

#### QUARTERLY SECTOR STATISTICS REPORT

# 2<sup>nd</sup> QUARTER OCTOBER-DECEMBER 2011/2012

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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 and Communication Technologies

Mbps Megabits per second MoU Minutes of Use

SIM Subscriber Identification Module

SMS Short Messaging Service
VSAT Very Small Aperture Terminal

#### 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.

#### II. SUMMARY

By the end of the quarter under review (Quarter 2 of 2011/12 i.e. the period from 1<sup>st</sup> October to 31<sup>st</sup> December 2011), there were a total of 28.08 million mobile subscriptions in the country up from 26.49 million subscriptions recorded during the previous quarter. This represents an increase of 5.99 per cent during the period. Pre-paid subscriptions grew by 6.03 per cent to record 27.84 million subscriptions while post-paid subscriptions grew by 1.31 per cent to record 236,436 subscriptions during the period. Mobile penetration was recorded as 71.3 per cent during the period up from 67.2 per cent recorded during the previous period.

The main fixed lines (fixed terrestrial lines and fixed wireless) subscriptions recorded a downward trend of 20.24 per cent during the period, from 355,493 fixed lines during the previous period to 283,546 during the quarter under review. This represents a fixed-line tele-density of 0.72 per cent from 0.90 per cent recorded during the previous period.

Total local mobile traffic declined to 6.70 billion minutes from 7.09 billion minutes recorded during the previous period, representing a decrease of 5.58 per cent. This was as a result of increase in tariffs by a key mobile operator that led to the reduction in local mobile traffic.

Similarly, Minutes of Use (MoU) per subscriber per month declined to 79.9 down from 89.3 recorded in the previous period, registering a decrease of 10.53 per cent. In addition, the number of SMS per subscriber per month declined by 38.52 per cent from 17.42 SMS during the previous period to 10.71 SMS during the period under review.

Meanwhile, Internet service continued to rise steadily during the quarter to stand at 6,152,687 Internet subscriptions from 5,422,009 during the previous period, representing a 13.48 per cent increase. Likewise, the estimated number of Internet users rose by 21.55 per cent from 14.30 million users in the previous period to 17.38 million during the period under review.

Broadband<sup>1</sup> subscriptions increased to 131,829 from 126,589 recorded during the previous period. This represents an increase of 4.14 per cent. Broadband subscriptions represented 2.14 per cent of the total Internet subscriptions.

International connectivity bandwidth increased by 3.15 per cent from 51,319.35 Mbps in the previous period to 52,938 Mbps during the period under review. The total available bandwidth in the country was recorded as 5,261,919Mbps during the period under review.

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

In the postal sector, the total local letters sent declined by 4.75 per cent from 20.57 million letters sent during the previous period to 19.59 million letters sent during the period under review. International incoming letters were recorded as 80,217 from 100,348 recorded during the period under review. Similarly international outgoing letters declined by 17.96 per cent from 2.73 million recorded during the previous period to 2.24 million recorded during the period under review.

#### 1. CELLULAR MOBILE SERVICES

#### 1.1 Subscriptions

At the end of the quarter under review, there were 28.08 million mobile phone subscriptions in Kenya up from 26.4 million recorded during the previous period. This represents an increase of 6.0 per cent during the period, and an increase of 12.46 relative to same period of the previous year.

The increase in mobile subscriptions is an indication of operators' determination to continue growing their subscriber base through tactful marketing approaches as a strategy towards customer acquisition.

The summary of growth in mobile subscriptions is as shown in Table 1.

**Table 1: Mobile Subscriptions** 

Table 1. Woodle Subscriptions								
Subscription type	Dec-11	Sep-11	Quarterly Variation (%)	Dec-10	Annual % Change (12 Months)			
Prepaid Subscriptions	27,844,335	26,260,564	6.03	24,756,190	12.47			
Post-Paid subscriptions	236,436	233,376	1.31	212,701	11.16			
Total Mobile subscriptions	28,080,771	26,493,940	6.00	24,968,891	12.46			

Source: CCK, Operators' Returns

The number of Pre-paid subscriptions grew by 6.03 per cent during the period under review compared to 1.31 per cent growth for Post-paid subscriptions. In addition, compared to the same period of the previous year, the growth in Pre-paid and Post-paid subscriptions was recorded as 12.47 per cent and 11.16 per cent, respectively.

As has been the trend, the number of prepaid subscriptions represented 99 per cent of the total mobile subscriptions, characteristic generally typical to developing and emerging economies.

The total net additions<sup>2</sup> during the period under review were recorded as 1,586,831 up from 1,214,172 recorded in the previous period, posting an increase of 30.69 per cent.

The summary of growth in new subscriptions is illustrated in Figure 1.

<sup>&</sup>lt;sup>2</sup> Net additions refer to new subscriptions acquired during the period.



Figure 1: Net Additions in Mobile Subscriptions

Source: CCK, Operators' Returns

During the quarter under review, the four mobile operators experienced gains in subscriptions. In particular, Safaricom Ltd recorded the highest gains with 741,560 new subscriptions from 593,177 recorded in the previous period. Essar Telecom (yuMobile) followed with 600,285 new subscriptions up from 46,742 recorded during the previous period. Orange gained 144,208 new subscriptions from 16,686 from the previous period while Airtel Networks Ltd had 100,778 new subscriptions from 557,567 in the previous period.

