SECOND QUARTER SECTOR STATISTICS REPORT FOR THE FINANCIAL YEAR 2022/2023
(1ST OCTOBER – 31ST DECEMBER 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 Second Quarter Sector Statistics Report for the 2022/23 Financial Year provides the performance and trends in the ICT sector for the period 1st October to 31st December 2022 in:

1. Mobile networks services
2. Fixed network services
3. Courier services
4. Broadcasting services
5. Frequency spectrum management
6. Electronic transactions and Cyber space management

Indicator/Period	Q2 (Oct-Dec 2022)	Q1 (July-Sep 2022)	Quarterly Variation (%)
MOBILE NETWORK SERVICES			
Subscriptions of Mobile			
Total Mobile (SIM) Subscriptions	65,737,164	65,459,720	0.4
Machine-to-Machine (M2M) Subscriptions	1,510,236	1,429,131	5.7
Mobile Data and Broadband Subscriptions			
Mobile Data Subscriptions	47,760,337	47,381,242	0.8
Penetration of Mobile Phones			
Penetration of Feature Phones (%)	68.1	66.6	2.3
Penetration of Smart Phones (%)	60.2	54.3	10.9
Mobile Money Transfer Services			
Number of Registered Mobile Money Agents	318,607	307,928	3.5
Mobile Money Subscriptions	38,645,654	37,403,762	3.3

Domestic Mobile Traffic			
Voice Traffic (Minutes)			
On-Net Voice Traffic	18,078,317,940	16,450,448,487	9.9
Off-Net Voice Traffic	2,752,607,034	2,463,847,876	11.7
Mobile Network to Fixed Network	15,389,719	17,063,562	-9.8
SMS Traffic			
SMS On-Net	10,699,243,196	12,582,653,244	-15.0
SMS Off-Net	1,414,535,794	1,644,644,086	-14.0
International Mobile Traffic			
Voice Traffic (Minutes)			
International Incoming Mobile Voice Traffic	98,519,787	101,963,388	-3.4
International Outgoing Mobile Voice Traffic	177,525,228	169,784,929	4.6
SMS Traffic			
International Incoming SMS	8,681,273	9,193,035	-5.6
International Outgoing SMS	4,709,102	5,016,164	-6.1
Roaming Traffic			
Out-bound Roaming Traffic			
Out-bound Roaming Incoming Voice Traffic (Minutes)	137,131,182	126,247,595	8.6
Out-bound Roaming Outgoing Voice Traffic (Minutes)	14,905,053	12,400,736	20.2
Out-bound Roaming Incoming SMS	51,606,679	46,367,551	11.3
Out-bound Roaming Outgoing SMS	6,834,474	6,904,649	-1.0
Data Volumes (MB)	109,547,537	91,534,504	19.7
In-bound Roaming Traffic			
In-bound Roaming Incoming Voice Traffic (Minutes)	39,865,338	34,998,181	13.9
In-bound Roaming Outgoing Voice Traffic (Minutes)	4,173,389	3,488,801	19.6
In-bound Roaming Incoming SMS	36,399,899	30,921,954	17.7

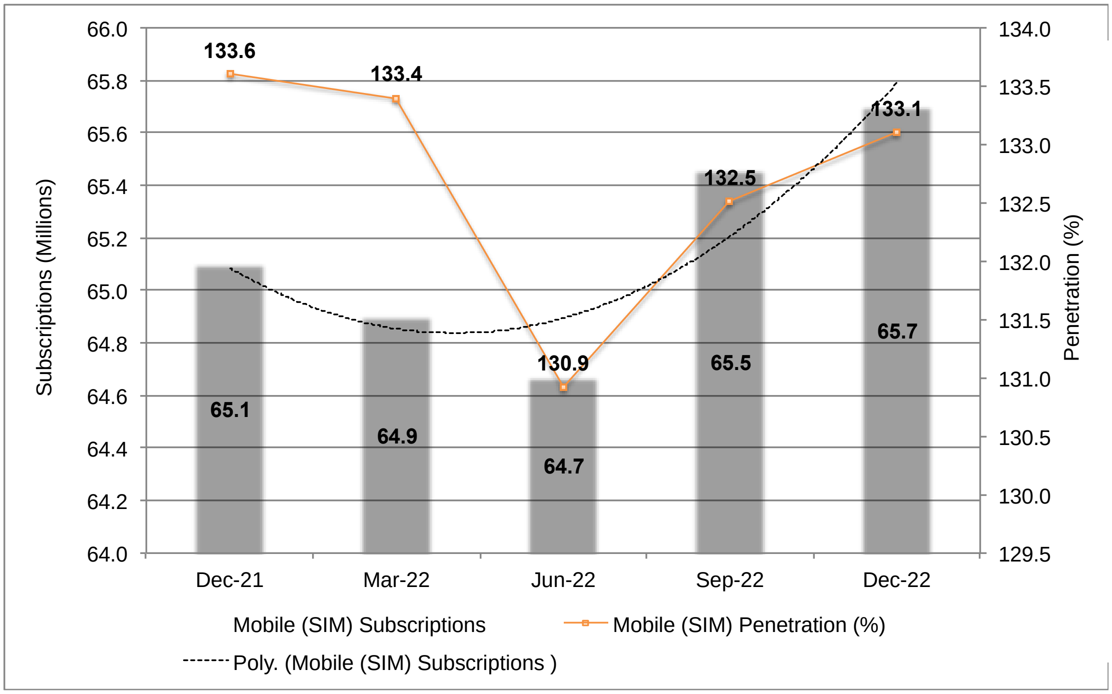
In-bound Roaming Outgoing SMS	1,889,054	1,637,272	15.4
Data Volumes (MB)	185,270,295	152,389,447	21.6
FIXED NETWORK SERVICES			
Fixed Voice Subscriptions			
Fixed Line Subscriptions	10,676	11,742	-9.1
Fixed Wireless Subscriptions	1,287	1,267	1.6
Fixed VoIP Subscriptions	51,144	54,859	-6.8
Domestic Fixed Voice Traffic			
Fixed line-Fixed line	71,881	77,315	-7.0
Fixed Wireless-Fixed Wireless	283,117	281,306	0.6
Fixed to Mobile	26,648,830	25,030,280	6.5
International Fixed Voice Traffic			
Incoming Fixed Voice Traffic	3,665,685	3,013,147	21.7
Outgoing Fixed Voice Traffic	2,090,566	1,241,835	68.3
Outgoing Fixed VOIP	527,585	580,687	-9.1
Fixed Data and Broadband Services			
Fixed Data/internet subscriptions	809,197	986,462	-18.0
Total Available International Bandwidth (Gbps)	11,970.53	11,971.23	0.0
Total Used International Bandwidth (Gbps)	6,469.94	6,135.40	5.5
COURIER SERVICES			
Domestic Courier Traffic			
Outgoing Domestic Letters	398,726	708,119	-43.7
Outgoing Domestic Courier Items	1,064,029	1,234,677	-13.8
International Courier Traffic			
International Outgoing Letters	453,951	452,701	0.3
International Incoming Letters	111,222	125,352	-11.3

