

# QUARTERLY SECTOR STATISTICS REPORT

## THIRD QUARTER OF THE FINANCIAL YEAR 2011/12

(JANUARY - MARCH 2012)

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## **Disclaimer:**

Although every effort has been made to ensure accuracy of the data contained in the report, the Commission is not liable for the inaccuracy of the information, which is contingent to the operators/service providers compliance returns.

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## **List of Abbreviations**

ICTs Information Communication Technologies

Mbps Megabits per second

MoU Minutes of Use

SIM Subscriber Identification Module

SMS Short Messaging Service
VSAT Very Small Aperture Terminal
EVDO Evolution-Data Optimized

GSM Global Systems for Mobile Communications

## I. PRELIMINARY NOTES

- This report has been prepared based on data provided by service providers.
- The information provided in this quarterly report is subject to alteration in case of any revisions or updates from the service providers.

## II. THE QUARTER IN SUMMARY

In the mobile telephony market segment, there were 29.2 million mobile subscriptions as at 31<sup>st</sup> March 2012 compared to 28.08 million as at 31<sup>st</sup> December 2011. This represents a growth of 4.0 per cent in total mobile subscriptions. During the quarter, Pre-paid subscriptions grew by 4.0 per cent to reach 28.9 million while Post-paid subscriptions grew by 7.5 per cent to post 254,194 subscribers. The growth in mobile subscriptions is an indication of operators' determination to continue growing their subscriber base and increasing access to mobile telephony services in the country. At the end of the quarter, mobile penetration was posted as 74.0 per cent up from 71.3 per cent recorded at the close of the previous quarter.

Total local mobile traffic increased by 1.6 per cent from the previous quarter to record 6.8 billion minutes during the quarter under review. The marginal growth in local mobile traffic could be attributed to stability in mobile tariffs following an increment in the previous quarter by the operators. On the other hand, Minutes of Use (MoU) per subscriber per month was recorded at 77.7, down from 79.9 in the previous quarter representing a 2.8 per cent decline... During the period under review, the number of SMS per subscriber per month increased by 9.3 per cent, from 10.7 SMS recorded in the previous quarter to 11.7 SMS.

While the mobile telephony subscriptions continue to show a growth trend, the main fixed line (fixed terrestrial lines and fixed wireless) subscriptions continued to record a downward trend. The number of subscriptions declined from 283,546 recorded in the previous quarter to 272,101 during the period under review, representing a 4.0 per cent drop.. The fixed terrestrial lines declined by 11.2 per cent to record 80,675 subscriptions, while fixed wireless declined by 0.7 to record 191,426 subscriptions at the end of quarter.

In the Internet/data market segment, the number of subscriptions increased by 5.5 per cent, from 6.1 million recorded in the previous period to 6.4 million during the quarter under review. Mobile data/internet subscriptions continued to dominate the internet market with 98.8 per cent of the total Internet/data subscriptions being from the mobile Internet/data sub-market. Number of Internet users rose by 4.7 per cent, from 11.3 million users posted the previous period to 11.8 million users during the quarter under review. Broadband¹ subscriptions increased significantly by more than three-fold, from 131,829 subscriptions posted the previous quarter to 651,738 subscriptions during the quarter. Broadband subscriptions represented 10.0 per cent of the total Internet/data subscriptions.

The tremendous growth in the Internet/data market segment may be attributed to international connectivity bandwidth that increased significantly by 216.4 per cent from

<sup>&</sup>lt;sup>1</sup> In Kenya broadband is defined as speeds greater than or equal to 256Kbps in one or both directions.

the previous quarter to post 167,476.9 Mbps during the quarter under review. The total available bandwidth in the country was recorded as 5,361,918.5 Mbps during the quarter under review. Thus, the total used bandwidth is still very low at 3.1 per cent utilization of the available bandwidth capacity.

In the postal and courier industry, the total local letters sent were 16.7 million from 19.5 million sent the previous period, representing a 14.6 per cent decline. International incoming letters increased significantly by 68.4 per cent, from 80,217 letters received the previous quarter, to 135,063 letters received during the quarter under review. On the other hand, international outgoing letters declined by 20.6 per cent, from 2.2 million letters sent during the previous quarter to 1.7 million letters sent during the quarter under review.

#### 1. CELLULAR MOBILE SERVICES

## 1.1 Subscriptions

Mobile market segment continued to dominate the activities in the Postal, Information Communications Technologies (ICT) sector during the third quarter of the Financial Year (FY) 2011/12, that is, for the period 1<sup>st</sup> January 2012 to 31<sup>st</sup> March 2012. As at 31<sup>st</sup> March 2012, 29.21 million mobile subscriptions were recorded compared to 28.08 million posted the previous period. This represents an increase of 4.0 per cent during the quarter and 15.9 per cent growth when compared to the same period of the previous year. The continued growth in subscriptions is a clear indication of the operators' increasing focus to offer competitive and innovative products and services to attract customers coupled with increasing demand from the population. Growth in mobile subscription during the quarter and over the same period previous year is shown in Table 1.

**Table 1: Mobile Subscriptions** 

Subscription Type	Mar-12	Dec-11	Quarterly Variation (%)	Mar-11	Annual Variation (%)
Prepaid Subscriptions	28,957,455	27,844,335	4.0	24,993,814	15.9
Post-Paid Subscriptions	254,194	236,436	7.5	226,888	12.0
Total Mobile Subscriptions	29,211,649	28,080,771	4.0	25,220,702	15.8

Source: CCK, Operators' Returns.

