QUARTERLY SECTOR STATISTICS REPORT

1ST QUARTER
JULY-SEPT 2010/2011

Any queries to this report contact;
Director/Competition Tariffs and Market Analysis
Tel:+254-20-4242000
Email: info@cck.go.ke
Website: www.cck.go.ke

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.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

SMS .... Short Messaging Service
MOU .... Minutes of Use
ICTs .... Information Communication Technologies
Mbps .... Megabits per second
SIM........ Subscriber Identification Module
QoS........ Quality of service

1. THE QUARTER IN SUMMARY

The quarter under review recorded 9.5 per cent mobile subscriptions growth from 20.1 million in the last quarter to 22 million subscribers. This is the highest growth that has been recorded over the last three quarters.

On the other hand, the fixed lines declined by 2.7 per cent from 234,522 to 228,391 lines. Similarly the fixed wireless recorded a 37.2 per cent decline from 225,592 in the previous period to 141,580 during the period under review.

Overall tele-density rose to 56.9 per cent from 53.3 per cent in Jun-10, with mobile services accounting for 55.9 per cent.

A total of 6.63 billion minutes of local calls were made on the mobile networks against 6.05 billion in the previous quarter, representing 9.6 per cent increase. Similarly, the number of voice minutes received on all mobile networks was 6.63 billion minutes, representing 97.5 per cent increase from the same period of the previous year. The number of SMS recorded during the quarter was 740 million text messages compared to 769.6 million text messages sent the previous quarter.

The total number of internet subscriptions registered 4.3 per cent growth from 3.09 million in the previous quarter, Jun-10, to 3.2 million in the quarter under review. The number of internet users was estimated at 8.69 million from 7.8 million users in the previous quarter.

Broadband[1] subscriptions increased from 18,626 subscribers in the previous quarter to 84,726 representing 0.97 per cent of the total internet subscriptions in the country.

The international internet connectivity bandwidth recorded marginal decline from 20,384.12Mbps in the previous quarter to 20,209.56Mbps during the quarter under review. This was as a result of decline in VSAT connectivity.

In the postal services, the number of total letters sent increased to 31.7 million from 29.3 million representing 8.1 per cent increase.

[1] In Kenya broadband is defined as speeds greater than or equal to 256Kbps in one or both directions.

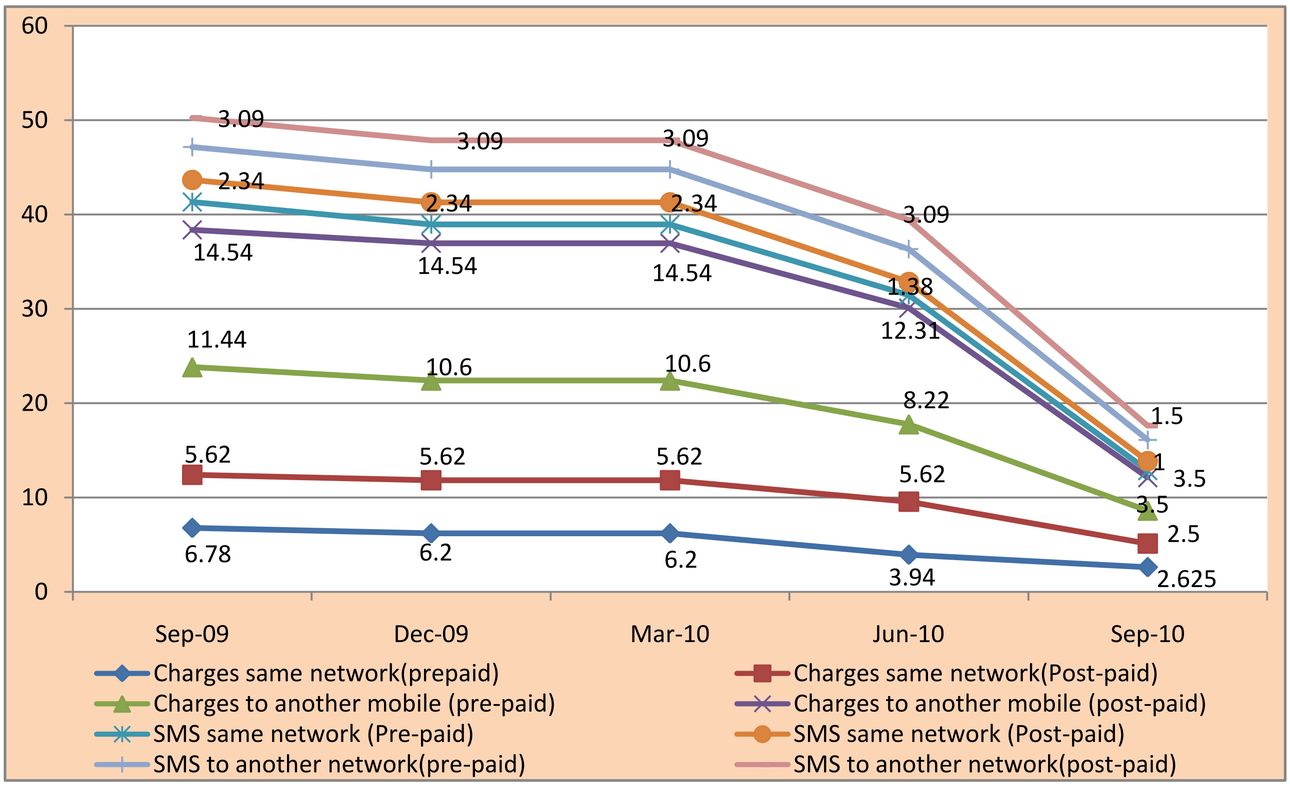
2. CELLULAR MOBILE SERVICES

a) Mobile Tariffs

Mobile tariffs reduced significantly over the quarter registering an average of KES 2.65 for on-net calls per minute from KES 4.78 per minute in the previous period and KES 2.5 for post-paid subscribers at the end of the quarter under review. This represents 33.4 per cent reduction on pre-paid tariffs and 55.5 per cent on post-paid tariffs from the previous period.

