



**Tanzania Communications
Regulatory Authority**

Communications Statistics

Quarter ending September 2024

About this report

This report presents communication statistics for the first quarter of the financial year 2024/2025. The report provides statistics on telecommunication, mobile money, Internet, broadcasting, postal and courier and other ICT-related services.

The statistics have been prepared in line with the statistical standards and International Telecommunications Union (ITU) standards for collecting and reporting administrative/supply-side data on telecommunications/ICT services.

Table of Contents

1	Telecommunication Statistics	1
1.1	Telecom subscriptions statistics	1
1.2	Telecommunication tariff	5
1.3	Telecom voice traffic	9
1.4	Telecom SMS traffic	12
1.5	User devices statistics	15
1.6	Number of telecom towers per region	16
1.7	Radio base stations distribution	17
2	Mobile Money Services Statistics	19
2.1	Mobile money subscriptions	19
2.2	Mobile money Transactions	20
3	Internet Services Statistics	21
3.1	Internet subscriptions	21
3.2	Internet usage per month	23
3.3	Internet link capacity	23
3.4	Roll out of mobile broadband network and quality of internet speed	24
3.5	Country Code Top Level Domains	25
4	Broadcasting Services Statistics	26
4.1	Active decoders	26
4.2	Sold decoders in the past five years	28
4.3	Cable TV subscriptions	28
4.4	Trend of cable TV subscriptions in the past five years	30
4.5	Coverage of broadcasting network	30
5	Postal & Courier Services Statistics	31
5.1	Subscription to postal receptacles	31
5.2	Courier customers	31
5.3	Domestic posted items	31
5.4	International posted items	32
5.5	Domestic delivered items	33
5.6	International delivered items	33
5.7	Trend of local and international posted items over the past five years	34
5.8	Trend of international posted and delivered items over the past five years	35
6	Quality of Services, Compliance Indicators & Fraud Attempts Statistics	36
6.1	Quality of services (QoS) for the telecom subsector	36
6.2	Compliance indicators for the Broadcasting subsector	43
6.3	Quality of services (QoS) for the Postal and Courier subsector	47
6.4	Fraudulent attempts	48
7	Number of Licenses and Certificates	51
7.1	Licenses	51
7.2	Certificates	52
8	Conclusion	53

1. Telecommunication Statistics

Telecommunication services statistics on subscriptions, tariffs, user devices, voice and SMS traffic are provided on a monthly, quarterly and annual basis as highlighted below.

1.1. Telecom subscriptions statistics

A count of all active SIM cards and fixed lines that have registered activity or have been used at least once in the past three months describes telecom subscriptions. There are two types of SIM card subscriptions: those subscribed for human communication (Person to Person - P2P) and those for machine communication (Machine to Machine - M2M). The total number of subscriptions (SIM cards and fixed lines - P2P and M2M) increased from 76.6 million during the previous quarter (quarter ending June 2024) to 80.7 million subscriptions as of September 2024. That is an increase of 5%, as summarized below.



1.1.1 Telecom subscriptions for P2P



SIM cards subscribed for P2P per operator in the quarter ending September 2024 are shown in Table 1.1.1.

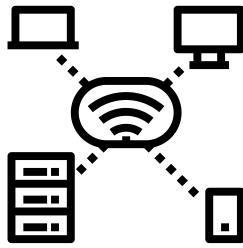
Table 1.1.1 Number of telecom subscriptions for P2P communication per operator

MONTH	AIRTEL	HALOTEL	TIGO	TTCL	VODACOM	TOTAL
July	19,349,803	10,288,681	22,234,092	1,718,668	23,402,345	76,993,589
August	19,533,663	10,598,149	22,836,771	1,574,711	23,657,084	78,200,378
September	19,492,734	10,971,582	23,458,325	1,586,724	24,136,856	79,646,221

1.1.2 Telecom subscriptions for M2M communications

**0.97
Million**

**As of June
2024**



**1.02
Million**

**As of September
2024**

4.8%

Table 1.1.2 shows SIM cards subscribed for M2M communications per operator for the quarter ending September 2024.

