



## **FIRST QUARTER SECTOR STATISTICS REPORT FINANCIAL YEAR 2023/24**

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

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## **LIST OF ACRONYMS**

DoS	Denial-of-Service
EASSy	Eastern Africa Submarine Cable Systems
FTTH/O	Fibre-To-The-Home/Office
FY	Financial Year
Gbps	Gigabits per second
ICTs	Information Communication Technologies
KE-CIRT/CC	National Kenya Computer Incident Response Team/Coordination Centre
LION2	Lower Indian Ocean Network
Mbps	Megabits per second
MoU	Minutes of Use
MVNO	Mobile Virtual Network Operator
NCC	National Cybersecurity Centre
SEACOM	Sea Sub-Marine Communications Limited
SIM	Subscriber Identification Module
SMS	Short Messaging Service
TEAMS	The East African Marine System
PEACE	Pakistan & East Africa Connecting Europe

## PRELIMINARY NOTES

This report is based on data provided by licensees in the ICT sector as per their license conditions and obligations. The information provided herein is subject to review during the subsequent quarter in case of any revisions or updates from the licensees.

This report has been prepared in line with best practice and adheres to International Telecommunications Union (ITU) standards on the collection of administrative/supply-side data on telecommunications/Information and Communications Technologies [https://www.itu.int/en/ITU-D/Statistics/Documents/publications/handbook/2020/ITUHandbookTelecomAdminData2020\\_E\\_rev1.pdf](https://www.itu.int/en/ITU-D/Statistics/Documents/publications/handbook/2020/ITUHandbookTelecomAdminData2020_E_rev1.pdf) and also the guiding manual available on our website <https://www.ca.go.ke/reports-and-studies?page=2>. These manuals provide clarity on how the various indicators are defined, methodologies for data collection, the scope of the indicators, and any limitations that may be related to the specific indicators.

The main objective of the report is to measure and monitor the availability and accessibility of ICT services by Kenyans from the perspective of supply. It is key to note that this report **does not include demand-side** (data on usage/uptake of ICTs from the consumer perspective) as this information is collected through National ICT Surveys and reported separately as per ITU standards

[https://www.itu.int/en/ITU-D/Statistics/Documents/publications/manual/ITUManualHouseholds2020\\_E.pdf](https://www.itu.int/en/ITU-D/Statistics/Documents/publications/manual/ITUManualHouseholds2020_E.pdf). Therefore, the Authority collaborates with the Kenyan National Bureau of Statistics (KNBS) to collect demand-side data through national surveys.

## SUMMARY OF ICT INDICATORS

The First Quarter Sector Statistics Report provides the performance and trends in the ICT sector for the period 1<sup>st</sup> July to 30<sup>th</sup> September 2023 in:

1. Mobile Network services
2. Fixed Network services
3. Postal and Courier services
4. Broadcasting services
5. Frequency spectrum management
6. Electronic transactions and Cyberspace management

Indicator/Period		Q1 (Jul-Sept 23)	Q4 (Apr-Jun 23)	Quarterly Variation (%)
<b>MOBILE NETWORK SERVICES</b>				
<b>Subscriptions to Mobile Services</b>	Total Mobile (SIM) Subscriptions	67,122,320	66,439,160	1.0
	Machine-to-Machine (M2M) Subscriptions	1,523,310	1,574,171	-3.2
<b>Mobile Money Transfer Services</b>	Number of Registered Mobile Money Agents	338,209	333,753	1.3
	Mobile Money Subscriptions	38,065,435	37,991,105	0.2
<b>Mobile Data and Broadband Subscriptions</b>	Mobile Data Subscriptions	49,331,154	49,355,495	0.0
	Mobile Broadband Subscriptions	34,627,645	33,317,546	3.9
<b>Mobile Phone Devices</b>	Feature Phones	32,040,928	32,140,606	-0.3
	Smartphones	32,631,924	30,793,395	6.0
<b>Domestic Mobile Traffic</b>				
<b>Mobile Voice Traffic (Minutes)</b>	On-Net Voice Traffic	19,121,250,817	18,457,947,077	3.6
	Off-Net Voice Traffic	3,082,888,542	2,885,541,224	6.8
	Mobile to Fixed Network	15,022,550	16,371,212	-8.2
<b>Mobile SMS Traffic</b>	SMS On-Net	10,743,772,432	10,891,845,275	-1.4
	SMS Off-Net	1,456,514,950	1,487,513,352	-2.1
<b>International Mobile Traffic</b>				
<b>Mobile Voice Traffic (Minutes)</b>	International Incoming Mobile Voice Traffic	85,258,066	68,021,604	25.3
	International Outgoing Mobile Voice Traffic	179,701,005	171,390,866	4.8
<b>Mobile SMS Traffic</b>	International Incoming SMS	9,372,590	9,282,463	1.0
	International Outgoing SMS	3,739,629	3,603,214	3.8
<b>Roaming Traffic</b>				
<b>Outbound Roaming Traffic</b>	Outbound Roaming Incoming Voice Traffic (Minutes)	146,602,182	136,792,249	7.2
	Outbound Roaming Outgoing Voice Traffic (Minutes)	11,736,806	13,598,974	-13.7
	Outbound Roaming Incoming SMS	57,510,828	53,301,483	7.9
	Outbound Roaming Outgoing SMS	6,345,238	6,321,542	0.4
	Data Volumes (MB)	122,441,201	138,784,266	-11.8
<b>Inbound Roaming Traffic</b>	Inbound Roaming Incoming Voice Traffic (Minutes)	77,489,707	42,867,602	80.8
	Inbound Roaming Outgoing Voice Traffic (Minutes)	5,057,364	4,254,684	18.9
	Inbound Roaming Incoming SMS	43,772,986	35,828,029	22.2
	Inbound Roaming Outgoing SMS	1,882,427	1,771,682	6.3
	Data Volumes (MB)	378,260,011	237,906,298	59.0
<b>FIXED NETWORK SERVICES</b>				

Indicator/Period		Q1 (Jul-Sept 23)	Q4 (Apr-Jun 23)	Quarterly Variation (%)
<b>Fixed Voice Subscriptions</b>	Fixed Line Subscriptions	9,605	9,974	-3.7
	Fixed Wireless Subscriptions	1,379	1,386	-0.5
	Fixed VoIP Subscriptions	53,733	48,204	11.5
<b>Domestic Fixed Voice Traffic</b>	Fixed line-Fixed line	130,811	144,656	-9.6
	Fixed Wireless-Fixed Wireless	305,462	300,846	1.5
	Fixed to Mobile	22,481,678	22,957,134	-2.1
<b>International Fixed Voice Traffic</b>	Incoming Fixed Voice Traffic	4,332,941	3,091,576	40.2
	Outgoing Fixed Voice Traffic	1,054,903	847,104	24.5
	Outgoing Fixed VOIP	559,440	476,680	17.4
<b>Fixed Data and Broadband Services</b>	Fixed Data/internet subscriptions	1,245,022	1,178,203	5.7
	Total Available International Bandwidth (Gbps)	17,353.722	16,520.303	5.0
	Total Used International Bandwidth (Gbps)	10,965.293	9,676.44	13.3
<b>PRIVATE COURIER SERVICES</b>				
Outgoing Domestic Letters		413,720	326,233	26.8
Outgoing Domestic Courier Items		1,427,436	1,256,522	13.6
International Outgoing Letters		411,194	420,700	- 2.3
International Incoming Letters		111,533	123,516	- 9.7
<b>BROADCASTING SERVICES</b>				
Licensed Commercial Free to Air TV		337	334	0.9
Licensed Commercial FM radio		202	201	0.5
Licensed Community Free to Air TV		9	9	0.0
Licensed Community FM Radio		76	74	2.7
DTT Subscriptions		4,476,826	4,450,688	0.6
DTH Subscriptions		1,801,670	1,709,395	5.4
Cable Subscriptions		64,631	57,149	13.1
<b>FREQUENCY SPECTRUM MANAGEMENT</b>				
Microwave links Deployed		203	1,292	-84.3
Fixed Links Decommissioned		11	1,336	-99.2
FM Sound Broadcasting Frequencies Assigned		4	24	-83.3
<b>ELECTRONIC TRANSACTIONS AND CYBERSPACE MANAGEMENT</b>				
.KE Domain		104,321	103,298	1.0
Total Cyber Threats Detected		123,899,936	139,775,123	-11.4
Total Cyber Threat Advisories		5,581,354	10,742,859	-48.0
<b>POPULATION</b>				

