FIRST QUARTER SECTOR STATISTICS REPORT FOR THE FINANCIAL YEAR 2022/2023 (1ST JULY – 30TH SEPTEMBER 2022)

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LIST OF ACRONYMS

B2B	Business to Business
B2C	Business to Customer
C2B	Customer to Business
C2G	Citizen to Government
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
P2P	Person to Person
SEACOM	Sea Sub-Marine Communications Limited
SIM	Subscriber Identification Module
SMS	Short Messaging Service
TEAMS	The East African Marine System
LTE	Long Term Evolution
UMTS	Universal Mobile Telecommunication System

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 in this report is subject to review during the subsequent quarter in case of any revisions or updates from the licensees.

The Authority developed and published a manual on definitions and methodologies of collecting and reporting administrative data on Telecommunication indicators. The Manual, which was prepared in consultation with the International Telecommunications Union (ITU) is available on https://ca.go.ke/wp-content/uploads/2020/03/ICT-Indicators-Manual-2019-.pdf

SUMMARY OF ICT INDICATORS

This First Quarter Sector Statistics Report for the 2022/23 Financial Year provides the performance and trends in the ICT sector for the period 1st July to 30th September 2022 in:

1. Telephony services
2. Data/Internet services
3. Postal and Courier services
4. Broadcasting services
5. Frequency spectrum management
6. Electronic transactions and Cyber space management

Indicator/Period	Q1 (July - Sep 2022)	Q4 (Apr-Jun 2022)	Quarterly Variation (%)
TELEPHONY SERVICES			
Subscription to Mobile Services			
Total Mobile (SIM) Subscriptions	65,459,720	64,673,817	1.2
Machine to Machine (M2M) Subscriptions	1,429,131	1,341,111	6.6
Penetration of Mobile Phones			
Penetration of Feature Phones (%)	66.6	66.5	0.2
Penetration of Smart Phones (%)	54.3	56.4	-3.7
Mobile Money Transfer Services			
Number of Registered Mobile Money Agents	307,928	301,890	2.0
Mobile Money Subscriptions	37,403,762	37,218,141	0.5
Domestic Mobile Traffic			
Mobile Voice Traffic (Minutes)			
On-Net Voice Traffic	16,450,448,487	16,787,459,739	-2.0
Off-Net Voice Traffic	2,463,847,876	2,413,468,196	2.1
Mobile Network to Fixed Network	17,063,562	14,112,698	20.9

Indicator/Period	Q1 (July - Sep 2022)	Q4 (Apr-Jun 2022)	Quarterly Variation (%)
Mobile SMS Traffic			
SMS On-Net	12,582,653,244	12,477,142,312	0.8
SMS Off-Net	1,644,644,086	1,493,439,357	10.1
International Mobile Traffic			
Mobile Voice Traffic (Minutes)			
International Incoming Mobile Voice Traffic	101,963,388	106,116,104	-3.9
International Outgoing Mobile Voice Traffic	169,784,929	169,821,009	0.0
Mobile SMS Traffic			
International Incoming SMS	9,193,035	9,143,550	0.5
International Outgoing SMS	5,016,164	5,111,392	-1.9
Roaming Traffic			
Out-bound Roaming Traffic			
Out-bound Roaming Incoming Voice Traffic (Minutes)	126,247,595	125,395,944	0.7
Out-bound Roaming Outgoing Voice Traffic (Minutes)	12,400,736	12,450,581	-0.4
Out-bound Roaming Incoming SMS	46,367,551	41,871,244	10.7
Out-bound Roaming Outgoing SMS	6,904,649	13,608,841	-49.3
Data Volumes (MB)	91,534,504	85,857,627	6.6
In-bound Roaming Traffic			

Indicator/Period	Q1 (July - Sep 2022)	Q4 (Apr-Jun 2022)	Quarterly Variation (%)
In-bound Roaming Incoming Voice Traffic (Minutes)	34,998,181	33,970,665	3.0
In-bound Roaming Outgoing Voice Traffic (Minutes)	3,488,801	3,558,756	-2.0
In-bound Roaming Incoming SMS	30,921,954	27,708,583	11.6
In-bound Roaming Outgoing SMS	1,637,272	1,523,089	7.5
Data Volumes (MB)	152,389,447	121,378,027	25.5
Fixed Voice Subscriptions			
Fixed Line Subscriptions	11,742	12,529	-6.3
Fixed Wireless Subscriptions	1,267	1,253	1.1
Fixed VoIP Subscriptions	54,859	51,861	5.8
Domestic Fixed Voice Traffic			
Fixed line-Fixed line	77,315	94,129	-17.9
Fixed Wireless-Fixed Wireless	281,306	295,421	-4.8
Fixed to Mobile	25,030,280	22,430,428	11.6
International Fixed Voice Traffic			
Incoming Fixed Voice Traffic	3,013,147	2,707,155	11.3
Outgoing Fixed Voice Traffic	1,241,835	1,387,617	-10.5
Outgoing Fixed VOIP	580,687	596,912	-2.7

Indicator/Period	Q1 (July - Sep 2022)	Q4 (Apr-Jun 2022)	Quarterly Variation (%)
DATA/INTERNET AND BROADBAND SERVICES			
Total Data/internet subscriptions	48,367,704	47,644,676	1.5
Total Broadband subscriptions	31,820,694	30,105,197	5.7
Total Available International Bandwidth (Gbps)	11,971.23	11,605.99	3.1
Total Used International Bandwidth (Gbps)	6,135.40	6,003.17	2.2
ELECTRONIC TRANSACTIONS AND CYBER SPACE MANAGEMENT			
. CO.KE Domain	98,662	97,596	1.1
Total Cyber Threats Detected	278,030,354	92,838,258	199.5
Total Cyber Threat Advisories	5,313,512	1,972,575	169.4
BROADCASTING SERVICES			
Licensed Commercial Free to Air TV	300	286	4.9
Licensed Commercial FM radio	172	160	7.5
Licensed Community Free to Air TV	9	9	0.0
Licensed Community FM Radio	55	53	3.8
DTT Subscriptions	4,337,703	4,283,070	1.3
DTH Subscriptions	1,680,381	1,627,498	3.2
Cable Subscriptions	62,386	78,063	-20.1
COURIER SERVICES			
Outgoing Domestic Letters	708,119	663,437	6.7
Outgoing Domestic Courier Items	1,234,677	1,133,720	8.9
International Outgoing Letters	452,701	473,479	-4.4

Indicator/Period	Q1 (July - Sep 2022)	Q4 (Apr-Jun 2022)	Quarterly Variation (%)
International Incoming Letters	125,352	134,129	-6.3
FREQUENCY SPECTRUM MANAGEMENT			
Microwave links Deployed	203	198	2.5
Fixed Links Decommissioned	135	357	-62.2
FM Sound Broadcasting Frequencies Assigned	17	13	30.8
POPULATION			
Total Population in Kenya (Millions)*	49.4	49.4	0.0

