





**FOURTH QUARTER SECTOR STATISTICS REPORT FOR
THE FINANCIAL YEAR 2016/2017
(APRIL-JUNE 2017)**

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Disclaimer:

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

| | |
|--------|--|
| DTT | Digital Terrestrial Television |
| EASSy | Eastern Africa Submarine Cable Systems |
| ICTs | Information Communication Technologies |
| EVDO | Evolution-Data Optimized |
| LION2 | Lower Indian Ocean Network |
| GSM | Global Systems for Mobile Communications |
| Mbps | Megabits 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 |
| OTT | Over-The-Top |

I. 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 review in case of any revisions or updates from the service providers.*

II. REPORT SUMMARY

The Fourth Quarter Sector Statistics Report provides an overview of the sector performance and trends for the period April to June 2016 and the Financial Year 2016/17 on the following service categories:

- Mobile Telephony Service
- Fixed Telephony Service
- Data/Internet Service
- Broadcasting Service
- Postal and Courier Service
- Tariffs, Promotions and Special Offers

As at the end of the fourth quarter of 2016/17 financial year, the number of mobile subscriptions stood at 40.2 million. This marked a growth of 2.8 per cent from 39.1 million subscriptions recorded in the third quarter. When compared to the same period of the previous financial year, a growth of 1.2 per cent has been registered. The mobile penetration level rose by 2.5 percentage points to stand at 88.7 per cent from 86.2 per cent recorded in the previous quarter.

During the quarter under review, the number of mobile money subscriptions stood at 28.0 million while the number of agents was registered at 180,657. A total of 480.5 million transactions (withdrawals and deposits) valued at 1.2 trillion Kenya shillings were made during the quarter. In addition, goods and services purchased over mobile platform amounted to 692.1 billion Kenya shillings which involved 316.5 million mobile commerce transactions. Person to person transfers were valued at 541.8 billion Kenya Shillings. The positive growth witnessed in the mobile money transfer service was largely driven by the widespread use of mobile money solutions and adoption of the service among traditionally underserved groups (rural populations), and increasingly broad range of mobile money services (including insurance and loan products) in Kenya.

The number of ported mobile numbers declined by 17.1 per cent during the quarter under review to record 311 in-ports from 375 recorded in the preceding quarter.

The total inter-network local mobile voice traffic stood at 10.6 billion minutes during the quarter under review up from 10.4 billion recorded in the previous quarter representing a growth of 2.1 per cent over the period.

Total traffic originating from mobile networks stood at 42.7 billion minutes during 2016/17 financial year. This was an increase of 2.6 per cent from 41.6 billion minutes recorded in the previous fiscal year.

The total number of Short Messaging Service (SMS) sent during the quarter increased significantly to post 14.6 billion messages from 12.8 billion registered last quarter.

Roaming-out¹ voice traffic recorded 37.9 million minutes with those roamers within EAC region calling for 31.1 million minutes while roamers in non-EAC region contributed 5.8 million minutes. On the other hand, roaming-in² voice traffic registered 37.7 million minutes with in-roamers from EAC region contributing 85.6 per cent of the traffic which is equivalent to 32.3 million minutes while non-EAC roamers made calls lasting for 5.3 million minutes.

International incoming mobile voice traffic rose by 3.2 per cent during the quarter under review to register 146.9 million minutes from 142.3 million minutes recorded in the previous quarter. Traffic originating from EAC region stood at 45.3 million minutes while non-EAC region contributed 101.5 million minutes. Traffic terminating in EAC countries was recorded at 45.5 million minutes while in non-EAC countries stood at 64.7 million minutes.

Generally, the international mobile traffic declined during the year under review when compared to the previous financial year, and this could be as a result of many activities took place in the country during FY 2015/16 such as international meetings.

The total number of fixed network subscriptions in the country stood at 71,307 with the number of fixed terrestrial and fixed wireless connections registering at 70,967 and 340 respectively.

During the financial year 2016/17, data/internet subsector maintained upward growth across all technologies as witnessed during the quarter under review. The total number of Internet subscriptions amounted to 29.6 million, which was an increase of 15.2 per cent from 25.7 million registered in the previous quarter. The growth was driven by 15.3 per cent increase of mobile data subscriptions to stand at 29.4 million at the end of the quarter, which accounted for approximately 99.0 per cent of total subscriptions. The internet/data penetration level rose to 100.2 per cent up from 89.4 per cent recorded during the previous quarter.

The number of broadband subscriptions was recorded at 15.4 million up from 13.7 million posted in the preceding quarter representing a growth of 12.6 per cent. This translated to broadband penetration level of 34.2 per cent as at the end of quarter under review up from last quarter's 30.4 per cent.

¹ Roaming-out is traffic originated and terminated by subscribers of national networks as users of foreign networks abroad.

² Roaming in is traffic originated and terminated by foreign subscribers as users of local network.

International Internet Bandwidth available in the country stood at 2,906.873 Gbps as at the end of the quarter under review. The total used international Internet bandwidth rose to 882.5 Gbps during the quarter under review reflecting a growth of 0.3 per cent.

As at 30th June 2017, the number of .KE domain names stood at 66,724. When compared to the same period of the previous year, a growth of 14.8 per cent has been recorded over the year.

Digital TV signal grew to record 78.0 per cent up from 75.0 per cent land coverage at the end of the period, which was occasioned by inclusion of the Self-provisioning signal distributors. The number of FM stations in the country stood at 178 stations as at 30th June 2017. When compared to the previous financial year as at June 2016, the number of FM stations was recorded at 139. This could be attributed to licensing of new operators in market.

Postal and courier sub sector registered mixed reactions during the 2016/17 financial year. The volume of letters posted locally increased substantially during the quarter under review to post 15.7 million from 8.2 million letters registered in the previous quarter. Conversely, the total number of letters sent during the financial year under review was recorded at 57.0 million down from 60.0 million letters registered in the previous representing a drop of 5.1 per cent.

The number of courier items sent locally stood at 1.4 million in the period under review down from last quarter's 1.6 million items. However, the items sent throughout the financial year registered an increase of 59.3 per cent to record 6.1 million up from 3.8 million items in the previous year. This could be attributed to adoption of e-commerce services by consumers.

The Authority received a total of 24 applications in the quarter under review for tariffs and promotions & special offers out of which 4 were tariffs and 20 were promotions and special offers, which were all reviewed and approved accordingly.

KEY ICT INDICATORS

| SELECTED INDICATORS | July-Sep 2016 | Oct-Dec 2016 | Jan-Mar 2017 | Apr-Jun 2017 | % change Q3 to Q4 |
|---|------------------|-----------------|-----------------|-----------------|----------------------|
| | Q1 | Q2 | Q3 | Q4 | |
| Mobile Subscriptions (Millions) | 39.784 | 38.982 | 39.146 | 40.259 | 2.8 |
| Fixed subscriptions | 80,388 | 72,801 | 72,259 | 71,307 | -1.3 |
| Mobile cellular telephone subscriptions per 100 inhabitants | 87.3 | 88.2 | 86.2 | 88.7 | 2.9 |
| Fixed telephone lines per 100 inhabitants | 0.18 | 0.16 | 0.16 | 0.16 | 0.0 |
| VOICE TRAFFIC IN MINUTES | | | | | |
| On-Net Voice Traffic (Billions) | 9.446 | 9.522 | 9.265 | 9.541 | 3.0 |
| Off-Net Voice Traffic (Billions) | 1.296 | 1.321 | 1.169 | 1.108 | -5.2 |
| International Incoming Mobile Voice traffic (Millions) | 132.013 | 147.157 | 142.353 | 146.964 | 3.2 |
| International Outgoing mobile Voice traffic (Millions) | 117.545 | 116.75 | 117.44 | 110.269 | -6.1 |
| Roaming-out (Own Subscribers) (Millions) | 36.129 | 36.857 | 38.544 | 37.988 | -1.4 |
| Roaming-in (Foreign Subscribers) (Millions) | 43.101 | 30.509 | 32.362 | 37.722 | 16.6 |
| Total Local Fixed network traffic | 697,332 | 675,123 | 727,283 | 680,082 | -6.5 |
| International Incoming Fixed Network Voice traffic (Millions) | 3.332 | 2.573 | 2.600 | 2.422 | -6.8 |
| International Outgoing Fixed Network Voice traffic (Millions) | 2.345 | 2.091 | 2.135 | 1.961 | -8.1 |
| International Outgoing Fixed Network VoIP traffic | 916,020 | 1,000,509 | 811,029 | 741,622 | -8.6 |
| SMS TRAFFIC | | | | | |
| Outgoing SMS On-Net (Billions) | 11.775 | 15.264 | 12.801 | 14.670 | 14.6 |
| Outgoing SMS Off-Net (Millions) | 508.889 | 593.367 | 527.75 | 556.934 | 5.5 |
| Incoming International SMS (Millions) | 9.629 | 9.227 | 8.530 | 8.210 | -3.8 |
| Outgoing International SMS (Millions) | 10.798 | 9 | 9.169 | 9.461 | 3.2 |
| MOBILE MONEY | | | | | |
| Number of Mobile Money subscribers (Millions) | 31.092 | 31.996 | 27.543 | 28.074 | 1.9 |
| Number of Transactions (Millions) | 400.695 | 456.646 | 471.133 | 480.585 | 2.0 |
| Value of Transactions (Ksh in trillions) | 1.081 | 1.151 | 1.170 | 1.218 | 4.1 |
| Number of Mobile money agents | 169,698 | 161,583 | 174,018 | 180,657 | 3.8 |
| DATA/INTERNET | | | | | |
| Data/ Internet subscriptions (Millions) | 25.672 | 26.679 | 25.707 | 29.624 | 15.2 |
| Total Available Bandwidth (Gbps) | 2,028.74 | 2,028.74 | 2,906.87 | 2,906.87 | 0.00 |
| Internet penetration per 100 inhabitants | 85.3 | 89.7 | 89.4 | 100.2 | 10.8 |
| Broadband Subscriptions per 100 inhabitants | 27.0 | 28.7 | 30.3 | 34.2 | 12.9 |
| BROADCASTING | | | | | |
| Number of free-to-air TV channels | 63 | 66 | 60 | 66 | 10.0 |
| Number of Radio FM stations | 139 | 139 | 178 | 178 | 0.0 |
| Digital Signal Population Coverage (%) | 66 | 66 | 75 | 78 | 3.0 |

| | July-Sep 2016 | Oct-Dec 2016 | Jan-Mar 2017 | Apr-Jun 2017 | % change Q3 to Q4 |
|---|--------------------------|-------------------------|-------------------------|-------------------------|------------------------------|
| POSTAL AND COURIER | | | | | |
| Postal Outlets | 623 | 623 | 623 | 623 | 0.0 |
| Private Courier Outlets* | 976 | 976 | 976 | 997 | 2.2 |
| Number of Letters (Up to 350 gms) Posted Locally (Millions) | 17.211 | 15.894 | 8.209 | 15.722 | 91.5 |
| Total Courier Items Sent locally | 1,324,786 | 1679188 | 1,630,765 | 1,472,290 | -9.7 |
| International Incoming Letters (Up to 350 gms) | 2,112,537 | 2,299,588 | 964,013 | 1,075,611 | 11.6 |
| International Outgoing Letters (Up to 350 gms) | 2,014,753 | 1,907,271 | 912,825 | 1,074,105 | 17.7 |
| Total Population (Millions) based on Economic Survey 2017 | 44.2 | 44.2 | 45.4 | 45.4 | 0.0 |