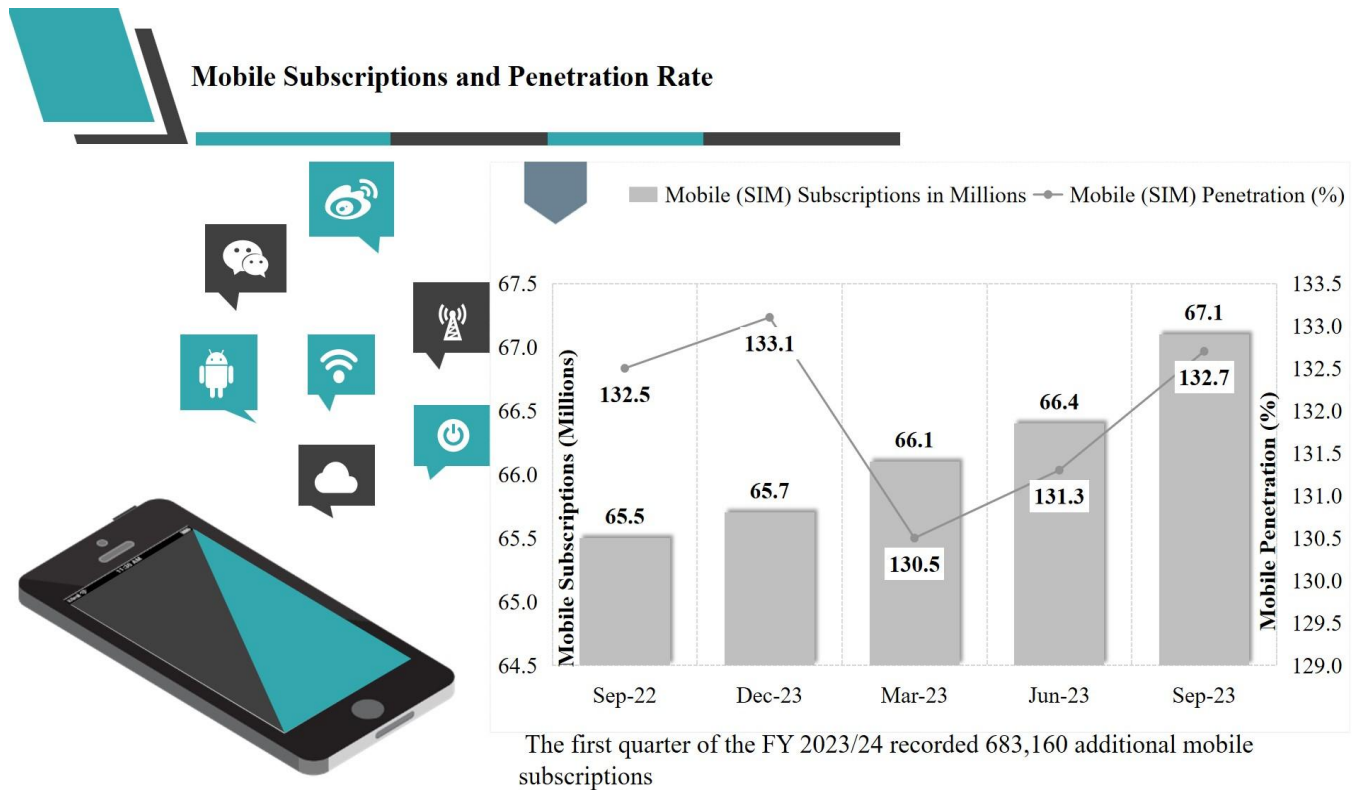
Indicator/Period	Q1 (Jul-Sept 23)	Q4 (Apr-Jun 23)	Quarterly Variation (%)
Total Population in Kenya (Millions)*	50.6	50.6	0.0

*\*Economic Survey 2023*



# 1. MOBILE NETWORK SERVICES

## 1.1 Active<sup>1</sup> Mobile (SIM) Subscriptions and Penetration Rate

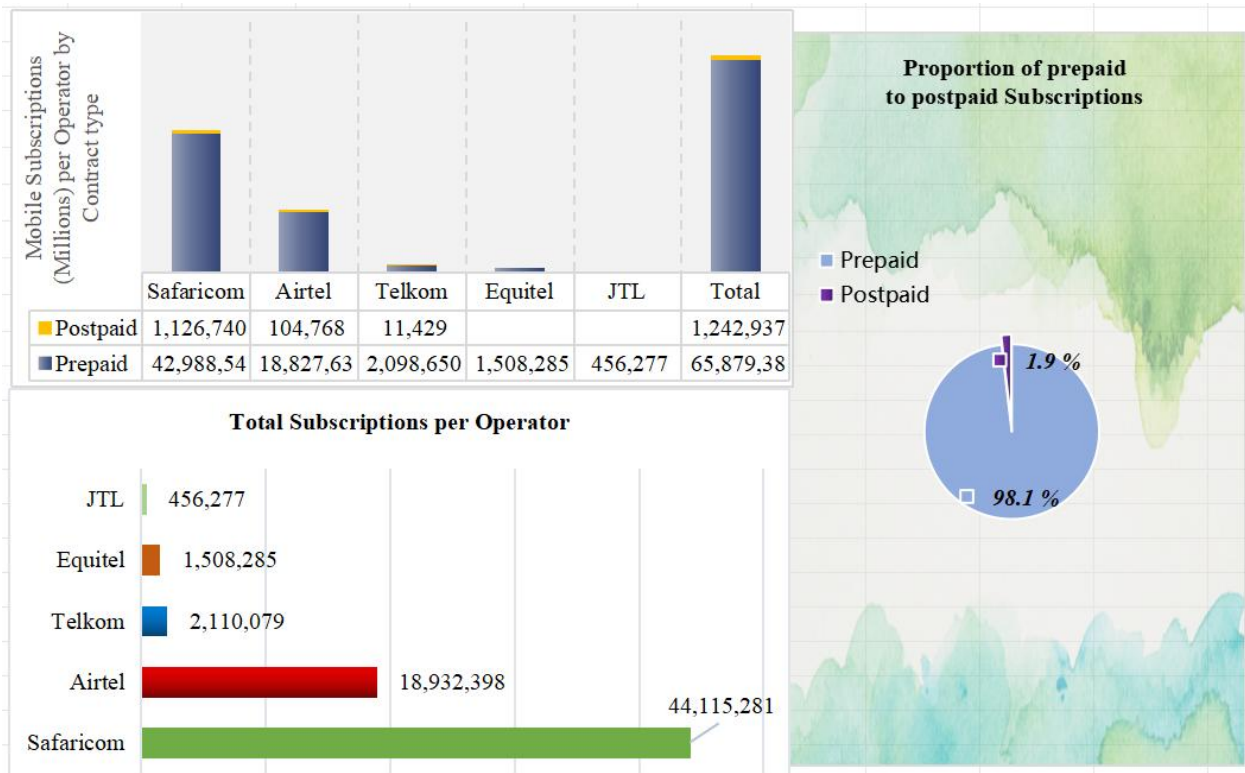


Source: CA, Operators' Returns

Figure 1: Mobile Subscriptions and Penetration

The number of active mobile (SIM) subscriptions per operator by contract type is shown in Figure 2.

