POSTAL AND TELECOMMUNICATIONS REGULATORY AUTHORITY OF ZIMBABWE (POTRAZ)

'creating a level playing field'

ABRIDGED POSTAL & TELECOMMUNICATIONS SECTOR PERFORMANCE REPORT

FOURTH QUARTER 2016

Disclaimer:

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1. MAJOR HIGHLIGHTS

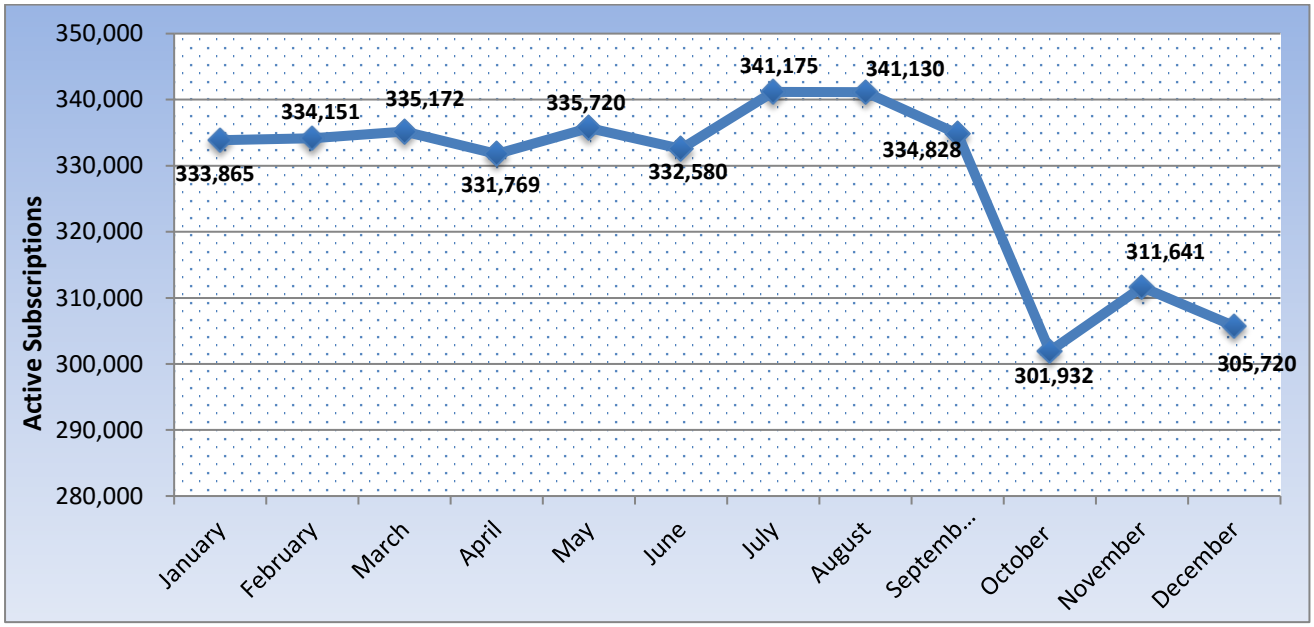
- There was not much movement in subscriptions for mobile and internet services except for fixed telephone lines which declined by 8.7%.
- The mobile penetration rate (active) increased by 0.5% to reach 94.8% from 94.3% recorded in the previous quarter.
- The internet penetration rate declined by 0.1% to reach 50% from 50.1% recorded in the previous quarter.
- Mobile Internet data usage up by 19%, whilst national mobile voice traffic declined by 15%.
- Significant increase in inbound roaming traffic of 36% whilst outbound roaming reduced by 14%.
- Telecommunication revenues increased by 2.8% to record $269,553,225 from $262,021,721 recorded in the previous quarter.
- Mobile money transactions decreased by 35%, with cross networking transactions going down by 44%.
- Internet Access Providers revenue up by 4%.
- Postal and courier volumes increased by 5.4% to register a 10% increase in revenue

2. FIXED TELEPHONE SERVICE

2.1 SUBSCRIPTIONS

The total number of active fixed telephone lines declined by 8.7% to record 305,720 from 334,828 active subscriptions recorded as at 30 September 2016. Active fixed telephone subscriptions have been fluctuating over the year as shown in Figure 1 below:

Figure 1: Fixed telephone subscriptions



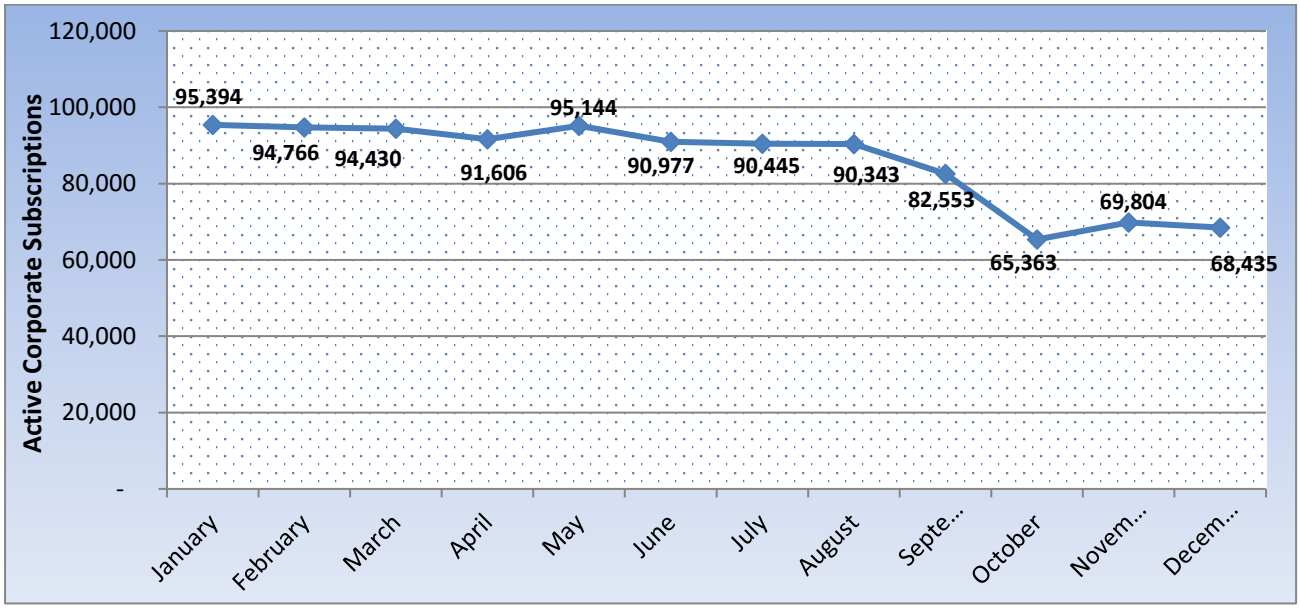
The fixed teledensity declined from 2.5% to reach 2.4% as a result of the decline in active fixed telephone subscriptions. Corporate subscriptions made up 22.4% of total active fixed subscriptions. Table 1 below summarises the quarterly variation in household and corporate subscriptions.

Table 1: Corporate vs. Household Subscriptions

	3rd Quarter 2016	4th Quarter 2016	% Variation
Corporates	82,553	68,435	-17.1%
Household/Individuals	252,275	237,285	-5.9%
Total	334,828	305,720	-8.7%

Corporate subscriptions have been on the decline which is a likely indicator that in the current economic environment corporates are adopting alternatives for voice communication like VoIP. The declining trend of corporate fixed telephone subscriptions is shown in Figure 2 below:

Figure 2: Corporate Fixed Telephone Subscriptions



Of the total active fixed telephone subscriptions, 3.4% were in rural areas. The quarterly variation in the distribution of fixed telephone lines by location is shown in table 2 below:

Table 2: Fixed telephone lines by location

	3rd Quarter 2016	4th Quarter 2016	% Variation
In Rural	9,585	10,499	9.5%
In Capital	253,229	220,441	-12.9%
Other Urban	72,014	74,780	3.8%
Total	**334,828**	**305,720**	**-8.7%**

As shown above, active fixed telephone lines in the capital declined by 12.9% whereas active fixed telephone lines in other urban and rural increased by 9.5% and 3.8% respectively.