Table 1.1.2 Number of telecom subscriptions for M2M communication per operator

MONTH	AIRTEL	HALOTEL	TIGO	TTCL	VODACOM	TOTAL
July	328,576	57,430	43,100	6,515	559,877	995,498
August	330,069	58,563	47,615	4,496	566,361	1,007,104
September	331,676	59,913	48,539	4,495	571,197	1,015,820

1.1.3 Operators' subscriptions market share

Chart 1.1.3a and 1.1.3b show the telecom market share by subscriptions per operator. For P2P, it is shown that there is high competition among the operators.

However, for M2M, Vodacom leads the market with more than half (56.2%) of all M2M subscriptions, as shown in Chart 1.1.3b. Airtel ranks second with 32.7%, followed by Halotel with 5.9%.

Chart 1.1.3a Operators' market share by subscriptions for P2P

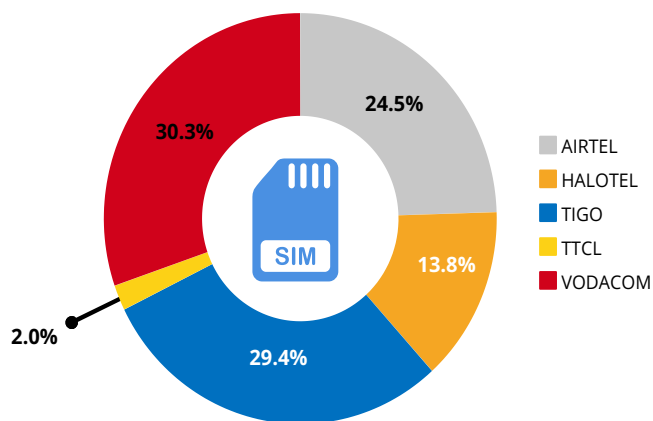
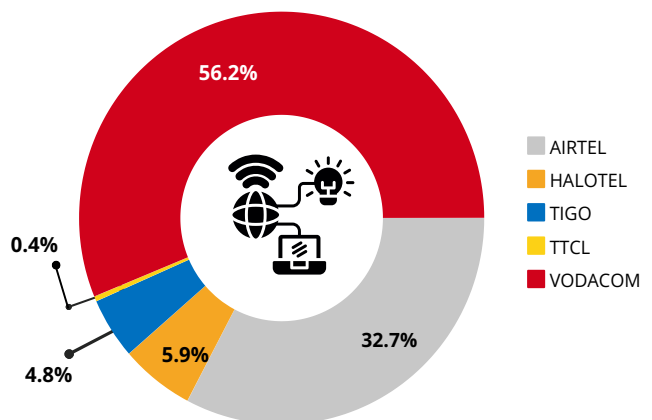


Chart 1.1.3b Operators' market share by M2M subscriptions for M2M



1.1.4 Subscriptions to mobile and fixed networks

Table 1.1.4 presents the number of subscriptions for mobile and fixed networks for the quarter ending September 2024. The table shows that the fixed networks have insignificant share.

Table 1.1.4 Subscriptions to mobile and fixed networks for P2P and M2M communication

MONTH	Mobile subscriptions (P2P)	Fixed subscriptions	Mobile subscriptions (M2M)	TOTAL
July	76,915,542	78,047	995,498	77,989,087
August	78,122,181	78,197	1,007,104	79,207,482
September	79,568,173	78,048	1,015,820	80,662,041

1.1.5 Quarterly change in subscriptions per operator

There was an increase in P2P subscriptions in the quarter ending September 2024 of around 4 million. Chart 1.1.5a indicates the change in P2P subscriptions as of September 2024.