<sup>1</sup> Active mobile (SIM) subscription refers to any subscription that has generated revenue in the last 3 months (90 days)

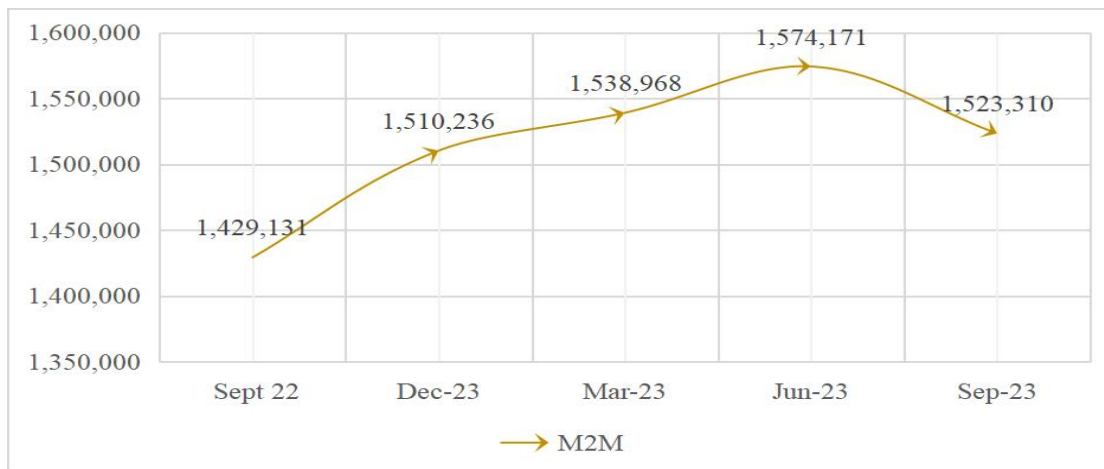


Source: CA, Operators' Returns

Figure 2: Mobile Subscriptions per Operator

## 1.2 Machine-to-Machine (M2M<sup>2</sup>) Subscriptions

Machine-to-Machine (M2M) subscriptions dropped by 3.2 percent to record 1.52 million from 1.57 million recorded in quarter four.



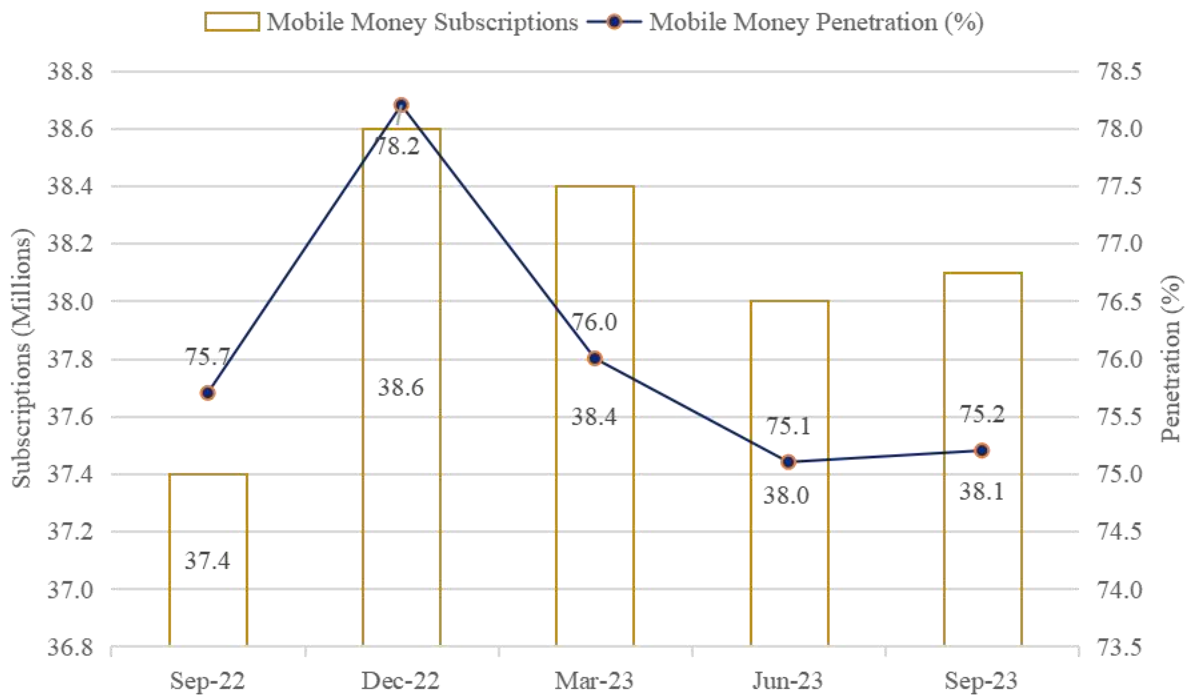
<sup>2</sup> **Machine to Machine mobile-network subscriptions (M2M subscriptions)** refer to the number of mobile cellular machine-to-machine subscriptions that are assigned for use in machines and devices (cars, smart meters, consumer electronics) for the exchange of data between networked devices, and are not part of a consumer subscription. For instance, SIM cards in personal navigation devices, smart meters, trains and automobiles are included while mobile dongles and tablet subscriptions are excluded. Only active subscriptions are counted.

Source: CA, Operators' Returns.\*Provisional Data for Telkom Kenya Limited

Figure 3: M2M Subscriptions

### 1.3 Mobile Money Services

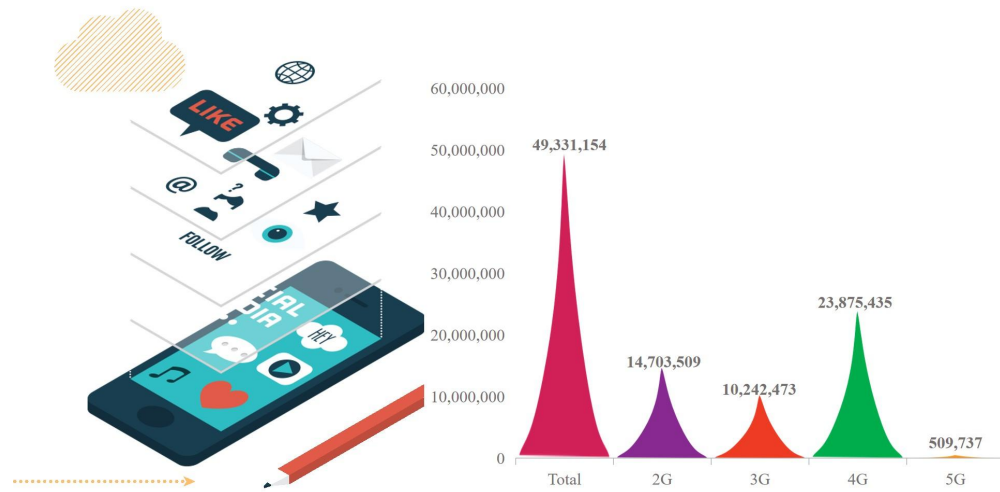
Mobile money subscriptions stood at 38.1 million, translating to a penetration rate of 75.2 percent, which was an increase of 0.1 percentage points from the last quarter's penetration rate, as shown in Figure 4.



