NIGERIAN COMMUNICATIONS COMMISSION

2023 SUBSCRIBER/NETWORK PERFORMANCE REPORT

POLICY, COMPETITION AND ECONOMIC ANALYSIS DEPARTMENT

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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 2023 Year End Subscriber/ Network Report for the period January–December 2023 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 contained in i – v above).

A. <u>BIRDS EYE VIEW OF THE TELECOMMUNICATION SECTOR</u>

The Telecommunications Sector in Nigeria has experienced remarkable growth over the years. This growth can be attributed to various indices driven by Regulatory reforms, increased investment and the adoption of advanced technologies since the liberalization of the Industry. The Sector in turn has had a significant impact on the economic development, digital inclusion, and access to various services in Nigeria.

An overview of the growth of the Telecommunications sector in Nigeria is as follows:

1. **Privatization and Liberalization**: One of the key milestones in the growth of the Nigerian telecom sector was the privatization and liberalization of the Industry circa 2001. This move ended the monopoly of the Nigerian Telecommunications Limited (NITEL) and opened the sector to private investment and competition.
2. **Mobile Telephony**: The introduction of mobile telephony services in Nigeria was a major catalyst for growth with Mobile Network Operators (MNOs) entering the market and offering affordable and accessible mobile services. The availability of MNOs made it easier for Nigerians to own and use mobile phones.
3. **Internet and Data Services**: The expansion of mobile internet services has significantly contributed to the growth of the telecom sector. With the advent of 3G, 4G, and now 5G networks alongside Internet Service Providers (ISPs), Nigerians have gained access to faster and more reliable internet services. The rise in smartphone usage has also driven data consumption.
4. **Increased Investment**: Telecommunication companies have made substantial investments in Foreign Direct Investment (FDI), infrastructure development, including the expansion of network coverage. These investments have played a crucial role in improving service quality and coverage.
5. **Regulatory Framework**: The Nigerian Communications Commission (NCC) has played a pivotal role in regulating the telecom sector, ensuring fair competition, and protecting consumer interests. The regulatory environment has encouraged investment and innovation.
6. **Digital Inclusion**: The telecom sector has contributed to digital inclusion in Nigeria, bringing connectivity to previously underserved areas and providing access to various digital services, including mobile banking, e-commerce, and e-government services.
7. **5G Rollout**: Nigeria successfully rolled out 5G technology in 2022. The deployment of 5G networks is expected to further enhance internet speeds and support emerging technologies like the Internet of Things (IoT).

B. SUMMARY OF INDUSTRY PERFORMANCE REPORT- 2023

1. **Telecoms Industry Active Subscriber Statistics** – The number of Active Subscribers increased from **222,571,568** subscriptions in 2022 to **224,713,710** active voice subscriptions as at December 2023. This is an increase of 2,142,142 subscriptions representing a **0.96%** growth 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, aggressive consumer acquisition drive, and competitive product offerings across all the networks.

2. **Teledensity –** Telephone density or teledensity is the number of telephone connections for every hundred individuals living within an area. This is calculated using the estimated national population figure against monthly telecoms subscribers' base. Nigeria's Teledensity **decreased** from 116.60% as at December 2022 to 103.66% by December 31st 2023 indicating a 11.10% loss.

   The decline in teledensity was due to the adjustment made by the Commission on the population figure used in calculating teledensity. The National Population Commission (NPC)'s projection of Nigeria's population stood at 216,783,381 as of 2022, replacing the previously used 2017 projection of 190 million inhabitants.

3. The number of **Internet Subscribers** increased from 154,847,901 subscription as at December 2022 to 163,838,439 Subscriptions as at December 2023 representing an increase of 5.81% and an added 8,990,538 subscription within the period under review.

4. **Broadband Penetration Rate –** declined from 47.36% as at December 2022 to 43.71% as at December 2023. However, Broadband Subscriptions increased from 90,398,960 subscriptions in December 2022 to 94,757,184 subscriptions as at December 2023. The decline noted in the broadband penetration rate is due to the adjustment made by the Commission on the population figure used in calculating the indicator as seen in (2) above.

5. **Data Usage in Terabytes** – There was an increase in the volume of data consumed as at the yearend December 2023 when compared with the year-end December 2022. The total volume of data consumed by subscribers increased to 713,200.62TB as at December 2023 from 518,381.78TB as at December 2022. This represents an increase of 37.58% in data consumption within the period. The increased data consumption is indicative of the increasing appetite and use for data by consumers

6. **Percentage of the population covered by mobile-cellular network** (2G, 3G and LTE/WiMAX 4G and 5G): 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 – **94.14%**
   ii. % of Population covered by 3G mobile- cellular network – **89.42%**
   iii. % of Population covered by LTE/WiMAX mobile- cellular network – **84.19%**
   iv. % of Population covered by at least (5G) Network – **11.80%**

C. INDUSTRY FINANCIAL REPORT

1. **Industry Financial Report–** This collation was based on the submissions received from responsive service providers in the industry and includes the following matrix as at December 2023;

   i. **CAPEX (Domestic Investment):** Nine Hundred and Ninety Billion, Five Hundred and Fifty Million, Six Hundred and Sixty One Thousand, Five Hundred and One Naira, Seventy Three Kobo **(₦990,550,661,501.73)**.

   ii. **Operating cost:** Three Trillion, One Hundred and Fifty Eight Billion, Four Hundred and Three Million, Seven Hundred and Sixty Seven Thousand, Three Hundred and Twenty Eight Naira, Forty Eight Kobo **(₦3,158,403,767,328.48)**.

   iii. **Revenue:** Five Trillion, Three Hundred and Three Billion, Five Hundred and Thirty Nine Million, One Hundred and Two Thousand, Six Hundred and Ninety Seven Naira, Ninety Three Kobo **(₦ 5,303,539,102,697.93)**

2023 YEAR END TELECOM PROVIDER'S FINANCIAL DATA IN NAIRA (₦)				
S/N	**CATEGORY**	**CAPEX**	**OPERATING COST**	**REVENUE**
1.	**GSM**	**983,180,390,000.00**	**2,515,454,790,000.00**	**4,012,411,230,000.00**
2.	**FIXED WIRED**	**60,000,000.00**	**214,750,471.30**	**273,010,222.21**
3.	**INTERNET SERVICE PROVIDER**	**3,915,271,993.27**	**96,808,672,141.58**	**89,806,249,295.90**
4.	**VALUE ADDED SERVICE**	**1,811,785,472.00**	**53,631,109,506.94**	**14,559,978,522.80**
5.	**COLLOCATION & INFRASTRUCTURE SHARING**	**293,567,381.00**	**457,434,555,744.08**	**1,144,647,323,946.63**
6.	**OTHER TELECOM OPERATORS**	**1,289,646,655.46**	**34,859,889,464.58**	**41,841,310,710.39**
	TOTAL	**990,550,661,501.73**	**3,158,403,767,328.48**	**5,303,539,102,697.93**

Table 1. Telecom Providers CAPEX (Domestic Investment), Operating Cost and Revenue – 2023

Please not that in Comparing the financial performance of the Market between year 2022 and 2023, the Market witnessed a rise in all financial segments of the market.

S/N	**Financial Indices**	**2022**	**2023**	**% Change**
1.	**CAPEX**	**785,771,028,960.36**	**990,550,661,501.73**	**26.06%**
2.	**Operating Cost**	**2,092,815,085,166.00**	**3,158,403,767,328.48**	**50.92%**
3.	**Revenue**	**3,856,026,156,380.29**	**5,303,539,102,697.93**	**37.54%**

Table 2. Analysis of the Telecom Providers CAPEX (Domestic Investment), Operating Cost and Revenue – 2023

iv. Capital Inflow (Foreign Direct Investment) into the Nigerian Telecoms Industry in Year 2023 was approximately One Hundred and Thirty Four Million, Seven Hundred and Fifty and Four Thousand, Eight Hundred and Nineteen US Dollars, Twenty-Seven Cents **(USD 134,754,819.27)** against Three Hundred and Ninety Nine Million, Nine Hundred and Five Thousand, Five Hundred and Thirty One US Dollars, Thirty Eight Cents **(USD 399,905,531.38)** as at year 2022 (Source CBN).

v. **Contribution to the Gross Domestic Product (GDP) –** Telecoms industry contribution to the Nigerian Gross Domestic Products increased from **13.55%** in the Fourth Quarter, 2022 to **14.00%** in the Fourth Quarter of 2023.

D. <u>INDUSTRY INFRASTRUCTURAL DEVELOPMENT</u>

Substantial telecom infrastructure deployment was recorded in 2023 by Telecoms providers, as indicated below:

1. The Total Number of Towers collated at December 2023 stood at **39,356** Towers. These include the Towers owned by TowerCos as well as Other Operators within the Telecoms ecosystem. A breakdown of the ownership of the Towers is indicated below:

S/N	Market Segment	No. of Towers
1.	Tower Cos	30,373
2	Mobile Operators	8,983
	Total No. of Towers	**39,356**

2. The operators also reported a total number of **137,992** Base Stations.
3. On-Land fibre optics deployment (not-leased) in Kilometres (Km) was reported as **83,254.50km**.
4. **Microwave** coverage recorded in Year 2023 stood at **300,226.06km**.
5. The total number of **Trunks in Use (E1)** in use by Operators as at the end of Year 2023 was **43,974** reported by operators.
6. A total number of **104 Gateways** in use in the telecom industry as at December 2023.

E. <u>STAFF HEAD COUNT IN THE INDUSTRY- 2023</u>

GSM	FIXED	ISP	VAS	C&I	OTHERS	TOTAL
7,212	268	5,589	813	1,574	2,426	17,882

Table 2: Staff Head Profile as at Year End 2023

The Total number of staff from responsive licensees as at Year end 2023 stood at 17,882. A breakdown of the staff categories is disaggregated in the report of each category.

CHAPTER TWO

ANALYSIS OF 2023 YEAR END SUBSCRIBER / NETWORK DATA– MOBILE AND VOIP MARKET SEGMENT

A. NETWORK DATA

1. **Base Stations for Mobile:** The Count of Base Stations deployed by Mobile Telecoms Operating Companies increased from 127,294 in December 2022 to 137,992 as at December, 2023 across all States of the Federation representing an increase of 8.4% from the previous year.

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

2a. Microwave Radio in (KM): As at December, 2023 the Mobile Operators had deployed a total of **299,976.06KM** of Microwave Radio Links as against the **288,947.48KM** of Microwave Radio Links reported for 2022. This is an increase of 3.82%.

	MICROWAVE RADIO (KM)	2022	2023
1.	MTN	80,074.59	70,778.00
2.	GLO	71,061.46	63,413.33
3.	AIRTEL	81,352.00	110,902.00
4.	EMTS	48,957.69	48,957.69
5.	SMILE	2,948.00	1,371.30
6.	NTEL	4,553.74	4,553.74
	TOTAL	288,947.48	299,976.06

Table 1: Microwave Radio by Operators in Year 2022-2023 (Microwave)

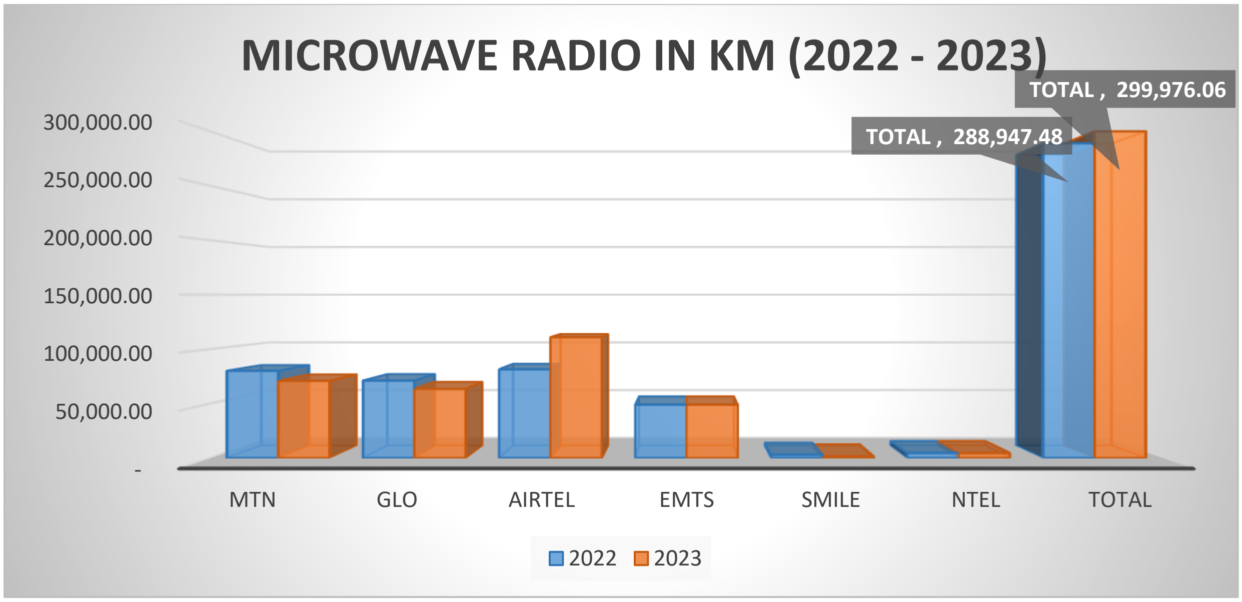

Figure 1. Microwave Radio in KM (2022 – 2023)

2b. <u>Trunks in Use</u>: MTN, AIRTEL, GLO, and EMTS have a total number of 15,896 Trunks (E1) in use as at December, 2023 indicating a decline from 41,395 Trunks (E1) reported at the end of December 2022 which indicates a 61.6% within the period under review.

In recent time, 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.

	TRUNKS (E1) IN USE	2022	2023
1.	MTN	10,783.00	4,723.00
2.	GLO	16,335.00	3,736.00
3.	AIRTEL	8,040.00	1,200.00
4.	EMTS	6,237.00	6,237.00
	TOTAL	41,395.00	15,896.00

Table 2: Trunks (E1) in Use by Operators in Year 2022-2023

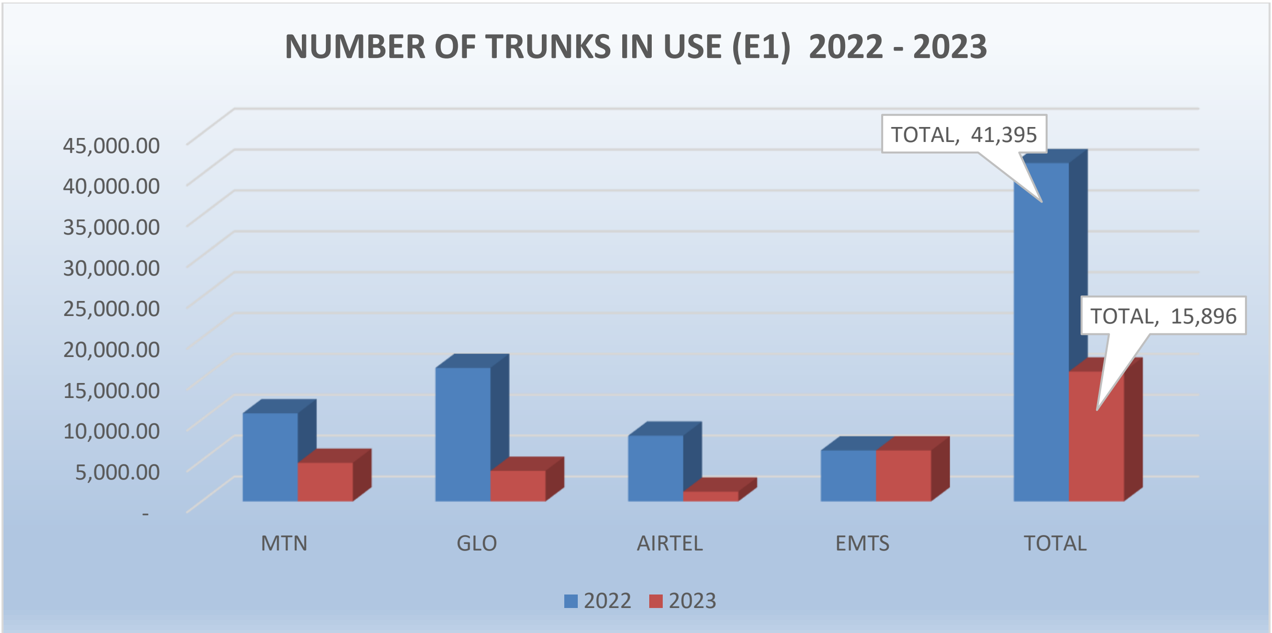

Figure 2. Number of Trunks (E1) in use (2022– 2023)

2c. <u>Gateways in Use</u>: MTN, GLO, AIRTEL, SMILE and NTEL have a total number of 62 Gateways in use as at December, 2023. A summary shows, MTN had 1; GLO - 3; AIRTEL - 16, EMTS – 39, SMILE -2 and NTEL -1.

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

1a. **<u>Subscriber Voice Data & Teledensity (All Segments):</u>** As at December, 2023 total active voice subscriptions for the entire market segments was **224,713,710** as against **222,571,568** recorded as at December, 2022. This indicates an increase of **0.96%** in 2023.

The Operators attributed the increase in subscriber base to high volumes of subscriber activation and reactivation drive of efficient customer retention management strategies and an increase in new subscriber additions within the period under review.

Teledensity was **103.61%** in 2023 as against **116.60%** recorded in 2022, which indicates a decrease of **11.10%** in Teledensity as at December 2023.

The decrease in teledensity was as a result of applying the projected Population information derived from the National Population Commission (NPC) as at Yearend 2022. NPC projection of Nigeria's population at 216,783,381 as at 2022, replacing the previously used 2017 projection of 190 million people affected this indicator.