* Revised Data

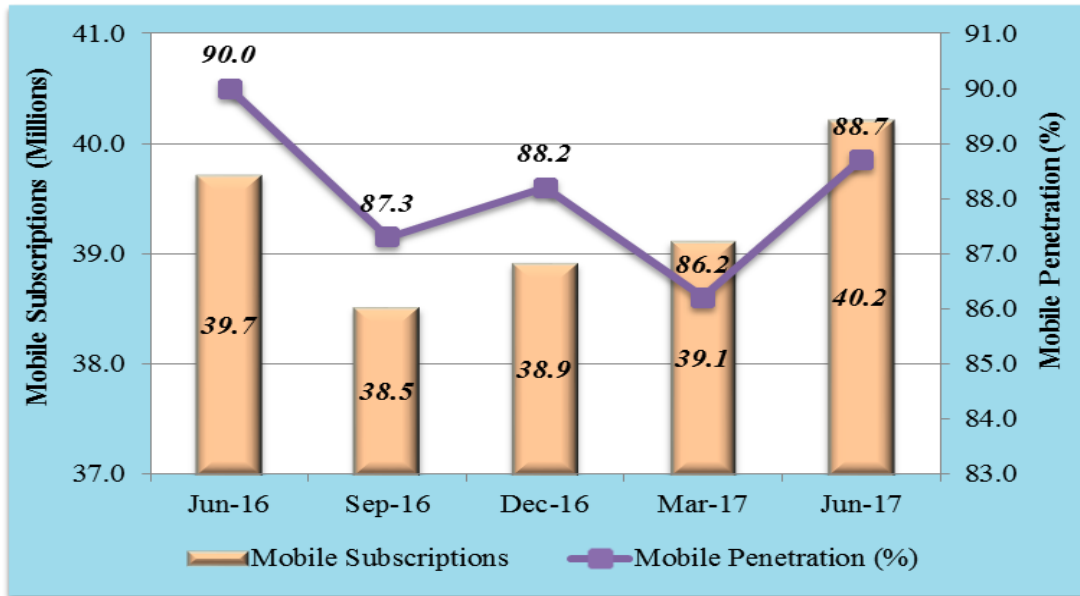
1 CELLULAR MOBILE SERVICES

1.1 Mobile Subscriptions

As at the end of the fourth quarter of the financial year 2016/17, the number of mobile subscriptions stood at 40.2 million. This marked a growth of 2.8 per cent from 39.1 million subscriptions recorded during the third quarter. When compared to the same period of the previous financial year, a growth of 1.2 per cent was realized. Expansion of the markets by the service providers and availability of affordable phones are some of the factors that continue to spur mobile telephony growth in the country. Consequently, mobile penetration rose by 2.5 percentage points to stand at 88.7 per cent up from 86.2 per cent recorded in the previous quarter. However this was a decline of 1.3 percentage points in comparison to the same period of the previous financial year. This is mainly attributed to the review of base population upwards to 45.4 million from 44.2 million as per Economic Survey 2017.

Figure 1 illustrates the trends in mobile subscriptions and penetration levels.

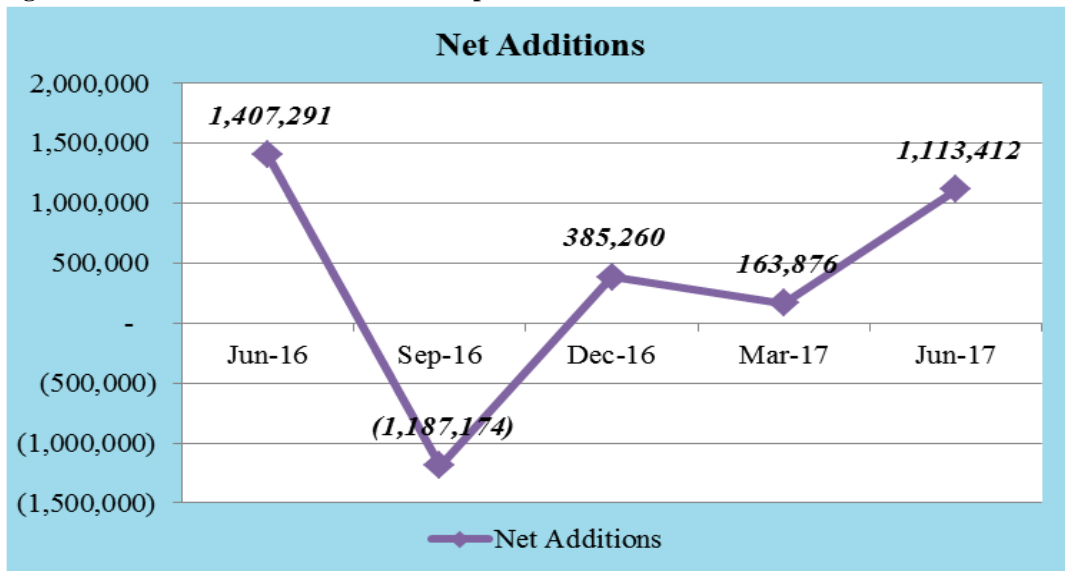
Figure 1: Mobile Subscriptions



Source: CA, Operators' Returns,

As shown in Figure 2, there were 1.1 million new mobile subscriptions during the quarter under review up from 163,876 net additions recorded in the previous period.

Figure 2: Net additions in Mobile Subscriptions



Source: CA, Operators' Returns

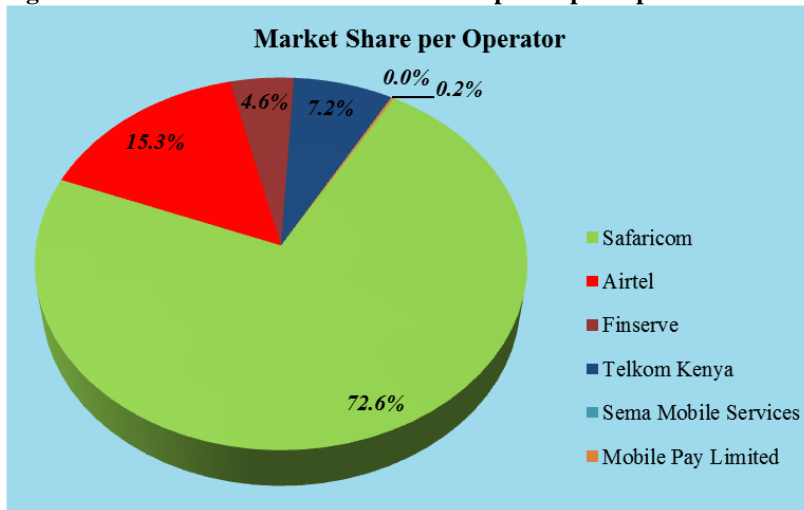
The quarter under review saw only three operators' record marginal changes in their market shares. Safaricom Limited registered an increase of 0.7 percentage points to stand at 72.6 per cent from 71.9 per cent recorded in the previous quarter.

Finserve Africa Limited market share rose to 4.6 per cent during the period under review from 4.4 per cent posted in the third quarter.

Airtel Networks Limited registered a decline of 1.0 percentage points to record a market share of 15.3 per cent from 16.3 per cent.

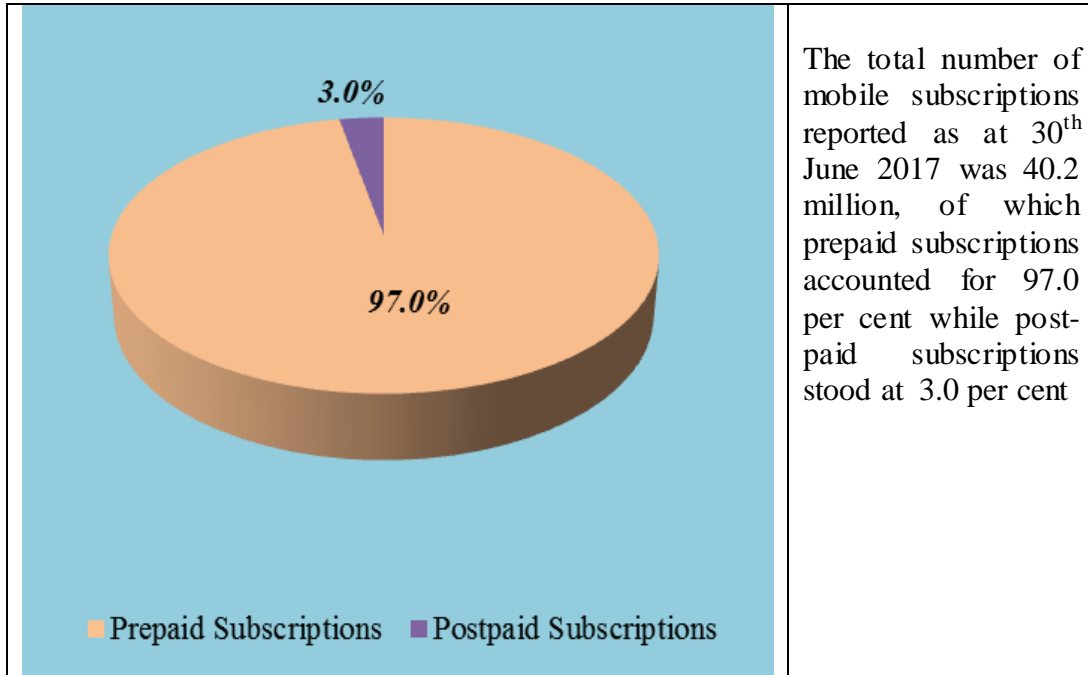
Telkom Kenya Limited, Mobile Pay Limited and Sema Mobile Services market shares remained unchanged over the quarter to stand at 7.2 per cent, 0.2 per cent and 0.0 per cent respectively.

Figure 3: Market Share for Mobile Subscriptions per Operator



Source: CA, Operators' Returns,

Figure 4: Pre paid and Postpaid Mobile cellular Subscriptions



Source: CA, Operators' Returns,

The total number of mobile subscriptions recorded by Safaricom Limited during the quarter under review stood at 29.2 million which marked an increase of 3.9 per cent up from 28.1 million subscriptions recorded in the previous period. The number of pre-paid and post-paid subscriptions was registered at 28.1 million and 1.0 million respectively.

Airtel Networks Limited posted a total of 6.1 million subscriptions down from 6.3 million registered during the preceding quarter. This translated to a decline of 3.4 per cent during the period under review.

Finserve Africa Limited registered a positive growth of 8.0 per cent to post 1.8 million subscriptions during the period under review from 1.7 million recorded in the preceding quarter. Likewise Telkom Kenya Limited total subscriptions rose by 3.4 per cent to stand at 2.89 million from last quarter's 2.80 million.

Mobile Pay Limited reported a total of 87,786 subscriptions during the period under review up from 86,724 posted in the previous quarter while on the other hand Sema Mobile Services recorded a decline to post 263 subscriptions from 295 recorded in the previous quarter.