Source: CA, Operators' Returns

Figure 4: Mobile Money Services

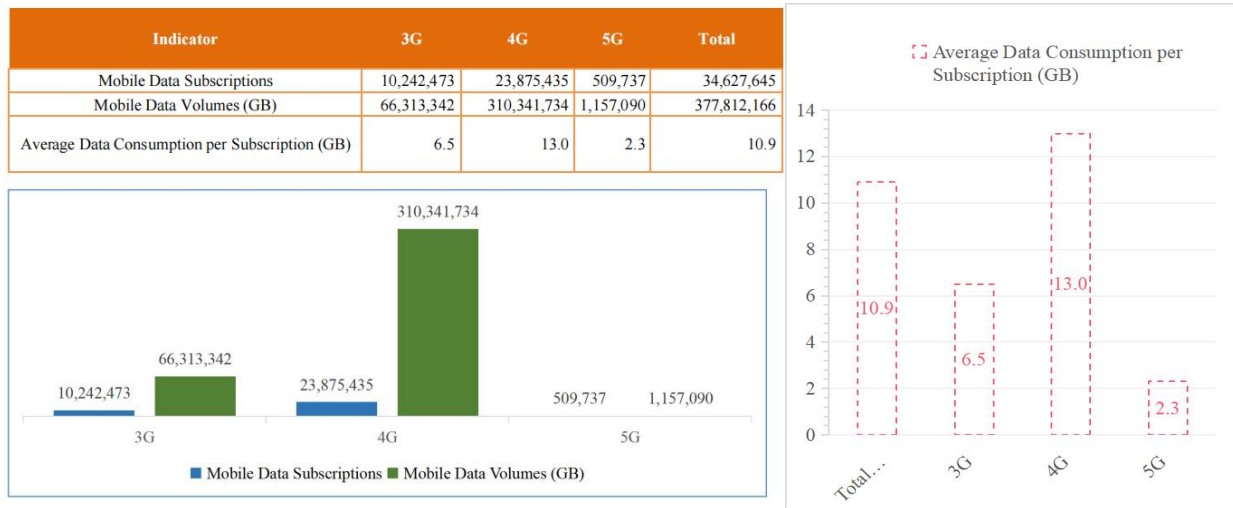
## 1.4 Mobile Data and Broadband<sup>3</sup> Services



2G subscriptions declined as more customers migrated to faster internet speeds offered by 4G and 5G technologies.

Source: CA, Operators' Returns

Figure 5: Mobile Data and Broadband Subscriptions

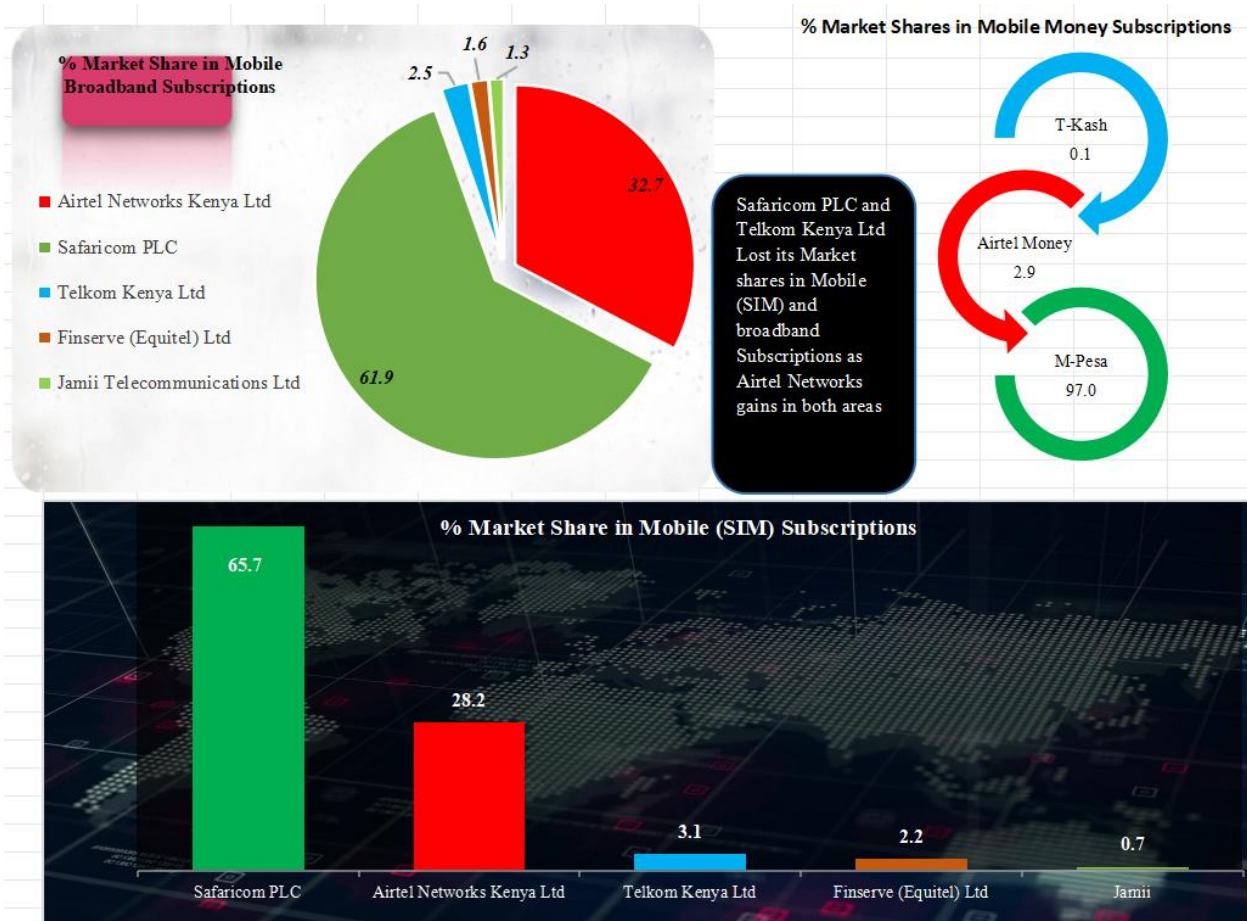


Source: CA, Operators' Returns

Figure 6: Mobile Data Consumption

<sup>3</sup> **Mobile broadband** includes 3G, 4G and 5G. Broadband refers to connectivity that delivers interactive, secure, quality and affordable services at a minimum speed of 2Mbps (The National Broadband Strategy 2018-2023)

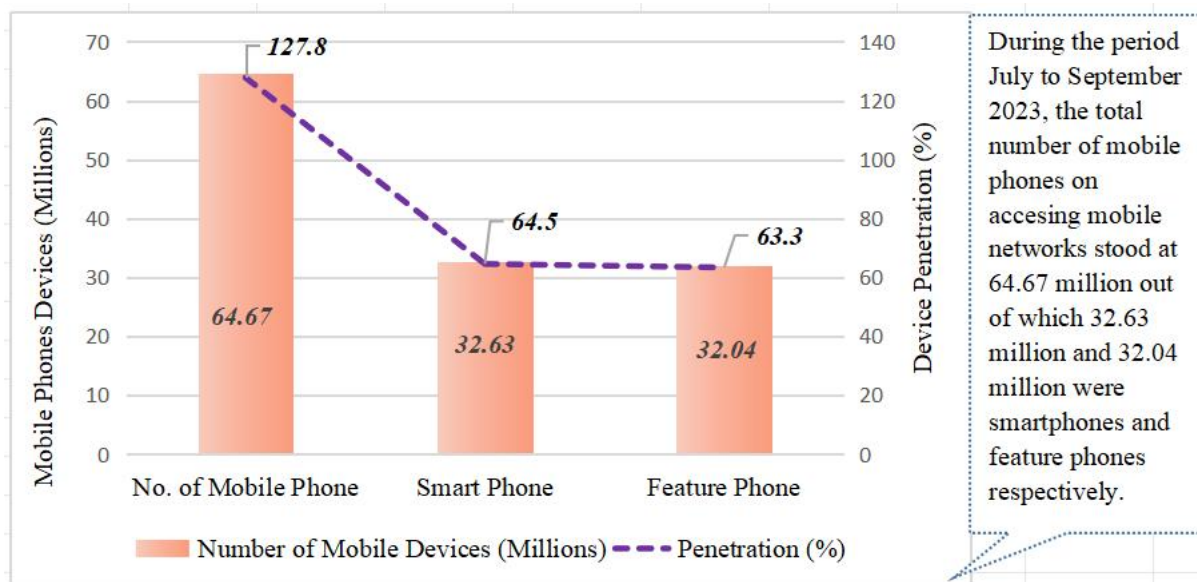
## 1.5 Market Shares in Subscriptions for Mobile Services