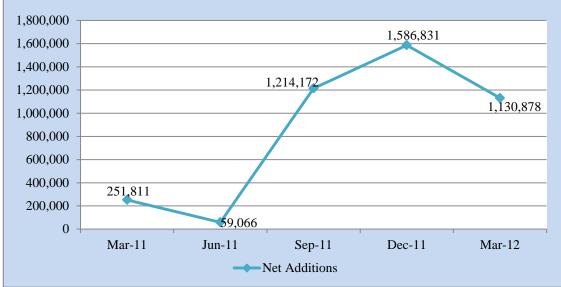
During the period under review, Pre-paid and Post-paid subscriptions grew by 4.0 per cent and 7.5 per cent to record 28.9 million and 254,194 subscriptions, respectively. It is important to note that while there was an increase in the growth of the Post-paid subscriptions by 6.2 percentage points during the quarter, the growth in the Pre-paid subscriptions declined by 2.0 percentage points. Despite this growth, the number of Pre-paid subscriptions continued to dominate the total mobile subscriptions and represented 99 per cent of the total mobile subscriptions compared to only 1 per cent for Post-paid subscriptions. When compared to the same period of the previous year, there was a 15.9 per cent increase in total mobile subscription; with Pre-paid subscriptions growing by 15.9 percent while Post-paid subscriber base grew by 12.0 per cent.

As illustrated in Figure 1, the growth trend in total net additions<sup>2</sup> experienced from June 2011 through December 2011 was reversed during the third quarter as there were 1,130,878 net additions recorded compared to 1,586,831 posted in the second quarter. This represents a decline in total net additions of 28.7 per cent, that may be attributed to reduced promotional and special offers which are strategies used for acquisition of new customers by the four mobile operators; Safaricom Limited, Airtel Networks Kenya Limited, Essar Telecom Kenya Limited and Telkom Kenya Limited (Orange).

 $^{\rm 2}$  Net additions refer to new mobile subscriptions acquired during the period.

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Source: CCK, Operators' Returns.

During the quarter under review, all the four mobile operators experienced gains in subscriptions during the period. The highest gain in absolute values was recorded as 386,777 new subscriptions by Safaricom Limited which represented a quarterly growth of 2.1 per cent while in percentage terms, Essar Telecom Kenya Limited posted the highest growth of 14.5 per cent, representing growth of 324,284 new subscriptions. The tremendous growth in the new subscriptions by Essar Telecom Kenya Limited could be attributed to increased promotional and special offers targeting the youth that were offered during the period.

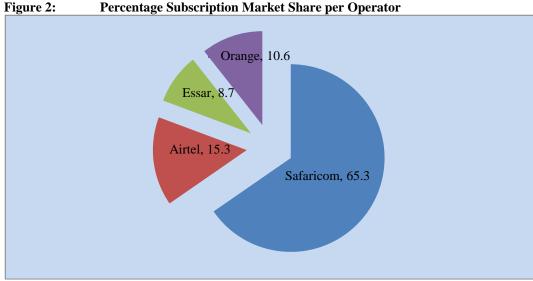
Telekom Kenya Limited and Airtel Networks Kenya Limited gained 209,447 and 210,370 new subscriptions representing 7.2 per cent and 4.9 per cent growth, respectively during the period. Mobile subscription by operator is shown in Table 2.

**Table 2: Mobile Subscriptions per Operator** 

Name of Operator	Mar-12	Dec-11	Quarterly Variation (%)	Mar-11	Annual Variation (%)
Safaricom Kenya Limited	19,074,700	18,687,923	2.1	17,205,123	10.9
Airtel Networks Kenya Limited	4,483,334	4,272,964	4.9	3,817,589	17.4
Essar Telecom Kenya Limited	2,554,258	2,229,974	14.5	1,584,501	61.2
Telkom Kenya Limited (Orange)	3,099,357	2,889,910	7.2	2,613,489	18.6

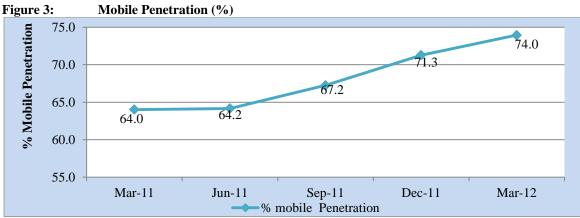
Source: CCK, Operators' Returns.

There was a marginal change in the level of concentration measured by market shares through subscriptions. Safaricom Limited market share by subscription declined from 66.6 per cent in the previous quarter to 65.3 per cent during the quarter under review. Essar Telecom Kenya Limited gained the largest market share (0.8 percentage points), followed by Telkom Kenya Limited - Orange (0.3 percentage points) and Airtel Networks Kenya Limited (0.1 percentage points). Thus, at the end of the quarter, market shares by subscription for Airtel, Telkom (Orange) and Essar stood at 15.3 per cent, 10.6 per cent and 8.7 per cent; respectively as shown in Figure 2.



Source: CCK, Operators' Returns.

Access to mobile telephony services continued to be realized as the quarter posted a mobile penetration of 74.0 per 100 inhabitants<sup>3</sup> up from 71.3 per 100 inhabitants recorded during the previous quarter. This represents an increase mobile penetration of 0.7 percentage points during the quarter and an increase of 10.0 percentage points when compared to the same quarter of the previous year. The growth trend in the mobile penetration from March 2011 to March 2012 is illustrated in Figure 3.



Source: CCK, Operators' Returns.

#### 1.2 **Mobile Money Transfer Service**

Mobile money transfer service continued to play a significant role in the country of ensuring seamless transfer of money, mobile payments among other transactions. Cumulatively, as at 31<sup>st</sup> March 2012, there were 18.987 million mobile money transfer subscriptions from 18.981 million recorded during the previous period. This represents a marginal growth of 0.03 per cent during the quarter and 9.1 per cent growth over the same period the previous year. During the quarter, the number of mobile money transfer

<sup>3</sup> Population used 39.5 Million, provisional, as provided in the Economic Survey 2012.

subscriptions as a ratio of the total number of mobile subscriptions declined to 65.0 per cent from 67.6 per cent recorded in the previous quarter.

The mobile money transfer service continues to create employment opportunities particularly for the unemployed population in the country. At the end of quarter under review, there were 45,861 active mobile money transfer service agents compared to 47,997 recorded in the previous quarter. The decline of 4.5 per cent in the number of agents could be attributed to Airtel Networks Kenya Limited, the only operators that reported a decrease in the numbers of agents. Compared to the same period of the previous year, the number of agents grew by 13.5 per cent. The number of agents and subscriptions to the mobile money transfer service and total deposits made are shown in Table 3.

