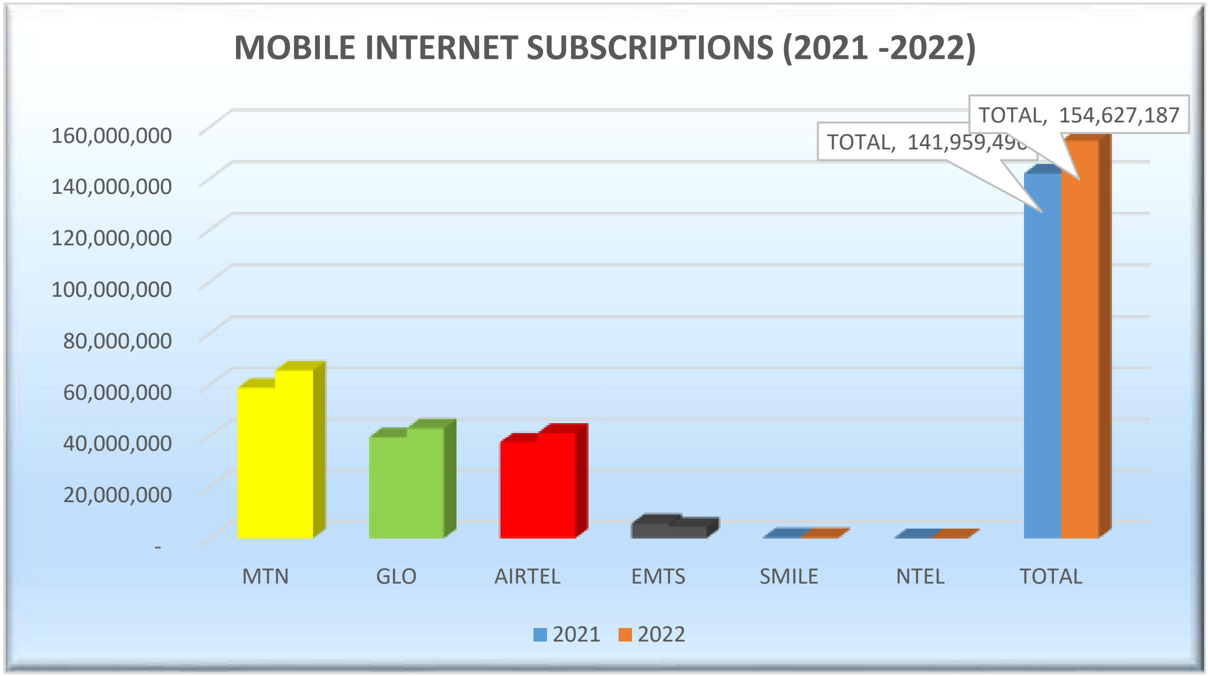

Figure 20: Total Number of Active Mobile Subscriptions – (2021- 2022)

1b. **Active Subscriptions to Mobile Broadband (Broadband Penetration 2022):**

The Broadband Penetration percentage is the summation of Counts of Total Active 3G, 4G & 5G Subscriptions, Active Subscriptions to all ISPs as well as Fixed Wired Internet Subscriptions. The subscriptions indicate that Broadband penetration stood at **47.36%** as at December 2022 which is in fair progression towards mid-term broadband target to be met in 2023. The graph below represents Broadband Penetration within the period under review.

The Commission has long exceeded the target of 30% penetration as at December 2018 and has begun implementing new strategies to meet the new target of 70% Broadband penetration by year 2025 as contained in the new Broadband Plan.

This new broadband plan is designed to deliver data download speeds across Nigeria, a minimum of 25Mbps in urban areas, and 10Mbps in rural areas, with effective coverage available to at least 90% of the population by 2025 at a price not more than N390 per 1GB of data (2% of median income or 1% of minimum wage).

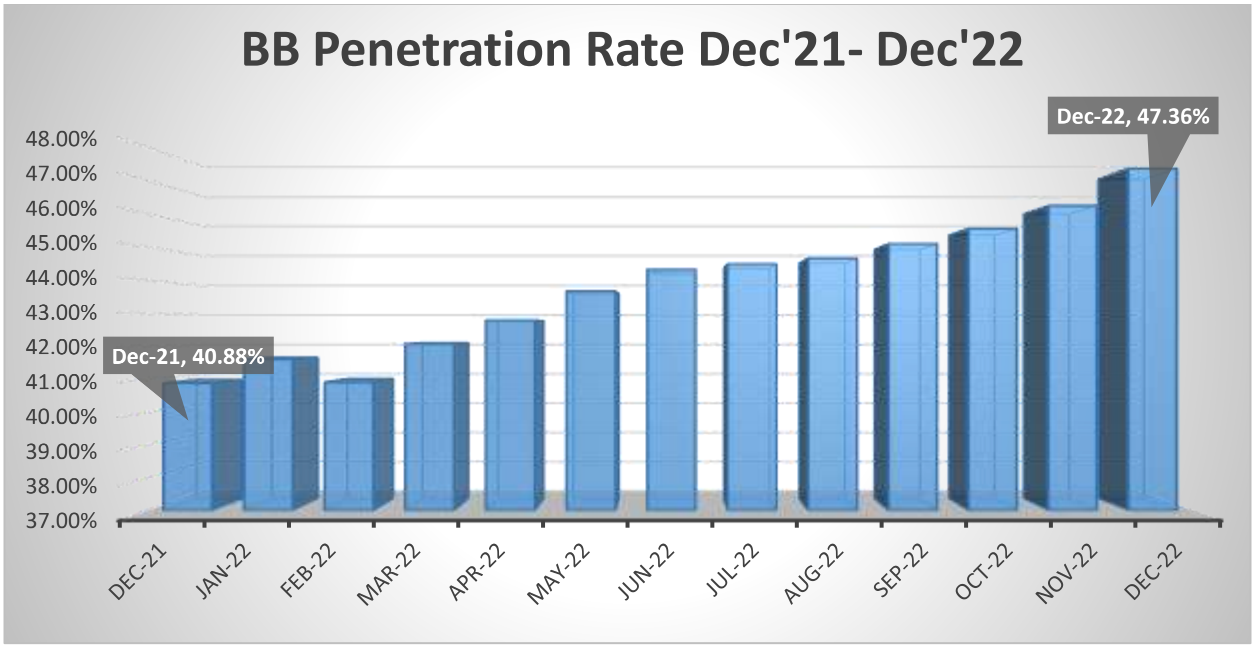

Figure 21: Active Broadband Subscriptions (2022)

1c. <u>Data Usage/Consumption Statistics – December 2022:-</u>

The total volume of data consumed by subscribers increased from **350,165**TB in December, 2021 to **514,502**TB as at December 2022 indicating a percentage increase of 46.93% year on Year.

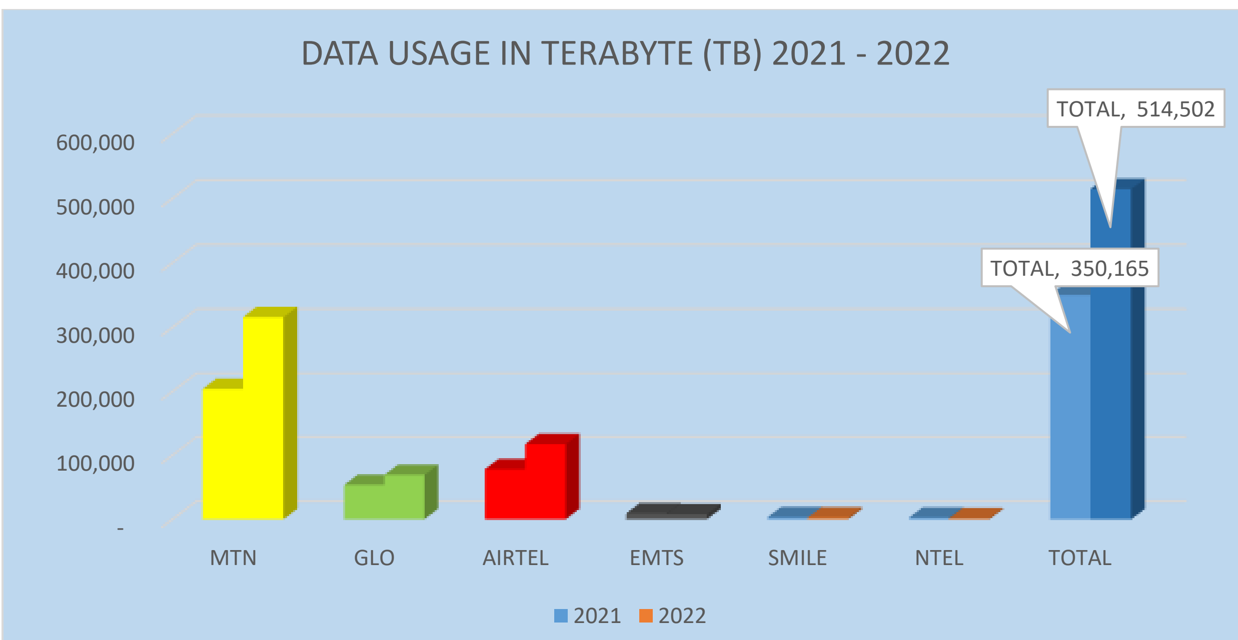

Figure 22: Internet Usage Statistics December 2021 – December, 2022

1d. **Machine to Machine (2022):** This refers to the number of Mobile-Cellular machine to machine subscriptions that are assigned for use in machines and devices for the exchange of data between networked devices and are not part of a consumer subscription.
As at December, 2022 the number of Mobile-Cellular machine-machine subscriptions as reported by **MTN, GLO, AIRTEL and EMTS** was **1,772,365**.

MTN had the highest number of machine-to-machine subscriptions with 946,805, EMTS had 543,291 while Airtel recorded 231,093 M2M subscriptions with GLO reporting the least with 51,176 subscriptions as shown in Figure 23 below;

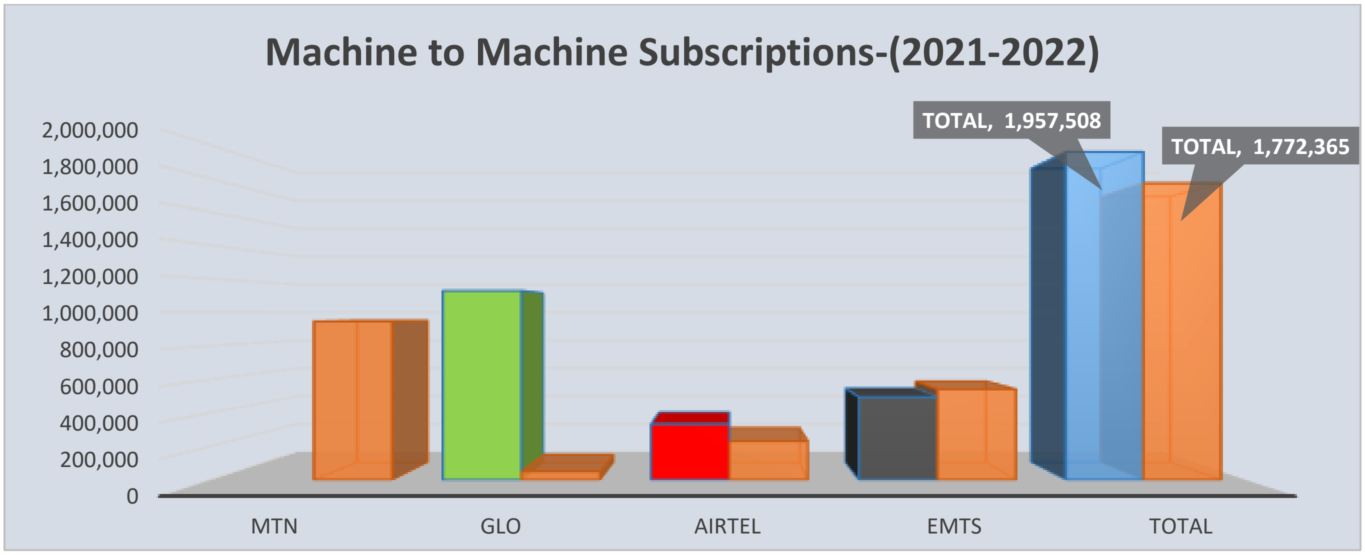

Figure 23: Machine to Machine Subscriptions (2021-2022)

1e. **Number of Data-Only Mobile-Broadband Subscriptions – Dongles (2022):**
This refers to subscriptions to mobile broadband services that allow access to the open Internet via hypertext transfer protocol (*HTTP*) and do not include voices services, i.e. Subscriptions that offer mobile broadband as a standalone service such as mobile-broadband subscriptions for data-cards, USB modem/dongle and tablets. MTN, GLO, AIRTEL and EMTS had a total number of **598,736** Data-Only Mobile-Broadband Subscriptions (Dongles) as at December, 2022.
In summary, AIRTEL, MTN, EMTS and SMILE each recorded **538,828; 41,258; 17,926** and **724** Data-Only Mobile-Broadband Subscriptions (Dongles) respectively as at December, 2022.

