



**THIRD QUARTER SECTOR STATISTICS REPORT FOR THE FINANCIAL YEAR  
2016/2017**

**(JANUARY-MARCH 2017)**

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*Although every effort has been made to ensure accuracy of the data contained in this report, the Authority is not liable for inaccuracies in any of the information contained in this report, which is contingent upon the operators/service providers' compliance returns.*

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## LIST OF ABBREVIATIONS

|        |  |
|--------|--|
| EASSy  | Eastern Africa Submarine Cable Systems   |
| LION2  | Lower Indian Ocean Network               |
| GSM    | Global Systems for Mobile Communications |
| Gbps   | Gigabits per second                      |
| MMS    | Multimedia Service                       |
| MoU    | Minutes of Use                           |
| MVNO   | Mobile virtual network operator          |
| SEACOM | Sea Sub-Marine Communications Limited    |
| SIM    | Subscriber Identification Module         |
| SMS    | Short Messaging Service                  |
| TEAMS  | The East African Marine System           |
| VSAT   | Very Small Aperture Terminal             |
| FY     | Financial Year                           |
| TV     | Television                               |
| DTT    | Digital Terrestrial Television           |
| FTA    | Free to Air                              |
| STB    | Set Top Boxes                            |
| FM     | Frequency Modulation                     |
| MB     | Megabytes                                |

## **PRELIMINARY NOTES**

- *This report is based on data provided by service providers as per their license conditions.*
- *The information provided in this report is subject to alteration in case of any revisions or updates from the service providers.*

## **REPORT SUMMARY**

The ICT Sector Quarterly Statistics Report for the Q3 FY 2016/17 provides an overview of the ICT sector performance and development of trends in the following service categories:

- Mobile Telephony Service
- Fixed Telephony Service
- Internet/Data Service
- Registered Internet Domains Names in Kenya
- Broadcasting
- Postal and Courier Service and;
- Tariffs, Promotions and Special Offers

During the third quarter, the mobile telephony sub sector recorded slight growth in mobile subscriptions. The number of mobile subscriptions stood at 39.1 million up from 38.9 million reported during the previous quarter marking an increase of 0.5 per cent. On the other hand, mobile penetration dropped by 2.0 per centage points to stand at 86.2 per cent during the period from 88.2 per cent in the last quarter. This is attributed to the review of the country's population to 45.4 million up from 44.2 million as per the Economic Survey 2017.

During the quarter under review, pre-paid mobile subscriptions rose to 37.9 million subscriptions up from 37.5 million registered in the previous quarter marking a growth of 1.1 per cent. On the other hand, post-paid subscriptions declined from 1.4 million posted in the preceding quarter to 1.1 million subscriptions recorded during the quarter under review.

The number of mobile money subscriptions stood at 27.5 million subscriptions whereas the number of active mobile money transfer agents was registered at 174,018. The volume of transactions on this platform was recorded at 471.1 million with 1.1 trillion Kenya Shillings moved during the period. Mobile commerce recorded a total of 290.5 million transactions with 627.4 billion Kenya shillings used to pay for goods and services.

As at the end of the period under review, the number of mobile in-ports stood at 375 up from 153 in-ports recorded in the previous quarter representing a significant growth of 145.0 per cent.

Total traffic originating from mobile network registered a decline of 3.7 per cent during the quarter under review to stand at 10.4 billion minutes from 10.8 billion minutes posted during the previous quarter. Subsequently, the Minutes of Use (MoU) per month per subscription registered a downward trend to stand at 89.0 minutes during the quarter from 92.7 minutes recorded during the previous quarter.

The volume of local Short Messaging Service (SMS) registered during the quarter stood at 12.8 billion messages down from last quarter's 15.2 billion messages sent representing a drop of 18.8 per cent. The significant decline in local SMS is attributed to the end of the busy festive season during which service providers had launched numerous special offers and promotions.

Roaming-in voice traffic recorded a total of 32.3 million minutes with in-roamers from EAC countries contributing 87.1 per cent of the traffic.

International incoming mobile voice traffic registered a decline of 3.3 per cent during the quarter to stand at 142.3 million minutes from 147.1 million minutes registered - last quarter. Traffic received from EAC countries –amounted to 44.4 million minutes. Conversely, International outgoing mobile traffic was recorded at 117.4 million minutes during the period under review up from 116.7 million minutes posted in the previous quarter representing a nominal growth of 0.6 per cent.

The number of fixed network subscriptions continued to decline, registering a 0.7 per cent drop during the period to stand at 72,259 subscriptions down from 72,801 recorded in the previous quarter. The number of fixed terrestrial and fixed wireless connections stood at 71,912 and 347 subscriptions respectively.

Data/Internet subscriptions during the quarter under review declined by 3.6 per cent to stand at 25.7 million subscriptions from 26.6 million subscriptions posted in the preceding quarter. On the other hand, when compared to the same period – in the previous year, the number of data subscriptions grew by 3.4 per cent. On the contrary, there was a nominal growth on the estimated Internet users of 2.3 per cent to stand at 40.5 million from 39.6 million users reported at the end of the previous period. This translated to an estimated Internet/data penetration level of 89.4 per cent during the quarter under review.

During the period under review, the number of broadband subscriptions increased substantially by 7.9 per cent to reach 13.7 million subscriptions from 12.7 million subscriptions registered in the previous quarter. Subsequently, broadband penetration level was recorded at 30.3 per cent during the quarter under review up from 28.7 per cent posted in the previous quarter.

International bandwidth available in the country posted a significant growth of 43.3 per cent to stand at 2,906.8 Gbps during the period under review up from 2,028.7 Gbps recorded during the preceding quarter. This is attributed to increase of supply capacity by the service providers. Bandwidth utilization was recorded at 879.5 Gbps up from 860.5 Gbps posted in the previous quarter marking a growth of 2.2 per cent during the quarter.

The number of .KE domain names increased by 4.8 per cent during the quarter to register 65,255 domains up from last quarter's 62,215 domains.

The digital broadcasting signal covered 75 per cent of the Kenyan population, which was an increase when compared to last quarter's coverage of 66 per cent. The increase could be attributed to additional areas being covered during the quarter, such as Busia, Sotik, Maralal and Mazeras. The number of free to-air TV channels on the digital terrestrial platform declined to

stand at 60 from 66 posted in the last quarter whereas number of pay TV service providers on the Digital Terrestrial Television (DTT) remained at 2; GoTV and Star Times. The total number of FM stations was registered at 178 up from 139 registered in the previous quarter.

In the postal and courier sector, the number of letters sent locally declined significantly by 48.3 per cent to register 8.2 million from 15.8 million letters sent during the previous quarter. Likewise, total courier items sent locally declined to stand at 1.63 million items. International incoming letters declined to record 964,013 letters from 2.2 million letters received during the preceding quarter.

The quarter under review saw a decline in applications of tariffs and promotions and special offers. The Authority reviewed and approved at total of 5 and 13 applications for tariffs and promotions and special offers respectively.

## Key ICT Indicators

| SELECTED INDICATORS   | Jan-Mar 2017 | Oct-Dec 2016 | % change |
|---|--------------|--------------|----------|
|   | Q3           | Q2           | Q2 to Q3 |
| Mobile Subscriptions (Millions)                               | 39.146       | 38.982       | 0.42     |
| Fixed subscriptions   | 72,259       | 72,801       | -0.74    |
| Mobile cellular telephone subscriptions per 100 inhabitants   | 86.2         | 88.2         | -2.27    |
| Fixed telephone lines per 100 inhabitants                     | 0.15         | 0.16         | -6.25    |
| <b>VOICE TRAFFIC IN MINUTES</b>                               |              |              |          |
| On-Net Voice Traffic (Billions)                               | 9.265        | 9.522        | -2.7     |
| Off-Net Voice Traffic (Billions)                              | 1.169        | 1.321        | -11.51   |
| International Incoming Mobile Voice traffic (Millions)        | 142.353      | 147.157      | -3.26    |
| International Outgoing mobile Voice traffic (Millions)        | 117.440      | 116.750      | 0.59     |
| Roaming-out (Own Subscribers) (Millions)                      | 38.544       | 36.857       | 4.58     |
| Roaming-in (Foreign Subscribers) (Millions)                   | 32.362       | 30.509       | 6.07     |
| Total Local Fixed network traffic                             | 727,283      | 675,123      | 7.73     |
| International Incoming Fixed Network Voice traffic (Millions) | 2.600        | 2.573        | 1.04     |
| International Outgoing Fixed Network Voice traffic (Millions) | 2.135        | 2.091        | 2.12     |
| International Outgoing Fixed Network VoIP traffic             | 811,029      | 1,000,509    | -18.9    |
| <b>SMS TRAFFIC</b>  |              |              |          |
| Outgoing SMS On-Net (Billions)                                | 12.801       | 15.264       | -16.14   |
| Outgoing SMS Off-Net (Millions)                               | 527.750      | 593.367      | -11.06   |
| Incoming International SMS (Millions)                         | 8.530        | 9.227        | -7.55    |
| Outgoing International SMS (Millions)                         | 9.169        | 9.000        | 1.89     |
| <b>MOBILE MONEY</b>   |              |              |          |
| Number of Mobile Money subscribers (Millions)                 | 27.543       | 31.996       | -13.91   |
| Number of Transactions (Millions)                             | 471.133      | 456.646      | 3.17     |
| Value of Transactions (Ksh in trillions)                      | 1.170        | 1.151        | 1.65     |
| Number of Mobile money agents                                 | 174,018      | 161,583      | 7.69     |
| <b>DATA/INTERNET</b>  |              |              |          |
| Data/ Internet subscriptions(Millions)                        | 25.707       | 26.679       | 3.61     |
| Estimated Internet users (Millions)                           | 40.594       | 39.664       | 2.34     |
| Total Available Bandwidth (Gbps)                              | 2,906.80     | 2,028.74     | 43.28    |
| Internet penetration per 100 population                       | 89.4         | 89.7         | -0.33    |
| Broadband Subscriptions per 100 inhabitants                   | 30.3         | 28.7         | 5.57     |
| <b>BROADCASTING</b>   |              |              |          |
| Number of free-to-air TV channels                             | 60           | 66           | -9.09    |
| Number of Radio FM stations                                   | 178          | 139          | 28.06    |
| Digital Signal Population Coverage (%)                        | 75           | 66           | 13.64    |



