

# 2014 YEAR END SUBSCRIBER/ NETWORK DATA REPORT FOR TELECOMMUNICATIONS OPERATING COMPANIES IN NIGERIA

**Policy Competition and Economic Analysis Department** 



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#### WHO WE ARE

The Nigerian Communications Commission (NCC) is the Independent national regulatory authority for the telecommunications industry in Nigeria. The Commission was created by Decree 75 of 1992, which enabled the partial deregulation of the telecommunications industry. In 2003, the Nigerian legislature took a comprehensive review of the decree to enact the Nigerian Communications Act 2003, which mandated the full deregulation of the sector.

The primary responsibility of the NCC is the promotion of investments into the Nigerian Market, and facilitation of entry by service providers for the provision of efficient, cost effective and qualitative services. The Commission is also responsible for providing an enabling environment for healthy completion among service providers in the industry as well as the protection of the consumers in the sector.

#### **CORPORATE SRATEGY**

- ❖ Vision: To be a responsive, world class communications regulatory organization.
- Mission: To support a market driven telecommunications industry and promote universal access.
- **Core Values:** Integrity, Excellence, Professionalism, Responsiveness, Innovation
- Guiding Principles: Fair, Firm, Forthright

#### 1. HISTORICAL PERSPECTIVE OF THE TELECOMS SECTOR

Prior to 1999, Telecommunication services were expensive to acquire, Difficult to obtain, Expensive to use. Teledensity stood at 0.04% (about 400,000 users) in a country with an estimated population of over 100 million people which was one of the lowest in the world. Investment in the sector was below \$50m US dollars.

This state of affairs had adverse consequences on the nation; more pressure on other infrastructure such as roads, Inability to make emergency calls in life threatening situations undoubtedly leading to the loss of many lives, business efficiency not maximized, reduced social cohesion, and Inability to leverage the potentials being promised by ICTs in all aspects of human endeavor.

## 1.1 Increased Subscriber Lines and Teledensity

Prior to the liberalization of the Nigerian Telecom industry, there were just about 400,000 lines with a teledensity of 0.4; there has however been a significant improvement as total active subscriptions as at the end of December 2014, about fourteen years after full liberalisation stood at over 139.1 million lines with a teledensity of over 99.39.

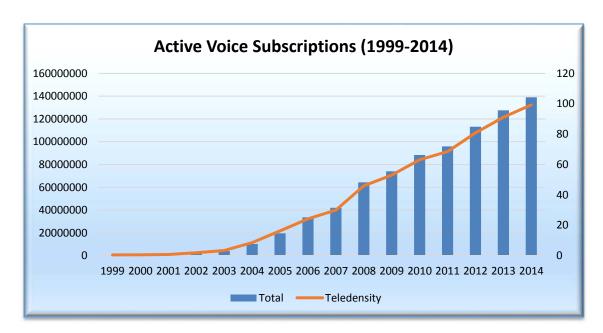


Figure 1: Trend of Active Voice Subscriptions 1999-December 2014.

#### 2. TELECOM INDUSTRY REVIEW 2013-2014

The significant growth as evidenced by the growth in the number of telecom subscribers as well as infrastructural development to mention a few.

❖ The Commission recorded a significant increase in the number of telecom subscriptions in year 2014. This is evidenced by the increase in total active

subscriptions from **127,606,629** in December, 2013 to **139,143,610** as at December 2014 with Teledensity from **91.15** to **99.39** 

- ❖ Total Active Internet subscriptions has also increased from 64,417,110 as at December, 2013 to 76,494,696 as at December 2014.
- ❖ Following the launch of Mobile Number Portability (MNP) service by the Commission in April 2013, the cumulative total number of ported lines (both incoming and outgoing) as at December, 2014 was 452,107 from 157,432 recorded in December 2013.
- ❖ Installed capacity as at December 2014 was 275,594,468 from 248,353,725 reported in December 2013 while total connected lines stood at 188,892,194. The total number of Base Transceiver Stations (BTS) sites increased to 30,954 for both the GSM and CDMA telecoms Operators from 28,289 reported in December 2013.
- ❖ The Nigerian telecom industry is primarily driven by the Mobile (GSM) market segment as this segment accounts for 98.30% of the entire telecoms market while the Mobile (CDMA) and Fixed/ Fixed Wireless segments account for about 1.57% and 0.31% respectively.
- ❖ This has shown an increased telecoms penetration throughout the country that is better, well connected with wider coverage despite the challenges of quality of service provided by the telecoms operators.