2.2 FIXED NETWORK TRAFFIC

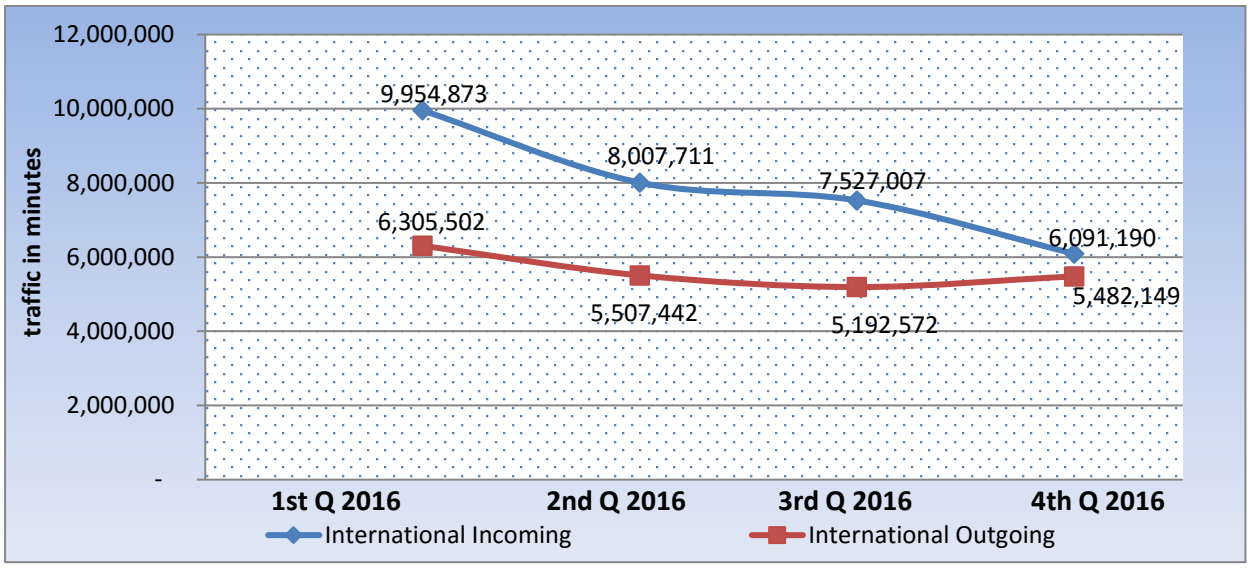
Total traffic on the fixed network increased by 0.9% to record 155.1 million minutes from 153.6 million minutes recorded in the previous quarter. An increase in fourth quarter traffic is typical due to the peak festive period. All the categories of fixed voice traffic registered an increase with the exception of international incoming traffic as shown in table 3 below:

Table 3: Fixed Voice Traffic

Traffic Category	3rd Quarter 2016	4th Quarter 2016	Quarterly Variation %
Net On Net	62,994,025	65,327,245	3.7%
Outgoing to Mobile	69,457,257	69,502,424	0.1%
Incoming from Mobile	6,873,647	7,010,925	2%
Incoming from IAPs	1,115,685	1,156,190	3.6%
Outgoing to IAPs	488,282	532,134	9%
International Incoming	7,527,007	6,091,190	-19.9%
International Outgoing	5,192,572	5,482,149	5.6%
Total traffic	**153,648,475**	**155,102,257**	**0.9%**

International incoming fixed voice traffic has been declining as shown in the graph below. International outgoing fixed voice traffic has also been generally on the decline in 2016, save for the 5.6% increase experienced in the fourth quarter as shown below:

Figure 3: International fixed voice traffic



2.4 TELONE EMPLOYMENT

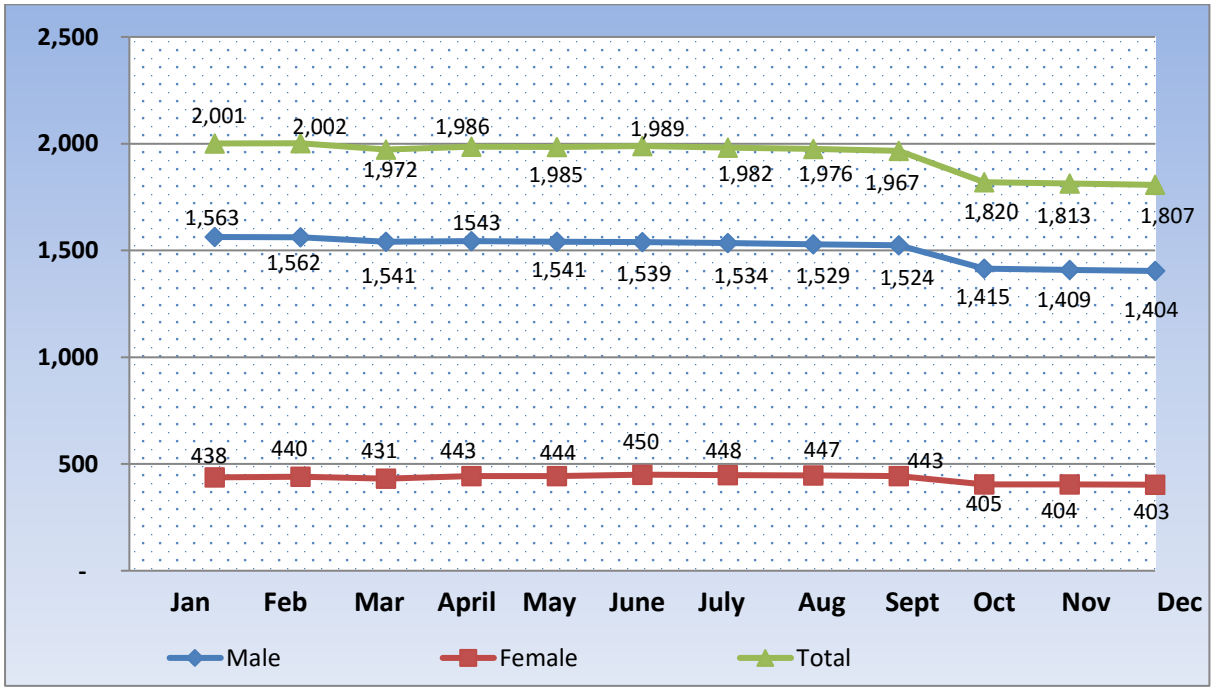
The total number of people employed by TelOne on a full time basis was 1,807 as at 31 December 2016. This implies an 8.1% decline from 1,967 employees as at 30 September 2016. Employees are broken down by gender in table 5 below:

Table 4: Full time employment by TelOne

	Third Quarter 2016	4th Quarter 2016	% Variation
Female	443	403	-9%
Male	1,524	1,404	-7.9%
Total	1,967	1,807	-8.1%

As shown above females made up 22.3% of TelOne`s workforce as at 31 December 2016. The number of TelOne employees has been declining over the year as shown in Figure 4 below:

Figure 4: Employment by TelOne



The decline in the number of employees is attributed to layoffs as well as employee churn to other companies.

3. MOBILE TELEPHONY

3.1 SUBSCRIPTIONS

The total number of active mobile telephone subscriptions increased by 1.4% to reach 12,878,926 from 12,696,303 recorded in the previous quarter. An active mobile line is one which has been used to make or receive a call and/or send or receive a message at least once in the past 90 days. Active and total subscriptions per operator are given in table 6 below:

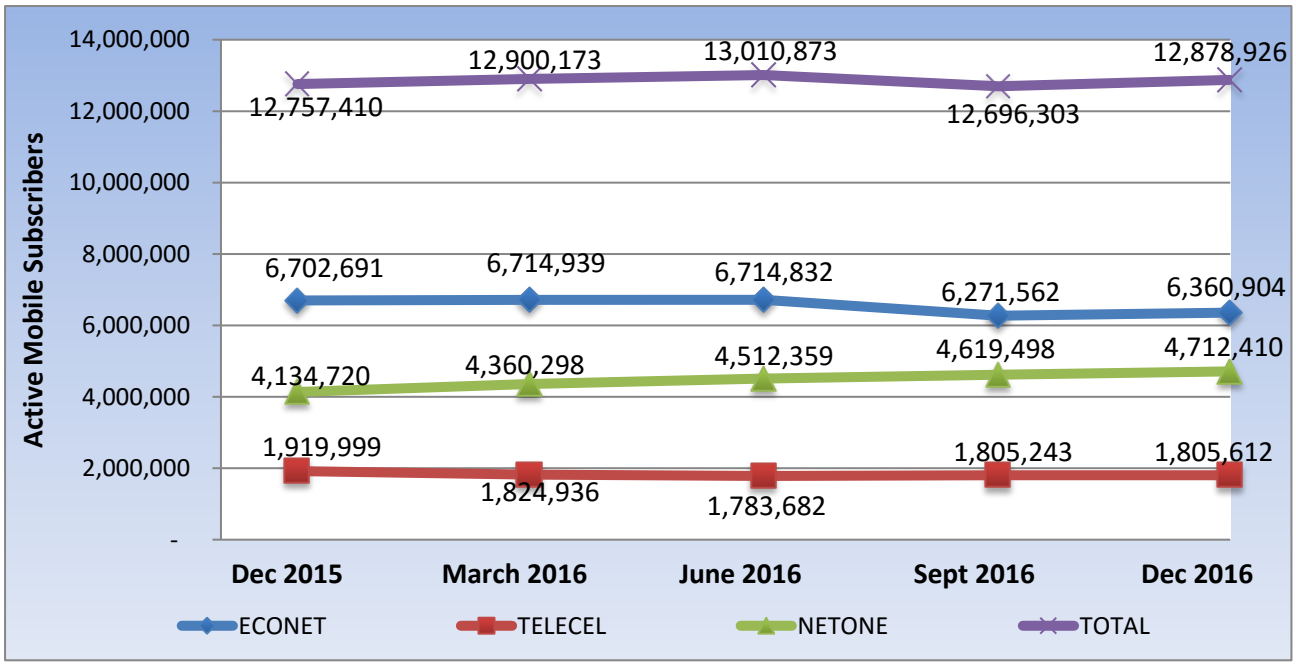
Table 5: Active vs. Total Mobile Subscriptions

	Active Subscribers			Total Subscribers		
	3rd Q 2016	4th Q 2016	% Change	3rd Q 2016	4th Q 2016	% Change
Econet	6,271,562	6,360,904	1.4%	9,915,149	10,075,656	1.6%
Telecel	1,805,243	1,805,612	-%	4,582,451	4,643,325	1.3%
NetOne	4,619,498	4,712,410	2%	5,742,205	5,842,456	1.7%
Total	**12,696,303**	**12,878,926**	**1.4%**	**20,239,805**	**20,561,437**	**1.6%**