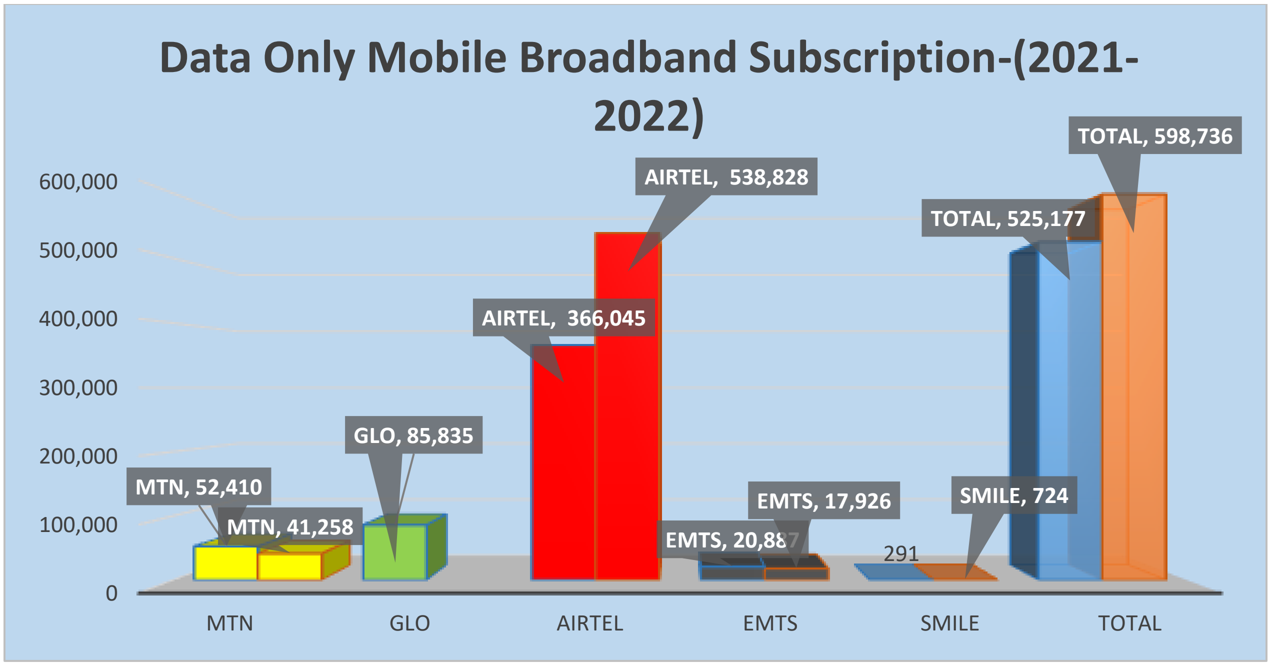

Figure 24: Data-Only Broadband Subscriptions December (2020 - 2021)

C. <u>SUBSCRIBER & SERVICE DATA – PORTING TREND IN NIGERIA AS AT DECEMBER 2022</u>

1a. <u>The Mobile (GSM) Number Porting Activities: -</u> this segment highlights porting activities across the various Mobile GSM networks ***(MTN, GLO, AIRTEL & EMTS)*** in the country and analysis of these activities is as shown below:

i. Table 14 below shows the trend of Nigeria's porting activities from inception (May, 2013 to December, 2022) for the four (4) major GSM Operators. The analysis illustrates that EMTS had the highest count of Port-in subscribers [676,944] while AIRTEL, MTN and GLO respectively recorded the following counts of Port-in as follows [331,837]; [181,301] & [105,746].

ii. Similarly, our analysis from May, 2013 to December, 2022 reveals that MTN had the highest number of subscribers that ported-out [444,226] to other networks while AIRTEL, GLO & EMTS are as follows [351,422]; [277,527] & [190,742] respectively.

	MTN	*GLO*	*AIRTEL*	*EMTS*	*TOTAL*
	May'13 - December'22	*May'13 - December'22*	*May'13 - December'22*	*May'13 - December'22*	*May'13 - December'22*
Cumulative Port-In	*181,301*	*105,746*	*331,837*	*676,944*	*1,295,828*
Cumulative Port-Out	*444,226*	*277,527*	*351,422*	*190,742*	*1,263,917*
Total Porting Activities (Port-in and Port-out) for the period May 2013 – 2022					*2,559,745*

Table 14: Cumulative Mobile Number Portability (May, 2013 – December, 2022)

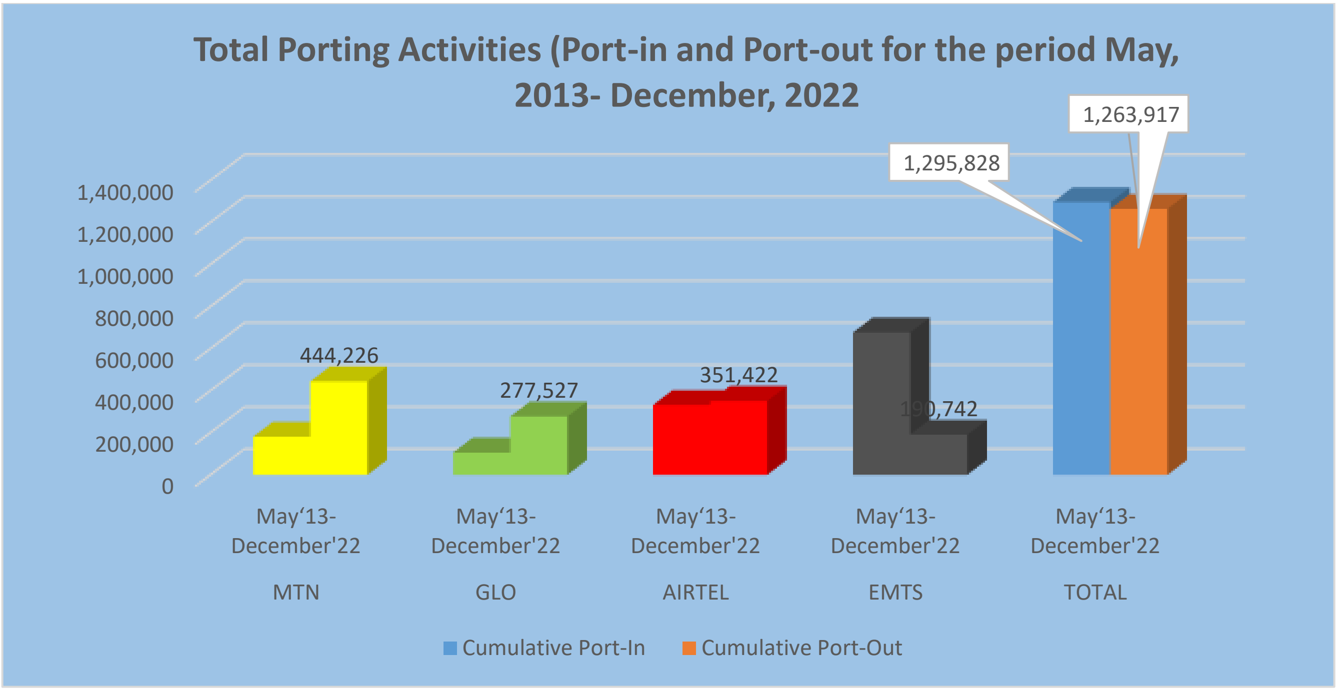

Figure 25: Cumulative Mobile Number Portability (May, 2013 – December, 2022)

1b. Port- In activities from December, 2021 – December, 2022:-

The count of Port-In activities increased from 17,467 in year 2021 to 32,086 as at the end of year 2022. This indicates an increase of 83.69% in the total port-in between 2021 and 2022 year on year.

The increase noted in Port-In activities was attributed majorly to the effect of the directive from NCC in April 2021 to all GSM Operators lifting the ban on the sale and registration of new SIMs, SIM swaps and all porting activities following the conclusion of the Commissions nationwide audit of Subscriber Registration Database.

Table 15 and figure 26 below, illustrates the Port-In performance in the telecommunications sector between 2021 and 2022;

OPERATOR	Port-In Activities Jan-Dec 2021	Port-In Activities Jan-Dec 2022	% Increase /Decrease
MTN	**8,361**	**21,285**	**155**
GLO	**1,832**	**3,684**	**101**
AIRTEL	**5,932**	**5,140**	**(13)**
EMTS	**1,342**	**1,977**	**47**
TOTAL	**17,467**	**32,086**	**84**

Table 15: Port-In Activities 2021 - 2022

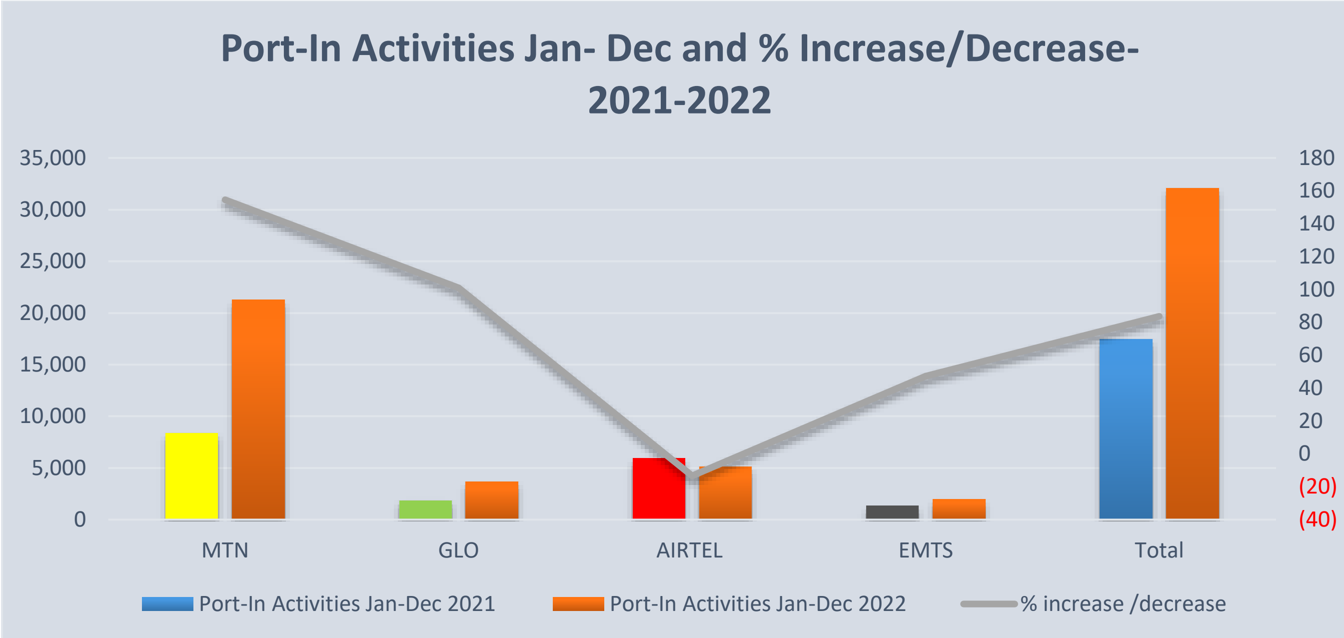

Figure 26: Port-In Activities Jan-Dec and Percentage Increase/Decrease of Port-In (2021 – 2022)

1c. **Port-Out activities from December, 2021 – December, 2022: -** The Count of Port-out increased from 11,514 in Year 2021 to 37,890 in Year 2022 indicating a rise of 229% year on year performance analysis.

Table 16 and figure 27 below illustrates the Port-Out performance in the telecommunications sector between 2021 and 2022.