***Economic Survey 2022**

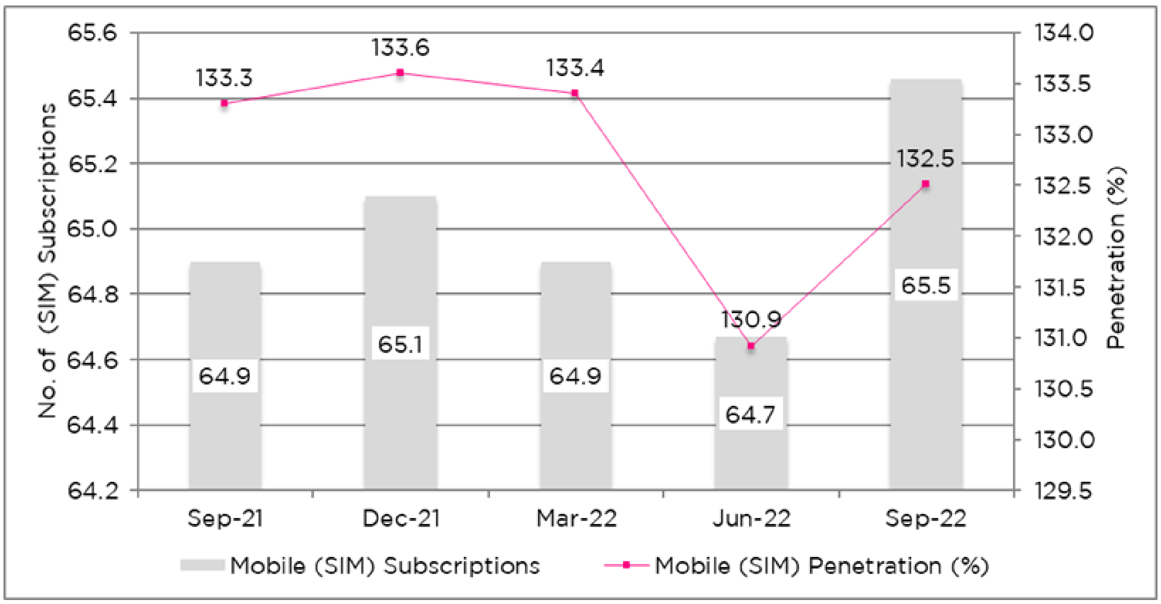
1. TELEPHONY SERVICES

1.1 Mobile Services

1.1.1 Mobile (SIM) Subscriptions

The quarter under review was marked by increased activity across mobile network platforms due to the busy electioneering period. Consequently, active[1] mobile subscriptions (SIM Cards) grew to 65.5 million from 64.7 million recorded in the previous quarter representing a growth of 1.2 percent. This translated to a mobile (SIM) penetration level of 132.5 percent.

Figure 1 illustrates the trends in mobile (SIM) subscriptions and penetration.

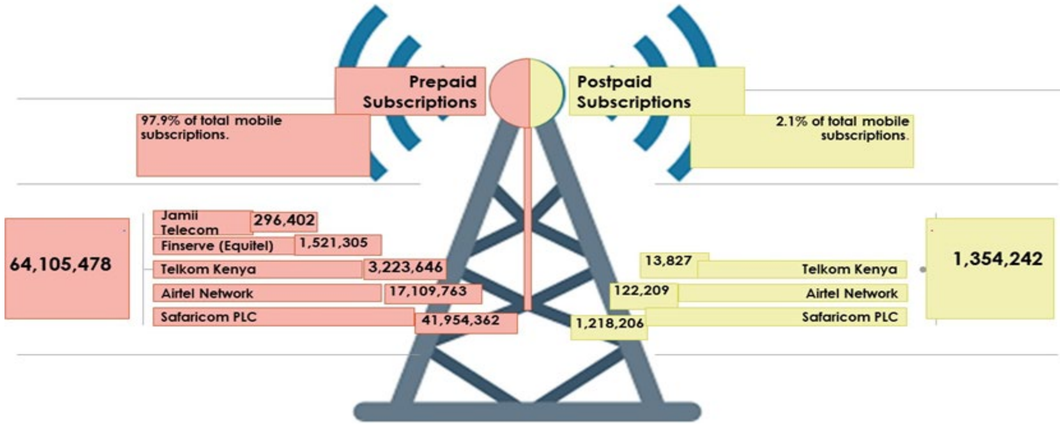


Source: CA, Operators' Returns

Figure 1: Mobile Subscriptions and Penetration

Figure 2 displays the number of active mobile (SIM) subscriptions per operator by contract type.

[1] Active Subscription refers to any subscription that has generated revenue in the last 3 months.



Source: CA, Operators' Returns

Figure 2: Mobile Subscription per Operator

1.1.2 Machine-to-Machine Subscriptions

Machine-to-Machine (M2M)2 subscriptions grew by 6.6 percent to 1.4 million from 1.3 million reported during the previous quarter as shown in Table 1.

Table 1: Machine-to-Machine Subscriptions

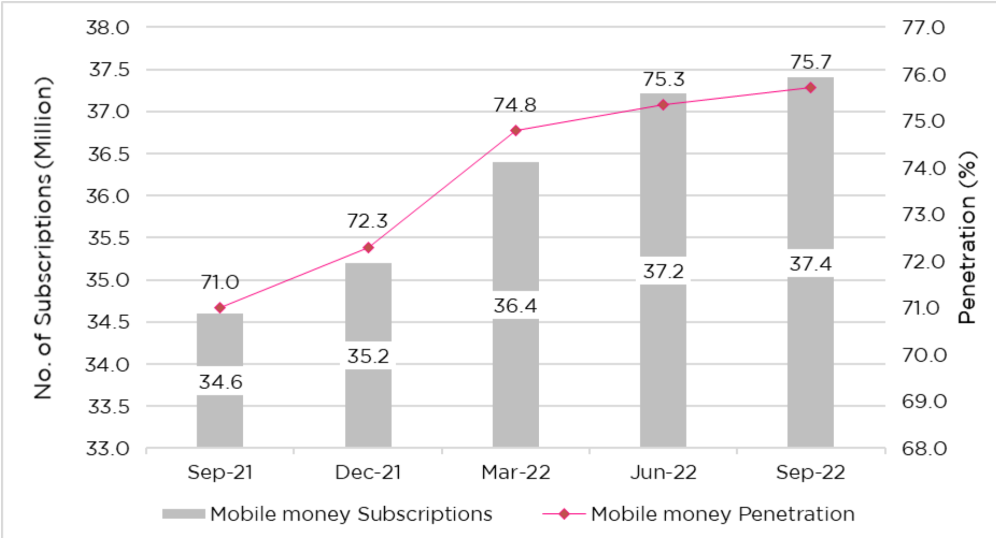
Indicator/Period	***Sep 22***	***Jun 22***	***Quarterly Variation (%)***
Machine-to-Machine (M2M)	1,429,131	1,341,111	6.6

Source: CA, Operators' Returns.