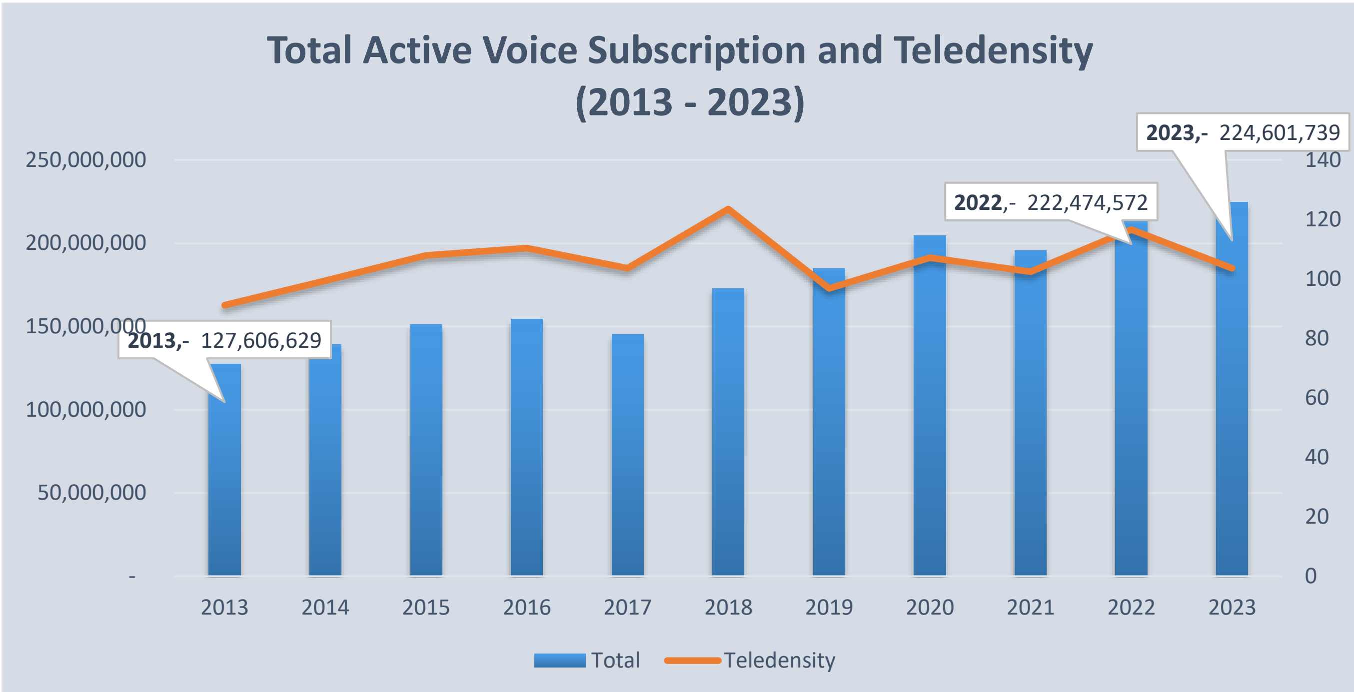

Figure 3. Subscriber Data- Active Voice Subscriptions & Teledensity (2013 - 2023)

1b. **<u>Subscriber Voice, Data & Teledensity (Mobile GSM- 2023):</u>** In analyzing the annual Active Voice Subscription for Mobile (GSM) Segment, total active voice subscriptions increased from **222,474,572** subscriptions as at December 2022 to **224,601,739** subscriptions as at December 2023. This indicates a 0.96% gain in GSM Active Voice Subscriptions year on year.

1c. **<u>Market Share of Active Voice Subscriptions (Mobile GSM Segment - December 2023):</u>**

Market Share of Mobile Operators were analyzed through the breakdown of each Operator`s subscription; **[MTN; AIRTEL; GLO and EMTS]** each recorded **87,038,768; 61,834,105; 61,604,576** and **13,935,482** Subscribers respectively. In that order **MTN; AIRTEL; GLO** and **EMTS** had **38.79%; 27.55%; 27.45% and 6.21%** share of the Mobile GSM market respectively in the month of December 2023.

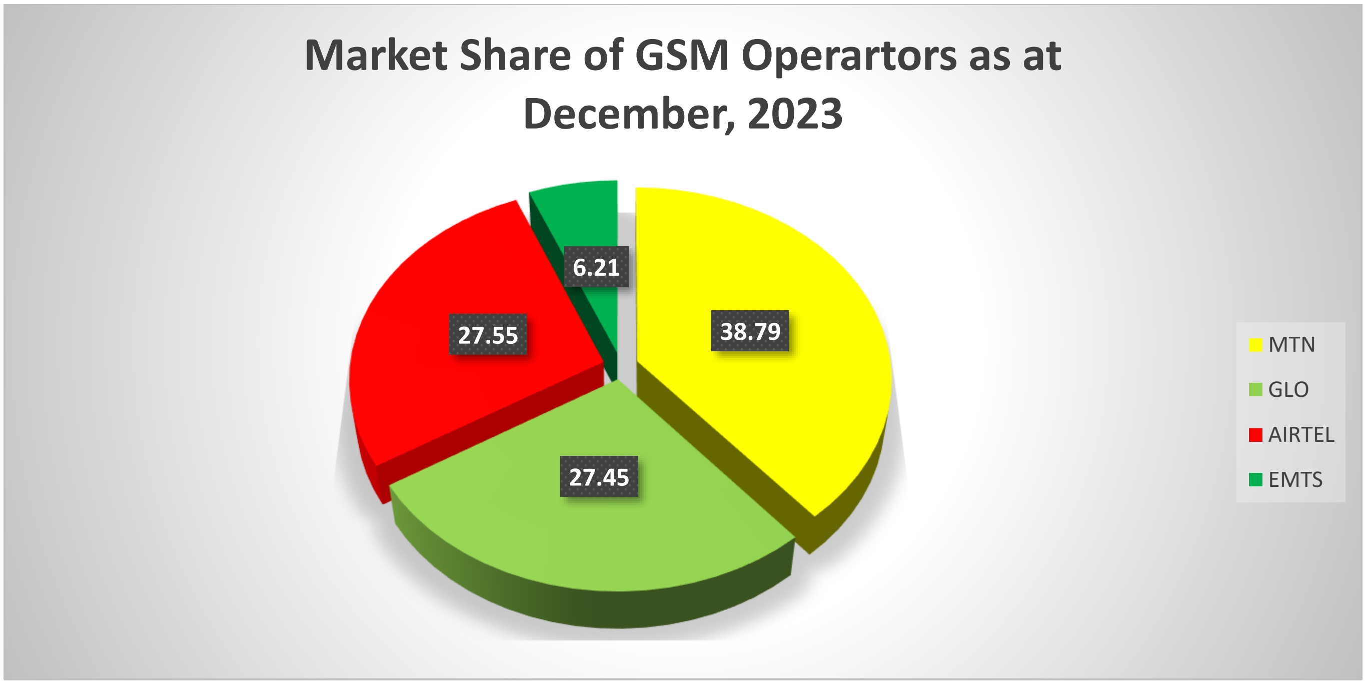

Figure 4. Market Share of Mobile GSM Operators – December 2023

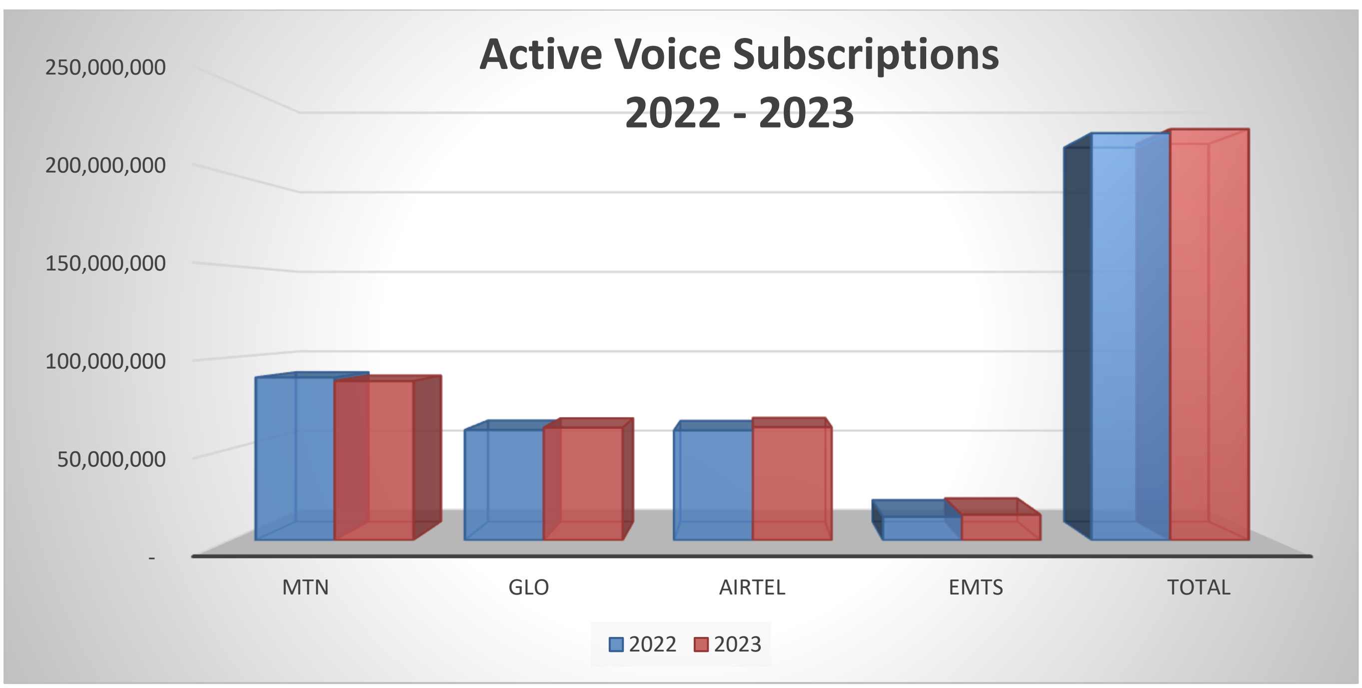

Figure 5. Active Voice Subscriptions of Mobile Segment, 2022 – 2023

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 3 and figure 6 below;

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

Table 3: Percentage of Market Share of Service Deployment by Technology as at December, 2023

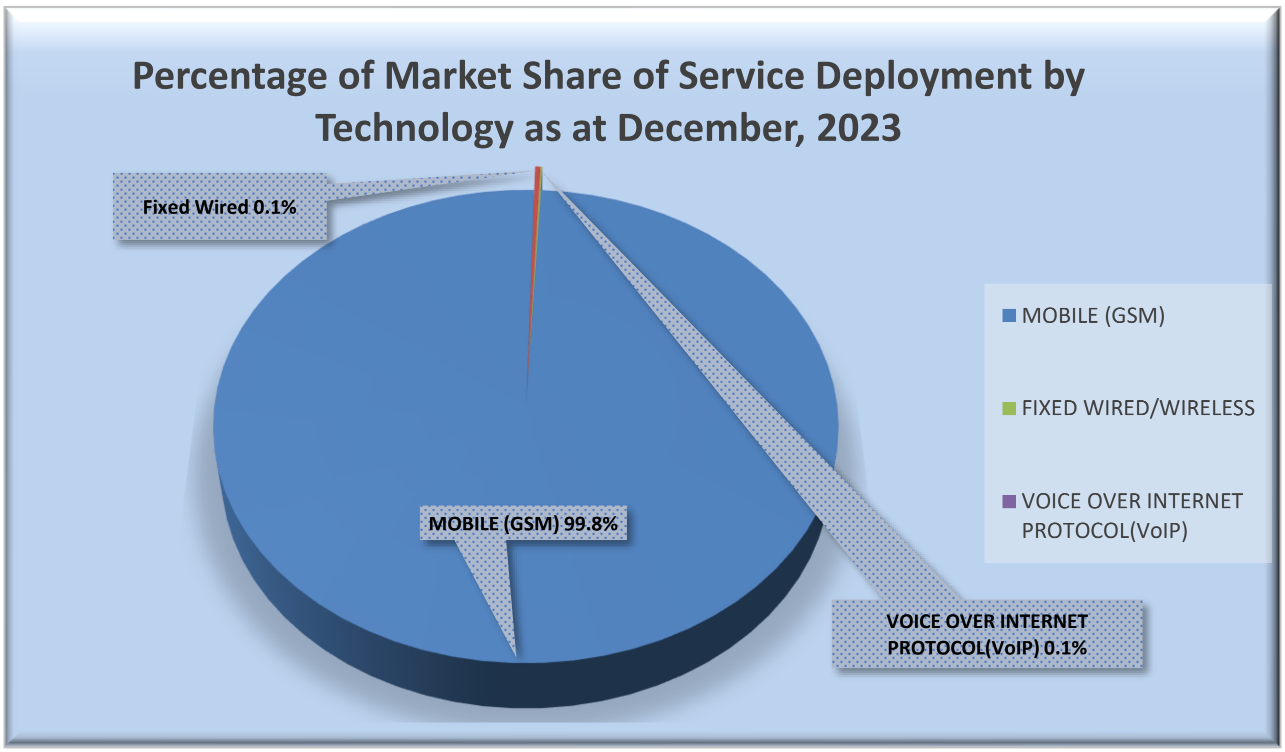

Figure 6: Percentage of Market Share of Service Deployment by Technology as at December, 2023

1e. **Prepaid & Postpaid Mobile Voice Subscriptions 2023:**

i. Total prepaid Mobile Voice subscriptions increased from **215,345,361** in December, 2022 to **217,143,995** in December, 2023 indicating an increase of 0.84% in prepaid Mobile Voice Subscriptions.

ii. Postpaid Mobile Voice Subscriptions increased from **7,129,211** in December, 2022 to **7,457,744** as at December, 2023 indicating an increase of 4.61% growth in postpaid Mobile Voice Subscriptions as at year end 2023.

iii. In summary, the above analysis indicates that about 96.7% of Mobile subscribers are prepaid subscribers while only about 3.3% 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 Southeast (SE) zone recorded the least number of subscriptions.

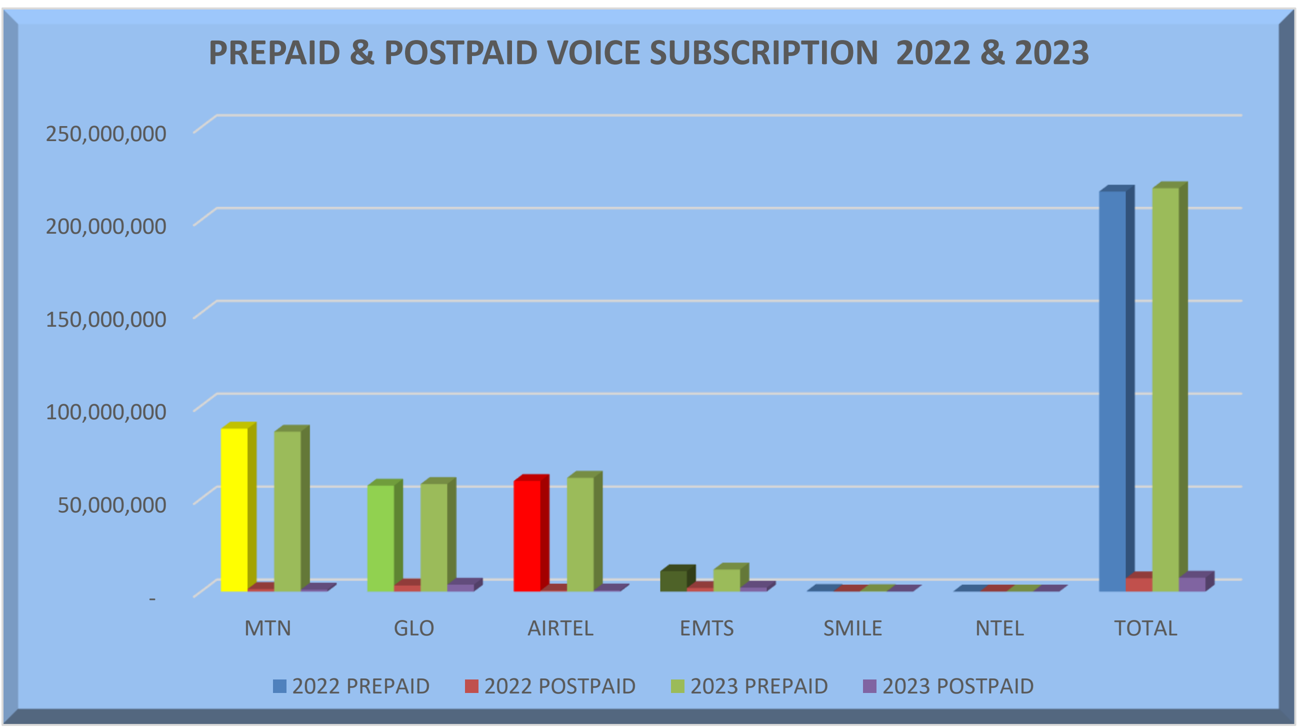

Figure 7: Prepaid & Postpaid Voice Subscriptions- Mobile 2022 – 2023

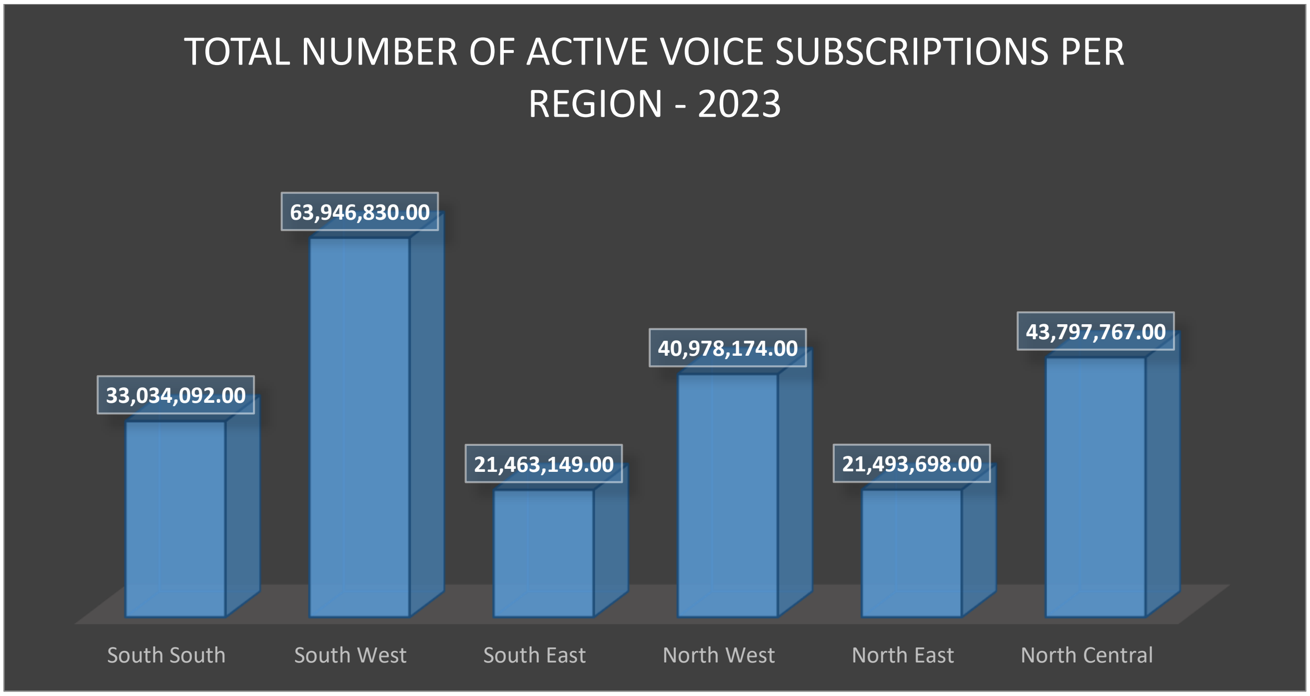

Figure 8a: Number of Active Voice Subscriptions per Region (2023)