	Port-Out Activities Jan-Dec 2021	Port-Out Activities Jan-Dec 2022	% Increase /Decrease
MTN	**2,048**	**2,701**	**32**
GLO	**1,318**	**3,193**	**142**
AIRTEL	**1,564**	**13,667**	**774**
EMTS	**6,584**	**18,329**	**178**
TOTAL	**11,514**	**37,890**	**229**

Table 16: Count of Port-Out Activities-December 2021-2022

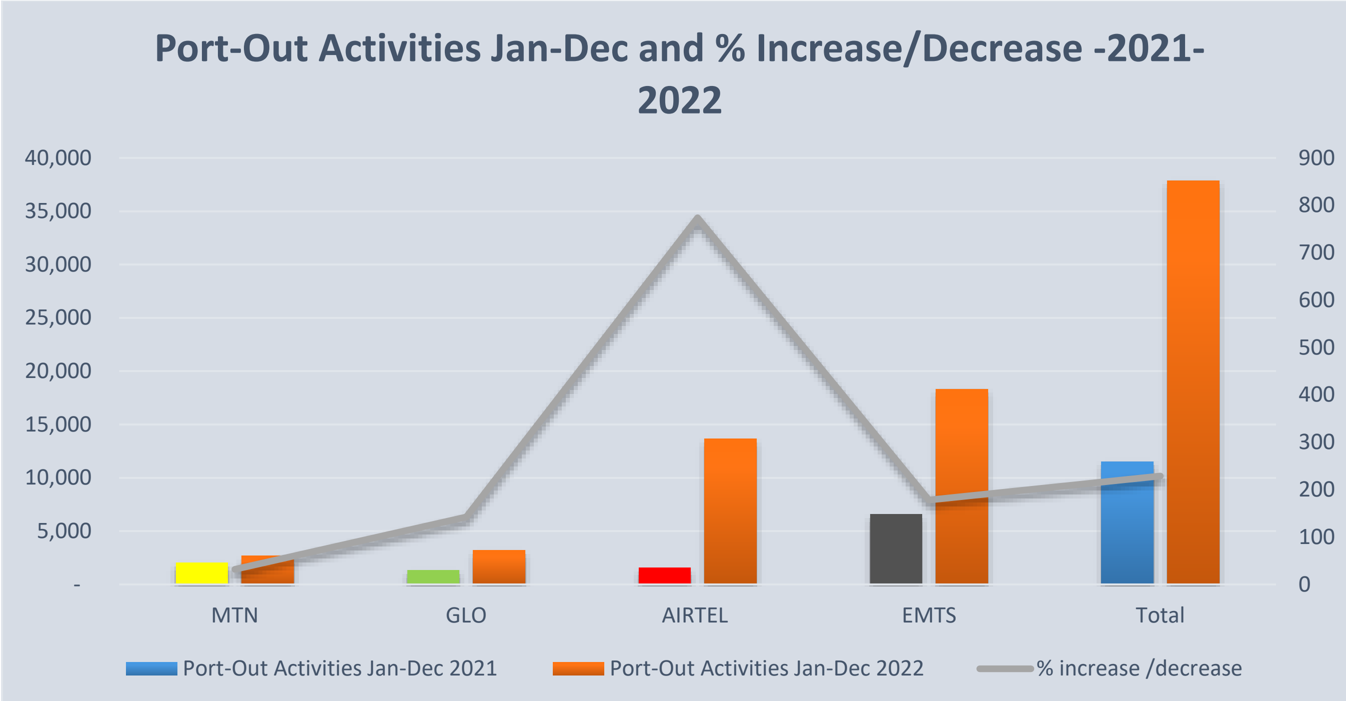

Figure 27: Port-Out Activities and Percentage Increase/Decrease of Port-Out Activities December 2021-2022

D. <u>FINANCIAL DATA – MOBILE AND VOIP (December 2022)</u>

1a. <u>CAPEX- Local Investments in the segment:</u> The Operators reported a total CAPEX of ₦ 718,350,570,000 in 2022 as against the ₦ 1,124,117,000,000 invested in Year 2021, indicating a decline of 36.1% within the period.

1b. <u>Operating Cost</u>: Total Operating Cost for the Operators increased from ₦1,658,235,000,000 in Year 2021 to ₦1,996,659,000,000 at the end of Year 2022. This illustrates an increase of 20.41% from the figure reported in 2021.

1c. <u>Revenue</u>: The operators in this market segment as at December 2022 recorded an approximate total revenue of ₦3,329,241,000,000 as against ₦2,774,128,000,000 recorded in Year 2021. This reflects an increase of 20.01% in total revenue from the Mobile Network Operators.

E. <u>STAFF PROFILE – MOBILE (2022)</u>

The total number of Staff reported by the Mobile operators (**MTN, GLO, Airtel, EMTS, Smile and Ntel)** as at December, 2022 was 7,451 composed of 7,270 Nigerians and 181 expatriates. Further breakdown of this category reveals that 4,735 of the Nigerian Staff are Male while 2,535 are female. Similarly, 177 are male expatriates and 4 are female expatriates.

CHAPTER THREE
ANALYSIS OF 2022 YEAR END SUBSCRIBER/ NETWORK DATA- FIXED TELEPHONY (Fixed Wired/ Wireless) OPERATORS

The Fixed year end performance report depicts the analysis of the fixed market as at December, 2022. The reports comprise of **MTN, GLO, ipnX, 21st Century, Inq. Digital (formerly Vodacom), Swift Telephone Network** and **Big Picture** presented in the report below:

A. NETWORK DATA

1. INFRASTRUCTURE DEPLOYMENT

1a. Fiber Optics: As at December, 2022, 21st Century deployed **9,000km** on-land and **33km** submarine while ipNX deployed **2,112.97km** on-land. In total a sum of **11,113km** was deployed for on-land fibre optics and **33km** submarine fibre optics.

1b. Microwave Radio: As at December, 2022 Microwave Radio deployment stood at **323km**. ipNX reported 298 while 21st Century reported 25.

1c. Trunks in Use: The operators in this market segment reported - 21st Century (720); ipNX (2) and Swift Telephone Network (2). This aggregates **724km** Trunks (E1) in use as at December, 2022.

1d. Gateways in Use: 21st Century, ipNX and Swift Telephone Network jointly reported a total of **10 Gateways** in use as at December 2022. 21ST Century (3); ipNX (6) and Swift (1).

B. SUBSCRIBER AND SERVICES DATA

1. Total Active Voice Subscriptions: As at December, 2022 Total Active Voice Subscription decreased to **96,996** subscription from **106,385** subscription recorded in 2021, this records a **8.83%** decline.

During the year under review, ipNX, 21st Century and GLO each recorded decline of **13.42%, 10.04%** and **0.48%** respectively. MTN recorded an increase of 4.44% in Active Voice Subscriptions within the period.

TOTAL ACTIVE VOICE SUBSCRIPTIONS			
	2021	2022	% Change
MTN	7,387	7,715	4.44
GLOBACOM	2,721	2,708	-0.48
21ST CENT	95,040	85,502	-10.04
IPNX	1,237	1,071	-13.42
TOTAL	106,385	96,996	(8.83)

Table 1: Total Active Voice Subscriptions 2021 – 2022

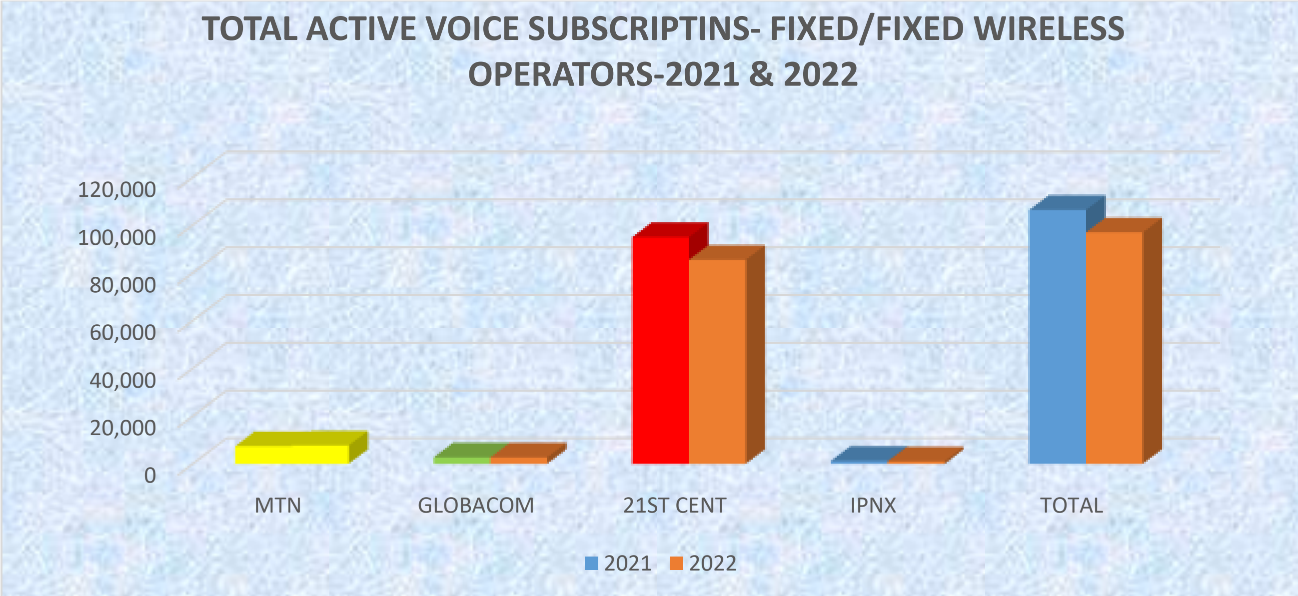

Figure 1: Total Active Voice Subscriptions (2021 & 2022)

2. <u>Total Active Internet Subscriptions</u>: As at December 2022 the Active Internet **subscriptions** for MTN, 21st Century and ipNX was **15,904** subscription. This indicates an increase of 29.73% from 2021 which was **12,259** subscriptions.

TOTAL ACTIVE INTERNET SUBSCRIPTIONS			
	2021	2022	% Change
MTN	273	928	239.93
21ST CENT	2,785	2,249	(19.25)
IPNX	9,201	12,727	38.32
TOTAL	12,259	15,904	29.73

Table 2: Total Active Internet Subscriptions (2021 & 2022)

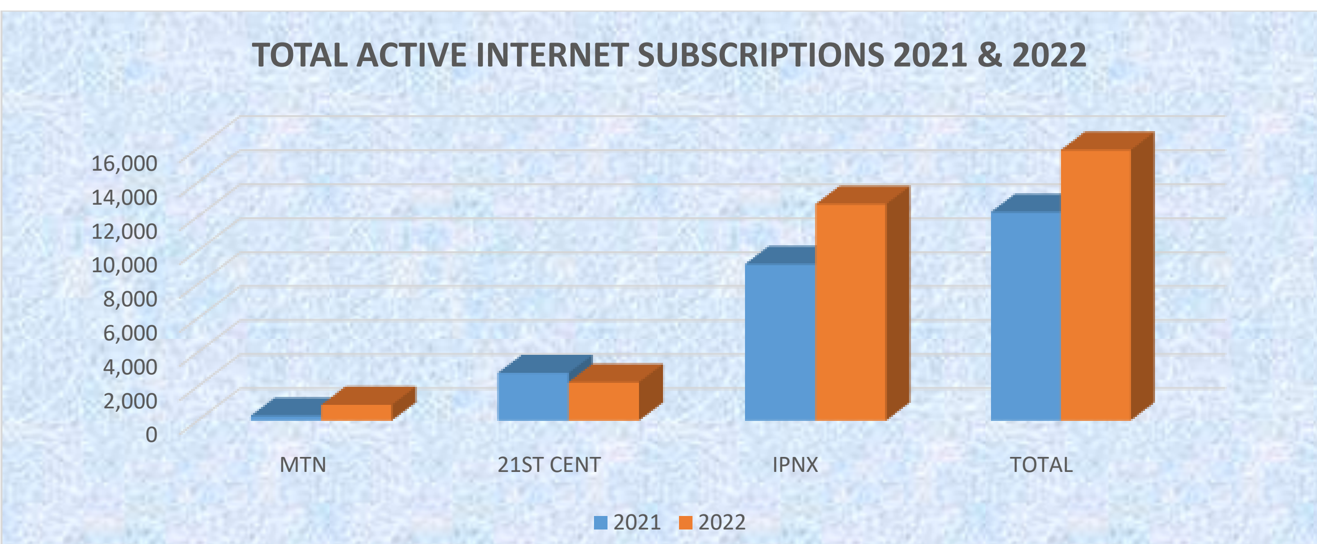

Figure 2: Total Active Internet Subscriptions (2021 - 2022)

3. **<u>Fibre to the Home/ Building (FTTH) Subscriptions:</u>** As at December 2022 ipNX, MTN, and 21st Century respectively installed **18,925km, 5,415km,** and **303km** of Fibre to Home / Building. This is a total of **24,643km** of fibre deployed by these operators within the reporting period.