Table 1 shows mobile subscription per operator.

Table 1: Mobile Subscription per operator

| Name of operator | Jun-17 | | | Mar-17 | | | Quarterly variation (%) |
|--------------------------------|-------------------|------------------|-------------------|-------------------|------------------|-------------------|-------------------------|
| | Pre-paid | Post-paid | Total | Pre-paid | Post-paid | Total | |
| <i>Safaricom Limited</i> | 28,155,068 | 1,073,828 | 29,228,896 | 27,099,918 | 1,033,670 | 28,133,588 | 3.9 |
| <i>Airtel Networks Limited</i> | 6,037,020 | 142,162 | 6,179,182 | 6,255,020 | 138,658 | 6,393,678 | -3.4 |
| <i>Finserve Africa Limited</i> | 1,864,838 | - | 1,864,838 | 1,727,270 | - | 1,727,270 | 8.0 |
| <i>Telkom Kenya Limited</i> | 2,889,756 | 8,755 | 2,898,511 | 2,795,762 | 8,747 | 2,804,509 | 3.4 |
| <i>Sema Mobile Services</i> | 263 | - | 263 | 295 | - | 295 | -10.8 |
| <i>Mobile Pay Limited</i> | 87,786 | - | 87,786 | 86,724 | - | 86,724 | 1.2 |
| Total | 39,034,731 | 1,224,745 | 40,259,476 | 37,964,989 | 1,181,075 | 39,146,064 | 2.8 |

Source: CA, Operators' Returns

1.2 Mobile Money Transfer Services

As at 30th June 2017, the number of active mobile money subscriptions stood at 28.0 million while the number of agents was registered at 180,657. A total of 480.5 million transactions (withdrawals and deposits) valued at 1.2 trillion Kenya shillings were made during the fourth quarter. In addition, goods and services purchased over mobile platform amounted to 692.1 billion Kenya shillings, which involved 316.5 million mobile commerce transactions. Person to person transfers were valued at 541.8 billion Kenya Shillings.

Table 2 shows the details of mobile money transfer and mobile commerce services.

Table 2: Mobile Money Transfer Service

| Service | Apr-June 17 | | | | | | |
|----------------------|----------------|-------------------|------------------------|------------------------------|------------------------------|---------------------------------|-----------------------------------|
| | Agents | Subscriptions | Number of transactions | Value of transactions (Kshs) | Mobile commerce transactions | Value of mobile commerce (Kshs) | Person to Person transfers (Kshs) |
| <i>M-Pesa</i> | 142,832 | 22,624,298 | 380,008,279 | 903,637,032,067 | 273,288,881 | 461,823,160,232 | 447,666,109,008 |
| <i>Airtel Money</i> | 14,872 | 1,530,645 | 2,195,804 | 1,200,124,975 | 2,622,863 | 2,275,244,137 | 869,489,346 |
| <i>Orange Money</i> | 800 | 194,445 | 19,000 | 85,270,000 | 221 | 51,881 | 2,025,405 |
| <i>Equitel Money</i> | - | 1,864,838 | 97,158,440 | 311,817,417,433 | 40,611,231 | 228,048,000,000 | 92,550,261,181 |
| <i>Mobikash*</i> | 16,749 | 1,772,696 | 815,881 | 127,032,829 | 6,430 | 9,227,168 | 22,876,608 |
| <i>Mobile Pay</i> | 5,404 | 87,786 | 388,218 | 1,450,485,349 | - | - | 757,982,401 |
| Total | 180,657 | 28,074,708 | 480,585,622 | 1,218,317,362,653 | 316,529,626 | 692,155,683,418 | 541,868,743,949 |

Source: CA, Operators' Returns * Provisional data

1.3 Mobile Number Portability

As illustrated in Table 3, the number of ported mobile numbers declined by 17.1 per cent during the quarter under review to stand at 311 in-ports from last quarter's 375. A similar trend was observed during the financial year under review where a total of 1,243 in-ports were registered down from 1,453 recorded in the previous fiscal year.

Table 3: Mobile Number Portability

| <i>Period</i> | <i>Apr-Jun 17</i> | <i>Jan-Mar 17</i> | <i>Quarterly Variation (%)</i> | <i>FY 2016/17</i> | <i>FY 2015/16</i> | <i>Annual Variation (%)</i> |
|---------------------------|-------------------|-------------------|--------------------------------|-------------------|-------------------|-----------------------------|
| <i>Number of in-ports</i> | 311 | 375 | -17.1 | 1,243 | 1,453 | -14.5 |

Source: CA, Operators' Returns

1.4 Mobile Traffic and Usage Pattern

1.4.1 Voice Traffic

During the quarter under review, the volume of intra-network mobile traffic grew by 3.0 per cent to reach 9.5 billion minutes from 9.2 billion recorded in the previous quarter. A similar trend was observed during the financial year under review whereby the volume of intra-network traffic rose to 37.7 billion minutes from 36.6 billion recorded in the previous year.

The volume of off net mobile traffic declined by 5.2 per cent to stand 1.10 billion minutes during the quarter under review from 1.16 billion recorded in the preceding quarter.

Mobile to fixed network traffic increased to 22.2 million minutes during the quarter under review from 20.2 million posted in the previous quarter. A similar trend was reflected during the fiscal year under review where the traffic rose to 74.5 million minutes from 67.0 million registered during 2015/16 financial year.

The total inter-network local mobile voice traffic stood at 10.6 billion minutes during the quarter under review from 10.4 billion recorded in the previous quarter representing a growth of 2.1 per cent over the period. Total traffic originating from mobile networks stood at 42.7 billion minutes during 2016/17 financial year. This was an increase of 2.6 per cent from 41.6 billion minutes recorded in the previous fiscal year.

The increase in volume of mobile voice traffic could be attributed to the growth of the number of mobile subscriptions.

Table 4: Local Mobile Voice Traffic in Minutes

| <i>Mobile Traffic</i> | <i>Apr-Jun 17</i> | <i>Jan-Mar 17</i> | <i>Quarterly Variation (%)</i> | <i>FY 2016/17</i> | <i>FY 2015/16</i> | <i>Annual Variation (%)</i> |
|---|-----------------------|-----------------------|--------------------------------|-----------------------|-----------------------|-----------------------------|
| <i>By Traffic originating (outgoing traffic)</i> | | | | | | |
| <i>Own Network –Own Network</i> | 9,541,444,813 | 9,265,953,858 | 3.0 | 37,775,948,439 | 36,695,058,937 | 2.9 |
| <i>Own Network to Other Mobile Networks</i> | 1,108,748,533 | 1,169,552,639 | -5.2 | 4,895,887,311 | 4,901,169,055 | -0.1 |
| <i>Mobile Network to Fixed Network</i> | 22,206,435 | 20,265,293 | 9.6 | 74,500,816 | 67,027,299 | 11.1 |
| <i>Total Traffic Origination (Outgoing)</i> | 10,672,399,781 | 10,455,771,790 | 2.1 | 42,746,336,566 | 41,663,255,291 | 2.6 |
| <i>By Traffic terminating (incoming traffic)</i> | | | | | | |
| <i>Own Network –Own Network</i> | 9,541,444,813 | 9,265,953,858 | 3.0 | 37,775,948,439 | 36,695,058,937 | 2.9 |
| <i>Other Mobile Networks to Own Network</i> | 1,108,748,533 | 1,117,786,855 | -0.8 | 4,742,450,819 | 4,785,299,692 | -0.9 |
| <i>Fixed Network to Mobile Network</i> | 10,810,309 | 11,742,761 | -7.9 | 43,294,557 | 52,472,963 | -17.5 |
| <i>Total traffic termination (Incoming)</i> | 10,661,003,655 | 10,395,483,474 | 2.6 | 42,561,693,815 | 41,521,523,453 | 2.5 |

Source: CA, Operators' Returns,

The volume of total traffic terminating on local mobile networks stood at 10.6 billion minutes during the quarter under review up from 10.3 billion minutes reported in the previous quarter. On the other hand the volume of fixed to mobile network traffic declined to post 10.8 million minutes from last quarter's 11.7 million minutes with the same downward trend observed during the fiscal year 2016/17 when compared to the previous fiscal year. This could be attributed to the decline in the number of fixed network subscriptions over the year.

1.4.2 Voice Traffic by Operator

The total volume of local mobile voice traffic registered by Safaricom limited during the quarter under review was 8.4 billion minutes down from last quarter's 8.5 billion minutes. Subsequently its quarterly voice market share dropped to 79.6 per cent from 82.0 per cent. Nevertheless, the volume of mobile traffic originating from its network rose to 35.6 billion minutes during 2016/17 fiscal year from 31.4 billion reported in the previous year.

Airtel Networks limited local voice mobile traffic rose to 1.5 billion minutes from 1.2 billion minutes recorded in the previous quarter. The increase could be attributed to *Tubonge* tariff introduced by the service provider where its customers could purchase airtime as low as ksh.10 and get 100 minutes of talk time. However, during the financial

year under review, the total volume of mobile traffic dropped to 5.7 billion minutes from 6.3 billion minutes reported in 2015/16 fiscal year. The decline could be attributed to the review of some voice tariffs upwards by the operator during the period.

Telkom Kenya limited recorded an increase in local mobile voice traffic to post 599.1 million minutes from last quarter's 572.3 million minutes. On the other hand there was a decline in its voice traffic during 2016/17 fiscal year which saw the operator post a total of 2.7 billion minutes from 3.5 billion minutes recorded in the previous year. This could be attributed to revision of subscription data by the operator which led to the drop in its number of subscriptions.

Finserve Africa Limited reported a total of 44.6 million minutes of mobile voice traffic down from 46.6 million minutes recorded in the previous quarter. However, its local voice traffic rose to 187.3 million minutes during the financial year under review from 146.5 million registered during 2015/16 financial year. Its voice market share remained fairly stable at 4.6 per cent over the year.

Sema Mobile Services local voice traffic declined by 16.5 per cent during the period under review to stand at 39,255 minutes from 47,057 minutes recorded in the previous quarter. On the contrary, its voice traffic increased by nearly four-fold over during the financial year under review when compared to 2015/16 fiscal year.