The tariff decline is attributed to an interconnection determination by the Commission during the period that saw mobile termination rates reduced to KES 2.21 from KES 4.42.

Figure 1: Average Mobile tariffs per minute



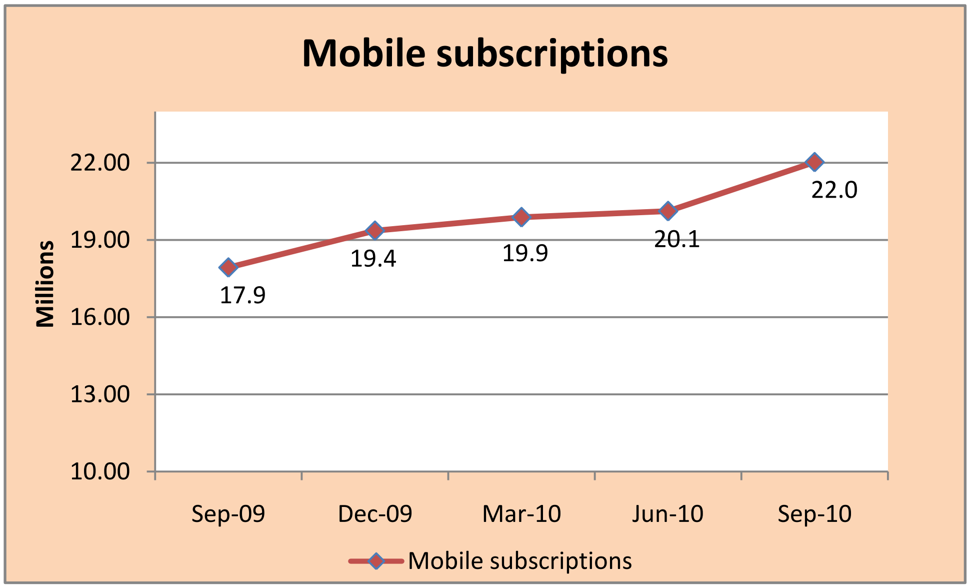
Source: CCK, Operators' returns

b) Mobile Subscriptions

The quarter under review recorded 1.9 million new mobile subscriptions representing 9.5 per cent growth. The significant growth could be attributed to the availability of bundled package that promotes cheaper handsets preloaded with airtime and SIM cards coupled with the reduction of tariffs

The growth in mobile subscriptions is as shown in figure 2.

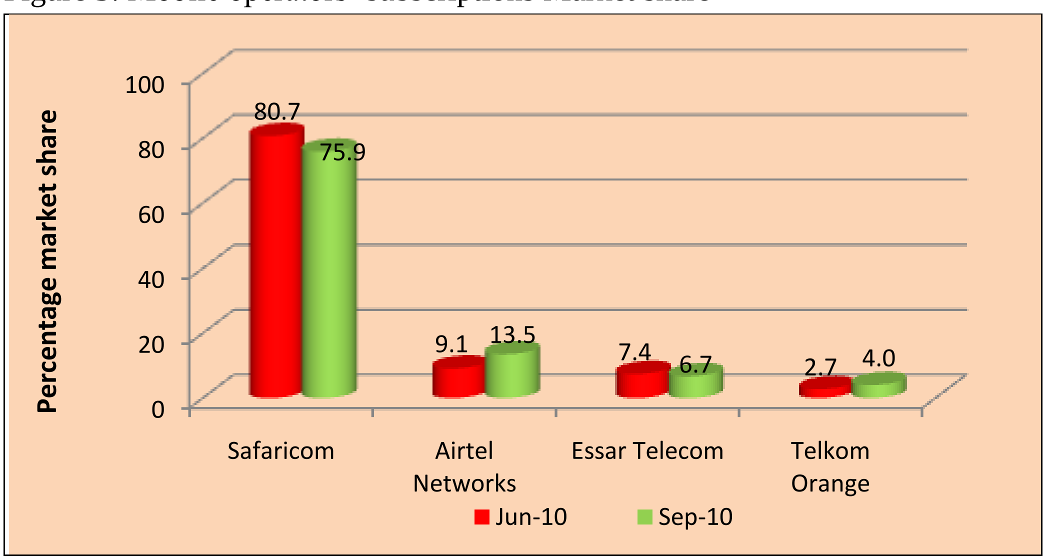
Figure 2: Growth in mobile subscriptions



Source: CCK, operators' returns

During the quarter, Airtel Networks and Telkom Orange gained 4.4 and 1.3 percentage points respectively of market share while Safaricom and Essar Telecom dropped by 4.8 and 0.7 percentage points respectively. Figure 3 shows the market share for each of the mobile operators during the period under review.