FIBRE-TO-THE-HOME/BUILDING SUBSCRIPTIONS		
	2021	2022
MTN	2,997	5,415
21 CENT	303	303
IPNX	15,689	18,925
TOTAL	18,989	24,643

Table 3: Fibre to the Home/Building Subscriptions 2022

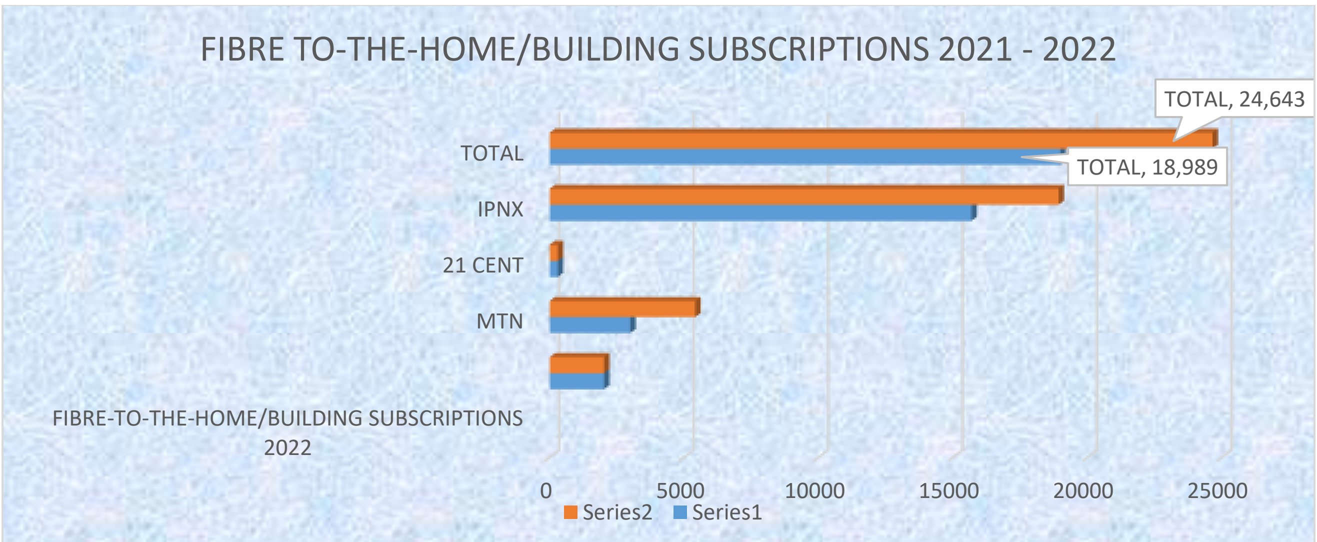

Figure 3: Fibre to the Home/Building Subscriptions 2022

4. **<u>Number of subscribers by Internet Speed:</u>** As at December 2022, **512 users** fell in the **256kbs– 1Mbps** category; **2,502** users subscribed to speeds between **2mbps-10mbps; 14,528** users between **10Mbps – 4G**, category.

There was no subscriptions in the **4G & above** category as reported by service providers in the fixed wired category.

NUMBER OF SUBSCRIBERS BY INTERNET SPEED 2022				
	256kbs-1mps	2mbps-10mbps	10mbps-4G	4G- above
21ST CENT	285	1,295	1,010	N/A
IPNX	151	414	13,066	N/A
INQ.DIGITAL NIGERIA LIMITED	76	793	452	N/A
TOTAL	512	2,502	14,528	N/A

Table 4: Fibre to the Home/Building Subscriptions 2022

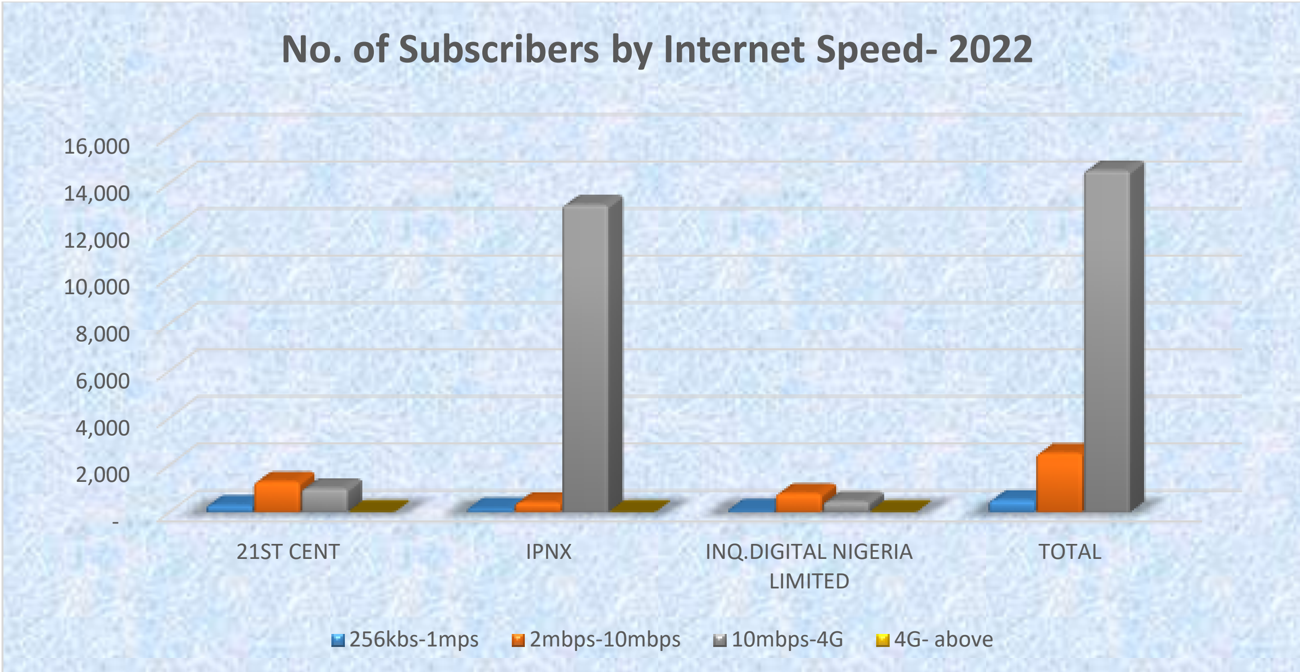

Figure 4: No of Subscribers by Internet Speed 2022

C. <u>TRAFFIC DATA</u>

1. <u>Local and National Traffic (Outgoing)</u>: As at December, 2022, the total minutes generated for local and national **outgoing traffic** (paid minutes) by fixed telephone operators; MTN, 21st Century, IpNX, Inq. Digital, Swift Telephone, and Big Picture was **13,361,366, 40,665,042, 1,459,157, 6,321,318, 30,600,260, and 11,407,919** respectively, making a total of **103,815,062** local & national **Outgoing** traffic.

2. <u>Local and National Traffic (Incoming)</u>: As at December, 2022, the total minutes generated for local and national **incoming traffic** (paid minutes) by fixed telephone operator; MTN, 21st Century, ipNX, Inq. Digital, Swift and Big Picture was **284,412, 34,737,556, 8,769,438, 7,904,011, 3,571,638 and 228,467** respectively, making a total of **55,495,521** local & National **Incoming** traffic.

Analysis of the **Total Outgoing** and **Incoming** Local National Telephone Traffic data for this market segment shows that a substantial portion of this traffic was generated by **21st Century** for both Incoming and Outgoing traffic during the year under review.

LOCAL AND NATIONAL TELEPHONE TRAFFIC (IN MINUTES) 2022		
	Outgoing	**Incoming**
MTN	**13,361,366**	**284,412**
21ST CENT	**40,665,042**	**34,737,556**
IPNX	**1,459,157**	**8,769,438**
INQ.DIGITAL NIGERIA LIMITED	**6,321,318**	**7,904,011**
SWIFT TELEPHONE NETWORK LIMITED	**30,600,260**	**3,571,638**
BIG PICTURE	**11,407,919**	**228,467**
TOTAL	**103,815,062**	**55,495,521**

Table 5: Total Number of Local & National Outgoing/ Incoming Calls (2022)

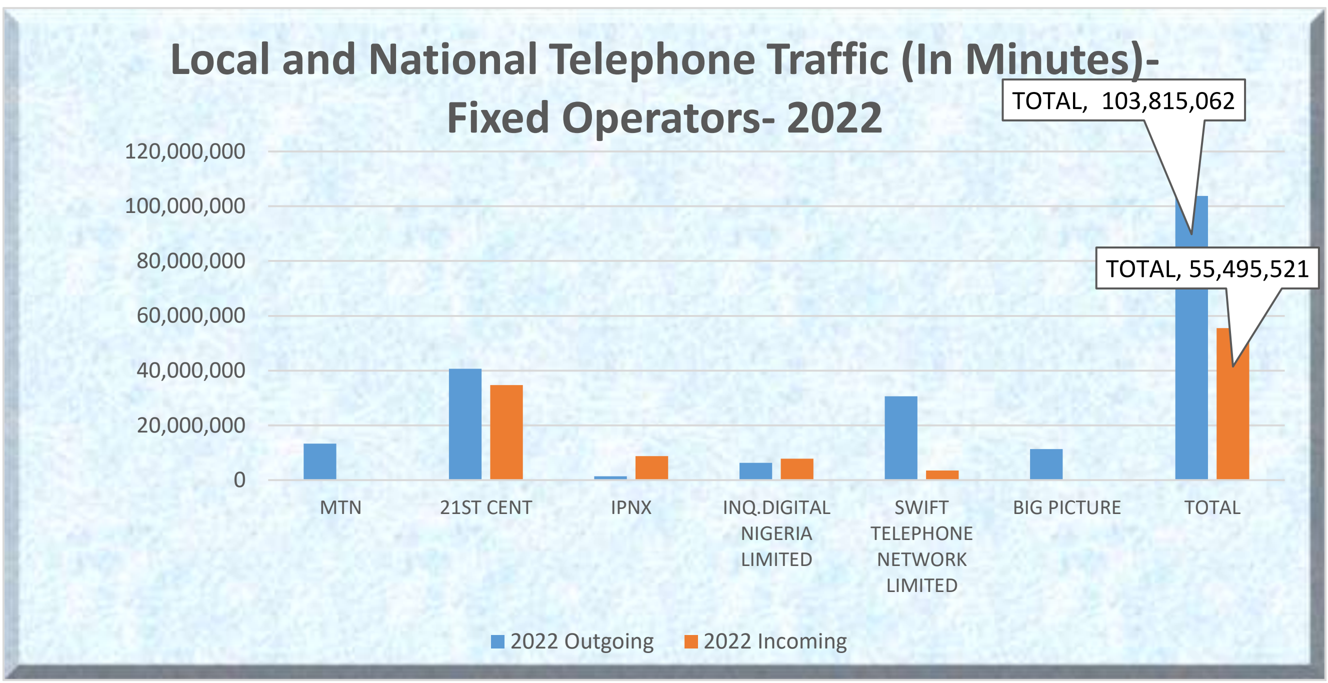

Figure 5: Total Number of Local & National Outgoing/ Incoming Calls (2022)

3. <u>**Total number of Fixed to Mobile traffic**:</u> As at December, 2022 the total number of **Outgoing** Fixed to Mobile traffic reported was **166,260,848**.
Similarly the total number of **Incoming Fixed to Mobile** traffic as at December 2021 was **191,599,581.**

Analysis of the **Fixed to the Mobile** traffic for the fixed market segment shows that a considerable percentage of this traffic was generated on the **MTN's network** for **Outgoing** traffic and **21st Century network** for **Incoming** traffic.

FIXED TO MOBILE TRAFFIC 2022			
	Outgoing	Incoming	Total
MTN	55,058,427	13,963,416	69,021,843
21ST CENT	40,588,731	134,486,309	175,075,040
IPNX	1,448,777	8,599,264	10,048,041
BIG PICTURE	8,083,637	434,905	8,518,542
INQ.DIGITAL NIGERIA LIMITED	30,481,017	30,544,049	61,025,066
SWIFT TELEPHONE NETWORK LIMITED	30,600,260	3,571,638	34,171,897
TOTAL	166,260,848	191,599,581	357,860,429

Table 6: Total number of Fixed to Mobile Traffic (2022)

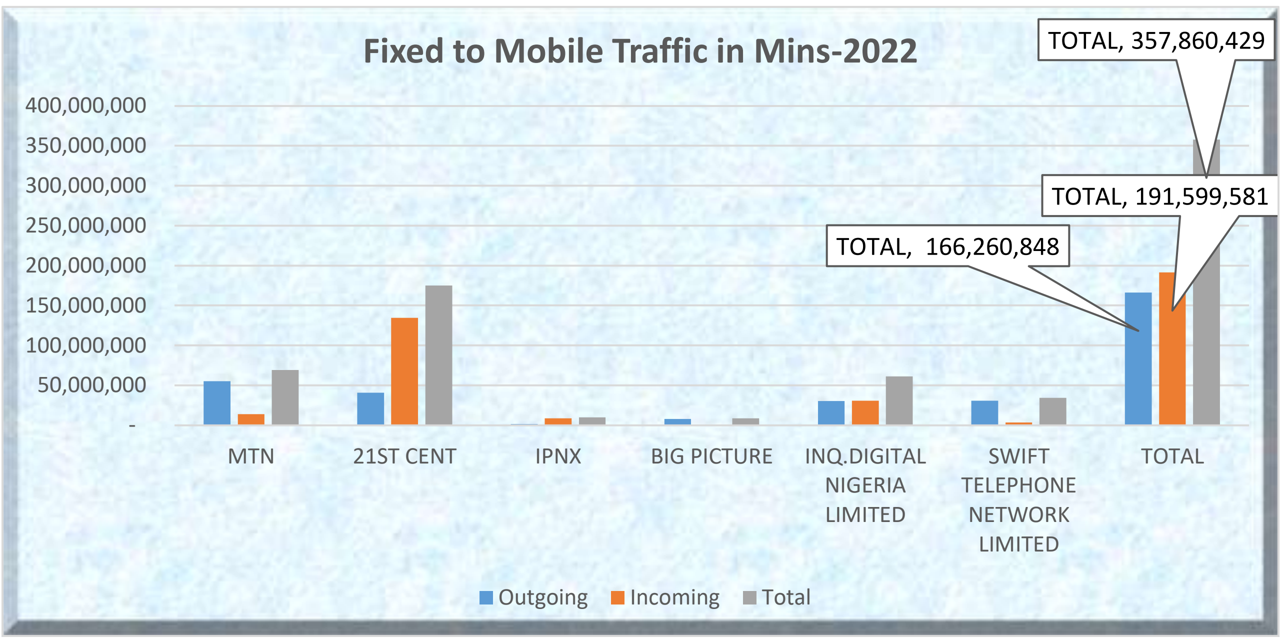

Figure 6: Total number of Fixed to Mobile Traffic (2022)

4. <u>Total number of Outgoing/ incoming Fixed Minutes International traffic</u>:

As at December, 2022 the total number of **Outgoing Fixed International** traffic (**minutes**) for MTN, 21st Century, ipNX, and Inq. Digital, were **107,657,014; 1,213,940**; **30,619.22** and **76,300** minutes respectively. While **Incoming Fixed International** traffic for MTN, 21st Century and Inq. Digital were **165,287; 42,058; & 19,163.21**; and **42,058** respectively.