Mobile Pay limited saw its local traffic register a slight increase to reach 29,508 minutes during the period under review from 28,654 minutes reported in the previous quarter. Notably the three MVNO's has its local mobile traffic being off net traffic and also their voice market share were recorded at 0.0 per cent

The traffic volumes for each of the mobile operators and MVNOs, and their 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> |
|-------------------|-----------------------------------|--------------------------|--------------------------------------|-----------------------------|--------------------------------|-----------------------------|---------------------------|
| Apr-Jun 17 | <i>On-net</i> | 8,154,182,598 | 956,923,000 | 426,433,847 | 3,898,845 | 3,407 | 3,116 |
| | <i>Off-net</i> | 322,857,408 | 572,399,328 | 172,686,776 | 40,743,038 | 35,848 | 26,392 |
| | Total | 8,477,040,006 | 1,529,322,328 | 599,120,623 | 44,641,883 | 39,255 | 29,508 |
| | <i>Market share (%)</i> | 79.6 | 14.4 | 5.6 | 0.4 | 0.0 | 0.0 |
| Jan-Mar 17 | <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 |
| | Total | 8,553,153,860 1 | 1,263,283,650 | 572,368,968 | 46,624,308 | 47,057 | 28,654 |
| | <i>Market share (%)</i> | 82.0 | 12.1 | 5.5 | 0.4 | 0.0 | 0.0 |
| FY 2016/17 | <i>On-net</i> | 32,529,179,619 | 3,164,827,000 | 2,066,233,723 | 15,689,896 | 12,066 | 6,136 |
| | <i>Off-net</i> | 3,164,827,000 | 2,573,765,051 | 710,273,114 | 171,617,376 | 149,101 | 52,026 |
| | Total | 35,694,006,619 | 5,738,592,051 | 2,776,506,837 | 187,307,272 | 161,167 | 58,162 |
| | <i>Market Share (%)</i> | 80.4 | 12.9 | 6.3 | 0.4 | 0.0 | 0.0 |
| FY 2015/16 | <i>On-net</i> | 30,156,710,061 | 3,815,068,000 | 2,706,982,956 | 16,295,020 | 2,900 | - |

| | | | | | | | |
|--|-------------------------|-----------------------|----------------------|----------------------|--------------------|---------------|---|
| | <i>Off-net</i> | 1,315,894,188 | 2,579,939,779 | 877,180,189 | 130,300,612 | 42,073 | - |
| | Total | 31,472,604,249 | 6,395,007,779 | 3,584,163,145 | 146,595,632 | 44,973 | - |
| | <i>Market Share (%)</i> | 75.7 | 15.4 | 8.6 | 0.4 | 0.0 | - |

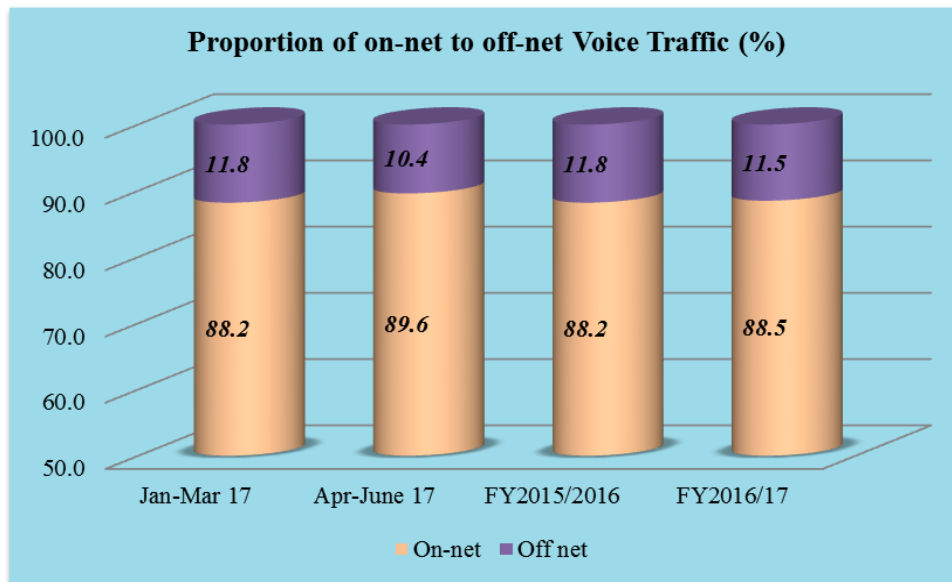
Source: CA, Operators' Returns,

During the quarter under review, per centage of on net traffic to total mobile traffic increased by 1.4 per centage points to stand at 89.6 per cent from last quarter's 88.2 per cent.

Similarly, during the financial year under review the proportion of on net traffic to total mobile traffic rose slightly to 88.5 per cent from 88.2 per cent recorded in the 2015/16 fiscal year.

The proportion of on-net and off-net traffic to total mobile voice traffic is shown in Figure 5.

Figure 5: Proportion of On-net and Off-net Voice Traffic

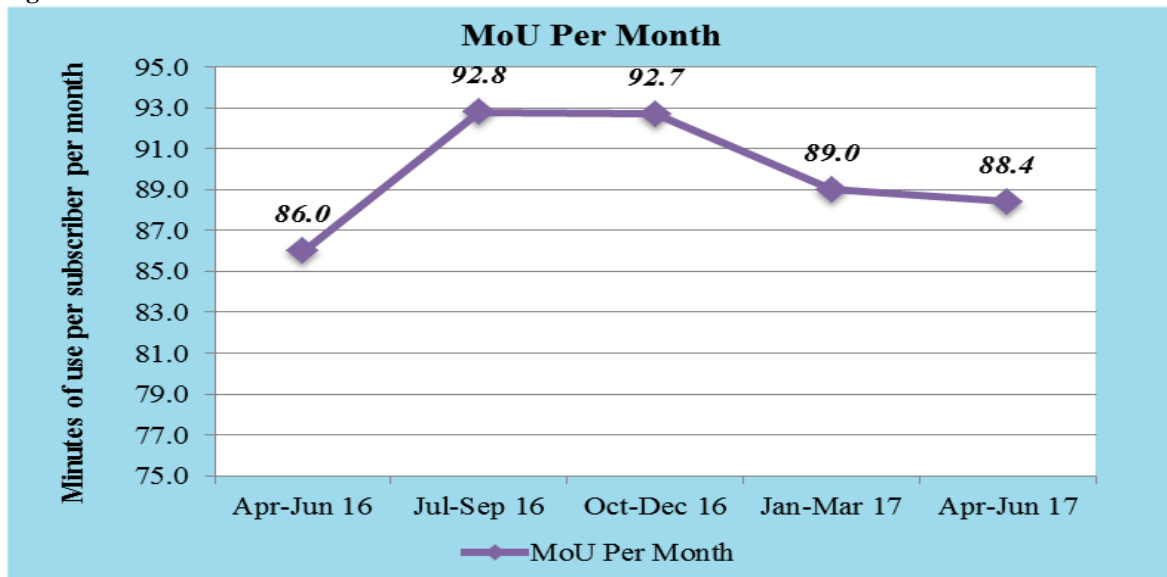


Source: CA, Operators' Returns

1.4.3 Minutes of Use

As illustrated in Figure 6, the Minutes of Use (MoU) per month per subscriber stood at 88.4 minutes during the quarter under review down from 89.0 minutes registered in the previous period.

Figure 6: Minutes of Use



Source: CA, Operators' Returns

1.4.4 Short Messaging Service

The use of SMSs continue to face stiff competition from the growing influence of OTTs. In order to merge this, the year under review saw the service providers introduce SMS tariffs which could enable customers to send nearly twenty sms as low as one shilling. This has seen the growth in SMS traffic with the quarter under review recording 14.6 billion messages up from 12.8 billion registered last quarter.

Safaricom Limited recorded 14.6 billion outgoing messages during the quarter under review up from last quarter's 12.6 billion messages. Its SMS market share stood at 95.9 per cent. During the year under review its SMS traffic increased substantially to reach 53.9 billion messages from 30.4 billion messages reported during 2015/16 financial year. The increase in traffic is attributed to introduction of SMS tariffs and promotions the service provider offered to its customers during the period.

The total number of SMS originating from Airtel Networks Limited stood at 543.2 million messages down from 563.0 million messages reported in the previous quarter. This translated to a decline in SMS market share to stand at 3.6 per cent. Similarly the number of the messages sent from the network during the year under review declined to stand at 2.41 billion messages from 2.49 billion messages recorded in the previous year.

During the quarter under review, Telkom Kenya Limited registered 68.1 million messages sent from its network up from 61.2 million messages recorded in the previous quarter. On the contrary, the volume of outgoing messages recorded in the year under review declined to 267.5 million from 335.1 million messages posted during 2015/16 fiscal year.

Finserve Africa Limited reported 9.1 million outgoing messages up from 8.3 million recorded in the previous quarter. Despite this increase, its SMS market share stood at 0.1 per cent. In addition, the volume of messages sent during the year under review rose to 36.5 million from 28.9 million messages recorded in the previous year.

Sema Mobile Services recorded a decline in SMS volume during the quarter under review to post 9.1 million messages from last quarter's 8.3 million while its SMS market share remained unchanged at 0.0 per cent. During the year under review, there was a four fold increase in number of SMS to record 48,745 messages.

Mobile Pay Limited reported 22,611 outgoing messages during the quarter under review up from 21,920 recorded in the previous quarter. Its SMS market share was below zero percent.

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 Kenya Limited</i> | <i>Telkom Kenya Limited</i> | <i>Finserve Africa Limited</i> | <i>Sema Mobile Services</i> | <i>Mobile Pay Limited</i> |
|-------------------|-----------------------------------|--------------------------|--------------------------------------|-----------------------------|--------------------------------|-----------------------------|---------------------------|
| <i>Apr-Jun 17</i> | <i>On-net</i> | 14,431,066,765 | 220,354,774 | 17,276,167 | 1,996,676 | 952 | 2,302 |
| | <i>Off-net</i> | 175,984,130 | 322,861,272 | 50,884,685 | 7,183,879 | 9,485 | 20,309 |
| | Total | 14,607,050,895 | 543,216,046 | 68,160,852 | 9,180,555 | 10,437 | 22,611 |
| | <i>Market Share (%)</i> | 95.9 | 3.6 | 0.4 | 0.1 | 0.0 | 0.0 |
| <i>Jan-Mar 17</i> | <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 |
| | Total | 12,696,109,430 | 563,079,003 | 61,286,719 | 8,354,715 | 13,339 | 21,920 |
| | <i>Market Share (%)</i> | 95.3 | 4.2 | 0.5 | 0.1 | 0.0 | 0.0 |
| <i>FY 2016/17</i> | <i>On-net</i> | 53,306,185,141 | 1,117,934,908 | 82,102,608 | 5,270,016 | 4,583 | 4,516 |
| | <i>Off-net</i> | 670,491,240 | 1,299,643,184 | 185,442,651 | 31,294,155 | 44,162 | 40,015 |
| | Total | 53,976,676,381 | 2,417,578,092 | 267,545,259 | 36,564,171 | 48,745 | 44,531 |
| | <i>Market Share (%)</i> | 95.2 | 4.3 | 0.5 | 0.1 | 0.0 | 0.0 |
| <i>FY 2015/16</i> | <i>On-net</i> | 29,875,265,508 | 1,388,567,930 | 112,711,413 | 3,409,155 | 937 | - |
| | <i>Off-net</i> | 591,450,314 | 1,101,696,343 | 222,433,265 | 25,502,323 | 11,247 | - |
| | Total | 30,466,715,822 | 2,490,264,273 | 335,144,678 | 28,911,478 | 12,184 | - |
| | <i>Market Share (%)</i> | 91.4 | 7.5 | 1.0 | 0.1 | 0.0 | - |

Source: CA, Operators' Returns,

1.4.5 Roaming Traffic

Roaming-out³ voice traffic stood at 37.9 million minutes with those roaming within EAC region calling for 31.1 million minutes while roamers from non-EAC region contributed 5.8 million minutes. The total messages sent by out roamers were 11.6 million and they spent 4.7 million MB on data services.