The summary of subscriptions per operators is as shown in Table 2.

Table 2: Mobile Subscriptions per Operator

Table 2. Mobile	Table 2. Woone Subscriptions per Operator								
Name of	Dec-11	Sep-11	Quarterly	Dec-10	Annual %				
Operator			Variation (%)		Change				
					(12 Months)				
Safaricom	18,687,923	17,946,363	4.13	17,451,325	7.09				
Airtel	4,272,964	4,172,186	2.42	3,792,404	12.67				
Essar Telecom (yuMobile)	2,229,974	1,629,689	36.83	1,591,700	40.10				
Telkom Orange	2,889,910	2,745,702	5.25	2,133,462	35.46				

Source: CCK, Operators' Returns

In terms of market share by subscription, Safaricom Limited recorded 66.6 per cent down from 67.7 per cent recorded during the previous period. Airtel recorded 15.2 per cent down from 15.7 recorded during the previous period while Orange recorded 10.3 per cent

from 10.4 per cent recorded during the previous period. Essar Telecom (yuMobile) had 7.9 per cent up from 6.2 per cent recorded during the previous period.

The profile of market share by subscription per operator is as illustrated in Figure 2.

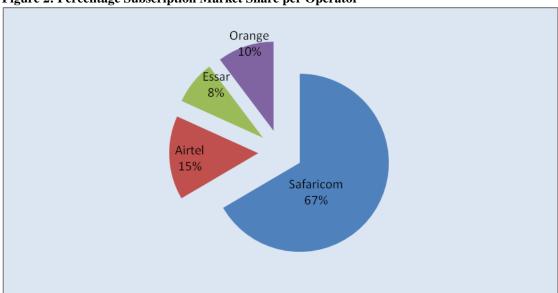
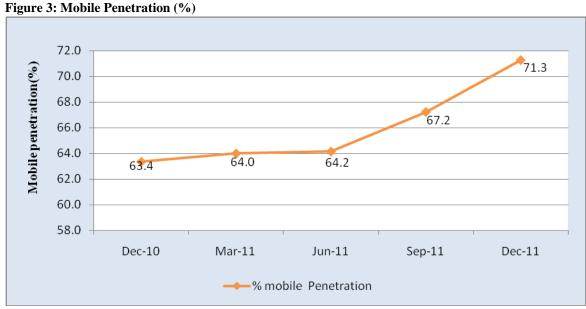


Figure 2: Percentage Subscription Market Share per Operator

Source: CCK, Operators' Returns

As illustrated in Figure 3, mobile penetration reached 71.3 per 100 inhabitants by the end of the quarter under review up from 67.2 per 100 inhabitants recorded during the previous period. This represented an increase of 4.1 percentage points. Compared to the same period the previous year, an increase of 7.9 percentage points was recorded.



Source: CCK, Operators' Returns

#### 1.2 Mobile Money Transfer

During the quarter under review, an increase of 3.08 per cent subscriptions in mobile money transfer was recorded from 18.4 million in the previous period to 18.9 million. Compared to the same period of the previous year, an increase of 42.13 per cent in mobile money subscriptions was registered. Moreover, the number of mobile money transfer subscriptions represents 70.35 per cent of the total mobile subscriptions. This rapid uptake of mobile money is an indication of the continued demand of the service particularly to low income earners who do not have access to banking services.

At the same time, the number of mobile money agents grew by 6.84 per cent during the period, from 44,922 during the previous period to 47,997during the period under review. Compared to the same period of the previous year, a growth of 34.51 per cent was recorded.

The summary of mobile money transfer is shown in Table 3.

**Table 3: Mobile Money Transfer** 

Mobile money transfer	Dec-11	Sep-11	Quarterly Variation (%)	Dec-10	Annual % Change (12 Months)
Subscriptions	18,981,443	18,414,667	3.08	13,355,354	42.13
Number of agents	47,997	44,922*	6.84	35,684*	34.51
Total Deposits(KES)	176,836,359,552	117,369,930,600	50.67	114,132,875,724	54.94

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

The total deposits made during the period under review were recorded as KSh176 billion, representing an average of KSh58 billion deposits made per month. This is against KSh117 billion deposits made during the previous reporting period, representing an increase of 50.67 per cent during the period under review and 54.94 per cent increase compared to the same period of the previous year.

#### 1.3 Mobile Traffic and Usage Pattern

#### 1.3.1 Voice Traffic

The quarter under review, Q2 2011/12, witnessed a total of 6.7 billion mobile voice minutes recorded down from 7.09 billion minutes of the previous period, representing a decline of 5.58 per cent during the period. This decline could have been as a result of increased mobile tariffs by the major operator, Safaricom Ltd, during the period under review and as a result there was significant decline in the operators' on-net traffic and

consequently an overall decline in local mobile traffic. Compared to the same period the previous year, an increase of 16.21 per cent was recorded.

As shown in Table 4, on-net traffic declined by 10.78 per cent from 6.58 billion minutes in the previous period to 5.87 billion minutes recorded during the period under review. The decline was largely due to Safaricom Ltd that recorded 18.28 per cent decline in onnet traffic. Compared to the same period of the previous year, an increase of 15.60 per cent was recorded.