Over all the total number of **Outgoing Fixed International** traffic reported was **108,977,873.** While **Incoming Fixed International** traffic was **4,425,753.**

Analysis of the **Outgoing/Originating Fixed minutes International Telephone traffic** for the fixed market segment shows that a considerable percentage of this traffic was generated on the **MTN network** for **Outgoing** traffic and **21st Century network** for **Incoming** traffic for year 2022.

OUTGOING/ORIGINATING FIXED MINUTES INTERNATIONAL TELEPHONE TRAFFIC 2022			
	Outgoing	Incoming	Total
MTN	107,657,014	165,287	107,657,014
21ST CENT	1,213,940	4,199,245	5,413,185
IPNX	30,619.22	19,163.21	49,782
INQ.DIGITAL NIGERIA LIMITED	76,300	42,058	118,358
TOTAL	108,977,873	4,425,753	113,403,627

Table 7: Local and National Telephone Traffic 2022 (In Minutes)

D. FINANCIAL DATA - FIXED (December 2022)

1a. CAPEX- Local Investments in the segment: Capex expenditure was recorded at **₦61,326,000** million as at December 2022 for IpNX and Swift Telephone Network.

1b. Operating Cost: Similarly, the total Operating cost as at December 2022 for the fixed telephone market segment was **₦841,738,077 million** for IpNX, Swift Telephone Network and Big Picture.

1c. Revenue: The total Revenue as at December 2022 for the fixed Service Provider was **₦385,071,346** million for IpNX, Swift Telephone Network and Big Picture.

D. STAFF PROFILE

The total number of Staff reported by the fixed telephone operators (21st Century, ipNX, Swift Telephone Network and Big Picture) as at December, 2022 was 260 comprising of Male: 174 and Female: 86 while 86 Expatriate staff 2.

CHAPTER FOUR
REPORT OF 2022 YEAR END PERFORMANCE REPORT FOR INTERNET SERVICE PROVIDERS (ISPs)

A. INTRODUCTION:

In line with the Commission's procedure for Year-End data collection from Internet Service Providers (ISPs) through administration of questionnaires, a total of 190 (One Hundred and Ninety) Internet Service Providers (ISP) were requested to make submissions for the year end 2022. Out of this figure, 120 submitted statistical data, while 70 were non-responsive.

B. NETWORK DATA:

1. Points of Presence (PoP):
1a. Analysis of Points of Presence (PoP)

A total of 104 ISPs responded to the questionnaire in this category. PoPs increased from **1,843** in December, 2021 to **1,977** as at December, 2022 indicating an increase of **7.2%**. Table 1 above, shows that Spectranet had the highest number of PoPs with **649**, indicating **32.8%**, followed by Swifttalk Ltd, Tizeti Ltd and Cyberspace Ltd with **149, 133 and 129** indicating **7.5%, 6.7% and 6.5%** respectively**.**

The other ISPs had a combined total of **917 PoPs** representing **46.4%** of the Point of Presence - AFR-IX Data Communications Limited, Arif Investment Ltd and **28** other ISPs were among service providers with (1) point of presence.

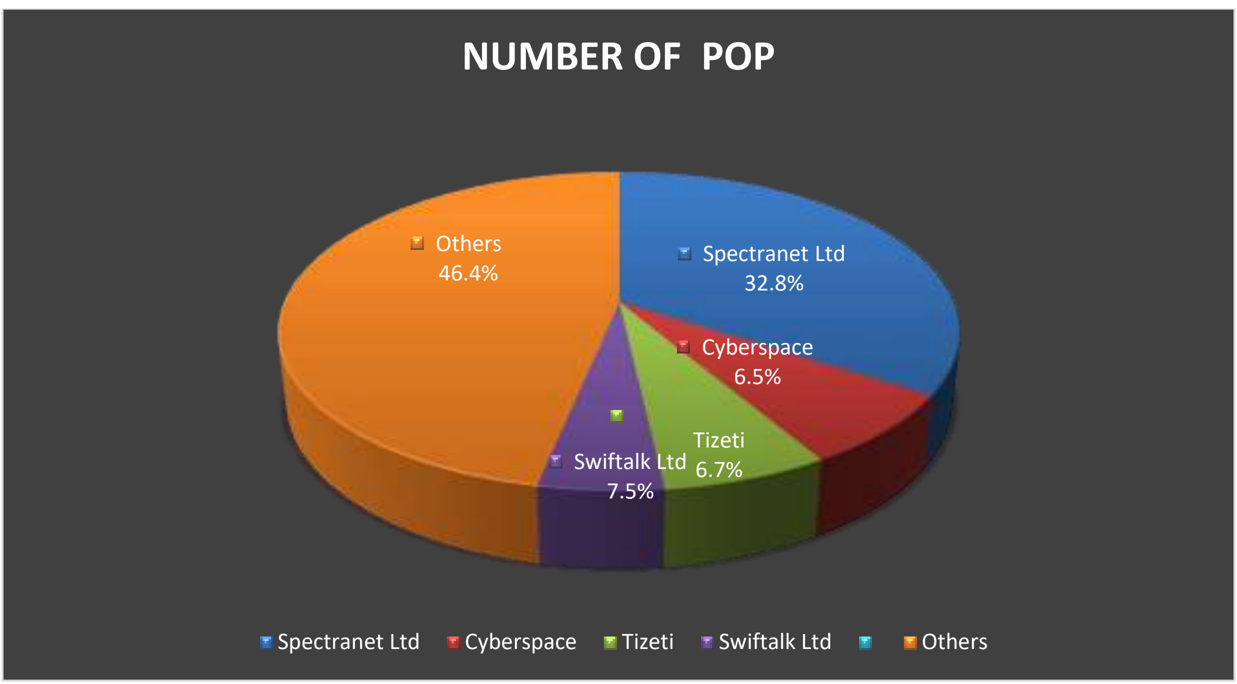

Fig 1: The chart below indicates the four (4) ISPs with highest percentage of PoP

2. **Location of Internet Service Providers:**

Internet Service Providers (ISPs) in Nigeria are concentrated mostly in Lagos and Abuja. This can be attributed to the higher business opportunities and dynamic economic nature of these locations.

3. **Installed Subscriber Capacity**

In this category, Inq. Digital Ltd had the largest Installed capacity of 12,944,796Mbps, followed by Mainone Ltd, Spectranet Ltd, Arif Investment Nigeria Ltd and Galaxy Backbone Ltd with 4,960,000Mbps, 520,000Mbps, 200,000Mbps and 200,000 Mbps respectively. IP Express Ltd, Priority Communications Ltd and CITCC had the lowest installed capacity with 4-10Mbps, 2Mbps and 1Mbps respectively.

4. **Operator Bandwidth Capacity**

Inq. Global Ltd had the largest bandwidth capacity with 15,728,640Mbps (equivalent to 15.7Tbps/15,700Gbps), followed by MainOne Ltd and IPNX Nigeria Ltd with up to 4.96Tbps (4960Gbps) and 4.7Tbps (4700Gbps) respectively as at December 2022.

5. **Access Speed being offered:**

As at December 2022, the downlink speed offered by different operators varied depending on their mode of deployment, the operators' business model and the infrastructure used for deployment. There were low, medium and high access speed deployments as illustrated below.

i. **The low access** speed categories ranged from 256Kbps-5Mbps. In this category Mobitel Ltd, Tizeti Ltd and Triple Logic Ltd recorded the highest speed of up to 5Mbps. Coz Internet Ltd, Inq. Digital Nigeria Ltd, NetAccess Ltd and Syscodes Ltd recorded the lowest speed with 1Mbps.

ii. **The medium access** speed categories were 10Mbps – 25Mbps. Layer3 Ltd and CITCC Ltd recorded the highest speed with 24.08Mbps and 24Mbps respectively followed by Comternet Ltd, Ejalet Ltd, Gifra Ltd and IP2Air Ltd with 20Mbps each. 5M Ltd, Backbone Connectivity Ltd, Connect & Surf Ltd, Drausnet Ltd, Electronic Connections Ltd and Futurecom Ltd amongst others recorded the lowest in this category with up to 10Mbps.

iii. **The high access** speed categories were 50Mbps – 350Gbps. Ngcom Ltd and Nkponani Ltd offered the highest speed with up to 15Gbps, followed by AFR-IX Data Communications Ltd 10Gbps. The lowest in this category include Arrow Fast Ltd, Wavetek Ltd and Syscomptech Ltd with 64Mbps, 72Mbps and 75Mbps respectively.

C. SUBSCRIBER & SERVICES DATA:

1. Active Fixed Wired Internet Subscriptions Fibre to The Home/Building Subscriptions (FTTH), Terrestrial and Other Fixed Wired Internet Subscriptions

1a. Fibre to The Home/Building Subscriptions (FTTH)

FTTH subscriptions recorded **25,707** subscriptions in December 2022 from **18,590** subscriptions in December 2021 indicating an increase of 38.3% in the period under review. IPNX Ltd recorded a total of 13,074 subscriptions out of 25,707 subscriptions, accounting for 50.9% of the subscriptions made in this category.

1b. Terrestrial and Other Fixed Wired Internet Subscriptions

A comparative analysis of the submissions made in this category from Table 3 below shows an increase from **22,725** subscriptions recorded in **December, 2021** to **29,538** subscriptions in **December, 2022** indicating an increase of **30%.** Tizeti Networks Limited recorded the highest figure with **20,558** subscriptions which accounted for **69.6%** of this segment in 2022, while Alfa O and O Ventures Ltd, MainOne Ltd and NgCom Ltd had **3,028, 1,877** and **1,693** subscriptions respectively, indicating a percentage of **10.1%, 6.4%** and **5.7%** respectively.
ConnectFocus Ltd, Trefoil Ltd and Ejalet Tech Services Ltd recorded the lowest in this category with one (1) subscription each.

1c. Fixed wired subscription:

In summary the Fixed wired subscription is a combination of terrestrial & other subscriptions **(29,538)** and FTTH subscriptions **(25,707)** which stood at **55,245** as at December 2022 as reported by service providers.

2. Total Number of Wireless Internet Subscriptions (Satellite, Radio and Others)

During the period under review, the total number of wireless subscriptions as indicated in the Table above decreased from **164,774** as at December, 2021 to **153,367** in December 2022. In this category, Spectranet Ltd with the highest number, **106,307** accounted for **69.3%** of the subscriptions. Priority Communications Ltd recorded the least figure with One (1) subscription.

3. Number of Users by Internet Speed

As at December 2022, out of a total of **412,659** users via ISPs, **5,944** users subscribed to speeds between **256Kbps-2Mbps**, representing **1.4%** of the total user base; **77,254** users between **2–10Mbps,** representing **18.7%** of the total user base, while **329,461** subscriptions in the **10mbps & above** category, accounting for **79.9%** of the total.