Roaming-in⁴ voice traffic registered 37.7 million minutes with in-roamers from EAC region contributing 85.6 per cent of the traffic, which is equivalent to 32.3 million minutes while non-EAC roamers made calls lasting for 5.3 million minutes. The number of messages sent by in roamers from EAC region and non-EAC region stood at 2.4 million and 3.0 million respectively. The amount of data spent by in roamers was 15.9 million MB with roamers from non-EAC region consuming 14.9 million MB.

Uganda contributed the largest volume of both roaming out and roaming in voice traffic in EAC region.

The trends on roaming traffic are indicated in Table 7.

Table 7: Roaming Traffic

| Name of Country | Apr - Jun 17 | | | | | |
|------------------|-------------------------------|------------|-----------|----------------------------------|-----------|------------|
| | Roaming-Out (Own Subscribers) | | | Roaming-In (Foreign Subscribers) | | |
| | Voice | SMS | Data (MB) | Voice | SMS | Data (MB) |
| <i>Uganda</i> | 21,586,328 | 3,663,556 | 678,568 | 18,746,131 | 393,047 | 500,763 |
| <i>Tanzania</i> | 5,275,384 | 1,570,506 | 888,430 | 1,616,241 | 1,841,010 | 382,398 |
| <i>Rwanda</i> | 1,805,542 | 332,666 | 245,982 | 5,140,885 | 155,502 | 147,090 |
| <i>Burundi</i> | 31,003 | 21,040 | 3,573 | 18,037 | 13,015 | 1,072 |
| <i>S. Sudan</i> | 3,464,987 | 580,556 | 33,336 | 6,832,852 | 74,340 | 247 |
| <i>Sub-total</i> | 32,163,244 | 6,168,324 | 1,849,889 | 32,354,146 | 2,476,914 | 1,031,570 |
| <i>Others</i> | 5,825,476 | 5,447,875 | 2,863,784 | 5,368,648 | 3,096,312 | 14,926,839 |
| <i>Total</i> | 37,988,720 | 11,616,199 | 4,713,673 | 37,722,794 | 5,573,226 | 15,958,409 |

Source: CA, Operators' Returns.

1.4.6 International Mobile Traffic

International incoming mobile voice traffic rose by 3.2 per cent during the quarter under review to register 146.9 million minutes from 142.3 million minutes recorded in the previous quarter. Traffic originating from EAC region stood at 45.3 million minutes while non-EAC region contributed 101.5 million minutes. The total mobile voice traffic received from other countries during the financial year under review declined by 23.4 per cent to post 568.4 million minutes from 742.4 million minutes recorded in the previous fiscal year.

³ Roaming-out is traffic originated and terminated by subscribers of national networks as users of foreign networks abroad.

⁴ Roaming in is traffic originated and terminated by foreign subscribers as users of local network.

International outgoing mobile voice traffic dropped to 110.2 million minutes from 117.4 million minutes reported in the previous quarter. Traffic terminating in EAC countries was recorded at 45.5 million minutes while in non-EAC countries posted 64.7 million minutes. During the financial year under review, the volume of traffic originating from the country declined by 6.1 per cent to record 462.0 million minutes from 485.3 million minutes registered during 2015/16 fiscal year.

The number of international incoming mobile SMS was registered at 8.2 million during the quarter under review down from last quarter's 8.5 million messages. Similarly the mobile SMS received from other countries during the financial year under review dropped to 35.5 million from 41.9 million recorded during previous financial year.

International outgoing messages increased to 9.4 million during the quarter under review from 9.1 million messages registered in the preceding quarter. Also during the fiscal year under review, the SMS traffic to other countries rose by 7.1 per cent to reach 38.4 million messages from 35.8 million messages.

Generally, the international mobile traffic declined during the year under review when compared to the previous financial year, and this could be as a result of activities like the international meetings that took place in the country during 2015/16 financial year.

International Voice and SMS traffic is indicated in Table 8.

Table 8: International Mobile Traffic

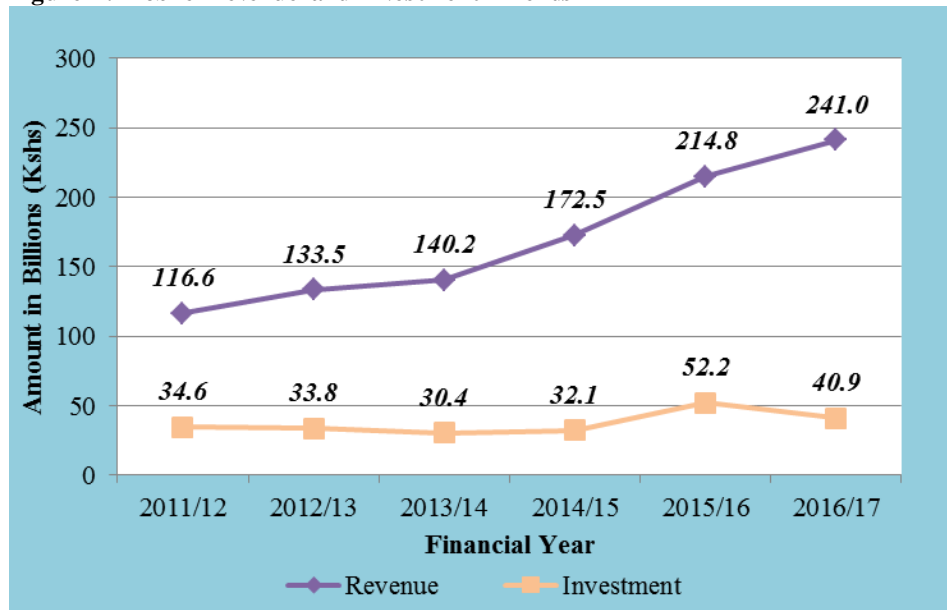
| <i>Traffic</i> | <i>Region</i> | <i>Apr-Jun 17</i> | <i>Jan-Mar 17</i> | <i>Quarterly Variation (%)</i> | <i>FY 2016/17</i> | <i>FY 2015/16</i> | <i>Annual Variation (%)</i> |
|--|---------------------|--------------------|--------------------|--------------------------------|--------------------|--------------------|-----------------------------|
| <i>International Incoming Mobile Voice Minutes</i> | <i>EAC</i> | 45,366,016 | 44,434,436 | 2.1 | 182,565,063 | 248,105,807 | -26.4 |
| | <i>Others</i> | 101,598,592 | 97,919,141 | 3.8 | 385,923,571 | 494,376,098 | -21.9 |
| | <i>Total</i> | 146,964,608 | 142,353,577 | 3.2 | 568,488,634 | 742,481,905 | -23.4 |
| <i>International Outgoing Mobile Voice Minutes</i> | <i>EAC</i> | 45,527,141 | 45,547,779 | -0.1 | 186,080,909 | 158,442,938 | 17.4 |
| | <i>Others</i> | 64,742,154 | 71,893,083 | -10.0 | 275,926,041 | 326,908,303 | -15.6 |
| | <i>Total</i> | 110,269,295 | 117,440,862 | -6.1 | 462,006,950 | 485,351,241 | -4.8 |
| <i>International Incoming Mobile SMS</i> | | 8,210,360 | 8,530,417 | -3.7 | 35,596,925 | 41,936,811 | -15.1 |
| <i>International Outgoing Mobile SMS</i> | | 9,461,337 | 9,169,746 | 3.1 | 38,429,821 | 35,883,986 | 7.1 |

Source: CA, Operators' Returns

1.5 Mobile Revenue and Investments

Mobile revenue was recorded at 241.0 billion Kenya Shillings whereas Investment stood at 40.9 billion Kenya shillings during the FY 2016/17 as illustrated in Figure 7.

Figure 7: Mobile Revenue and Investment Trends



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

1.6 Employment in the Mobile Service Industry

As at the end of 2016/17 financial year, the number of employees in mobile industry stood at 6,907 which was a growth of 11.8 per cent. Table 9 shows the trends of staff over the fiscal years.

Table 9: Staff in Mobile Sector

| Employee | Jun-17 | Jun-16 | Jun-15 | Jun-14 | Jun-13 | Jun-12 | Variation (%) Over 2016 | Variation (%) Over 2015 | Variation (%) Over 2014 | Variation (%) Over 2013 | Variation (%) Over 2012 |
|---------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| <i>Male</i> | 3,695 | 3,383 | 3,549 | 3,795 | 3,535 | 3,489 | 9.2 | -4.7 | -6.5 | 7.3 | 1.3 |
| <i>Female</i> | 3,212 | 2,795 | 2,598 | 2,644 | 2,082 | 2,053 | 14.9 | 7.6 | -1.7 | 27.0 | 1.4 |
| Total | 6,907 | 6,178 | 6,147 | 6,439 | 5,617 | 5,542 | 11.8 | 0.5 | -4.5 | 14.6 | 1.3 |

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



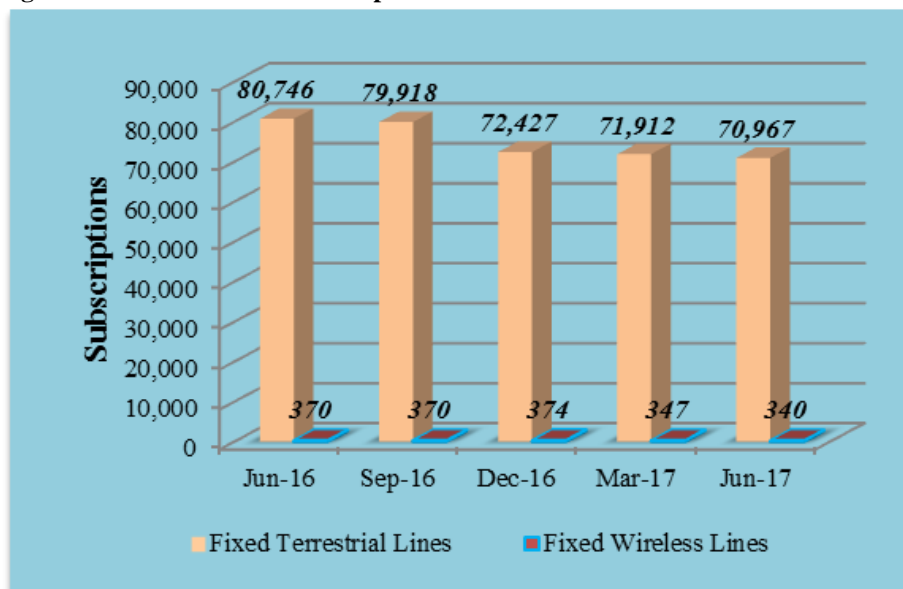
2 FIXED TELEPHONE SERVICE

2.1 Fixed Network Subscriptions

During the period under review, the total number of fixed network subscriptions in the country stood at 71,307 down from 72,259 subscriptions recorded in the previous quarter. The number of fixed terrestrial and fixed wireless connections stood at 70,967 and 340 respectively.

The trend in fixed network subscriptions is illustrated in Figure 8.

Figure 8: Fixed Network Subscriptions



Source: CA, Operators' Returns.

2.2 Fixed Network Traffic

Fixed to fixed local network traffic declined by 10.6 per cent during the quarter under review to post 332,248 minutes down from 389,154 minutes reported during the previous quarter. Similarly, during the fiscal year under review fixed to fixed local traffic dropped by 28.4 per cent to post 1.4 million minutes down from 2.0 million minutes posted during previous year.