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

Mobile money transfer	Oct-Dec 11	Jul-Sep 11	Quarterly Variation (%)	Oct-Dec 10	Quarterly Variation (%)
	By	traffic Origin(Outgo	ing traffic)		
Own network –Own network	5,870,570,860	6,580,097,875	-10.78	5,078,132,578	15.60
Own network to other mobile networks	789,197,560	498,957,125	58.17	668,911,201	17.98
Mobile network to fixed network	42,171,413	19,357,556	117.86	19,904,340	111.87
Total traffic origination(Outgoing)	6,701,939,833	7,098,412,556	-5.58	5,766,948,119	16.21
	By tra	ffic termination(Inc	oming traffic)		
Own network –Own network	5,870,570,860	6,580,097,875	-10.78	5,078,132,578	15.60
Other mobile networks to own network	839,328,628	492,244,117	70.51	689,193,407	21.78
Fixed network to mobile network	32,281,989.00	29,857,148	8.12	40,300,255	-19.90
Total traffic termination(Incoming traffic)	6,742,181,477	7,102,199,140	-5.07	5,807,626,240	16.09

Source: CCK, Operators' Returns

In addition, the total number of voice minutes received on all mobile networks declined by 5.07 per cent from 7.1 billion minutes in the previous period to 6.7 billion minutes recorded during the period under review. Compared to the same period of the previous year, an increase of 16.09 per cent was recorded.

Conversely, there was recorded increase in traffic across networks during the period under review. The traffic was recorded at 789 million minutes in the period under review from 498 million minutes in the previous period representing a 58.17 per cent increase.. This growth could have been triggered by the increase in tariffs by the major operator which could have influenced their subscribers to use other networks to make off-net calls.

Mobile to fixed traffic increased significantly by 117.86 per cent during the period under review from 19 million minutes during the previous period to 42 million minutes during the period under review. Compared to the same period of the previous year, an increase of 111.87 per cent is recorded. Needless to say, the overall increase in fixed network traffic is an indication that despite the reduction in fixed line network, the narrowing of

price differentials for mobile and fixed has had a great effect in the fixed line network growing its voice traffic. Consequently, traffic from fixed to mobile increased by 8.12 per cent from 29 million minutes during the previous period to 32 million minutes recorded during the period under review. However, compared to the same period of the previous year a decline of 19.90 per cent was recorded.

During the period under review, the volume of on-net traffic to the total mobile voice traffic declined by 5.1 percentage points to represent 87.60 per cent of the total mobile traffic compared to 92.70 per cent recorded during the previous period.

The portion of off-net traffic, however, increased by 5.10 percentage points from 7.30 per cent of the total traffic recorded during the previous period to 12.40 per cent recorded during the period under review. The increase in off-net activity and decline in on-net activity shows that the increase in price of on-net above off-net charges had a significant bearing to the on-net traffic.

The summary is illustrated in Figure 4.

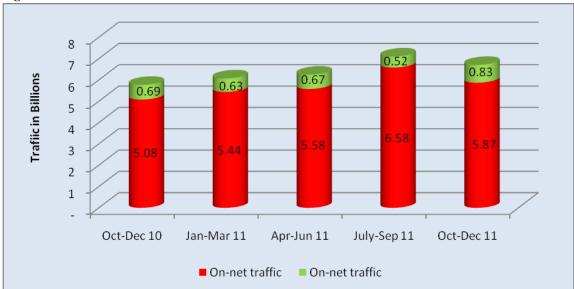


Figure 4: Growth in Mobile Traffic in Minutes

Source: CCK, Operators' Returns

#### 1.3.2 **Voice Traffic by Operator**

The market share by voice traffic per operator saw Safaricom Ltd record 77.86 per cent from 88.27 per cent recorded during the previous period, a decline of 10.41 percentage points. Airtel gained 6.24 percentage points to record 12.79 per cent market share from 6.55 per cent recorded during the previous period. Essar Telecom (yuMobile) recorded

8.53 per cent market share up from 4.58 per cent recorded during the previous period. Orange gained 0.22 percentage points to record 0.82 per cent market share from 0.60 per cent recorded during the period under review.

The summary of voice traffic and market shares per operator is as shown in Table 5.

Table 5: Voice traffic by operator

Name of Operator	Oct-Dec 11				Jul-Sep 11				
	On-net	Off-net	Total	%Market Share	On-net	Off-net	Total	%Market Share	
Safaricom	4,990,830,943	227,004,015	5,217,834,958	77.86	6,107,113,620	158,773,784	6,265,887,404	88.27	
Airtel	427,361,165	429,766,670	857,127,835	12.79	197,613,358	267,443,282	465,056,640	6.55	
Essar Telecom	436,837,581	135,028,258	571,865,839	8.53	260,915,776	63,848,060	324,763,836	4.58	
Telkom Orange	15,541,171	39,570,030	55,111,201	0.82	14,455,121	28,249,555	42,704,676	0.60	

Source: CCK, Operators' Returns

Despite the decline in mobile voice traffic during the period, there is still a wide disparity in market share on voice traffic by operator particularly on the on-net traffic which could be attributed to favorable promotional offerings within the operator's network that consequently creates clubbing effect within the network.