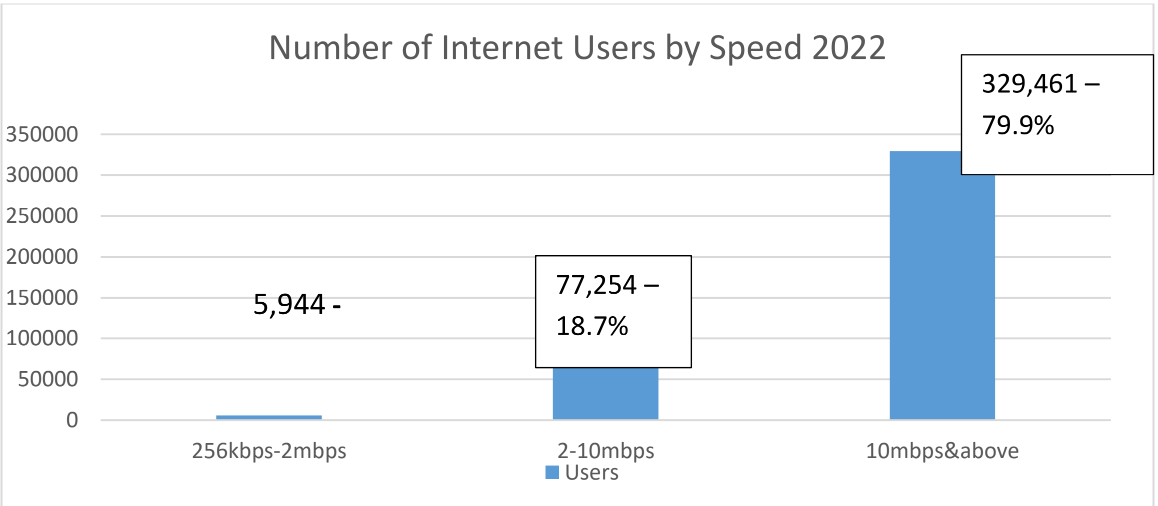

Figure 2: Speed of Internet as delivered to subscribers 2022

D. FINANCIAL DATA – ISP SEGMENT (December 2022)

1a. CAPEX- Local Investments in the segment:

CAPEX reported by ISPs in 2021 stood at **₦ 5,243,381,710.22** (Five Billion, Two Hundred and Forty Three Million, Three Hundred and Eighty One Thousand, Seven Hundred and Ten Naira, Twenty Two kobo.

1b. Operating Cost

The Operating Cost for ISPs recorded in 2022 was **₦ 71,200,884,440.55** (Seventy One Billion, Two Hundred Million, Eight Hundred and Eighty-Four Thousand, Four Hundred and Forty Naira Fifty Five Kobo Only).

1c. Revenue

As at December 2022, a total sum of **₦ 92,079,251,596.26** (Ninety Two Billion, Seventy Nine Million, Two Hundred and Fifty One Thousand, Five Hundred and Ninety Six Naira, Twenty Six Kobo Only) was generated by ISP licensees as revenue.

E. STAFF PROFILE:

As at December **2022**, the number of staff of ISP operators increased to **4,481** from **3,274** recorded in **2021**. This indicates an increase of **36.9%** in the work force comprising of **3,427** male and **1,054** female staff. A further breakdown reveals that **4,430** of the staff are Nigerians, while 51 are expatriates.

F. SUMMARY OF ISP MARKET SEGMENT

1. **Active Internet Subscriptions:**
   There is an increase in Active Subscriptions of **16.1%** between December 2021 and December 2022 with **206,089** in 2021 as against **208,612** subscriptions in 2022.
   Spectranet Nigeria Ltd had the highest figure with **107,018** which accounted for **51.3%** of subscriptions followed by Tizeti Ltd and Astramix Ltd with **20,558** and **15,040** subscriptions respectively.

2. **Fixed Wired Internet subscription:**
   In December 2022, the number of users per Fixed Wired Internet subscription increased to **55,245** from **41,315** subscriptions recorded in 2021, indicating a percentage increase of 33.7%. Tizeti Networks Ltd recorded the highest figure with **20,558** which accounted for 37.2% of Fixed Wired Internet Subscriptions in 2022.

3. **Fixed Wireless Internet subscription:**
   The total number of Wireless Internet Subscriptions decreased from **164,774** as at December, 2021 to **153,367** in December 2022 indicating a decrease of **7%**. In this category, Spectranet Ltd recorded the highest number of 106,307 which accounts for 69.3% of the subscriptions. Priority Communications Ltd recorded the least figure with just One (1) subscription.

4. **Point of Presence (PoPs):** The PoPs within the period increased to **1,977** as at December, 2022 from **1,843** PoPs recorded in December, 2021 indicating an increase of **7.2%**. Spectranet had the highest number of PoPs with **649**, indicating 32.8% of the PoPs.

5. **Staff composition:** Total number of employees increased from **3,274** in December 2021 to **4,481** recorded in December 2022, indicating **36.9%** increase in the workforce of the Internet Service Providers.

CHAPTER FIVE
ANALYSIS OF 2022 YEAR END SUBSCRIBER / NETWORK DATA– (COLLOCATION AND INFRASTRUCTURE SHARING LICENSEES)

A. NETWORK DATA:

The Commission received submissions from Licensees for the 2022 Year End Subscriber/Network Data for Operators which provided ancillary telecom services for the Collocation and Infrastructure Sharing segment other than Mobile.

These Operators provide telecommunications operations across the thirty-six (36) states and in at least each state of the geopolitical zones of the country.

B. INFRASTRUCTURE DEPLOYMENT (MAST AND TOWERS):

1. **Number of Towers:** As at December, 2022 the total Towers owned by Collocation and Infrastructure Sharing Licensees was **34,862.** The breakdown of the towers according to each Operator is as shown below:

S/N	COLLOCATION COMPANIES	NO. OF SITES
1	Emerging Markets Services	192
2	Airtel Networks Limited	61
3	ATC Wireless Infrastructure Limited	7,563
4	Alliance Towers Limited	46
5	Eastcastle Infrastructure Limited	76
6	Globacom Limited	8,742
7	IHS Nigeria Limited	16,853
8	MTN Communications Nigeria PLC	565
9	PAN African Tower Limited	763
10	Merit Telecoms Limited	1
	TOTAL	34,862

Table 1: Breakdown of Towers per Operator 2022

2. **<u>Market Share of Collocation & Infrastructure Sharing Licensee:</u>** As at December, 2022 the total Market share of Collocation and Infrastructure Sharing Licensees illustrates that the IHS Nigeria Limited own 48% of the Towers and has dominance showing in this market segment compared to other licensees.

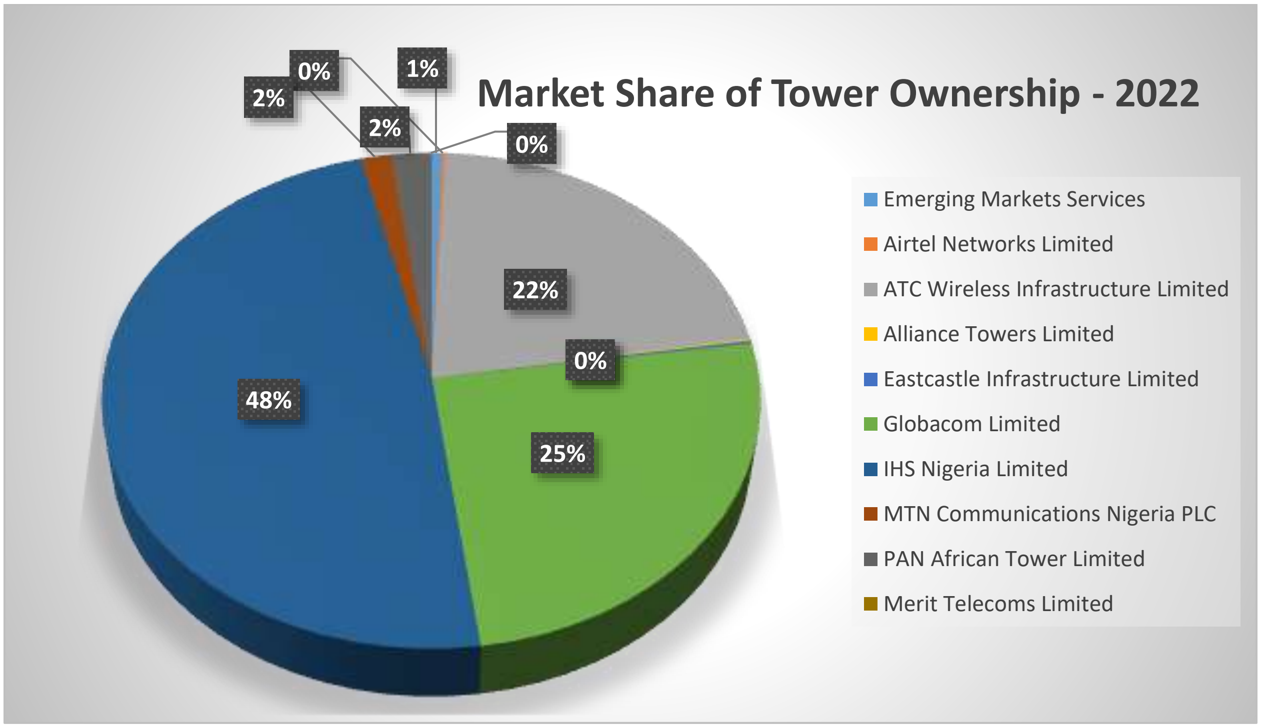

Figure 1: Market Share of Collocation & Infrastructure Sharing Licensee – December 2022

C. <u>FINANCIAL DATA - COLLOCATION & INFRASTRUCTURE SHARING (December 2022)</u>

1. **<u>CAPEX- Local Investments in the segment</u>**: CAPEX expenditure was recorded at **₦ 326,949,832.00** as of December 2022.

2. **<u>Operating Cost:</u>** Similarly, the total Operating cost as of December 2022 recorded based on submissions made by operators was **₦ 3,183,579,969.37**

3. **<u>Revenue:</u>** The total Revenue as of December 2022 for the collocation and infrastructure sharing licensees was **₦ 3,294,738,734.59**

D. <u>STAFF PROFILE</u>

As at December, 2022 the total staff strength of Collocation and Infrastructure Sharing Operator Category stood at **1,762** staff. In record, Nigerian staff were **1,395** Male and **314** Female while Expatriate staff base was **52** Male and **1** Female.

CHAPTER SIX

ANALYSIS OF 2022 YEAR END SUBSCRIBER / NETWORK DATA FOR VALUE ADDED SERVICE (VAS) OPERATORS

A. INTRODUCTION

The Value-Added Service licensees provide ancillary telecom services such as Content Services Using Short Code Numbers, Mobile Electricity Service, Unstructured Supplementary Service Data (USSD), SMS Service, Mobile Banking, Enterprise Bulk Messaging, Transactional Service, Electronic Airtime Distribution, Call Ring Back Tone/Entertainment, and Special Numbering. These licensees also provide telecommunications services across the thirty-six (36) states, and in at least each state of the geopolitical zones of the country. Twenty – Six (26) licenses responded which are listed below.

1. MNO VAS Nigeria Limited
2. Terragon Limited
3. Interconnect ClearingHouse Nigeria Limited
4. VastitudeTechnologies Limited
5. TXT Light Power Solutions Limited
6. Payvantage Limited
7. Avyra Systems Limited
8. HML Consulting Limited
9. Digiline Solution Limited
10. Information Secure Limited
11. Novaji Introserve Nig Ltd
12. CedarView Communiations Limited
13. Cowrie Integarted Systems Limited
14. Interra Networks Limited
15. Interra Networks Limited
16. Interra Networks Limited
17. Qrious VAS Limited
18. Telcovas Solutions & Services Limited
19. IP Integrated Solution Limited
20. Alvoice Solutions Limited
21. Capivas Africa Limited
22. Cloud Integrated Limited
23. Comviva Technologies Nigeria Limited
24. Tpay Telecom Services Limited
25. Infobip Nigeria Limited.
26. Creditswitch Limited

B. NETWORK STATISTICS:

Based on the available data, the total number of active subscriptions to the various Value Added Services by the end of year 2022 stood at Five Million Five Hundred and Eight – Five Thousand, Six Hundred and Fifty subscribers (5,585,650), signifying a 141.18 % increase from Two Million, Three Hundred and Fifteen Thousand, Nine Hundred and Forty **(2,315,940)** recorded in 2021.