**Key ICT Indicators**

| <b>SELECTED INDICATORS</b>                                  | <b>Jan-Mar 2017</b> | <b>Oct-Dec 2016</b> | <b>% change</b> |
|---|---------------------|---------------------|-----------------|
|   | <b>Q3</b>           | <b>Q2</b>           | <b>Q2 to Q3</b> |
| <b>POSTAL AND COURIER</b>                                   |                     |                     |                 |
| Postal Outlets  | 623                 | 623                 | 0               |
| Courier Outlets   | 1,599               | 1,599               | 0               |
| Number of Letters (Up to 350 gms) Posted Locally (Millions) | 8.209               | 15.894              | -48.35          |
| Total Courier Items Sent locally                            | 1,630,765           | 1679188             | -2.88           |
| International Incoming Letters (Up to 350 gms)              | 964,013             | 2,299,588           | -58.08          |
| International Outgoing Letters (Up to 350 gms)              | 912,825             | 1,907,271           | -52.14          |
| Population (Millions)                                       | 45.4                | 44.2                | 2.7             |



# 1 CELLULAR MOBILE SERVICES

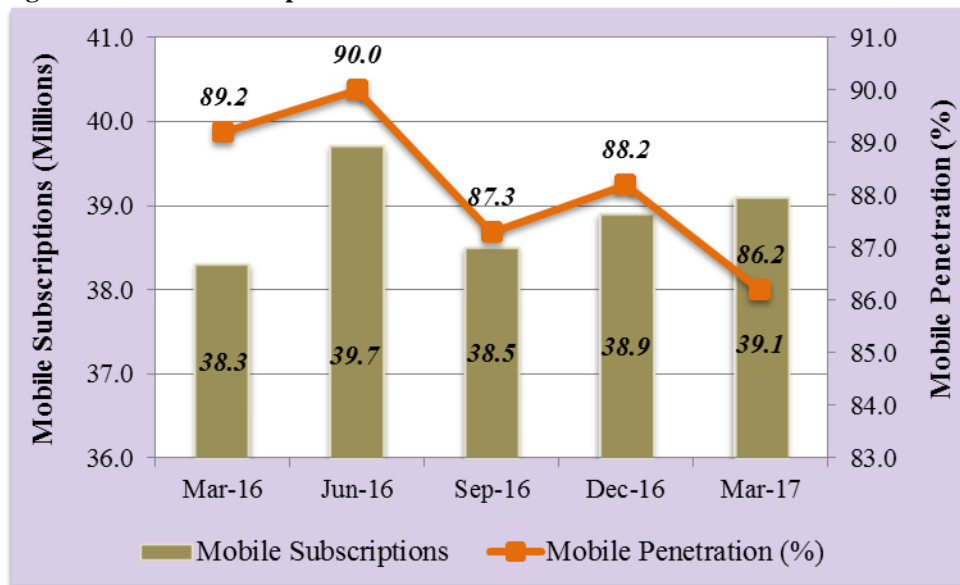
## 1.1 Mobile Subscriptions

The mobile telephony sub sector recorded mixed trends during the period under review. The period saw a growth in the mobile subscriptions to register 39.1 million up from last quarter's 38.9 million subscriptions. On the other hand, the mobile penetration level dropped by 2.0 percentage points to stand at 86.2 per cent from 88.2 per cent registered during the preceding quarter.

The decline in the penetration level was mainly attributed to the review of the country's population to 45.2 million up from 44.2 million as per the Economic survey 2017.

The trends in mobile subscriptions and penetration levels are illustrated in Figure 1.

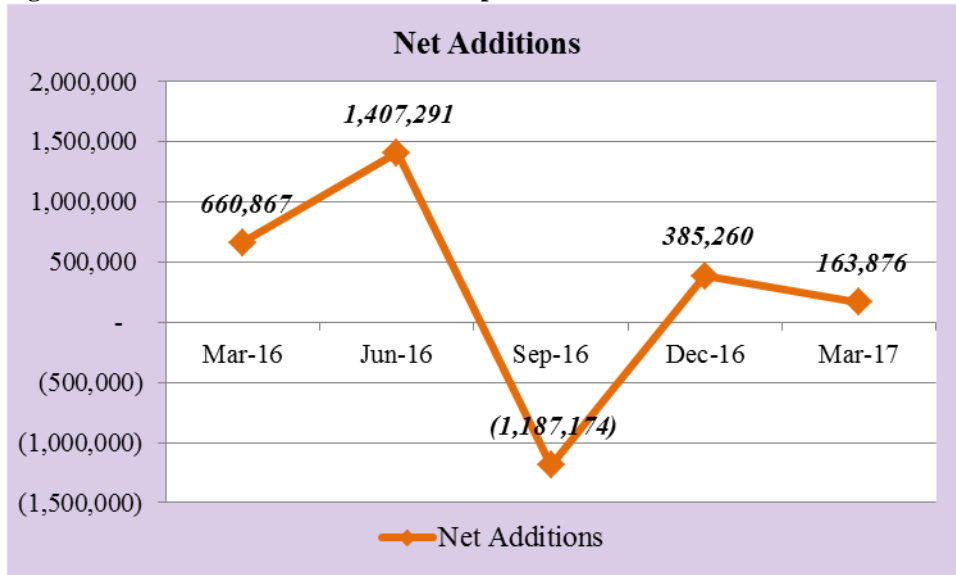
Figure 1: Mobile Subscriptions



Source: CA, Operators' Returns.

As illustrated in Figure 2, the net mobile additions during the quarter under review were registered at 163,876 compared to 385,260 new subscriptions recorded during the previous quarter.

**Figure 2: Net Additions in Mobile Subscriptions**



*Source: CA, Operators' Returns.*

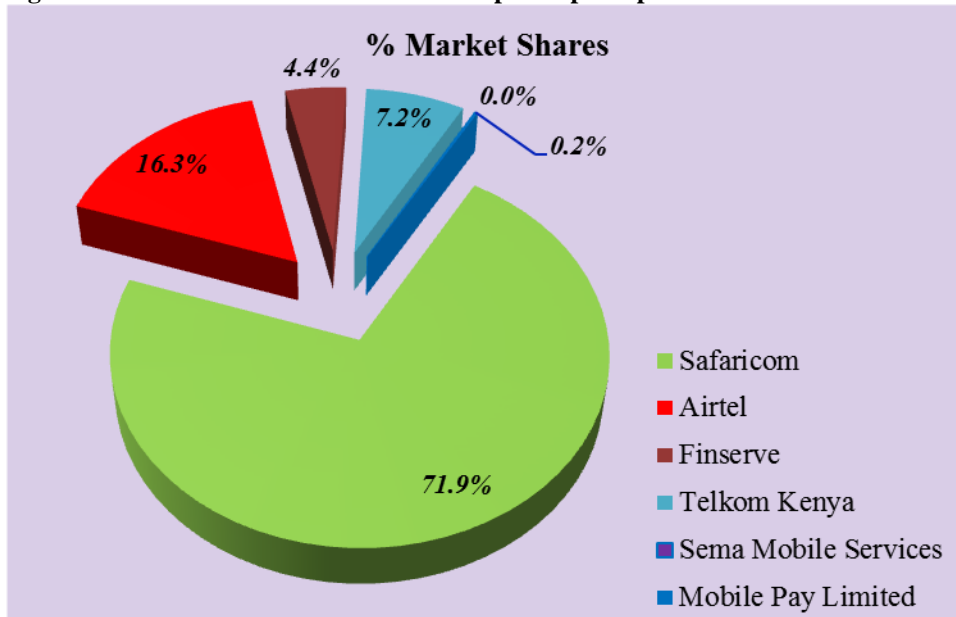
During the quarter under review, Safaricom Limited registered a growth of 0.7 per centage points in market share to stand at 71.9 per cent from last quarter's 71.2 per cent.

Airtel Networks Limited market share declined by 1.3 per centage points to register at 16.3 per cent from 17.6 per cent posted during the preceding quarter. Likewise, Telkom Kenya Limited market share dropped by 0.2 per centage points to register at 7.2 per cent from 7.4 per cent recorded during the previous quarter.

Finserve Africa Limited market share stood at 4.4 per cent during the quarter under review up from last quarter's 3.8 per cent marking a growth of 0.6 per centage points.

Mobile Pay Limited recorded a market share of 0.2 per cent while Sema Mobile services registered a total of 295 subscriptions which translated to 0.0 per cent of the market share.

**Figure 3: Market Share for Mobile Subscriptions per Operator**



*Source: CA, Operators' Returns*

During the period under review, the total number of mobile subscriptions increased by 0.4 per cent to stand at 39.1 million from 38.9 million subscriptions recorded in the previous quarter.

The total number of subscriptions recorded by Safaricom Limited was 28.1 million representing a growth of 1.4 per cent when compared to 27.7 million recorded in the previous quarter.

Airtel Networks Limited registered a decline of 6.7 per cent in the number of mobile subscriptions to post 6.3 million from 6.8 million subscriptions recorded in the previous quarter. This could be attributed to the review of a tariff carried out by the service provider which led to reduction in new acquisitions and increased subscriber in activity.

Finserve Africa Limited posted 1.7 million subscriptions up from 1.4 million recorded during the preceding quarter. This translated to a substantial growth of 15.4 per cent while Telkom Kenya Limited recorded a decline of 3.2 per cent to stand at 2.80 million down from last quarter's 2.89 million subscriptions.

Mobile Pay Limited reported a total of 86,724 subscriptions during the quarter under review while Sema Mobile Services recorded a total of 295 subscriptions up from 270 subscriptions posted during the previous quarter.

The number of pre-paid and post-paid subscriptions by operator is as indicated in Table 1.

**Table 1: Mobile Subscriptions Per Operator**

| Name of operator               | Mar-17            |                  |                   | Dec-16            |                  |                   | Quarterly variation (%) |
|--------------------------------|-------------------|------------------|-------------------|-------------------|------------------|-------------------|-------------------------|
|                                | Pre-paid          | Post-paid        | Total             | Pre-paid          | Post-paid        | Total             |                         |
| <b>Safaricom Limited</b>       | 27,099,918        | 1,033,670        | 28,133,588        | 26,471,893        | 1,266,834        | 27,738,727        | 1.4                     |
| <b>Airtel Networks Limited</b> | 6,255,020         | 138,658          | 6,393,678         | 6,711,829         | 137,664          | 6,849,493         | -6.7                    |
| <b>Finserve Africa Limited</b> | 1,727,270         | -                | 1,727,270         | 1,496,153         | -                | 1,496,153         | 15.4                    |
| <b>Telkom Kenya Limited</b>    | 2,795,762         | 8,747            | 2,804,509         | 2,888,674         | 8,871            | 2,897,545         | -3.2                    |
| <b>Mobile Pay Limited</b>      | 86,724            | -                | 86,724            | -                 | -                | -                 | -                       |
| <b>Sema Mobile Services</b>    | 295               | -                | 295               | 270               | -                | 270               | 9.3                     |
| <b>Total</b>                   | <b>37,964,989</b> | <b>1,181,075</b> | <b>39,146,064</b> | <b>37,568,819</b> | <b>1,413,369</b> | <b>38,982,188</b> | 0.4                     |

Source: CA, Operators' Returns.