The 2014 Year End Subscriber/ Network report for telecommunication companies in Nigeria was collated from the responses of the telecoms operating companies in Nigeria to the Annual questionnaires administered as at the end of December 2014.

Find below a report on the data collated and the review of the submissions of the telecoms operating companies as at 2014 Year End.

#### **SECTION 1.**

#### a. Total Number of Active Voice Subscriptions:

As at December, 2014 total active voice subscriptions was 139,143,610 while Teledensity was 99.39 This indicates that there was a 9% increase from 2013 when total active voice subscriptions was 127,606,629 and Teledensity was 91.5.

This growth in active voice subscriptions was primarily driven by the growth in the Mobile (GSM) market segment. While the Mobile (GSM) market segment accounted for 98.30% of the entire market, the Mobile (CDMA) and Fixed Wired/ Wireless segments recorded a decline indicating a 9.36% decrease as at December 2014 and the Fixed Wired/ Wireless decreased by 0.14%.

The decline in these segment may still be a result of Visafone's ended promo and Market drive for sales to boost their subscriber base during the last quarter of the year and largely attributed to a reduction in MultiLinks' HLR from 2.1 Million to 950,000 which resulted to the shutdown of the operators Abuja HLR.

The Mobile CDMA and Fixed Wired/ Wireless segments merely accounted for 1.57% and 0.13% respectively of the entire market as at December, 2014.

Table 1					
	2014				
Total Active Subscriptions	88,348,026	95,886,714	113,195,951	127,606,629	139,143,610
Teledensity	63.11	68.49	80.85	91.15	99.39

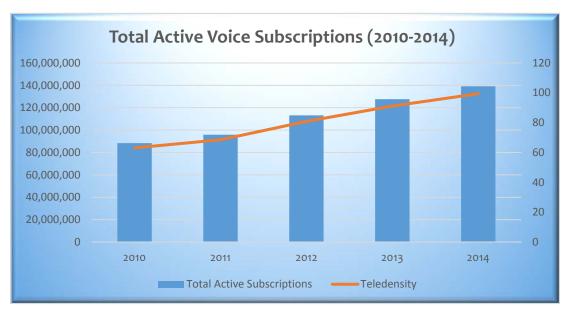


Figure 2: Subscriber Data- Active Voice Subscriptions & Teledensity (2010 - 2014)

#### b. Market Share of Mobile GSM Operators

As at December, 2014 the Mobile GSM Operators recorded a total of 136,772,475 active voice subscriptions indicating that it accounted for 97.83% of the entire market. A further break down shows that MTN; GLO; AIRTEL & EMTS respectively had 59,893,093; 28,219,089; 27,556,544; 21,103,749 active voice subscriptions thereby indicating that MTN; GLO; AIRTEL & EMTS each had 44%; 21%; 20% & 14% share of the Mobile GSM market. The Mobile CDMA and the Fixed Wired/ Wireless market segments each accounted for 1.57% and 0.13% share of the entire market.

TABLE 2: MARKET SHARE OF MOBILE GSM AS AT DEC 2014						
MTN	GLO	AIRTEL	EMTS			
59,893,093	28,219,089	27,556,544	21,103,749			
44%	21%	20%	15%			



Figure 3: Percentage of Market Share of Mobile GSM Operators as at December, 2014

TABLE 3: PERCENTAGE ( TECHNOLOGY (DEC 2014)	OF MARKET	SHARE OF	SERVICE	DEPLOYMENT	ВҮ
MOBILE(GSM)	МОВІ	LE(CDMA)	FIXE	O WIRED/ WIREL	ESS
97.83%	,	1.57%		0.13%	