Chart 1.1.5a Quarterly change in P2P subscriptions by operator

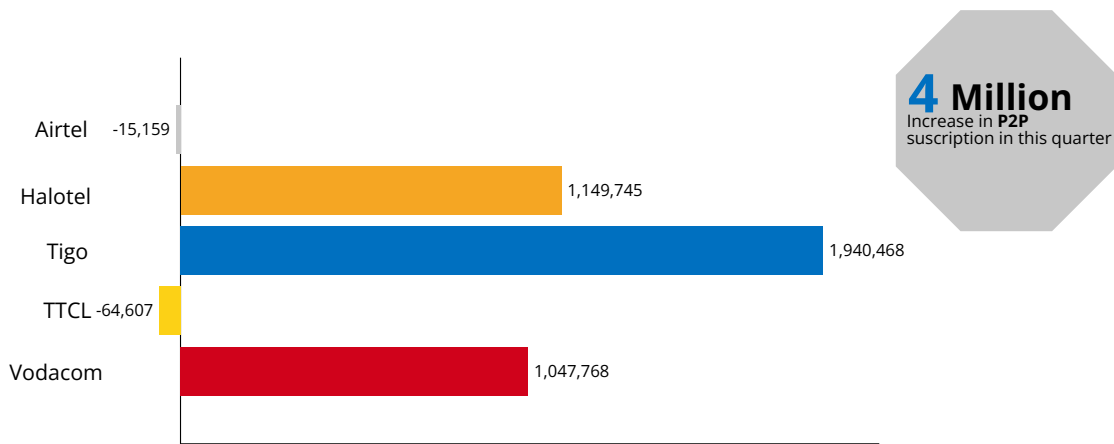
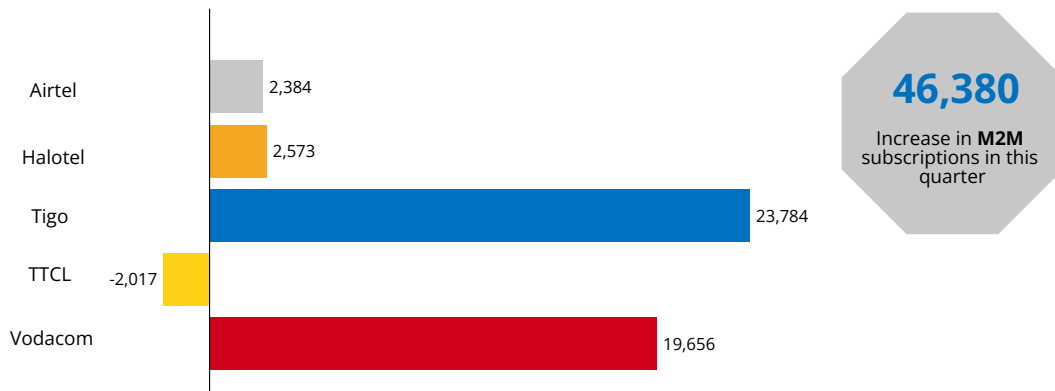


Chart 1.1.5b indicates the change in M2M subscriptions as of September 2024. There was an increase in M2M subscriptions in the quarter ending September 2024 of around 46,380.