**Table 3: Mobile Money Transfer** 

Mobile Money Transfer	Mar-12	Dec-11	Quarterly Variation (%)	Mar-11	Variation (%) Over the Same Period Last Year
Subscriptions	18,987,531	18,981,443	0.03	17,411,758	9.1
Number of Agents	45,861	47,997	-4.5	40,405*	13.5
Total Deposits (KES)**	185,361,277,029	176,836,359,552	4.8	130,190,469,267	42.4

Source: CCK, Operators Returns, (\*) Provisional, (\*\*) Quarterly Deposits.

From Table 3, the total deposits handled during the quarter grew by 4.8 per cent from KES 176.8 billion recorded during the previous period to KES 185.4 billion during the quarter. When compared to the same period of the previous year, a 42.4 per cent growth in the amount of deposits was posted. Notably, the total deposits have been growing steadily over the period, a clear indication that the demand for the mobile money transfer service has continued to expand possibly due to its convenience, ease of access, acceptability and as an instrument of financial inclusion for the unbanked population in the country.

## 1.3 Mobile Number Portability

To promote effective competition in the mobile market segment, in April 2011, the Commission introduced the Mobile Number Portability (MNP), a service that allows the consumers the flexibility and the convenience to retain subscribers' numbers upon switching service providers. The uptake of this service has continued to show mixed signals in the mobile market segment since its inception. During the quarter under review, there were a total of 6,646 in-ports up from 2,407 in-ports recorded during the previous quarter, representing an increase of 176.1 per cent. The number of in-ports recorded since the establishment of the MNP service in April 2011 is shown in Table 4.

**Table 4: Number of In-ports** 

Period	Jan-Mar-12	Oct-Dec-11	July-Sep 11	Apr-Jun 11
<b>Number of In-ports</b>	6,646	2,407	1,929	36,224
Variation (%)	176.1	24.8	-94.7	-

Source: CCK, Operators Returns.

## 1.4 Mobile Traffic and Usage Pattern

#### 1.4.1 Voice Traffic

During the quarter under review, a total of 6.8 billion minutes of calls were made on the mobile networks up from 6.7 billion minutes recorded in the previous quarter, representing a marginal increase of 1.6 per cent. This marginal growth in mobile traffic could be attributed to stability in mobile tariffs experienced during the quarter following an increment in tariffs by Safaricom Limited during the previous quarter. Compared to the same period of the previous year, there was a 12.2 per cent increase in total mobile traffic.

Comparing traffic by origin in Table 5, on-net traffic recorded 1.4 per cent growth from 5.8 billion minutes recorded during the previous period to 5.9 billion minutes during the quarter. Compared to the same period of the previous year, an increase of 9.5 per cent was posted. Similarly, traffic across networks increased to 839 million minutes up from 789 million minutes posted during the previous period. This represents an increase of 6.4 per cent during the quarter and 36.7 per cent growth compared to the same period last year. There was a significant decline in mobile to fixed traffic of 63.1 per cent during the quarter to record 15.3 million minutes down from 42.1 million minutes posted the previous period. The decline in mobile to fixed traffic could be as a result of a decrease in fixed line subscriptions. However, compared to the same period of the previous year, an increase of 3.8 per cent was posted.

**Table 5: Local Mobile Voice Traffic in Minutes** 

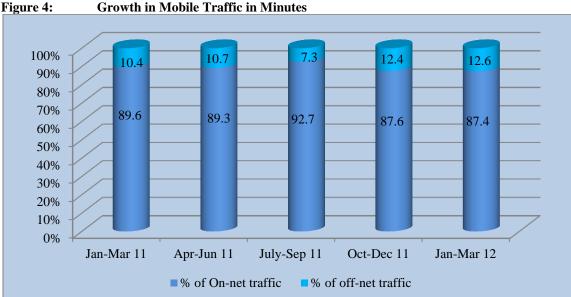
Mobile Traffic	Jan-Mar-12	Oct-Dec-11	Quarterly Variation (%)	Jan-Mar-11	Variation (%) Over the Same Period Last Year					
	By Traffic Origin (Outgoing Traffic)									
Own Network –Own Network	5,955,692,413	5,870,570,860	1.4	5,439,268,783	9.5					
Own Network to Other Mobile Networks	839,323,683	789,197,560	6.4	614,116,217	36.7					
Mobile Network to Fixed Network	15,552,579	42,171,413	-63.1	14,988,250	3.8					
Total Traffic Origination (Outgoing)	6,810,568,675	6,701,939,833	1.6	6,068,373,250	12.2					
	By Traffic T	ermination (Inco	ming Traffic)							
Own Network –Own Network	5,955,692,413	5,870,570,860	1.4	5,439,268,783	9.5					
Other Mobile Networks to Own Network	842,312,946	839,328,628	0.4	664,064,246	26.8					
Fixed Network to Mobile Network	22,370,865	32,281,989.00	-30.7	35,662,107	-37.3					
Total Traffic Termination (Incoming Traffic)	6,820,376,224	6,742,181,477	1.2	6,138,995,136	11.1					

Source: CCK, Operators' Returns.

With regard to traffic by termination, the total number of voice minutes received on all mobile networks increased by 1.2 per cent from 6.7 billion minutes posted during the

previous quarter to 6.8 billion minutes during the quarter. There was an 11.1 per cent increase in total traffic termination compared to the same quarter of the previous year. Fixed to mobile traffic declined by 30.7 per cent from 32.2 million minutes recorded during the previous period to 22.3 million minutes posted during the quarter under review. Compared to the same period of the previous year, a decline of 37.3 per cent was recorded. Notably, the overall mobile traffic experienced marginal growth during the review period which could have been as a result of stability in mobile tariffs that prevailed.

The ratio of on-net traffic to the total mobile traffic declined marginally from 87.6 per cent in the previous quarter to 87.4 per cent. Conversely, the ratio of off-net mobile traffic to total mobile traffic increased by a similar margin of 0.2 percentage points to record 12.6 per cent from 12.4 per cent recorded the previous period. The share of on-net and off-net mobile traffic to the total mobile traffic is illustrated in Figure 4.



Source: CCK, Operators' Returns.