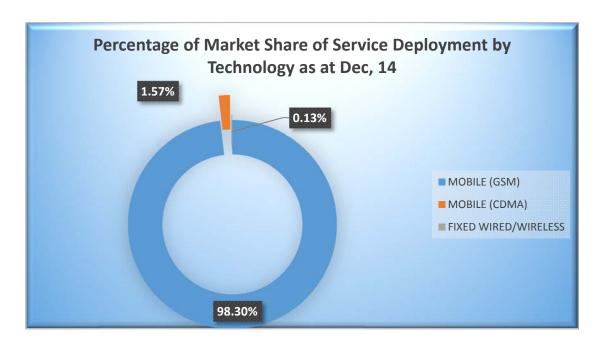


Figure 4: Percentage of Market Share of service deployment by technology as at December, 2014

#### c. Total Number of Active Internet Subscriptions:

As at December 2014, the total active internet subscription for all market segments was 76,492,866. The four (4) Mobile GSM operators recorded **76,324,632** active internet subscriptions indicating that the Mobile GSM operators accounted for **99.7**% of total active Internet service subscriptions. The Fixed Wired/Wireless market segment only accounted for 0.20% of total active internet subscriptions.

TABLE 4: TOTAL NUMBER OF INTERNET SUBSCRIPTIONS (JAN- DEC 2014)					
JAN, 2014	FEB, 2014	MAR, 2014	APR, 2014	MAY, 2014	JUN, 2014
64,264,496	63,640,926	64,139,429	65,980,392	67,629,469	67,368,214
JUL, 2014	AUG, 2014	SEPT, 2014	OCT, 2014	NOV, 2014	Dec-14
70,477,251	72,580,325	74,040,817	73,292,493	74,241,805	76,492,866

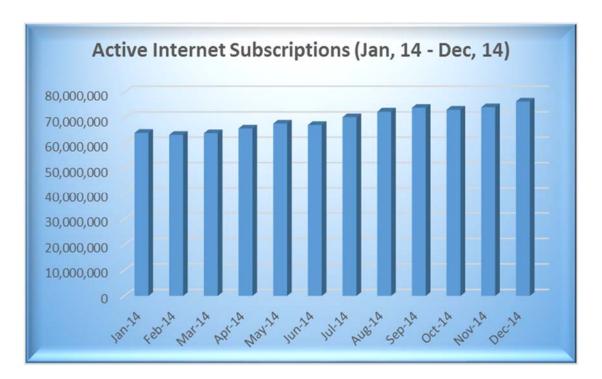


Figure 5: Total Active Internet Subscriptions (Jan 2014 - Dec 2014)

#### d. <u>Cumulative Total Numbers Ported-Incoming and Outgoing:</u>

Table 6, below shows the trend of Nigeria's porting activities from inception (May, 2013 to December, 2014) for the four (4) major GSM operators. The analyses above illustrates that EMTS has had the highest number of ported subscribers (92946) from other networks with AIRTEL, GLO and MTN each having; 85,918; 38,156 & 16,434 respectively. Similarly, our analysis of ported subscribers to other networks from May, 2013 to December, 2014 reveals that MTN had the highest number of ported subscribers (96,496) to other networks with AIRTEL, GLO & EMTS each recording; 51,902; 42,091 & 28,164 respectively for the four (4) major GSM operators.

TABLE5: CUMMULATIVE PORTED NUMBERS (MAY 2013- DEC 2014)						
MTN GLO AIRTEL EMTS TOTAL						
Cumulative Port-In	16,434	38,156	85,918	92,946	233,454	
Cumulative Port-Out	96,496	42,091	51,902	28,164	218,653	

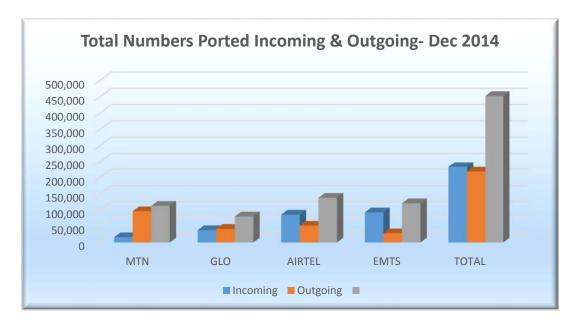


Figure 6: Total Cumulative Ported Incoming & Outgoing as at Dec 2014.