#### 1.3.3 Minutes of Use (MoU)

During the quarter under review, the average number of minutes made on the mobile network per subscriber per month dropped by 10.52 per cent from 89.3 minutes during the previous period to 79.9. Notably, the growth in mobile subscriptions of 5.99 per cent during the period was not proportional to the growth in mobile traffic. As a result, the decline in mobile traffic evidently brought about the reduction in MoU. Compared to the same period the previous year, an increase of 3.77 per cent was recorded. The summary of average minutes of use per subscriber per month is illustrated in Figure 5.

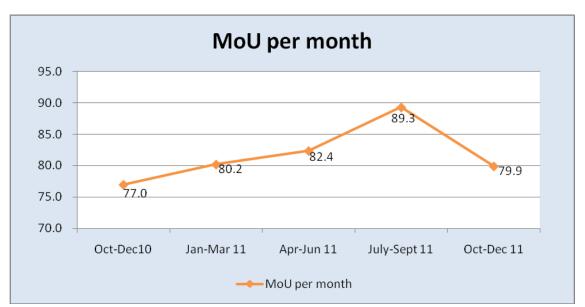


Figure 5: Minutes of Use per Subscriber per Month

Source: CCK, Operators' Returns

The use of short messaging service also recorded a decline during the period under review. During the reporting period, a total of 902 million messages were sent down from 1.38 billion during the previous period, posting a decline of 34.85 per cent. Compared to the same period of the previous year, an increase of 57.79 per cent was recorded.

As shown in Table 6, the on-net SMS declined by 40.56 per cent from 1.29 billion sent during the previous period to 768 million SMS during the period under review. However, the off-net SMS increased significantly by 45.93 percent during the reporting period to record 133 million SMS from 91 million in the previous period. Compared to the same period the previous year, an increase of 46.14 per cent was recorded.

**Table 6: Short Messaging Service** 

Mobile money	Oct-Dec 11	Jul-Sep 11	Quarterly	Oct-Dec 10	Quarterly
transfer			Variation (%)		Variation (%)
On-net SMS	768,270,544	1,292,847,167	-40.56	480,154,343	-60.00
Off-net SMS	133,733,880	91,640,192	45.93	91,511,760	46.14
Total SMS sent	902,004,424	1,384,487,359	-34.85	571,666,103	57.79
SMS per					
Subscriber per	10.71	17.42	-38.52	7.63	40.37
month					

Source: CCK, Operators' Returns

The average number of SMS sent by each subscriber per month was recorded as 10.71 down from 17.42 in the previous quarter representing a decline of 38.52 per cent. Compared to the same period of the previous year an increase of 40.37 per cent is recorded.

Additionally, the use of mobile service sent 1,723,544 multimedia messages during the period, which was 1.98 per cent more messages than what was recorded in the previous period. Compared to the same period of the previous year, an increase of 7.59 per cent is recorded. Table 7 gives a summary of the number of Multimedia messages sent.

**Table 7: Multimedia Messaging Service** 

MMS	Oct-Dec 11	Jul-Sep 11	Quarterly Variation (%)	Oct-Dec 10	Quarterly Variation (%)
MMS	1,723,544	1,690,084	1.98	1,601,960	7.59
MMs per subscriber per month	0.02	0.02	0.00	0.02	0.00

Source: CCK, Operators' Returns

While the rate of growth indicates a gentle slope, the absolute values recorded for the traffic of this service are relatively low compared to SMS service. Essentially, the number of MMS sent by each subscriber per month has been below 1 over the period, an indication that the service is still not very popular among the users of mobile services.

#### 1.3.4 Roaming Traffic

The period under review, recorded a decline in roaming out<sup>3</sup> voice traffic from 37 million recorded in the previous quarter to 29 million recorded during the period under review. Compared to the same period of the previous year a decline of 1.16 per cent is recorded.

At the same time, the quarter under review recorded 5 million roaming in voice traffic from 8 million recorded during the previous period, a decline of 27.68 per cent. Compared to the same period of the previous year an increase of 23.67 per cent was recorded.

Table 8 gives a summary of roaming traffic.

**Table 8: Roaming Traffic** 

Roaming traffic	Oct-Dec 11	Jul-Sep 11	Quarterly Variation (%)	Oct-Dec 10	Quarterly Variation (%)
Roaming voice minutes own subscribers on foreign networks	29,609,552	37,074,001	-20.13	29,958,271	-1.16
Roaming voice minutes foreign subscribers on local network	5,986,703	8,278,072	-27.68	4,840,847	23.67
Roaming messages own subscribers on foreign networks	6,625,691	5,996,858	10.49	8,412,791.00	-21.24
Roaming messages foreign	7,726,050	6,340,340	21.86	5,292,940	45.97

<sup>&</sup>lt;sup>3</sup> Roaming out is traffic originated and terminated by subscribers of national networks as users of foreign networks abroad.

<sup>&</sup>lt;sup>4</sup> Roaming in is traffic originated and terminated by foreign subscribers on national networks.

Source: CCK, Operators' Returns

On the contrary, the roaming out messages increased by 10.49 per cent during the period from 5.99 million to 6.62 million messages recorded during the period under review.