BROADCASTING SERVICES			
Licensed Stations			
Licensed Commercial Free to Air TV	306	300	2.0
Licensed Commercial FM radio	180	172	4.7
Licensed Community Free to Air TV	9	9	0.0
Licensed Community FM Radio	63	55	14.5
Subscription Services			
DTT Subscriptions	4,385,491	4,337,703	1.1
DTH Subscriptions	1,746,179	1,680,381	3.9
Cable Subscriptions	59,440	62,386	-4.7
FREQUENCY SPECTRUM MANAGEMENT			
Microwave links Deployed	166	203	-18.2
Fixed Links Decommissioned	74	135	-45.2
FM Sound Broadcasting Frequencies Assigned	7	17	-58.8
ELECTRONIC TRANSACTIONS AND CYBERSPACE MANAGEMENT			
. CO.KE Domain	100,420	98,662	1.8
Cyber Security Landscape			
Total Cyber Threats Detected	249,991,852	278,030,354	-10.1
Total Cyber Threat Advisories	3,554,356	5,313,512	-33.1
POPULATION			
Total Population in Kenya (Millions)*	49.4	49.4	0.0

***Economic Survey 2022**

1. MOBILE NETWORK SERVICES

1.1 Mobile (SIM) Subscriptions

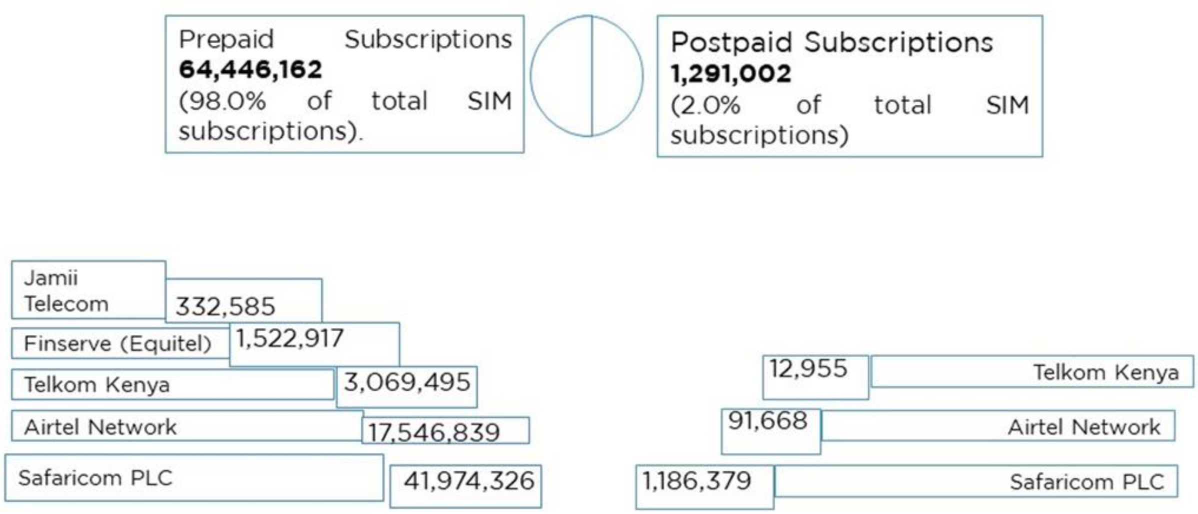


The number of mobile subscriptions increased from 65.5 million reported last quarter to 65.7 million during the reference period, representing a penetration rate of 133.1 %.

Source: CA, Operators' Returns

Figure 1: Mobile Subscriptions and Penetration

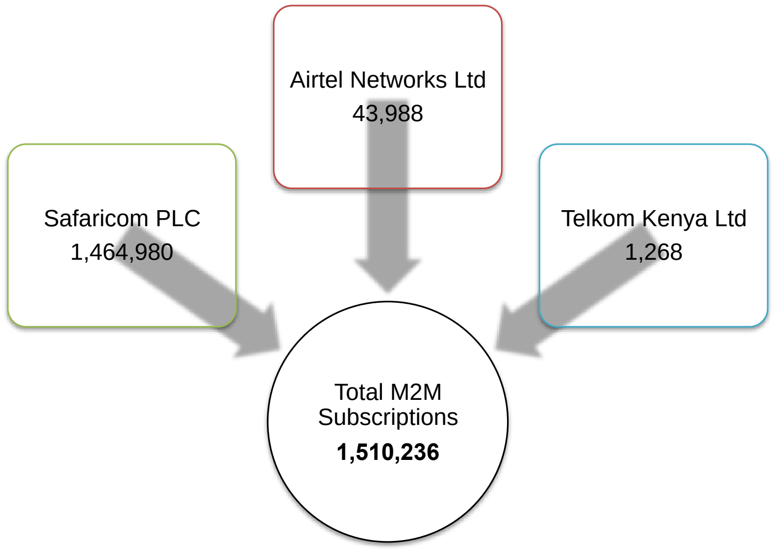
The number of active mobile (SIM) subscriptions per operator by contract type is as shown in figure 2.