Source: POTRAZ, Operator Returns

As shown above, all the mobile operators experienced an increase in mobile subscriptions. The growth trend of active mobile subscriptions for each operator over the past year is shown in figure 5 below:

Figure 5: Growth of active mobile subscriptions



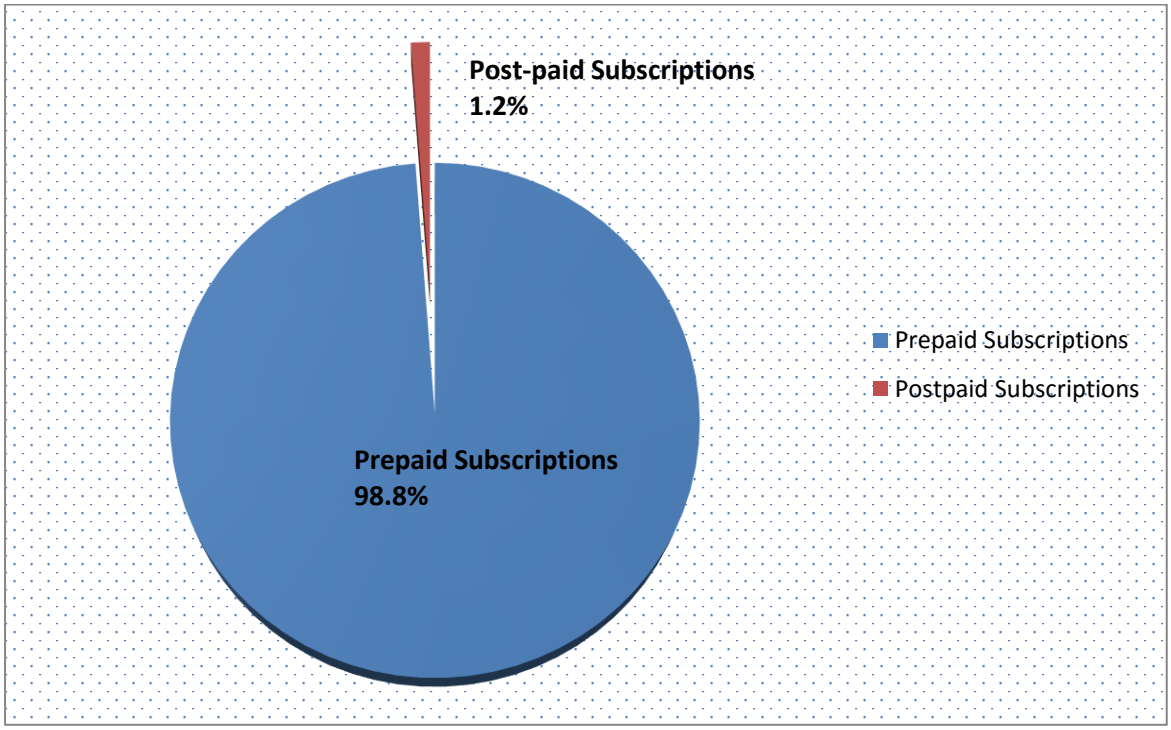
Of the total active subscriptions post-paid (contract) subscriptions were 155,435. Prepaid subscriptions are more popular as they do not require a minimum fixed monthly charge and the fact that most promotions are only offered to prepaid subscriptions. Prepaid and post-paid mobile subscriptions per operator are given in table 7 below:

Table 6: Prepaid and post-paid subscriptions

	Prepaid Subscriptions	Post-paid Subscriptions	Total
Econet	6,259,807	101,097	6,360,904
Telecel	1,789,407	16,205	1,805,612
NetOne	4,674,277	38,133	4,712,410
Total	**12,723,491**	**155,435**	**12,878,926**

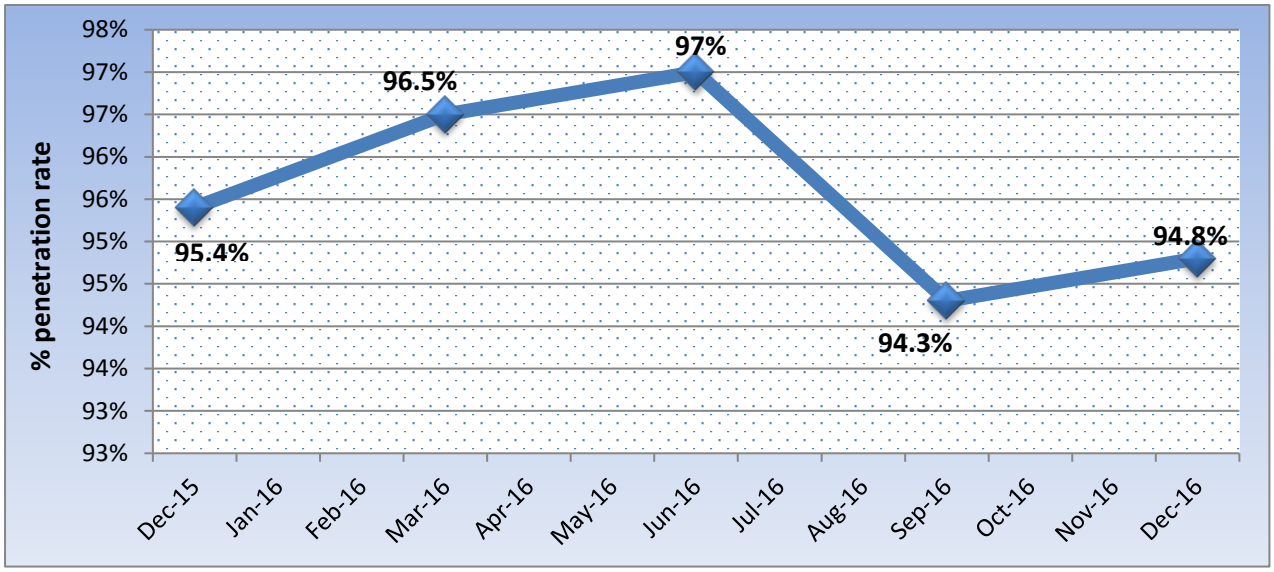
As shown above Econet had the highest number of contract subscriptions. Contract subscriptions constituted only 1.2% of total active subscriptions whereas prepaid subscriptions constituted 98.8% as shown below:

Figure 6: Prepaid and post-paid subscriptions



The increase in active mobile subscriptions led to a 0.5% increase in the mobile penetration rate from 94.3% to reach 94.8% as shown below:

Figure 7: Mobile penetration rate

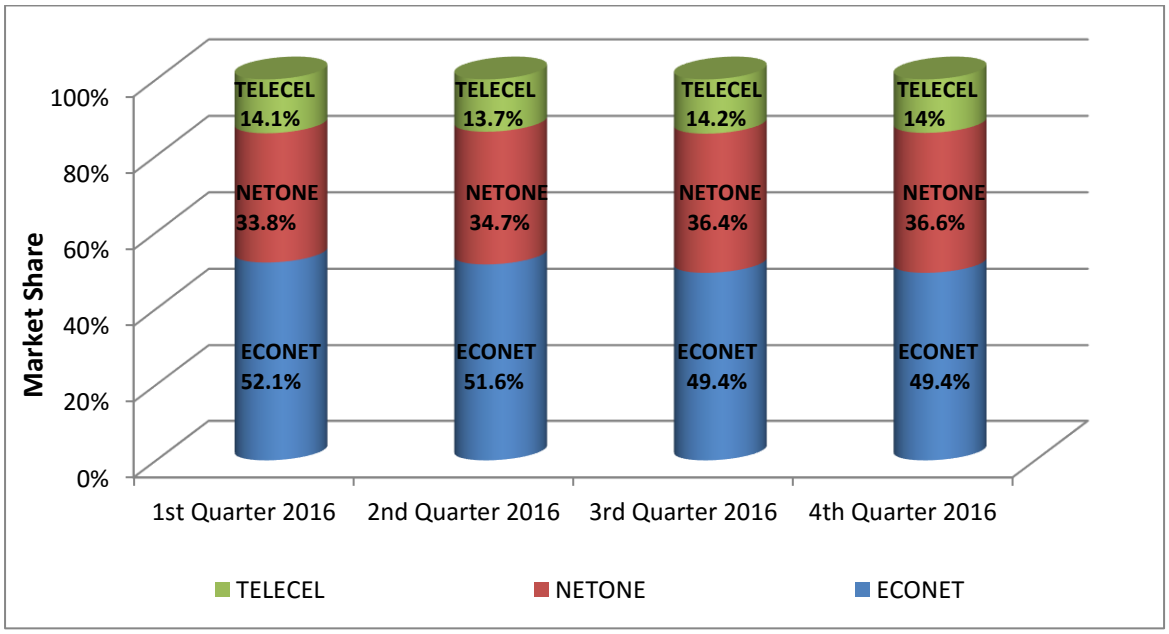


Source: POTRAZ, Operator Returns

3.1.1 MARKET SHARE OF MOBILE SUBSCRIPTIONS

Based on the active mobile subscriptions in table 7 above, Econet had 49.4% market share whereas NetOne and Telecel had 36.6% and 14% respectively. The changes in the market share of subscribers over the year are shown in the graph below:

Figure 8: Market share of mobile subscribers



As shown above, Econet dominates the market with close to 50% market share. Over the course of 2016 Econet and Telecel`s maket share fluctuated whereas NetOne`s market share was steadily increasing.