Similarly, the number of roaming in messages increased from 6.34 million during the previous period to 7.72 million messages during the period under review. Compared to the same period of the previous year an increase of 45.97 per cent was recorded. Notably, roaming out and roaming in messages increased during the period while roaming out and roaming in voice traffic declined during the period. The increase in roaming out and roaming in messages could have partially offset the decline in roaming out and roaming in voice traffic.

#### 1.3.5 <u>International Mobile Traffic</u>

During the quarter under review, international incoming mobile voice traffic rose by 3.67 per cent to 153 million minutes from 148 million during the previous period. Compared to the same period of the previous year, an increase of 1.96 per cent was recorded.

At the same time international outgoing mobile traffic experienced a decline of 20.92 per cent during the period to record 148 million minutes down from 187 million minutes recorded during the period. The increase in international incoming traffic could partly explain the decline in international outgoing traffic. Compared to the same period of the previous year, an increase of 15.99 per cent is recorded.

The summary of international mobile traffic is shown in Table 9.

Table 9: International Mobile Traffic (Minutes)

Tuble 51 International Number Plante (Minutes)								
International mobile traffic	Oct-Dec 11	Jul-Sep 11	Quarterly Variation (%)	Oct-Dec 10	Quarterly Variation (%)			
International incoming mobile voice minutes	153,664,018	148,222,266	3.67	150,716,492	1.96			
International outgoing Mobile minutes	148,164,029	187,360,927	-20.92	127,735,309	15.99			
International incoming mobile SMS	24,545,535	19,547,448	25.57	8,889,427	176.12			
International outgoing mobile SMS	3,594,638	3,250,841	10.58	5,618,547	-36.02			

Source: CCK, Operators' Returns

On the other hand, international incoming mobile SMS increased significantly by 25.57 per cent from 19.54 million messages recorded in the previous quarter to 24.54 million messages during the period under review. Compared to the same period of the previous year, an increase of 176.12 per cent was recorded.

In addition, international outgoing SMS grew to 3.59 million messages from 3.25 million messages recorded during the previous period, an increase of 10.58 per cent. The same period of the previous year recorded 36.02 per cent less messages than that recorded during the period under review.

#### 1.3.6 Mobile Coverage

During the quarter under review, 89.10 per cent of the population had access to mobile services compared to 84.5 per cent recorded in the same period of the previous year, representing a 4.6 percentage point increase.

At the same time, the percentage land mass covered by mobile services was increased to 34.45 per cent from 34.00 per cent recorded in the same period of the previous year.

A summary of mobile coverage is shown in Table 10.

**Table 10: Mobile Coverage** 

MMS	Oct-Dec 11	Jul-Sep 11	Quarterly Variation (%)	Oct-Dec 10	Annual Variation (%)
Population Coverage (%)	89.10	89.10	0.00	84.5	4.6
Land coverage (%)	34.45	34.45	0.00	34.0	0.45

Source: CCK, Operators' Returns

#### 1.4 Mobile Revenue and Investments

Mobile revenue and investments from 2007 is as shown in Table 11. This information will be updated every end of the financial year since this data is generated on an annual basis.

**Table 11: Mobile Revenue and Investments (KES)**<sup>5</sup>

MMS	2010	2009	2008	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>5</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 period under review, the total main fixed lines (fixed terrestrial lines and fixed wireless) declined to 283,546 down from 355,493 during the previous year. This represents a decline of 20.24 per cent during the period and 26.37 per cent decline when compared to the same period the previous year. The continued vandalism of the copper cables coupled with fixed-mobile substitution could explain the negative growth of the fixed line service in the country.

The summary of fixed network subscription is shown in Table 12.

**Table 12: Fixed network subscriptions** 

Subscription type	Dec-11	Sep-11	Quarterly Variation (%)	Dec-10	Annual % Change
Fixed terrestrial subscriptions	90,814	148,745	-38.95	226,587	-59.92
Fixed wireless subscriptions	192,732	202,389	-4.77	158,520	21.58
Total Main fixed line subscriptions	283,546	355,493	-20.24	385,107	-26.37

Source: CCK, Operators Returns

The total net additions for the fixed line network were recorded as negative 71,947 subscriptions from negative 19,449 subscriptions recorded during the previous period. This translates to a negative growth of 20.24 per cent during the period compared to negative 5.19 per cent recorded during the previous period.

The growth in fixed line subscription is illustrated in Figure 6.



Figure 6: Percentage growth in fixed line subscriptions

Source: CCK, Operators Returns

#### 2.2 **Fixed Network Traffic**

As shown in Table 13, the total fixed line network<sup>6</sup> recorded 51.18 million minutes of voice traffic during the period under review down from 69.64 million recorded in the previous quarter, representing a decline of 26.51 per cent. Compared to the same period of the previous year, a decline of 36.73 per cent was recorded. The decline in the fixed line traffic could be as a result of continued reduction in fixed line subscriptions and consequently the negative effect in traffic growth.

In addition, the on-net fixed line traffic was recorded as 18.79 million minutes down from 40.14 million minutes recorded during the previous period, a reduction of 53.17 per cent... Compared to the same period of the previous year, this represents a decline of 66.56 per cent. Meanwhile, fixed line traffic to other networks recorded an increase of 9.75 per cent during the period from 29.50 million minutes recorded during the previous period to 32.38 million recorded during the period under review. Compared to the same period of the previous year an increase of 31.23 per cent was recorded.