Figure 3: Mobile operators' subscriptions Market share



Source: CCK, operators' returns

In terms of absolute net additions Airtel Networks registered the highest number during the quarter under review with 1,143,353 new subscriptions followed by Safaricom with 473,979. Essar Telecom lost 26,266 subscriptions.

A summary of subscriptions for each of the operators is as shown in table 1.

Table 1: Mobile Subscriptions by operator

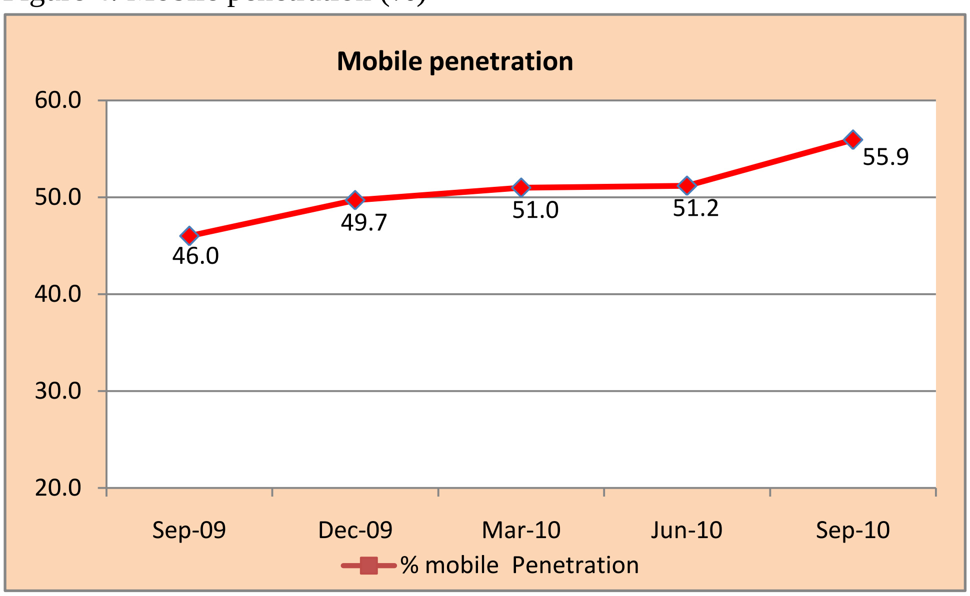
Service provider	**Subscriber base**				**Market share (%) Q1 10/11**	**Market share (%) Q4 09/10**
	Q1 10/11	Q4 09/10	Net additions	Growth rate (%)		
Safaricom	16,714,548	16,240,569	473,979	2.9	75.9	80.7
Zain	2,977,696	1,834,343	1,143,353	62.3	13.5	9.1
Essar Telecom	1,465,832	1,492,098	-26,266	-1.7	6.7	7.4
Orange	875,592	552,294	323,298	58.5	4.0	2.7
Total	**22,033,668**	**20,119,304**	**1,914,364**	**9.5**		

Source: CCK, operators returns

The prepaid option continued to dominate the mobile market accounting for 99 percent of the total mobile subscriptions against 1% of post paid lines.

As illustrated in figure 4 mobile penetration has been growing steadily over the quarters. At the end of the quarter being reported, the penetration of mobile service was 55.9 per 100 inhabitants.

Figure 4: Mobile penetration (%)



Source: CCK, operators returns

c) Mobile traffic and usage pattern

i. Voice traffic

During the quarter under review, a total of 6.63 billion minutes of local calls were made on the mobile network against 6.05 billion in the previous quarter, representing 9.6 per cent increase. This growth which is presented in Table 2 is attributed to the increase in subscribers and to tariff reductions experienced during the quarter.

Table 2: Local Mobile voice traffic in minutes

	Q1 10/11	Distribution of traffic type (%)	Q4 09/10	Quarterly variation (%)	Q1 09/10	Quarterly variation (%)
By traffic origin(Outgoing traffic)	**6,630,478,938**	**100**	**6,052,055,448**	**9.6**	**3,357,955,269**	**97.5**
Own network-Own network	6,211,390,284	93.7	5,826,330,211	6.6	3,207,717,793	93.6
Own network to other mobile networks	405,153,040	6.1	187,312,873	116.3	147,158,839	175.3
Mobile network fixed network	13,935,614	0.2	8,555,216*	62.9	3,078,637*	353.0
By traffic termination(Incoming traffic)	**6,626,086,174**	**100**	**6,022,063,555**	**10.0**	**3,384,303,564**	**95.8**
Own network-own network	6,211,390,284	93.7	5,826,330,211	6.6	3,207,717,793	93.6
Other mobile networks -own network	404,189,936	6.1	189,495,945	113.3	168,144,954	140.4
Fixed network-Mobile network	10,505,954	0.16	6,237,399	68.4	8,440,817	24.5

Source: CCK, Operators' returns, (*) provisional

Similarly, the number of **voice minutes received** on all mobile networks was 6.63 billion minutes, representing 97.5 per cent increase from the same period of the previous year.