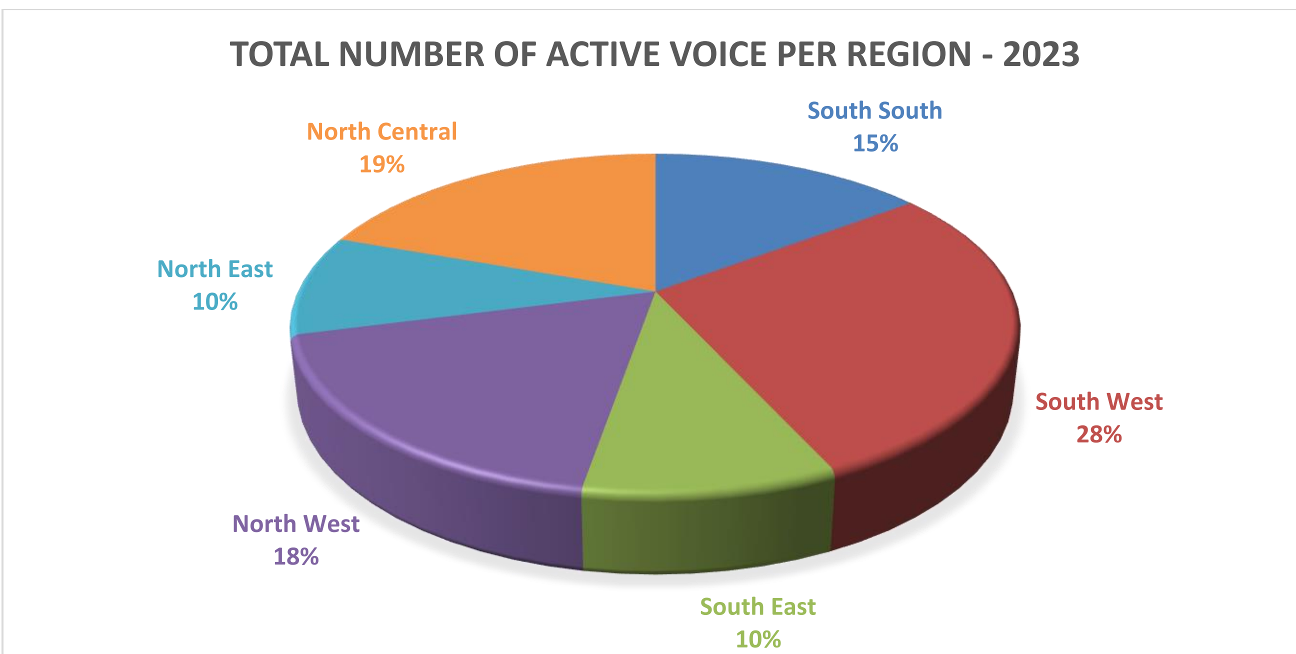

Figure 8b: Number of Active Voice Subscriptions per Region (2023)

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, 2023 had registered a total of **306,725,380** subscribers in the country.

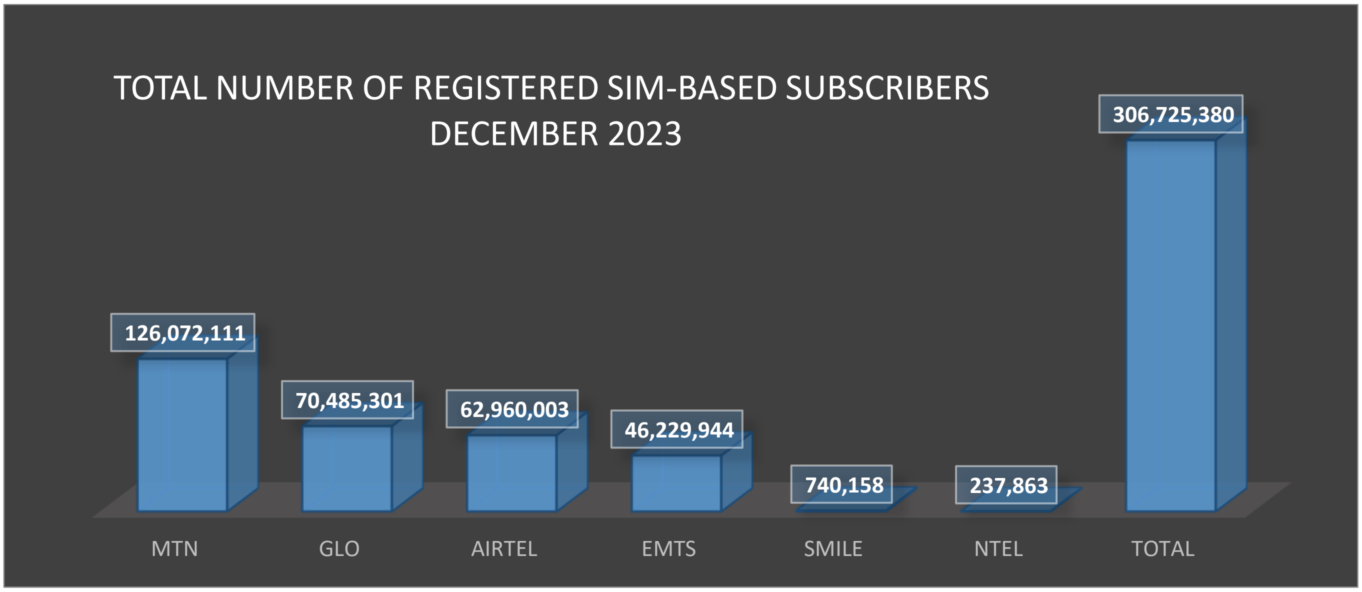

Figure 9: Total Number of Registered SIM- Based Subscribers (2023)

1h. <u>Mobile & VoIP Voice Traffic Trend (2023):</u>

The call traffic activities contained in the year 2023 as reported by Mobile operators in the country.

i. **<u>Local and National Telephone Traffic in 2023:</u>** As at December, 2023 total outgoing Local and National Traffic was **205,298,114,995.11** minutes while Total incoming Local and National Traffic was **203,187,588,876.00** minutes. MTN had the highest total outgoing and incoming Traffic of **122,667,600,437.00** and **123,762,501,615.00** minutes respectively in 2023.

NATIONAL TELEPHONE TRAFFIC 2023		
OPERATOR	**Outgoing**	**Incoming**
MTN	**122,667,600,437.00**	**123,762,501,615.00**
GLO	**19,329,516,265.18**	**13,165,839,740.07**
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	**205,298,114,995.11**	**203,187,588,876.00**

Table 4: Local and National Traffic in 2023

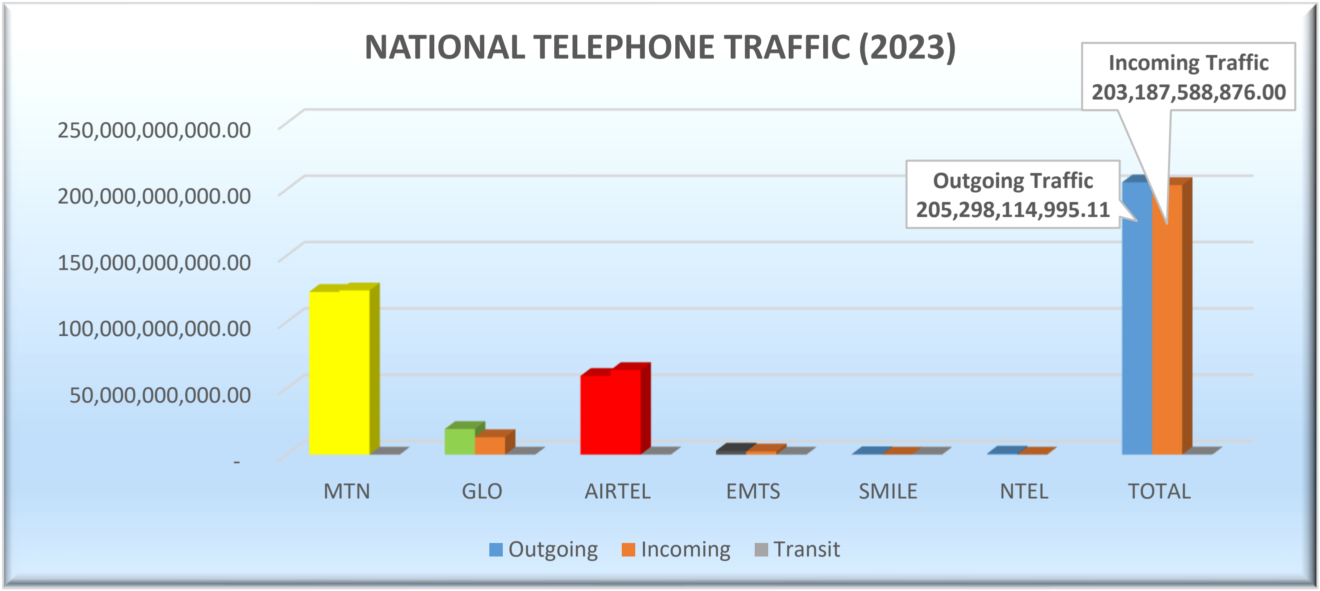

Figure 10: Local and National Telephone traffic – 2023

ii. **Outgoing and Incoming Mobile & VoIP to (and) from International Traffic in 2023:** As at December, 2023 Total Outgoing Mobile International Traffic was **536,064,266.85** minutes while Total Incoming International Traffic to Mobile was **998,238,975.08**. AIRTEL reported the highest Outgoing Traffic of 255,709,149.00 and MTN had the highest Incoming Traffic of 578,909,732.00 for the period under review.

OUTGOING/ORIGINATING & INCOMING MOBILE TO/FROM INTERNATIONAL TRAFFIC- 2023			
OPERATOR	**Outgoing**	**Incoming**	**Total**
MTN	**221,126,899.00**	**578,909,732.00**	**800,036,631.00**
GLO	**47,560,603.00**	**89,311,984.00**	**136,872,587.00**
AIRTEL	**255,709,149.00**	**304,221,481.00**	**559,930,630.00**
EMTS	**11,514,466.71**	**25,627,568.07**	**37,142,034.78**
SMILE	**66,974.00**	**-**	**66,974.00**
NTEL	**86,175.14**	**168,210.01**	**254,385.15**
TOTAL	**536,064,266.85**	**998,238,975.08**	**1,534,303,241.93**

Table 5: Outgoing and Incoming Mobile to/ from International Traffic in December 2023

iii. **<u>Mobile to Mobile Voice Call Traffic in 2023: -</u>** As at December, 2023 total outgoing traffic Mobile to Mobile minutes was **172,823,093,211.00** while total incoming Mobile to Mobile minutes was **124,005,128,232.49** MTN reported the highest Outgoing Traffic of **123,173,296,621.00** and the highest incoming Traffic of **80,592,092,846.00** for the period under review.

MOBILE TO MOBILE TRAFFIC 2023			
OPERATOR	**Outgoing**	**Incoming**	**Total**
MTN	**123,173,296,621.00**	**80,592,092,846.00**	**203,765,389,467.00**
GLO	**19,280,628,900.19**	**13,132,061,472.54**	**32,412,744,372.73**
AIRTEL	**26,931,670,909**	**28,328,194,616**	**55,259,865,525.00**
EMTS	**2,361,655,437.81**	**1,858,938,462.95**	**4,220,593,900.76**
SMILE	**284,897,987**	**30,761,838**	**315,659,825.00**
NTEL	**790,889,356.00**	**63,078,997.00**	**853,968,353.00**
TOTAL	**172,823,093,211.00**	**124,005,128,232.49**	**296,828,221,443.49**

Table 6: Mobile to Mobile Voice Traffic December 2023

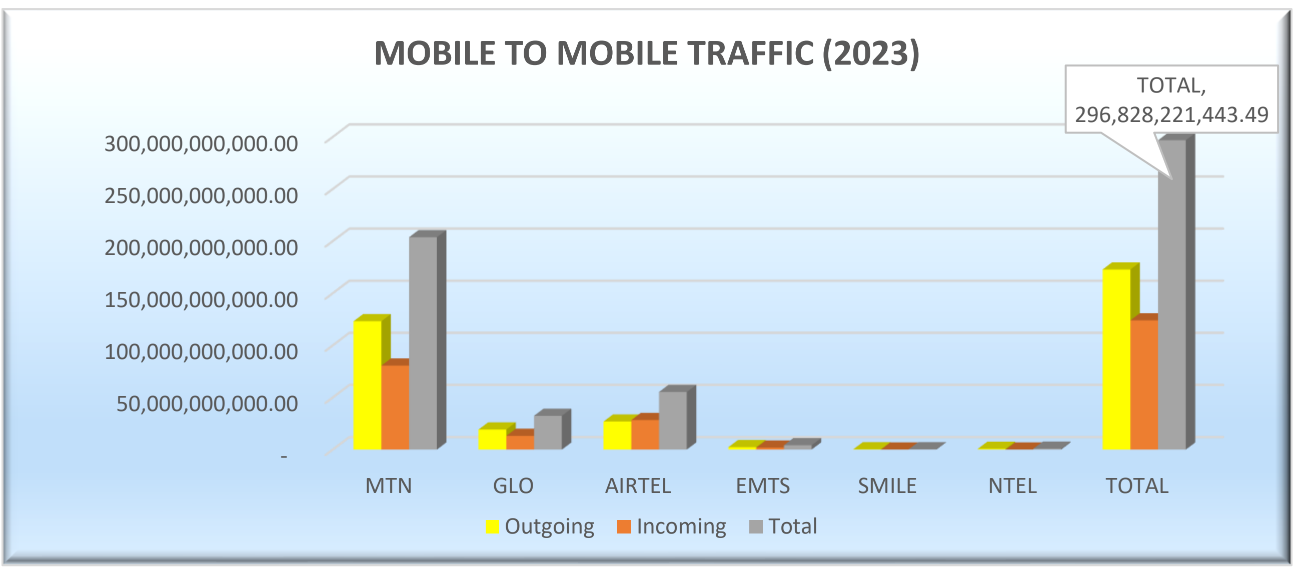

Figure 11: Mobile to Mobile traffic – December 2023

iv. **<u>Mobile to Fixed Voice Call Traffic in 2023: -</u>** As at December, 2023 Total Outgoing Mobile to Fixed minutes was **11,930,798,614.54** while Total incoming Mobile to Mobile minutes was **9,972,702,389.61** MTN reported the highest Outgoing Traffic of **11,819,263,461.00** and the highest Incoming Traffic of **9,771,071,376.00** for the period under review.