1.1.3 Mobile Money Services

As mobile money continues to gain popularity among businesses and public institutions, the number of subscriptions continues to increase with the reference period recording 37.4 million from 37.2 million reported during preceding period, representing a penetration level of 75.7 percent.

[2] **Machine to Machine mobile-network subscriptions (M2M subscriptions)** refers 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 should be included. Mobile dongles and tablet subscriptions should be excluded. Only active subscriptions are counted

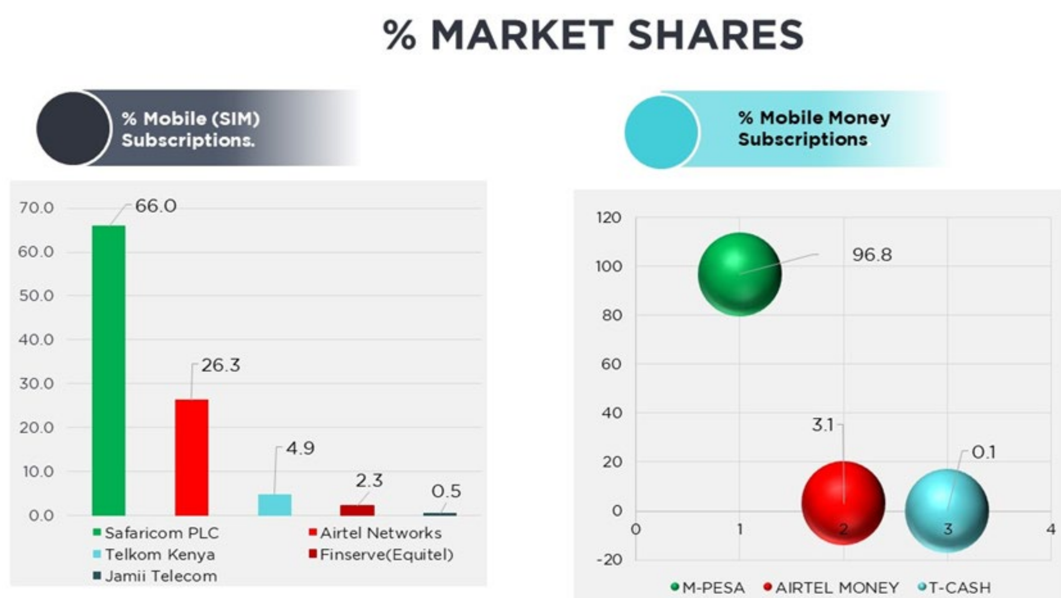


Source: CA, Operators' Returns

Figure 3: Mobile Money Services

1.1.4 Market Shares in Subscriptions for Mobile Services

Figure 4 illustrates market shares in mobile (SIM) subscriptions per operator and mobile money subscriptions per brand.

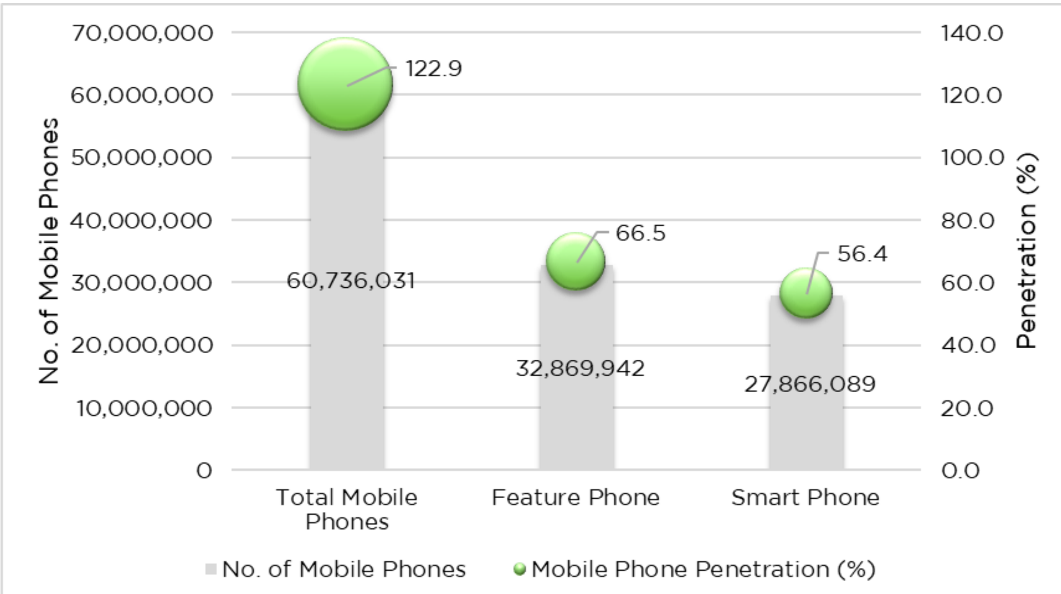


Source: CA, Operators' Returns

Figure 4: Mobile Market Shares

1.1.5 Mobile Phone Devices

As at 30th September 2022, there were 60.7 million mobile phone devices connected to mobile networks, out of which 32.9 million were feature phones while 27.9 million were smartphones. The penetration rates for feature phones and smartphones as a percentage of the total population was 66.5 and 56.4 percent respectively.



Source: CA, Operators' Returns

Figure 5: Mobile Phone Devices

1.1.6 Domestic Mobile Voice Traffic (Minutes)

The total outgoing mobile voice traffic declined to 18.9 billion during the quarter from 19.2 billion minutes recorded during the fourth quarter. The decline is attributed to the increased preference and uptake of VoIP services especially in urban areas where fast Internet connections are readily available.

Table 2: Domestic Mobile Voice Traffic

Mobile Traffic	***Jul-Sep 22***	***Apr-Jun 22***	***Quarterly Variation (%)***
Total Outgoing Traffic	**18,931,359,926**	**19,215,040,633**	**-1.5**
On-net (Own Network - Own Network)	16,450,448,487	16,787,459,739	-2.0
off-net (Own Network to Other Mobile Networks)	2,463,847,876	2,413,468,196	2.1
Mobile Network to Fixed Network	17,063,562	14,112,698	20.9

Source: CA, Operators' Returns,

1.1.1.1. Minutes of Use per Call per Operator

The average Minutes of Use per Call for on-net and off-net local mobile voice traffic stood at 1.6 and 1.0 minutes respectively, with Airtel Networks' customers spending more time on a single on-net call averaging 2.7 minutes. Further, Telkom Kenya Ltd and Equitel customers recorded the highest average Minutes of Use per off net call, attributed to their lower calling rates.