Source: CA, Operators' Returns

Figure 2: Mobile Subscription per Operator

1.2 Machine-to-Machine Subscriptions



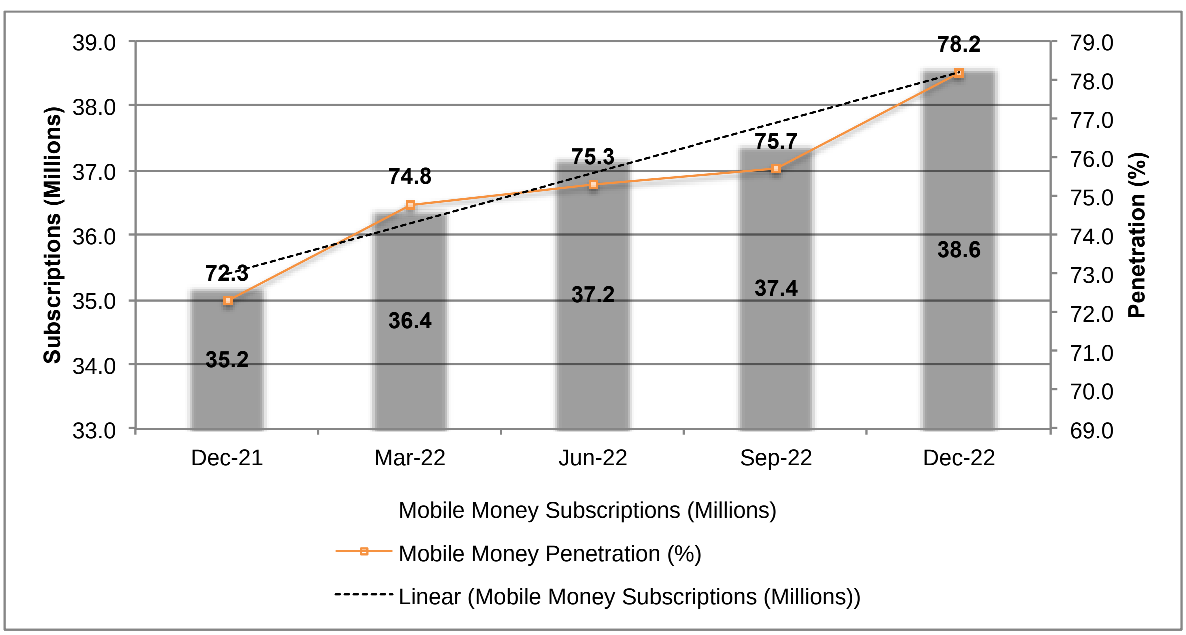
The number of SIM cards used to facilitate communication between machines such as car tracking services stood at 1,510,236 as at 31st December 2022.

Source: CA, Operators' Returns.

Figure 3: Machine-to-Machine Subscriptions

1.3 Mobile Money Services

The uptake of mobile money services remained steady with the reference period recording 38.6 million subscriptions up from 37.4 million recorded during the previous period, representing a penetration rate of 78.2 percent.

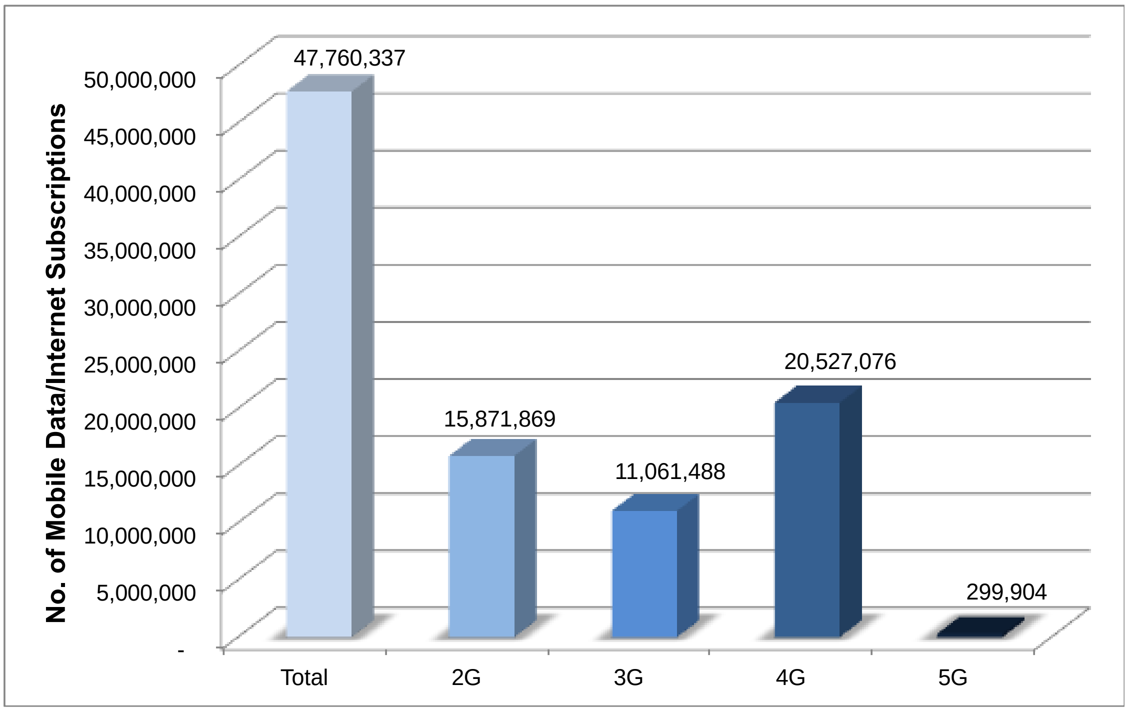


Source: CA, Operators' Returns

Figure 4: Mobile Money Services

1.4 Mobile Data and Broadband[1] Services

The total mobile data/Internet subscriptions stood at 47.7 million during the reference period, out of which 66.8 percent were on mobile broadband. Data/Internet users have embraced higher mobile network generations such as 4G that offer faster Internet speeds that enhance customer experience.