#### **SECTION 2.**

#### Infrastructure Deployment.

#### a. Base Transceiver Stations (BTS) Sites:

As at December 2014, the installed capacities for (MTN, GLO, AIRTEL and EMTS) were 80,000,000; 38,631,800; 51,012,668 and 40,000,000 respectively. Active voice subscriptions increased from the year 2012, active voice subscriptions increased to 59,893,093; 28,219,089; 27,556,544 and 21,103,749 for MTN, GLO, Airtel and EMTS respectively.

MTN, GLO, Airtel and EMTS had 12,557; 6,677; 6,186 and 4,756 base stations. Mobile [GSM] operators owned a total of **30,176** base stations which is an increase from **28,289** base stations recorded by Mobile [GSM] in December, 2013 thereby indicating an increase of **6.6**%.

TABLE 6:INSTALLED CAPACITY, ACTIVE VOICE SUBSCRIPTIONS & BASE STATIONS GSM (2013 - 2014)					
	MTN	GLO	AIRTEL	EMTS	
2013 Installed Capacity	80,000,000	39,396,740	58,000,000	40,000,000	
2013 Active Voice Subscriptions	56,766,085	25,933,867	24,847,567	17,035,276	
2013 Base stations	11,551	6,305	5,997	4,436	
2014 Installed Capacity	80,000,000	38,631,800	51,012,668	40,000,000	
2014 Active Voice Subscriptions	59,893,093	28,219,089	27,556,544	21,103,749	
2014 Base stations	12,557	6,677	6,186	4,756	

<sup>\*</sup>These figures submitted are as at December 31st of each year (2013 & 2014)

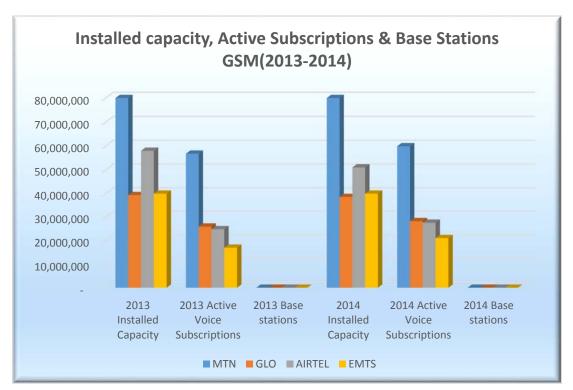


Figure 7: Installed Capacity, Active Voice Subscriptions & Base Stations (GSM) 2013 - 2014

As at December 2014 the installed capacities for Visafone and Multilinks were 6,500,000 and 950,000. Visafone reported a decrease in their installed capacity from 6,700,000 reported in December 2013, however they recorded an increase in base stations from 567 to 695 as at December 2014 while active voice subscriptions was unstable during the year. On the other hand Multilinks significant decrease of Installed Capacity of 950,000 from 5,100,000 reported in December 2013 is as a result of the reduction in Multilinks' HLR from 2.1 Million to 950,000 which resulted to the shutdown of the operators Abuja. Similarly Multilinks has experienced a constant decline in active voice subscriptions during the year under review.

Active Voice subscriptions for Visafone and Multilinks were 2,224,511 & 22,938 as at December 2014. As at December 2014, Visafone and Multilinks recorded a total of **748** base stations and when compared with the year 2013, this shows a decline for the Mobile CDMA segment when the Mobile CDMA reported a total of **641** base stations.

The Mobile CDMA accounted for 1.57% share of the entire market as at December 2014 and this market segment has recorded a general decline over the past years which is attributed to the technology of the Mobile CDMA and thus losing their share of the Market to the Mobile GSM.

TABLE 7:INSTALLED CAPACITY, ACTIVE VOICE SUBSCRIPTIONS & BASE STATIONS CDMA(2013-2014)					
VISAFONE MULTILINKS					
2013 Installed Capacity	6,700,000	5,100,000			
2013 Active Voice Subscriptions	2,101,520	66,444			
2013 Base stations	567	74			
2014 Installed Capacity 6,500,000 950,000					
2014 Active Voice Subscriptions 2,224,511 22,93					
2014 Base stations	695	53			

<sup>\*</sup>These figures submitted are as at December 31st of each year (2013, & 2014)