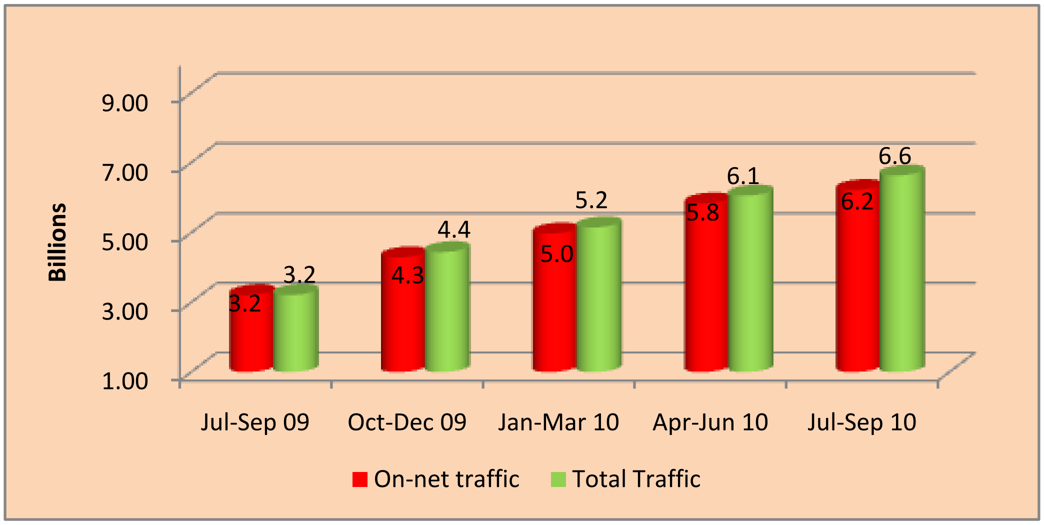
Notably, traffic from other mobile networks to own networks increased significantly during the period under review from 187 million minutes in the previous quarter to 405 million minutes during the quarter under review. This may be due to the reduction of off net tariffs across all networks which motivated calls across networks.

Similarly, the quarter under review experienced a gradual increase in the number of minutes of traffic from fixed to mobile which had been declining previously. This traffic grew by 68.4 per cent compared to the previous quarter and 24.5 per cent during the same period of the previous year. The increase reflects the impact that the reduction of tariffs has had on calls originating from fixed to mobile network.

On-net network traffic continues to dominate mobile traffic and accounted for 93.7 per cent of the total mobile traffic during the period under review. A 6.6 per cent growth is recorded from the previous quarter and 93.6 per cent compared to the same period of the previous year. This increase can be attributed to the continued on-net promotional offers aimed at encouraging on-net activity.

The growth in mobile traffic is as illustrated in figure 5.

Figure 5: Mobile traffic in minutes

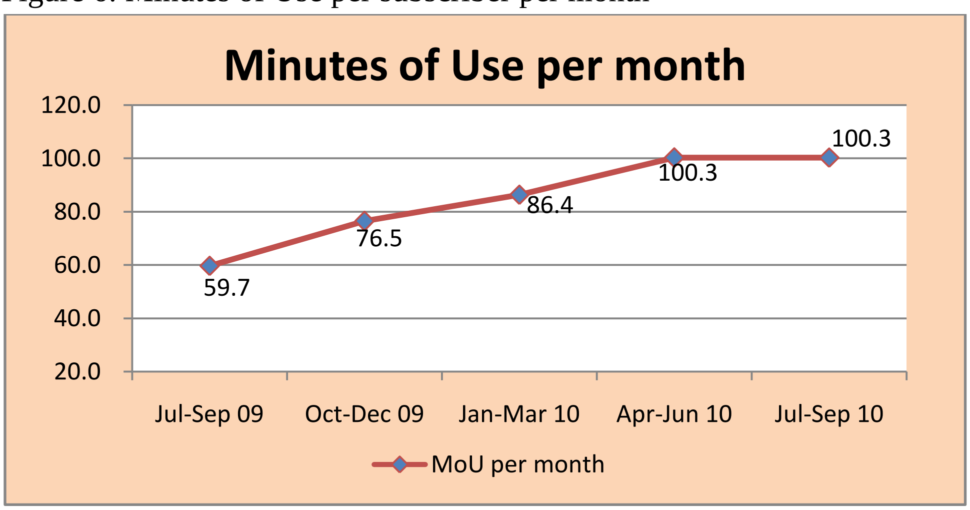


Source: CCK, Operators' returns

ii. Minutes of use

As shown in Figure 6, the Minutes of Use per subscriber per month remained at 100.3 minutes which could be due to the fact that mobile traffic increased by equal proportions to mobile subscriptions.