Fixed wireless to fixed wireless network traffic grew by 2.9 per cent to record 347,834 minutes. Likewise traffic recorded during the financial year increased notably by 5-fold to post 1.3 million minutes.

Table 10 illustrates the trend in fixed network traffic.

Table 10: Local Fixed Network Traffic in Minutes

| Local Fixed Network traffic | Apr-Jun 17 | Jan-Mar 17 | Quarterly Variation (%) | FY 2016/17 | FY 2015/16 | Annual Variation (%) |
|--|----------------|----------------|-------------------------|------------------|------------------|----------------------|
| <i>Intra-network traffic</i> | | | | | | |
| <i>Fixed-fixed</i> | 332,248 | 389,154 | -14.6 | 1,435,442 | 2,005,986 | -28.4 |
| <i>Fixed wireless-fixed wireless</i> | 347,834 | 338,129 | 2.9 | 1,344,368 | 218,934 | 514.2 |
| <i>Total Local Fixed network traffic</i> | 680,082 | 727,283 | -6.4 | 2,779,810 | 1,646,470 | 68.8 |

Source: CA, Operators' Returns

International incoming fixed network voice traffic dropped by 6.8 per cent to register 2.4 million minutes down from 2.6 million minutes recorded in the previous quarter. Nevertheless the cumulative traffic for the whole fiscal year stood at 10.9 million minutes up from 7.4 million minutes reported in the previous year.

During the quarter under review, international outgoing traffic stood at 1.9 million minutes down from 2.1 million minutes recorded in the previous. Similarly the fiscal year under review saw the fixed traffic to other countries decline to register 8.5 million minutes from 9.2 million reported during the 2015/16 financial year.

International outgoing fixed VoIP traffic declined to 741,622 minutes during the quarter under review from last quarter's 811,029 minutes. However the number of VoIP minutes originating from the country to other countries rose by 13.8 per cent during the year under review to record 3.4 million minutes.

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>Apr-Jun 17</i> | <i>Jan-Mar 17</i> | <i>Quarterly Variation (%)</i> | <i>FY 2016/17</i> | <i>FY 2015/16</i> | <i>Annual Variation (%)</i> |
|---|-------------------|-------------------|--------------------------------|-------------------|-------------------|-----------------------------|
| <i>International Incoming Fixed Network Voice traffic</i> | 2,422,371 | 2,600,060 | -6.8 | 10,923,999 | 7,483,318 | 46.0 |
| <i>International Outgoing Fixed Network Voice traffic</i> | 1,961,621 | 2,135,181 | -8.1 | 8,533,093 | 9,269,611 | -7.9 |
| <i>International Outgoing Fixed Network VoIP traffic</i> | 741,622 | 811,029 | -8.6 | 3,469,780 | 3,048,325 | 13.8 |

Source: CA, Operators' Returns.



3 DATA/INTERNET SERVICE

3.1 Data/Internet Service

During the financial year 2016/17, data/Internet sub-sector experienced a positive growth across all technologies as witnessed in the quarter under review. The total number of Internet subscriptions amounted to 29.6 million which was an increase of 15.2 per cent from 25.7 million registered in the previous quarter. The growth was driven by 15.3 per

cent increase of in mobile data subscriptions to 29.4 million at the end of the quarter, which quarter, which accounted for approximately 99 per cent of the total subscriptions. The increase of mobile data subscriptions could be attributed to continued fall in the price of smartphones costs as well widespread the availability of the handsets. The number of data subscriptions has grown by 9.9 per cent when compared to the same period of the previous year.

The total number of terrestrial wireless data subscriptions recorded an increase of 30.5 per cent to post 47,231 subscriptions at the end of the quarter under review up from 36,104 subscriptions registered in the previous quarter. When compared to the same period of the previous financial year, there was a two-fold increase, which could be attributed to the licensing of new players in the market during the financial year.

Fixed DSL data/internet subscriptions rose to 2,715 during the period under review from 2,452 subscriptions reported in the third quarter marking an increase of 10.7 per cent. However when compared to the same period of the previous year, there was a decline of 11.4 per cent over the year.

Fibre optic data subscriptions continued to grow with the quarter under review recording 54,700 subscriptions up from 48,040 subscriptions registered during the previous period. In relation to the same period of the previous year, growth of about one fold was realized. The number of Fixed Cable subscriptions grew throughout the year to record 99,971 up from 95,976 representing 4.2 per cent growth at the end of the period under review.

The trend in data/internet subscriptions is as indicated in Table 12.

Table 12: Data/Internet Subscriptions

| <i>Internet/Data Subscriptions</i> | <i>Jun-17</i> | <i>Mar-17</i> | <i>Quarterly Variation (%)</i> | <i>Jun-16</i> | <i>Annual Variation (%)</i> |
|--|-------------------|-------------------|--------------------------------|-------------------|-----------------------------|
| <i>Mobile Data Subscriptions</i> | 29,419,164 | 25,524,363 | 15.3 | 26,758,789 | 9.9 |
| <i>Terrestrial Wireless Data Subscriptions</i> | 47,231 | 36,104 | 30.8 | 13,449 | 251.2 |
| <i>Satellite Data Subscriptions</i> | 693 | 622 | 11.4 | 280 | 147.5 |
| <i>Fixed DSL Data Subscriptions</i> | 2,715 | 2,452 | 10.7 | 3,063 | -11.4 |
| <i>Fixed Fibre Optic Data Subscriptions</i> | 54,700 | 48,040 | 13.9 | 27,571 | 98.4 |
| <i>Fixed Cable Modem Subscriptions</i> | 99,971 | 95,976 | 4.2 | 77,319 | 29.3 |
| <i>Total Internet Subscriptions</i> | 29,624,474 | 25,707,557 | 15.2 | 26,880,471 | 10.2 |
| <i>Estimated Number of Data/Internet Users⁵</i> | 45,485,414 | 40,594,403 | 12.0 | 37,716,579 | 20.6 |

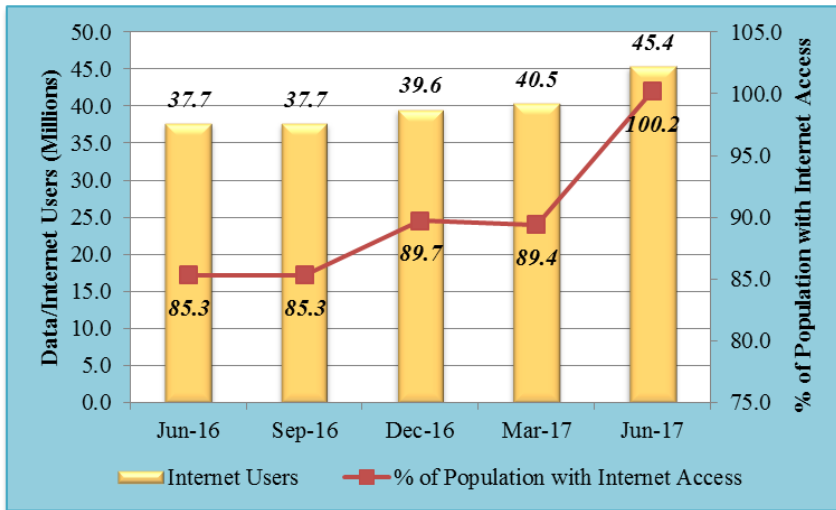
⁵ Total no. of Estimated Internet Users = (1MD+10TW+100FFOS) where MD is the number of mobile data/internet subscriptions; TW is the terrestrial wireless subscriptions; and FFOS by 100 is fixed DSL, Fibre optic and satellite subscriptions. There is no Scientific method of estimating internet users; for the purpose of this report the methodology is adopted from the recommendation of ITU

Source: CA, Operators Returns

The internet/data penetration level⁶ rose to 100.2 per cent up from 89.4 per cent recorded during the previous quarter.

The trends on internet/data subscriptions and penetration level are as demonstrated in Figure 7

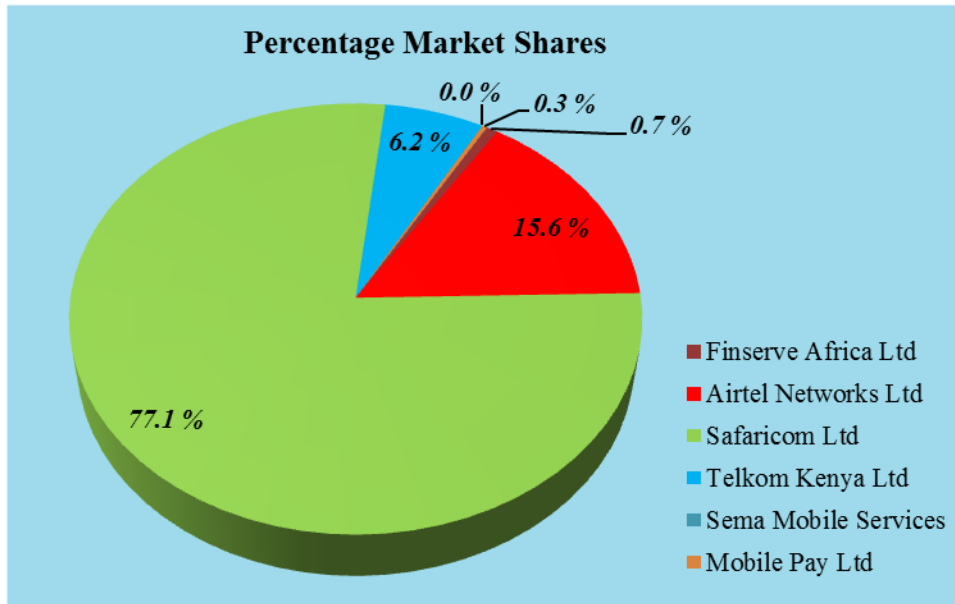
Figure 9: Data/Internet Subscriptions and Internet Penetration



Source: CA, Operators' Returns

Figure 10 illustrates the market share of mobile data/Internet subscriptions with Safaricom Limited registering the highest share of 77.1 per cent translating to an increase of 2.2 per centage points in relation to last quarter. The data subscriptions market share for Airtel Network Limited dropped by 2.5 per centage points to stand at 15.6 per cent. Similarly, Telkom Kenya Limited slightly fell by 0.2 per centage points to record 6.2 per cent market shares. Finserve Africa Limited recorded a market share of 0.7 per cent whereas Mobile Pay registered 0.3 per cent. Sema Africa Limited market share stood at 0 per cent.