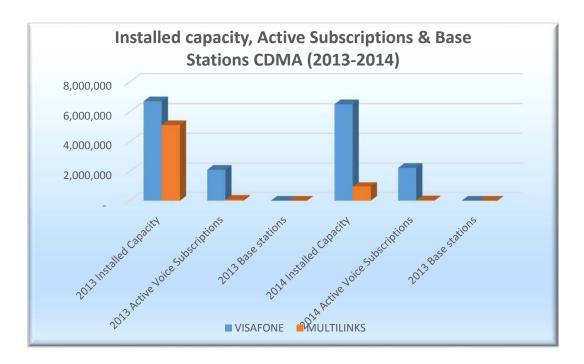


Figure 8: Installed Capacity, Active Voice Subscriptions & Base Stations (CDMA) [2013-2014]

An analysis of the trends for installed capacities, active subscriptions & base stations from 2013-2014 showed that the Mobile GSM operators had a steady pattern of growth. Also, there was an increase of number of the base stations deployed by the various operators. While the Mobile CDMA segment had a decline in active voice subscriptions and number of base stations which is also as a result of a reduction in MultiLinks' HLR and further closure of several base stations by Multilinks during the year.

IpNX also had 49 base stations, while ISP'S including Entouche Networks Nigeria Limited, IS Internet Solutions Limited, Vodacom Business Africa Nigeria Limited, Juniper Solutions Limited, Spectranet Nigeria Limited, Cobranet Limited, ipNX Nigeria Limited and Ezweb

Wireless Limited had a total number of **404** Points of Presences (POPs) with several base stations in Nigeria.

**Installed capacity** varied for each internet service provider; Entouche Networks Nigeria Limited had 250, IS Internet Solutions Limited had 373links, Vodacom Business Africa Nigeria Limited had 3.6 GHz, Juniper Solutions Limited had STM2, Spectranet Nigeria Limited had 150,000, Cobranet Limited had 1.5Gbps, ipNX Nigeria Limited had 29,324, VDT Communications Limited had 400Mbps and Ezweb Wireless Limited reported 1,440Mbps installed capacity.

Similarly, a varied **bandwidth capacity** is also evident; Entouche Networks Nigeria Limited had 10Mbps, IS Internet Solutions Limited had 930Mbps, Juniper Solutions Limited had STM1, Spectranet Nigeria Limited had 9.2Gbps, Deston Integrated Services Limited had 256/128K, Cobranet Limited had 1.6Gbps, ipNX Nigeria Limited had 3Gbps, VDT Communications Limited had 465Mbps and Ezweb Wireless Limited recorded 12Mbps bandwidth capacity.

Phase 3 Telecom, Vodacom Business Africa (Nig), Interconnect Clearing House Nigeria Limited, Tycil Telecom, GTS Infotel Limited, Defcom Technologies Limited and Layer 3 Limited had a total number of **160** coverage locations in Nigeria.

As at December, 2014, Phase3 Telecom, Vodacom Business Africa (Nig), Interconnect Clearing House Nigeria Limited, Tycil Telecom, GTS Infotel Limited, Defcom Technologies Limited and Layer 3 Limited had a total number of 11, 33, 3, 37, 37, 37, & 2 coverage locations respectively across the 36 states of the federation including the Federal Capital Territory.

#### Fibre Optics Deployment in Kilometers:

**Fibre Optics:** As at December 2014, the telecoms operating companies (GSM and CDMA/Fixed telephony Operators) had deployed a combined total of **80,938km** of Fibre optics.

TABLE 8: FIBRE OPTICS (in km) 2014					
	Onland	Submarine			
MTN	19,200	-			
GLO	10,869	9,800			
AIRTEL	6,314	23			
EMTS	4,300	-			
MULTILINKS	5,789	-			
VISAFONE	43	-			
MTN-FXD	12,518	6,682			
21st CENTURY	5000	1			
ipNX	400	424			
TOTAL	64,433	16,506			

A further analysis of the fibre optics data showed that of the **80,938km** deployed as at December 2014, **64,433 km** was on-land while **16,506** km was submarine. MTN had the largest on-land with **19,200 km**, GLo had on land of 10,869km and submarine of 9,800km, Airtel had deployed 6,314 km, EMTS had 4300km while Multilinks, Visafone, MTN FXD,21<sup>ST</sup> Century and ipNX had deployed 5,789km,43km,12,518km,5000km and 400km of On land Fibre optics respectively.