**Table 13: Local Fixed Network Traffic in Minutes** 

International mobile traffic	Oct-Dec 11	Jul-Sep 11	Quarterly Variation (%)	Oct-Dec 10	Quarterly Variation (%)
Intra-network traffic(Fixed-Fixed)	18,799,971	40,141,661	-53.17	56,212,335	-66.56
Fixed to other network(Mobile and LLOs)	32,380,687	29,503,945	9.75	24,673,858	31.23
Total Local Fixed network traffic	51,180,658	69,645,606	-26.51	80,886,193	-36.73

<sup>&</sup>lt;sup>6</sup> Fixed network refers to fixed line and fixed wireless

Source: CCK, operators' Returns

The international incoming fixed line traffic declined by 12.88 per cent from 4.87 million minutes recorded during the previous period to 4.24 million during the period under review. Likewise, international outgoing fixed line traffic declined by 1.01 per cent to reach 6.25 million minutes from 6.31 million recorded during the previous period. The continued competition from the mobile service as well as the decline in fixed line subscriptions could be the main reasons behind this decline.

The growth in international fixed line voice traffic is as illustrated in Figure 7.

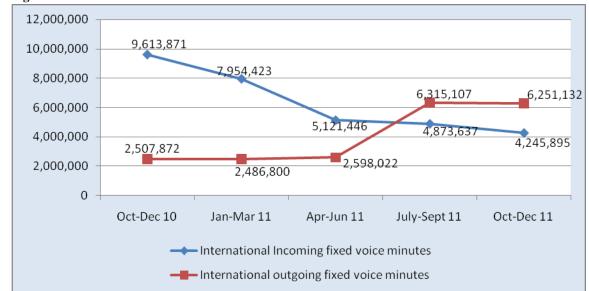


Figure 7: International Fixed Line Network Voice Traffic

Source: CCK, Operators' Returns

#### 3. DATA AND INTERNET SERVICE

#### 3.1 Subscriptions

At the end of Quarter 2 of the 2011/12 financial year, there were a total of 6.15 million Internet subscriptions in the country. This represented an increase of 13.20 per cent from the previous period and 86.62 per cent increase compared to the same period of the previous year.

Mobile data/Internet subscriptions on GPRS/EDGE and 3G recorded the highest portion of the total Internet/data subscriptions of 6.07 million subscriptions compared to 5.37 million subscriptions recorded during the previous period, which represents an increase of 13.04 per cent.

Fixed fiber subscriptions recorded an upward trend with a growth of 66.97 per cent during the period. Compared to the same period of the previous year, a growth of 337.43 per cent was recorded, which shows that the service is rapidly gaining ground and possibly consuming subscriptions from satellite service that have been on a declining trend.

On the other hand, satellite subscriptions declined from 774 subscriptions in the previous period to 669 during the quarter under review. A reduction of 13.57 per cent was recorded during the period and 27.36 per cent decline when compared to the same period of the previous year.

The summary of Internet subscriptions is as shown in Table 14.

**Table 14: Internet Subscriptions** 

Subscription by type	Dec 11	Sep 11	Quarterly Variation (%)	Dec 10	Annual Variation (%)
Total internet subscriptions	6,152,687	5,435,008	13.20	3,296,975	86.62
Mobile data/internet subscriptions	6,076,444	5,376,050	13.02	3,257,100	86.56
Terrestrial wireless data/internet subscriptions	26,615	13,059	103.81	17,965	48.15
Satellite data/internet subscriptions	669	774	-13.57	921	-27.36
Fixed DSL data/internet subscriptions	11,422	11,016	3.69	12,413	-7.98
Fixed fiber optic data/internet subscriptions	37,514	22,467	66.97	8,576	337.43
Fixed cable modem subscriptions	25	25	0.00	25	0.00
Total Internet users <sup>7</sup>	17,382,034	14,300,679	21.55	8,884,850	95.63

Source: CCK, Operators' Returns

Likewise, the quarter under review recorded an increase of 21.55 per cent on the estimated number of Internet users in the country. This was recorded as 17.38 million users from 14.30 million recorded during the previous period. Compared to the same period of the previous year, an increase of 95.63 per cent was realized. This increase could be attributed to intensified promotions on social media by the mobile operators; in particular one of the operators gave free browsing to this service.

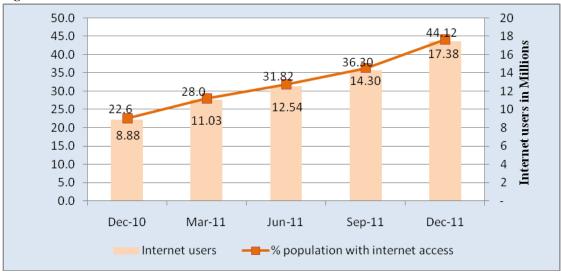
At the end of the quarter under review, 36.3 per cent of the population had access to Internet up from 31.8 per cent recorded in the previous period, posting an increase of 4.5 percentage points from the previous period. Compared to the same period of the previous year, an increase of 14.2 percentage points was recorded.