Table 3 outlines the average minutes of use per call by operator.

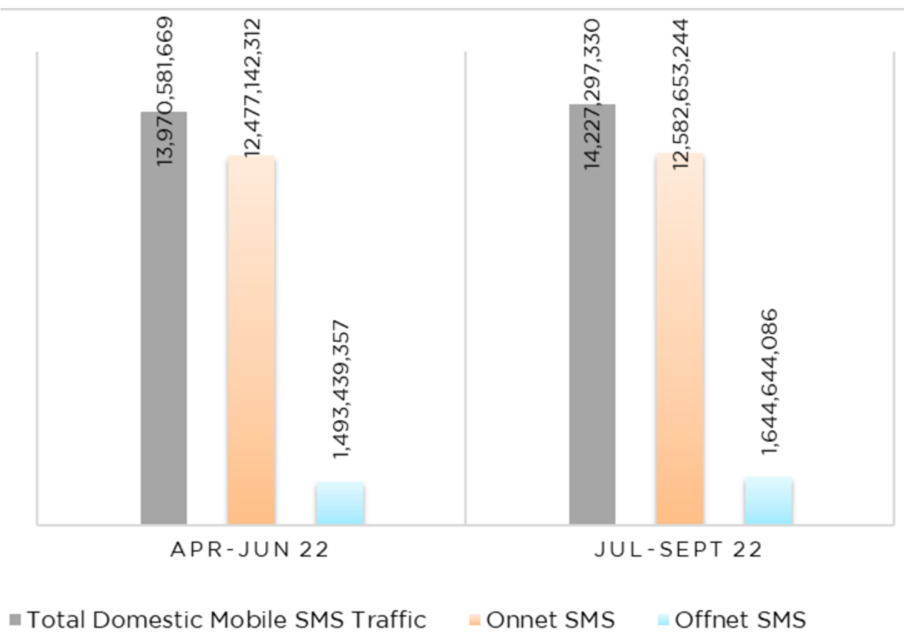
Table 3: Minutes of Use per Call

Period	***Jul-Sep 22***		***Apr-Jun 22***	
Operator/Indicator	***On-net***	***Off-net***	***On-net***	***Off-net***
Total	**1.6**	**1.0**	**1.6**	**1.0**
Safaricom PLC	1.4	1.0	1.4	1.0
Airtel networks Limited	2.7	0.9	2.8	1.0
Telkom Kenya Limited	2.0	1.3	1.9	1.3
Equitel	2.3	1.3	2.4	1.3
Jamii Telecommunications Limited	0.1	1.1	0.1	1.2

Source: CA, Operators' Returns

1.1.7 Mobile SMS Traffic

Domestic SMS traffic grew by 1.8 percent to record 14.23 billion from 14.0 billion messages reported in the preceding quarter. The ratio of on net to off net SMS was 88:12.



Source: CA, Operators' Returns

Figure 6: Domestic SMS Traffic

1.1.8 Voice and SMS Traffic per Operator

The trends in domestic voice and SMS traffic per operator are shown in Table 4.

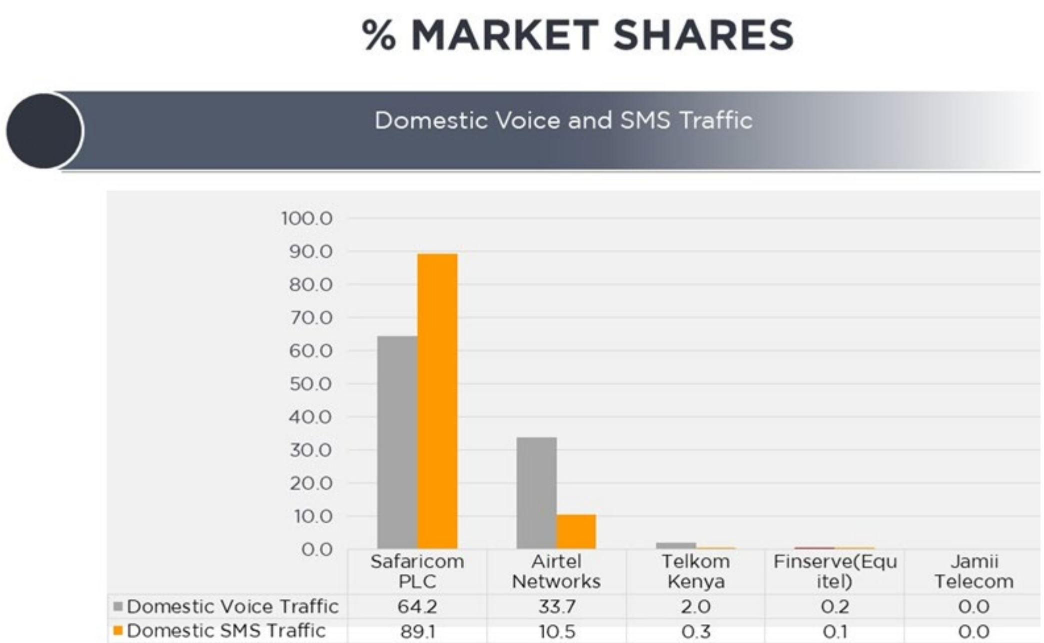
Table 4: Domestic Mobile Traffic

Name of /Indicator		***Operator***	***Safaricom PLC***	***Airtel Networks Kenya Limited***	***TKL***	***Equitel***	***JTL***	***Total***
Jul-Sep 22	***Voice***	***On-net***	11,402,262,230	4,827,837,317	217,920,004	2,394,467	34,469	**16,450,448,487**
		Off-net	742,804,590	1,537,667,529	152,653,106	29,256,810	1,465,841	**2,463,847,876**
		Total	**12,145,066,820**	**6,365,504,846**	**370,573,110**	**31,651,277**	**1,500,311**	**18,914,296,364**
	SMS	*On-net*	11,876,076,650	701,164,963	3,388,615	2,006,174	16,842	**12,582,653,244**
		Off-net	798,647,081	799,747,592	41,910,113	3,972,062	367,238	**1,644,644,086**
		Total	**12,674,723,731**	**1,500,912,555**	**45,298,728**	**5,978,236**	**384,080**	**14,227,297,330**

Source: CA, Operators' Returns

1.1.9 Market shares in Domestic Mobile Voice and SMS Traffic

The market shares in domestic mobile voice and SMS traffic are as shown in Figure 7.