2021		2022	
Installed Capacity	**Active Subscriptions**	**Installed Capacity**	**Active Subscriptions**
12,005,000.00	2,315,940.00	12,005,000.00	5,585,650.00

Table 1: Total Number of Installed Capacity and Active Subscriptions 2021 - 2022

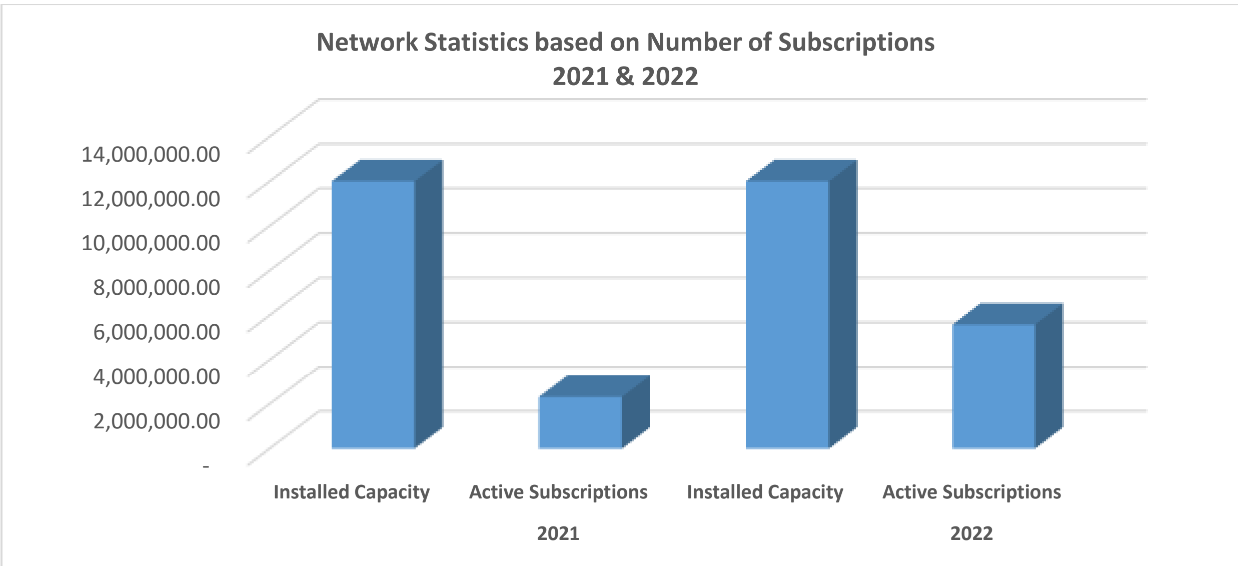

Figure 1: Installed Capacity and Active Subscriptions 2021 – 2022

C. FINANCIAL DATA – VAS SEGMENT (December 2022)

1a. CAPEX- Local Investments in the segment: The Domestic Investment (CAPEX) figure reported was ₦417, 336,278.14 as at end of Year 2022.

1b. Operating Cost: The total **Operating cost** incurred by the Licensees as at the end of December 2022 was ₦14,914,146,598.

1c. Revenue: The total revenue generated by VAS licensees in Year 2022 stood at ₦40,742,900,243.50.

D. STAFF PROFILE:

As at December, 2022 the total staff strength of VAS market segment stood at **560** staff. In record, Nigerian staff were 551 comprising of 385 Male and 166 Female while the Expatriate staff base reported 9 Male and no Female in record.

CHAPTER SEVEN

ANALYSIS OF 2021 YEAR END SUBSCRIBER / NETWORK DATA FOR OTHER OPERATORS

A. INTRODUCTION

These "Other Operators" referred to in the report provide ancillary telecom services such as Long-Distance Service Operators, Automated Vehicle Tracking services Interconnect Exchange, Metropolitan Fiber License Operators, International Data Access, Sales & Installation. These licensees also provide telecommunications services across the thirty-six (36) states, and in at least each state of the geopolitical zones of the country.

B. INFRASTRUCTURE DEPLOYMENT

1. **Long Distance Cable Network (km);**

As at December, 2022 the total Long Distance cable deployed by Operators in this category was 6,776.2km. A summary of this breakdown is seen below;

i. Interconnect Clearing House Limited recorded 3,526km,
ii. Telko Managed Services Limited recorded 1,185km,
iii. WIOCC Nigeria Limited recorded 713km,
iv. Layer3 Limited recorded 702.1km,
v. Backbone Connectivity Network (Nigeria) Limited recorded 549.1km and
vi. O'odua Infraco Resource Limited recorded 100km.

2. **Fibre Optic Network (km);**

As at December, 2022 the total Fibre Optic Network deployed (leased and owned) by Other Operators was 7,816.50km. A breakdown of Fibre Optic deployment is seen below;

i. Global Independent Connect Limited recorded 5,734km,
ii. Bitflux Communications Limited - 120km,
iii. Breeze Micro Limited - 55km,
iv. Interconnect Clearing House Limited - 42.5km,
v. Nationwaves Telecom Nigeria Limited 20km,
vi. Backbone Connectivity Network (Nigeria) Limited recorded 549.1km,
vii. Layer3 Limited recorded 300km,
viii. O'odua Infraco Resource Limited recorded 100km,
ix. Aldreda Fields Limited recorded 73km,
x. Telko Managed Services Limited recorded 34.7km,
xi. Solid Interconnectivity Services Limited recorded 25km and
xii. Analytiq Telecom Solutions Limited 762.2km.

3. **Number of Trunks in use (E1):**

The total number of E1 in use by Operators as at the end of Year 2022 was 6,229.5 reported by operators.

4. **Number of Gateways:**

   The total Number of Gateways in use as at year 2022 based on submissions by service providers in this category was 53.

   i. Interconnect Clearing House Nigeria Limited reported 21;
   ii. Bitflux Communications Limited reported 3;
   iii. Analytiq Telecom Solutions Limited – 2,
   iv. Upland Consulting Nigeria Limited – 2,
   v. Amics Technologies Limited – 2,
   vi. Routelink Integrated Systems Limited – 16,
   vii. Solid Interconnectivity Services Limited – 2,
   viii. Telko Managed Services Limited – 1,
   ix. Realife Telecommunications Limited – 1,
   x. Layer3 Limited – 2, and
   xi. Telnia Limited -1 number of the Gateways.

5. **Subscriber Data:**

   The Subscriber Data for Operators in this market segment indicate varying Subscriber Matrix due to the different Service offerings and licenses held by each of the Operator. Hence, the basis of analysis is unique for each licensed Operator.

C. FINANCIAL DATA – OTHER OPERATORS (December 2022)

1a. CAPEX- Local Investments in the segment: The Domestic Investment (CAPEX) figure reported was ₦524,127,418.14 as at end of Year 2022.

1b. Operating Cost: The total **Operating cost** incurred by the Licensees as at the end of December 2022 was ₦6,015,736,081.20.

1c. Revenue: The total revenue generated by VAS licensees in Year 2022 stood at ₦5,596,919,805.94.

D. STAFF PROFILE:

As at December, 2022 the total staff strength of Other Operator's market segment stood at **993** staff. In record, Nigerian staff were 954 comprising of 757 Male and 197 Female while the Expatriate staff base reported 36 Male and 3 Female.

APPENDIX A: POINTS OF PRESENCE IN 2022 (PoPS)

S/N	Operator	Number of Points of Presence (POP)
1	5M Telecom Ltd	13
2	8ight Unique Global Telecommunication Ltd	3
3	Access and Content Ltd	2
4	AFR-IX Data Communications Ltd	1
5	Alfa O and O Ventures Ltd	15
6	Arif Investment Nig Ltd	1
7	Arrow Fast Ltd	3
8	Astramix Ltd	5
9	Backbone Connectivity Network Ltd	2
10	Bat Computer Technologies Ltd	8
11	Brainshare Technologies & Services Nig Ltd	24
12	BridgeOne Telecoms Ltd	2
13	CBC Emea Ltd	1
14	Chapman Computers Nigeria Ltd	1
15	CITCC Nigeria Ltd	1
16	Ciudad Infrastructure Ltd	25
17	Cleveland Technology Ltd	1
18	Cobranet Ltd	84
19	Comternet World Ltd	6
20	Connect Surf and Smile Ltd	3
21	Coquina Software Ltd	10
22	Coscharis Technologies Ltd	1
23	Coverage Broadband Ltd	1
24	Coz Internet Ltd	1
25	Cross Atlantic Cables Ltd	1
26	Cyberspace Ltd	129
27	Dimension Data Ltd	9
28	Dotmac Technologies Ltd	27
29	Drausnet Ltd	3
30	Ejalet Technologies Ltd	1
31	Ekovolt Telco Ltd	11
32	Electronic Connections Ltd	6
33	Estream Ltd	21
34	Excelsimo Networks Ltd	4
35	Fibrehub Internetworking Services Ltd	1
36	Futurecom Ltd	1
37	Galaxy Backbone Ltd	2
38	GIFRA Wireless Network Ltd	2
39	Gutti Global Solutions Ltd	2
40	Hoop Telecoms Ltd	9
41	Hyperia Ltd	4
42	IDS Africa Ltd	3

43	Imbil Telecom Solutions Ltd	3
44	I-Net World Ltd	6
45	Information Connectivity Solutions Ltd	30
46	Inq. Digital Nigeria Ltd (formerly Vodacom)	90
47	Internet Solutions Nigeria Ltd	30
48	Internetsional Technologies Ltd	4
49	Interra Network Ltd	3
50	Interweb Satcom Ltd	3
51	Iotech Global Hub Ltd	4
52	IP Express Ltd	30
53	IP2AIR Networks Ltd	13
54	IPNX Nigeria Ltd	53
55	ITX Telecoms Ltd	9
56	I-World Networks Ltd	2
57	Juniper solutions Ltd	6
58	Kajab Engineering Services Ltd	3
59	KKON Technologies Ltd	5
60	Layer3 Ltd	2
61	Liquid Intelligent Technology Ltd	6
62	Main One Ltd	51
63	Megamore Wireless Broadband Ltd	8
64	Mobitel Ltd	2
65	Multi Dimensions Technology Nig Ltd	1
66	Nanocom International Ltd	15
67	Netaccess Ltd	1
68	Ngcom Ltd	10
69	Nkponani Ltd	1
70	Odua Telecoms Ltd	2
71	One Network Integrated Links Ltd	1
72	Orange Business Ltd	2
73	Pear System Development Company Ltd	5
74	Phase 3 Telecom Ltd	10
75	Platinum Index Data Ltd	9
76	Priority Communications Ltd	1
77	Proline Technology Ltd	1
78	Radical Technology Network Ltd	6
79	Ratel Plus Ltd	2
80	Sea Net Technologies Ltd	1
81	Skymax Ltd	16
82	Smart City Technology Company Ltd	3
83	Smooth Multi Service Platform Ltd	1
84	Spectranet Ltd	649
85	STL Fiberco Ltd	2
86	Suburban Broadband Ltd	6
87	Swifttalk Ltd	149

88	Syscodes Communications Ltd	24
89	Syscomtech Communication Ltd	1
90	Taprap Nigeria Ltd	1
91	Tecpoint Global Solutions Ltd	5
92	Tehilah Base Digital Ltd	1
93	Telequip & Digital Ltd	1
94	Teleweb Services Ltd	1
95	Telserve Networks Ltd	6
96	Tizeti Ltd	133
97	Trakatel Ltd	5
98	Tranter IT Infrastructure Services Ltd	2
99	Trefoil Networks Ltd	2
100	Tripple Logic Telecomunication Ltd	6
101	VDT Communications Ltd	59
102	Wavetek Nig. Ltd	1
103	Winrock Nigeria Ltd	21
104	Zeta-web Nigeria Ltd	1
	TOTAL	1,977

Table 1: Points of Presence in 2022 (PoPs)

APPENDIX B:

LOCATION OF INTERNET SERVICE PROVIDERS (ISPs)

S/N	Operator	Location
1	5M Telecom Ltd	Enugu
2	8ight Unique Global Telecommunication Ltd	Abuja
3	Access and Content Ltd	Abuja
4	AFR-IX Data Communications Ltd	Abuja
5	Alfa O and O Ventures Ltd	Lagos
6	Arif Investment Nig Ltd	Abuja
7	Arrow Fast Ltd	Ebonyi/Kogi
8	Astramix Ltd	Lagos
9	Backbone Connectivity Network Ltd	Abuja
10	Bat Computer Technologies Ltd	Lagos
11	Beaconade Network Ltd	Lagos
12	Brainshare Technologies & Services Nig Ltd	Lagos
13	BridgeOne Telecoms Ltd	Lagos
14	CBC EMEA Ltd	Lagos
15	Chapman Computers Nigeria Ltd	Plateau
16	CITCC Nigeria Ltd	Abuja
17	Ciudad Infrastructure Ltd	Lagos
18	Cleveland Technology Ltd	Abuja
19	Cobranet Ltd	Lagos
20	Comternet World Ltd	Akwa Ibom
21	Connect Surf and Smile Ltd	Akwa Ibom