Source: CA, Operators' Returns

Figure 7: Mobile Market Shares

## 1.6 Mobile Phone Devices



Source: CA, Operators' Returns

Figure 8: Mobile Phone Devices

### 1.7 Domestic Mobile Voice Traffic (Minutes)

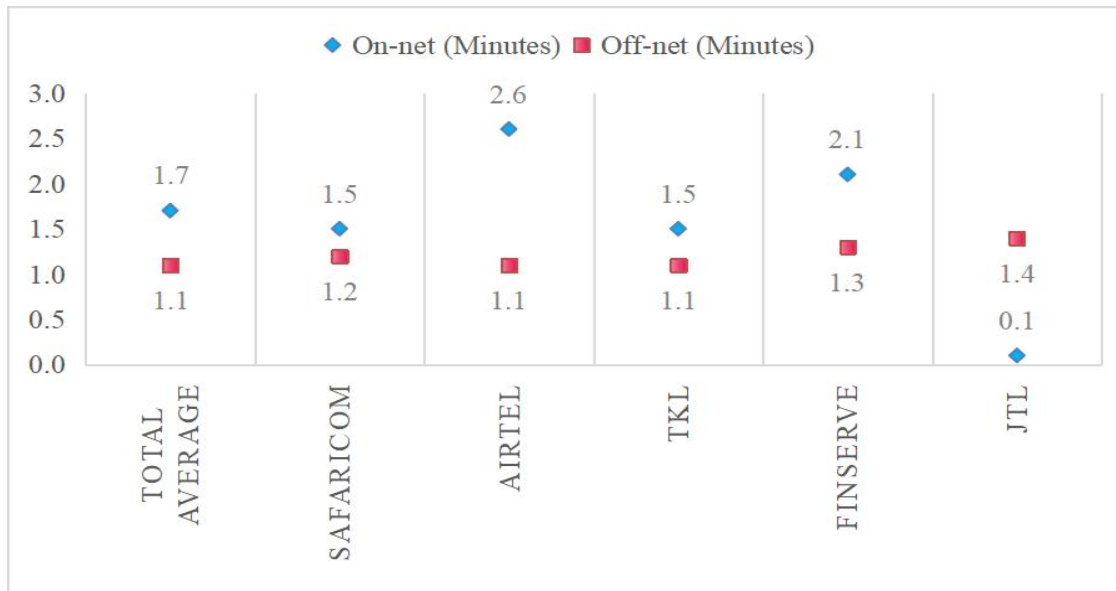
During the period under review, the total local mobile voice traffic rose by 4.0 percent to 22.2 billion minutes from 21.4 billion minutes reported in the last quarter. Table 1 shows the trends for domestic mobile voice traffic in Minutes.

Table 1: Domestic Voice Traffic (Minutes)

Indicator/Period	Jul-Sep 23	Apr-Jun 23	Quarterly Variation (%)
<b>Total Outgoing Traffic</b>	22,219,161,909	21,359,859,513	4.0
<b>On-net (Own Network – Own Network)</b>	19,121,250,817	18,457,947,077	3.6
<b>Off-net (Own Network to Other Mobile Networks)</b>	3,082,888,542	2,885,541,224	6.8
<b>Mobile Network to Fixed Network</b>	15,022,550	16,371,212	-8.2

Source: CA, Operators' Returns

### 1.8 Minutes of Use per Call per Operator



In Q1, Airtel Networks Ltd recorded the highest average on-net minutes/call whereas Jamii Telecommunications Ltd recorded the highest off net minutes/call. This is attributed to the fair tariffs offered by the two operators.

Source: CA, Operators' Returns

Figure 9: MoU per Call

## 1.9 Domestic Mobile SMS Traffic

Domestic SMS traffic dropped by 1.4 percent to record 12.2 billion from 12.4 billion messages posted in the previous quarter. The ratio of on-net to off-net SMS was 88:12.

Table 2: Domestic Mobile SMS Traffic

Indicator/Period	Jul-Sep 23	Apr-Jun 23	Quarterly Variation (%)
<b>Total SMS Traffic</b>	<b>12,200,287,382</b>	<b>12,379,358,627</b>	<b>-1.4</b>
<b>On-net (Own Network – Own Network)</b>	10,743,772,432	10,891,845,275	-1.4
<b>Off-net (Own Network to Other Mobile Networks)</b>	1,456,514,950	1,487,513,352	-2.1

Source: CA, Operators' Returns

## 1.10 Voice and SMS Traffic per Operator

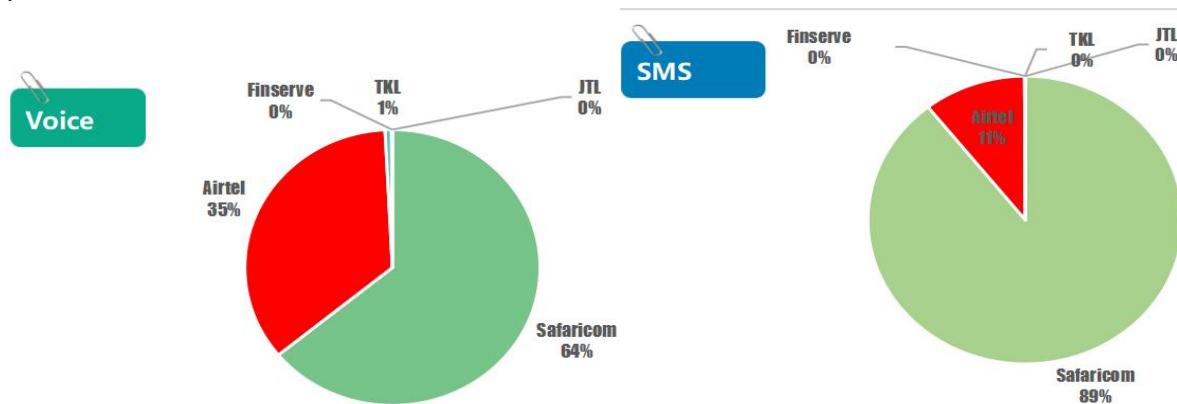
The trends in domestic voice and SMS traffic per operator are shown in Table 3.

Table 3: Voice and SMS Traffic per Operator

Name of Operator /Indicator			Safaricom PLC	Airtel Networks Kenya Limited	TKL	Finserve	JTL	Total
Jul-Sep 23	Voice	Total	14,212,193,163	7,803,142,880	159,186,399	25,018,730	4,598,187	22,204,139,359
		On-net	13,266,185,991	5,768,283,700	84,747,597	1,972,819	60,710	19,121,250,817
		Off-net	946,007,172	2,034,859,180	74,438,802	23,045,911	4,537,477	3,082,888,542
	SMS	Total	10,894,805,460	1,283,512,508	16,178,792	5,020,616	770,006	12,200,287,382
		On-net	10,168,519,834	572,446,572	1,025,213	1,746,509	34,304	10,743,772,432
		Off-net	726,285,626	711,065,936	15,153,579	3,274,107	735,702	1,456,514,950
Apr-Jun 23	Voice	Total	14,118,725,509	6,914,041,399	280,920,042	25,788,570	4,012,781	21,343,488,301
		On-net	13,171,605,713	5,116,311,857	167,904,788	2,075,384	49,335	18,457,947,077
		Off-net	947,119,796	1,797,729,542	113,015,254	23,713,186	3,963,446	2,885,541,224
	SMS	Total	11,084,903,346	1,263,718,889	5,151,370	24,916,815	668,207	12,379,358,627
		On-net	10,358,082,348	530,100,327	1,749,425	1,880,248	32,927	10,891,845,275
		Off-net	726,820,998	733,618,562	3,401,945	23,036,567	635,280	1,487,513,352

Source: CA, Operators' Returns

### 1.11 Market Shares in Domestic Mobile Voice and SMS Traffic



Source: CA, Operators' Returns

Figure 10: Market Shares in Domestic Mobile Voice and SMS

### 1.12 Minutes/Month/Subscription vs SMS/Month/Subscription

The minutes of use per subscriber per month have maintained an upward trend to record 110.3 minutes. This is attributed to the increase in mobile subscriptions as well as the various voice and bundle promotions offered by the service providers during the reference period. On the other hand, the short messages per subscription per month continued to decline owing to stiff competition from other (OTT) messaging platforms such as WhatsApp, Instagram, Telegram and Signal, which continue to gain popularity following increased coverage in broadband.