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<sup>&</sup>lt;sup>7</sup> Internet users is estimated by multiplying by 2 the number of mobile data/internet subscriptions, by 10 terrestrial wireless subscriptions, and by 100 fixed DSL, Fiber 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 of CCK.

The summary of the growth of Internet users and access is illustrated in Figure 8.

**Figure 8: Internet Penetration** 



Source: CCK, Operators' Returns

As shown in Table 15, during the period under review Safaricom recorded the highest number of mobile data/Internet subscriptions with a market share of 77.15 per cent. Essar Teleom (yuMobile) had 11.03 per cent while Airtel and Telkom Orange had 10.01 per cent and 1.82 per cent market share respectively.

Table 15: Mobile data/internet Subscriptions by operator

Name of Operator	Dec 11	% Market share	Sept-11	% Market share
Safaricom Ltd	4,687,834	77.15	4,307,746	80.34
Essar Telecom (yuMobile)	669,982	11.03	487,793	9.10
Airtel Kenya Ltd	608,088	10.01	460,221	8.58
Telkom Orange	110,538	1.82	106,290	1.98

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

In terms of other fixed/terrestrial wireless data/internet subscriptions, the Kenya Data Networks led the pack with a market share of 33.48 percent followed by Wananchi Telecom which had a market share 23.55 per cent..

A summary of fixed/terrestrial wireless data/Internet subscriptions by operator is as shown in Table 16.

Table 16: Other fixed/Wireless internet Subscriptions by Operator

Name of Operator	Dec 11	% Market share	Sept-11	% Market share
Kenya Data Networks	25,525	33.48	21,326	36.17
Wananchi Telecom	17,958	23.55	8,400	14.25
Access Kenya	11,150	14.62	11,150	18.91
Telkom Kenya	10,423	13.67	10,088	17.11
Swift Global	1,200	1.57	1,520	2.58
Flexible Bandwidth	1,198	1.57	1,198	2.03
IWay Africa	935	1.23	1,221	2.07
Internet Solutions	847	1.11	847	1.44
Call Kenya Networks	627	0.82	636-	1.08
Tangerine	543	0.71	412-	0.70
Others	5,839	7.66	2,160	3.66

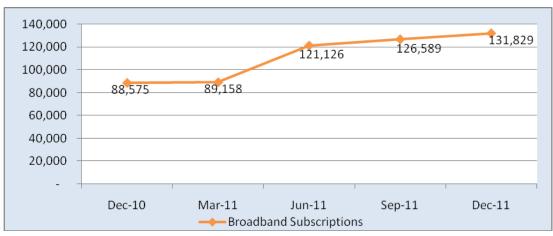
Source: CCK, Operators' Returns, (-) Subscriptions below the first 10, aggregated under others

#### 3.2 Broadband

The quarter under review recorded broadband<sup>8</sup> subscriptions of 131, 829 up from 126,589 recorded in the previous period. This was an increase of 5,240 new subscriptions, representing a growth of 4.14 per cent during the period. When compared to the same period of the previous period, an increase of 48.83 per cent was recorded. This continued growth in broadband services is an indication that consumers are demanding for higher capacity with superior speeds for this service.

Figure 9 illustrates the growth of broadband subscriptions over the period.

Figure: Broadband subscriptions



Source: CCK, Operators' Returns

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<sup>&</sup>lt;sup>8</sup> In this report Broadband is defined as speeds greater than or equal to 256Kbps in one or both directions.

#### 3.3 International Bandwidth

In the quarter being reported, the total available bandwidth in the country was recorded as 5,261,919 Mbps up from 5,261,839 Mbps recorded during the previous period. This represents more than 25-fold increase compared to the same period of the previous year.

The summary of international available bandwidth is as shown in Table 17.

**Table 17: International Internet available Bandwidth (Mbps)** 

International connectivity bandwidth	Dec 11	Sep 11	Quarterly Variation (%)	Dec 10	Annual Variation (%)
Seacom-International internet capacity(Mbps)	210,000	210,000	0.00	79,626.24	163.73
Teams- International internet capacity(Mbps)	101,990	102,351	-0.35	122,880	-17.00
Telkom Kenya Ltd (EASSY)*	4,949,278.72	4,949,278.72	0.00	-	-
VSAT	649.78	209.56	210.07	213.78	203.94
Total international					
internet bandwidth(Mbps)	5,261,919	5,261,839.28	0.00	202,720.02	2495.66

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

Unlike in the previous periods where satellite bandwidth was on a declining trend, the period under review recorded a significant increase in satellite bandwidth from 209.56 Mbps recorded in the previous period to 649.78 Mbps during the period under review. This represented an increase of 210.07 per cent.

Similarly the quarter under review recorded an increase in international connectivity bandwidth of 3.15 per cent from 51,319.35 Mbps in the previous period to 52,938 Mbps recorded during the period under review.

The international connectivity bandwidth is shown in Table 18.