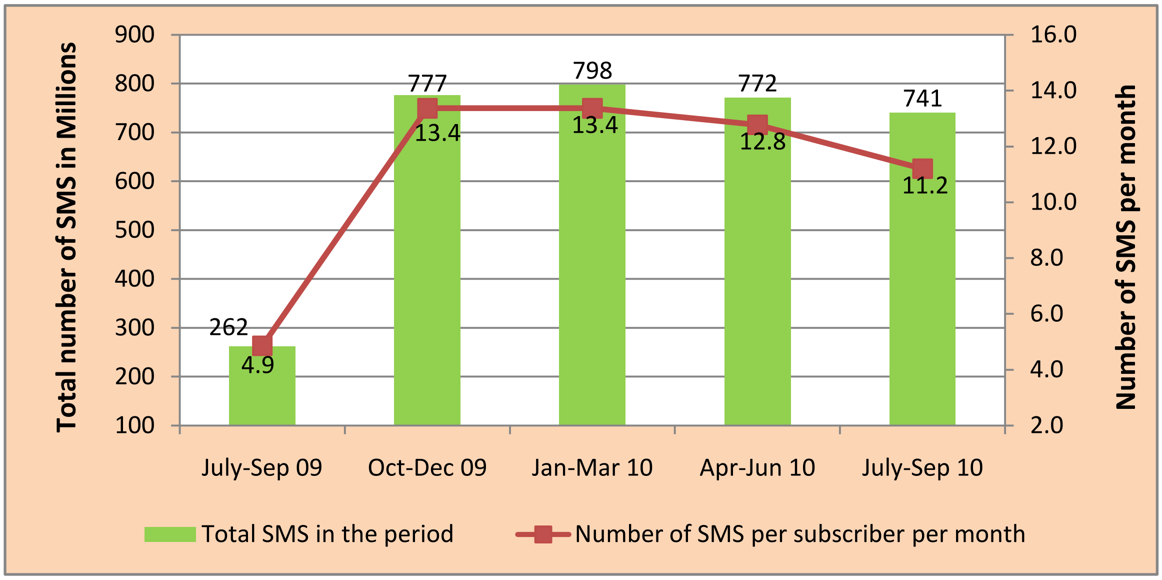
Figure 6: Minutes of Use per subscriber per month



Source: CCK, Operators' returns

The quarter under review reported a total of 740 million text messages sent. This is 4 per cent lower than what had been reported in the previous quarter but more than 2 times higher than the same period of the previous year. The decline in the number of SMS sent as demonstrated in figure 7 against increased voice traffic alludes to the fact that the decline in mobile retail tariffs has influenced subscribers' preference of voice calls over SMS.

Figure 7: Number of SMS sent



Source: CCK, Operators' returns

iii. Roaming traffic

During the quarter under review, roaming out[2] voice traffic was reported at 24.3 million minutes up from 19.8 million minutes reported in the previous quarter, representing an increase of 23 per cent during the period and 58.7 per cent increase compared to the same period of the previous year.

Similarly, the number of minutes of roaming in[3] increased by 66.4 per cent during the period to 7.47 million minutes up from 4.49 million minutes in the previous quarter. Compared to the same quarter of the previous year, a 36.3 per cent increase is recorded. This achievement may have been caused by the various activities within the quarter including the promulgation of the new constitution which led to an influx of foreign representatives and the fact that it was the high tourism season .

[2] Roaming out is traffic originated and terminated by subscribers of national networks as users of foreign networks abroad

[3] Roaming in is traffic originated and terminated by foreign subscribers on national networks

During the quarter, the country continued to experience negative roaming imbalance of negative (-)16.91 Million minutes which indicates that national networks received significantly more calls when abroad than those received by subscribers to foreign networks while in the country. The summary is as shown in table 3.

Table 3: Roaming traffic

Roaming traffic in Minutes	Q1 10/11	Q4 09/10	Quarterly variation % (+/-)	Q1 09/10	Quarterly variation % (+/-)
Roaming voice minutes own subscribers on foreign networks	24,386,746.14	19,820,115	**23.0**	15,366,131	**58.7**
Roaming voice minutes foreign subscribers on local network	7,472,120.02	4,490,350	**66.4**	5,472,797	**36.5**
Roaming messages own subscribers on foreign networks	6,718,069	6,668,308.26	**0.7**	151,066,233	-**95.6**
Roaming messages foreign subscribers on local network	5,374,911	3,370,260	**59.5**	16,665,319	-**67.7**

Source: CCK, Operators' returns

Similarly, the number of roaming out messages increased by a thin margin of 0.7 per cent during the period with 6.7 million messages reported compared to 6.67 million messages reported in the previous period. Compared to the same quarter of the previous year a decline of 95.6 per cent is recorded. Additionally, the roaming in messages increased by 59.5 per cent during the period, a trend consistent with roaming in traffic. Compared to the same period of the previous year, a decline of 67.7 per cent is recorded.

iv. International mobile traffic

In the quarter being reported, the international incoming mobile voice minutes increased marginally by 0.2 percent to reach 167 million minutes up from 166.69 million minutes in the previous quarter. This was 45.5 per cent increase compared to the same period of the previous year.

In addition the international outgoing mobile traffic increased significantly by 50.7 per cent over the last quarter as shown in Table 4

Table 4: International mobile traffic (minutes)

International mobile traffic in Minutes	Q1 10/11	Q4 09/10	Quarterly variation % (+/-)	Q1 09/10	Quarterly variation % (+/-)
International incoming mobile voice minutes	167,061,300	166,690,149	0.2	114,787,085	45.5
International outgoing mobile voice minutes	88,678,425	58,838,493	50.7	46,356,770	91.3