3.2 MOBILE TRAFFIC AND USAGE PATTERNS

3.2.1 MOBILE VOICE TRAFFIC

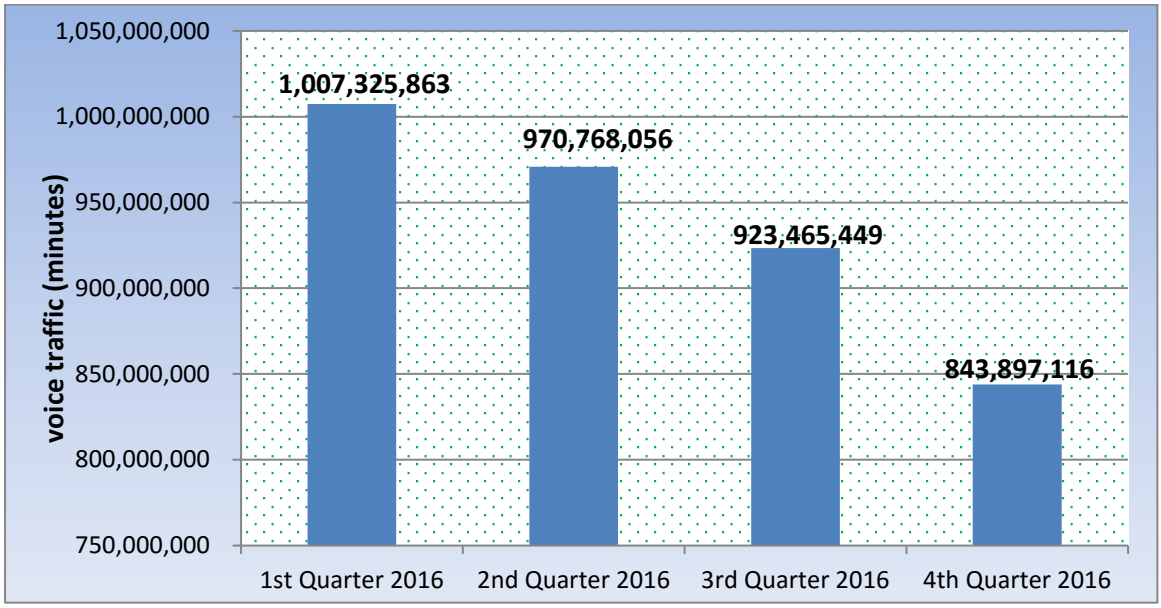
National voice traffic for the fourth quarter of 2016 was 843,897,116 minutes; this represents an 8.6% decline from 923,465,449 recorded in the previous quarter. The decline was attributed to the 15.4% decline in net-on-net traffic as shown in the table below:

Table 7: Mobile telephone traffic

	3rd Quarter 2016	4th Quarter 2016	% Variation
Net On Net	639,500,021	540,865,954	-15.4%
Mobile to Fixed	6,873,647	7,033,730	2.3%
Incoming from Fixed	69,457,257	69,840,352	0.6%
Mobile to Other Mobile (by termination)	195,111,583	212,627,137	9.0%
Outgoing to IAPs	995,909	1,175,288	18.0%
Incoming from IAPs	11,527,032	12,354,665	7.2%
TOTAL NATIONAL	**923,465,449**	**843,897,116**	-8.6%
International Incoming	51,489,004	48,529,727	-5.7%
International Outgoing	19,022,601	20,045,326	5.4%
Inbound Roaming	1,469,489	1,994,363	35.7%
Outbound Roaming	438,471	375,978	-14.3%

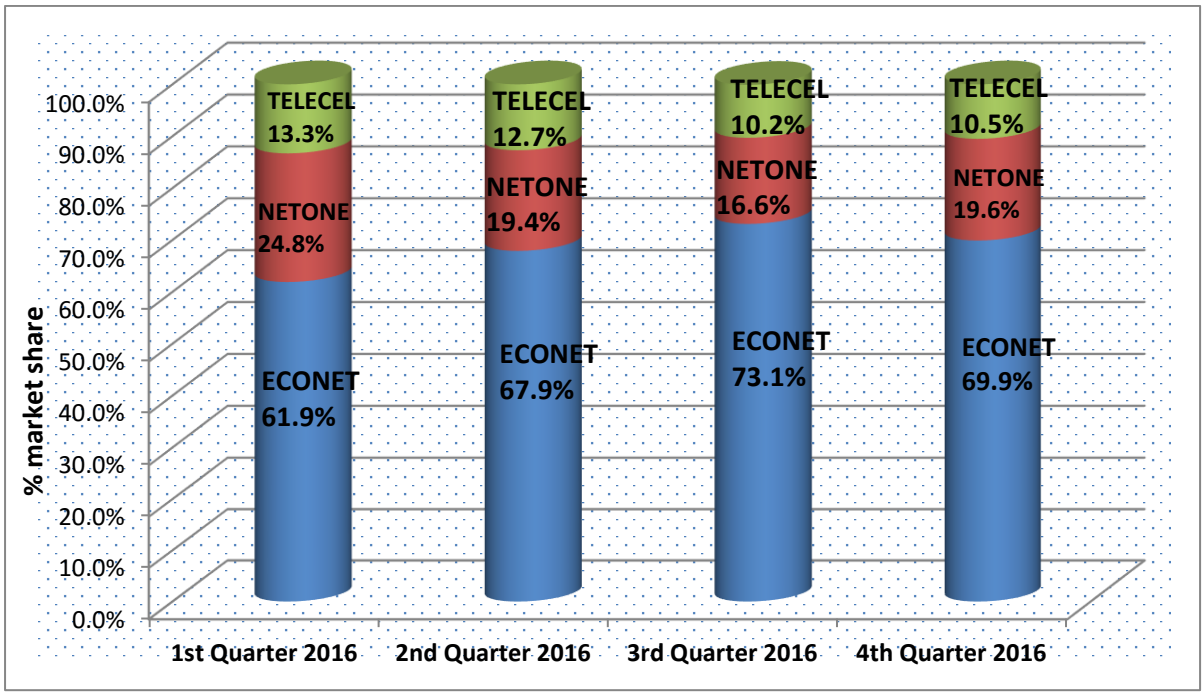
Inbound roaming traffic registered the biggest increase of 35.7% as shown above; this implies an increase in the number of minutes by foreign subscribers roaming on the local networks. This is typical of the festive period when the country receives a high number of tourists. The decline in net-on-net traffic can be attributed the discontinuation of a number of promotions that offered free net-on-net calls. National traffic exhibited a declining trend as shown in the graph below:

Figure 9: National Voice traffic



The substitution of traditional voice with OTT text and voice is also attributed to the general decline in traffic. Based on the voice traffic per operator, the market share of mobile voice traffic was as follows:

Figure 10: Voice Traffic Market Share



As shown above, Telecel`s market share of voice traffic declined over the past year, whereas that of NetOne and Econet exhibited a fluctuating trend. Econet remained the dominant operator commanding close to 70% of total mobile voice traffic.

3.2.2 SMS TRAFFIC

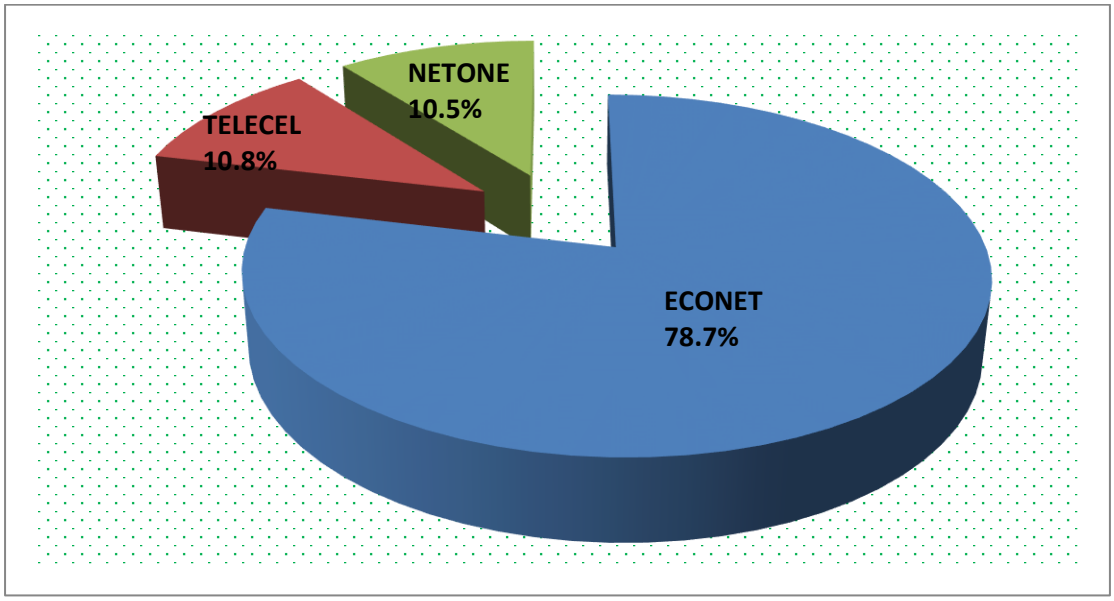
There was a general decline in SMS traffic in the period under review. The decline in SMS traffic is generally attributable to the substitution of traditional SMS with OTT text messaging which is significantly cheaper.