MOBILE TO FIXED TRAFFIC 2023			
OPERATOR	**Outgoing**	**Incoming**	**Total**
MTN	**11,819,263,461.00**	**9,771,071,376.00**	**21,590,334,837.00**
GLO	**48,833,364.99**	**33,778,267.53**	**82,611,632.52**
AIRTEL	**60,219,644**	**165,717,225.00**	**225,936,869.00**
EMTS	**2,482,144,.55**	**2,135,521.08**	**4,617,665.63**
TOTAL	**11,930,798,614.54**	**9,972,702,389.61**	**21,903,501,004.15**

Table 7: Table of Mobile to Fixed Traffic in 2023

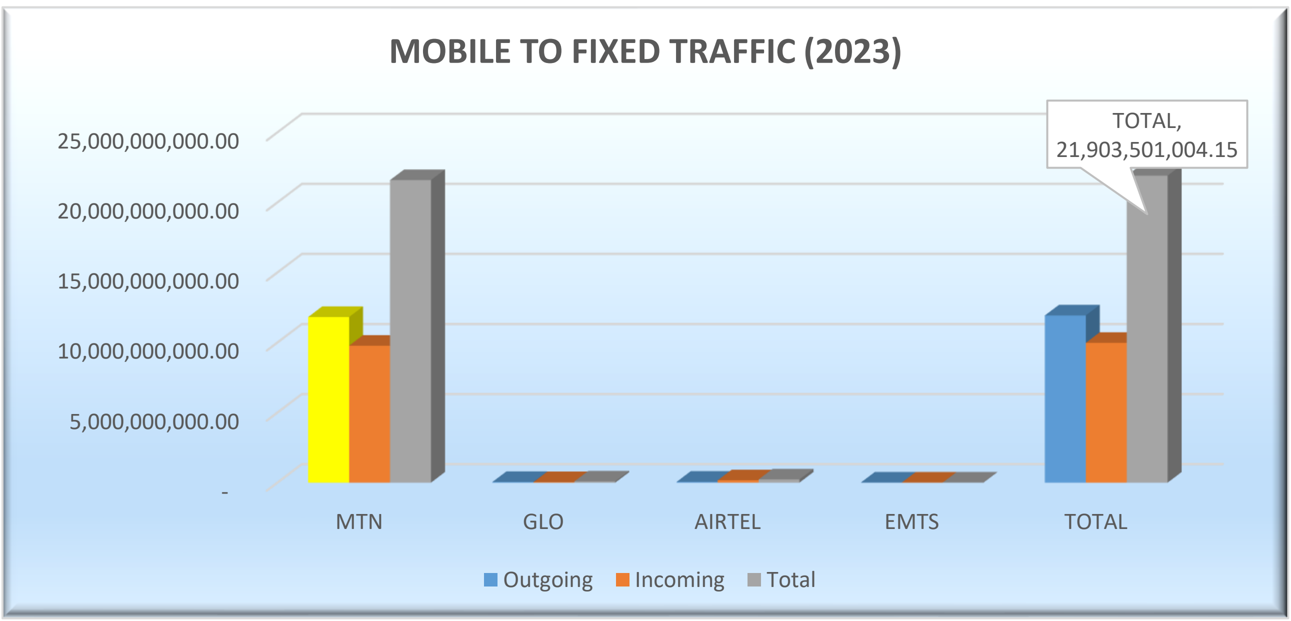

Figure 12: Mobile to Fixed traffic – December 2023

v. **<u>Number of Roaming Minutes in 2023:</u>** The Total Number of Mobile Roaming Minutes Outgoing and Incoming as at December 2023 for the Mobile Operators was **61,778,932.78** and **80,016,778.38** minutes respectively. MTN posted the highest incoming and outgoing minutes of **51,447,190.00** and **34,290,236.00** respectively. See Table 9 & Figure 16 below;

NUMBER OF ROAMING MINUTES 2023			
OPERATOR	**Outgoing**	**Incoming**	**Total**
MTN	**34,290,236.00**	**51,447,190.00**	**85,737,426.00**
GLO	**1,871,057.00**	**3,957,903.00**	**5,828,960.00**
AIRTEL	**25,028,043.00**	**20,726,368.00**	**45,754,411.00**
EMTS	**589,596.78**	**3,885,317.38**	**4,474,914.16**
TOTAL	**61,778,932.78**	**80,016,778.38**	**141,795,711.16**

Table 8: Number of Roaming Minutes (2023)

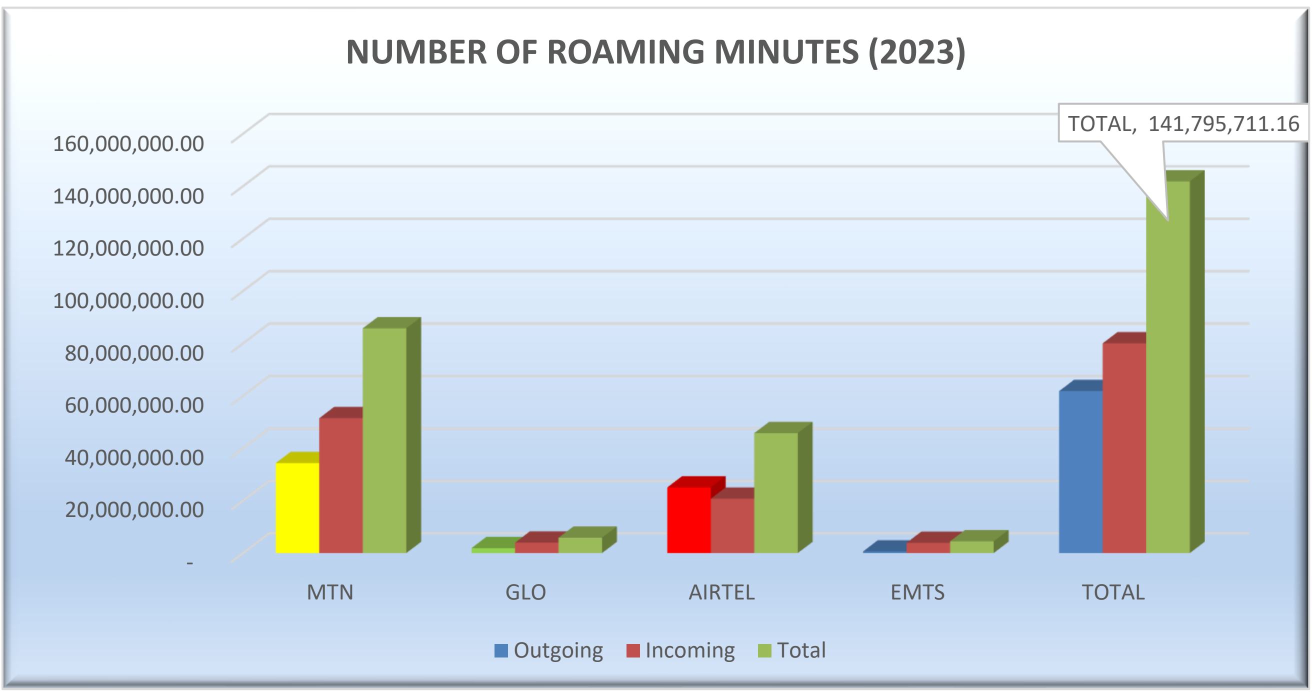

Figure 13: Number of Roaming Minutes-December 2023

vi. **<u>National SMS in 2023:</u>** The Total Number of national SMS both sent and received as at December 2023 was **22,973,122,650.64**. This is a loss of 11.38% from that of the total SMS sent and received in year 2022 which stood at **25,924,511,108** SMS.

- There was a 20.66% increase in the number of SMS sent out in year 2023 compared to year 2022.
- Conversely, the Year 2023 count of Incoming SMS also increased by 0.35% higher than that of Year 2022.

In Year 2023, MTN recorded the highest count of SMS received and sent which stood at **8,575,198,097** and **8,211,488,136** respectively, this is as indicated in table 17 and in figure 17 below;

SMS MESSAGES NATIONAL 2023			
OPERATOR	**SMS Sent**	**SMS Received**	**Total**
MTN	**8,211,488,136**	**8,575,198,097**	**16,786,686,233.00**
GLO	**656,185,274.11**	**694,109,442.00**	**1,350,294,716.11**
AIRTEL	**2,008,356,919**	**2,368,455,892**	**4,376,812,811.00**
EMTS	**299,867,502.53**	**158,235,101.00**	**458,102,604.00**
SMILE	**263,458.00**	**962,829.00**	**1,226,287.00**
TOTAL	**11,176,161,289.64**	**11,796,961,361.00**	**22,973,122,650.64**

Table 9: Total number of Outgoing/Incoming Local/National SMS trend (2023)

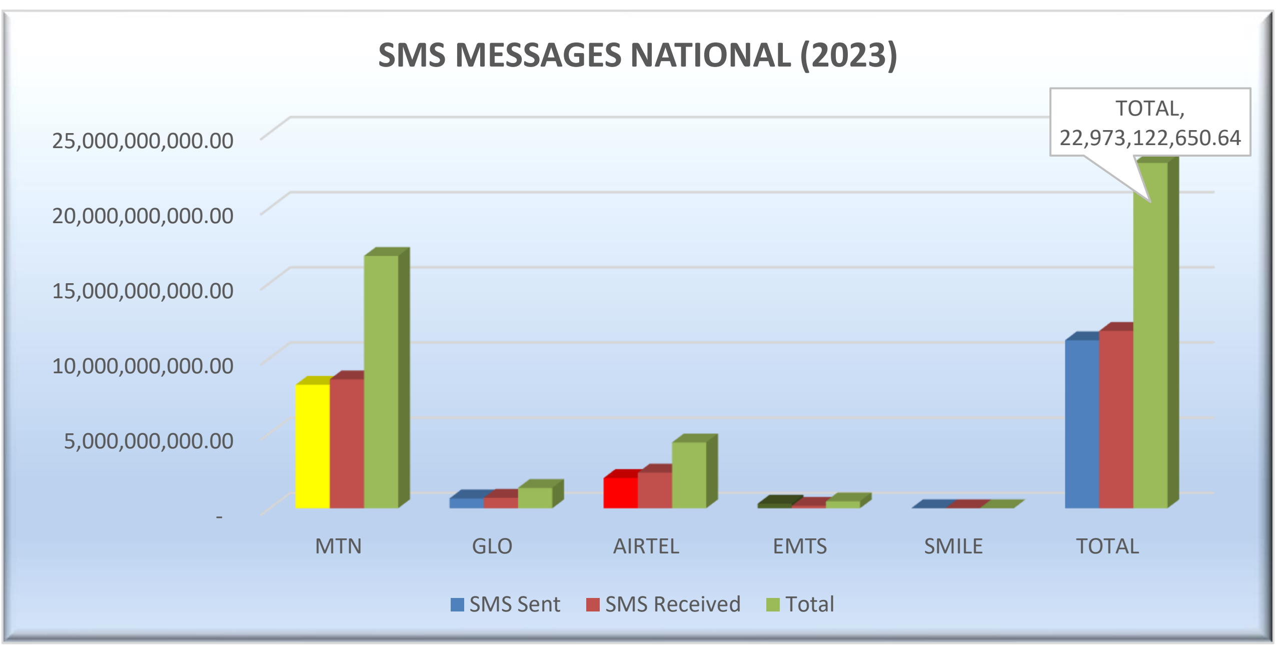

Figure 14: Total Outgoing/ Incoming SMS, Mobile December 2023

vii. **<u>International SMS in 2023:</u>** The Total Number of International SMS sent as at December 2023 was **75,414,619** while total number of SMS received was **264,265,952**. See Table 11 & Figure 18 below;

SMS MESSAGES INTERNATIONAL 2023			
OPERATOR	**SMS Sent**	**SMS Received**	**Total**
MTN	**21,331,465**	**13,180,785**	**34,512,250**
GLO	**651,550**	**6,236,795**	**6,888,345**
AIRTEL	**52,572,437**	**222,566,095**	**275,138,532**
EMTS	**855,343**	**22,232,093**	**23,087,436**
SMILE	**3,824**	**50,184**	**54,008**
TOTAL	**75,414,619**	**264,265,952**	**339,680,571**

Table 10: Total number of Outgoing/Incoming International SMS trend 2023

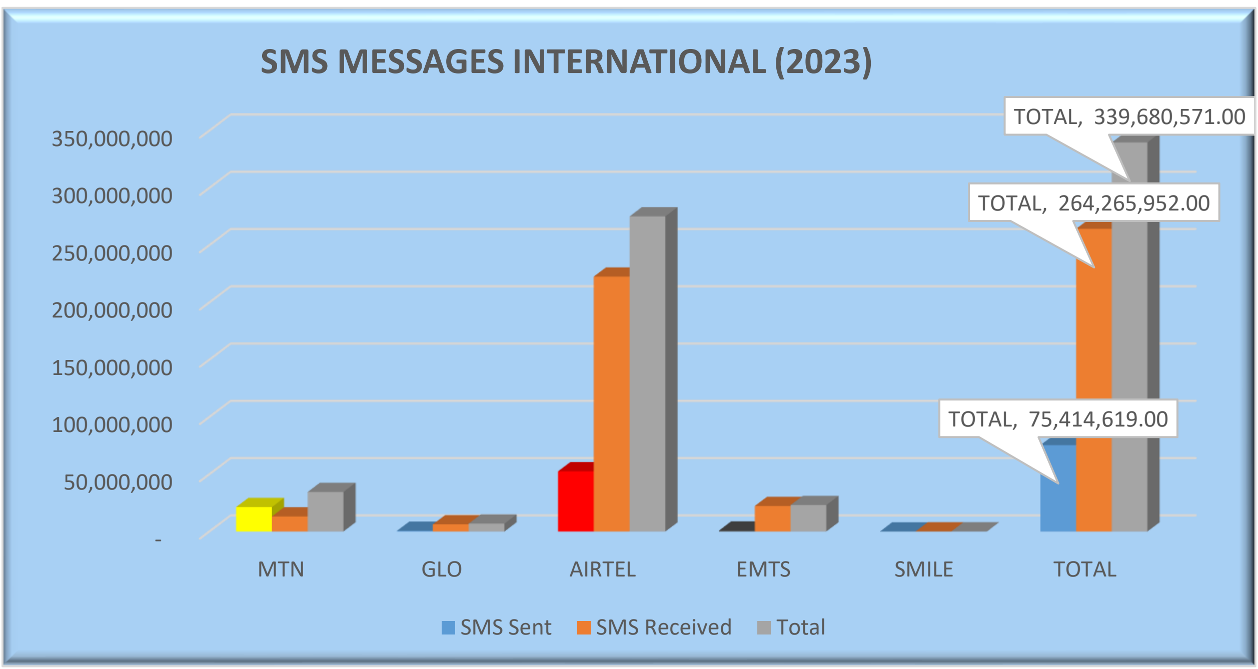

Figure 15: Total Outgoing/ Incoming SMS International, 2023

- Total Number of International SMS sent increased from 59,571,547 in year 2022 to 75,414,619 in year 2023; this indicates a 26.6% increase in SMS international sent in year 2023.
- Similarly, the Number of international SMS received in year 2022 decreased from 459,329,782 SMS to 264,265,952 SMS as at December 2023. This translated to a 42.47% loss.
- Airtel recorded the highest count of incoming and outgoing SMS at 222,566,095 and 52,572,437 respectively in year 2023. This is as shown in Table 11 above.

SUBSCRIBER & SERVICE DATA – INTERNET SUBSCRIPTIONS

1a. Mobile Subscriber Internet Data- 2023:

As at December, 2023 the total active internet subscriptions increased to 163,603,459 from 154,627,187 subscriptions reported in December 2022. This indicates a 5.81% growth in Total Active Internet Subscriptions Year on Year.

For the Mobile GSM Operators the Active Internet as at December 2023 is as shown below:

Operators (GSM)	Active Internet Subscriptions December'22 (GSM & VoIP)	Active Internet Subscriptions December'23 (GSM & VoIP)	Difference	% Change
MTN	**65,619,610**	**70,659,889**	**5,040,279**	**7.68**
GLO	**43,050,005**	**43,998,101**	**948,096**	**2.20**
AIRTEL	**41,174,942**	**45,064,857**	**3,889,915**	**9.45**
EMTS	**4,432,816**	**3,630,796**	**(802,020)**	**(18.09)**
SMILE	**331,071**	**246,199**	**(84,872)**	**(25.64)**
NTEL	**18,743**	**3,617**	**(15,126)**	**(80.70)**
TOTAL	**154,627,187**	**163,603,459**	**8,976,272**	**5.81**

Table 11: Active Internet Subscription (GSM) Operators 2022-2023

- In view of the Figure 19 and Table 12 above, EMTS, SMILE and NTEL experienced losses in subscriptions during the period under review.
- AIRTEL recorded the highest percentage increase of Active Internet Subscription of 9.45%.

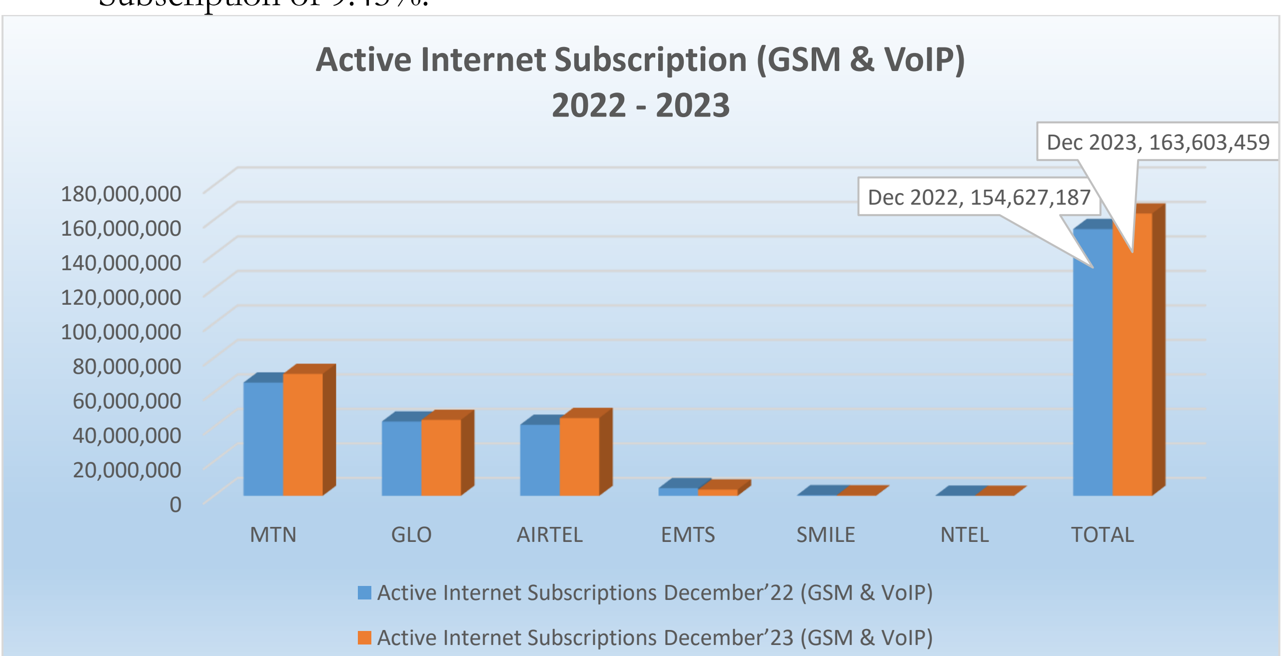

Figure 20: Total Number of Active Mobile Subscriptions – (2022- 2023)

1b. <u>**Active Subscriptions to Mobile Broadband (Broadband Penetration 2023):**</u>

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 43.71% as at December 2023. The graph below represents Broadband Penetration within the period under review.