Source: CA, Operators' Returns

Figure 5: Mobile Data Subscriptions

1.5 Market Shares in Subscriptions for Mobile Services

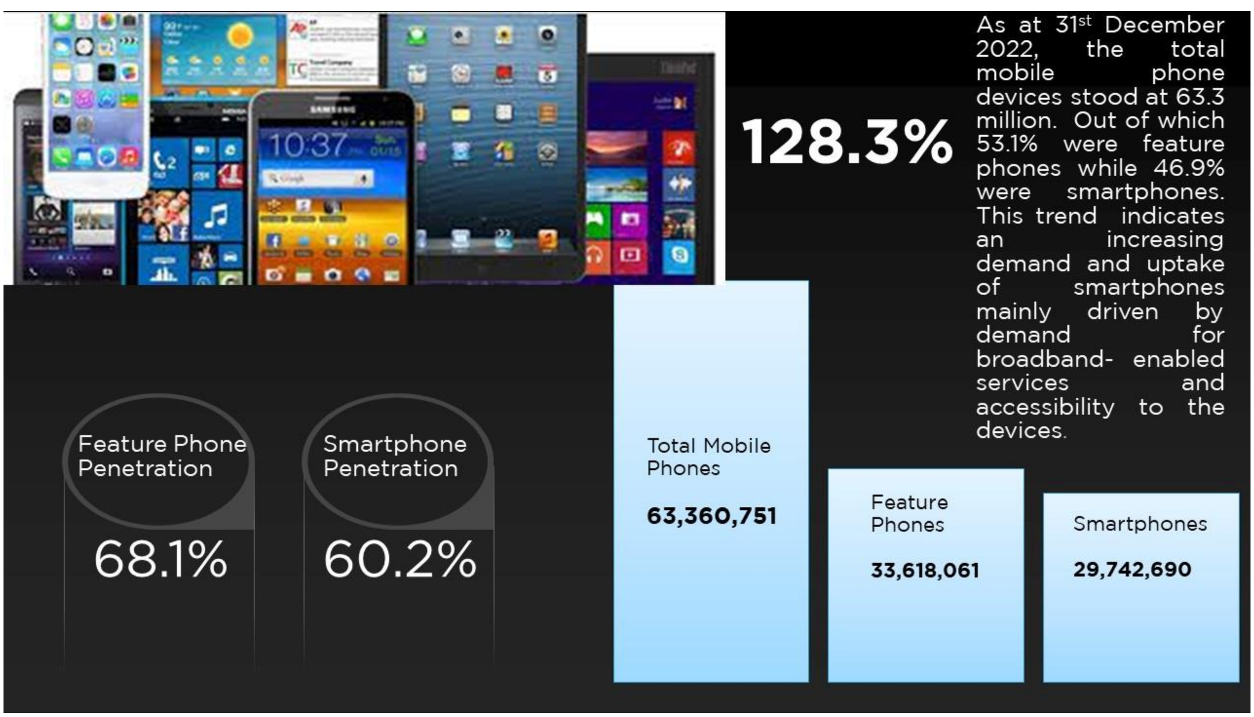
The market shares in subscriptions for the respective mobile services is as shown in Figure 6.

[1] 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)

Source: CA, Operators' Returns

Figure 6: Mobile Market Shares

1.6 Mobile Phone Devices



Source: CA, Operators' Returns

Figure 7: Mobile Phone Devices

1.7 Domestic Mobile Voice Traffic (Minutes)

The total outgoing domestic mobile voice traffic increased by 10.1 percent to post 20.8 billion minutes from 18.9 billion recorded in the previous quarter. The growth is attributed to the various voice promotions and special offers launched by the market players during the period coupled with long school holidays and the festive season.

Table 1: Domestic Mobile Voice Traffic (Minutes)

Indicator/Period	*Oct-Dec 22*	*Jul-Sep 22*	*Quarterly Variation (%)*
Total Outgoing Traffic	**20,846,314,693**	**18,931,359,926**	**10.1**
On-net (Own Network – Own Network)	18,078,317,940	16,450,448,487	9.9
off-net (Own Network to Other Mobile Networks)	2,752,607,034	2,463,847,876	11.7
Mobile Network to Fixed Network	15,389,719	17,063,562	-9.8

Source: CA, Operators' Returns,

1.8 Minutes of Use per Call per Operator

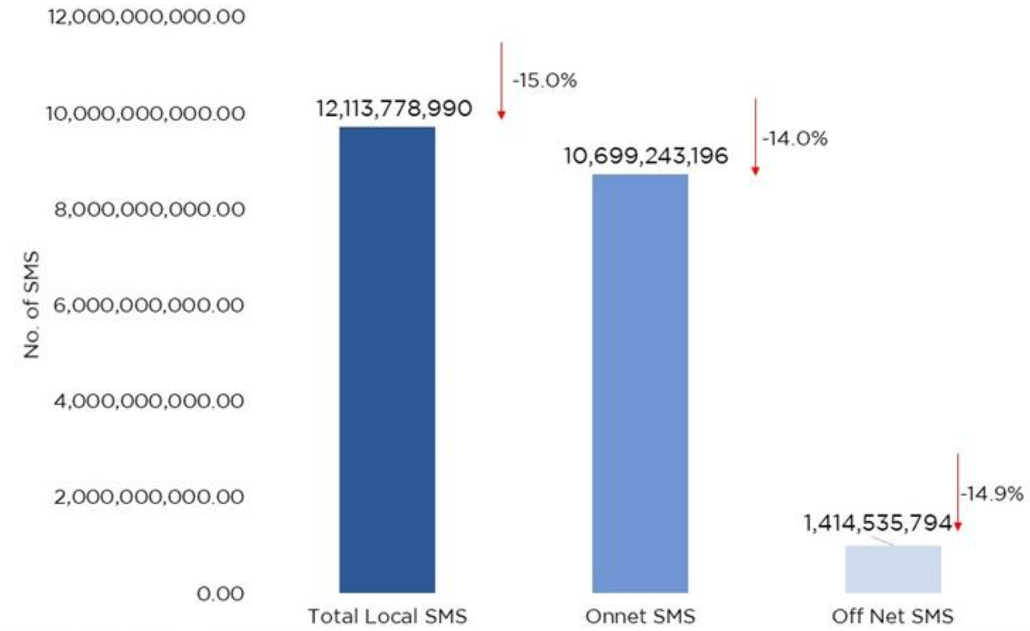
Customers on Airtel Networks spent more time on a single on-net call averaging 2.8 minutes. Further, Telkom Kenya Ltd and Equitel customers recorded the highest average Minutes of Use per off net call at 1.3, mainly attributed to the lower calling rates offered by the operators.

Table 2: Minutes of Use per Call (Minutes)

Period	*Oct-Dec 22*		*Jul-Sep 22*	
Operator/Indicator	*On-net (Minutes)*	*Off-net (Minutes)*	*On-net (Minutes)*	*Off-net (Minutes)*
Total Average	**1.7**	**1.1**	**1.6**	**1.0**
Safaricom PLC	1.5	1.1	1.4	1.0
Airtel networks Limited	2.8	1.0	2.7	0.9
Telkom Kenya Limited	2.0	1.3	2.0	1.3
Equitel	2.5	1.3	2.3	1.3
Jamii Telecommunications Limited	0.1	1.2	0.1	1.1

Source: CA, Operators' Returns

1.9 Mobile SMS Traffic



The general decline in domestic SMS is attributed to limited special offers and promotions during the reference period as compared to the previous quarter. Increasing preference for OTT services like Watsapp also influenced the slow uptake for SMS.