Figure 10: Mobile/Data Subscriptions



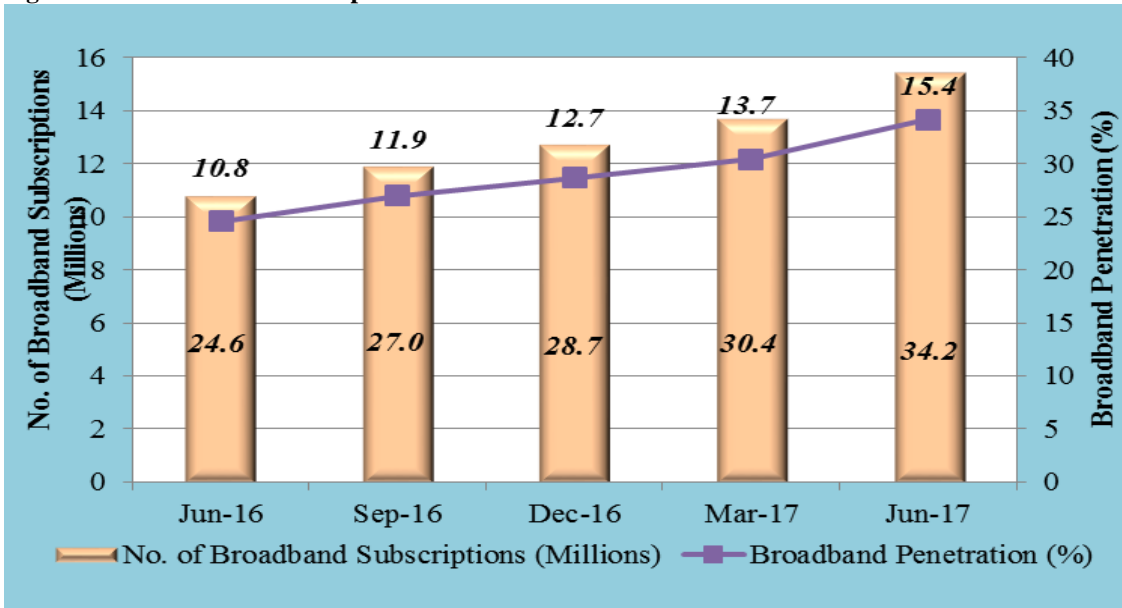
Source: CA, Operators' Returns

3.2 Broadband Services

3.2.1 Data / Internet broadband subscriptions

During the quarter under review, the number of broadband subscriptions was recorded at 15.4 million up from 13.7 million posted in the preceding quarter representing a growth of 12.6 per cent. This translated to broadband penetration level of 34.2 per cent as at the end of quarter under review up from last quarter's 30.4 Per cent.

Figure 11: Broadband Subscriptions

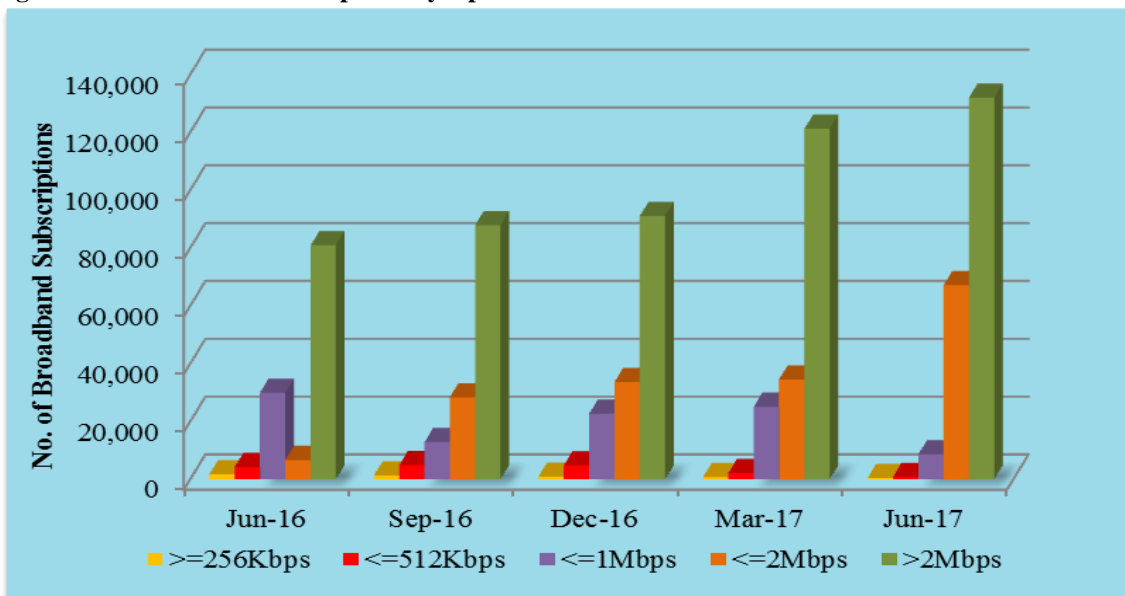


Source: CA, Operators' Returns

3.2.2 Fixed Broadband subscriptions by Speed

As illustrated in Figure 12, fixed broadband speeds of greater than or equal to 256 kbps recorded the least number of subscriptions while those above 2 Mbps recorded the highest number of subscriptions during the period under review. The same trend has been observed from quarter-to-quarter.

Figure 12: Broadband Subscriptions by Speed



Source: CA, Operators' Returns.

3.3 International Bandwidth

The amount of International Internet Available Bandwidth remained unchanged as at end of the quarter under review. On the other hand, when compared to the same period in the last financial year, a growth of 68 per cent has been attained. This was driven by 112.6 per cent increase in SEACOM bandwidth as a result of Increase of their capacity. This could be attributed to increase of supply capacity by the service providers as the demand for the bandwidth in the country increases. EASSy and Lion 2 increased their capacity by 112.5 and 158.6 respectively when compared to the same period the previous year.

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

Table 13: International Internet Available Bandwidth (Gbps)

| <i>International Connectivity Bandwidth</i> | <i>Jun-17</i> | <i>Mar-17</i> | <i>Quarterly Variation (%)</i> | <i>Jun-16</i> | <i>Annual Variation (%)</i> |
|--|------------------|------------------|--------------------------------|------------------|-----------------------------|
| <i>SEACOM</i> | 2,020.0 | 2,020.0 | 0.0 | 950.0 | 112.6 |
| <i>TEAMS</i> | 702.0 | 702.0 | 0.0 | 702.0 | 0.0 |
| <i>Telkom Kenya Limited (EASSY)</i> | 83.0 | 83.0 | 0.0 | 39.06 | 112.5 |
| <i>Lion 2</i> | 101.4 | 101.4 | 0.0 | 39.21 | 158.6 |
| <i>Satellite Internet Bandwidth</i> | 0.473 | 0.473 | 0.0 | 0.475 | -0.4 |
| <i>Total International Internet Bandwidth (Mbps)</i> | 2,906.873 | 2,906.873 | 0.0 | 1,730.745 | 68.0 |

Source: CA, Operators' Returns

Total used international Internet bandwidth rose to 882.5 Gbps during the quarter under review reflecting a growth of 0.3 per cent. Similarly, there was an increase of 0.5 percent was recorded when compared to the same period of previous financial year.

The undersea cable used bandwidth increased by 0.3 percent to reach 882.3 Gbps up from 879.3 Gbps recorded during the last quarter. When compared to the same period of the previous year, a growth of 0.6 per cent was realized.

Satellite used bandwidth increased to 0.273 Gbps up from 0.2703 Gbps reported during the previous quarter representing a minimal growth of 1.0 per cent. Conversely, used bandwidth dropped by 42.5 per cent when compared to the same period of the previous year.

The trend in international Internet connectivity (used) bandwidth is shown in Table 14.

Table 14: International Internet Connectivity Bandwidth (Gbps)

| <i>International Leased (Used) Bandwidth</i> | <i>Jun-17</i> | <i>Mar-17</i> | <i>Quarterly Variation (%)</i> | <i>Jun -16</i> | <i>Annual Variation (%)</i> |
|--|----------------|-----------------|--------------------------------|----------------|-----------------------------|
| <i>International Undersea Internet Connectivity Bandwidth (Gbps)</i> | 882.30 | 879.30 | 0.3 | 877.30 | 0.6 |
| <i>International Satellite Internet Connectivity Bandwidth</i> | 0.273 | 0.2703 | 1.0 | 0.475 | -42.5 |
| <i>Total International Internet Connectivity Bandwidth (Gbps)</i> | 882.573 | 879.5703 | 0.3 | 877.775 | 0.5 |

Source: CA, Operators' Returns

3.4 Revenue and Investment in the Data/Internet Market

During the fiscal year 2016/17, the data/internet market generated revenues of 15.8 billion Kenya Shillings after 3.7 billion Kenya Shillings were utilized for investment in the same sector.

Table 15: Data/Internet Revenue and Investment

| <i>Data/Internet Revenue and Investments</i> | <i>2016*</i> | <i>2015*</i> | <i>2014*</i> | <i>2013</i> | <i>2012</i> | <i>Variation (%) Over 2015</i> | <i>Variation (%) Over 2014</i> | <i>Variation (%) Over 2013</i> | <i>Variation (%) Over 2012</i> |
|---|--------------|--------------|--------------|-------------|-------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| <i>Data/Internet Revenue (KES Millions)</i> | 15,945 | 8,498 | 10,158 | 21,941 | 25,627 | 87.6 | -16.3 | -53.7 | -14.4 |
| <i>Data/Internet Investments (KES Millions)</i> | 3,706 | 2,233 | 3,440 | 3,537 | 6,115 | 66.0 | -35 | -2.7 | -42.2 |

Source: CA, Operators' Returns.

3.5 Registered Domain Names

As at 30th June 2017, the number of .KE domain names stood at 66,724. When compared to the same period of the previous year, a growth of 14.8 per cent was recorded over the year.

Table 16: Number of Domain names

| Sub-domain | Use | Jun-2017 | | Jun-2016 | |
|--------------|-------------------------------------|----------------|----------------|----------------|----------------|
| | | No. of Domains | Percentage (%) | No. of Domains | Percentage (%) |
| CO.KE | Companies | 61,969 | 92.87 | 53,990 | 92.76 |
| GO.KE | Government Entities | 397 | 0.59 | 368 | 0.63 |
| OR.KE | Non Profit Making Organizations | 1,947 | 2.92 | 1,759 | 3.02 |
| AC.KE | Institutions of Higher Education | 738 | 1.12 | 791 | 1.36 |
| SC.KE | Lower and Middle Level Institutions | 980 | 1.47 | 605 | 1.04 |
| NE.KE | Personal Websites and E-mail | 189 | 0.28 | 182 | 0.31 |
| ME.KE | Personal Websites and E-mail | 309 | 0.46 | 337 | 0.58 |
| MOBL.KE | Mobile Content | 48 | 0.07 | 46 | 0.08 |
| INFO.KE | Information | 147 | 0.22 | 128 | 0.22 |
| Total | | 66,724 | 100 | 58,206 | 100 |

Source: Kenya Network Information Centre (KeNIC)

4 BROADCASTING

4.1 Digital Television

At the end of the financial year 2016/17, the number of free-to-air TV channels on the digital terrestrial platform stood at 66 up from 60 recorded in the previous quarter. The increase is mainly as a result of licensing of new entrants in the broadcasting market. On the other hand, the number of pay TV service providers on the Digital Terrestrial Television (DTT) platform remained unchanged (GoTV and Star Times).