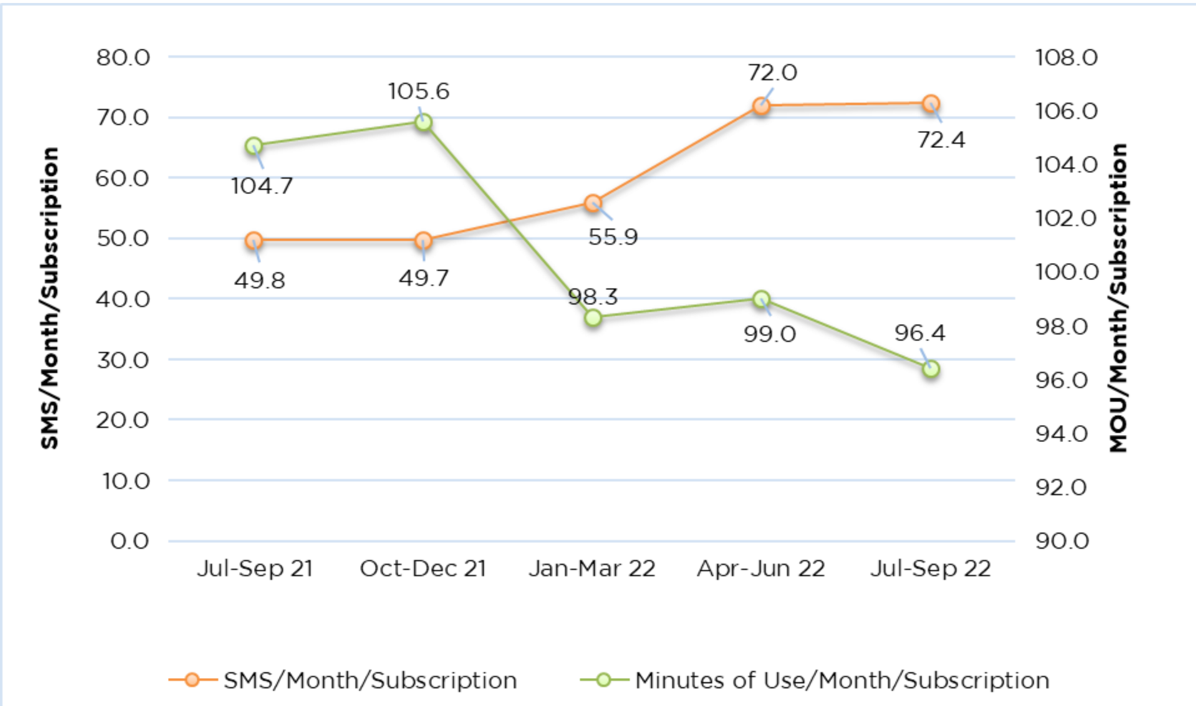


Source: CA, Operators' Returns

Figure 7: Market Shares in Domestic Mobile Voice and SMS

1.1.10 Minutes/Month/Subscription vs SMS/Month/Subscription

The Minutes of Use per Month per Subscription dropped from 99.0 recorded during the fourth quarter to 96.4 minutes during the reference period. Conversely, short messages sent per month per subscription grew from 72.0 to 72.4 messages.



Source: CA, Operators' Returns

Figure 8: MoU/Month/Subscription vs SMS/Month/Subscription

1.1.11 International Mobile Traffic

The international incoming mobile voice traffic declined by 3.9 percent to 101.96 million minutes whereas international outgoing mobile voice traffic declined by 0.02 percent to 169.78 million minutes.

The international incoming and outgoing mobile SMS stood at 9.2 million and 5.0 million respectively as shown in Table 5.

Table 5: International Mobile Traffic

Indicator/Period	*Region*	*Jul-Sep 22*	*Apr-Jun 22*	*Quarterly Variation (%)*
International Incoming Mobile Voice Minutes	*EAC*	69,328,822	68,015,684	1.93
	Others	32,634,566	38,100,420	-14.35
	Total	**101,963,388**	**106,116,104**	**-3.91**
International Outgoing Mobile Voice Minutes	*EAC*	88,687,382	87,887,419	0.91
	Others	81,097,547	81,933,590	-1.02
	Total	**169,784,929**	**169,821,009**	**-0.02**
International Incoming Mobile SMS		9,193,035	9,143,550	0.54
International Outgoing Mobile SMS		5,016,164	5,111,392	-1.86

Source: CA, Operators' Returns

1.1.12 Roaming Traffic

The trends in outbound and inbound roaming traffic are as shown in Tables 6 and 7.

Table 6: Outbound Roaming Traffic

Country / Indicator	**Incoming Voice (Minutes)**	**Incoming SMS**	**Outgoing Voice (Minutes)**	**Outgoing SMS**	**Data Volumes (MB)**
Uganda	116,003,021	5,094,570	5,194, 540	1,803,744	33,858,558
Tanzania	248,441	11,144,841	782,593	897,967	11,555,114
Rwanda	4,289,904	0	548,876	166,715	3,557,801
Burundi	6,957	702,301	4,115	10,103	23,514
S. Sudan	4,547,238	18,213	860,551	190,258	165,973
EAC Total	**125,095,561**	**16,959,925**	**7,390,675**	**3,068,787**	**49,160,960**
Others	1,152,034	29,407,626	5,010,061	3,835,862	42,373,544
Total	**126,247,595**	**46,367,551**	**12,400,736**	**6,904,649**	**91,534,504**

Source: CA, Operators' Returns

Table 7: In-bound Roaming Traffic

Country / Indicator	Incoming Voice (Minutes)	Incoming SMS	Outgoing Voice (Minutes)	Outgoing SMS	Data Volumes (MB)
Uganda	21,283,380	3,926,764	739,960	138,516	3,864,974
Tanzania	176,264	10,002,506	66,660	130,989	845,657
Rwanda	7,534,105	1,587,636	196,526	24,400	2,543,976
Burundi	534	2,570	887	991	111
S. Sudan	4,927,624	839,032	201,915	29,585	872,916
EAC Total	**33,921,907**	**16,358,508**	**1,205,948**	**324,481**	**8,127,634**
Others	1,076,274	14,563,446	2,282,853	1,312,791	144,261,813
Total	**34,998,181**	**30,921,954**	**3,488,801**	**1,637,272**	**152,389,447**

Source: CA, Operators' Returns

1.1.13 Tariffs, Promotions and Special Offers

The number of approved applications for tariffs and, promotions and special offers filed by MNOs during the referenced period is as shown in Figure 9.