Source: CCK, Operators' returns

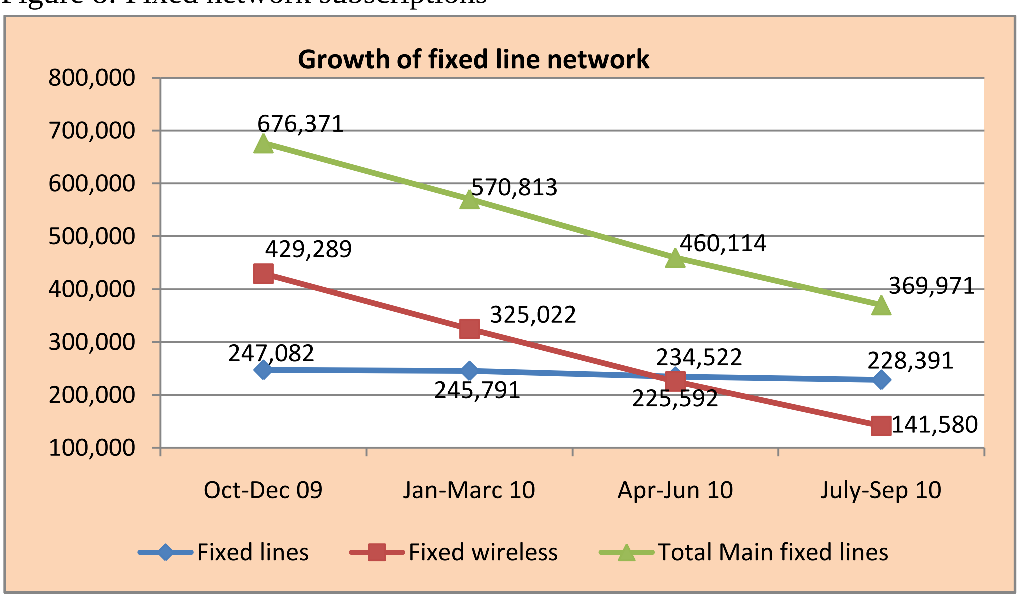
3. FIXED TELEPHONE SERVICE

a) Subscriptions

The general trend of the fixed line shows a continuous decline, largely due to its substitution by mobile telephony and perhaps vandalism of the copper wires. During the quarter under review there were 228,391 fixed lines down from 234,522 lines in the previous quarter, a 2.7 per cent decline. Similarly the number of fixed wireless lines recorded 37.2 per cent decline to 141,580 from 225,592 lines in the previous quarter. The total number of main fixed lines (fixed lines plus fixed wireless) stood at 369,971 representing a penetration of 0.96 main lines per 100 inhabitants. This is against 1.7 and 17.1 main lines per 100 inhabitants in Africa and the world respectively (ITU world telecommunication/ICT indicators database, 2010) and is a trend unlikely to be reversed.

The growth in the number of fixed lines is as shown in figure 8.

Figure 8: Fixed network subscriptions



Source: CCK, operators returns

b) Fixed network traffic

During the quarter under review, there were 29,095,849 minutes of local calls made on the fixed line network[4]. The on-net traffic represented 43.5 per cent of this total traffic to record 18,589,895 minutes.

Although the fixed line network experienced reduction in subscription levels during the quarter, fixed to mobile traffic grew by 61 per cent from the previous quarter to record 10,505,954 minutes from 6,521,416 minutes. This could be attributed to reduction in interconnect rates that led to reduced tariffs on calls originating from fixed to mobile networks. A summary of the fixed network traffic is as shown in table 5.

Table 5: Local fixed network traffic in minutes

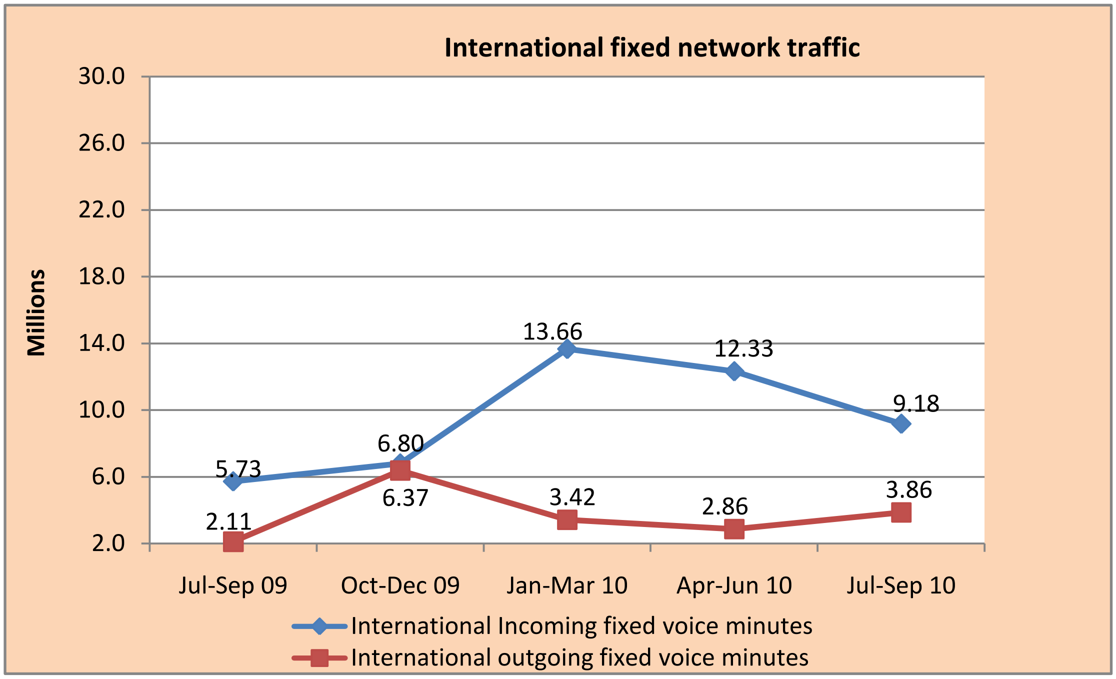
Local fixed network traffic	Q1 10/11	Q4 09/10	Quarterly variation % (+/-)	Q1 09/10	Quarterly variation % (+/-)
Intra-network traffic	18,589,895	DNA	-	DNA	-
Fixed to mobile traffic	10,505,954	6,521,416	61.1	8,109,207	29.6
Total local fixed network traffic	29,095,849	-	-	-	-