## 1.2 Mobile Money Transfer

The number of mobile money subscriptions stood at 27.5 million subscriptions whereas the number of active mobile money transfer agents was registered at 174,018. The volume of transactions on this platform was recorded at 471.1 million with 1.1 trillion Kenya Shillings moved during the period. In addition there were a total of 290.5 million transactions worth 627.4 billion Kenya shillings for goods and services. The person-to-person money transfers amounted to 520.4 billion Kenya shillings.

**Table 2: Mobile Money Transfer Service**

| Service              | Mar-17         |                   |                        |                              |                              |                                 |                                   |
|----------------------|----------------|-------------------|------------------------|------------------------------|------------------------------|---------------------------------|-----------------------------------|
|                      | Agents         | Subscriptions     | Number of transactions | Value of transactions (Kshs) | Mobile commerce transactions | Value of mobile commerce (Kshs) | Person to Person transfers (Kshs) |
| <b>M-pesa</b>        | 135,544        | 22,031,599        | 364,204,678            | 890,676,274,606              | 244,997,747                  | 432,548,984,176                 | 424,358,473,777                   |
| <b>Airtel Money</b>  | 16,623         | 1,730,524         | 8,117,770              | 5,843,212,397                | 8,117,770                    | 5,843,212,397                   | 2,614,634,646                     |
| <b>Orange Money</b>  | 800            | 194,427           | 26,000                 | 125,674,000                  | 178                          | 52,343                          | 3,450,199                         |
| <b>Equitel Money</b> | -              | 1,727,270         | 97,608,310             | 271,806,473,195              | 37,384,852                   | 189,080,441,202                 | 92,705,846,614                    |
| <b>Mobikash*</b>     | 16,749         | 1,772,696         | 815,881                | 127,032,829                  | 6,430                        | 9,227,168                       | 22,876,608                        |
| <b>Mobile Pay</b>    | 4,302          | 86,724            | 360,651                | 1,434,945,936                | -                            | -                               | 749,683,772                       |
| <b>Total</b>         | <b>174,018</b> | <b>27,543,240</b> | <b>471,133,290</b>     | <b>1,170,013,612,963</b>     | <b>290,506,977</b>           | <b>627,481,917,286</b>          | <b>520,454,965,616</b>            |

Source: CA, Operators' Returns, \*Provisional data.

### 1.3 Mobile Number Portability

As shown in Table 3, the number of ported mobile numbers increased during the quarter under review to stand at 375 from last quarter's 153.

**Table 3: Mobile Number Portability**

| <i>Period</i>             | <i>Jan-Mar 17</i> | <i>Oct -Dec 16</i> | <i>Quarterly Variation (%)</i> | <i>Jan-Mar 16</i> | <i>Oct -Dec 15</i> | <i>Quarterly Variation (%)</i> |
|---------------------------|-------------------|--------------------|--------------------------------|-------------------|--------------------|--------------------------------|
| <i>Number of in-ports</i> | 375               | 153                | 145.0                          | 395               | 234                | 68.8                           |

*Source: CA, Operators' Returns*

### 1.4 Mobile Traffic and Usage Pattern

#### 1.4.1 Voice Traffic

Traffic originating from mobile networks registered a decline of 3.7 per cent during the quarter under review to record 10.4 billion minutes from last quarter's 10.8 billion minutes. This could mainly be attributed to the end of festivities that was experienced during the previous quarter and the similar trend was experienced during the same period in the previous year.

The volume of on-net mobile traffic was recorded at 9.2 billion minutes registering a drop of 2.7 per cent compared to 9.5 billion minutes posted during the previous quarter.

The off-net mobile traffic registered a total of 1.1 billion minutes during the quarter under review down from 1.3 billion minutes posted in the previous quarter. On the other hand, mobile to fixed network traffic grew to reach 20.2 million minutes from 16.3 million minutes recorded in the preceding quarter.

Table 4 shows a summary of local mobile voice traffic.

**Table 4: Local Mobile Voice Traffic in Minutes**

| <i>Mobile Traffic</i>                              | <i>Jan - Mar 17</i>   | <i>Oct - Dec 16</i>   | <i>Quarterly Variation (%)</i> | <i>Jan - Mar 16</i>   | <i>Oct - Dec 15</i>   | <i>Quarterly Variation (%)</i> |
|--|-----------------------|-----------------------|--------------------------------|-----------------------|-----------------------|--------------------------------|
| <i>By Traffic originating (outgoing traffic)</i>   |                       |                       |                                |                       |                       |                                |
| <i>Own Network – Own Network</i>                   | 9,265,953,858         | 9,522,341,685         | -2.7                           | 9,021,652,848         | 8,982,304,017         | 0.4                            |
| <i>Own Network to Other Mobile Networks</i>        | 1,169,552,639         | 1,321,393,435         | -11.5                          | 1,212,787,035         | 1,272,404,250         | -4.7                           |
| <i>Mobile Network to Fixed Network</i>             | 20,265,293            | 16,362,117            | 23.9                           | 15,201,786            | 15,968,998            | -4.8                           |
| <b><i>Total Traffic Origination (Outgoing)</i></b> | <b>10,455,771,790</b> | <b>10,860,097,237</b> | <b>-3.7</b>                    | <b>10,249,641,669</b> | <b>10,270,677,265</b> | <b>-0.2</b>                    |
| <i>By Traffic terminating (incoming traffic)</i>   |                       |                       |                                |                       |                       |                                |
| <i>Own Network – Own Network</i>                   | 9,265,953,858         | 9,522,341,685         | -2.7                           | 9,021,652,848         | 8,982,304,017         | 0.4                            |

|   |                       |                       |             |                       |                       |             |
|---|-----------------------|-----------------------|-------------|-----------------------|-----------------------|-------------|
| <b>Other Mobile Networks to Own Network</b> | 1,117,786,855         | 1,258,551,962         | -11.2       | 1,162,790,450         | 1,295,667,381         | -10.3       |
| <b>Fixed Network to Mobile Network</b>      | 11,742,761            | 10,313,024            | 13.9        | 9,858,085             | 9,141,859             | 7.8         |
| <b>Total Traffic termination (Incoming)</b> | <b>10,395,483,474</b> | <b>10,791,206,671</b> | <b>-3.7</b> | <b>10,194,301,383</b> | <b>10,287,113,257</b> | <b>-0.9</b> |

*Source: CA, Operators' Returns.*

The volume of total traffic terminating on local mobile network stood at 10.3 billion minutes during the quarter under review. This is a drop of 3.7 per cent when compared to 10.7 billion minutes recorded during the previous quarter. On the contrary, the volume of fixed to mobile network traffic increased to post 11.7 million minutes from last quarter's 10.3 million minutes.

#### **1.4.2 Voice Traffic per Operator**

Safaricom Limited recorded a total of 8.5 billion minutes during the quarter under review. This was a decline from 8.7 billion minutes posted in the previous quarter. The volume of on-net traffic was 8.1 billion minutes while off-net traffic stood at 361.2 million minutes. Despite the drop in the volume of voice traffic, the operator had its voice market share rising to stand at 82.0 per cent from 80.6 per cent attained during the preceding quarter.

The total volume of voice traffic registered by Airtel Networks Limited was 1.2 billion minutes during the quarter under review. This was a decline compared to 1.4 billion minutes recorded during the previous quarter. Subsequently, its voice market share dropped to stand at 12.1 per cent from 13.5 per cent.

Telkom Kenya Limited local voice traffic decreased by 3.1 per cent during the quarter under review to stand at 572.3 million minutes from 590.9 million minutes recorded during the preceding quarter. On the other hand, its voice market share gained by 0.1 per centage points to stand at 5.5 per cent from 5.4 per cent attained during the preceding quarter.

During the period under review, Finserve Africa Limited recorded an increase in the volume of local voice traffic to stand at 46.6 million minutes from 46.5 million minutes posted in the previous quarter. Its on-net and off-net voice traffic stood at 3.6 million and 43.0 million minutes respectively.

Sema Mobile Services saw its local voice traffic increase by 11.5 per cent to post a total of 47,057 minutes during the quarter under review from 42,205 minutes recorded during the previous quarter. Mobile Pay Limited reported a total of 28,654 minutes of local voice traffic.

The traffic volumes for each of the mobile operators and MVNOs and the respective market shares are shown in Table 5.

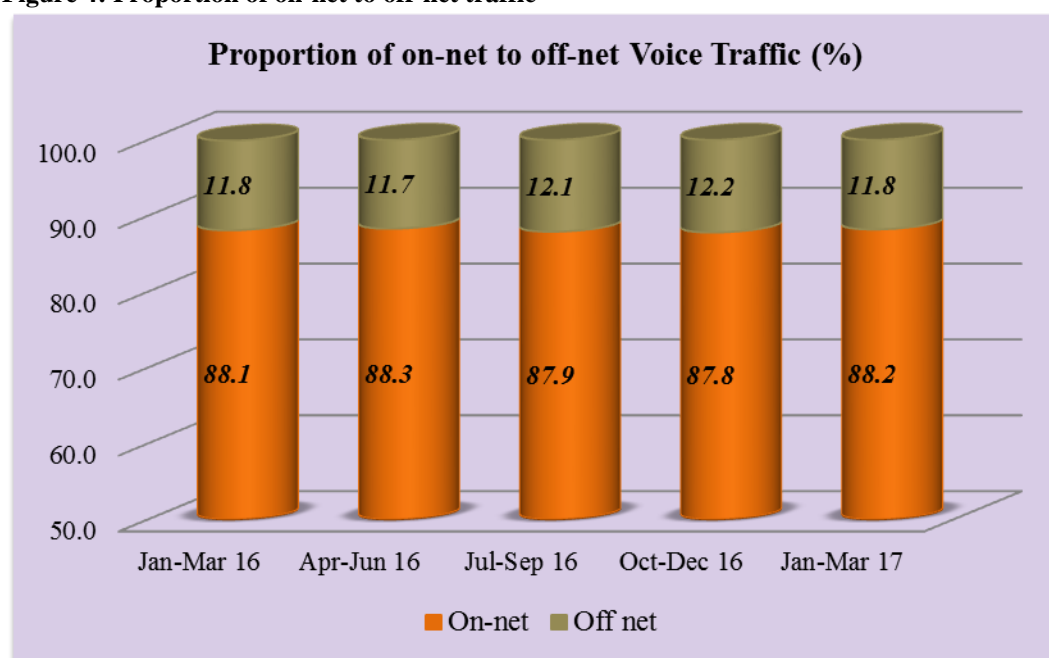
**Table 5: Local Mobile Voice Traffic by Operator**