Source: CA, Operators' Returns

Figure 8: Domestic SMS Traffic

1.10 Voice and SMS Traffic per Operator

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

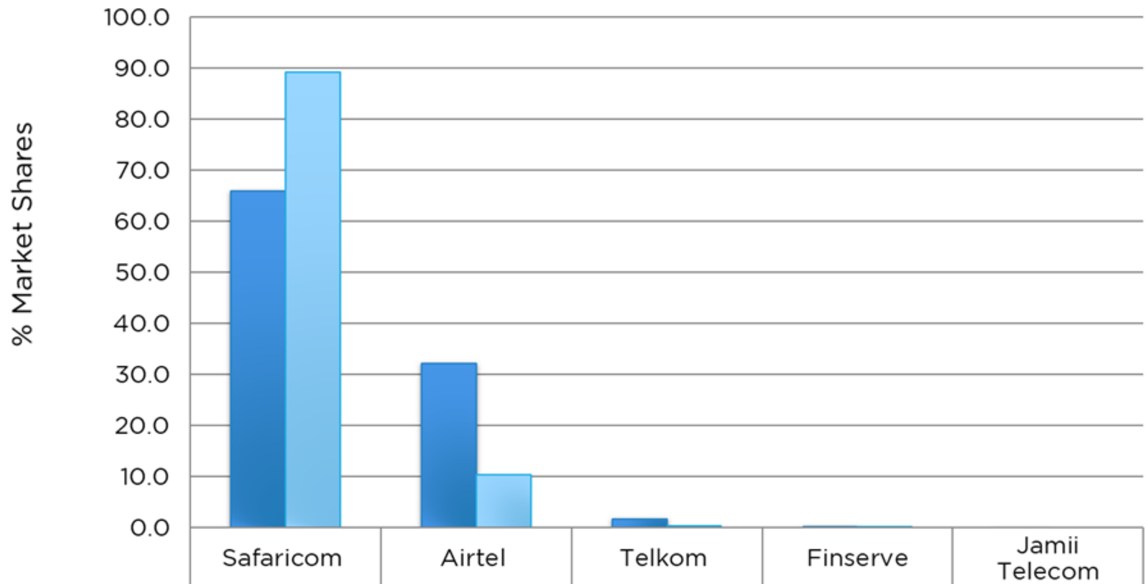
Table 3: Domestic Mobile Traffic per Operator

Indicator/Operator			*Safaricom PLC*	*Airtel Networks Kenya Limited*	*TKL*	*Equitel*	*JTL*	*Total*
Oct-Dec 22	*Voice*	*On-net*	12,870,058,904	4,993,251,314	211,858,121	3,108,684	40,917	18,078,317,940
		Off-net	864,813,636	1,709,501,478	144,176,640	31,752,584	2,362,696	2,752,607,034
		Total	**13,734,872,540**	**6,702,752,792**	**356,034,761**	**34,861,268**	**2,403,613**	**20,830,924,974**
	SMS	*On-net*	10,108,607690	585,492,297	2,907,337	2,211,516	24,356	10,699,243,196
		Off-net	706,389,784	668,838,586	34,646,616	4,178,546	482,262	1,414,535,794
		Total	**10,814,997,474**	**1,254,330,883**	**37,553,953**	**6,390,062**	**506,618**	**12,113,778,990**

Source: CA, Operators' Returns

1.11 Market shares in Domestic Mobile Voice and SMS Traffic

The market shares in domestic mobile voice and SMS traffic are as shown in Figure 9.

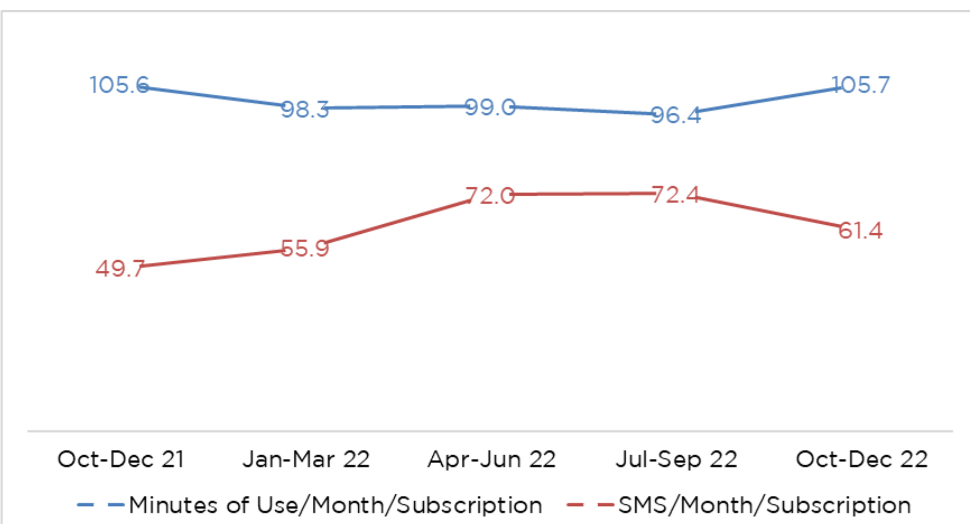


	Safaricom	Airtel	Telkom	Finserve	Jamii Telecom
Domestic Voice Traffic (%)	65.9	32.2	1.7	0.2	0.0
Domestic SMS Traffic (%)	89.2	10.4	0.3	0.1	0.0

Source: CA, Operators' Returns

Figure 9: Market Shares in Domestic Mobile Voice and SMS

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



The Minutes of Use per Month per Subscription increased from 96.4 recorded in the first quarter to 105.7 minutes during the reference period. Conversely, short messages sent per month per subscription declined from 72.4 to 61.4 messages.

Source: CA, Operators' Returns

Figure 10: MoU/Month/Subscription vs SMS/Month/Subscription

1.13 International Mobile Traffic

International incoming mobile voice traffic declined by 3.4 percent whereas international outgoing mobile voice traffic rose by 4.6 percent during the reference period. International incoming and outgoing mobile SMS declined by 5.6 and 6.1 percent to 8.6 million and 4.7 million messages respectively. This is mainly as a result of increased preference for OTT channels such as Whatsapp and availability of lucrative special offers and promotions for data bundles that facilitate access to OTTs.

Table 4: International Mobile Traffic

Indicator/Period	*Region*	*Oct-Dec 22*	*Jul-Sep 22*	*Quarterly Variation (%)*
International Incoming Mobile Voice Minutes	*EAC*	69,632,376	69,328,822	0.4
	Others	28,887,411	32,634,566	-11.5
	Total	**98,519,787**	**101,963,388**	**-3.4**
International Outgoing Mobile Voice Minutes	*EAC*	100,714,458	88,687,382	13.6
	Others	76,810,770	81,097,547	-5.3
	Total	**177,525,228**	**169,784,929**	**4.6**
International Incoming Mobile SMS		8,681,273	9,193,035	-5.6
International Outgoing Mobile SMS		4,709,102	5,016,164	-6.1

Source: CA, Operators' Returns

1.14 Roaming Traffic

The trends in outbound and inbound roaming traffic are as shown in *Tables 5 and 6.* Notably, both in-bound and outbound traffic from Tanzania and Burundi remained low, which is attributed to the fact that the two countries are yet to join the One Network Area initiative in the region.