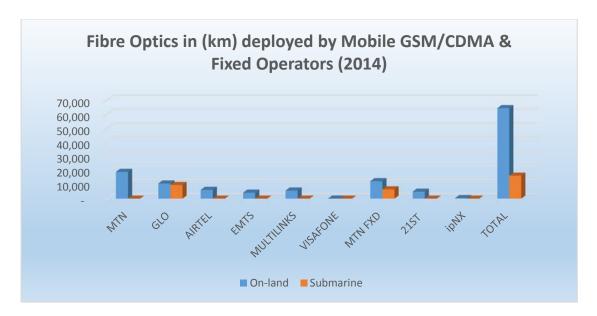


Figure 9: Fibre Optics deployed by Mobile GSM, CDMA & Fixed Operators in 2014

Fibre optics for other category of operators; Interconnect Clearing House Nigeria Limited had a total of 18.7km which was an increase from 7.5km reported in 2013. Defcom Technologies Limited and Layer3 had a total of 30km and 161m respectively as at December, 2014 while Tycil Telecom reported using MTN Sim cards as at December 2013 and December 2014.

#### A. Microwave Radio:

As at December, 2014 the Mobile GSM,CDMA & Fixed telephone operators had deployed total microwave radio links of 214,625 km thus indicating an increase of 67,930km from 146,695km reported for 2013.

TABLE 9 : MICROWAVE RADIO (in km)					
	2013	2014			
MTN	11,500	11,553			
GLO	75,044	101,800			
AIRTEL	13,174	30,283			
EMTS	32,780	56,382			
VISAFONE	2,000	2,450			
MTN-FW	11,553	11,553			
21st CENTURY	220	180			
ipNX	424	424			
TOTAL	146,695	214,625			

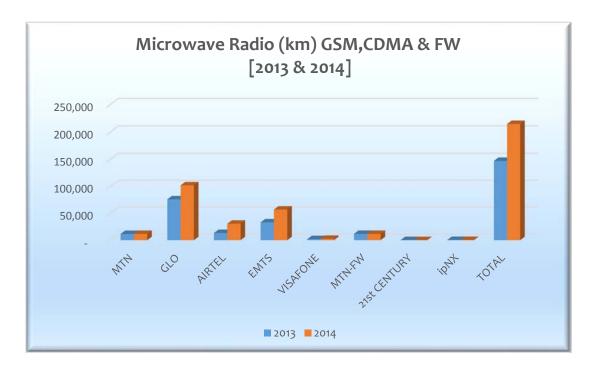


Figure 10: Microwave Radio (km) GSM, CDMA & Fixed (2014)

## B. Number of Gateways in Use:

A total of **110** Gateways were in use by Mobile GSM, CDMA & operators in 2014 compared to 107 in use in 2013.

Interconnect Clearing House Nigeria Limited reported (13) **Number of gateways in use** as at December, 2014 which was an increase from (11) Number of gateways in use recorded in 2013. Similarly, GTS Infotel reported (2) Number of gateways in use as at December, 2014 which was an increase from (1) Number of gateway in use as at December, 2013.

TABLE 10: NUMBER OF GATEWAYS IN USE (2013-2014)					
	2013	2014			
MTN	22	22			
GLO	3	3			
AIRTEL	16	16			
EMTS	33	37			
VISAFONE	4	4			
MTN -FW	22	22			
GLOBACOM	3	2			
ipNX	2	2			
21st CENTURY	2	2			
TOTAL	107	110			

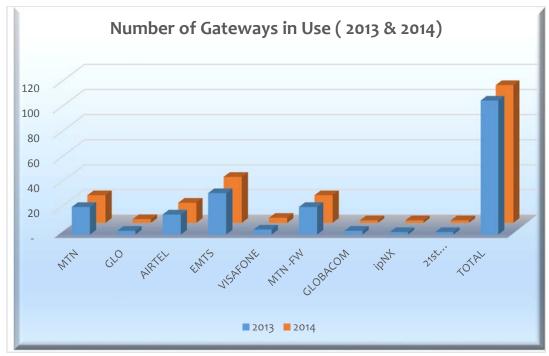


Figure 11: Number of Gateways in Use (2013 -2014)