## 1.4.2 Voice Traffic by Operator

Similar to the observations made under mobile subscription by operator, there was a marginal change in the level of concentration measured by market shares by traffic. During the quarter under review, Safaricom Limited posted a market share by voice traffic of 77.3 per cent from 77.9 per cent recorded in the previous period. This represents a decrease of 0.6 percentage points that was gained by Airtel Networks Kenya Limited (0.4 percentage points) and Essar Telecom Kenya Limited (0.2 percentage points); while Telkom Kenya Limited's market shares<sup>4</sup> by voice traffic remained the same at 0.8 per cent. Voice traffic and resultant market share by operator are shown in Table 6.

<sup>&</sup>lt;sup>4</sup> Note that there is a big difference in Telkom Kenya Limited's (Orange) market share by subscription (10.6 per cent) and market share by voice traffic (0.8 per cent). This could be explained by the error in the Compliance Returns submitted to the Commission.

**Table 6: Voice Traffic by Operator** 

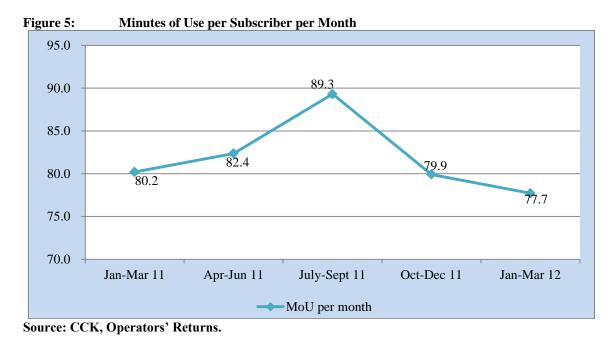
Name of Operator	Jan-Mar 12				Oct-Dec 11			
	On-net	Off-net	Total	Market Share (%)	On-net	Off-net	Total	Market Share (%)
Safaricom Limited	5,025,014,795	237,734,643	5,262,749,438	77.3	4,990,830,943	227,004,015	5,217,834,958	77.9
Airtel Networks Kenya Limited	447,307,739	450,540,444	897,848,183	13.2	427,361,165	429,766,670	857,127,835	12.8
Essar Telecom Kenya Limited	463,656,538	130,721,395	594,377,933	8.7	436,837,581	135,028,258	571,865,839	8.5
Telkom Kenya Limited (Orange)	19,713,341	35,879,780	55,593,121	0.8	15,541,171	39,570,030	55,111,201	0.8

Source: CCK, Operators' Returns.

There was no significant change in market shares on voice traffic during the quarter and the previous quarter. However, there is still a wide disparity in traffic volumes particularly on on-net traffic among the operators. The on-net traffic has been largely contributed by Safaricom Limited given its largest market share by subscription of 65.3 per cent. Moreover, Safaricom Limited continues to have the largest market share by voice traffic since a large percentage of off-net traffic from other networks terminates to Safaricom Limited network.

### 1.4.3 Minutes of Use

The quarter under review, recorded 77.7 Minutes of Use (MoU) made by each subscriber per month down from 79.9 minutes per subscriber per month in the previous period. This represents a reduction of 2.8 per cent during the period and could be attributed to a large proportionate increase in the total number of mobile subscriptions (4.0 per cent) compared to a small proportionate increase in the total mobile traffic (1.6 per cent). When compared to the same period of the previous year, there was a decline of 3.1 per cent in the MoU. As illustrated in Figure 5, there is an observed downward trend in the MoU from the period July – September 2011 to January – March 2012.



A total of 1.0 billion Short Messaging Service (SMS) were sent during the quarter compared to 902 million the previous quarter. This represents 13.4 per cent increase during the quarter and 53.0 per cent increase compared to the same quarter of the previous year. On-net SMS grew by 4.0 per cent to reach 799 million from 768 million SMS recorded in the previous period. On the other hand, off-net SMS grew significantly by 67.3 per cent to post 223 Million SMS up from 133 Million recorded in the previous quarter. Compared to the same period of the previous year, 148.2 per cent increase is recorded. The average number of SMS sent by each subscriber per month was recorded as 11.67 which were 0.96 messages more than that recorded in the previous quarter. Compared to the same quarter of the previous year, this represents an increase of 32.0 per cent. SMS traffic is shown in Table 7.

**Table 7: Short Messaging Service** 

SMS Traffic	Jan-Mar 12	Oct-Dec-11	Quarterly Variation (%)	Jan-Mar-11	Variation (%) Over the Same Period Last Year
On-net SMS	799,102,623	768,270,544	4.0	575,521,457	38.8
Off-net SMS	223,715,651	133,733,880	67.3	90,131,881	148.2
Total SMS Sent	1,022,818,274	902,004,424	13.4	665,653,338	53.7
SMS per Subscriber per Month	11.7	10.7	9.0	8.84	32.0

Source: CCK, Operators' Returns.

The number of Multi-Media Messages (MMS) that were sent during the quarter declined to 1,517,733 from 1,723,544 sent the previous period. This represents a decline of 11.9 per cent in the quarter and when compared to the same quarter of the previous year, represents a decline of 5.3 per cent. Table 8 gives the number of MMS sent.

Table 8: Multimedia Messaging Service

MMS Traffic	Jan-Mar-12	Oct-Dec-11	Quarterly Variation (%)	Jan-Mar-11	Variation (%) Over the Same Period Last Year
MMS	1,517,733	1,723,544	-11.9	1,601,960	-5.3
MMs per Subscriber per Month	0.02	0.02	0.0	0.02	0.0

Source: CCK, Operators' Returns.

It is important to note that the absolute values reported for MMS are still very low compared to SMS. In particular, each user sent an average of 0.02 MMs per month during the period under review compared to 11.67 SMS sent by each user per month. Essentially, the use of MMS has remained low over the period which could be as a result of customers' preference to SMS and social media over MMS.

## 1.4.4 Roaming Traffic

During the quarter under review, there was 7.6 million minutes of roaming out<sup>5</sup> voice traffic posted compared to 29 million recorded during the previous period. The 74.1 per cent decline in the minutes of roaming out indicates that there were few local subscribers roaming on foreign networks during the quarter. Compared to the same quarter of the previous year, a decline of 73.6 per cent was posted. On the other hand, there was a significant increase in roaming in<sup>6</sup> voice traffic of 51.6 per cent from 5.9 million minutes recorded the previous period to 9.0 million minutes recorded during the period under review. Compared to the same quarter of the previous year, an increase of 57.9 per cent was recorded. Table 9 gives roaming traffic and SMS posted during the quarter.