22	Content Oasis Ltd	Abuja
23	Coquina Software Company Ltd	Lagos
24	Coscharis Technologies Ltd	Lagos
25	Coverage Broadband Ltd	Abuja
26	Coz Internet Ltd	Lagos
27	Cross Atlantic Cables Ltd	Lagos
28	Cyberspace Ltd	Lagos
29	Dimension Data Ltd	Lagos
30	Dotmac Technologies Ltd	Abuja
31	Drausnet Ltd	Lagos
32	Ejalet Tech Ltd	Lagos
33	Ekovolt Telco Ltd	Lagos
34	Electronic Connection Ltd	Kano
35	Estream Ltd	Lagos
36	Excelsimo Networks Ltd	Lagos
37	Fastfeet Ltd	Lagos
38	Fibrehub Internetworking Services Ltd	Lagos
39	Futurecom Ltd	Lagos
40	Galaxy Backbone Ltd	Abuja/Lagos
41	Gifra Wireless Network Ltd	Abuja
42	Gutti Global Solutions Ltd	Borno
43	Hoop Telecoms Ltd	Lagos
44	Hyperia Ltd	Lagos
45	IDS Africa Ltd	Lagos
46	Imbil Telecom Solutions Ltd	Lagos
47	I-Net World Ltd	Abuja
48	Information Connectivity Solutions Ltd	Lagos
49	Inq. Digital Nigeria Ltd (formerly Vodacom)	Lagos
50	Internet Solutions Nigeria Ltd	Lagos
51	Internetsional Technologies Ltd	Oyo
52	Interra Network Ltd	Abuja
53	Interweb Satcom Ltd	Abuja
54	Iotech Global Hub Ltd	Lagos
55	IP Express Ltd	Lagos
56	IP2AIR Networks Ltd	Imo
57	IPNX Nigeria Ltd	Lagos
58	ITX Telecoms Ltd	Abuja
59	I-World Networks Ltd	Lagos
60	Juniper solutions Ltd	Lagos
61	Kajab Engineering Services Ltd	Lagos
62	KKON Technologies Ltd	Lagos
63	Layer3 Ltd	Abuja
64	Liquid Intelligent Technology Ltd	Lagos
65	Main One Company Ltd	Lagos
66	Megamore Wireless Broadband Ltd	Kano

67	Mobitel Ltd	Lagos
68	Multi Dimensions Technology Nig Ltd	Lagos
69	Nanocom International Ltd	Abuja
70	Netaccess Ltd	Plateau
71	Ngcom Ltd	Lagos
72	Nkponani Ltd	Lagos
73	Odua Telecoms Ltd	Oyo/Osun
74	One Network Integrated Links Ltd	Abuja
75	Orange Business Communications Ltd	Lagos
76	Pear System Development Company Ltd	Edo
77	Phase 3 Telecom Ltd	Abuja
78	Platinum Index Data Ltd	Lagos
79	Priority Communications Ltd	Lagos
80	Proline Technology Ltd	Lagos
81	Radical Technology Network Ltd	Lagos
82	Ratel Plus Ltd	Kano
83	Sea-Net Technologies Ltd	Lagos
84	Sentient Networks Ltd	Lagos
85	Skymax Integrated Networks Ltd	Lagos
86	Smart City Technology Company Ltd	Lagos
87	Smooth Multi Service Platform Ltd	Lagos
88	Spectranet Nigeria Ltd	Lagos, Ogun, Nasarawa, Port Harcourt, Abuja & Ibadan
89	STL Fiberco Ltd	Abuja
90	Suburban Broadband Ltd	Abuja
91	Swifttalk Ltd	Lagos
92	Syscodes Communications Ltd	Lagos
93	Syscomtech Communication Ltd	Lagos
94	Taprap Nigeria Ltd	Lagos
95	Tecpoint Global Solutions Ltd	Lagos
96	Tehilah Base Digital Ltd	Lagos
97	Telequip & Digital Ltd	Abuja
98	Teleweb Services Ltd	Lagos
99	Telserve Networks Ltd	Lagos
100	Tizeti Ltd	Lagos
101	Trakatel Ltd	Enugu/Lagos/Abuja
102	Trefoil Ltd	Abuja
103	Tripple Logic Telecomunication Ltd	Lagos
104	VDT communications Ltd	Lagos
105	Wavetek Nig. Ltd	Lagos
106	Winrock Ltd	Abuja
107	Zeta-web Nigeria Ltd	Lagos

Table 2: Location of Internet Service Providers (ISPs)

APPENDIX C:

ISP FIBRE TO THE HOME/BUILDING SUBSCRIPTIONS (FTTH)

S/N	Operator	2021	2022
1	8ight Unique Global Telecommunication Ltd	4	15
2	Access and Content Ltd	23	0
3	Backbone Connectivity Network Ltd	0	340
4	Brainshare Technologies & Services Nig Ltd	757	0
5	CBC Emea Ltd	1	1
6	CITCC Nigeria Ltd	1	3
7	Ciudad Infrastructure Ltd	92	450
8	Clear Sky Broadband Ventures Ltd	5	0
9	Cobranet Ltd	96	79
10	Content Oasis Ltd	2	0
11	Coscharis Ltd	0	10
12	Cyberspace Ltd	0	27
13	Dimension Data Ltd	0	275
14	Dotmac Technologies Ltd	0	1,816
15	Estream Ltd	17	0
16	Excelsimo Networks Ltd	0	159
17	Fibrehub Internetworking Services Ltd	215	382
18	Galaxy Backbone Ltd	325	534
19	Gutti Global Solutions Ltd	1	0
20	Hyperia Ltd	0	1,303
21	IDS Africa Ltd	40	68
22	Imbil Telecom Solutions Ltd	0	15
23	iNet World Ltd	3	4
24	Internetsional Technologies Ltd	1	16
25	IP Express Ltd	41	194
26	IPNX Nigeria Ltd	15,689	13,074
27	Juniper solutions Ltd	15	14
28	Layer3 Ltd	266	608
29	Nanocom International Ltd	2	2
30	Phase 3 Telecom Ltd	0	152
31	Platinum Index Data Ltd	15	88
32	Radical Technology Network Ltd	25	343

33	Sentient Ltd	0	117
34	Smart City Technology Company Ltd	15	481
35	Smooth Multi Service Platform Ltd	0	45
36	Spectranet Nigeria Ltd	539	711
37	STL Fiberco Limited	0	127
38	Suburban Broadband Ltd	0	3,911
39	Syscomtech Communication Ltd	0	15
40	Teleweb Services Ltd	133	129
41	Telserve Networks Ltd	1	25
42	VDT Communications Ltd	190	44
43	Winrock Ltd	76	130
	Total	18,590	25,707

Table 3: ISP Fibre to The Home/Building Subscriptions (FTTH)

APPENDIX D:

NUMBER OF ISP USERS PER FIXED WIRED (TERRESTRIAL & OTHERS) INTERNET SUBSCRIPTIONS

S/N	Operator	2021	2022
1	21st Century Technologies Ltd	2,590	**
2	5M Telecom Ltd	299	0
3	8ight Unique Global Telecommunication Ltd	31	0
4	Access and Content Ltd	23	29
5	AFR-IX Data Communications Ltd	0	4
6	Alfa O and O Ventures Ltd	0	3,028
7	Arif Investment Nig Ltd	80	50
8	Bat Computer Technologies Ltd	8	0
9	Beaconade Network Ltd	0	20
10	Brainshare Technologies & Services Nig Ltd	700	900
11	CBC Emea Ltd	1	0
12	Chapman Computers Nigeria Ltd	0	20
13	CITCC Nigeria Ltd	1	0
14	Cleveland Technology Ltd	0	45
15	Cobranet Ltd	0	165
16	ConnectFocus Ltd	0	1
17	Coverage Broadband Ltd	0	2
18	Cyberspace Ltd	11	0

19	Dotmac Technologies Ltd	32	0
20	Ejalet Tech Ltd	0	1
21	Fastfeet Ltd	0	145
22	Fibrehub Internetworking Services Ltd	290	0
23	Gifra Wireless Network Ltd	0	10
24	Hoop Telecoms Ltd	0	287
25	Inq. Digital Nigeria Ltd (formerly Vodacom)	127	199
26	Internetsional Technologies Ltd	33	0
27	Interweb Satcom Ltd	320	40
28	IP Express Ltd	707	0
29	ITX Telecoms Ltd	26	4
30	Juniper solutions Ltd	6	0
31	Kajab Engineering Services Ltd	0	37
32	Khal Communications Ltd	25	0
33	Layer3 Ltd	106	158
34	Liquid Intelligent Technology Ltd	0	2
35	MainOne Ltd	0	1,877
36	Nanocom International Ltd	4	7
37	Netaccess Communications Nigeria Ltd	17	17
38	Ngcom Ltd	0	1,693
39	Orange Ltd	0	145
40	Passage Telecommunications Nig Ltd	20	0
41	Platinum Index Data Ltd	200	0
42	Radical Technology Network Ltd	20	0
43	Smart City Technology Company Ltd	300	0
44	Syscodes Communications Ltd	50	3
45	Taprap Nigeria Ltd	0	85
46	Tecpoint Global Solutions Ltd	0	2
47	Tehilah Base Ltd	0	3
48	Telserve Networks Ltd	1	0
49	Tizeti Network Ltd	16,621	20,558
50	Trefoil Ltd	0	1
51	Winrock Nigeria Ltd	76	0
	Total	22,725	29,538

Table 4: Number of Users Per Fixed Wired (Terrestrial & Others) Internet Subscriptions

APPENDIX E:

NUMBER OF ISP WIRELESS SUBSCRIPTIONS (SATELLITE, RADIO, AND OTHERS)

S/N	Operator	2021	2022
1	5M Telecom Ltd	299	323
2	8ight Unique Global Telecommunication Ltd	31	0
3	Arif Investment Nig Ltd	90	0
4	Arrow Fast Ltd	0	25
5	Astramix Ltd	0	15,040
6	Bat Computer Technologies Ltd	66	59
7	BridgeOne Telecoms Ltd	39	25
8	CBC Emea Ltd	38	398
9	Cobranet Ltd	3,397	3,151
10	Comternet World Ltd	63	86
11	Connect Surf and Smile Ltd	0	93
12	Content Oasis Ltd	0	22
13	Coquina Ltd	0	152
14	Coscharis Ltd	0	27
15	Coz Internet Ltd	180	125
16	Cross Atlantic Cables Ltd	0	8
17	Cyberspace Ltd	0	4,642
18	Dimension Data Ltd	679	503
19	Drausnet Ltd	0	26
20	Ekovolt Ltd	50	101
21	Electronic Connections Ltd	0	109
22	Estream Ltd	149	168
23	Excelsimo Networks Ltd	0	129
24	Futurecom Ltd	26	26
25	Galaxy Backbone Ltd	325	558
26	Galaxy Information Technology and Telecommunications Ltd	37	0
27	Gutti Ltd	0	13
28	Hoop Telecoms Ltd	0	974
29	IDS Africa Ltd	44	0
30	iNet World Ltd	54	38
31	Information Connectivity Solutions Ltd	581	403

32	Inq. Digital Nigeria Ltd (formerly Vodacom)	923	1,122
33	Internet Solutions Ltd	0	705
34	Internetsional Ltd	0	39
35	Interra Networks Ltd	0	3
36	Interweb Satcom Ltd	180	20
37	IOtech Global Hub Ltd	0	20
38	IP Express Ltd	0	727
39	IP2AIR Ltd	0	90
40	IPNX Ltd	0	557
41	ITX Telecoms Ltd	16	25
42	I-World Ltd	0	1,157
43	Juniper Solutions Ltd	105	107
44	KKON Tech Ltd	0	115
45	Layer3 Ltd	113	0
46	MainOne Ltd	0	0
47	Megamore Ltd	0	175
48	Multi Dimensions Ltd	0	3
49	Nanocom International Ltd	56	45
50	Ngcom Ltd	0	1,099
51	Nkponani Ltd	0	5
52	Odua telecoms Ltd	4	4
53	One Network Integrated Links Ltd	5	6
54	Orange Business Ltd	150	0
55	Passage Telecommunications Nig Ltd	20	0
56	Pear Ltd	0	68
57	Platinum Index Ltd	0	109
58	Priority Comm Ltd	0	1
59	Proline Technology Ltd	0	109
60	Radical Technology Network Ltd	422	3,821
61	Sea Net Ltd	0	24
62	Skymax Ltd	353	486
63	Spectranet Ltd	0	106,307
64	Swifttalk Ltd	0	421
65	Syscodes Communications Ltd	229	283
66	Syscomtech Communication Ltd	0	33
67	Tecpoint Global Solutions Ltd	0	91

68	Tehilah Base Digital Ltd	323	325
69	Telequip & Digital Ltd	0	121
70	Telserve Networks Ltd	20	0
71	Tizeti Network Ltd	152,386	0
72	Trakatel Ltd	105	152
73	VDT Communications Ltd	3,168	7,405
74	Wavetek	0	4
75	Winrock Ltd	0	38
76	Zeta-web Nigeria Ltd	48	321
	TOTAL	164,774	153,367

Table 5: Total Number of ISP Wireless Subscriptions (Satellite, Radio, and Others)