Source: CCK, operators' returns, DNA-data not available

International incoming and outgoing fixed network traffic has been showing a contrasting trend as illustrated in figure 9 below. During the period under review, the international outgoing fixed network traffic increased by 35 per cent from 2.86 million minutes in the previous quarter to 3.86 million minutes. The increase can be attributed to the reduction in international tariffs by the fixed network operator. On the other hand, the international incoming traffic declined by 26 per cent to record 9.18 million minutes during the period under review compared to 12.3 million minutes in the previous quarter.

[4] Fixed network include fixed line and fixed wireless

Figure 9: International fixed network traffic



Source: CCK, operators' returns

4. DATA AND INTERNET SERVICE

a) Subscriptions

The number of internet/data subscriptions reached 3.2 million at the end of the quarter under review up from 3.09 million at the end of the previous quarter. This represents 4.3 per cent increase during the period and 71.6 per cent increase compared to the same period of the previous year. Satellite subscriptions have continued to decline significantly and during the quarter under review, a reduction of 12 per cent was experienced as illustrated in Table 6.

The mobile data/internet subscriptions through GPRS/EDGE and 3G continue to dominate internet subscriptions and accounted for 99 per cent of the total subscriptions during the period. It is expected that mobile shall continue to dominate the provision of Internet service as competition in the voice market intensifies compelling operators to diversify into other products and services in order to sustain and grow revenue.

A summary of internet subscriptions is as shown in table 6.

Table 6: Internet subscriptions

	Q1 10/11	Distribution of subscription type (%)	Q4 09/10	Quarterly variation % (+/-)	Q1 09/10	Annual variation % (+/-)
Total internet subscriptions	**3,230,023**	**100**	**3,096,952**	**4.3**	**1,880,115**	**71.8**
Terrestrial mobile/data subscriptions	3,192,667	98.8	3,059,906	**4.3**	1,864,991	**71.2**
Terrestrial wireless data/internet subscriptions	15,907	0.49	22,134	**-28.1**	1,687	**842.9**
Satellite data/internet subscriptions	839	0.23	953	**-12.0**	1,598	**-47.5**
Fixed DSL data/Internet subscriptions	12,216	0.38	9,631	**27.1**	8,299	**47.2**
Fixed fiber optic data/internet subscriptions	8,369	0.26	4,303	**94.5**	3,540	**136.4**
Fixed cable modem data/internet subscriptions	25	0.00077	25	**0**	-	**-**
Estimated Internet users[5]	8,689,304		7,832,352	**10.9**	3,746,580	**131.1**

Source: CCK, Operators' returns, (-) data not available

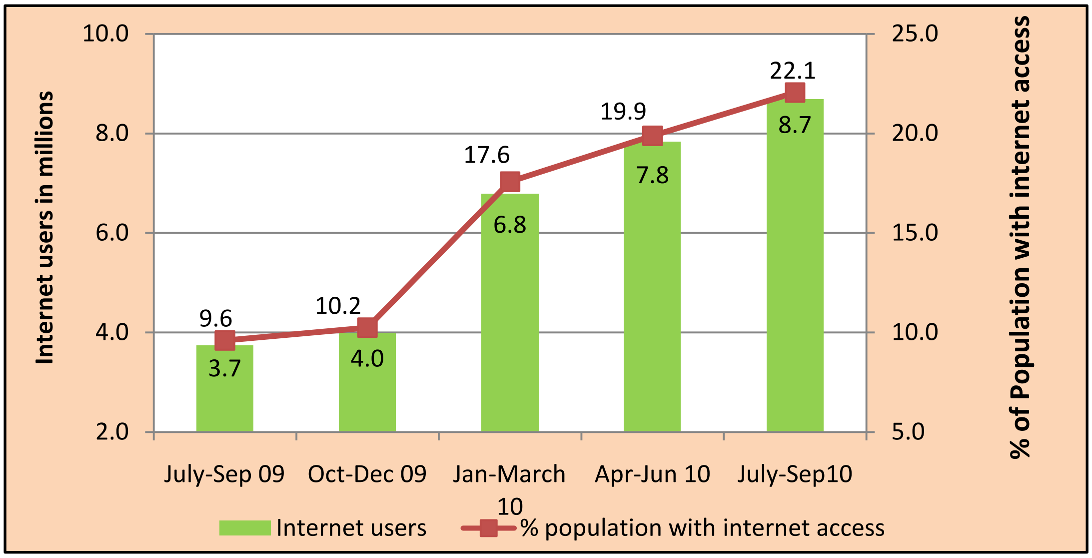
At the end of the quarter being reported, there were an estimated 8.69 million internet users compared to 7.8 million reported in the previous quarter. This represents 10.9 per cent increase.