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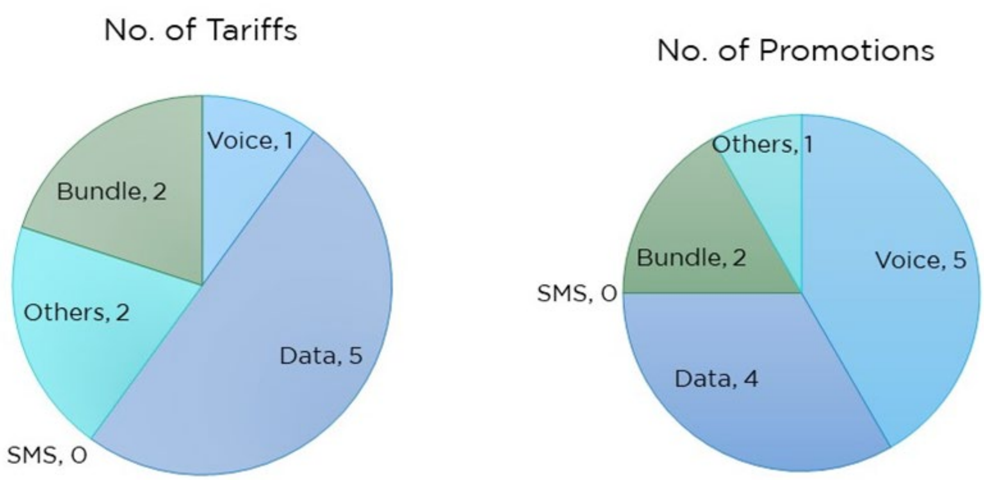


Source: CA, filed tariffs, promotions and special offers

Figure 9: Distribution of Tariffs, Promotions and Special Offers

1.1.14 Average Pay-As-You-Go (PAYG) Tariffs

Table 8: Average Pay-As-You-Go (PAYG) Tariffs

Market	Tariff (Ksh.)
Voice (KES/Min)	3.92
SMS (KES/SMS)	1.19
Data (KES/MB)	4.59

1.2 FIXED TELEPHONE SERVICE

1.2.1 Fixed Telephone Subscriptions

Fixed line subscriptions dropped by 6.3 percent whereas fixed wireless and fixed VoIP subscriptions grew by 1.1 percent and 5.8 percent respectively.

Table 9: Fixed Voice Subscriptions

Subscriptions	*Sep-22*	*Jun-22*	*Quarterly Variation (%)*
Fixed Line	11,742	12,529	-6.3
Fixed Wireless	1,267	1,253	1.1
Fixed VoIP	54,859	51,861	5.8

Source: CA, Operators' Returns

1.2.2 Domestic Fixed Voice Traffic

The total domestic fixed network traffic grew by 11.3 percent during the period to record 25.4 million minutes. Table 9 shows trends in domestic fixed voice traffic in minutes.

Table 10: Domestic Fixed Voice Traffic in Minutes

Domestic Fixed Network Traffic	*Jul-Sep 22*	*Apr-Jun 22*	*Quarterly Variation (%)*
Fixed-Fixed	77,315	94,129	-17.9
Fixed Wireless-Fixed Wireless	281,306	295,421	-4.8
Fixed to Mobile	25,030,230	22,430,428	11.6
Total Domestic Fixed Network Traffic	**25,388,851**	**22,819,978**	**11.3**

Source: CA, Operators' Returns

1.2.3 International Fixed Voice Traffic

During the period under review, international incoming fixed voice recorded an upward trend whereas outgoing fixed voice and outgoing fixed VoIP traffic recorded a downward trend as shown in Table 10.

Table 11: International Fixed Voice Traffic

Indicator/Period	*Jul-Sep 22*	*Apr-Jun 22*	*Quarterly Variation (%)*
International Incoming Fixed Network Voice traffic	3,013,147	2,707,155	11.3
International Outgoing Fixed Network Voice traffic	1,241,835	1,387,617	-10.5
International Outgoing Fixed VoIP traffic	580,687	596,912	-2.7

Source: CA, Operators' Returns

2. DATA/INTERNET AND BROADBAND SERVICES

During the first quarter, total data/Internet and broadband[3] subscriptions grew by 1.5 percent and 5.7 percent to stand at 48.4 million and 31.8 million respectively as shown in Table 11.

Table 12: Data and Broadband Subscriptions

Indicator/Period	*Sep 22*	*Jun 22*	*Quarterly Variation (%)*
Total Data/internet subscriptions	48,367,704	47,644,676	1.5
Total Broadband subscriptions*	31,820,694	30,105,197	5.7

Source: CA operator returns, ** Includes both mobile and fixed broadband*

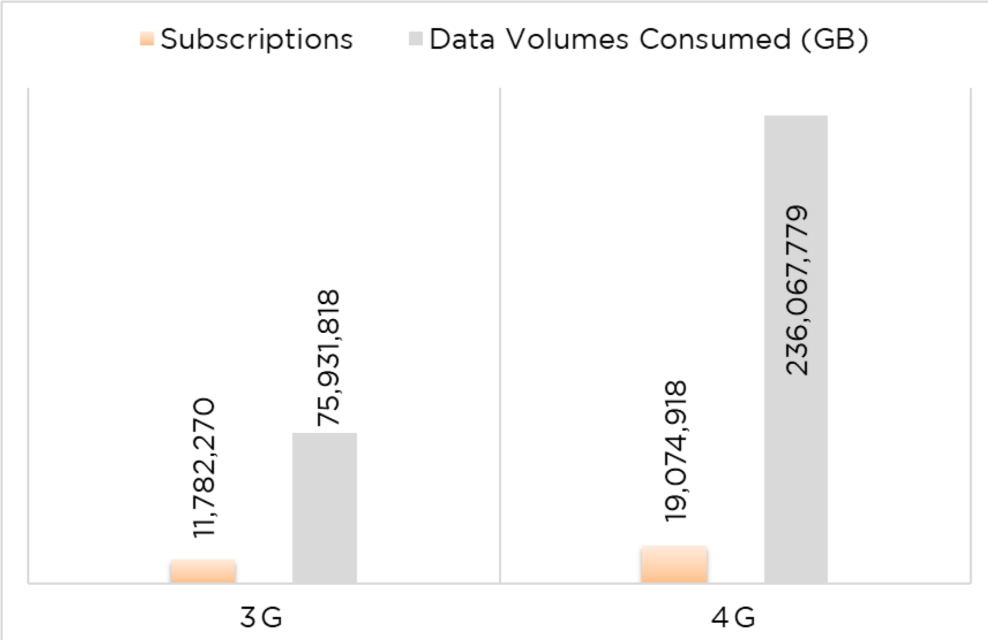
2.1 Mobile Broadband Subscriptions (3G[4] and 4G[5])

The total mobile broadband subscriptions stood at 30.9 million by the end of the first quarter of the 2022/23 Financial Year. The number of active mobile broadband subscriptions by technology and the respective data volumes consumed in GB is as shown in Figure 10.

[3] Broadband refers to connectivity that delivers interactive, secure, quality and affordable services at a minimum speed of 2Mbps (The National Broadband Strategy 2018-2023).