In line with the Nigerian National Broad Plan 2020 – 2025, the baseline Broadband Penetration target (Year 2020) was set at 30%. The Commission recorded a success rate of 100% of its target for the baseline year. For Year 2023, the target set by the plan was 50%. With Broadband Penetration at 43.71% as at December 2023, the Commission was able to achieve a success rate of 87.42% for the year 2023.

To this end, based on the trend of the Commission's previous success rates and Broadband target implementation strategies, we are optimistic that the Commission is on course to achieving the target of 70% Broadband penetration by year 2025 as contained in the Broadband Plan.

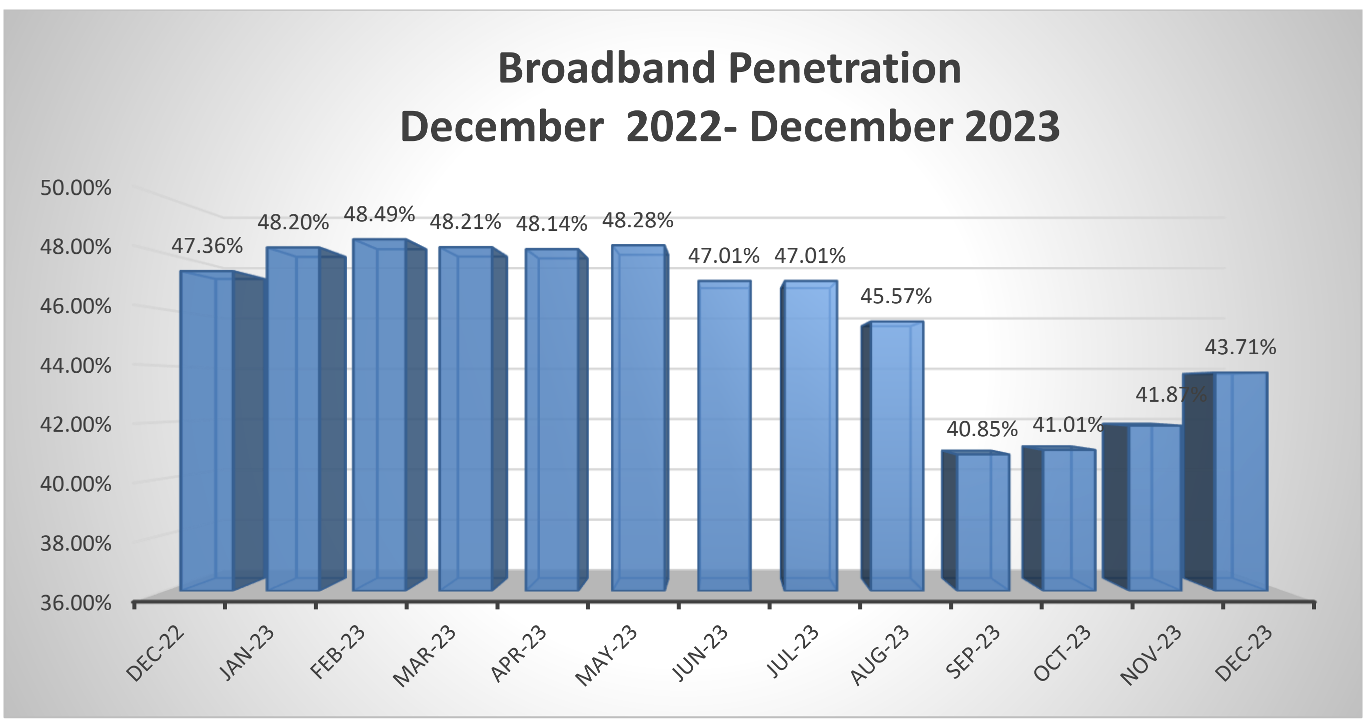

Figure 17: Active Broadband Subscriptions (2023)

1c. Data Usage/Consumption Statistics – December 2023: -

The total volume of data consumed by subscribers increased from **514,502.23** TB in December 2022 to **708,849.59**TB as at December 2023 indicating a percentage increase of 37.8% year on Year.

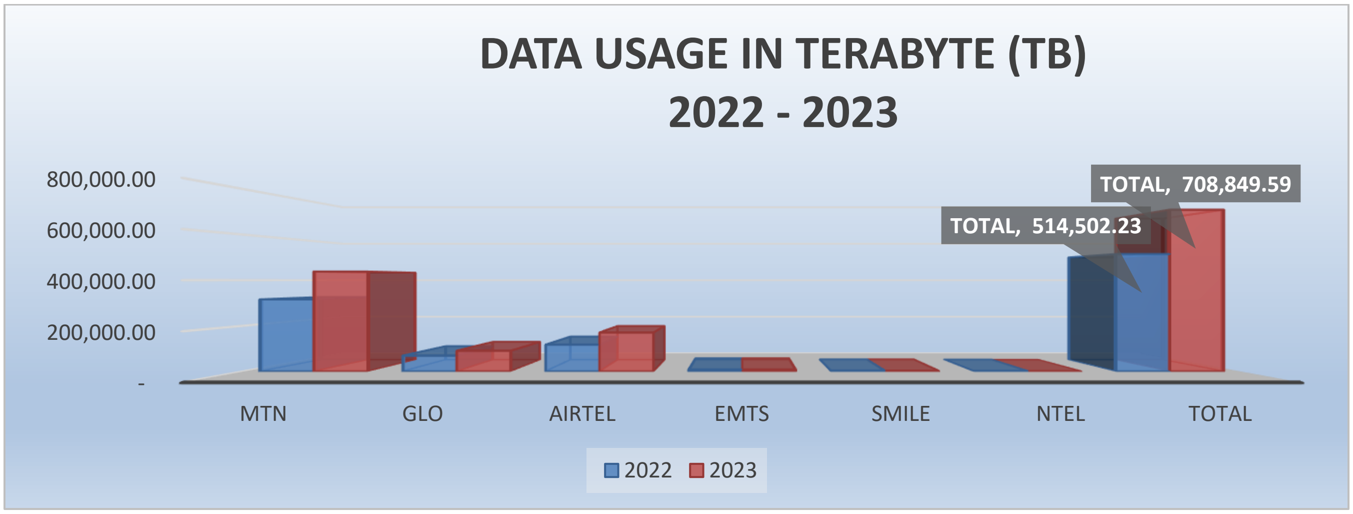

Figure 18: Internet Usage Statistics December 2022 – December 2023

1d. Machine to Machine (2023): 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, 2023 the number of Mobile-Cellular machine-machine subscriptions as reported by **MTN, GLO, AIRTEL and EMTS** was **1,628,060**.

MTN had the highest number of Machine-to-Machine subscriptions with 706,357; EMTS had 659,724; AIRTEL – 251,321; GLO – 10,344 and Smile recorded 314 M2M subscriptions as shown in Figure 23 below;

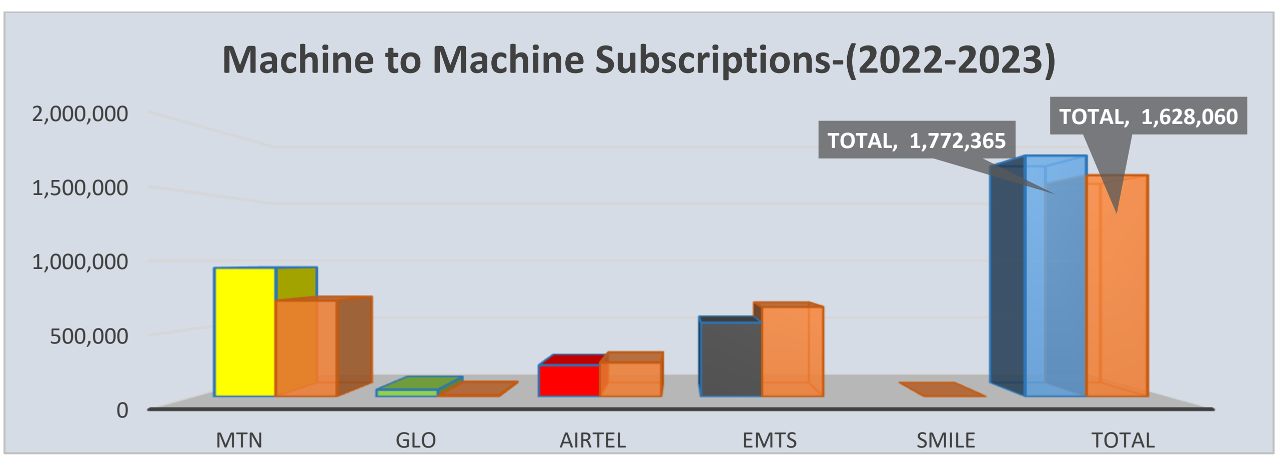

Figure 19: Machine to Machine Subscriptions (2022-2023)

1e. **<u>Number of Data-Only Mobile-Broadband Subscriptions – Dongles (2023) SIMs without Voice Subscriptions:</u>**

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 **1,573,225** Data-Only Mobile-Broadband Subscriptions (Dongles) as at December, 2023.

In summary, AIRTEL, GLO, MTN, EMTS and SMILE each recorded **1,377,269; 142,432; 27,940; 24,985 and 599** Data-Only Mobile-Broadband Subscriptions (Dongles) respectively as at December, 2023.

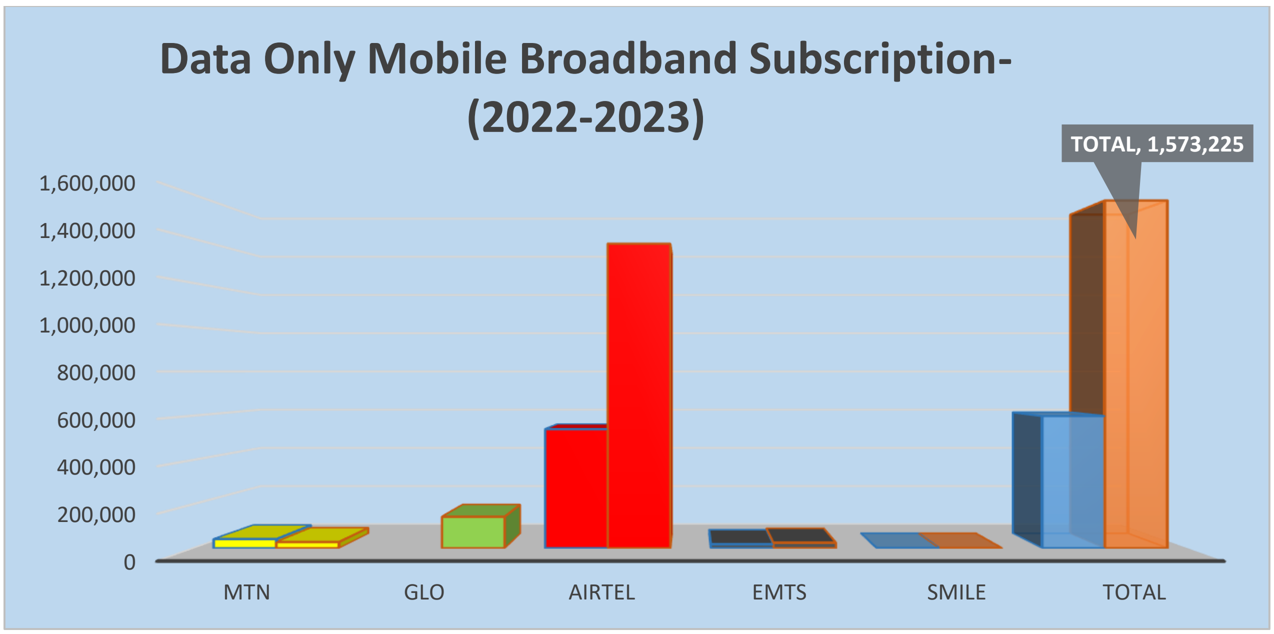

Figure 20: Data-Only Broadband Subscriptions December (2022 - 2023)

SUBSCRIBER & SERVICE DATA – PORTING TREND IN NIGERIA AS AT DECEMBER, 2023

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, 2023) for the four (4) major GSM Operators. The analysis illustrates that EMTS had the highest count of Port-in subscribers [**678,009**] while AIRTEL, MTN and GLO respectively recorded the following counts of Port-in as follows [**338,441**]; [**202,678**] & [**107,652**].

ii. Similarly, our analysis from May, 2013 to December, 2023 reveals that MTN had the highest number of subscribers that ported-out [**446,679**] to other networks while AIRTEL, GLO & EMTS are as follows [**355,326**]; [**280,765**] & [**212,099**] respectively.

1.a <u>Porting Activities – From Inception (Port-in and Port-out) for the period May 2013 – December 2023</u>

	MTN	***GLO***	***AIRTEL***	***EMTS***	***TOTAL***
	May'13 – December'23	***May'13 – December'23***	***May'13 – December'23***	***May'13 – December'23***	***May'13 – December'23***
Cumulative Port-In	**202,678**	**107,652**	**338,441**	**678,009**	**1,326,780**
Cumulative Port-Out	**446,679**	**280,765**	**355,326**	**212,099**	**1,294,869**
					2,621,649

Table 12: Cumulative Mobile Number Portability (May, 2013 – December, 2023)

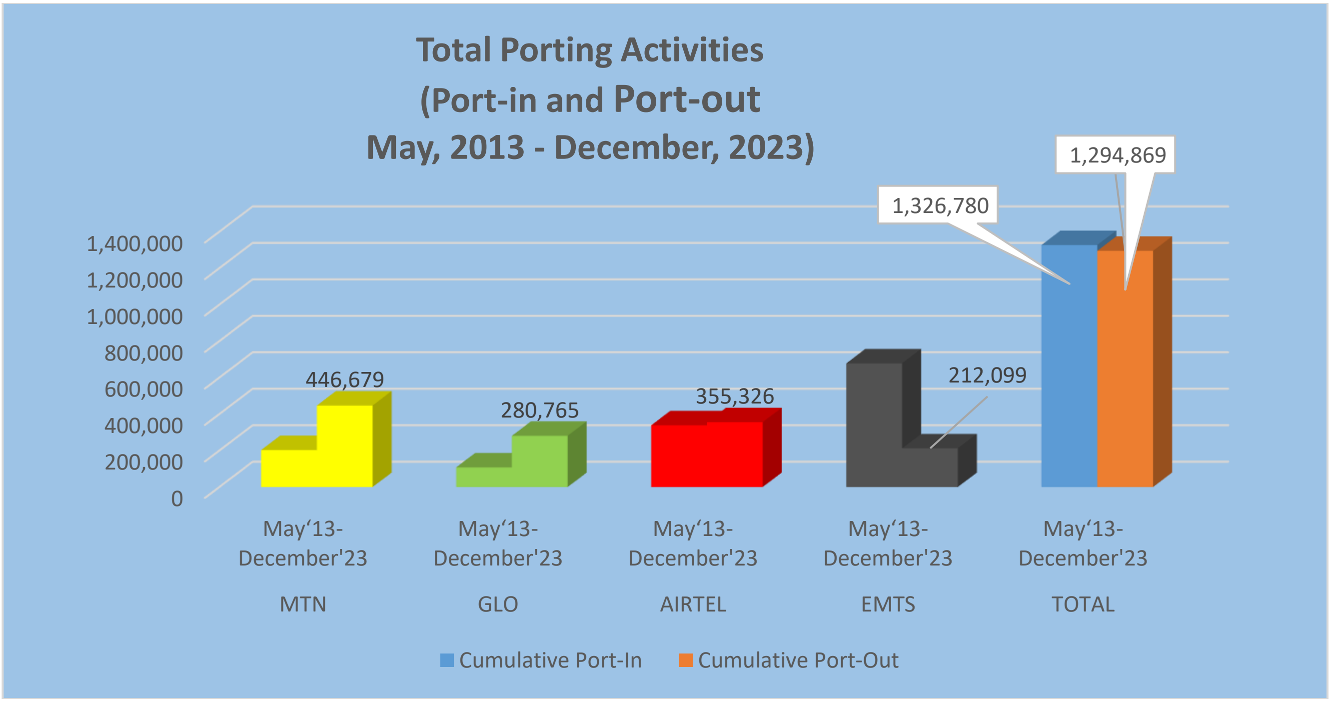

Figure 21: Cumulative Mobile Number Portability (May, 2013 – December, 2023)

1b. Port- In activities from December, 2022 – December, 2023:-

The count of Port-In activities increased from 32,086 in year 2022 to **33,681** as at the end of year 2023. This indicates an increase of 5% in the total port-in between 2022 and 2023 year on year.