| <i>Period</i>     | <i>Name of Operator/Indicator</i> | <i>Safaricom Limited</i> | <i>Airtel Networks Kenya Limited</i> | <i>Telkom Kenya Limited</i> | <i>Finserve Africa Limited</i> | <i>Sema Mobile Services</i> | <i>Mobile Pay Limited</i> |
|-------------------|-----------------------------------|--------------------------|--------------------------------------|-----------------------------|--------------------------------|-----------------------------|---------------------------|
| <b>Jan-Mar 17</b> | <i>On-net</i>                     | 8,191,883,021            | 660,920,000                          | 409,544,140                 | 3,600,081                      | 3,596                       | 3,020                     |
|                   | <i>Off-net</i>                    | 361,270,839              | 602,363,650                          | 162,824,828                 | 43,024,227                     | 43,461                      | 25,634                    |
|                   | <b>Total</b>                      | <b>8,553,153,860</b>     | <b>1,263,283,650</b>                 | <b>572,368,968</b>          | <b>46,624,308</b>              | <b>47,057</b>               | <b>28,654</b>             |
|                   | <i>Market share (%)</i>           | 82.0                     | 12.1                                 | 5.5                         | 0.4                            | 0.0                         | 0.0                       |
| <b>Oct-Dec 16</b> | <i>On-net</i>                     | 8,343,311,000            | 765,210,000                          | 409,803,391                 | 4,013,903                      | 3,391                       | -                         |
|                   | <i>Off-net</i>                    | 398,022,273              | 699,698,004                          | 181,107,643                 | 42,526,701                     | 38,814                      | -                         |
|                   | <b>Total</b>                      | <b>8,741,333,273</b>     | <b>1,464,908,004</b>                 | <b>590,911,034</b>          | <b>46,540,604</b>              | <b>42,205</b>               | <b>-</b>                  |
|                   | <i>Market share (%)</i>           | 80.6                     | 13.5                                 | 5.4                         | 0.4                            | 0.0                         | -                         |
| <b>Jan-Mar 16</b> | <i>On-net</i>                     | 7,521,296,800            | 858,674,000                          | 637,626,512                 | 4,053,907                      | 1,629                       | -                         |
|                   | <i>Off-net</i>                    | 338,755,322              | 625,144,457                          | 213,484,044                 | 35,385,244                     | 17,968                      | -                         |
|                   | <b>Total</b>                      | <b>7,860,052,122</b>     | <b>1,483,818,457</b>                 | <b>851,110,556</b>          | <b>39,439,151</b>              | <b>19,597</b>               | <b>-</b>                  |
|                   | <i>Market Share (%)</i>           | 76.8                     | 14.5                                 | 8.3                         | 0.4                            | 0.0                         | -                         |

*Source: CA, Operators' Returns.*

As illustrated in figure 4, the proportion of on-net traffic rose to 88.2 per cent during the period under review from 87.8 per cent recorded in the previous quarter.

**Figure 4: Proportion of on-net to off-net traffic**



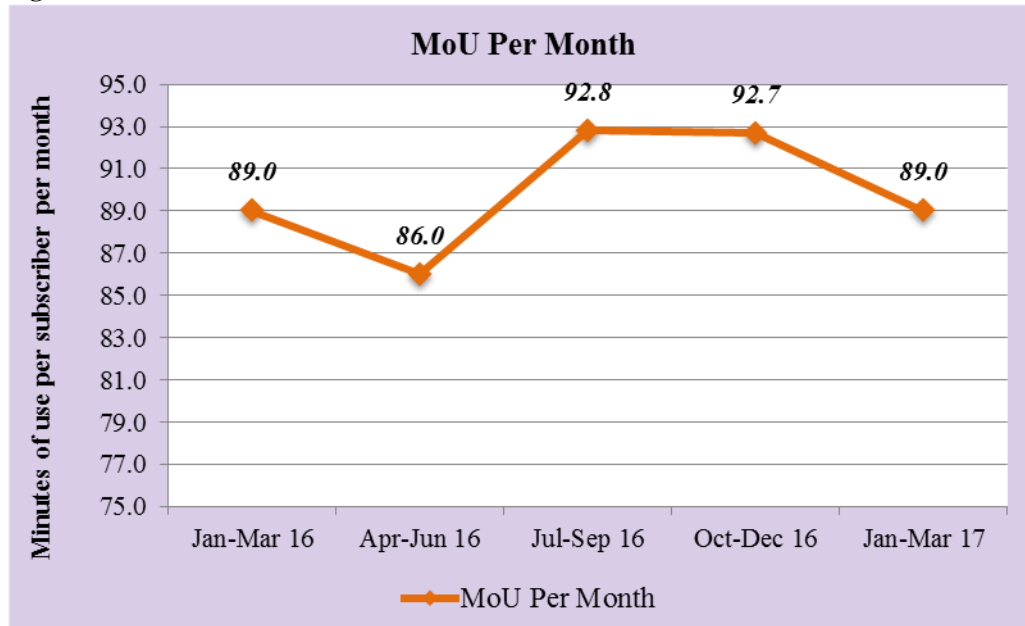
*Source: CA, Operators' Returns.*



### 1.4.3 Minutes of Use

The period under review saw a decline in the minutes of use to stand at 89.0 minutes from 92.7 minutes recorded in the previous quarter. The decline could be as a result of expiry of various promotions that the operators had offered to their customers during the festive season in the preceding quarter.

Figure 5: Minutes of Use



Source: CA, Operators' Returns.

### 1.4.4 Short Message Service

The period under review saw the volume of on-net SMS sent decline by 18.8 per cent to stand at 12.8 billion messages from last quarter's 15.2 billion messages. These could be attributed to seasonal changes over the periods where the previous quarter experienced many busy activities like the Christmas holidays and long school holidays.

Safaricom limited recorded a total of 12.6 billion messages sent from its network during the period under review down from 15.0 billion messages posted in the previous period. The volume of on-net and off-net messages stood at 12.5 billion and 161.3 million respectively. Its market SMS market share expanded to reach 95.3 per cent up from last quarter's 95.1 per cent

Airtel Networks Limited registered a total 563.0 million messages originating from its network during the quarter under review which was a decline of 18.8 per cent compared to 693.3 million messages recorded during the preceding quarter. Also, its SMS market share dropped to 4.2 per cent from 4.4 per cent.

The total SMS traffic that was sent from Telkom Kenya Limited network declined by 18.4 per cent during the quarter under review to stand at 61.2 million messages from 75.0 million messages recorded in the previous period.

Finserve Africa Limited posted a total of 8.3 million outgoing messages during the period under review down from last quarter's 9.5 million messages. Its SMS market share stood at 0.1 per cent.

The volume of outgoing messages recorded by Sema Mobile Services decreased by 15.2 per cent during the period under review to stand at 13,339 messages from 15,745 messages recorded during the previous period.

Mobile Pay Limited registered a total of 21,920 outgoing messages with on-net and off-net being recorded at 2,214 and 19,706 respectively.

SMS traffic and the corresponding market share per operator is as shown in Table 6.

**Table 6: Short Messaging Service per Operator**

| <i>Period</i>     | <i>Name of Operator/Indicator</i> | <i>Safaricom Limited</i> | <i>Airtel Networks Limited</i> | <i>Telkom Kenya Limited</i> | <i>Finserve Africa Limited</i> | <i>Sema Mobile Services</i> | <i>Mobile Pay Limited</i> |
|-------------------|-----------------------------------|--------------------------|--------------------------------|-----------------------------|--------------------------------|-----------------------------|---------------------------|
| <b>Jan-Mar 17</b> | <i>On-net</i>                     | 12,534,726,046           | 249,014,488                    | 16,381,210                  | 985,042                        | 1,136                       | 2,214                     |
|                   | <i>Off-net</i>                    | 161,383,384              | 314,064,515                    | 44,905,509                  | 7,369,673                      | 12,203                      | 19,706                    |
|                   | <b>Total</b>                      | <b>12,696,109,430</b>    | <b>563,079,003</b>             | <b>61,286,719</b>           | <b>8,354,715</b>               | <b>13,339</b>               | <b>21,920</b>             |
|                   | <i>Market Share (%)</i>           | 95.3                     | 4.2                            | 0.5                         | 0.1                            | 0.0                         | 0.0                       |
| <b>Oct-Dec 16</b> | <i>On-net</i>                     | 14,891,334,324           | 346,466,628                    | 25,253,090                  | 1,108,527                      | 1,319                       | -                         |
|                   | <i>Off-net</i>                    | 188,113,470              | 346,925,711                    | 49,824,968                  | 8,488,753                      | 14,426                      | -                         |
|                   | <b>Total</b>                      | <b>15,079,447,794</b>    | <b>693,392,339</b>             | <b>75,078,058</b>           | <b>9,597,280</b>               | <b>15,745</b>               | <b>-</b>                  |
|                   | <i>Market Share (%)</i>           | 95.1                     | 4.4                            | 0.5                         | 0.1                            | 0.0                         | -                         |
| <b>Jan-Mar 16</b> | <i>On-net</i>                     | 5,688,865,241            | 311,463,284                    | 26,421,376                  | 566,320                        | 475                         | -                         |
|                   | <i>Off-net</i>                    | 199,144,166              | 267,676,699                    | 46,159,906                  | 6,674,006                      | 4,141                       | -                         |
|                   | <b>Total</b>                      | <b>5,888,009,407</b>     | <b>579,139,983</b>             | <b>72,581,282</b>           | <b>7,240,326</b>               | <b>4,616</b>                | <b>-</b>                  |
|                   | <i>Market Share (%)</i>           | 89.9                     | 8.8                            | 1.1                         | 0.1                            | 0.0                         | -                         |

*Source: CA, Operators' Returns.*

#### **1.4.5 Roaming Traffic**

During the period under review, the volume of roaming-out<sup>1</sup> voice traffic was recorded at 38.5 million minutes with roaming within East Africa countries contributing 33.6 million minutes. Roaming-out SMS was registered at 9.6 million messages while 4.2 million MB was consumed by outbound roamers on data services.

Roaming-in<sup>2</sup> voice traffic registered 32.3 million minutes during the quarter under review with in-roamers from East Africa countries contributing 87.1 per cent of the traffic. The in-bound roamers sent 5.9 million messages and consumed 13.5 million MB of data. Roaming-out and Roaming-in traffic for the quarter is as indicated in Table 7.