[4] **Active 3G mobile-broadband subscriptions** refer to the sum of active handset based and computer-based (USB/dongles) SIM Cards that have generated the highest broadband traffic through 3G technologies. It covers actual subscriptions, not potential subscribers, even though the latter may have broadband-enabled handsets. If a subscriber has accessed the Internet through 3G and 4G, the technology where the subscriber has generated the highest traffic will be the one to be counted.

[5] **Active 4G mobile-broadband subscriptions** refers to the sum of active handset based and computer-based (USB/dongles) SIM Cards that have generated the highest broadband traffic through 4G technology.



Source: CA, Operators' Returns.

Figure 10: Mobile Broadband Subscriptions

2.2Fixed Data/Internet and Broadband Subscriptions

As shown in Table 12, the majority of fixed data/Internet subscribers were on speeds greater than/equal to 2Mbps and less than 10 Mbps. Notably, 60.2 percent of fixed data/Internet subscribers were connected through fibre technology (FTH/O[6]).

Table 12 shows the breakdown of fixed data/internet subscriptions by technology and speed.

Table 13: Fixed Data and Broadband Subscriptions

Internet Technology/Speeds	***<256Kbps***	***=>256Kbps < 2Mbps***	***=>2 Mbps <10 Mbps***	***=>10Mbps <30 Mbps***	***=>30 Mbps <100Mbps***	***=>100 Mbps***	***Totals***
Cable Modem	-	-	56,423	133,143	13,081	490	**203,137**
Copper (DSL)	11	23	405	365	5	3	**812**
FTTH/O	0	7,594	236,229	187,574	158,264	4,417	**594,078**
Fixed Wireless	7,659	7,402	160,958	8107	2281	520	**186,927**
Satellite	27	240	337	127	0	0	**731**
Other Fixed	-	-	665	85	25	2	**777**
Totals	**7,697**	**15,259**	**455,017**	**329,401**	**173,656**	**5,432**	**986,462**

Source: CA, Operators' Returns.

[6] FTH/O refers to Fibre-to-the-Home/Office

During the quarter under review, Safaricom PLC recorded the highest market shares in fixed data subscriptions at 35.6% followed by Wananchi Group at 25.5 percent as shown in Table 13.

Table 14: Fixed Data Subscriptions by Operator

Name of service Provider	*Number of data/internet subscriptions*	*Percentage Market share (%)*
Safaricom PLC	350,724	35.6
Wananchi Group (Kenya) Limited*	251,133	25.5
Jamii Telecommunications Ltd	218,036	22.1
Poa Internet Kenya Ltd	106,571	10.8
Liquid Telecommuications Kenya	16,370	1.7
Mawingu Networks Ltd	14,370	1.5
Dimension Data Solutions East Africa Limited	12,820	1.3
Telkom Kenya Ltd	4,541	0.5
Vilcom Network Limited	3,423	0.3
Other Fixed Service providers	8,474	0.9

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

2.3 International Bandwidth

The total international Internet bandwidth available in the country grew by 3.2 percent to 11,971.23Gbps as shown in Table 14. The total utilized undersea bandwidth capacity increased by 2.2 percent to 6,132.81Gbps out of which, 4,026Gbps was used in the country and 2,105.82Gbps sold outside the country.

Table 15: International Internet Bandwidth (Gbps)

<table>
<tr><th>Indicator/ Operator</th><th colspan="3">Jul-Sep 22</th><th colspan="2">Apr-Jun 22</th><th>Quarterly Variation (%)</th></tr>
<tr><td>Total Available (Lit/Equip) Bandwidth Capacity (Gbps)</td><td colspan="3">11,971.23</td><td colspan="2">11,605.99</td><td>3.2</td></tr>
<tr><td rowspan="5">Undersea Bandwidth Capacity</td><td colspan="2">SEACOM</td><td>3,920.00</td><td>SEACOM</td><td>3,920.00</td><td>0.0</td></tr>
<tr><td colspan="2">TEAMS</td><td>1,618.00</td><td>TEAMS</td><td>1,618.00</td><td>0.0</td></tr>
<tr><td rowspan="3">Telkom Kenya</td><td>EASSY</td><td>4,990.00</td><td>EASSY</td><td>4,750.00</td><td>5.1</td></tr>
<tr><td>Lion 2</td><td>572.20</td><td>Lion 2</td><td>553.00</td><td>3.5</td></tr>
<tr><td>DARE 1</td><td>866.04</td><td>DARE 1</td><td>760.00</td><td>14.0</td></tr>
<tr><td>Satellite Bandwidth</td><td colspan="3">4.99</td><td colspan="2">4.99</td><td>0.0</td></tr>
</table>

Capacity					
	Total Utilized Bandwidth Capacity (Gbps)				
Undersea Bandwidth Capacity	***Sold In Kenya***	***Sold in other Countries***	***Sold In Kenya***	***Sold in other Countries***	
	4,026.99	2,105.82	3,924.76	2,075.82	2.2
Satellite Internet Capacity	2.59		2.59		0.0

Source: CA, Operators' Returns.

3. POSTAL AND COURIER SEVICES

The volume of letters and courier items sent within the country increased by 6.7 percent and 8.9 percent respectively while the international outgoing and incoming letters dropped by 4.4 percent and 6.3 percent respectively as shown in Table 15.

Table 16: Courier Items

Indicator/Period	***Jul-Sep 22***	***Apr-Jun 22****	***Quarterly Variation (%)***
Outgoing Domestic Letters	708,119	663,437	6.7
Outgoing Domestic Courier Items	1,234,677	1,133,720	8.9
International Outgoing Letters	452,701	473,479	-4.4
International Incoming Letters	125,352	134,129	-6.3

Source: CA, Operators' Returns, **Data revised to includes Postal Corporation of Kenya (PCK)*

4. BROADCASTING SERVICES

The Authority in its mandate to promote and facilitate the development of diverse range of broadcasting services in Kenya and fostering a competitive broadcasting market issues licenses to service providers on a continuous basis.

4.1 Licensees under Broadcast License Framework

Table 16 provides the details of the cumulative number of licensees in the broadcasting sub-sector.