Source: CA, Operators' Returns

Figure 11: MoU/Month/Subscription vs SMS/Month/Subscription

### 1.13 International Mobile Traffic

Incoming international mobile voice traffic in minutes increased by 25.3 percent to record 85.3 million minutes, whereas outgoing international mobile voice traffic grew by 4.8 percent to post



179.7 million minutes. This growth is attributed to the African Climate Summit hosted by the country during September 2023. The incoming and outgoing international mobile SMS were recorded at 9.4 million and 3.7 million messages, respectively.

Table 4: International Mobile Traffic

Indicator/Period	Region	Jul-Sep 23	Apr-Jun 23	Quarterly Variation (%)
International Incoming Mobile Voice Minutes	EAC	64,803,006	43,471,192	49.1
	Others	20,455,060	24,550,412	-16.7
	<b>Total</b>	<b>85,258,066</b>	<b>68,021,604</b>	<b>25.3</b>
International Outgoing Mobile Voice Minutes	EAC	109,728,756	102,475,026	7.1
	Others	69,972,249	68,915,840	1.5
	<b>Total</b>	<b>179,701,005</b>	<b>171,390,866</b>	<b>4.8</b>
International Incoming Mobile SMS		9,372,590	9,282,463	1.0
International Outgoing Mobile SMS		3,739,629	3,603,214	3.8

Source: CA, Operators' Returns

## 1.14 Roaming Traffic

The trends in outbound and inbound roaming traffic are shown in Tables 5 and 6.

Table 5: Outbound Roaming Traffic

Country / Indicator	Incoming Voice (Minutes)	Incoming SMS	Outgoing Voice (Minutes)	Outgoing SMS	Data Volumes (MB)
Uganda	129,956,419	8,483,026	4,640,235	1,602,885	40,527,720
Tanzania	3,963,587	12,939,120	1,476,149	710,513	11,079,832
Rwanda	3,962,520	-	499,635	179,239	3,643,321
Burundi	4,061	869,132	2,696	8,811	18,111
S. Sudan	5,227,048	120	1,089,668	274,953	71,746
Democratic Republic of Congo	43,792	154,080	133,737	35,159	20,917,840
<b>EAC Total</b>	<b>143,157,427</b>	<b>22,445,478</b>	<b>7,842,120</b>	<b>2,811,560</b>	<b>76,258,570</b>
Others	3,444,755	35,065,350	3,894,686	3,533,678	46,182,631
<b>Total</b>	<b>146,602,182</b>	<b>57,510,828</b>	<b>11,736,806</b>	<b>6,345,238</b>	<b>122,441,201</b>

Source: CA, Operators' Returns

Table 6: In-bound Roaming Traffic

Country / Indicator	Incoming Voice (Minutes)	Incoming SMS	Outgoing Voice (Minutes)	Outgoing SMS	Data Volumes (MB)
Uganda	25,081,578	4,818,725	1,422,855	144,531	12,933,334
Tanzania	33,349,774	16,241,273	302,425	143,881	1,391,119
Rwanda	12,912,549	3,050,648	216,918	41,287	480,089
Burundi	610	2,003	1,290	885	85
S. Sudan	4,761,663	950,039	207,007	27,053	1,083,309
Democratic Republic of Congo	9,583	188,969	69,015	9,691	188,664
<b>EAC Total</b>	<b>76,115,757</b>	<b>25,251,657</b>	<b>2,219,510</b>	<b>367,328</b>	<b>16,076,600</b>

<b>Others</b>	1,373,950	18,521,329	2,837,854	1,515,099	362,183,411
<b>Total</b>	<b>77,489,707</b>	<b>43,772,986</b>	<b>5,057,364</b>	<b>1,882,427</b>	<b>378,260,011</b>

Source: CA, Operators' Returns

### 1.15 Tariffs, Promotions and Special Offers

The number of approved applications for tariffs and, promotions & special offers filed by MNOs during the referenced period is as shown in Figure 12.



Source: CA filed tariffs, promotions and special offers

Figure 12: Distribution of Tariffs, Promotions and Special Offers

### 1.16 Average Pay-As-You-Go (PAYG) Tariffs

Table 7: Average Pay-As-You-Go (PAYG) Tariffs

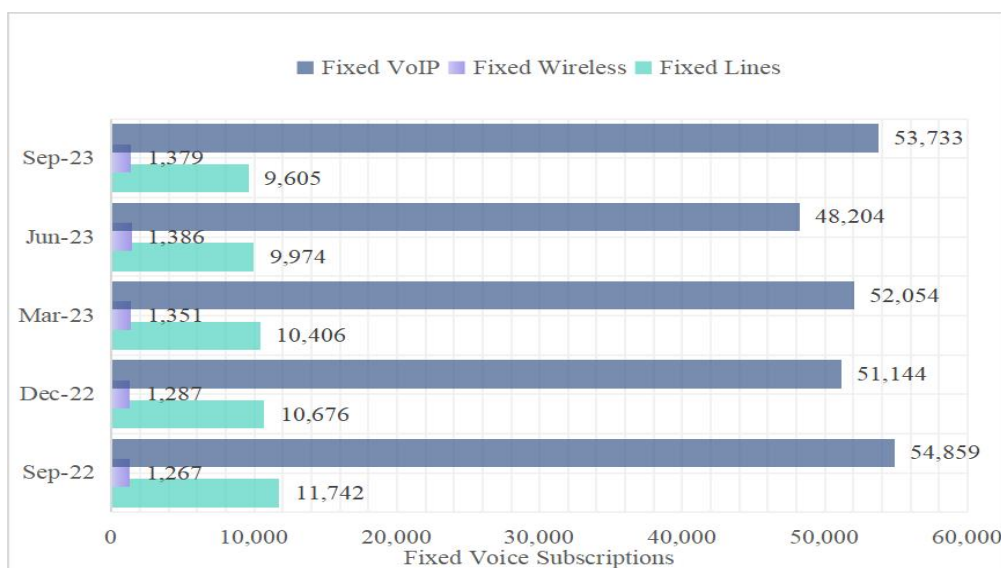
<b>Operator/Market</b>	<b>Average Voice (KES/Min)</b>	<b>SMS (KES/SMS)</b>	<b>Data (KES/MB)</b>
<b>Safaricom PLC</b>	4.87	1.20	4.87
<b>Airtel Network Limited</b>	2.78	1.20	4.50
	4.50	1.20	4.50
<b>Telkom Kenya Limited</b>	3.54	1.15	4.50
<b>Average</b>	<b>3.92</b>	<b>1.19</b>	<b>4.59</b>

Source: CA

## 2. FIXED NETWORK SERVICES

### 2.1 Fixed Telephone Subscriptions

The trends in fixed voice subscriptions are shown in Figure 13.



Source: CA, Operators' Returns

Figure 13: Fixed Voice Subscriptions

## 2.2 Domestic Fixed Voice Traffic

The total domestic fixed network traffic dropped by 2.1 percent to 22.9 million minutes, as shown in Table 8.