Table 5: Outbound Roaming Traffic

Country / Indicator	**Incoming Voice (Minutes)**	**Incoming SMS**	**Outgoing Voice (Minutes)**	**Outgoing SMS**	**Data Volumes (MB)**
Uganda	125,051,538	6,521,613	6,054,059	1,932,145	36,377,106
Tanzania	278,324	11,440,146	1,076,150	803,833	12,621,191
Rwanda	4,763,293	0	629,474	187,733	5,597,747
Burundi	6,350	775,697	4,057	9,564	17,548
S. Sudan	5,708,253	26,414	2,040,444	253,361	206,736

Democratic Republic of Congo	8,327	115,839	201,841	23,491	24,000,154
EAC Total	**135,816,085**	**18,879,709**	**10,006,025**	**3,210,127**	**78,820,482**
Others	1,315,097	32,726,970	4,899,028	3,624,347	30,727,055
Total	**137,131,182**	**51,606,679**	**14,905,053**	**6,834,474**	**109,547,537**

Source: CA, Operators' Returns

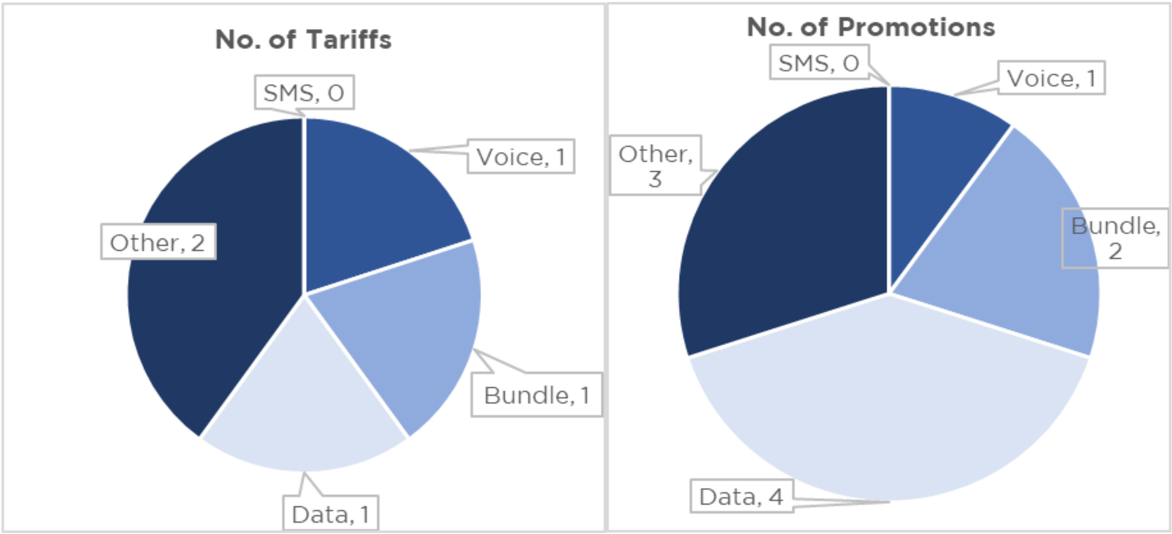
Table 6: In-bound Roaming Traffic

Country / Indicator	Incoming Voice (Minutes)	Incoming SMS	Outgoing Voice (Minutes)	Outgoing SMS	Data Volumes (MB)
Uganda	26,921,091	4,310,605	1,216,961	178,569	9,324,083
Tanzania	93,906	13,276,838	81,882	130,208	1,197,817
Rwanda	9,645,948	2,054,347	224,295	34,251	1,331,650
Burundi	815	3,176	504	1,155	99
S. Sudan	2,030,845	923,483	169,718	15,358	865,780
Democratic Republic of Congo	13,199	103,058	74,205	12,374	124,097
EAC Total	**38,705,804**	**20,671,507**	**1,767,565**	**371,915**	**12,843,526**
Others	1,159,534	15,728,392	2,405,824	1,517,139	172,426,769
Total	**39,865,338**	**36,399,899**	**4,173,389**	**1,889,054**	**185,270,295**

Source: CA, Operators' Returns

1.15 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 11.



Source: CA, filed tariffs, promotions and special offers

Figure 11: 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

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

Source: CA

Table 8: Average Pay TV Tariffs

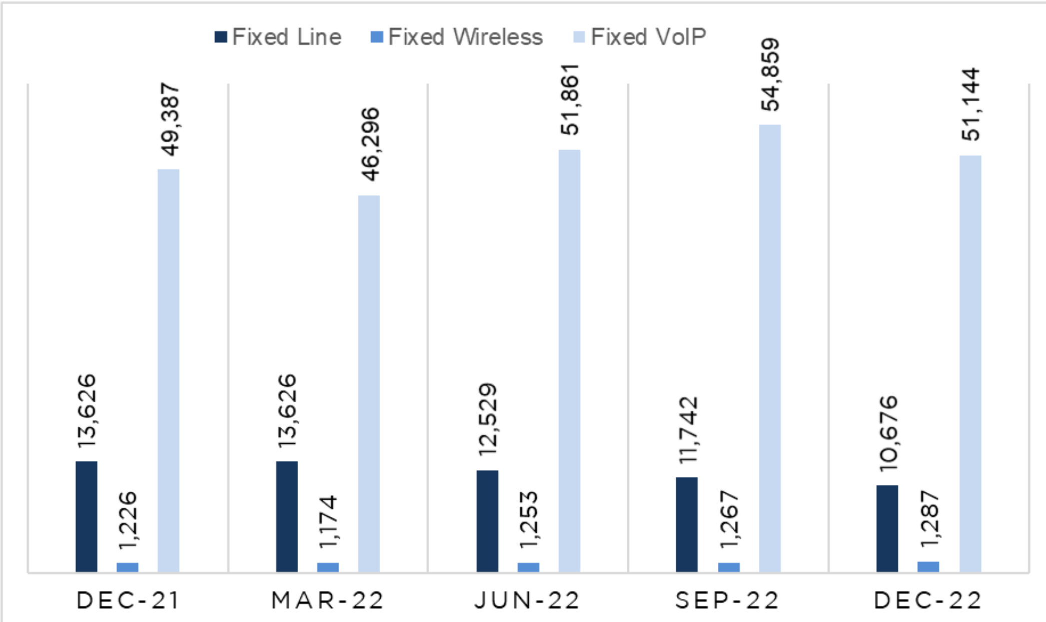
Market	Tariff (Ksh.)
Average Lowest Monthly Bouquet (KES)	249
Average Highest Monthly Bouquet (KES)	1,249

Source: CA

2. FIXED NETWORK SERVICES

2.1 Fixed Telephone Subscriptions

Fixed line, fixed wireless and fixed VoIP subscriptions stood at 10,676, 1,287 and 51,144 respectively.