#### C. <u>Trunks in Use:</u>

For the CDMA/Fixed telephony Operators: Multilinks, Visafone, and 21<sup>st</sup> Century had a total of **2,177** Trunks (E1) in use as at December, 2014 indicating an decrease from **2,388** trunks (E1) reported for 2013 while Multilinks had **327**, Visafone, and 21<sup>st</sup> Century had **1,600** and **250** respectively. Number of Trunks (E1) in use for other category of operators; Interconnect had a total of 3,311 Trunks (E1) in use as at December, 2014 indicating an increase of 816 Trunks (E1) as there was 2,495 Trunks (E1) in use as at December 2013. Defcom Technologies Limited and Layer3 had a total of 238 and 63 Trunks (E1) respectively in use as at December, 2014.

## **SECTION 3.**

## **Subscriber and Services Data**

## A. Total Local and National Telephone Traffic GSM;

Total Outgoing traffic for the Mobile GSM operators as at December 2014 was 32,216,272,310.83 while Total Incoming was 32,631,856,833.06. MTN reported the highest Outgoing Traffic of 10,074,000,000 and the highest incoming traffic of 15,699,000,000 for the period under review.

T/	TABLE 11: LOCAL & NATIONAL TELEPHONE TRAFFIC GSM (2014)					
Outgoing Incoming						
MTN	10,074,000,000.00	15,699,000,000.00				
GLO	7,608,256,463.01	5,065,958,826.28				
AIRTEL	7,042,598,992.00	6,932,463,561.00				
<b>EMTS</b>	7,491,416,855.82	4,934,434,445.78				
TOTAL	32,216,272,310.83	32,631,856,832.90				



Figure 12: Total Number of Local & National Telephone Traffic GSM -2014

## B. Total Local and National Telephone Traffic CDMA & Fixed:

Total Outgoing traffic for the Mobile CDMA operators & Fixed telephone Operators as at December 2014 was 2,182,002,795.95 while Total Incoming was 1,819,854,715.84 MTN Fixed reported the highest Outgoing Traffic of 1,392,000,000 and the highest Incoming Traffic of 1,476,000,000 for the period under review.

TABLE 12: LOCAL & NATIONAL TELEPHONE TRAFFIC CDMA (2014)				
	Outgoing	Incoming		
MULTILINKS	3,094,233.64	9,844,549.00		
GLOBACOM	11,853,221	1,022,315		
MTN	1,392,000,000	1,476,000,000		
VISAFONE	694,480,160	292,063,696		
21st CENTURY	80,428,775	40,924,155		
ipNX	146,406	-		
TOTAL	2,182,002,795.95	1,819,854,715.84		

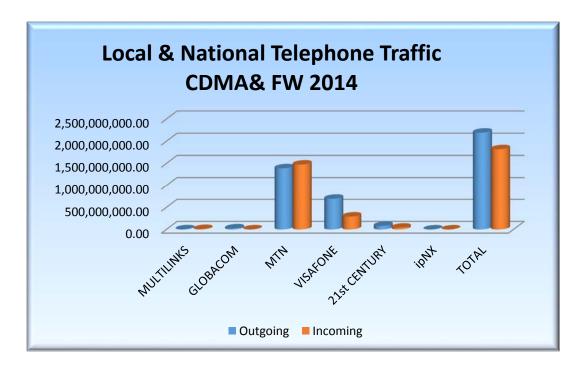


Figure 13: Total Number of Local & National Telephone Traffic CDMA & FW -2014

## C. <u>Total Outgoing/ Incoming Mobile to International Traffic</u>

As at December, 2014 Total Outgoing Mobile to International Traffic was 1,642,981,283.56 while Total incoming Mobile to International Traffic was 2,775,774,791.19. MTN reported the highest Outgoing Traffic of 891,000,000.00 and the highest Incoming Traffic of1, 944,000,000.00 for the period under review.