Table 17: Licensees under Broadcast License Framework

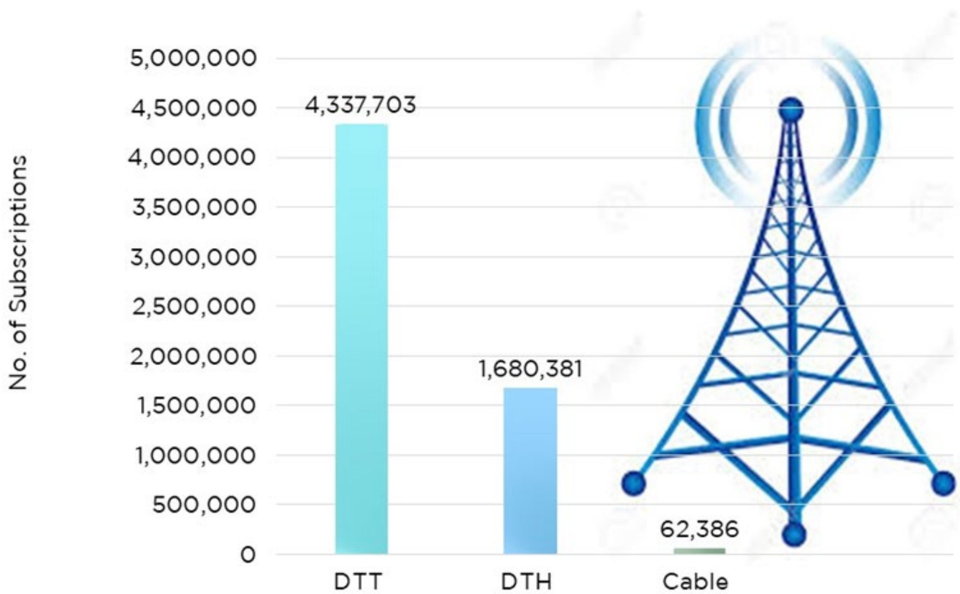
Indicator/Period	***Sep-22***	***Jun-22***	***Quarterly Variation (%)***
Broadcast Signal Distributor	2	2	0.0
Self-Provisioning Broadcast Signal Distributor	3	3	0.0
Commercial Free to Air TV	300	286	4.9

Community Free to Air TV	9	9	0.0
Commercial FM radio	172	160	7.5
Community FM Radio	55	53	3.8
Subscription Broadcasting Service	18	18	0.0
Subscription Management Service	4	4	0.0
Landing Rights Authorization	5	5	0.0
Total	**568**	**540**	**5.2**

Source: CA

4.2 Subscription to Broadcasting Services

Subscriptions to broadcasting services grew by 1.5 percent to a total of 6.08 million from 5.98 million reported at the end of the previous quarter. Digital terrestrial television (DTT) and direct to home (DTH) recorded an upward trend of 1.3 percent and 3.2 percent respectively whereas cable subscriptions dropped significantly by 20.1 percent as shown in Figure 11.



Source: CA

Figure 11: Broadcasting Subscriptions

5. FREQUENCY SPECTRUM MANAGEMENT

During the period under review, the Authority assigned frequencies to various operators for deployment of 203 microwave links and processed the decommissioning of 135 fixed links. Further, the Authority assigned 17 FM sound broadcasting frequencies to broadcasters.

Table 18: Frequency Spectrum Management

Indicator/Period	*Jul-Sep 22*	*Apr-Jun 22*	*Quarterly Variation (%)*
Microwave links Deployed	203	198	2.5
Fixed Links Decommissioned	135	357	-62.2
FM Sound Broadcasting Frequencies Assigned	17	13	30.8

Source: CA

6. ELECTRONIC TRANSACTIONS AND CYBER SPACE MANAGEMENT

6.1 Registered Domain Names

The total number of users for .KE domains stood at 98,662 as at 30th September, 2022 with .CO.KE sub-domain recording the highest market share in users at 89.0 percent. Table 18 illustrates the various sub-domains and their respective users.

Table 19: .KE Domains

SUB-DOMAIN	*USER*	*Sep-22*	
		Number of Users	**% Users**
CO.KE	Companies	87,800	89.0
OR.KE	Non-Profit-Making Organizations	1,890	1.9
AC.KE	Institutions of Higher Education	1,045	1.1
SC.KE	Lower and Middle Level Institutions	1,116	1.1
NE.KE	Personal Websites and E-mail	48	0.0
ME.KE	Personal Websites and E-mail	1,375	1.4
MOBI.KE	Mobile Content	34	0.0
INFO.KE	Information	138	0.1
GO.KE	Government Institutions	626	0.6
. KE	Second level	4,590	4.7
Total		**98,662**	**100.0**

Source: CA, Operators' Returns.

6.2 National Cyber Space Landscape

The trends in Cyber Threats Detected and Cyber Threat Advisories are as shown in Figure 12.

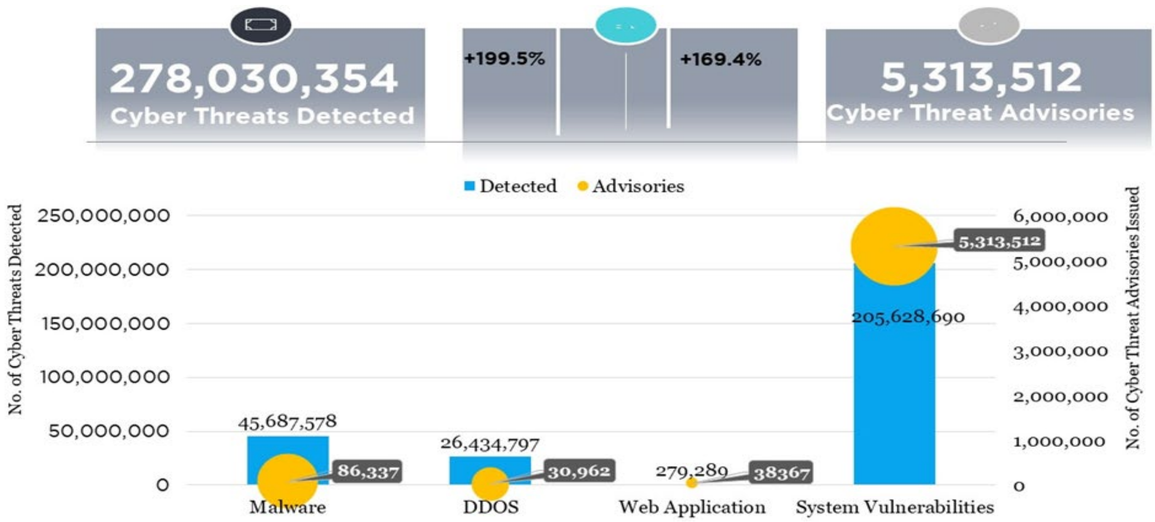


Figure 12: Cybersecurity Landscape

Source: National KE-CIRT/CC

7. CONCLUSION

The country continues to lead within the region in terms of general ICT infrastructure, mobile financial services, and broadband connectivity, value added services and FinTech services. Earlier in the year, the Kenyan government launched its ten year Digital Masterplan 2022-2032 in a bid to enhance the country's digital economy and ICTs primed as a key driver for the developmental agenda across other sectors. The roll out of commercial 5G network which enables consumers to access super-fast data services together with improved fibre network connectivity, and rapid developments in the mobile market is expected to spur growth in various areas of the economy. In addition, it will promote and drive government agenda on leveraging technology to access public and private sector innovation.