<sup>1</sup> Roaming out is traffic originated and terminated by subscribers of national networks as users of foreign networks abroad

<sup>2</sup> Roaming in is traffic originated and terminated by foreign subscribers as users of local network

**Table 7: Roaming traffic**

| <i>Name of the Country</i> | <i>Jan-Mar 17</i>                    |                  |                  |   |                  |                   |
|----------------------------|--------------------------------------|------------------|------------------|---|------------------|-------------------|
|                            | <i>Roaming-Out (Own Subscribers)</i> |                  |                  | <i>Roaming-In (Foreign Subscribers)</i> |                  |                   |
|                            | <i>Voice</i>                         | <i>SMS</i>       | <i>Data (MB)</i> | <i>Voice</i>                            | <i>SMS</i>       | <i>Data (MB)</i>  |
| <i>Uganda</i>              | 22,817,689                           | 4,079,850        | 1,001,044        | 15,934,941                              | 961,109          | 2,253,666         |
| <i>Tanzania</i>            | 5,505,761                            | 1,847,455        | 672,218          | 1,278,877                               | 1,361,254        | 295,079           |
| <i>Rwanda</i>              | 1,684,344                            | 356,543          | 213,749          | 4,709,354                               | 93,052           | 160,009           |
| <i>Burundi</i>             | 20911                                | 21,043           | 4,100            | 11889                                   | 11,087           | 2684              |
| <i>S. Sudan</i>            | 3,590,435                            | 551724           | 60,409           | 6,249,466                               | 109,246          | 0                 |
| <i>Others</i>              | 4,924,466                            | 2,831,206        | 2,274,037        | 4,177,458                               | 3,416,746        | 10,852,978        |
| <b>Total</b>               | <b>38,543,606</b>                    | <b>9,687,821</b> | <b>4,225,557</b> | <b>32,361,985</b>                       | <b>5,952,494</b> | <b>13,564,416</b> |

*Source: CA, Operators' Returns*

#### **1.4.6 International Mobile Traffic**

International incoming Mobile voice traffic decreased by 3.3 per cent during the review period to post 142.3 million minutes from 147.1 million minutes recorded in the previous quarter. A similar trend was observed during the same period of the previous year. Traffic originating from EAC countries was recorded at 44.4 million minutes while other countries contributed 97.9 million minutes.

The volume of International Outgoing Mobile voice traffic registered a marginal increase of 0.6 per cent to record 117.4 million minutes during the period under review from 116.7 million minutes.

During the quarter under review the volume of International Incoming Mobile SMS decreased to 8.5 million messages from 9.2 million messages registered in the preceding quarter.

International Outgoing Mobile SMS increased by 1.9 per cent to reach 9.1 million messages during the period under review from 9.0 million messages that were reported in the previous quarter.

International Voice and SMS traffic is indicated in Table 8.

**Table 8: International Mobile Traffic**

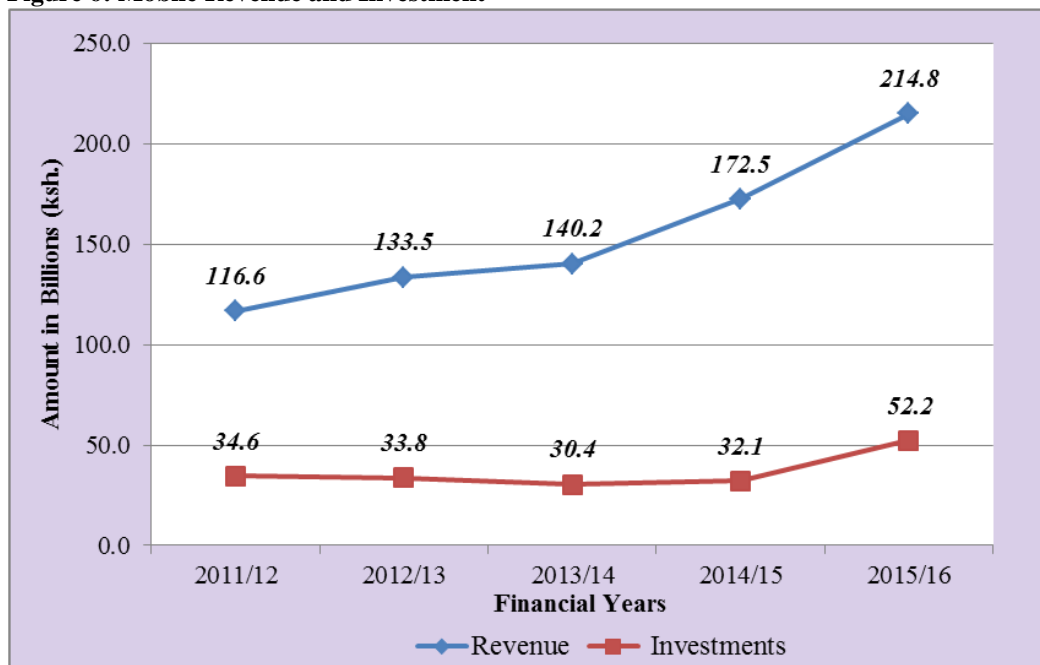
| Traffic                                     | Region       | Jan - Mar 17       | Oct-Dec 16         | Quarterly Variation (%) | Jan - Mar 16       | Oct - Dec 15       | Quarterly Variation (%) |
|---|--------------|--------------------|--------------------|-------------------------|--------------------|--------------------|-------------------------|
| International Incoming Mobile Voice Minutes | EAC          | 44,434,436         | 44,520,389         | -0.2                    | 46,446,883         | 56,157,419         | -17.3                   |
|   | Others       | 97,919,141         | 102,636,939        | -4.6                    | 102,278,066        | 101,419,942        | 0.8                     |
|   | <b>Total</b> | <b>142,353,577</b> | <b>147,157,328</b> | <b>-3.3</b>             | <b>148,724,949</b> | <b>157,577,361</b> | <b>-5.6</b>             |
| International Outgoing Mobile Voice Minutes | EAC          | 45,547,779         | 48,653,026         | -6.4                    | 38,233,826         | 36,957,264         | 3.5                     |
|   | Others       | 71,893,083         | 68,097,836         | 5.6                     | 81,636,164         | 83,046,354         | -1.7                    |
|   | <b>Total</b> | <b>117,440,862</b> | <b>116,750,862</b> | <b>0.6</b>              | <b>119,869,990</b> | <b>120,003,618</b> | <b>-0.1</b>             |
| International Incoming Mobile SMS           |              | 8,530,417          | 9,226,640          | -7.5                    | 9,780,677          | 10,997,314         | -11.1                   |
| International Outgoing Mobile SMS           |              | 9,169,746          | 9,000,009          | 1.9                     | 10,353,784         | 9,120,631          | 13.5                    |

Source: CA, Operators' Returns.

### 1.5 Mobile Revenue and Investments

The data on mobile revenue and investments will be updated at the end of the 2016/17 financial year. The figure below indicates the trend as at 30<sup>th</sup> June 2016.

**Figure 6: Mobile Revenue and Investment**



Source: CA, Operators Return\* Includes Telkom Fixed Network Revenue and Investment.

## 1.6 Employment in the Mobile Service Industry

Data on the number of staff will be updated at the end of the 2016/17 Financial Year. The table below indicates the status as at 30<sup>th</sup> June 2016.

**Table 9: Staff in Mobile Sector**

| Staff               | Jun-16       | Jun-15       | Jun-14       | Jun-13       | Jun-12       | Jun-11       | Variation (%) Over 2015 | Variation (%) Over 2014 | Variation (%) Over 2013 | Variation (%) Over 2012 | Variation (%) Over 2011 |
|---------------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| <i>Male Staff</i>   | 3,383        | 3,549        | 3,795        | 3,535        | 3,489        | 3,769        | -4.7                    | -6.5                    | 7.4                     | 1.3                     | -7.4                    |
| <i>Female Staff</i> | 2,795        | 2,598        | 2,644        | 2,082        | 2053         | 2058         | 7.6                     | -1.7                    | 27                      | 1.4                     | -0.2                    |
| <i>Total Staff*</i> | <b>6,178</b> | <b>6,147</b> | <b>6,439</b> | <b>5,617</b> | <b>5,542</b> | <b>5,827</b> | <b>0.5</b>              | <b>-4.5</b>             | <b>14.6</b>             | <b>1.4</b>              | <b>-4.9</b>             |

*Source: CA, Operators Returns, (\*) includes Telkom Fixed Network*



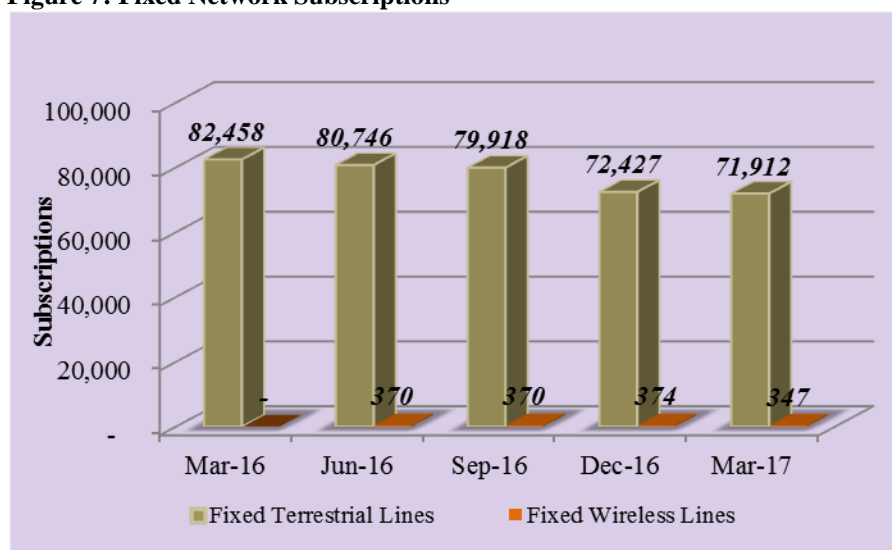
## 2 FIXED TELEPHONE SERVICE

### 2.1 Fixed Network Subscriptions

During the quarter under review, fixed network subscriptions declined by 0.7 per cent to reach 72,259 subscriptions from 72,801 subscriptions reported in the preceding quarter. The number of fixed terrestrial and fixed wireless connections stood at 71,912 and 347 subscriptions respectively.

The trend in fixed network subscriptions is illustrated in Figure 7.

**Figure 7: Fixed Network Subscriptions**



*Source: CA, Operators Returns*

## 2.2 Fixed Network Traffic

Local fixed network traffic recorded a growth of 7.7 per cent during the period under review to register 727,283 minutes from 675,123 minutes reported during the previous period.

Fixed to fixed network traffic increased by 14.6 per cent to post 389,154 minutes while fixed wireless to fixed wireless traffic rose by 0.8 per cent to register 338,129 minutes.

Table 10 illustrates the trend in fixed network traffic.