Table 13 and figure 22 below, illustrates the Port-In performance in the telecommunications sector between 2022 and 2023;

OPERATOR	Port-In Activities Jan-Dec 2022	Port-In Activities Jan-Dec 2023	% increase /decrease
MTN	**21,285**	**23,038**	**8**
GLO	**3,684**	**2,102**	**(43)**
AIRTEL	**5,140**	**7,399**	**44**
EMTS	**1,977**	**1,142**	**(42)**
Total	**32,086**	**33,681**	**5**

Table 13: Port-In Activities 2022- 2023

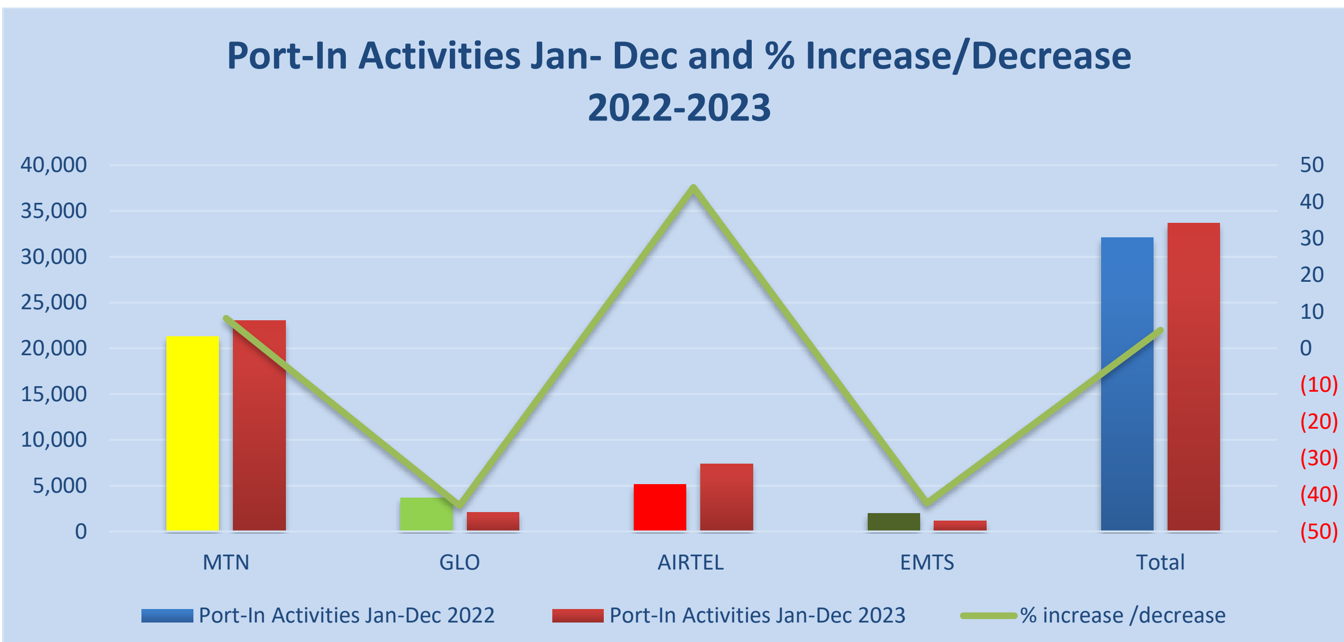

Figure 22: Port-In Activities Jan-Dec and Percentage Increase/Decrease of Port-In (2022 – 2023)

1c. <u>Port-Out activities from December, 2022 – December, 2023: -</u> The Count of Port-out decreased from 37,890 in Year 2022 to 33,681 in Year 2023 indicating a loss of 11% year on year performance analysis.

Table 14 and figure 23 below illustrates the Port-Out performance in the telecommunications sector between 2022 and 2023.

OPERATOR	Port-Out Activities Jan-Dec 2022	Port-Out Activities Jan-Dec 2023	% increase /decrease
MTN	2,701	2,630	(3)
GLO	3,193	3,514	10
AIRTEL	13,667	4,121	(70)
EMTS	18,329	23,416	28
Total	37,890	33,681	(11)

Table 14: Count of Port-Out Activities-December 2022-2023

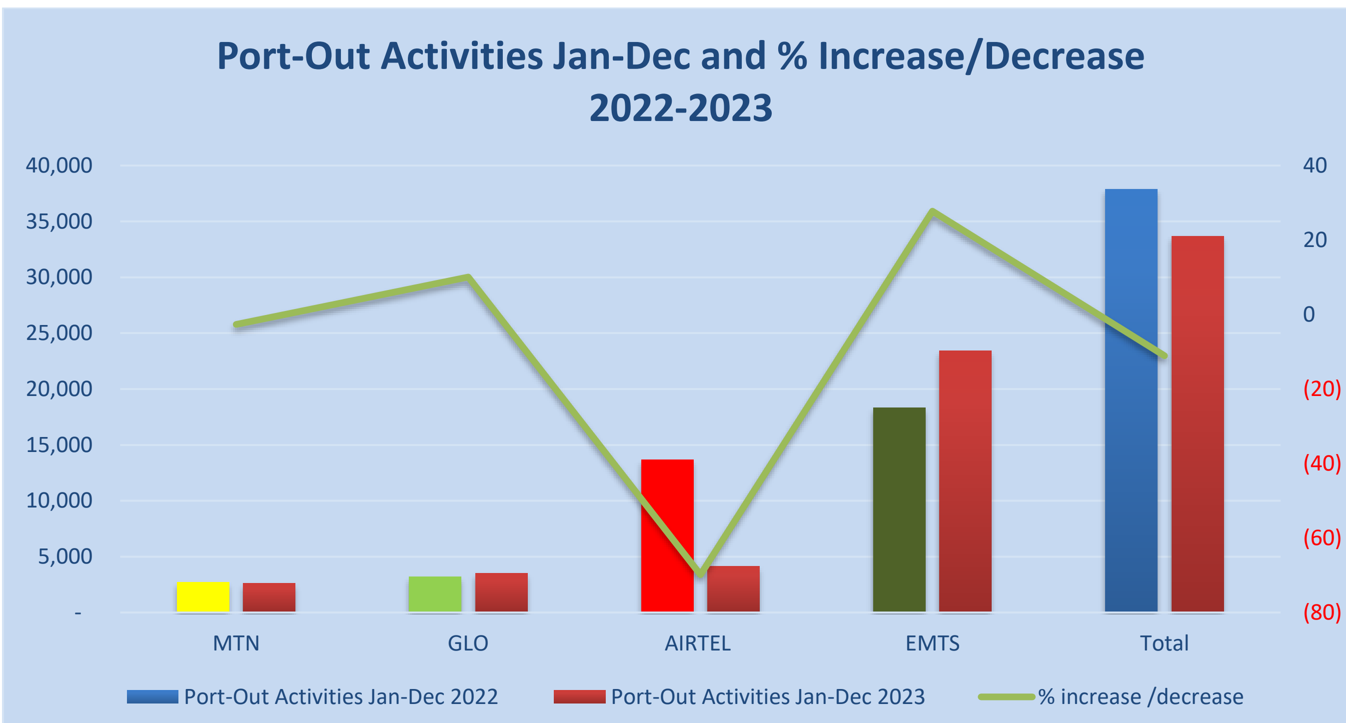

Figure 23: Port-Out Activities and Percentage Increase/Decrease of Port-Out Activities December 2022-2023

FINANCIAL DATA – MOBILE AND VOIP (December 2023)

1a. **Revenue:** The operators in this market segment as at December 2023 recorded an approximate total revenue of **₦4,012,411,230,000** as against **₦3,329,241,110,000** recorded in Year 2022. This reflects an increase of 20.52% of total revenue from the Mobile Network Operators.

1b. **Operating Cost:** Total Operating Cost for the Operators increased from **₦1,996,659,000,000** in Year 2022 to **₦2,515,454,790,000** at the end of Year 2023. This illustrates an increase of 25.98% within the period reviewed.

1c. **CAPEX- Local Investments in the Industry (2022-2023):** The Operators reported a total CAPEX of **₦ 983,180,390,000** in Year 2023 as against **the ₦718,350,570,000** invested in Year 2022, indicating a decline of 36.1% within the period.

STAFF PROFILE – MOBILE (2023)

The total number of Staff reported by the Mobile operators (MTN, GLO, Airtel, EMTS, Smile and Ntel) as at December, 2023 was 7,212 composed of (7,025-Nigerians and 187-Expatriates). Further breakdown of this category reveals that 4,468 of the Nigerian Staff are Male while 2,557 are female. Similarly, 182 are male expatriates and 5 are female expatriates.

CHAPTER THREE

ANALYSIS OF 2023 YEAR END SUBSCRIBER/ NETWORK DATA-FIXED TELEPHONY (FIXED WIRED/FIXED WIRELESS) OPERATORS

The Fixed year-end performance report depicts the analysis of the Fixed market as at December, 2023. The reports comprise of **MTN, GLO, ipnX, Inq. Digital, Swift Telephone Network** and **Big Picture** presented in the report below:

A. NETWORK DATA

1. INFRASTRUCTURE DEPLOYMENT

1a. Fiber Optics: As at December, 2023, the Fixed Telephony segment recorded **816 km** of additional on-land ibre optics network deployment. The 816km infrastructure deployment was attributed to IpNX network expansion.

1b. Microwave Radio: As at December, 2023 Microwave Radio deployment stood at **290km**. IpNX was responsible for the reported deployment.

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, 2023.

1d. Gateways in Use: 21st Century, ipNX and Swift Telephone Network jointly reported a total of **10 Gateways** in use as at December 2023. 21ST Century (3); ipNX (6) and Swift (1).

B. SUBSCRIBER AND SERVICES DATA

1. **Total Active Voice Subscriptions**: As at December, 2023 Total Active Voice Subscription increased to **111,971** subscription from **96,996** subscription recorded in 2022, this translates to a **15.44%** increase.

   During the year under review, ipNX, MTN and GLO each recorded a decline of **10.74%, 3.01%** and **1%** respectively. Big Picture and Inq Digital recorded **5,020** and **10,264** Active Voice Subscriptions within the period under review.

TOTAL ACTIVE VOICE SUBSCRIPTIONS			
OPERATOR	**2022**	**2023**	**Difference**
MTN	**7,715**	**7,483**	**(3.01)**
GLOBACOM	**2,708**	**2,681**	**(1.00)**
21ST CENT	**85,502**	**85,502**	**-**
IPNX	**1,071**	**956**	**(10.74)**
INQ	**-**	**10,264**	**-**
BIG PICTURE	**-**	**5,020**	**-**
TOTAL	**96,996**	**111,971**	**15.44**

Table 1: Total Active Voice Subscriptions (2022 & 2023)

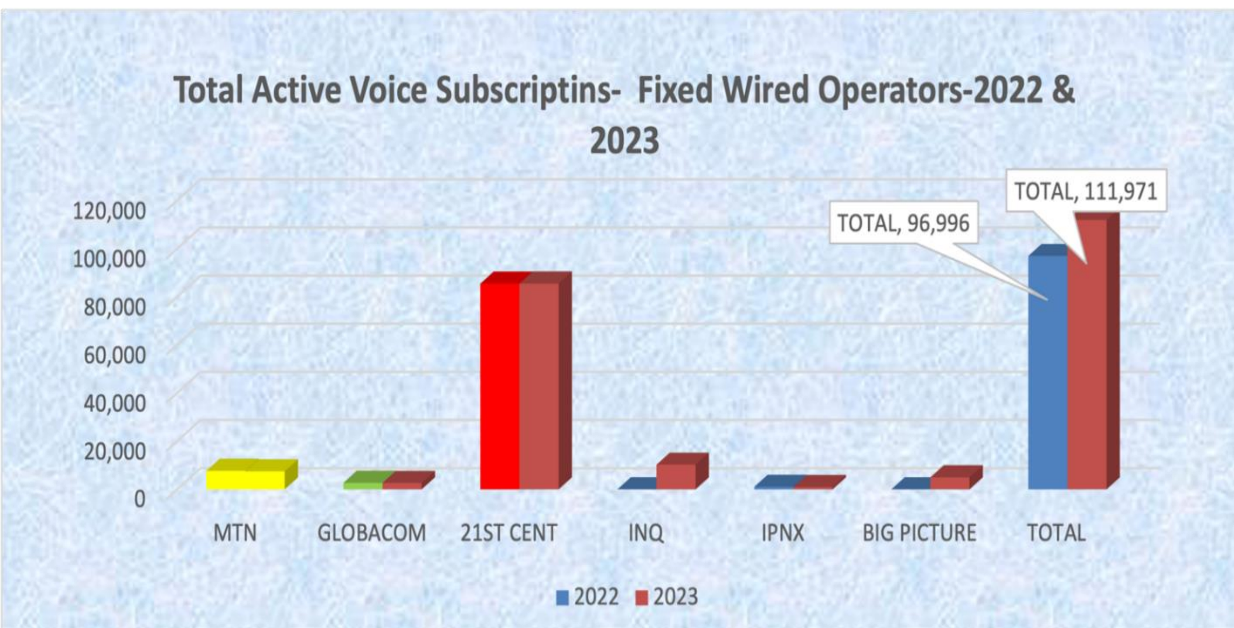

Figure 1: Total Active Voice Subscriptions (2022 & 2023)

1. **Total Active Internet Subscriptions [Fixed Telephony]**: As at December 2023 the **Active Internet subscriptions** for MTN and 21st Century was **5,648** subscriptions. This indicates a decline of **64.49%** from 2022 which was **15,904** subscriptions.
   The decline noted is due to IPNX Internet Subscriptions which is being captured in the ISP Market Segment Analysis seen in Chapter 4 of this report.

2. **Fiber to the X (FTTP/FTTH/FTTB):** The total fiber to the Premises/Home/Building subscription count stood at 50,213. The FTTX count is inclusive of the Total Wired Internet Service Provider (ISP) count of 44,565 as seen in chapter 4 of the ISP market segment analysis of this report.

C. TRAFFIC DATA

1. Local and National Traffic (Outgoing): As at December, 2023, 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 **10,775,880, 40,665,042, 651,157, 27,743,607, 5,479,986, and 6,147,479** respectively, making a total of **91,463,152** local & national **Outgoing** traffic.

2. Local and National Traffic (Incoming): As at December, 2023, 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 **246,727, 34,737,556, 9,873,713, 8,866,167, 4,300,022 and 363,325** respectively, making a total of **58,387,510** local & National **Incoming** traffic.

Analysis of the **Total Outgoing** and **Incoming** Local National Telephone Traffic data for this market segment shows that a substantial increase in traffic year on year in this traffic was generated by Inq. Digital for both Incoming and Outgoing traffic during the year under review.

LOCAL AND NATIONAL TELEPHONE TRAFFIC (IN MINUTES) 2023		
OPERATORS	**Outgoing**	**Incoming**
MTN	**10,775,880**	**246,727**
21ST CENT	**40,665,042**	**34,737,556**
IPNX	**651,157**	**9,873,713**
INQ.DIGITAL NIGERIA LIMITED	**27,743,607**	**8,866,167**
SWIFT TELEPHONE NETWORK LIMITED	**5,479,986**	**4,300,022**
BIG PICTURE	**6,147,479**	**363,325**
TOTAL	**91,463,152**	**58,387,510**

Table 5: Total Number of Local & National Outgoing/ Incoming Calls (2023)

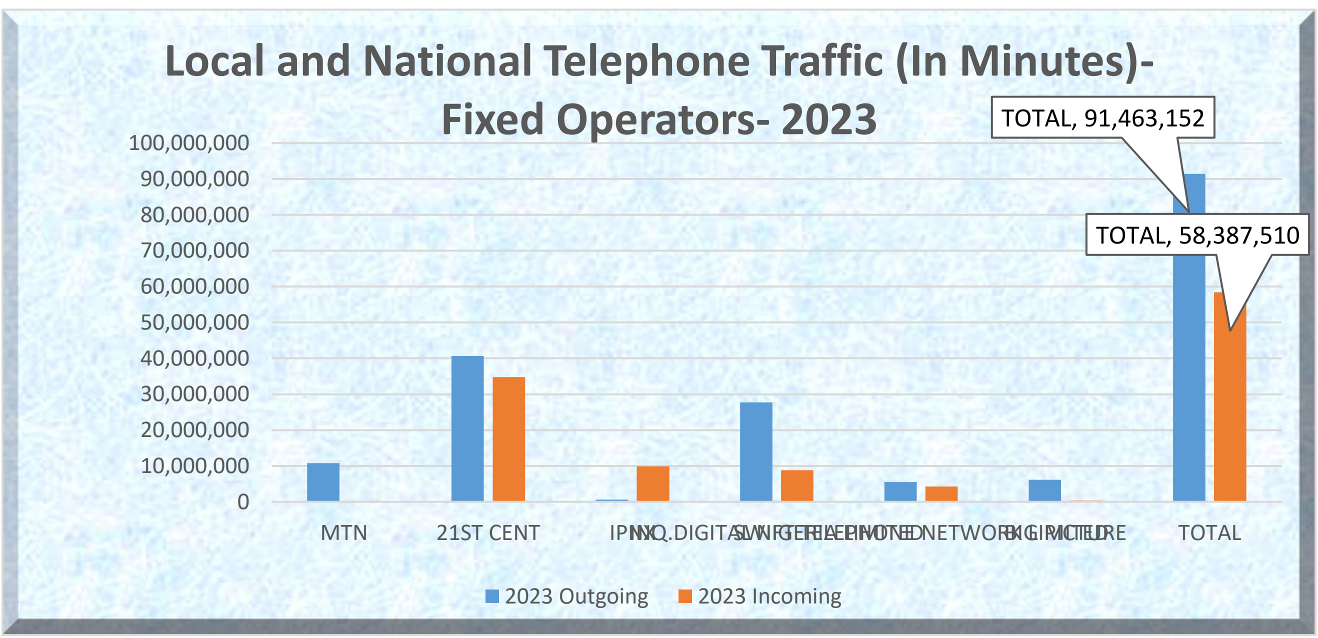

Figure 5: Total Number of Local & National Outgoing/ Incoming Calls (2023)