TABLE 13: TOTAL OUTGOING/INCOMING MOBILE TO INT'L TRAFFIC 2014				
	Outgoing	Incoming		
MTN	891,000,000.00	1,944,000,000.00		
GLO	207,093,638.00	374,563,869.00		
AIRTEL	315,755,070.10	425,017,976.00		
EMTS	207,344,422.49	-		
MULTILINKS	943,960	298,493		
VISAFONE	20,844,193	31,894,453		
TOTAL	1,642,981,283.56	2,775,774,791.19		

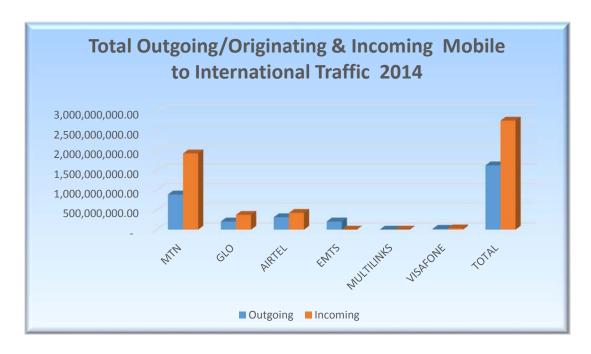


Figure 14: Total Outgoing/Incoming Mobile to International Traffic (2014)

## D. <u>Total Number of Roaming International Minutes Mobile GSM:</u>

The Total Number of Mobile Roaming Minutes Outgoing and Incoming as at December 2015 for the Mobile GSM operators was 66,076,993.71. See Table 14 & Figure 15 below.

TABLE 14: TOTAL NUMBER OF ROAMING MINUTES GSM (2014)					
	Outgoing	Incoming	Total		
MTN	33,865,155.00	14,426,965.00	48,292,120.00		
GLO	3,274,557.00	2,775,263.00	6,049,820.00		
AIRTEL	377,992.00	4,399,274.00	4,777,266.00		
EMTS	4,420,271.32	2,537,516.39	6,957,787.71		
TOTAL	41,937,975.32	24,139,018.39	66,076,993.71		

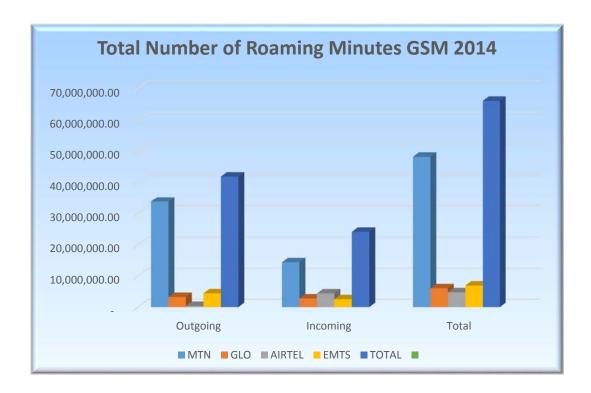


Figure 15: Total Outgoing/Incoming Mobile GSM Roaming Minutes Traffic 2014.

# E. Total Outgoing/Incoming SMS GSM &CDMA:

The Total Number of SMS sent as at December 2014 was 2,280,172,539 while total number of received SMS reported was 2,577,896,769. See Table 15 below & Figure 16 below:

TABLE 15:TOTAL SMS OUTGOING /INCOMING 2014				
MTN	739,000,000	1,125,000,000		
GLO	515,704,665	348,141,363		
AIRTEL	577,594,753	738,917,112		
EMTS	430,417,825	348,559,265		
MULTILINKS	24,965	42,832		
VISAFONE	17,430,331	17,236,197		
TOTAL	2,280,172,539	2,577,896,769		

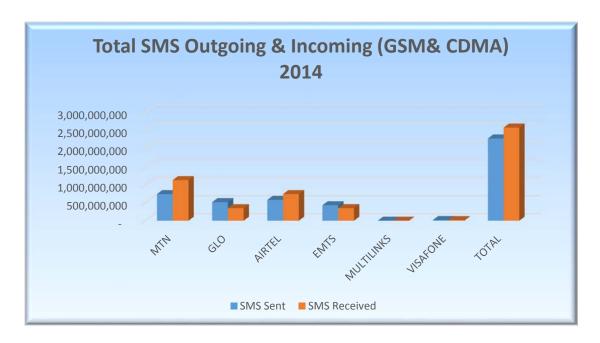


Figure 16: Total Outgoing/Incoming SMS, GSM& CDMA (2014)