**Table 10: Local Fixed Network Traffic in Minutes**

| <i>Local Fixed Network traffic</i>       | <i>Jan-Mar 17</i> | <i>Oct-Dec 16</i> | <i>Quarterly Variation (%)</i> | <i>Jan-Mar 16</i> | <i>Oct-Dec 15</i> | <i>Quarterly Variation (%)</i> |
|--|-------------------|-------------------|--------------------------------|-------------------|-------------------|--------------------------------|
| <i>Fixed-fixed</i>                       | 389,154           | 339,715           | 14.6                           | 562,486           | 541,262           | 3.9                            |
| <i>Fixed Wireless-fixed wireless</i>     | 338,129           | 335,408           | 0.8                            | -                 | -                 | -                              |
| <i>Total Local Fixed network traffic</i> | <b>727,283</b>    | <b>675,123</b>    | 7.7                            | <b>562,486</b>    | <b>541,262</b>    | 3.9                            |

*Source: CA, Operators Returns*

International incoming fixed voice traffic recorded a marginal increase of 1.0 per cent during the period under review to post 2.6 million minutes from 2.5 million minutes reported in the previous period.

Similarly the volume of International outgoing fixed voice traffic registered a growth of 2.1 per cent during the period under review to record 2.1 million minutes from last quarter's 2.0 million minutes.

On the contrary, International outgoing fixed VoIP traffic declined by 18.9 per cent during the quarter under review to record 811,029 minutes from 1.0 million messages registered during the preceding quarter.

The trend in international fixed network traffic is illustrated in Table 11.

**Table 11: International Fixed Voice Traffic**

| <i>International Fixed Network traffic</i>                | <i>Jan-Mar 17</i> | <i>Oct-Dec 16</i> | <i>Quarterly Variation (%)</i> | <i>Jan-Mar 16</i> | <i>Oct-Dec 15</i> | <i>Quarterly Variation (%)</i> |
|---|-------------------|-------------------|--------------------------------|-------------------|-------------------|--------------------------------|
| <i>International Incoming Fixed Network Voice traffic</i> | 2,600,060         | 2,573,212         | 1.0                            | 1,176,034         | 2,395,499         | -50.9                          |
| <i>International Outgoing Fixed Network Voice traffic</i> | 2,135,181         | 2,090,833         | 2.1                            | 2,360,259         | 2,251,603         | 4.8                            |
| <i>International Outgoing Fixed Network VoIP traffic</i>  | 811,029           | 1,000,509         | -18.9                          | 539,689           | 961,039           | -43.8                          |

*Source: CA, Operators Returns*



### 3 DATA/INTERNET SERVICES

#### 3.1 Data/Internet Service

The ability to access and use reliable Internet services has become fundamental in our daily lives. At the end of the quarter, the estimated Internet users registered a growth of 2.3 per cent to stand at 40.5 million up from 39.6 million users reported at the end of the previous period. The number of Internet subscriptions slightly declined by 3.6 per cent to stand at 25.7 million subscriptions from last quarter's 26.6 million subscriptions. This is attributed to the revision of data by Finserve Kenya during the quarter. On the other hand, the number of data subscriptions has grown by 3.4 per cent when compared to the same period of the previous year. Mobile data/internet subscriptions were 21.5 million accounting for 99 per cent of the total Internet subscriptions during the quarter under review.

Terrestrial wireless data subscriptions rose during the quarter under review to post 36,104 subscriptions from 29,724 subscriptions recorded during the previous quarter marking a growth of 21.5 per cent. Similarly, Satellite subscriptions increased by 6.5 per cent to stand at 622 subscriptions from 584 subscriptions recorded during the previous quarter.

The growth of fibre optic network in the country has been vibrant over the recent quarters. This similar trend was observed during the period under review with the number of fixed fibre optic subscriptions growing by 22.4 per cent to post 48,040 subscriptions up from last quarter's 39,255 subscriptions.

Fixed cable modem subscriptions recorded an increase of 11.4 per cent to post 95,976 subscriptions up from 86,139 recorded in the previous quarter.

The number of data/Internet subscriptions and estimated users is as indicated in Table 12.

**Table 12 : Internet Subscriptions and Internet Users**

| <i>Internet/Data Subscriptions</i>          | <i>Mar-17</i>     | <i>Dec-16</i>     | <i>Quarterly Variation (%)</i> | <i>Mar-16</i>     | <i>Dec-15</i>     | <i>Quarterly Variation (%)</i> |
|---|-------------------|-------------------|--------------------------------|-------------------|-------------------|--------------------------------|
| <b>Total Internet Subscriptions</b>         | <b>25,707,557</b> | <b>26,679,222</b> | <b>-3.6</b>                    | <b>24,848,065</b> | <b>23,929,657</b> | <b>3.8</b>                     |
| <b>Mobile Data Subscriptions</b>            | 25,524,363        | 26,521,037        | -3.8                           | 24,708,551        | 23,794,550        | 3.8                            |
| <b>Fixed Wireless Data Subscriptions</b>    | 36,104            | 29,724            | 21.5                           | 13,792            | 19,507            | -29.3                          |
| <b>Satellite Data Subscriptions</b>         | 622               | 584               | 6.5                            | 299               | 489               | -38.9                          |
| <b>Fixed DSL Data Subscriptions</b>         | 2,452             | 2,483             | -1.3                           | 2,961             | 3,732             | -20.7                          |
| <b>Fixed Fibre Optic Data Subscriptions</b> | 48,040            | 39,255            | 22.4                           | 122,437           | 111,354           | 9.9                            |
| <b>Fixed Cable Modem Subscriptions</b>      | 95,976            | 86,139            | 11.4                           | 25                | 25                | 0.0                            |

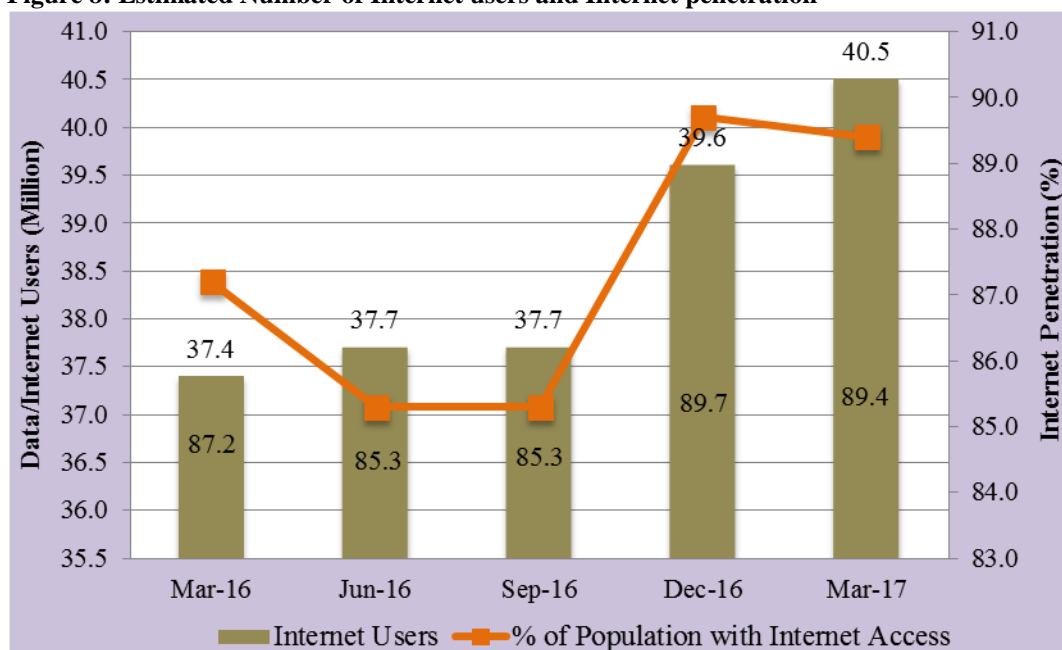
|   |                   |                   |            |                 |                   |            |
|---|-------------------|-------------------|------------|-----------------|-------------------|------------|
| <i>Estimated Internet Users<sup>3</sup></i> | <b>40,594,403</b> | <b>39,664,377</b> | <b>2.3</b> | <b>37418671</b> | <b>35,549,620</b> | <b>5.3</b> |
|---|-------------------|-------------------|------------|-----------------|-------------------|------------|

Source: CA, Operators' Returns.

The estimated number of people with access to Internet rose to 40.5 million during the quarter up from 39.6 million reported in the last quarter representing a growth of 2.3 per cent. On the contrary there was a drop in Internet/data penetration level to stand at 89.4 per cent during the quarter under review from 89.7 per cent recorded in the previous quarter. The decline was mainly attributed to the revision of the base population figure to 45.4 million from 44.2 million as per Economic Survey 2017.

The trends on internet/data usage and penetration level are as demonstrated in Figure 8.

Figure 8: Estimated Number of Internet users and Internet penetration



Source: CA, Operators' Returns.

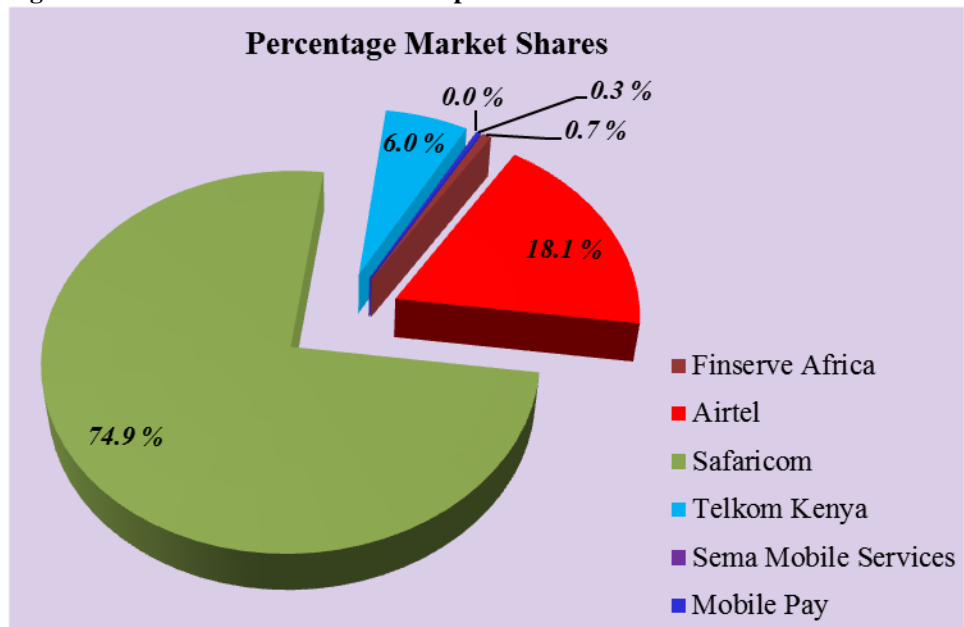
With regards to the market share for mobile data/Internet subscriptions; Safaricom Limited had the highest market share during the quarter with its market share standing at 74.9 per cent followed by Airtel Networks Limited stood at 18.1 per cent. Telkom Kenya Limited and Finserve Africa Limited market shares were recorded at 6.0 per cent and 0.7 per cent respectively. Mobile Pay registered a market share of 0.3 per cent while Sema Mobile Service Limited had its market share at 0.0 per cent.