3. <u>**Total number of Fixed to Mobile traffic**</u>: As at December, 2023 the total number of **Outgoing** Fixed to Mobile traffic reported was **133,842,483**.
Similarly the total number of **Incoming Fixed to Mobile** traffic as at December 2023 was **157,335,317.**

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 2023			
Operators	**Outgoing**	**Incoming**	**Total**
MTN	**51,298,580**	**12,359,982**	**63,658,562**
21ST CENT	**40,588,731**	**134,486,309**	**175,075,040**
IPNX	**647,942.80**	**9,247,913.09**	**9,895,855.89**
BIG PICTURE	**8,083,637**	**434,905**	**8,518,542**
INQ.DIGITAL NIGERIA LIMITED	**27,743,607.49**	**8,866,166.68**	**36,609,774.17**
SWIFT TELEPHONE NETWORK LIMITED	**5,479,985.64**	**4,300,022.46**	**9,780,008.10**
TOTAL	**133,842,483**	**157,335,317**	**303,537,782**

Table 6: Total number of Fixed to Mobile Traffic (2023)

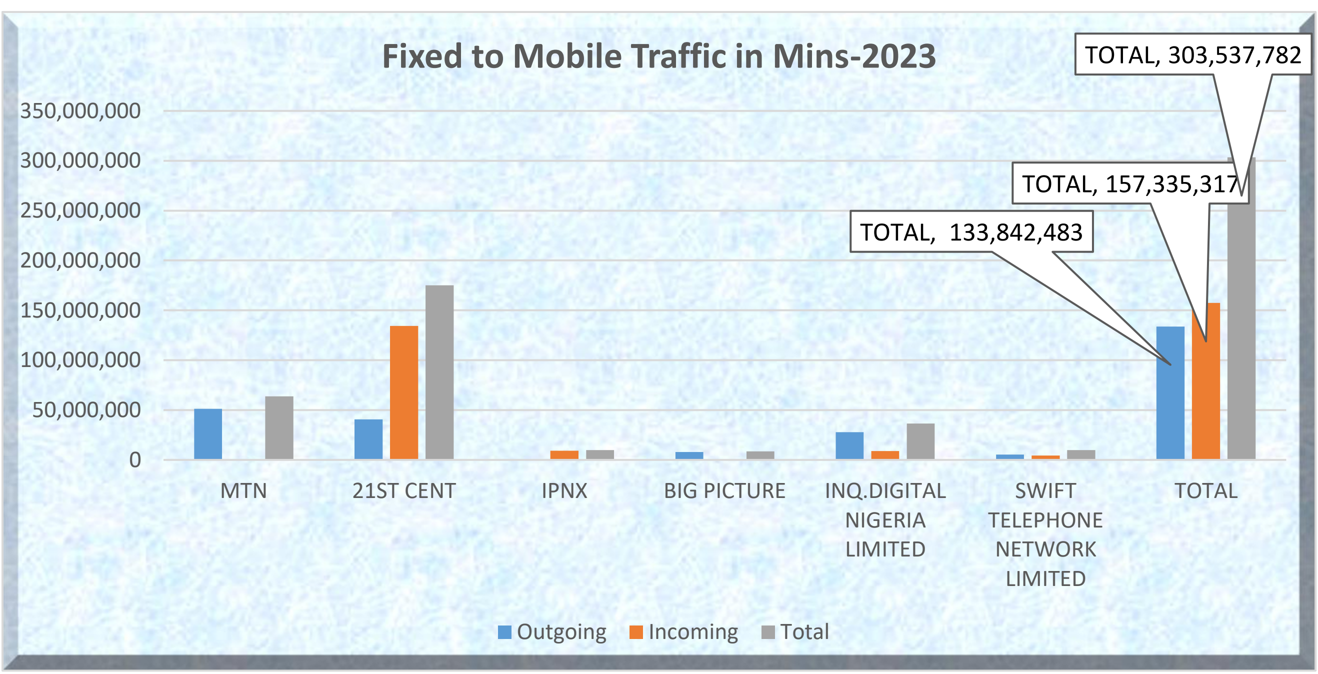

Figure 6: Total number of Fixed to Mobile Traffic (2023)

4. **Total number of Outgoing/ incoming Fixed Minutes International traffic:**

As at December, 2023 the total number of **Outgoing Fixed International** traffic (**minutes**) for MTN, 21st Century, ipNX, and Inq. Digital, were **171,470,734; 1,213,940**; **11,013,590** and **29,749,080** minutes respectively. While **Incoming Fixed International** traffic for MTN, 21st Century and Inq. Digital were **143,386; 4,199,245; & 42,347,830**; and **38,842,080** respectively.

Over all the total number of **Outgoing Fixed International** traffic reported was **213,447,344, w**hile **Incoming Fixed International** traffic was **85,532,541.**

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 2023.

OUTGOING/ORIGINATING FIXED MINUTES INTERNATIONAL TELEPHONE TRAFFIC 2023			
Operators	**Outgoing**	**Incoming**	**Total**
MTN	**171,470,734**	**143,386**	**171,614,120**
21ST CENT	**1,213,940**	**4,199,245**	**5,413,185**
IPNX	**11,013,590**	**42,347,830**	**53,361,420**
INQ.DIGITAL NIGERIA LIMITED	**29,749,080**	**38,842,080**	**68,591,160**
TOTAL	**213,447,344**	**85,532,541**	**298,979,885**

Table 7: Local and National Telephone Traffic 2023 (In Minutes)

D. FINANCIAL DATA - FIXED (December 2023)

1a. CAPEX- Local Investments in the segment: Capex expenditure was recorded at Two Hundred and Seventy Three Million, Ten Thousand, Two Hundred and Twenty Two Naira (**₦273,010,222.00)** as at December 2023.

1b. Operating Cost: Similarly, the total Operating cost as at December 2023 for the Fixed Telephone Market segment stood at the sum of Two Hundred and Fourteen Million, Seven Hundred and Fifty Thousand, Four Hundred and Seventy One Naira Thirty Kobo (**₦214,750,471.30)**.

1c. Revenue: The total Revenue as at December 2023 for the fixed Service Providers was Sixty Million Naira (**₦ 60,000,000.00)**.

E. STAFF PROFILE

The total number of Staff reported by the fixed telephone operators (21st Century, Swift Telephone Network and Big Picture) as at December, 2023 was 153 comprising of Male: 100 and Female: 52 (1 Male Expatriate male).

CHAPTER FOUR

ANALYSIS OF 2023 YEAR END PERFORMANCE REPORT FOR INTERNET SERVICE PROVIDERS (ISPs)

A. INTRODUCTION:

In line with the Commission's procedures for the Year-End data collection from the Internet Service Providers (ISPs) through administration of questionnaires, a total number of 194 (One Hundred and Ninety Four) Internet Service Providers (ISP) were requested to make submissions for the year end 2023. Out of the 194 ISPs, 106 responded with the requested statistical figures, 12 made empty submissions while 76 were non-responsive. Thus, the response rate currently stands at approximately 61%.

B. NETWORK DATA:

1. Points of Presence (PoP):

A total number of 106 ISPs across Nigeria as at December 2023 had a combined total of **2,377** PoPs. Table 1 above, shows that Spectranet had the highest number of PoPs with **645**, indicating **27.16%** of the PoPs, followed by Swifttalk Ltd, Tizeti Ltd, Galaxy Backbone Ltd, and Cyberspace Ltd with **170, 163, 143,** and **131** PoPs, indicating **7.15%, 6.86%, 6.02%** and **5.51%** respectively**.**

The other ISPs had a combined total of **1,125 PoPs** representing **47.33%** of the Point of Presence - Arif Investment Ltd, CBC Emea Ltd and **23** other ISPs were among service providers with (1) point of presence.

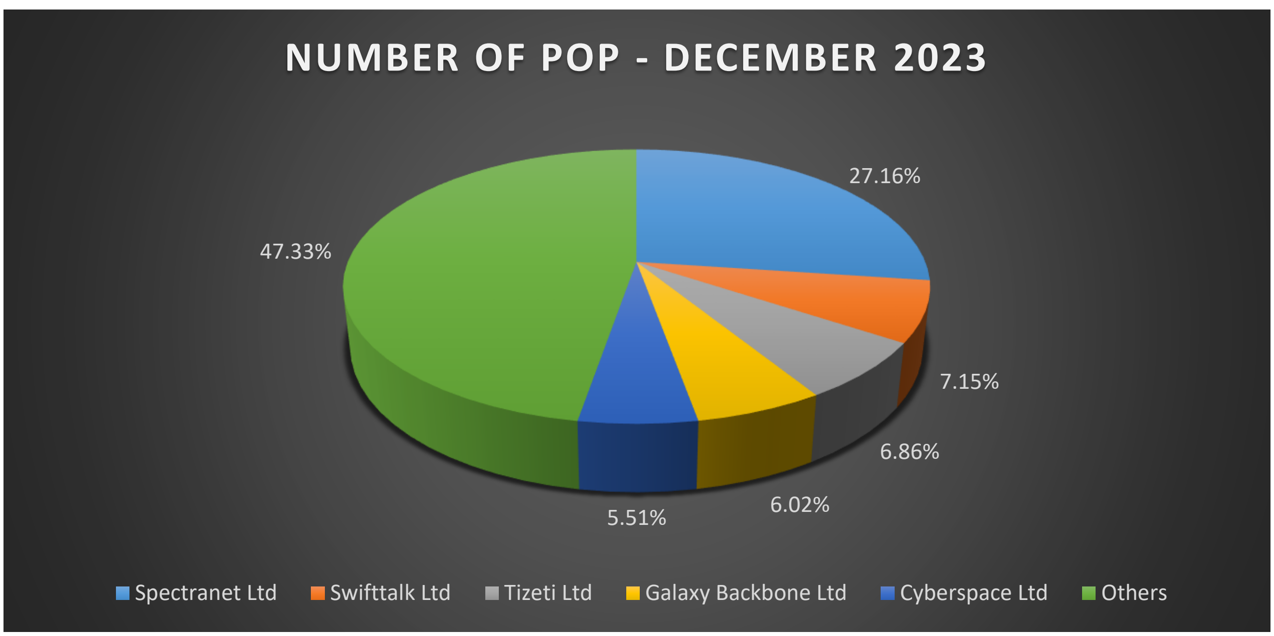

Figure 1: Analysis of Points of Presence (PoP) as at December 2023

The Chart above indicates the five (5) ISPs with highest percentage of PoP. Spectranet recorded the highest percentage with **27.16%** of PoP, followed by Swifttalk Ltd with **7.15%,** Tizeti Ltd with **6.86**%, Galaxy Backbone with **6.02%** and Cyberspace Ltd **5.51%** respectively, while others had a combined Points of Presence of **47.33%.**

2. **Location of Service Provider:**

Internet Service Providers (ISPs) in Nigeria are concentrated mostly in Lagos followed by Abuja perhaps due to the urban high population as well as high number of businesses which in turn generates high demand for broadband services in the areas.

3. **Operator Bandwidth Capacity**

Operator bandwidth is the amount of bandwidth available to an operator for subscribers' use.

Mainone Ltd Ltd had the largest bandwidth capacity with 490,100Mbps (equivalent to 0.49Tbps (490Gbps), followed by Galaxy Backbone and Liquid Intelligent Technologies Ltd with 200,000Mbps each, equivalent to 0.20Tbps (200Gbps) as at December 2023.

4. **Access Speed being offered:**

As at December 2023, the downlink speed offered by various 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 256 Kbps-10 Mbps. In this categories 5M Telecom Ltd, 8te Global Ltd and Trakatel Ltd amongst others recorded the highest speed of up to 10 Mbps. Arif Investment Ltd, Coz Internet Ltd, and Syscodes Communications Ltd recorded the lowest speed with 1Mbps.

ii. **The medium access** speed categories were 10 Mbps – 155 Mbps. Access & Content Ltd, Coverage Broadband Ltd, FiberOne Broadband Ltd and Zeta Web Ltd recorded the lowest speed with up to 20 Mbps. Cyberspace Ltd, Starlink Ltd, VDT Communications Ltd, and Winrock Nigeria Ltd amongst others recorded the highest in this category with up to 155 Mbps offered.

iii. **The high access** speed categories were 155 Mbps – 45 Gbps. Orange Nigeria Ltd offered the highest speed with up to 45Gbps, followed by Hoop Nigeria Ltd and Excelsimo Ltd with 10Gbps each. The lowest in this category include Coscharis Ltd, Internetsional Ltd, Megamore Ltd and Nilmage Ltd with up to 200Mbps offered.

C. SUBSCRIBER & SERVICES DATA:

a. Total Number of Active Subscriptions

Total Active Internet Subscriptions from ISPs in 2023 is **262,206** from **208,612** subscriptions recorded in December 2022, indicating a **25.69%** increase in the total active subscriptions. Spectranet Nigeria Ltd had the highest figure with **113,869** which accounted for the **43.43%** of the subscription, followed by FiberOne Broadband Limited and Starlink Internet Services Nigeria Ltd with **27,000** and **23,897** respectively.

b. Total Number of Wired Subscriptions

Total Active Wired Subscriptions recorded **44,565** subscriptions in **December 2023** from **55,245** subscriptions in **December 2022** indicating a decrease of **19.33%** in wired subscriptions during the period under review. IPNX Ltd recorded a total of **14,628** subscriptions out of **44,565** subscriptions, accounting for **33.3%** of the subscriptions made in this category. The significant decrease is attributed to some operators that failed to make submission in this category as at December 2022 but made submission in December 2023. They include; Broadbased Ltd, Kkon Ltd, Luli Fibra Ltd, MainOne Ltd and Ngcom Ltd with **7,073, 1,293, 1,447, 1,307 and 4,232** subscribers respectively.

c. Total Number of Wireless Subscriptions

During the period under review, the total number of wireless subscriptions increased from **153,367** as at December, 2022 to **217,641** in December 2023 indicating an increase of **41.91%**. In this category, Spectranet Ltd with the highest number, **112,976** accounted for about **51.9%** of the subscriptions. CITCC Ltd, Edo Telecom Ltd, Interra Networks Ltd and Priority Communications Ltd recorded the least figure with just One (1) subscription each.

d. Number of Internet Subscribers Per Region

Number of Internet Subscribers Per Region - 2023	**Total**	**Percentage**
South-South	17,506	6.7%
South-West	186,557	71.1%
South-East	3,123	1.2%
North-West	8,308	3.2%
North-East	2,133	0.8%
North-Central	44,579	17%
Total	**262,206**	**100.00%**

***Table 8*: Number of Internet Subscribers per Region**

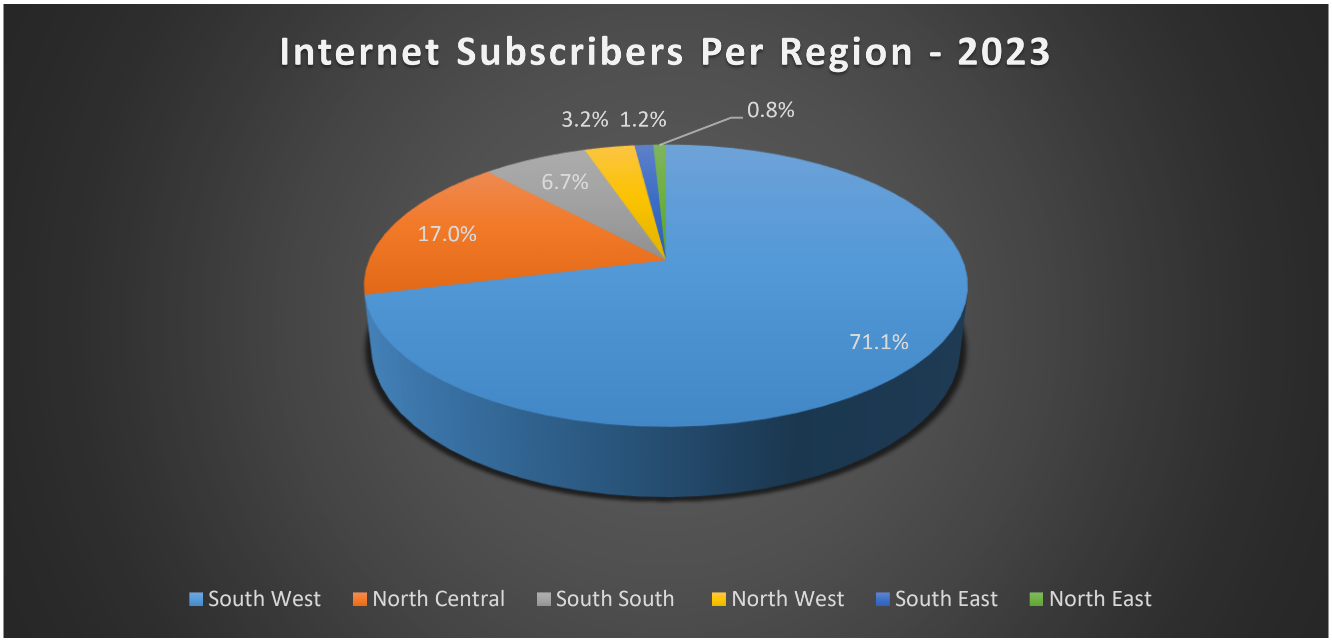

Figure 2: Number of Internet Subscribers per Region

In **December, 2023**, the total number of Internet subscribers that connected through ISPs, in the six geopolitical zones was **262,206.** The analysis of the breakdown is as follows:

a. **South West** had the highest number of Internet subscribers in December 2023 with **186,557 subscribers indicating 71.1%** of the total subscriptions
b. **North Central had 17%** with **44,579** subscribers;
c. **South South had 6.7%** with **17,506** subscribers;
d. **North West had 3.2%** with **8,308** subscribers;
e. **South East had 1.2%** with **3,123** subscribers;
f. **North East** had **0.8%,** which was the least of all the regions with **2,133** subscribers.