Table 8: SMS Traffic

	3rd Quarter 2016	4th Quarter 2016	% variation
Net On Net	1,296,719,026	1,238,372,951	-4.5%
National off-net	369,032,997	356,000,941	-3.5%
International incoming	17,735,629	17,629,699	-0.6%
International outgoing	4,503,610	4,454,204	-1.1%

The market share of SMS traffic in the period under review is shown in figure 11 below:

Figure 11: Market share of SMS traffic



3.2.3 MOBILE INTERNET & DATA TRAFFIC

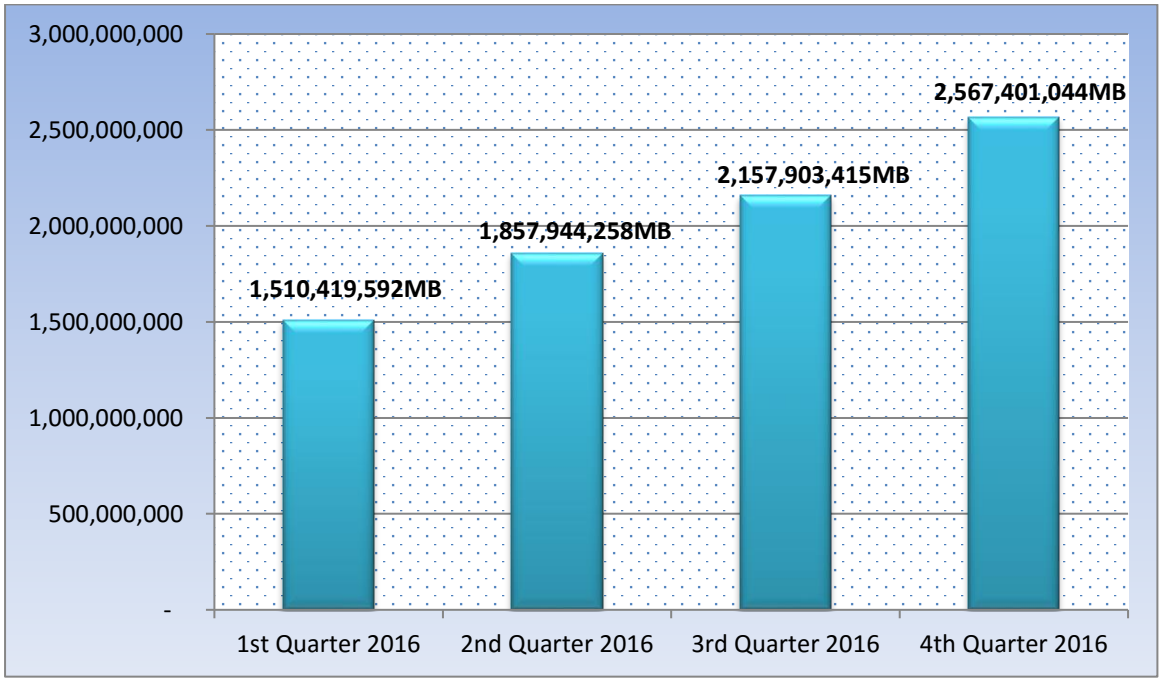
Mobile data utilisation increased by 19% to record 2,567,401,044 MB from 2,157,903,415MB (1,771.9TB) recorded in the previous quarter. NB: 1 MB = 0.00000095367432 TB. Mobile data utilisation is broken down by operator in table 10 below:

Table 9: Mobile internet & data usage

	1st Quarter 2016	2nd Quarter 2016	3rd Quarter 2016	4th Quarter 2016	Quarterly Variation
ECONET	1,195,746,882	1,454,008,244	1,733,303,205	1,823,113,852	5.2%
TELECEL	109,220,054	154,753,049	164,432,376	196,573,777	19.5%
NETONE	205,452,656	249,182,965	260,167,834	547,713,415	110.5%
TOTAL	**1,510,419,592**	**1,857,944,258**	**2,157,903,415**	**2,567,401,044**	**19.0%**

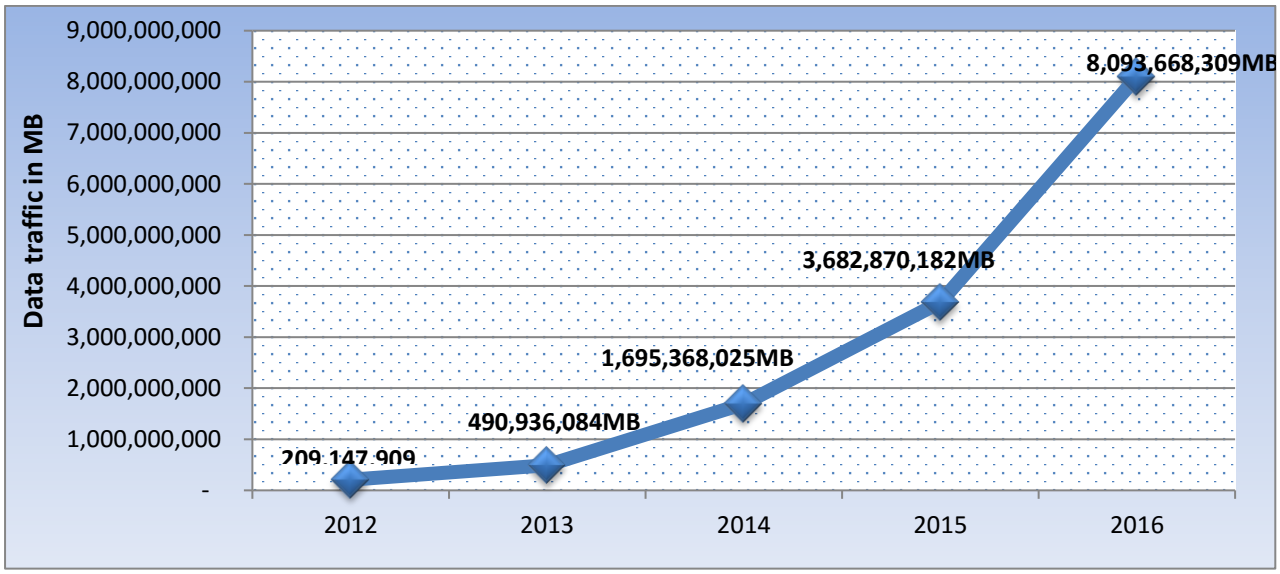
NetOne experienced the biggest growth in data utilisation and this can be attributed to their internet packages. There has been continuous growth in data usage over the past year as shown in Figure 12 below:

Figure 12: Mobile internet & data usage



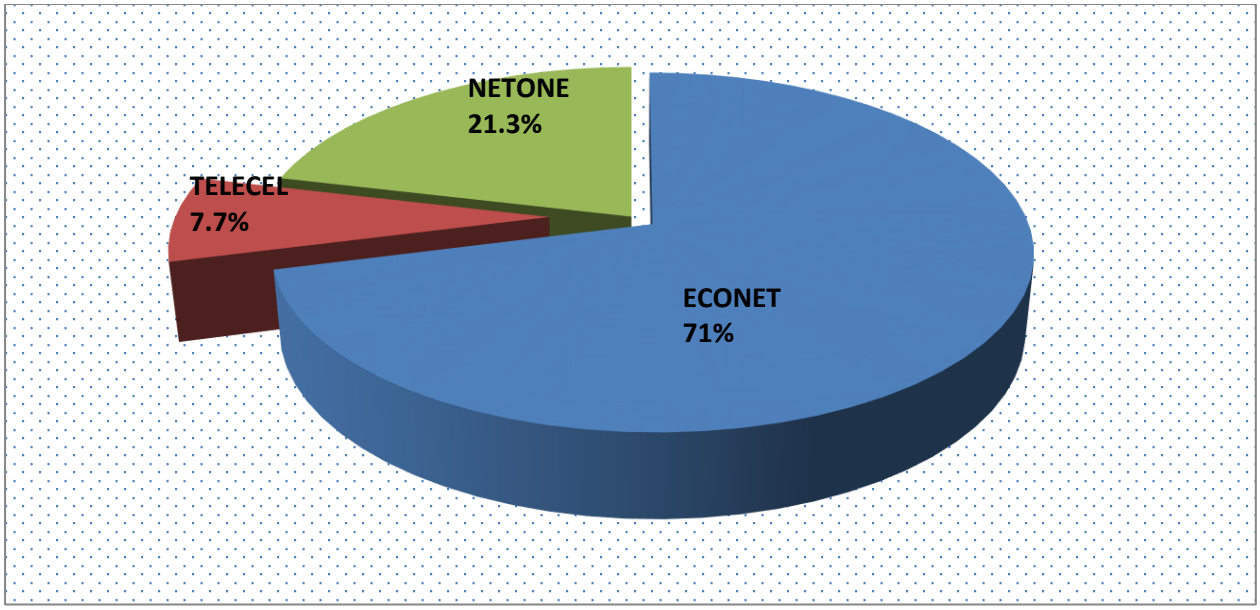
This implies that a total of 8,093,668,309MegaBytes were consumed in 2016. This represents a 119.8% increase from 3,682,870,182MB consumed in 2015. The annual growth in mobile internet and data usage from 2012 is shown in the graph below:

Figure 13: Growth in mobile internet & data usage



Based on the mobile data usage per mobile operator, the market share of mobile data usage was as follows:

Figure 14: Market share of data usage

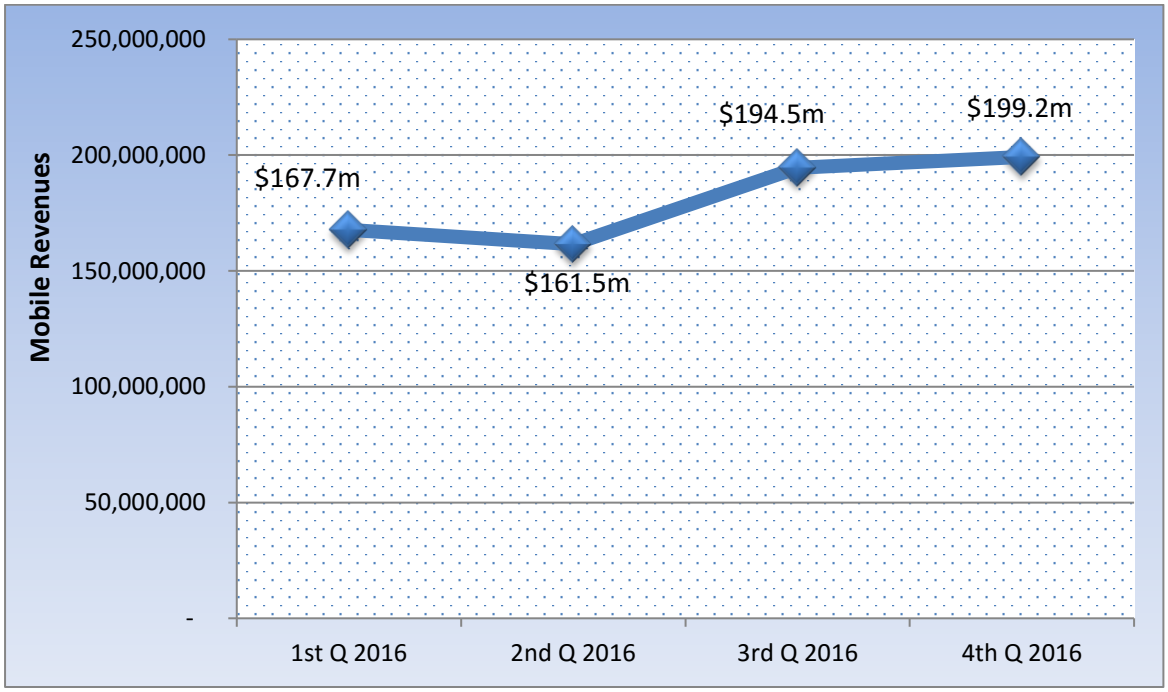


A comparison with the previous quarter shows that Econet lost market share by 9.3%whereas NetOne and Telecel gained market share by 9.2% and 0.1% respectively.

3.3 MOBILE REVENUES

Total mobile revenues increased by 2.4% to record $199.2 million from $194.5 million recorded in the previous quarter. However, Econet was the only operator to register an increase in revenues. The trend of total mobile revenue growth over the course of 2016 is shown in the graph below:

Figure 15: Mobile operator revenues



As shown above, total mobile revenues experienced an upturn in the third and fourth quarter of 2016. The Average revenue per user increased by 0.2% to record $4.50 from $4.49 recorded in the previous quarter.

3.4 MOBILE TELEPHONY INFRASTRUCTURE

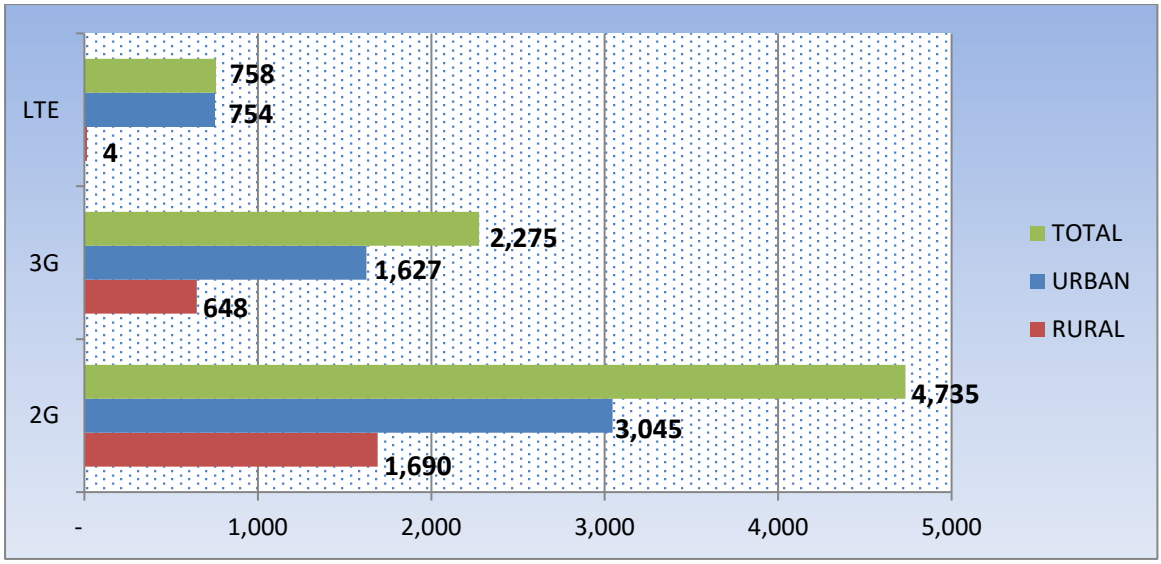
The growth in mobile base stations per operator and by technology in the fourth quarter of 2016 is shown in the table below:

Table 10: Mobile Base Stations

OPERATOR	2G			3G			LTE		
	3rd Q 2016	4th Q 2016	Net Addition	3rd Q 2016	4th Q 2016	Net Addition	3rd Q 2016	4th Q 2016	Net Addition
Econet	2,399	2,400	1	1,180	1,183	3	497	497	-
Telecel	661	661	-	343	361	18	-	-	
NetOne	1,628	1,674	46	731	731	-	150	261	111
Total	**4,688**	**4,735**	**47**	**2,254**	**2,275**	**21**	**647**	**758**	**111**

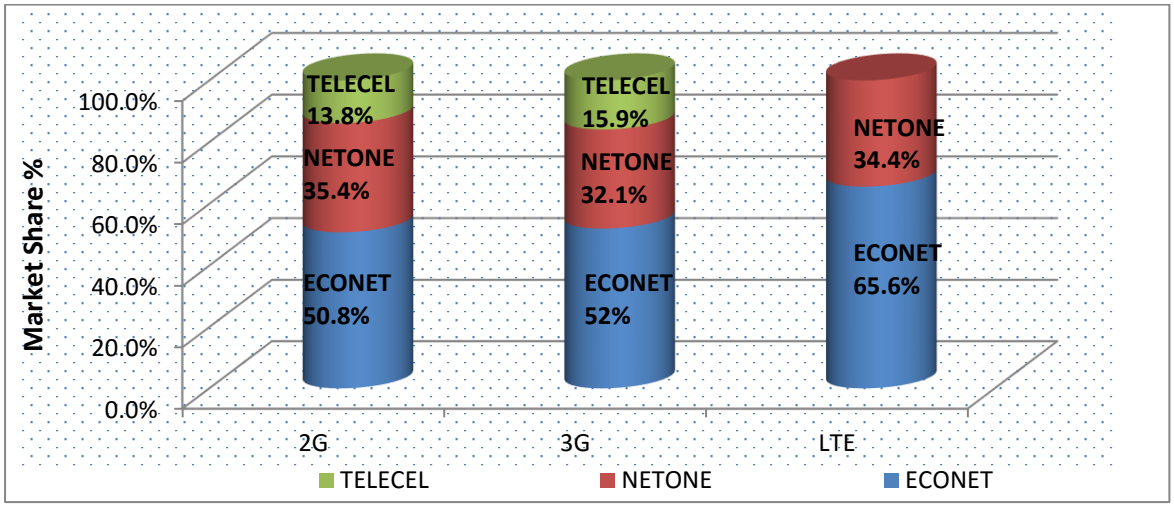
As shown above the largest increase was registered for LTE e-Node Bs where 111 more were commissioned by NetOne in the quarter under review. Of the total number of base stations 30.1% are in the rural areas. A comparison of the number of base stations in rural and urban areas by technology is shown in the graph below:

Figure 16: Base stations in rural and urban areas



The digital divide between the urban and rural areas is shown in that there are fewer deployments of 3G and LTE in the rural areas, hence broadband coverage in these areas is sparse. Of the 758 LTE base stations only 4 are in rural areas. Based on the base stations per mobile operator as shown in table 11 above, the market share of mobile base stations was as follows:

Figure 17: Market share of mobile base stations



The information above shows that Econet has the widest 2G, 3G as well as LTE coverage in the country.