The market shares for mobile data/Internet market by operator are as shown in Figure 9.

<sup>3</sup> Estimated Internet users = (1MD+10TW+100FFOS) where MD is the number of mobile data/internet subscriptions; TW is the terrestrial wireless subscriptions; and FFOS by 100 is fixed DSL, Fibre optic and satellite subscriptions. There is no scientific method of estimating internet users; for the purpose of this report the methodology is adopted from the recommendation from ITU



**Figure 9 : Mobile data/Internet Subscriptions**



*Source: CA, Operators' Returns.*

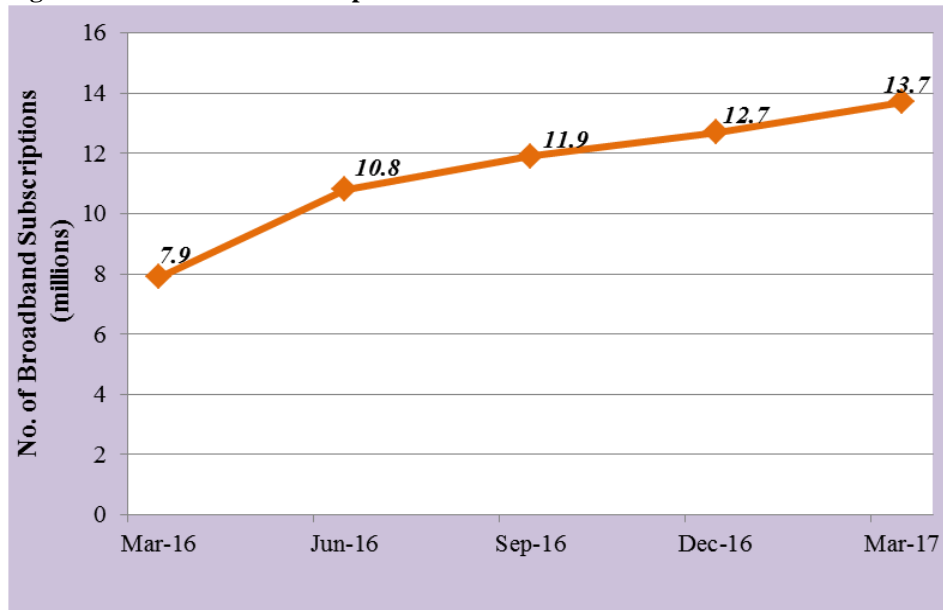
### **3.2 Broadband Services**

#### **3.2.1 Data / Internet broadband subscriptions**

As the demand for Internet continues to grow in the country, the requisite infrastructure is needed to match this pace. For this reasons, various service providers in the country continue to roll out broadband services in various parts of the country. This has contributed to the continued growth in the number of broadband subscriptions in the country. During the quarter under review, the number of subscribers reached 13.7 million during the quarter under review from 12.7 million subscriptions recorded in the preceding quarter. Consequently, broadband penetration level increased to 30.3 per cent during the quarter from 28.7 per cent recorded in the previous quarter.

The trend in broadband subscriptions is illustrated in Figure 10.

**Figure 10: Broadband Subscriptions**

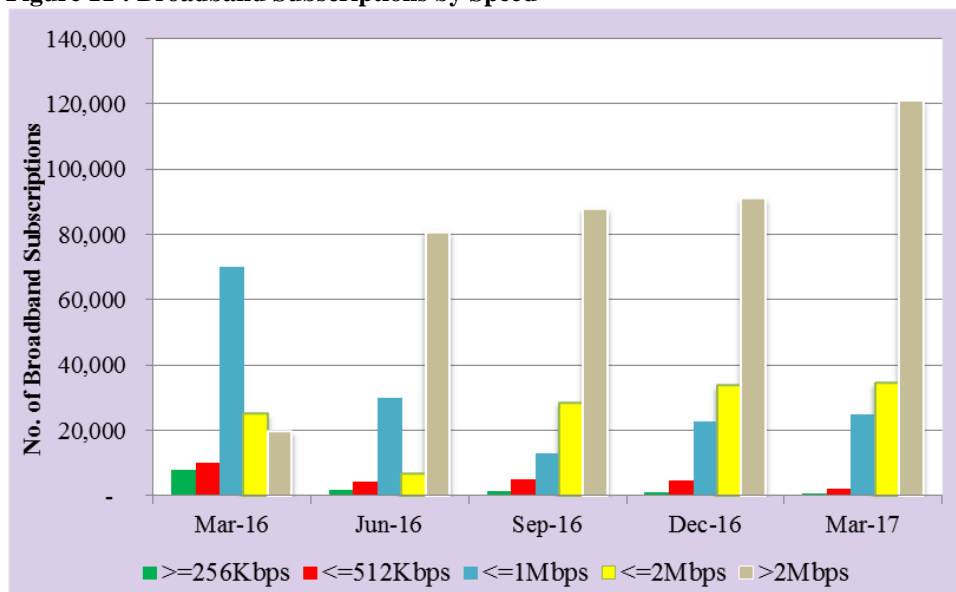


Source: CA, Operators' Returns.

### 3.2.2 Broadband subscriptions by Speed

The demand for higher broadband speeds is becoming increasingly common in the country. As witnessed during the quarter under review, broadband speeds of more than 2Mbps recorded the highest number of subscriptions while those greater than or equal to 256Kbps recorded the least as illustrated in Figure 11.

**Figure 11 : Broadband Subscriptions by Speed**



Source: CA, Operators' Returns.

### 3.3 International Bandwidth

During the period under review, the international bandwidth available in the country rose significantly by 43.3 per cent to reach 2,906.8 Gbps up from last quarter's 2,028.7 Gbps. This was mainly attributed to increase of supply capacity by the service providers as usage for the bandwidth in the country increases.

SEACOM increased its capacity from 1,250 Gbps to 2,020.0 Gbps while EASSY and Lion 2 had their capacities expanding from 39.06 Gbps to 83.0 Mbps and 39.210 Gbps to 101.4 Gbps respectively.

Satellite Internet bandwidth capacity remained unchanged at 0.473 Gbps during the quarter under review.

The total Internet bandwidth available in the country has tremendously increased by nearly half over the year from 2,906.8 Gbps during the same period last year to currently 2,028.7 Gbps.

The trend on international available bandwidth is as shown in Table 13.

**Table 13: International Internet Available Bandwidth (Gbps)**

| <i>International Connectivity Bandwidth</i>                 | <i>Mar-17</i>    | <i>Dec-16</i>    | <i>Quarterly Variation (%)</i> | <i>Mar-16</i>    |
|---|------------------|------------------|--------------------------------|------------------|
| <i>SEACOM</i>   | 2,020.00         | 1,250.00         | 61.6                           | 870.00           |
| <i>TEAMS</i>  | 702.00           | 700.00           | 0.3                            | 702.00           |
| <i>EASSY</i>  | 83.00            | 39.06            | 112.5                          | 390.60           |
| <i>Lion 2</i>   | 101.40           | 39.21            | 158.6                          | 39.21            |
| <i>Satellite Internet Bandwidth</i>                         | 0.473            | 0.473            | 0.0                            | 0.524            |
| <b><i>Total International Internet Bandwidth (Gbps)</i></b> | <b>2,906.873</b> | <b>2,028.743</b> | <b>43.3</b>                    | <b>2,002.334</b> |

Source: CA, Operators Returns

The total used International Internet Bandwidth in the country increased to reach 879.5 Gbps during the quarter under review from 860.5 Gbps recorded in the previous period.

The used Undersea Internet Bandwidth increased from 860.3 Gbps to 879.3 Gbps while 0.27 Gbps of Satellite bandwidth was consumed during the period under review.

**Table 14: International Internet Used Bandwidth**

| <i>International Leased (Used) Bandwidth</i>                             | <i>Mar-17</i>   | <i>Dec-16</i>   | <i>Quarterly Variation (%)</i> | <i>Mar-16</i>  |
|--|-----------------|-----------------|--------------------------------|----------------|
| <i>International Undersea Internet Connectivity Bandwidth (Gbps)</i>     | 879.30          | 860.30          | 2.2                            | 861.30         |
| <i>International Satellite Internet Connectivity Bandwidth</i>           | 0.2703          | 0.2703          | 0.0                            | 0.420          |
| <b><i>Total International Internet Connectivity Bandwidth (Gbps)</i></b> | <b>879.5703</b> | <b>860.5703</b> | <b>2.2</b>                     | <b>861.720</b> |

Source: CA, Operators Returns

### 3.4 Registered Domain Names

The number of .KE domains increased by 4.8 per cent during the quarter under review to stand at 65,255 domains from 62,215 domains recorded during the previous quarter. The distribution of domains as per category is illustrated in table 15.

**Table 15: Number of Domain Names**

|                   |                                     | <i>Mar-17</i>         |                       | <i>Dec-16</i>         |                       |
|-------------------|-------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <b>Sub-domain</b> | <b>Use</b>                          | <b>No. of Domains</b> | <b>Percentage (%)</b> | <b>No. of Domains</b> | <b>Percentage (%)</b> |
| <b>CO.KE</b>      | Companies                           | 60,505                | 92.8                  | 57,752                | 92.8                  |
| <b>GO.KE</b>      | Government Entities                 | 382                   | 0.6                   | 372                   | 0.6                   |
| <b>OR.KE</b>      | Non Profit Making Organizations     | 1,929                 | 3.0                   | 1,859                 | 3.0                   |
| <b>AC.KE</b>      | Institutions of Higher Education    | 749                   | 1.1                   | 763                   | 1.2                   |
| <b>SC.KE</b>      | Lower and Middle Level Institutions | 954                   | 1.5                   | 770                   | 1.2                   |
| <b>NE.KE</b>      | Personal Websites and E-mail        | 189                   | 0.3                   | 181                   | 0.3                   |
| <b>ME.KE</b>      | Personal Websites and E-mail        | 328                   | 0.5                   | 336                   | 0.5                   |
| <b>MOBI.KE</b>    | Mobile Content                      | 46                    | 0.1                   | 43                    | 0.1                   |
| <b>INFO.KE</b>    | Information                         | 143                   | 0.2                   | 139                   | 0.2                   |
| <b>Total</b>      |                                     | <b>65,225</b>         |                       | <b>62,215</b>         |                       |

*Source: CA, Operators Returns*

### 3.5 Revenue and Investment in the Data/Internet Market

The data on annual revenues and investments for data/internet market will be updated at the end of the financial year. Data/internet revenue and investment is shown in Table 16.