Table 8: Domestic Fixed Voice Traffic (Minutes)

Domestic Fixed Voice Traffic (Minutes)	Jul-Sep 23	Apr-Jun 23	Quarterly Variation (%)
<b>Fixed-Fixed</b>	130,811	144,656	-9.6
<b>Fixed Wireless-Fixed Wireless</b>	305,462	300,846	1.5
<b>Fixed to Mobile</b>	22,481,678	22,957,134	-2.1
<b>Total Domestic Fixed Network Traffic</b>	<b>22,917,951</b>	<b>23,402,636</b>	<b>-2.1</b>

Source: CA, Operators' Returns

## 2.3 International Fixed Voice Traffic

International fixed voice traffic recorded an upward trend during the reference as shown in Table 9. The growth for international incoming and outgoing fixed network voice traffic is attributed to the African Climate Summit hosted by the country during September 2023.

Table 9: International Fixed Voice Traffic

Indicator/Period	Jul-Sep 23	Apr-Jun 23	Quarterly Variation (%)
<b>International Incoming Fixed Network Voice traffic</b>	4,332,941	3,091,576	40.2
<b>International Outgoing Fixed Network Voice traffic</b>	1,054,903	847,104	24.5
<b>International Outgoing Fixed VoIP traffic</b>	559,440	476,680	17.4

Source: CA, Operators' Returns

## 2.4 Fixed Data and Broadband Subscriptions

At the end of the first quarter, the majority of customers subscribed to data/Internet speeds between 2 Mbps and 10 Mbps. Table 10 shows the breakdown of fixed data/Internet subscriptions by speed and technology.

Table 10: Fixed Data and Broadband Subscriptions

<b>Internet Technology/Speeds</b>	<b>&lt;256Kbps</b>	<b>=&gt;256Kbps &lt; 2Mbps</b>	<b>=&gt;2 Mbps &lt;10 Mbps</b>	<b>=&gt;10Mbps &lt;30 Mbps</b>	<b>=&gt;30 Mbps &lt;100Mbps</b>	<b>=&gt;100 Mbps &lt;1Gbps</b>	<b>=&gt;1 Gbps</b>	<b>Totals</b>
<b>Cable Modem</b>	-	-	43,858	145,387	9,600	242	1	199,088
<b>Copper (DSL)</b>	9	15	153	5	-	-	-	182
<b>FTTH</b>	-	1,927	284,502	222,664	194,082	3,589	-	706,764
<b>FTTO</b>	163	5,297	28,498	33,855	4,541	1,748	266	74,368
<b>Fixed Wireless</b>	8,326	10,759	226,603	13,062	3,973	589	-	263,312
<b>Satellite</b>	30	218	19	127	-	960	-	1,354
<b>Other Fixed</b>	-	-	665	85	29	2	-	781
<b>Totals</b>	<b>8,528</b>	<b>18,216</b>	<b>584,298</b>	<b>415,185</b>	<b>212,225</b>	<b>7,130</b>	<b>267</b>	<b>1,245,849</b>

Source: CA, Operators' Returns.

## 2.5 Fixed Data Subscriptions by Operator

Table 11 shows Fixed data subscriptions and percentage market shares by operator.

Table 11: Fixed Data Subscriptions by Operator

<b>Service Provider/Indicator</b>	<b>Number of data subscriptions</b>	<b>Market share (%)</b>
Safaricom PLC	454,765	36.5
Jamii Telecommunications Ltd	300,065	24.1
Wananchi Group (Kenya) Limited*	258,418	20.7
Poa Internet Kenya Ltd	155,272	12.5
Mawingu Networks Ltd	22,405	1.8
Dimension Data Solutions East Africa Limited	15,872	1.3
Liquid Telecommunications Kenya	11,279	0.9
Vilcom Network Limited	10,600	0.9
Telkom Kenya Ltd	3,491	0.3
Other Fixed Service providers	13,682	1.1

Source: CA Operators' Returns, \* includes Wananchi Group, Wananchi Telecom, ISAT and Simbanet.

## 2.6 International Bandwidth

During the review period, the total international Internet bandwidth capacity in the country grew by 5.0 percent to 17,353.722 Gbps from 16,523.303 Gbps reported in the preceding quarter. Further, utilisation of undersea bandwidth rose by 13.3 to record 10,964.87 Gbps, out of which 8,011.046 Gbps was used in the country and 2,953.820 Gbps sold outside the country, as shown in Table 12.

Table 12: International Internet Bandwidth (Gbps)

Indicator/ Period	Jul – Sep 23		Apr-Jun 23		Quarterly Variation (%)	
<b>Total Available (Lit/Equip) Bandwidth Capacity (Gbps)</b>	17,353.722		16,523.303		5.0	
<b>Undersea Bandwidth Capacity</b>	<b>SEACOM</b>		<b>SEACOM</b>	3,920.0	0.0	
	<b>TEAMS</b>		<b>TEAMS</b>	4,063.0	0.0	
	<b>Telkom Kenya</b>	<b>EASSY</b>	5,450.0	<b>EASSY</b>	5,250.0	3.8
		<b>Lion 2</b>	880.5	<b>Lion 2</b>	750.5	17.3
		<b>DARE 1</b>	1,386.0	<b>DARE 1</b>	1,386.0	0.0
	<b>PEACE</b>	1,651.405	<b>PEACE</b>	1,151.0	43.5	
<b>Satellite Bandwidth Capacity</b>	2.817		2.803		0.5	
<b>Total Utilized Bandwidth Capacity (Gbps)</b>						
<b>Undersea Bandwidth Capacity</b>	Sold in Kenya	Sold in other Countries	Sold in Kenya	Sold in other Countries	Quarterly Variation (%)	
	8,011.046	2,953.820	6,722.209	2,953.820	13.3	
<b>Satellite Internet Capacity</b>	0.427		0.413		3.4	

Source: CA, Operators' Returns,

### 3. COURIER SERVICES

#### 3.1 Private Operator Traffic

The volume of domestic letters and parcels sent via private courier operators increased from 326,233 to 413,720 and 1.3 million to 1.4 million items, respectively. However, the number of International outgoing and incoming letters decreased during the quarter, as illustrated in Table 13.

Table 13: Courier Items

Indicator/Period	Jul-Sept 23	Apr-Jun 23	Quarterly Variation (%)
<b>Outgoing Domestic Letters</b>	413,720	326,233	26.8
<b>Outgoing Domestic Courier Items</b>	1,427,436	1,256,522	13.6
<b>International Outgoing Letters</b>	411,194	420,700	- 2.3
<b>International Incoming Letters</b>	111,533	123,516	- 9.7

Source: CA, Operators' Returns,

### 4. BROADCASTING SERVICES

Licenses under Broadcast License Framework as of 30<sup>th</sup> September 2023 and the category of services offered.

Table 14: Licensees under Broadcast License Framework

<i>Indicator/Period</i>	<i>Sep-23</i>	<i>Jun-23</i>	<i>Quarterly Variation (%)</i>
<b>Broadcast Signal Distributor</b>	2	2	0.0
<b>Self-Provisioning Broadcast Signal Distributor</b>	3	3	0.0
<b>Commercial Free to Air TV</b>	337	327	3.1
<b>Community Free-to-air TV</b>	9	9	0.0
<b>Commercial FM radio</b>	202	197	2.5
<b>Community FM Radio</b>	76	74	2.7
<b>Subscription Broadcasting Service</b>	18	18	0.0
<b>Subscription Management Service</b>	4	4	0.0
<b>Landing Rights Authorization</b>	5	5	0.0
<b>Total</b>	<b>655</b>	<b>650</b>	<b>0.8</b>

Source: CA, Operators' Returns

#### 4.2 Subscription to Broadcasting Services

The number of subscriptions to the broadcasting services grew by 1.6 percent to report 6.319 million at the end of the reviewed quarter from 6.217 million subscriptions posted in the last quarter.