4. DATA & INTERNET SERVICE

4.1 SUBSCRIPTIONS

The total number of active internet subscriptions declined by 0.2% to reach 6,721,947 from 6,732,470 recorded as at 30 September 2016. The decline in CDMA and ADSL subscriptions led to the overall decline in total data and internet subscriptions as shown in table 12 below:

Table 11: Active Internet Subscriptions

Technology	3rd Quarter 2016	4th Quarter 2016	Quarterly Variation
2G/3G/HSDPA/LTE	6,587,979	6,591,109	0.1%
Leased Lines	1,016	1,048	3.1%
Dial up	35	16	-54.3%
ADSL	71,836	68,370	-4.8%
WiMAX	7,317	7,196	-1.7%
CDMA	43,105	32,019	-25.7%
VSAT	2,147	2,491	16.0%
Active Fibre subscriptions	19,035	19,698	3.5%
Total	**6,732,470**	**6,721,947**	-0.2%
Internet Penetration rate	**50.1%**	**50%**	-0.1%

Of the total mobile internet and data subscriptions, 211,566 accessed and used LTE in the quarter under review. This represents a 23% increase from 205,082 subscribers recorded in the

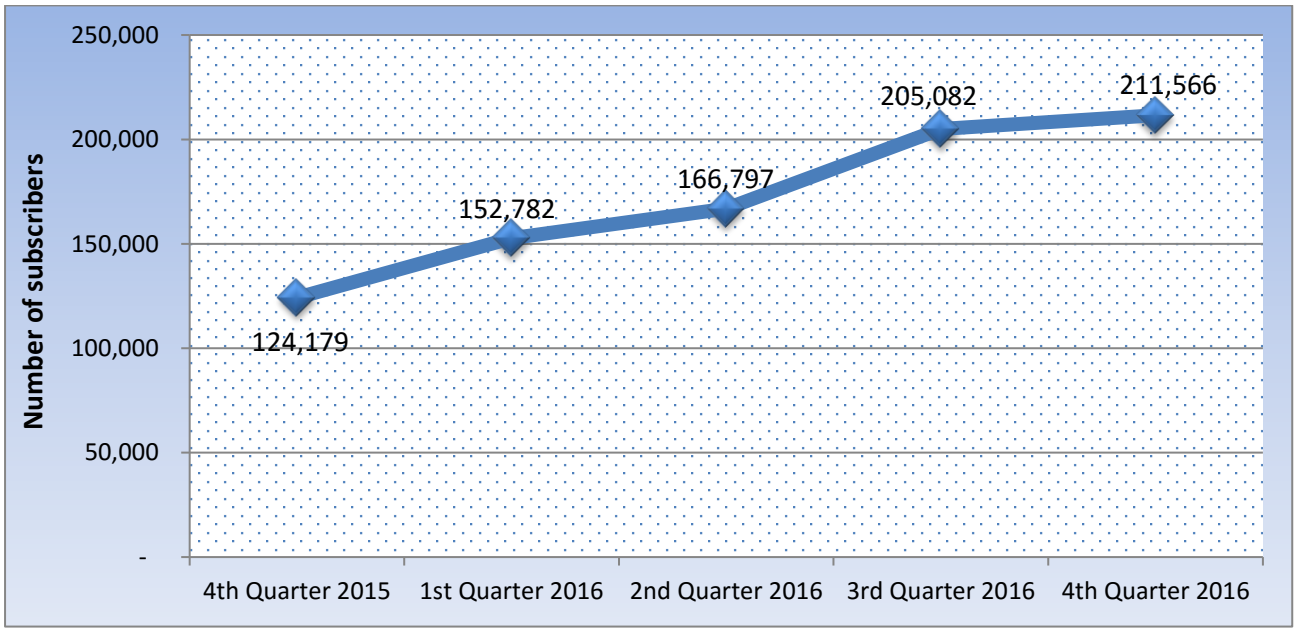
previous quarter. 99.4% of those who used LTE in the 4th quarter of 2016 were Econet subscribers as shown in table 13 below:

Table 12: LTE access and use

	3rd Quarter 2016	4th Quarter 2016	% Growth
Econet	204,074	210,256	3%
NetOne	1,008	1,310	30%
Total	**205,082**	**211,566**	**3.2%**

The growth in LTE use by mobile subscribers over the course of 2016 is shown in the graph below:

Figure 18: LTE Use



LTE use is expected to increase as coverage and the smartphone penetration increases. The number of public Wi-Fi hotspots increased by 7.3% to reach 877 from 817 recorded in the previous quarter as shown in table 14 below:

Table 13: Wi-Fi Hotspots

	3rd Quarter 2016	4th Quarter 2016	% Variation
Liquid	335	362	8.1%
TelOne	280	280	-
Africom	64	64	-
Telecontract	50	49	-2%
Dandemutande	63	96	52.4%
Powertel	25	26	4%
Total	**817**	**877**	**7.3%**

4.2 INTERNATIONAL INTERNET CONNECTIVITY

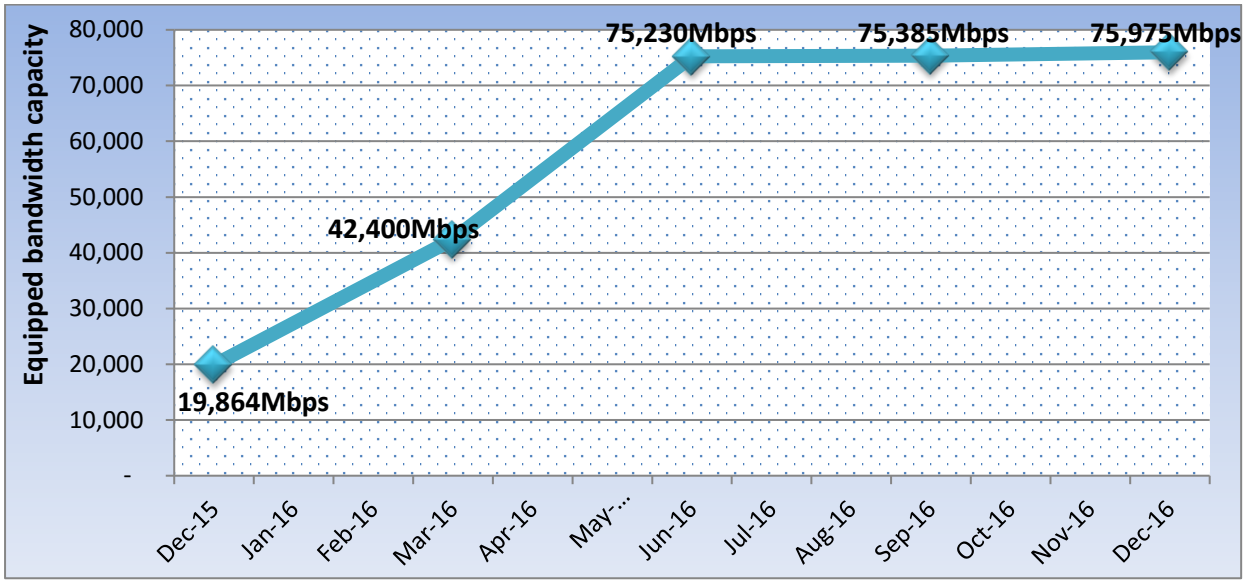
The total incoming equipped international internet bandwidth capacity increased by 0.8% to reach 75,975Mbps from 75,385Mbps recorded in the previous quarter. Equipped international incoming and outgoing internet bandwidth for each of the Internet Access Providers with international internet connectivity was as follows:

Table 14: Equipped international internet bandwidth

	3rd Quarter 2016	4th Quarter 2016	% Variation
Liquid	60,000	60,000	-
TelOne	12,400	12,400	-
Powertel	1,860	1,860	-
Dandemutande	660	1,250	89.4%
Africom	465	465	-
Total	**75,385**	**75,975**	**0.8%**

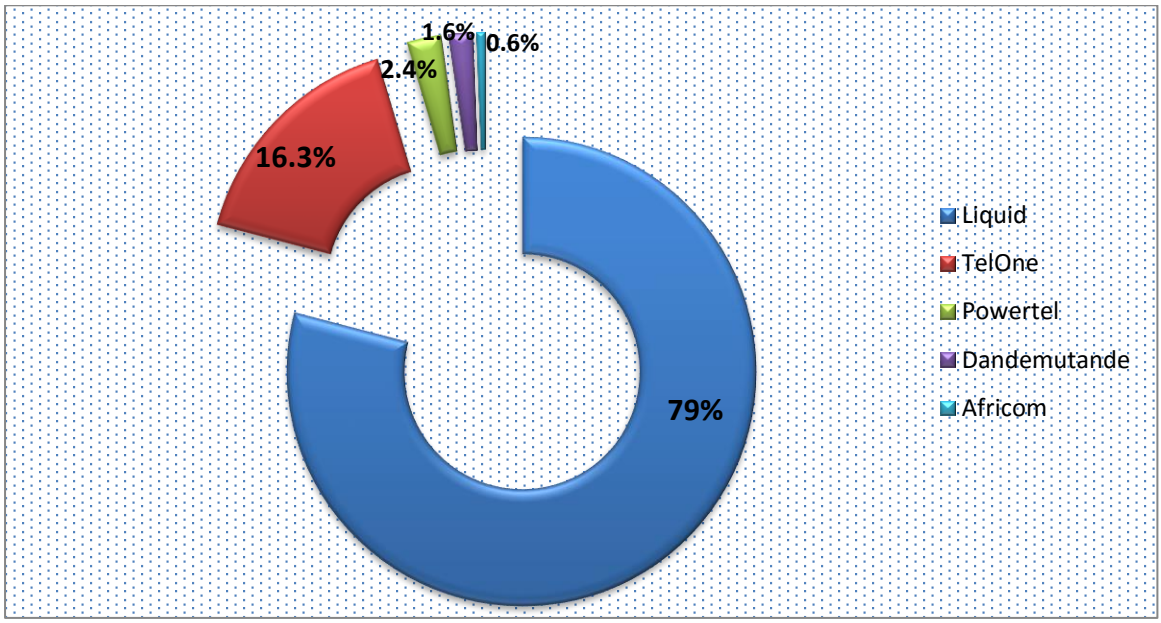
The equipped capacity has been increasing over the years as operators augment their capacities to accommodate increased demand for internet and data.