**Table 9: Roaming Traffic** 

Roaming Traffic	Jan-Mar-12	Oct-Dec-11	Quarterly Variation (%)	Jan-Mar-11	Variation (%) Over the Same Period Last Year
Roaming Voice Minutes Own Subscribers on Foreign Networks	7,673,887.76	29,609,552	-74.1	29,073,610.94	-73.6
Roaming Voice Minutes Foreign Subscribers on Local Network	9,077,652.77	5,986,703	51.6	5,747,616	57.9
Roaming SMS - Own Subscribers on Foreign Networks	6,973,170.00	6,625,691	5.2	5,605,142.67	24.4
Roaming SMS - Foreign Subscribers on Local Network	9,596,732.00	7,726,050	24.2	6,104,844	57.2

Source: CCK, Operators' Returns.

During the quarter as shown in Table 9, the number of roaming out SMS increased by 5.2 per cent to reach 6.9 million. Compared to the same quarter the previous year, this represents an increase of 24.4 per cent. Similarly, roaming in SMS increased significantly by 24.2 per cent to reach 9.5 million from 7.7 million SMS recorded in the previous quarter. When compared to the same quarter of the previous year, this represents an increase of 57.2 per cent.

#### 1.4.5 International Mobile Traffic

During the quarter, 166 million minutes up from 153 million minutes recorded in the previous period of international incoming mobile voice traffic was posted. This represents growth of 8.7 per cent during the quarter and an increase of 20.8 per cent over same quarter of the previous year. Similarly, international outgoing traffic increased by 3.9 per cent from 148 million minutes posted the previous period to 153 million during the quarter. Compared to the same quarter of the previous year, there was an increase of 7.5 per cent in the international outgoing traffic. The growth in international outgoing

<sup>5</sup> Roaming out is traffic originated and terminated by subscribers of national networks as users of foreign networks abroad

<sup>&</sup>lt;sup>6</sup> Roaming in is traffic originated and terminated by foreign subscribers on national networks.

traffic is an indication that subscribers have continually taken advantage of the operators' reduction in international tariffs where operators are charging as low as KES 3.00 per minute for international calls to countries such as the United States of America (USA), Canada and China.

International incoming mobile SMS increased marginally by 0.7 per cent to record 24.7 million SMS from 24.5 million the previous period. Compared to the same quarter of the previous year, this represents a significant increase of 973.7 per cent. However, international outgoing SMS decreased from 3.5 million SMS posted the previous period to 2.0 million during the quarter under review. This represents a decline of 43.8 per cent during the quarter and could be attributed to an increase in international outgoing voice traffic that resulted from low international calling tariffs to destinations such as USA, Canada and China. The international mobile traffic and SMS are shown in Table 10.

**Table 10: International Mobile Traffic (Minutes)** 

International Mobile Traffic and SMS	Jan-Mar-12	Oct-Dec-11	Quarterly Variation (%)	Jan-Mar-11	Variation (%) Over the Same Period Last Year
International Incoming Mobile Voice Minutes	166,977,461	153,664,018	8.7	138,219,588	20.8
International Outgoing Mobile Minutes	153,942,497	148,164,029	3.9	143,176,153	7.5
International Incoming Mobile SMS	24,725,320	24,545,535	0.7	2,302,755	973.7
International Outgoing Mobile SMS	2,020,694	3,594,638	-43.8	4,189,644	94.2

Source: CCK, Operators' Returns.

## 1.4.6 Mobile Coverage

The Commission continues to facilitate increased access to mobile telephony services through enabling regulation. During the quarter under review, there was 89.10 per cent of the population that had access to mobile services compared to 84.0 per cent recorded in the same period of the previous year. This represents an increase of 5.1 percentage points. The land mass with mobile coverage was recorded as 34.45 per cent which represents growth in coverage of 2.3 percentage points. Mobile coverage by population and land mass is shown in Table 11.

Table 11: Mobile Coverage

Mobile Coverage	Jan-Mar-12	Oct-Dec-11	Quarterly Variation (%)	Jan-Mar-11	Variation (%) Over the Same Period Last Year
Population Coverage (%)	89.10	89.10	0.0	84.0	6.1
Land Coverage (%)	34.45	34.45	0.0	32.12	7.3

Source: CCK, Operators' Returns.

## 1.5 Mobile Revenue and Investments

Mobile revenue and investments from 2007 is as shown in Table 12. This information will be updated every end of the financial year as this data is generated on an annual basis.

**Table 12: Mobile Revenue and Investment (KES)**<sup>7</sup>

Mobile Revenues and Investments	2010	2009	2008	2007	Variation (%) Over 2009	Variation (%) Over 2008	Variation (%) Over 2007
Mobile Revenue (KES Millions)	104,552*	90,394*	72,625	57,998	15.7	44.0	80.3
Mobile Investments (KES Millions)	27,126*	40,260*	29,436	21,221	-32.6	-7.8	27.8

Source: CCK, Operators Returns, (\*) includes Telkom Fixed Network Revenue and Investment.

<sup>&</sup>lt;sup>7</sup> The information on mobile revenue and investment will be updated every end of financial year to reflect the current status of the market.

## 2. FIXED TELEPHONE SERVICE

## 2.1 Subscriptions

The fixed line network continued to record a downward trend. During the quarter under review, there were a total of 272,101 main fixed lines (fixed terrestrial lines and fixed wireless) subscriptions down from 283,546 lines recorded during the previous quarter. This represents a 4.0 per cent decline during the quarter and 38.6 per cent decline when compared to the same quarter of the previous year.

As shown in Table 13, fixed terrestrial subscriptions category recorded a significant decline of 11.2 per cent compared to the fixed wireless subscriptions which declined marginally by 0.7 per cent. The significant decline in the fixed terrestrial subscriptions could be attributed to vandalism of copper cables; and substitution of fixed telephony service with mobile telephony service, a trend that is observed in developing countries. Fixed network subscriptions are shown in Table 13.