Table 18: International Internet connectivity Bandwidth (Mbps)

Tubic 10. International		10001/10/ 2011101/110	(1.15 <b>p</b> 5)		
International leased bandwidth	Dec 11	Sep 11	Quarterly Variation (%)	Dec 10	Annual Variation (%)
International undersea internet connectivity bandwidth(Mbps)	52,830	51,200.35	3.18	20,000	164.15
International satellite internet connectivity bandwidth	108.28	119	-9.00	209.56	-48.33
Total international internet connectivity bandwidth(Mbps)	52,938	51,319.35	3.15	20,209.56	161.95

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

Satellite connectivity bandwidth declined by 9per cent from 119 Mbps recorded during the previous period to 108.28 Mbps recorded during the period under review. Compared to the same period of the previous year a decline of 48.33 per cent was recorded.

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

Data/Internet revenue and investments from 2007 is as shown in Table 19. This information will be updated every end of the financial year since this data is generated on an annual basis.

Table 19: Data/Internet revenue and Investment

Data/internet revenue and investments	2010	2009	2008	2007	% Change over 2009	% Change over 2008	% Change 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 revenue 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

In the quarter under review, , the number of letters sent through postal services declined to 19.59 million down from 20.49 million recorded during the previous period, representing a decrease of 4.41 per cent. The stiff competition the sector faces from the telecommunication players has had a negative impact on the growth of this sector. For instance the growth in Internet usage volume during the period could be one of the indications that some of the postal traffic is being consumed by the telecommunication sector. Compared to the same period of the previous year a decline of 33.51 per cent is recorded

In addition, as shown in Table 20, the number of courier items sent through postal and courier services declined by 1.69 per cent from 392,566 during the previous period to 385,914 items recorded during the period under review. Compared to the same period of the previous year, 22.00 per cent increase was recorded.

**Table 20: Postal and Courier Traffic** 

International leased bandwidth	Oct-Dec 11	Jul-Sep 11	Quarterly Variation (%)	Oct-Dec 10	Quarterly Variation (%)
Number of letters posted locally	19,595,146	20,571,629	-4.75	29,536,992	-33.66
Total courier items sent locally	385,914	392,566	-1.69	316,310	22.00
International incoming letters	80,217	100,348	-20.06	130,044	-38.32
International outgoing letters	2,244,615	2,736,154	-17.96	1,777,095	26.31

Source: CCK, Operators' Returns

Similarly, the number of international incoming letters declined by 20.06 per cent during the review period to 80,217 down from 100,348 recorded during the previous period. Compared to the same period of the previous year, a decline of 38.32 per cent was recorded. The international incoming traffic has been on a declining trend over the period possibly due to intensified competition from the telecommunications sector. In actual fact, the increase in international SMS during the period could have partially offset the reduction in international incoming letters.

At the same time, the international outgoing letters declined by 17.96 per cent from 2.73 million letters recorded during the previous period to 2.24 million during the period under review. When compared to the same period of the previous year, a 26.31 per cent increase was registered.

#### **4.2 Postal and Courier Revenue and Investment**

The summary of postal and courier revenue and investments is shown in Table 21. This information will be updated at the end of each financial year.

Table 21: Postal and Courier revenue and investments

Post/courier revenue and investment	2010*	2009	2008	2007	% Change over	% Change	% Change over
Postal/Courier					2009		2007
Revenue(KES Millions)	1,535	4,255	13,907	13,719	-63.92	-88.96	-88.81
Postal/Courier Investments	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 telecommunication sector remains on a growth trajectory particularly the mobile sector that has witnessed positive growth over the years. The sector continued to expand in respect to subscription, a trend that is likely to be sustained in the coming periods as

operators seek innovative means of growing their subscriber base. Although there was a decline in mobile traffic volumes as a result of increased tariffs during the period under review, it is expected that the coming periods may experience a reverse trend with operators keen on offering attractive promotional offerings likely to keep subscribers calling for longer periods.

The mobile money transfer continued to record positive growth during the period and the coming periods may be no exception as this service has become a medium of payment and provision of accessible and affordable banking services.

The fixed line network, on the other hand, has been experiencing negative growth. Vandalism of copper cables, high maintenance costs as well as fixed-mobile substitution could be behind the decline.

Mobile data/Internet market continued to grow steadily with the number of mobile data subscriptions dominating the total Internet subscriptions. The availability of this service on mobile phones and the popularity of social media such as Facebook, and Twitter could be some of the drivers of growth of this subsector.

Internet has become an important tool of accessing information and communicating. Its usage has been on a rising trend with the quarter under review recording estimated 17.38 million users representing an increase of 21.55 per cent from the previous period. This translates to 44.12 per cent of the population that have access to the Internet with majority accessing the service through their mobile phones. With the steady growth in mobile subscriptions, the growth in Internet usage is likely to continue as operators seek to leverage on new and emerging technologies to offer attractive packages aimed at garnering more subscribers to use this service.

Although the international available bandwidth has increased more than 25-fold, from 202,720.02Mbps in December 2010 to 5,261,919Mbps in December 2011, its usage level, still remains very low with only 1.01 per cent of it being utilized. This indicates that a lot of potential still lies in this sub-sector and initiatives towards formulating policies and projects that encourage the uptake of this capacity are required.

In the postal and courier sector, the number of letters sent continued to record a downward trend with 4.75 per cent reduction recorded during the period. Similarly international incoming and outgoing letters experienced a decline of 20.06 per cent and 17.96 per cent respectively during the period. Revitalization of this sector will depend on its ability to handle competitive pressure from the telecommunication sector as well as being innovative and responsive to customer expectations.

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