During the period under review, the percentage of population that had internet access reached 22.1 per cent from 19.9 per cent reported in the previous quarter, representing an increase of 2.2 percentage points.

Figure 10 shows the growth of internet penetration in the country.

[5] 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.

Figure 10: Internet penetration



Source: CCK, Operators' returns

Mobile operators continue to dominate the internet market with more than 98 percent of the Internet market share being through mobile services as shown in table 7 below.

Table 7: Internet subscriptions by operator

S/No.	Name of Operator	Subscriptions	Market share (%)
1.	Safaricom Ltd	2,977,584	92.18
2.	Celtel Kenya Ltd	149,053	4.61
3.	Telkom Orange	66,030	2.40
	Telkom Fixed	11,638	
4.	Communication Solutions(Access Kenya) Ltd	7,512	0.23
5.	Wananchi Telkom Ltd	7,500	0.23
6.	Kenya Data Networks	5,451	0.17
7.	Africa Online	1,608	0.05
8.	Flexible Bandwidth	1,198	0.04
9.	Swift Global	1,133	0.04
10.	Callkey Networks Ltd	800	0.02
11.	Others	516	0.02

Source: CCK, Operators' returns

b) Broadband

During the quarter under review, the total number of broadband[6] subscriptions was reported at 84,726 up from 18,626 subscriptions in the last quarter. This represents 0.97 per cent of the total internet subscriptions.

c) International connectivity

At the end of the quarter under review, the total international bandwidth available in the country was 202,240 Mbps.

Table 8: International bandwidth (Mbps)

Provider	Q1 10/11	Q4 09/10	Quarterly variation % (+/-)	Q1 09/10	Annual variation % (+/-)
Seacom-International Bandwidth (Mbps)	79,360	79,360	0	0	100
Teams- International Bandwidth (Mbps)	122,880	122,880	0	0	0
Total international Bandwidth **(Mbps)**	**202,240**	**202,240**	**0**	**0**	**100**

Source: CCK, Operators' returns

At the same time, total international bandwidth dropped to 20,209.56 Mbps from 20,364.12 Mbps in the previous quarter. The international bandwidth from undersea cables remained unchanged from the previous quarter an indication that no additional capacities wwere purchased during the quarter. A significant decline on satellite of (-45.4 percent) was noted from the previous quarter as operators continued to shift from the expensive satellite platform to undersea cables.

Table 9: International internet connectivity bandwidth (Mbps)

	Q1 10/11	Q4 09/10	Quarterly variation % (+/-)	Q1 09/10	Annual variation % (+/-)
International undersea internet connectivity bandwidth(Mbps)	20,000.00	20,000.00	0	-	100
International Satellite internet connectivity bandwidth(Mbps)	209.56	384.12	-45.4	3,324.5	-93.7
Total international internet connectivity bandwidth(Mbps)	**20,209.56**	**20,384.12**	**-0.86**	**3,324.5**	**507.9**

Source: CCK, Operators' returns, (-) Data not available

[6] In this report Broadband is defined as speeds greater than or equal to 256Kbps in one or both directions

As illustrated in Table 9, the undersea cables contributed 99 percent of the international internet connectivity.

5. POSTAL AND COURIER SERVICE

a) Postal traffic

During the quarter under review, the total number of letters sent increased to 31.7 million from 29.3 million in the previous quarter. This represents an increase of 8.1 per cent over the quarter and 70.5 per cent increase compared to the same period of the previous year.

The courier items increased by 13.1 per cent to record 203,928 items during the quarter up from 180,307 items reported in the previous quarter. However compared to the same period of the previous year, a decline of 2 per cent is recorded.

Table 10: Postal traffic

	Q1 10/11	Q4 09/10	Quarterly variation % (+/-)	Q1 09/10	Quarterly variation % (+/-)
Number of letters posted	31,697,050	29,310,657	8.1	18,586,347	70.5
Total courier items sent	203,928	180,307	13.1	208,011	-2.0
International incoming letters	101,595	273,009	-62.8	191,980	-47.1
International outgoing letters	1,343,044	1,431,366	-6.2	2,200,465	-39.0

Source: CCK, Operators' returns

On the other hand the international incoming letters experienced a significant decline of 62.8 per cent. Compared to the same period of the previous year, a decline of 47.1 per cent is recorded.
Similarly, the international outgoing traffic experienced a decline of 6.2 per cent over the period to record 1.3 million letters from 1.4 million recorded in the previous quarter.

6. CONCLUSION

The telecommunication market continued to demonstrate strong and consistent growth as demonstrated by increased subscriptions in the mobile market while the fixed line continue on a declining trend.

The number of mobile subscriptions has tripled in the last five years from 7.3 in 2006 to the current 22 million subscriptions. With competitive pressure likely to remain intense among the four service providers, growth in subscriptions is expected to continue. The mobile/data subscriptions have continued to experience significant growth, driven by consumer demand as well as the need by operators to diversify services as a result of intense competition in the voice market.

Growth in internet subscription resulted in increased internet usage from 19.9 per cent in the previous quarter to 22.1 per cent.

The postal service has continued to show a declining path especially on the international traffic. While total number of letters increased within the quarter, there was a decline recorded in the incoming and outgoing international letters.

Published: January, 2011
Author: CCK