Figure 19: Growth in equipped international internet bandwidth capacity



Based on the equipped international internet bandwidth per operator given in table 18 above, the market share was as follows:

Figure 20: Market share of equipped bandwidth capacity



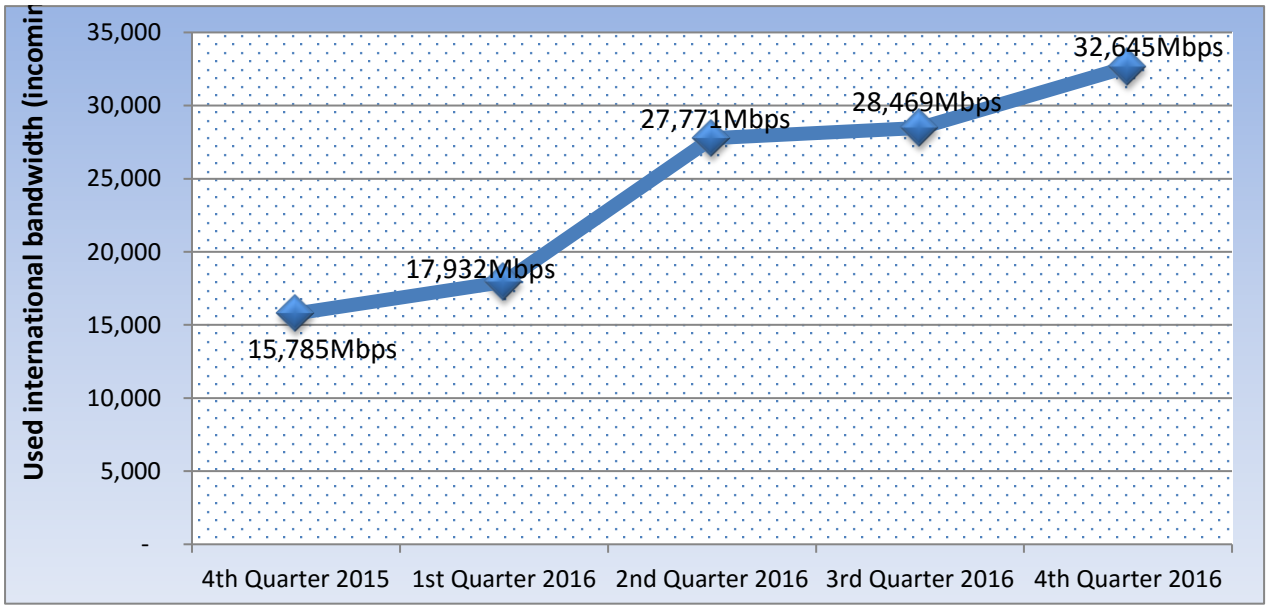
43% of the equipped incoming international internet bandwidth capacity was utilised in the quarter under review. The growth in the used international internet bandwidth capacity per IAP is shown in the table below:

Table 15: Used international internet bandwidth

OPERATOR	Incoming International			Outgoing International		
	3rd Q 2016	4th Q 2016	Quarterly Variation	3rd Q 2016	4th Q 2016	Quarterly Variation
Liquid	13,395	17,095	27.6%	7,367	8,300	12.7%
Tel One	12,089	12,210	1.0%	4,002	4,330	8.2%
Powertel	1,860	1,860	0.0%	320	320	0.0%
Dandemutande	660	1,160	75.8%	230	290	26.1%
Africom	465	320	-31.2%	210	65	-69.0%
TOTAL	**28,469**	**32,645**	**14.7%**	**12,129**	**13,305**	**9.7%**

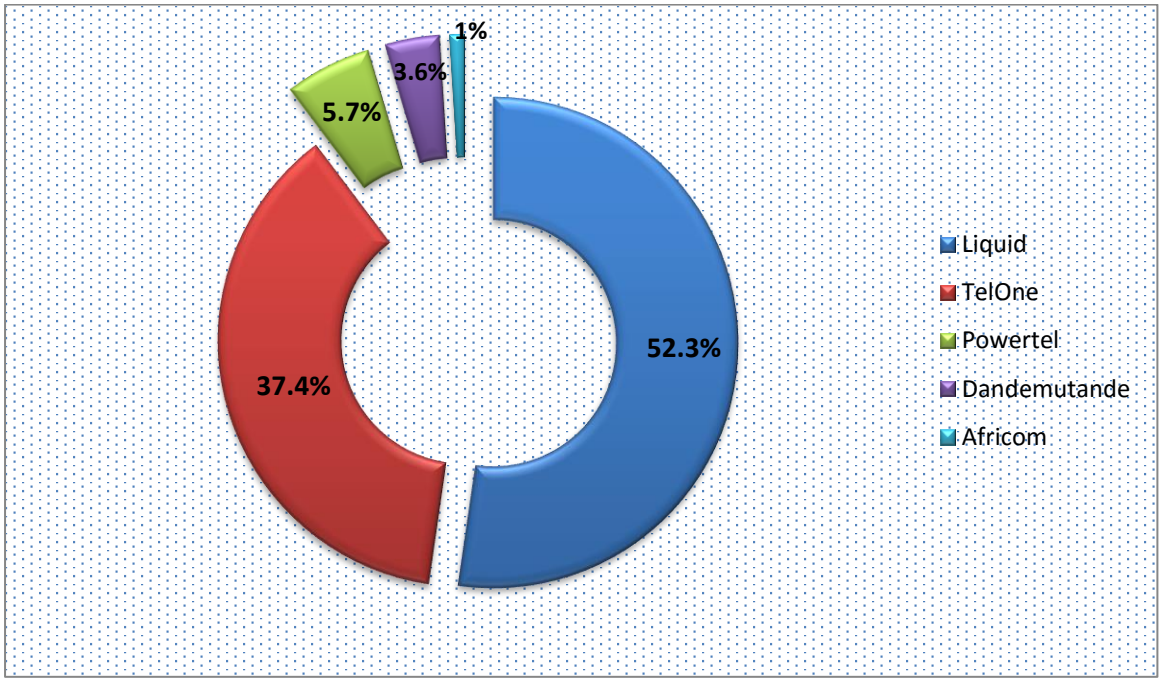
The amount of international internet bandwidth that is utilised has been on the increase as coverage and demand has been increasing. The growth in used international internet bandwidth in 2016 is shown in the graph below:

Figure 21: Used international incoming internet bandwidth



Based on the used bandwidth per operator as shown in table 20 above, the market share was as follows:

Figure22: Market share of used international internet bandwidth



4.3 IAP REVENUES AND INVESTMENT

Revenues generated by Internet Access Providers increased by 3.8% to record $40,874,590 from $39,367,443 recorded in the previous quarter. Investment by Internet Access Providers increased by 53.4% to record $10,847,271 from $7,087,740 recorded in the previous quarter. Much of the investment was in telecommunications equipment.

5. POSTAL & COURIER

5.1 POSTAL & COURIER VOLUMES

The postal volumes recorded in the fourth quarter of 2016 are compared with third quarter 2016 volumes in table 17 below:

Table 16: Postal and courier volumes

	3rd Quarter 2016	4th Quarter 2016	% Growth
Domestic	1,739,052	1,813,144	4.3%
International Incoming	438,649	487,029	11.0%
International Outgoing	58,411	56,981	-2.4%
Total	**2,236,112**	**2,357,154**	5.4%

Source: POTRAZ, Operator Returns

As shown above, international incoming and domestic postal and courier volumes increased whereas international outgoing courier volumes declined. December is usually the peak period for domestic parcels and international courier, hence the increase in the quarter under review.

5.2 POSTAL & COURIER REVENUES

Revenue generated by postal and courier operators increased by 10.4% to record $9,596,081 from $8,688,514 recorded in the previous quarter. The increase in revenues is attributed to the increase in the volume of domestic and international incoming postal and courier items.

5.3 POSTAL & COURIER OUTLETS

Postal and courier outlets remained at 435, broken down as follows:

Table 17: Postal and courier outlets per operator

	POSTAL & COURIER OUTLETS
ZIMPOST	226
DHL	109
SKYNET	33
UNIFREIGHT	31
FEDEX	21
OVERNIGHT EXPRESS	8
COURIER CONNECT	7
TOTAL NUMBER OF POSTAL & COURIER OUTLETS	**435**

142 out of the 226 post office had internet connection. Private bags remained 727 and rented private boxed increased from 12,388 recorded in the previous to reach 12,392.

6. CONCLUSION

The 4th quarter of 2016 was characterised by marginal subscriber growth across the board with active internet subscriptions also declining by 0.2%. This is a sign of general stagnation in subscriptions growth which could be an indication of market saturation. Fixed line subscriptions registered the biggest decline of 8.7%. This can largely be attributed to alternatives such as mobile, VoIP and other alternative calling procedures such as WhatsApp calling.

In terms of usage traffic, the quarter under review registered a general decline in traffic across the board except for data and internet usage traffic which registered a growth of 19%. National voice usage traffic declined by 15%. TelOne international incoming traffic registered a 20% decline. The general decline in national traffic and international incoming traffic is expected to continue due to the proliferation in the use of OTTs.

Also noteworthy, is the decline in the value of mobile money transactions where the value of cash in and cash out transactions declined by 35%. This shows the impact of cash shortages is having on mobile money transactions, which if not addressed, can cause further decline in mobile money transactions, rendering Mobile money business unviable due to low volumes.

The fourth quarter of 2016 was also characterised by growth in revenue across all subsectors. Total telecommunication revenues increased by 2.8% to record $269,553,225 from $262,021,721 recorded in the previous quarter. Revenue generated by postal and courier operators also increased by 10.4% to record $9,596,081 from $8,688,514 recorded in the previous quarter; the increase is attributed to the increase in the volume of domestic and international incoming postal and courier items which is typical during the festive period.

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