Out of the 106 ISPs that made submissions, 62 are based in Lagos representing 58.5%, 24 are in Abuja representing 22.6%, South-West and South-East had 4 each representing 3.8% each, while the remaining 12 which represents 11.3% are in other location of the country i.e. North-West, North-East, North-Central and South-South with 3, 2, 1 and 6 submissions respectively.

e. ***Number of Subscribers by Internet Speed***

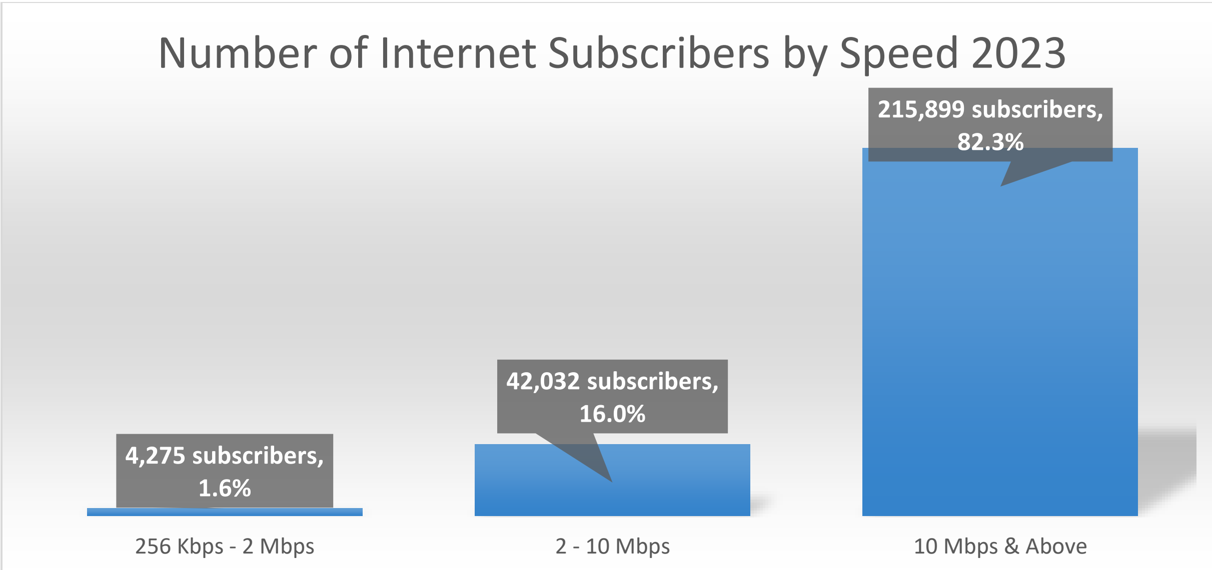

Figure 3: Speed of Internet as delivered to subscribers 2023

As at December 2023, out of a total of **262,206** subscribers via ISPs, **4,275** subscribers subscribed to speeds between **256Kbps-2Mbps**, representing **1.6%** of the total subscriber base; **42,032** subscribers between **2–10Mbps,** representing **16%** of the total subscriber base; & **215,899** subscribers in the **10mbps & above** category, accounting for **82.3%** of the total.

D. FINANCIAL DATA:

a. CAPEX- Local Investments in the segment:

Capex expenditure was recorded at Three Billion, Nine Hundred and Fifteen Million, Two Hundred and Seventy One Thousand, Nine Hundred and Ninety Three Naira, Twenty Seven Kobo (**₦3,915,271,993.27)** as at December 2023 as against Five Billion, Five Hundred and Eighteen Million, Seven Hundred and Six Thousand, Three Hundred and Sixty Six Naira, Thirty Three Kobo **(₦ 5,518,706,366.33)** recorded in December 2022. This indicates a decrease of 29.05% in the total CAPEX as at December 2023.

b. Operating Cost:

The Operating Costs for the ISPs increased from **N71,109,111,027.07** (Seventy One Billion, One Hundred and Nine Million, One Hundred and Eleven Thousand, Twenty Seven Naira and Seven Kobo in **2022** to **N96,808,672,141.58** (Ninety Six Billion, Eight Hundred and Eight Million, Six Hundred and Seventy Two Thousand, One Hundred and Forty One Naira and Fifty Eight Kobo in **2023**. This indicates an increase of **30.6%** in the total operating costs as at December 2023.

c. Revenue:

As at December 2023, a total sum of **N89,806,249,295.90** (Eighty Nine Billion, Eight Hundred and Six Million, Two Hundred and Forty Nine Thousand, Two Hundred and Ninety Five Naira, Ninety Kobo Only) was generated by ISP licensees as revenue, representing a **2.3%** decrease from the **N91,940,441,834.26** (Ninety One Billion, Nine Hundred and Forty Million, Four Hundred and Forty One Thousand, Eight Hundred and Thirty Four Naira, Twenty Six Kobo Only) that was generated in 2022.

E. STAFF PROFILE:

As at December **2023**, the number of staff of ISP operators increased to **5,589** from **4,481** recorded in **2022**. This indicates an increase of **22%** in the work force. There was a total of **4,295** male and **1,294** female staff. A further breakdown reveals that **5,510** of the staff are Nigerians, while expatriates were **79**.

F. SUMMARY OF ISP MARKET SEGMENT

1. **Active Internet Subscriptions:**
   Total Active Internet Subscriptions from ISPs in 2023 is **262,206** from **208,612** subscriptions recorded in December 2022, indicating a **25.69%** increase in the total active subscriptions.

2. **Fixed Wired Internet Subscription:**
   Total Active Wired Subscriptions recorded **44,565** subscriptions in December 2023 from **55,245** subscriptions in December 2022 indicating a dcrease of **19.33%** in wired subscriptions during the period under review. IPNX Ltd accounted for **14,837** which represents **33.3%** of the subscriptions in this category.

3. **Fixed Wireless Internet Subscription:**
   During the period under review, the total number of wireless subscriptions increased from **153,367** as at December 2022 to **217,641** in December 2023 indicating an increase of **41.91%**.

4. **Point of Presence (PoPs):**
   The PoP within the period increased to **2,377** as at December 2023 from **1,977** PoPs recorded in December, 2022. Spectranet had the highest number of PoPs with **645,** indicating **27.16%** of the PoPs**.**

5. **Staff profile:**
   Total number of workforce increased to **5,589** in December 2023 against **4,481** recorded in December 2022, indicating **22%** increase in the workforce of the Internet Service Providers.

CHAPTER FIVE

ANALYSIS OF 2023 YEAR END SUBSCRIBER / NETWORK DATA– (COLLOCATION AND INFRASTRUCTURE SHARING LICENSEES)

A. NETWORK DATA:

The Commission received submissions from Licensees for the 2023 Year End Subscriber/Network Data for Operators which provided auxiliary telecom services for the Collocation and Infrastructure Sharing Market Segment.

These Operators provide telecommunication operations across the Thirty-Six (36) States of Nigeria.

B. INFRASTRUCTURE DEPLOYMENT (MAST & TOWERS):

1. **Number of Towers:** As at December, 2023 the Count of Total Towers in the Industry was 39,356 **Towers** The Collocation and Infrastructure Sharing Market (TowerCo) own about **30,373.** The breakdown of the towers according to each Operator and group is as shown below:

S/N	Mobile Operators	Towers Count
1.	GLO	8,550
2.	MTN	286
3.	EMTS	86
4.	Airtel	61
	Total No. of Towers	8,983
S/N	Collocated Towers (Tower Co)	
1.	IHS	18,925
2.	ATC	8,270
3.	Pan African Towers	764
4.	East Castle	113
5.	Coloplus	139
6.	Extended Networks	42
7.	MPS Technologies	648
8.	Seal Towers	24
9.	Tydacomm	3

10.	**EM Towers**	**3**
11.	**Infraworks**	**3**
12.	**Atlas Towers**	**1**
13.	**Infratel**	**12**
14.	**Union Towers**	**51**
15.	**Vanu Wireless**	**3**
16.	**Africa Mobile Networks Limited**	**1,326**
17.	**CREI Networks**	**40**
18.	**Communications Towers**	**6**
	Total No. of Towers owned by Tower Cos	**30,373**
	Total Number of Towers	**39,356**

Table 1: Breakdown of Towers per Operator 2023

2. **Market Share of Collocation & Infrastructure Sharing Licensee:** As at December, 2023 the total Market share of the Collocation and Infrastructure Sharing Licensees illustrates that IHS Limited has 48% of the entire Market share of ownership of Towers in Nigeria.

C. FINANCIAL DATA - COLLOCATION & INFRASTRUCTURE SHARING (December 2023)

1. CAPEX- Local Investments in the segment: CAPEX expenditure was recorded at Two Hundred and Ninety Three Million, Five Hundred and Sixty Seven Thousand, Three Hundred and Eighty One Naira only **(₦293, 567,381.00)** as of December 2023.

2. Operating Cost: Similarly, the total Operating cost as of December 2023 recorded based on submissions made by operators was Four Hundred and Fifty Seven Billion, Four Hundred and Thirty Four Million, Five Hundred and Fifty Five Thousand, Seven Hundred and Forty Four Naira, Eight Kobo only **(₦457, 434,555,744.08)**

3. Revenue: The total Revenue as of December 2023 for the Collocation and Infrastructure Sharing licensees was One Trillion, One Hundred Forty Four Billion, Six Hundred and Forty Seven Million, Three Hundred and Twenty Three Thousand, Nine Hundred and Forty Six Naira, Sixty Three Kobo only **(₦ 1,144,647,323,946.63).**

D. STAFF PROFILE

As at December, 2023 the total staff strength of Collocation and Infrastructure Sharing Operator Category stood at **1,574** staff. In record, Nigerian staff were **1,535** comprising of **1,210** Male staff and **325** Female staff while Expatriate staff base reported was **39** with **37** Male and **2** Female.

CHAPTER SIX

ANALYSIS OF 2023 YEAR END SUBSCRIBER / NETWORK DATA FOR VALUE ADDED SERVICE (VAS) MARKET SEGMENT

A. INTRODUCTION

The Value-Added Service Market Segment consists of Licensees providing auxiliary telecom services such as Aggregators, 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 provide telecommunications services across the thirty – six (36) States of Nigeria. Thirty – Six (36) Licensees submitted their Network/Subscriber Information and they are listed below:

1. Interconnect ClearingHouse Nigeria Limited
2. TXT Light Power Solutions Limited
3. Payvantage Limited
4. HML Consulting Limited
5. Digiline Solution Limited
6. Information Secure Limited
7. Novaji Introserve Nig Ltd
8. CedarView Communiations Limited
9. Interra Networks Limited VAS (Contact Centre)
10. Interra Networks Limited VAS (Special Numbering Services)
11. Interra Networks Limited VAS (Short Code Services)
12. Telcovas Solutions & Services Limited
13. Alvoice Solutions Limited
14. Capivas Africa Limited
15. Tpay Telecom Services Limited
16. Simteckcard Plant Limited
17. Avanzar Technologies Limited
18. Vas2Nets Technologies Limited
19. Avetium Consult Limited
20. Elrae Technologies Limited
21. Pisi Mobile Services Limited
22. Nextgen Telesolutions Limited
23. Callphone Limited
24. Alpha Technologies Limited
25. Growthngine Nigeria Limited
26. Broadbased Communications Limited

27. Thevar Projects & Telecoms Limited
28. Martad Education & Skills Development Limited
29. Nzmobile Nigeria Limited
30. Mkel Networks Limited
31. Clairvoyant Business Option Limited
32. Cloud Interactive Associates Limited
33. Perpetual Communications Limited
34. Cowrie Integarted Systems Limited
35. Iykejordan Limited
36. Celd Innovations Limited

B. NETWORK STATISTICS:

Based on the available data, the total number of active subscriptions to the various Value Added Services (VAS) by the end of year 2023 stood at Ten Million, Eight Hundred and Forty Five Thousand, One Hundred and Thirty Four subscribers (**10,845,134**), signifying a **94.16%** increase from Five Million Five Hundred and Eighty Five Thousand, Six Hundred and Fifty (**5,585,650**).

NETWORK STATISTICS BASED ON NUMBER OF SUBSCRIPTIONS 2022 & 2023	
Year	**Active Subscriptions**
2022	**5,585,650**
2023	**10,845,134**
Percentage Change	**94.16%**

Figure 1: Active Subscriptions 2022 – 2023

C. FINANCIAL DATA – VAS SEGMENT (December 2023)

1a. CAPEX- Local Investments in the segment: The Domestic Investment (CAPEX) figure reported was One Billion Eight Hundred and Eleven Million Seven Hundred and Eighty - Five Thousand Four Hundred and Seventy Two (₦ 1,811,785,472.00) as at end of Year 2023.

1b. Operating Cost: The total Operating cost incurred by the Licensees as at the end of December 2023 was Fifty Three Billion Six Hundred and Thirty One Million One Hundred and Nine Thousand Five Hundred and Six (₦ 53,631,109,506.94).

1c. Revenue: The total revenue generated by VAS licensees in Year 2023 stood at Fourteen Billion Five Hundred and Fifty Nine Million Nine Hundred and Seventy Eight Thousand Five Hundred and Twenty Two (₦ 14,559,978,522.80).

D. <u>STAFF PROFILE:</u>

As at December, 2023 the total staff strength of VAS market segment stood at **813** staff. In record, Nigerian staff were 807 comprising of 564 Male and 243 Female while the Expatriate Staff base reported 5 Male and 1 Female in record.

E. <u>OBSERVATION</u>

Arising from the collation and analysis of the submissions from the Operators, we make the following observations:

1. The active subscription of the VAS Market segment recorded a total number of Ten Million, Eight Hundred and Forty Five, One Hundred and Thirty – Four subscribers **(10,845,134),** signifying a **94.1 % increase** from Five Million Five Hundred and Eight – Five Thousand, Six Hundred and Fifty **(5,585,650)** recorded in 2022.

2. The Market recorded a total sum of Fifty Three Billion, Six Hundred and Thirty One Million, One Hundred and Nine Thousand, Five Hundred and Six Naira and Ninety Four Kobo **(₦ 53,631,109,506.94)** as Operating cost during the period under review as against Fourteen Billion, Nine Hundred & Fourteen Million, One hundred and Forty Sixty Thousand, Eight Hundred and Ninety Eight Naira **(N14, 914,146,898.00)** recorded in the previous year, signifying a **259.59% increment** in Operating cost.

3. Again, the revenues generated during the period in view stood at Fourteen Billion, Five Hundred and Fifty Nine Million, Nine Hundred and Seventy Eight Thousand, Five Hundred and Twenty Two Naira and Eight Kobo **(₦ 14,559,978,522.80)** as against Forty Billion, Seven Hundred and Forty Two Million, Nine Hundred Thousand, Two Hundred and Forty Three Naira and Fifty Kobo (**₦40, 742,900,243.50**) signifying a **64.26% decline** in Revenue reported by operators within the year.

CHAPTER SEVEN

ANALYSIS OF 2023 YEAR END SUBSCRIBER / NETWORK DATA FOR OTHER OPERATORS

A. INTRODUCTION

These "Other Operators" referred to in the report provide auxiliary 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 of the Country.

INFRASTRUCTURE DEPLOYMENT

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

   As at December, 2023 the total Long Distance cable deployed by Operators in this category was 18,711km. 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. Inq. Digital Nigeria (Vodacom Business Africa Limited) recorded 14,000km.

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

   The total number of E1 in use by Operators as at the end of Year 2023 was 27,354 reported by operators.

3. **Number of Gateways:**

   The total Number of Gateways in use as at year 2023 based on submissions by service providers in this category was 32.

   i. Interconnect Clearing House Nigeria Limited reported 21;
   ii. Enverge Limited reported 4,
   iii. Bitflux Communications Limited reported 3;
   iv. Solid Interconnectivity Services Limited – 2.
   v. Interconnect Clearing House Nigeria Limited - 21
   vi. Telko Managed Services Limited – 1,
   vii. Realife Telecommunications Limited – 1, number of the Gateways.

4. **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 2023)

1a. CAPEX- Local Investments in the segment: The Domestic Investment (CAPEX) figure reported was One Billion Two Hundred and Eighty Nine Million, Six Hundred and Forty Six Thousand, Six Hundred and Fifty Five Naira and Forty Six Kobo (**₦1,289,646,655.46**) as at end of Year 2023.

1b. Operating Cost: The total **Operating cost** incurred by the Licensees as at the end of December 2023 was Thirty Four Billion, Eight Hundred and Fifty Nine Million, Eighty Hundred and Eighty Nine Thousand, Four Hundred and Forty Six Naira and Fifty Eight Kobo **(₦ 34,859,889,464.58)**

1c. Revenue: The total revenue generated by Other Licensees in Year 2023 stood at the sum of Forty One Billion, Eight Hundred and Forty One Million, Three Hundred and Ten Thousand, Seven Hundred and Ten Naira and Thirty Nine Kobo (**₦41, 841,310,710.39)**

D. STAFF PROFILE:

As at December, 2023 the total staff strength of Other Operator's market segment stood at **2,426** staff. In record, Nigerian staff were 2,321 comprising of 1,955 Male and 366 Female while the Expatriate staff base reported 81 Male and 24 Female.