**Table 16: Data/Internet Revenue and Investment**

| <b>Data/Internet Revenue and Investments</b> | <b>2015*</b> | <b>2014*</b> | <b>2013</b> | <b>2012</b> | <b>2011</b> | <b>Variation (%) Over 2013</b> | <b>Variation (%) Over 2012</b> | <b>Variation (%) Over 2011</b> | <b>Variation (%) Over 2010</b> |
|--|--------------|--------------|-------------|-------------|-------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| <b>Revenue (KES Millions)</b>                | 8,498        | 10,158       | 21,941      | 25,627      | 13,710      | -53.7                          | -14.4                          | 86.9                           | 58.3                           |
| <b>Investments (KES Millions)</b>            | 2,233        | 3,440        | 3,537       | 6,115       | 5,079       | -2.7                           | -42.2                          | 20.4                           | 44.3                           |

*Source: CA, Operators' Returns. \* Note that revenue and investments in data market excludes data revenues from the mobile sector*



#### **4.1 Digital Television:**

As at the end of the quarter under review, the number of free-to-air TV channels on the digital terrestrial platform stood at 60 down from 66 recorded in the preceding quarter. This decline is attributed to financial constraints experienced by some of the content providers. The number of pay TV service providers on the Digital Terrestrial Television (DTT) platform on the other hand remained unchanged at two; GoTV and StarTimes.

#### **4.2 Digital Terrestrial Television sites rollout:**

By the end of the period under review, the digital signal was on air in; Nairobi, Nakuru, Nyeri, Mombasa, Kisumu, Eldoret, Malindi, Meru, Kisii, Kericho, Narok, Nyahururu, Embu, Migori, Machakos, Murang'a, Naivasha, Nyeri, Webuye, Kapenguria, Kitui, Lamu, Namanga, Kakamega, Kabarnet, Siaya, Homabay, Timboroa, Nanyuki, Thika, Limuru, Mwingi, Kajiado, Kibwezi, Garissa, Voi, Kilifi, Marsabit, Wajir, Maralal, Sotik, Busia, Mazeras and Kwale. This translated to 75 per cent coverage of the Kenyan population.

#### **4.3 Set top Boxes:**

The cumulative number of digital Set Free-to-Air Top Boxes (FTA STBs) purchased as at the end of the quarter under review increased to 725,205 from 722,196 representing an insignificant growth of 0.4 per cent while PAY TV rose to 3,742,504 from 3,534,086.

#### **4.4 FM Radio Broadcast:**

The total number of FM radio stations was recorded at 178 during the period under review up from 139 recorded in the previous quarter.



## 5 POSTAL AND COURIER SERVICES

### 5.1 Postal and Courier Traffic

The Postal and Courier sub sector experienced a downward trend during the period under review compared to the preceding quarter. A similar trend was observed during the same period in the previous year. These could mainly be attributed to the end of festive seasons and examination periods which occurs in the second quarter.

The volume of letters posted locally declined substantially during the period under review to record 8.2 million letters from 15.8 million letters posted in the previous period.

A total of 1.63 million courier items that were sent locally during the period under review down from last quarter's 1.67 million items

The number of International incoming letters decreased to 964,013 letters during the period under review down from 2.2 million letters recorded during the previous quarter. Likewise the volume of letters sent to other countries declined to stand at 912,825 letters from last quarter's 1.9 million letters.

**Table 17: Postal and Courier Traffic**

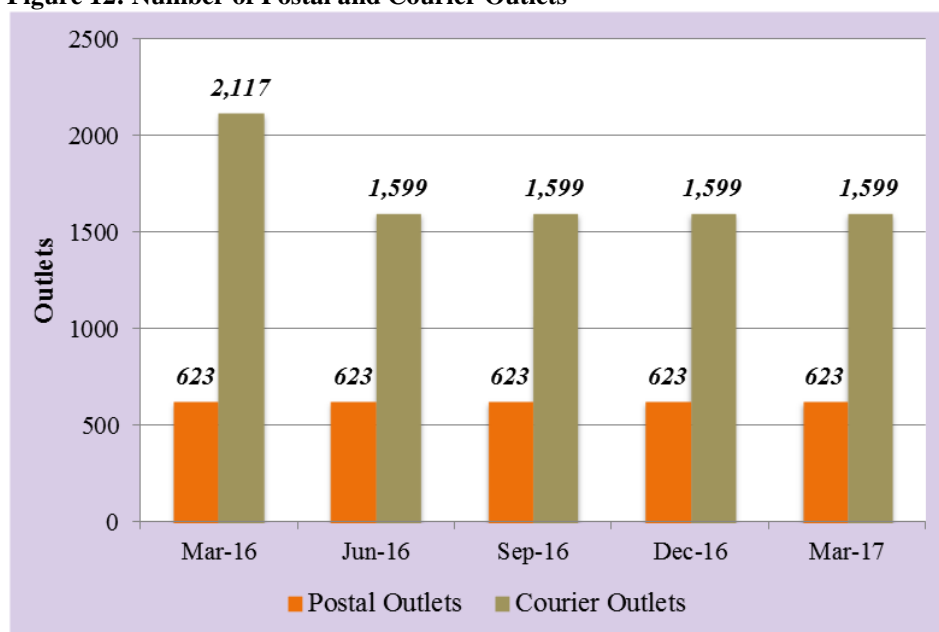
| <i>Post and Courier Traffic</i>                         | <i>Jan-Mar 17</i> | <i>Oct-Dec 16</i> | <i>Quarterly Variation (%)</i> | <i>Jan-Mar 16</i> | <i>Oct-Dec 15</i> | <i>Quarterly Variation (%)</i> |
|---|-------------------|-------------------|--------------------------------|-------------------|-------------------|--------------------------------|
| <i>Number of Letters (Up to 350 gms) Posted Locally</i> | 8,209,615         | 15,894,540        | -48.3                          | 12,855,103        | 17,613,809        | -27.0                          |
| <i>Total Courier Items Sent locally</i>                 | 1,630,765         | 1,679,188         | -2.9                           | 970,020           | 747,173           | 29.8                           |
| <i>International Incoming Letters (Up to 350 gms)</i>   | 964,013           | 2,299,588         | -58.1                          | 2,084,672         | 2,285,817         | -8.8                           |
| <i>International Outgoing Letters (Up to 350 gms)</i>   | 912,825           | 1,907,271         | -52.1                          | 1,885,891         | 2,665,410         | -29.2                          |

*Source: CA, Operators Returns*

### 5.2 Number of Postal and Courier Outlets

The number of postal and private courier outlets remained at 623 and 1599 respectively in the quarter under review as shown in figure 12.

**Figure 12: Number of Postal and Courier Outlets**



Source: CA, Operators' Returns,

### 5.3 Postal and Courier Revenue and Investments

Table 18 on revenues and investments in the postal and courier sub-sector will be updated at the end of the 2016/2017 financial year.

**Table 18 : Postal and Courier Revenue and Investments**

| Post/Courier Revenue and Investment | 2015  | 2014  | 2013  | 2012  | 2011   | Variation (%) Over 2014 | Variation (%) Over 2013 | Variation (%) Over 2012 | Variation (%) Over 2011 |
|-------------------------------------|-------|-------|-------|-------|--------|-------------------------|-------------------------|-------------------------|-------------------------|
| Revenue (KES Millions)              | 4,800 | 8,530 | 7,086 | 7,467 | 11,793 | -43.7                   | 20.4                    | -5.1                    | -36.7                   |
| Investments (KES Millions)          | 327   | 397   | 519   | 390   | 504    | -17.6                   | -23.5                   | 33.1                    | -22.6                   |

Source: CA, Operators Returns

## 6 TARIFFS, PROMOTIONS AND SPECIAL OFFERS

The Authority received a total of 5 tariffs and 13 promotions and special offers from telecommunications operators during the quarter under review for review and approval.

This was a decline by 13 applications for tariffs and promotions and special offers during the period under review in comparison to the previous period. This could be attributed to the end of the festive season where the service providers offered their customers a variety of discounted services.

The tables 19 and 20 show the distribution of the applications in detail.

**Table 19: Tariffs**

| Service Provider | Jan-Mar 2017 |     |      |        |              |       |       |
|------------------|--------------|-----|------|--------|--------------|-------|-------|
|                  | Voice        | SMS | Data | Bundle | Mobile Money | Other | Total |
| Safaricom        | -            | -   | -    | -      | -            | 1     | 1     |
| Airtel           | -            | -   | -    | -      | -            | 2     | 2     |
| Telkom           | -            | -   | -    | -      | -            | 1     | 1     |
| Wananchi Group   | -            | -   | -    | -      | -            | 1     | 1     |
| <b>Total</b>     | -            | -   | -    | -      | -            | 5     | 5     |

*Source: CA, Operators Returns*

**Table 20: Promotions and Special Offers**

| Service Provider | Jan-Mar 2017 |     |      |        |              |                         |                    |       |
|------------------|--------------|-----|------|--------|--------------|-------------------------|--------------------|-------|
|                  | Voice        | SMS | Data | Bundle | Mobile Money | Lucky Draw <sup>4</sup> | Other <sup>5</sup> | Total |
| Safaricom        | -            | -   | 4    | -      | 1            | -                       | 3                  | 8     |
| Airtel           | -            | -   | -    | -      | -            | -                       | -                  | -     |
| Telkom           | -            | -   | 3    | -      | -            | -                       | 1                  | 4     |
| Equitel          | -            | -   | 1    | -      | -            | -                       | -                  | 1     |
| <b>Total</b>     | -            | -   | 8    | -      | 1            | -                       | 4                  | 13    |

*Source: CA, Operators Returns*

<sup>4</sup>Lucky draw is a game of chance where the operator has no control over the specific user to receive a reward set out.

<sup>5</sup>“Other” refers to promotions that cannot be clearly attributed to any particular service or bundle of services, neither can they be attributed to a lucky draw



## **7 CONCLUSION**

The telecoms sub sector continues to be a critical element of the economy, laying the groundwork for greater investment in mobile money and as well as for ICT infrastructure growth. During the quarter under review, telecoms sub sector witnessed mixed trends with the number of mobile subscriptions increasing while the volume of voice and SMS traffic declining when compared to the previous quarter. This could be attributed to the back to school period coupled with end of high festive season during the previous quarter.

With the increased demand of Data/Internet service, the country is experiencing rapid expansion of infrastructure especially fibre optic. This will increasingly boost the country's connectivity and availability of better Internet services. The quarter under review experienced an increase in Internet bandwidth that is available in the country to meet the rising demand.

The postal and courier sub sector demonstrated a downward trend during the quarter under review. The sector experienced a decline in the number of locally sent letters and courier items as well as International outgoing and incoming letters. This could mainly be attributed to the end of the high season during the period under review. However, the growth in online shopping could fuel the volume of parcels sent in the near future and the relative ease of shopping online will open up opportunities to buy and sell from people and companies in other countries.

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