Table 15: Broadcasting Subscriptions

<i>Indicator/Period</i>	<i>Sep-23</i>	<i>Jun-23</i>	<i>Quarterly Variation (%)</i>	
<b>DTT</b>	Go TV	2,735,461	2,709,323	1.0
	Star Times	1,741,365	1,741,365	0.0
	<b>Sub-Total</b>	<b>4,476,826</b>	<b>4,450,688</b>	<b>0.6</b>
<b>DTH</b>	Azam	73,758	73,031	1.0
	MultiChoice (DSTV)	1,137,898	1,100,687	3.4
	Star Times	304,610	304,610	0.0
	Wananchi (Zuku)	285,404	231,067	23.5
	<b>Sub-Total</b>	<b>1,801,670</b>	<b>1,709,395</b>	<b>5.4</b>
<b>Cable</b>	Cable One	2,658	2,608	1.9
	CTN (MSA)	2,048	2,372	-13.7
	Wananchi (ZUKU)	56,230	48,474	16.0
	Hirani	3,600	3,600	0.0
	Matrucchaya	0	0	0.0
	Wadani Cable	95	95	0.0
	<b>Sub-Total</b>	<b>64,631</b>	<b>57,149</b>	<b>13.1</b>
<b>Total</b>	<b>6,343,127</b>	<b>6,217,232</b>	<b>2.0</b>	

Source: CA, Operators' Returns

#### 4.3 Average Pay TV Tariffs

Table 16: Average Pay TV Tariffs

Indicator	Tariff (Ksh.)
Average Lowest Monthly Bouquet (KES)	249
Average Highest Monthly Bouquet (KES)	1,249

Source: CA, Operators' Returns,

## 5 FREQUENCY SPECTRUM MANAGEMENT

The Authority assigned frequencies to various operators to deploy 203 microwave links and processed the decommissioning of 11 fixed links. In addition, the Authority assigned 4 FM sound broadcasting frequencies to broadcasters, as shown in Table 17.

Table 17: Frequency Spectrum Management

Indicator/Period	Apr-Jun 23	Apr-Jun 23	Quarterly Variation (%)
Microwave links Deployed	203	1,292	-84.3
Fixed Links Decommissioned	11	1,336	-99.2
FM Sound Broadcasting Frequencies Assigned	4	24	-83.3

Source: CA, Operators' Returns,

## 6 ELECTRONIC TRANSACTIONS AND CYBERSPACE MANAGEMENT

### 6.3 Registered Domain Names

Table 18 illustrates the various sub-domains and their respective users as of 30th September 2023.

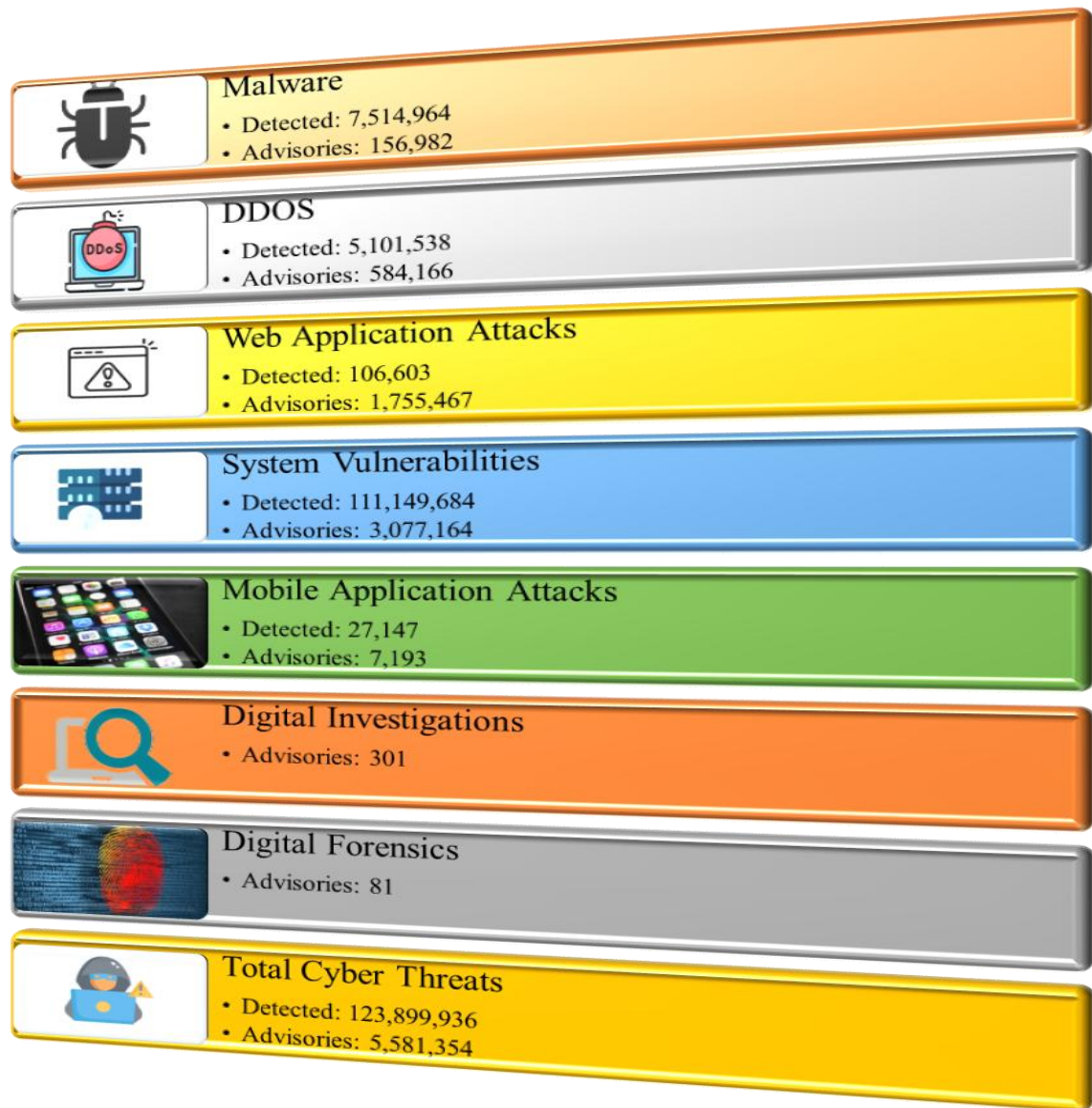
Table 18: KE Domains

SUB-DOMAIN	USER	Sep-23	
		Number of Users	% Share
<b>Total</b>		<b>104,321</b>	<b>100</b>
CO.KE	Companies	90,721	87.0
.KE	Second level	4,900	4.7
ME.KE	Personal Websites and E-mail	3,690	3.5
OR.KE	Non-Profit-Making Organizations	1,968	1.9
AC.KE	Institutions of Higher Education	1,119	1.1
SC.KE	Lower and Middle-Level Institutions	995	1.0
GO.KE	Government Institutions	700	0.7
INFO.KE	Information	147	0.1
NE.KE	Personal Websites and E-mail	48	0.0
MOBI.KE	Mobile Content	33	0.0

Source: Kenic.

### 6.4 National Cyber Space Landscape

The trends in cyber threats detected and cyber threat advisories are shown in Figure 14.



Source: National KE-CIRT/CC

Figure 14: Cybersecurity Landscape

## 7 CONCLUSION

Kenya’s ICT sector continued to exhibit an upward trajectory in the adoption of mobile services, propelled by advancements in mobile connectivity and the availability of infrastructure. Consequently, this has led to faster and more reliable connections. We anticipate the continuation of these trends, with increased communication and data usage as we enter the festive season, as consumers connect with their families and friends.