**Table 13: Fixed Network Subscriptions** 

Fixed Network Subscription	Mar-12	Dec-11	Quarterly Variation (%)	Mar-11	Annual Variation (%)
Fixed Terrestrial Subscriptions	80,675	90,814	-11.2	227,291	-64.5
Fixed Wireless Subscriptions	191,426	192,732	-0.7	215,659	-11.2
Total Main Fixed Line Subscriptions	272,101	283,546	-4.0	442,950	-38.6

Source: CCK, Operators Returns.

## 2.2 Fixed Network Traffic

The local fixed network traffic significantly declined from 51.1 million minutes in the previous quarter to reach 23.7 million minutes during the quarter under review. The 53.7 per cent decline recorded in the quarter and 43.7 per cent fall over the same quarter in the previous year could be attributed to a decrease in fixed line subscriptions.

The local fixed line on-net traffic recorded a decline of 93.5 per cent from 18.7 million minutes in the previous quarter to 1.2 million minutes during the quarter under review. Compared to the same period of the previous year, a decline of 93.7 per cent was posted. Similarly, fixed line traffic to other networks declined during the period from 32.3 million minutes posted the previous period to 22.4 million minutes during the quarter under review, representing a decline of 30.5 per cent. Compared to the same period of the previous year a 1.5 per cent decline is posted. Local fixed line traffic is shown in Table 14.

**Table 14: Local Fixed Network Traffic in Minutes** 

Local Fixed Network Traffic	Jan-Mar-12	Oct-Dec-11	Quarterly Variation (%)	Jan-Mar 11	Variation (%) Over the Same Period Last Year
Intra-Network Traffic(Fixed-Fixed)	1,225,017	18,799,971	-93.5	19,279,384	-93.7
Fixed to Other Network (Mobile and LLOs)	22,490,727	32,380,687	-30.5	22,833,224	-1.5
Total Local Fixed Network Traffic	23,715,744	51,180,658	-53.7	42,112,608	-43.7

Source: CCK, Operators' Returns.

The international incoming fixed line traffic declined by 0.4 per cent during the period from 4.24 million minutes recorded during the previous quarter to 4.22 million minutes during the quarter under review. Compared to the same period of the previous year, a significant decline of 88.2 per cent was recorded. Similarly, international outgoing traffic decreased by 61.3 per cent during the quarter to record 2.4 million minutes down from 6.2 million minutes posted the previous quarter. When compared to the same period of the previous year, this represents a decrease of 2.8 per cent. International fixed line network traffic is shown in Figure 6.

10,000,000 7,954,423 8,000,000 6,315,107 6,251,132 6,000,000 5,121,446 4,873,637 4,227,436 4,000,000 4,245,895 2,598,022 2,000,000 2,486,800 2,416,320 0 Jan-Mar 11 Apr-Jun 11 July-Sept 11 Oct-Dec 11 Jan-Mar 12 → International Incoming fixed voice minutes International outgoing fixed voice minutes

Figure 6: **International Fixed Line Network Voice Traffic** 

Source: CCK, Operators' Returns.

The continued decline in both international incoming and outgoing fixed traffic could be as a result of decreased fixed network subscriptions coupled with intense competition from the mobile operators that recorded growth in international incoming and outgoing mobile traffic.

#### 3. DATA AND INTERNET SERVICE

## 3.1 Subscriptions

As at 31<sup>st</sup> March 2012, there were 6.49 million Internet subscriptions up from 6.15 million recorded the previous period. This represents an increase of 5.5 per cent during the quarter under review and 69.0 per cent when compared to the same period of the previous year. The mobile data/Internet subscriptions on GPRS/EDGE and 3G continued to dominate the Internet market, representing a ratio of 98.8 per cent of the total Internet subscriptions.

There were 6.41 million mobile data/Internet subscriptions recorded during the quarter up from 6.07 million subscriptions in the previous quarter. Compared to the same period of the previous year, this represents an increase of 69.3 per cent. The continued increase in mobile data/Internet subscriptions could be as a result of stiff competition from the operators offering attractive promotional and special offers and competitive tariffs consequently leading to increased uptake of mobile data services and products.

The growth in fibre subscriptions registered during the quarter was 3.9 per cent to reach 38,966 subscriptions. When compared to the same period of the previous year, the subscriptions grew by 118.3 per cent.

The declining trend of satellite subscriptions was reversed during the quarter as the subscriptions increased from 669 the previous quarter to 787. The increase in subscription could be attributed to the need for operators to provide for redundancy as a result of the likely failure in the other modes of providing data/Internet services resulting from fibre cut and/or copper vandalism. The Internet subscriptions by category and estimated number of Internet users are shown in Table 15.

Table 15: Internet Subscriptions and Internet Users

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Internet/Data Subscriptions	Mar-12	Dec-11	Quarterly Variation (%)	Mar-11	Annual Variation (%)			
Total Internet Subscriptions	6,490,080	6,152,687	5.5	3,840,335	69.0			
Mobile Data/Internet Subscriptions	6,410,224	6,076,444	5.5	3,785,531	69.3			
Terrestrial Wireless Data/Internet Subscriptions	28,392	26,615	6.7	22,420	26.6			
Satellite Data/Internet Subscriptions	787	669	17.6	901	-12.7			
Fixed DSL Data/Internet Subscriptions	11,686	11,422	2.3	13,633	-14.3			
Fixed Fibre Optic Data/Internet Subscriptions	38,966	37,514	3.9	17,850	118.3			
Fixed Cable Modem Subscriptions	25	25	0.0	-	-			
Total Internet Users <sup>8</sup>	11,840,544	11,305,592	4.7	7,248,131	63.4			

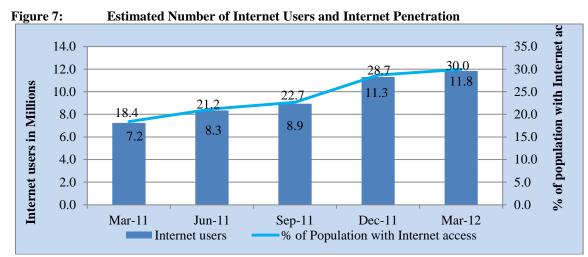
Source: CCK, Operators' Returns.