4.2 Digital Terrestrial Television sites rollout

The digital signal covered 78 per cent of the Kenyan population as at the end of June 2017 up from 75 per cent reported during the previous quarter. This was occasioned by the extension of network coverage by some of the self-provisioning digital signal distributors.. The signal is currently available in; Nairobi, Nakuru, Nyeri, Mombasa, Kisumu, Webuye, Eldoret, Malindi, Meru (Nyambene), Kisii, Kericho, Narok, Nyahururu, Embu, Kisii, Machakos, Murang'a, Naivasha, Nyeri, Webuye, Narok, Mbuinza, Kapenguria, Wajir, Kitui, Lamu and Namanga.

4.3 Set top Boxes

The cumulative number of digital Set Top Boxes purchased as at 30th June 2017 stood at 729,477 for Free-to-Air set top boxes (FTA STBs) and 3,788,417 for PAY TV.

4.4 FM Radio Stations

The total number of FM stations in the country stood at 178 stations as at 30th June 2017. When compared to the 139 stations recorded last financial year, there has been a

remarkable increase of 28.0 percent, which was as a result of licensing of new operators in market.



5 POSTAL AND COURIER SERVICES

5.1 Postal and Courier Traffic

Postal and courier sub sector registered mixed trends during the 2016/17 financial year. The volume of letters posted locally increased substantially during the quarter under review to post 15.7 million from 8.2 million letters registered in the previous quarter. Conversely, the total number of letters sent during the financial year was recorded at 57.0 million down from 60.0 million letters registered in the previous representing a drop of 5.1 per cent.

In contrast, the number of courier items sent locally stood at 1.4 million during the period under review down from 1.6 million items posted last quarter. However, the courier items sent throughout the financial year registered an increase of 59.3 per cent to record 6.1 million up from 3.8 million items posted in the previous financial year. This is attributed to the fast adoption of e-commerce services by consumers.

The number of International incoming letters increased to 1.0 million letters during the quarter under review up from 964,013 letters recorded in the previous quarter. On the contrary, the volume of letters received throughout the financial year registered a drop of 27.4 per cent to record 6.4 million down from 8.8 million letters recorded in the previous year.

On the other hand, the volume of letters sent to other countries increased by 17.7 per cent to stand at 1.0 million letters from last quarter's 912,825 letters. Conversely, during 2016/17 financial year the number of letters posted the declined by 29.4 per cent posting 5.2 million letters.

Table 17: Postal and Courier Traffic

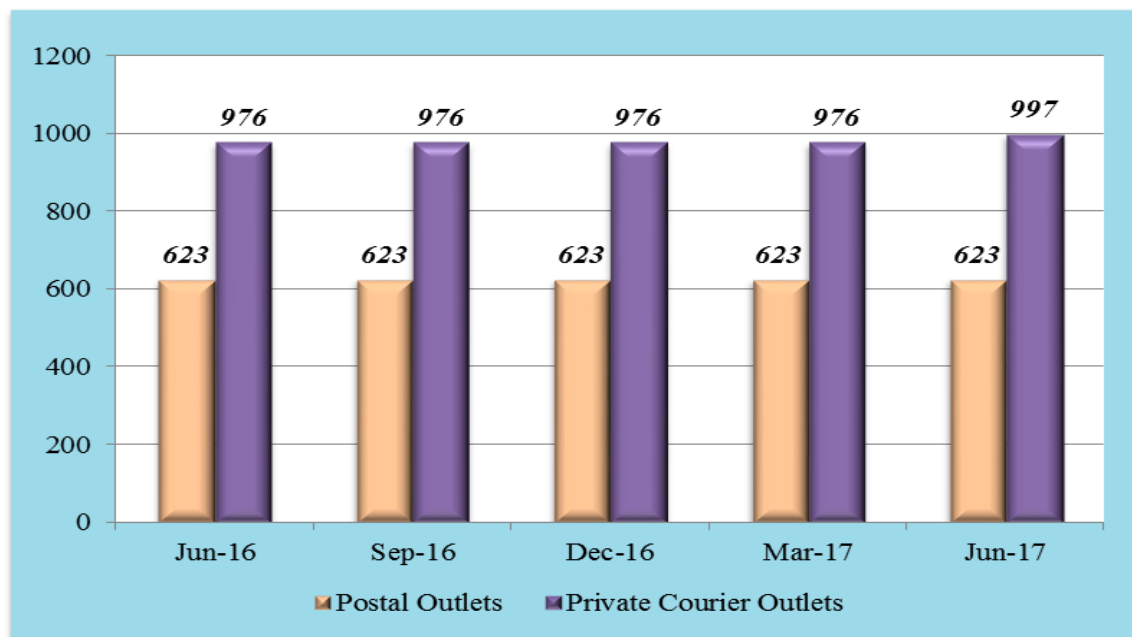
| <i>Post and Courier Traffic</i> | <i>Apr-Jun 17</i> | <i>Jan-Mar 17</i> | <i>Quarterly Variation (%)</i> | <i>FY 2016/17</i> | <i>FY 2015/16</i> | <i>Annual Variation (%)</i> |
|---|-------------------|-------------------|--------------------------------|-------------------|-------------------|-----------------------------|
| <i>Number of Letters (Up to 350 gms) Posted Locally</i> | 15,722,104 | 8,209,615 | 91.5 | 57,037,674 | 60,072,233 | -5.1 |
| <i>Total Courier Items Sent Locally</i> | 1,472,490 | 1,630,765 | -9.7 | 6,107,552 | 3,832,946 | 59.3 |
| <i>International Incoming Letters (Up to 350 gms)</i> | 1,075,611 | 964,013 | 11.6 | 6,451,749 | 8,889,643 | -27.4 |
| <i>International Outgoing Letters (Up to 350 gms)</i> | 1,074,105 | 912,825 | 17.7 | 5,908,954 | 8,366,623 | -29.4 |

Source: CA, Operators' Returns,

5.2 Number of Postal and Courier Outlets

During the quarter under review, the number of courier outlets rose to 997 up 996 recorded in the previous quarter representing a growth of 2.6 per cent while Postal outlets remained stable at 623.

Figure 13: Number of Postal and Private Courier Outlets



Source: CA, Operators' Returns, Note: Number of Courier Outlets data revised*

5.3 Postal and Courier Revenue and Investments

The postal and courier revenues declined by 2.7 per cent during 2016/17 fiscal year to post 4.6 billion Kenya Shillings down from 4.8 Kenya Shillings recorded in previous

financial year. Conversely, the amount used in investments in the sub-sector rose by 39.8 per cent during the financial year to stand at 457 million Kenya Shillings up from 327 million shillings recorded in 2015/16 FY.

Table 18: Postal and Courier Revenue and Investments

| <i>Post/Courier Revenue and Investment</i> | <i>2016</i> | <i>2015</i> | <i>2014</i> | <i>2013</i> | <i>2012</i> | <i>Variation (%) Over 2016</i> | <i>Variation (%) Over 2015</i> | <i>Variation (%) Over 2014</i> | <i>Variation (%) Over 2013</i> | <i>Variation (%) Over 2012</i> |
|--|-------------|-------------|-------------|-------------|-------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| <i>Revenue (KShs. Millions)</i> | 4,670 | 4,800 | 8,530 | 7,086 | 7,467 | 2.7 | -43.7 | 20.4 | -5.1 | -36.7 |
| <i>Investments (KShs Millions)</i> | 457 | 327 | 397 | 519 | 390 | 39.8 | -17.6 | -23.5 | 33.1 | -22.6 |

Source: CA, Operators' Returns

6 TARIFFS, PROMOTIONS AND SPECIAL OFFERS

The Authority received a total of 24 applications in the quarter under review for tariffs and promotions & special offers out of which 4 were tariffs and 20 were promotions and special offers, which were all reviewed and approved accordingly.

There were 4 more applications during the period under review compared to the previous period.

Tables 19 and 20 show the detailed distribution of the applications.

Table 19: Tariffs

| <i>Service provider</i> | <i>Apr - Jun 17</i> | | | | | | |
|-------------------------|---------------------|------------|-------------|---------------|---------------------|---------------|--------------|
| | <i>Voice</i> | <i>SMS</i> | <i>Data</i> | <i>Bundle</i> | <i>Mobile Money</i> | <i>Others</i> | <i>Total</i> |
| <i>Safaricom</i> | - | - | - | - | - | 1 | 1 |
| <i>Airtel</i> | - | - | - | 1 | - | - | 1 |
| <i>Telkom</i> | - | - | 2 | - | - | - | 2 |
| <i>Total</i> | - | - | 2 | 1 | - | 1 | 4 |

There were 4 more applications during the period under review compared to the previous period.

Tables 19 and 20 show the detailed distribution of the applications.

Table 20: Promotions and Special Offers

| Service provider | Apr - Jun 17 | | | | | | | Total |
|------------------|--------------|-----|------|--------|---------|-------------------------|---------------------|-------|
| | Voice | SMS | Data | Bundle | Airtime | Lucky Draw ⁷ | Others ⁸ | |
| <i>Safaricom</i> | - | - | 7 | 1 | 2 | - | 2 | 12 |
| <i>Airtel</i> | - | - | 1 | - | - | - | - | 1 |
| <i>Telkom</i> | - | 1 | 1 | 2 | - | - | - | 4 |
| <i>Finserve</i> | - | - | 2 | - | 1 | - | - | 3 |
| Total | - | 1 | 11 | 3 | 3 | - | 2 | 20 |

7 CONCLUSION

During the fiscal year 2016/17, telecommunications sector continued to register a positive growth when compared to the previous years and this could be attributed to increased uptake and usage of the mobile phone services by the people. Despite the growing influence of over the top services, which are widely available local mobile traffic as well as SMS services. This was as result of the introduction of services such as SMS tariffs, one-bundle tariffs by mobile service providers to keep up with the competition in the industry. The increase in mobile network coverage has led to a decline in fixed- line networks.

The volume of mobile money transactions (withdrawals and deposits) valued at 1.2 trillion Kenya shillings were made during the fourth quarter. In addition, goods and services purchased over mobile platform amounted to 692.1 billion Kenya shillings, which involved 316.5 million mobile e-commerce transactions. The positive growth witnessed in the mobile money transfer service has largely been driven by the widespread use of mobile money solutions in Kenya. The mobile money transfer service is driven by Kenya's commitment to advancing financial inclusion, widespread adoption of mobile money services among traditionally underserved groups, an increasingly broad range of mobile money services (including insurance and loan products), and an enabling regulatory environment for digital financial services.

Data/Internet sub-sector continued to sustain substantial growth over the period as technological and infrastructural environment become more conducive for better Internet access as a result of the rollout of 4G infrastructures by the Mobile Network Operators (MNOs) in Kenya. With the rapid expansion of fibre optic infrastructure across the country, more homes will be connected as well as better higher speed fibre broadband services will be accessed. In addition, service providers' increased Internet capacity bandwidth as the demand rise as witnessed during the year under review.

⁷Lucky draw is a game of chance where the operator has no control over the specific user to receive a reward set out

⁸“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

As Internet infrastructure become available and more efficient coupled with growing number of younger population in the country, mobile video traffic is anticipated to increase substantially.

The postal and courier sub-sector experienced mixed reactions during the year under review. Despite the presence of electronic communications, the volume of letters posted locally increased substantially during the quarter. Total courier items sent locally during the year grew significantly and this could have been driven by the increase in Internet shopping as e-commerce continues to be seen as a key driver of courier services in Kenya.

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