Source: CA, Operators' Returns

Figure 12: Fixed Voice Subscriptions

2.2 Domestic Fixed Voice Traffic

The total domestic fixed network traffic grew to 27.0 million minutes as shown in Table 9.

Table 9: Domestic Fixed Voice Traffic (Minutes)

Domestic Fixed Voice Traffic (Minutes)	Oct-Dec 22	Jul-Sep 22	Quarterly Variation (%)
Fixed-Fixed	71,881	77,315	-7.0
Fixed Wireless-Fixed Wireless	283,117	281,306	0.6
Fixed to Mobile	26,648,830	25,030,230	6.5
Total Domestic Fixed Network Traffic	**27,003,828**	**25,388,851**	**6.4**

Source: CA, Operators' Returns

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 10: International Fixed Voice Traffic

Indicator/Period	*Oct-Dec 22*	*Jul-Sep 22*	*Quarterly Variation (%)*
International Incoming Fixed Network Voice traffic	3,665,685	3,013,147	21.7
International Outgoing Fixed Network Voice traffic	2,090,566	1,241,835	68.3
International Outgoing Fixed VoIP traffic	527,585	580,687	-9.1

Source: CA, Operators' Returns

2.4 Fixed Data and Broadband Subscriptions

Fiber to the Home (FTTH) recorded the highest number of fixed broadband subscriptions and data speeds between 2Mbps and 10Mbps recorded the highest number of subscriptions.

Table 11: Fixed Data and Broadband Subscriptions

Internet Technology/Speeds	*<256Kbps*	*=>256Kbps < 2Mbps*	*=>2 Mbps <10 Mbps*	*=>10Mbps <30 Mbps*	*=>30 Mbps <100Mbps*	*=>100 Mbps <1Gbps*	*=>1Gbps*	***Totals***
Cable Modem	-	18	52,293	128,459	12,566	373	-	**193,709**
Copper (DSL)	11	23	394	374	5	-	-	**807**
FTTH	-	200	221,064	123,070	15,660	2,254	-	**362,248**
FTTO	-	4,141	21,738	11,541	4,331	1,393	75	**43,219**
Fixed Wireless	8,138	8,243	179,541	9,215	2,263	307	-	**207,707**
Satellite	27	248	328	127	-	-	-	**730**
Other Fixed	-	-	665	85	25	2	-	**777**
Totals	**8,176**	**12,873**	**476,023**	**272,871**	**34,850**	**4,329**	**75**	**809,197**

Source: CA, Operators' Returns. Data excludes Jamii Telecommunications Ltd.

2.5 Fixed Data Subscriptions by Operator

During the quarter under review, Safaricom PLC recorded the highest market shares in fixed data subscriptions at 46.1 percent followed by Wananchi Group at 31.1 percent as shown in Table 12.

Table 12: Fixed Data Subscriptions by Operator

Service Provider/Indicator	**Number of data subscriptions**	**Percentage Market share (%)**
Safaricom PLC	372,872	46.1
Wananchi Group (Kenya) Limited*	251,340	31.1
Poa Internet Kenya Ltd	120,168	14.9
Liquid Telecommunications Kenya	17,837	2.2
Mawingu Networks Ltd	14,951	1.8
Dimension Data Solutions East Africa Limited	13,950	1.7
Telkom Kenya Ltd	4,514	0.6

Vilcom Network Limited	4,086	0.5
Afriq Networks Solutions Ltd	1,526	0.2
Other Fixed Service providers	7,953	1.0

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

2.3 International Bandwidth

The total utilized undersea bandwidth capacity grew by 5.5 percent to 6,467.36 out of which, 4,361.54Gbps was used in the country and 2,105.82Gbps sold outside the country as shown in Table 13.

Table 13: International Internet Bandwidth (Gbps)

Indicator/ Period	**Oct – Dec 22**			**Jul-Sep 22**		**Quarterly Variation (%)**
Total Available (Lit/Equip) Bandwidth Capacity (Gbps)	**11,970.53**			**11,971.23**		**0.0**
Undersea Bandwidth Capacity	SEACOM		3,920.00	SEACOM	3,920.00	0.0
	TEAMS		1,618.00	TEAMS	1,618.00	0.0
	Telkom Kenya	EASSY	4,990.00	EASSY	4,990.00	0.0
		Lion 2	571.50	Lion 2	572.20	-0.1
		DARE 1	866.04	DARE 1	866.04	0.0
Satellite Bandwidth Capacity	4.99			4.99		0.0
Total Utilized Bandwidth Capacity (Gbps)						
Undersea Bandwidth Capacity	Sold In Kenya	Sold in other Countries		Sold In Kenya	Sold in other Countries	
	4,361.54	2,105.82		4,026.99	2,105.82	5.5
Satellite Internet Capacity	2.59			2.59		0.0

Source: CA, Operators' Returns,

3. COURIER SERVICES

As shown in Table 14, the volume of letters and courier items sent within the country grew by 3.8 and 7.6 percent respectively. Similarly, International Outgoing and Incoming letters increased to stand at 446,184 and 114,633 respectively.

Table 14: Courier Items

Indicator/Period	Oct-Dec 22	July-Sep 22	Quarterly Variation (%)
Outgoing Domestic Letters	353,428	340,460	3.8
Outgoing Domestic Courier Items	1,322,038	1,228,200	7.6
International Outgoing Letters	446,184	417,417	6.9
International Incoming Letters	114,633	111,601	2.7

*Source: CA, Operators' Returns, *Data excludes 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 15: Licensees under Broadcast License Framework

Indicator/Period	*Dec-22*	*Sep-22*	*Quarterly Variation (%)*
Broadcast Signal Distributor	2	2	0.0
Self-Provisioning Broadcast Signal Distributor	3	3	0.0
Commercial Free to Air TV	306	300	2.0
Community Free to Air TV	9	9	0.0
Commercial FM radio	180	172	4.7
Community FM Radio	63	55	14.5
Subscription Broadcasting Service	18	18	0.0
Subscription Management Service	4	4	0.0
Landing Rights Authorization	5	5	0.0
Total	**590**	**568**	**3.9**

Source: CA

4.2 Subscription to Broadcasting Services

As at 31st December 2022, subscriptions to broadcasting services rose by 1.8 percent to a total of 6.2 million from 6.1 million reported during the last quarter. Table 16 shows the subscriptions breakdown per category per operator.