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<sup>&</sup>lt;sup>8</sup> Internet users is estimated by multiplying by 1 the number of mobile data/Internet subscriptions, by 10 terrestrial wireless subscriptions and by 100 fixed DSL, fibre optic and satellite subscriptions. There is no scientific method of estimating Internet users; for the purpose of this report the methodology adopted is borrowed from the Internet Market Study 2006. The multiplier of 2 for mobile data/Internet users has been adjusted to 1 as per the ITU recommendations.

From Table 15, the estimated number of Internet users grew by 4.7 per cent during the quarter and 63.4 per cent over the same quarter of the previous year. The continued growth in Internet users is mainly attributed to the competitive tariffs coupled with aggressive promotional and special offers offered by the mobile operators' and the increasing use of the social media during the period under review.

Internet penetration rose from 28.7 per cent recorded in the previous quarter to 30.0 per cent during the quarter under review. This represents 1.3 percentage points increase in the percentage of population that had access to Internet during the quarter. Compared to the same period of the previous year, an increase in Internet penetration of 11.6 percentage points was posted. Figure 7 shows an increasing trend in both the estimated number of Internet users and Internet penetration.



Source: CCK, Operators' Returns.

The level of concentration as measured by market shares through subscription in the mobile data/Internet market segment changed during the period under review. Safaricom Limited recorded the highest market share by subscription of 71.02 per cent followed by Essar Telecom Kenya Limited (10.01 per cent), Telkom Kenya Limited – Orange (9.52 per cent) while Airtel Networks Kenya Limited had the lowest market share of 9.45 per cent. Compared with the previous quarter, Safaricom experienced the highest reduction in the market share by subscriptions of 6.13 percentage points, followed by Essar (1.02 percentage points) and Airtel (0.55 percentage points) while Telkom is the only operator that recorded growth in the market share of 7.70 percentage points. Table 16 gives mobile data/Internet subscriptions by operator.

Table 16: Mobile Data/Internet Subscriptions By Operator

Name of Operator	Mar-12	Market Share (%)	Dec-11	Market Share (%)
Safaricom Limited	4,552,519	71.02	4,687,834	77.15
Essar Telecom Kenya Limited	641,482	10.01	669,982	11.03
Airtel Networks Kenya Limited	606,079	9.45	608,088	10.01
Telkom Kenya Limited (Orange)	610,142	9.52	110,538	1.82

Source: CCK, Operators' Returns, (-) Data not Available.

With regard to other fixed/terrestrial wireless data/Internet subscriptions, Kenya Data Networks Limited recorded the highest market share of 30.2 per cent followed by Wananchi Telecom Limited (23.8 per cent), Access Kenya Limited (14.5 per cent), Telkom Kenya Limited (13.7 per cent) and Safaricom Limited (7.5 per cent). The market shares are shown in Table 17.

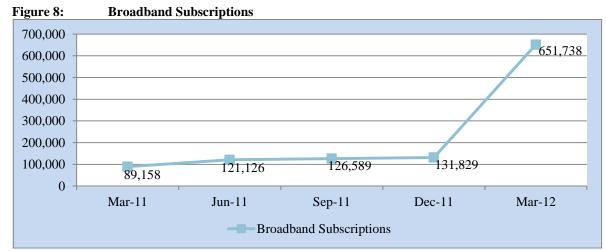
Table 17: Other Fixed/Wireless Internet Subscriptions by Operator

Name of Operator	Mar-12	Market Share (%)	Dec-11	Market Share (%)
Kenya Data Networks Limited	24,094	30.2	25,525	33.48
Wananchi Telecom Limited	18,971	23.8	17,958	23.55
Access Kenya Limited	11,600	14.5	11,150	14.62
Telkom Kenya Limited	10,908	13.7	10,423	13.67
Safaricom Limited	6,015	7.5	-	-
One Communications Limited	2,113	2.6	-	-
Swift Global	1,200	1.5	1,200	1.57
Flexible Bandwidth	-	2	1,198	1.57
Iway Africa	935	1.2	935	1.23
Internet Solutions	847	1.1	847	1.11
Other fixed/Terrestrial wireless operators	3,175	4.0	5,839	7.66

Source: CCK, Operators' Returns.

## 3.2 Broadband

During the quarter, the total broadband<sup>9</sup> subscriptions increased tremendously to record 651,738 subscriptions up from 131,829 subscriptions posted the previous quarter. This tremendous growth was brought about by increased subscriptions of GSM 3G and EVDO by one of the operators, Telkom Kenya Limited. Compared to the same quarter of the previous year, an increase of 584.3 per cent was recorded. The growth in broadband subscriptions is shown in Figure 8.



Source: CCK, Operators' Returns.

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<sup>&</sup>lt;sup>9</sup> In this report Broadband is defined as speeds greater than or equal to 256Kbps in one or both directions.

## 3.3 International Bandwidth

As at 31<sup>st</sup> March 2012, the amount of bandwidth available in the country was 5,361,918.5Mbps. This represents a marginal increase of 1.9 per cent from the previous quarter and when compared to the same quarter of the previous year, it represents an increase of more than 26-fold, as shown in Table 18.

**Table 18: International Internet Available Bandwidth (Mbps)** 

International Connectivity Bandwidth	Mar-12	Dec-11	Quarterly Variation (%)	Mar-11	Annual Variation (%)
SEACOM-International Internet Capacity (Mbps)	310,000	210,000	47.6	79,626.2	289.3
TEAMS - International Internet Capacity (Mbps)	101,990	101,990	0.0	122,880	-17.0
Telkom Kenya Limited (EASSY)*	4,949,278.8	4,949,278.8	0.0	-	-
VSAT	649.8	649.8	0.0	213.8	203.9
Total International Internet Bandwidth (Mbps)	5,361,918.6	5,261,918.6	1.9	202,720.0	2545.0

Source: CCK, Operators' Returns; (\*) Provisional, (-) Data not Available.