Table 16: Broadcasting Subscriptions

Indicator/Period		*Dec-22*	*Sep-22*	*Quarterly Variation (%)*
DTT	Go TV	2,654,583	2,616,831	1.4
	Star Times	1,730,908	1,720,872	0.6
	Sub-Total	**4,385,491**	**4,337,703**	**1.1**
DTH	Azam	68,599	67,778	1.2
	MultiChoice (DSTV)	1,080,494	1,045,525	3.3
	Star Times	291,984	283,180	3.1
	Wananchi (Zuku)	305,102	283,898	7.5
	Sub-Total	**1,746,179**	**1,680,381**	**3.9**
Cable	Cable One	2,484	**2,427**	2.3
	CTN (MSA)	2,002	1,975	1.4
	Wananchi (ZUKU)	51,259	52,384	-2.1
	Hirani	3,600	3,600	0.0
	Matrucchaya	0	2,000	-100.0
	Wadani Cable	95	0	100.0
	Sub-Total	**59,440**	**62,386**	**-4.7**
Total		**6,191,110**	**6,080,470**	**1.8**

Source: CA

5. FREQUENCY SPECTRUM MANAGEMENT

During the period under review, the Authority assigned frequencies to various operators for deployment of 166 microwave links and processed the decommissioning of 74 fixed links. Further, the Authority assigned 7 FM sound broadcasting frequencies to broadcasters.

Table 17: Frequency Spectrum Management

Indicator/Period	Oct-Dec 22	Jul-Sep 22	Quarterly Variation (%)
Microwave links Deployed	166	198	-16.2
Fixed Links Decommissioned	74	357	-79.3
FM Sound Broadcasting Frequencies Assigned	7	13	-46.2

Source: CA

6. ELECTRONIC TRANSACTIONS AND CYBER SPACE MANAGEMENT

6.1 Registered Domain Names

The total number of users for .KE domains was recorded at 100,420 as at 31st December, 2022 with .CO.KE sub-domain recording the highest market share of users at 89.6 percent. Table 18 illustrates the various sub-domains and their respective users.

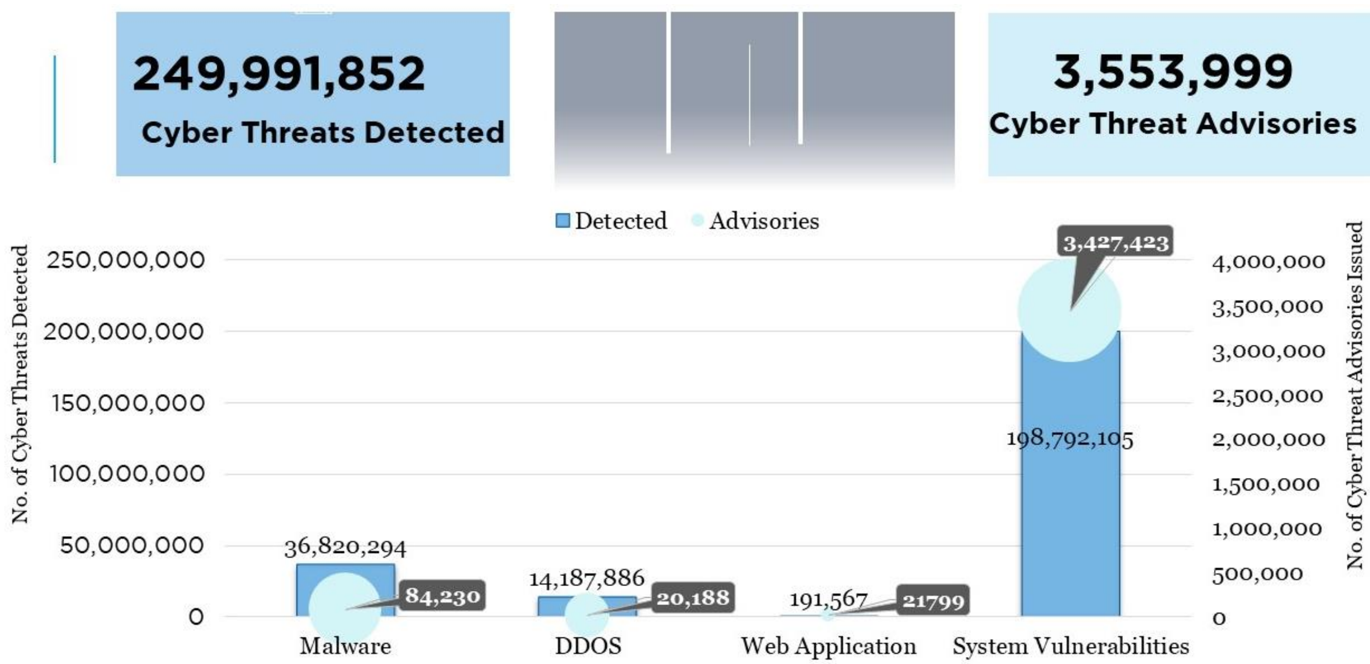
Table 18: .KE Domains

SUB-DOMAIN	USER	Dec-22	
		Number of Users	% Users
CO.KE	Companies	90,000	89.6
OR.KE	Non-Profit-Making Organizations	1,846	1.8
AC.KE	Institutions of Higher Education	1,079	1.1
SC.KE	Lower and Middle Level Institutions	931	0.9
NE.KE	Personal Websites and E-mail	48	0.0
ME.KE	Personal Websites and E-mail	1,325	1.3
MOBI.KE	Mobile Content	32	0.0
INFO.KE	Information	131	0.1
GO.KE	Government Institutions	656	0.7
. KE	Second level	4,372	4.4
Total		**100,420**	**100.0**

Source: Kenic.

6.2 National Cyber Space Landscape

The trends in cyber threats detected and cyber threat advisories are as shown in Figure 13.



Source: National KE-CIRT/CC

Figure 13: Cybersecurity Landscape

7. CONCLUSION

The period between October to December 2022 was marked by a myriad of activities, which included the national examinations, long school holidays, Christmas and New Year festivities. These activities coupled with lucrative promotions and special offers launched by the various operators played a key role in driving the increased uptake for ICT services especially mobile voice traffic and data services.

The government is strongly committed to the advancement of the digital superhighway and infrastructure expansion in its digital transformation agenda. The continued roll-out of the 5G network, coupled with the landing of the PEACE cable, will enable consumers to access super-fast Internet speeds, particularly in areas with high population density, and for linking connected devices, such as in manufacturing and healthcare.