During the quarter, the international leased bandwidth rose significantly by 216.4 per cent to reach 167,476.9 Mbps. This increase resulted from the undersea cable providers that recorded growth of 216.9 per cent. This is an indication that there is increased demand for international connectivity particularly through the fibre optic undersea cable. On the other hand, satellite connectivity bandwidth declined by 48.9 per cent, from 108.3 Mbps recorded the previous quarter to 53.3 Mbps during the quarter. The international Internet connectivity bandwidth is shown in Table 19.

**Table 19: International Internet Connectivity Bandwidth (Mbps)** 

International Leased Bandwidth	Mar-12	Dec-11	Quarterly Variation (%)	Mar-11	Annual Variation (%)
International Undersea Internet Connectivity Bandwidth (Mbps)	167,421.6	52,830	216.9	20,000	737.1
International Satellite Internet Connectivity Bandwidth	55.3	108.28	-48.9	107.8	-48.7
Total International Internet Connectivity Bandwidth (Mbps)	167,476.9	52,938	216.4	20,107.8	732.9

Source: CCK, Operators' Returns; (\*) Provisional, (-) Data not Available.

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

The annual revenue and investments in the data/Internet market from 2007 to 2010 is shown in Table 20. This information is updated at every end of the financial year.

Table 20: Data/Internet Revenue and Investment

Data/Internet Revenue and Investments	2010	2009	2008	2007	Variation (%) Over 2009	Variation (%) Over 2008	Variation (%) Over 2007
Data/Internet Revenue (KES Millions)	148,033	145,800	7,595	7,370	1.5	1849.1	1908.6
Data/Internet Investments (KES Millions)	29,361	53,870	1,171	833	-45.5	2407.3	3424.7

Source: CCK, Operators' Returns. \* Note that revenues in the data market are not inclusive of the data revenues from the mobile sector.

## 4. POSTAL AND COURIER SERVICE

## 4.1 Postal and Courier Traffic

During the period under review, the total number of local letters sent declined by 14.3 per cent to record 16.8 million letters. Compared to the same quarter of the previous year, 28.6 per cent drop in letters sent was posted. The decline could be attributed to the increasing preference in the use of Internet compared to letters; and thus stiff competition from the telecom operators. On the other hand, the number of courier items sent increased by 11.0 per cent during the period to reach 421,552 items from 385,914 items sent the previous quarter. When compared to the same quarter of the previous year, an increase of 0.8 per cent in items sent was recorded.

With international letters received and sent in the postal and courier network, the number of international incoming letters received increased significantly by 68.6 per cent from 80,217 recorded in the previous quarter to 135,212 letters during the quarter. Compared to the same period of the previous year an increase of 20.6 per cent in the letters received was recorded. However, the international outgoing letters declined by 20.5 per cent, from 2.2 million letters posted the previous quarter to 1.7 million during the quarter. When compared to the same quarter of the previous year, this represents an increase of 19.0 per cent. Postal and courier traffic is shown in Table 21.

**Table 21: Postal and Courier Traffic** 

Post and Courier Traffic	Jan-Mar 12	Oct-Dec-11	Quarterly Variation (%)	Jan-Mar-11	Variation (%) Over the Same Period Last Year
Number of Letters Posted Locally	16,802,743	19,595,146	-14.3	23,543,314	-28.6
Total Courier Items Sent Locally	428,211	385,914	11.0	424,719	0.8
International Incoming Letters	135,212	80,217	68.6	112,162	20.6
International Outgoing Letters	1,785,269	2,244,615	-20.5	1,499,808	19.0

Source: CCK, Operators' Returns.

## 4.2 Postal and Courier Revenue and Investment

The annual revenue and investment in the postal and courier market segment for the period 2007 to 2010 is shown in Table 22.

**Table 22: Postal and Courier Revenue and Investments** 

Post/Courier Revenue and Investment	2010*	2009	2008	2007	Variation (%) Over 2009	Variation (%) Over 2008	Variation (%) Over 2007
Revenue (KES Millions)	1,535	4,255	13,907	13,719	-63.92	-88.96	-88.81
Investments (KES)	13,378,081	558,832,784	798,677,532	521,193,374	-97.61	-98.32	-97.43

Source: CCK, Operators' Returns, (\*) Provisional.

## 5. CONCLUSION

The ICT sector has undergone major phases in its growth and technological advancements over the period. With the sector continually innovating new services and products, there is no doubt that it will continue to expand. This is particularly important for the mobile industry that has recorded tremendous growth, innovation and investment over the period. The industry recorded growth in subscriptions and traffic during the quarter. This trend is likely to continue in the coming periods particularly with increased competition in the industry which has made operators to innovate and formulate new strategies in order to garner subscriptions consequently increasing their market shares.

The mobile money transfer service also recorded positive growth during the quarter under review. Operators that offer this service continue to rollout a variety of products including banking services. Thus, this service is expected to continue recording positive growth in the coming periods.

In the Internet/data market, mobile data/Internet market continued to dominate the sector with majority of subscriptions being through the mobile phones. The population that had access to Internet was recorded as 30.0 per cent during the period from 28.7 per cent in the previous period. The ease of access of this service through the mobile phones coupled with the popularity of social media among the young generation has and will continue to contribute immensely to the growth of Internet market in the country. Further, growth in the data/Internet market and broadband services is expected in the coming periods as result of the increase in the available international bandwidth of 5,361,918.6 Mbps during the quarter. However, the total used bandwidth is still very low with only 3.1 per cent utilization. Initiatives that encourage the uptake of this capacity could be considered as this will ultimately stimulate demand for the capacity given the expected growth in demand for data/Internet and broadband services.

The fixed line network market segment and postal and courier industry continued to record negative growth over the period. With regard to fixed line services, vandalism of copper cables, high maintenance costs as well as fixed-mobile substitution particularly in developing countries could have had a major impact in the decline of this service.

In the postal and courier sector, a downward trend in the quantities of letters sent was recorded during the period. Similarly, international outgoing letters experienced a decline of 20.6 per cent during the period. This downward trend in the performance of the postal and courier industry could be reversed with adoption and utilization of modern ICTs. Provision of high quality postal and courier services coupled with a wide range of innovative products that meet customers growing expectation, could also be explored to reverse the negative trend experienced in the industry.

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