Chart 1.1.5b Quarterly change in M2M subscriptions per operator



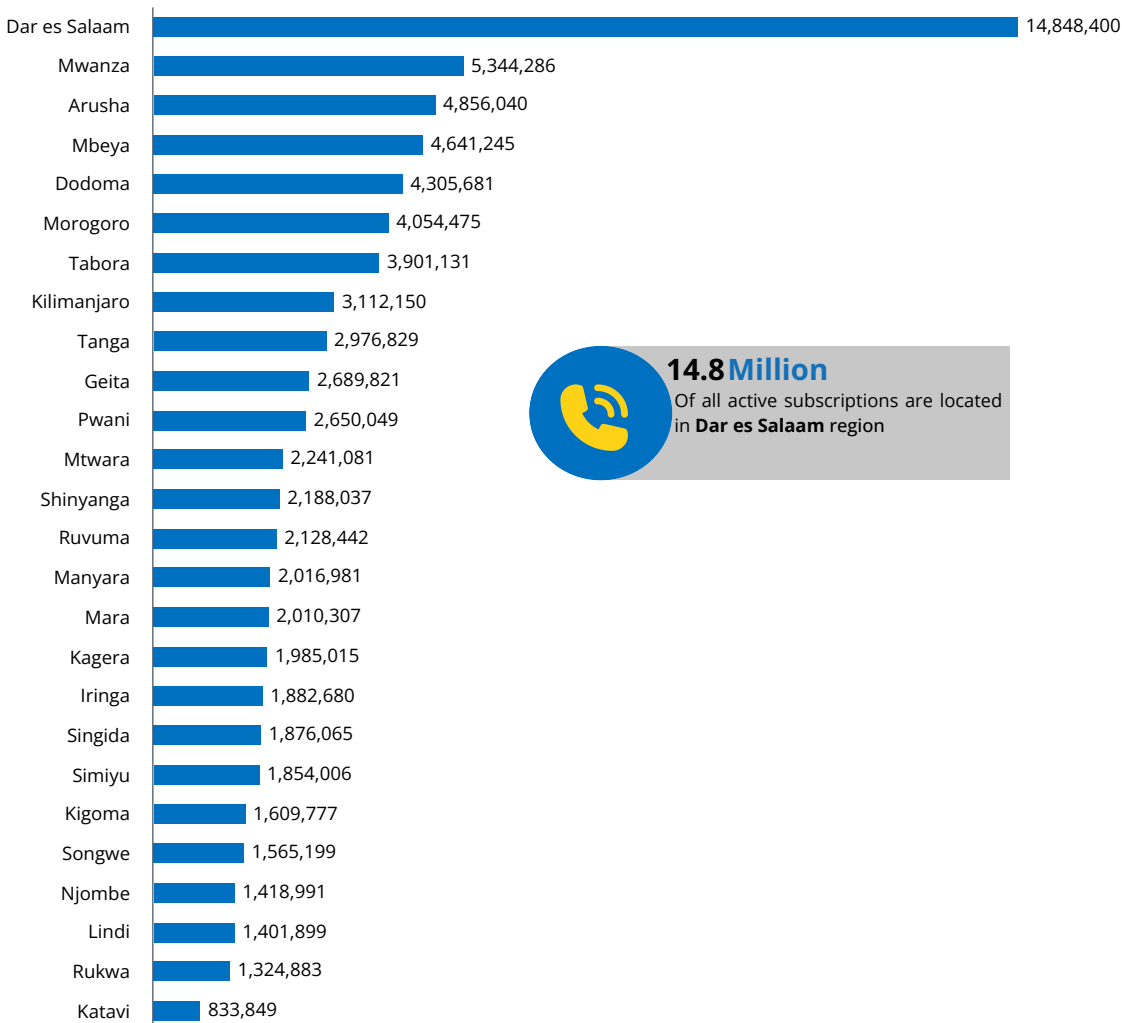
1.1.6 Telecom services subscriptions by region

The distribution of telecom subscriptions per region is depicted in Chart 1.1.6. In the quarter under review, Dar es Salaam ranks first by having about 14.8 million of all active subscriptions, Mwanza ranks second with 5.3 million subscriptions, Arusha ranks third with 4.9 million subscriptions, Mbeya ranks fourth with 4.6 million subscriptions, and Dodoma ranks fifth by having 4.3 million of all active subscriptions.

Regions with the lowest contribution to the country's total subscriptions are Kaskazini Unguja 73,743 subscriptions, Kusini Unguja 110,970 subscriptions, and Kusini Pemba 124,472 subscriptions.

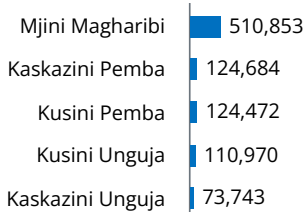
Chart 1.1.6 Telecom services subscriptions by region

Tanzania Mainland



14.8 Million
Of all active subscriptions are located in **Dar es Salaam** region

Zanzibar



510,853
Of all active subscriptions are located in **Mjini Magharibi**

1.1.7 Trend of telecom subscriptions over the past five years

The trend of telecom subscriptions for P2P communication for the past five years is shown in Table 1.1.7.

Table 1.1.7 Trend of telecom subscriptions for the past five years

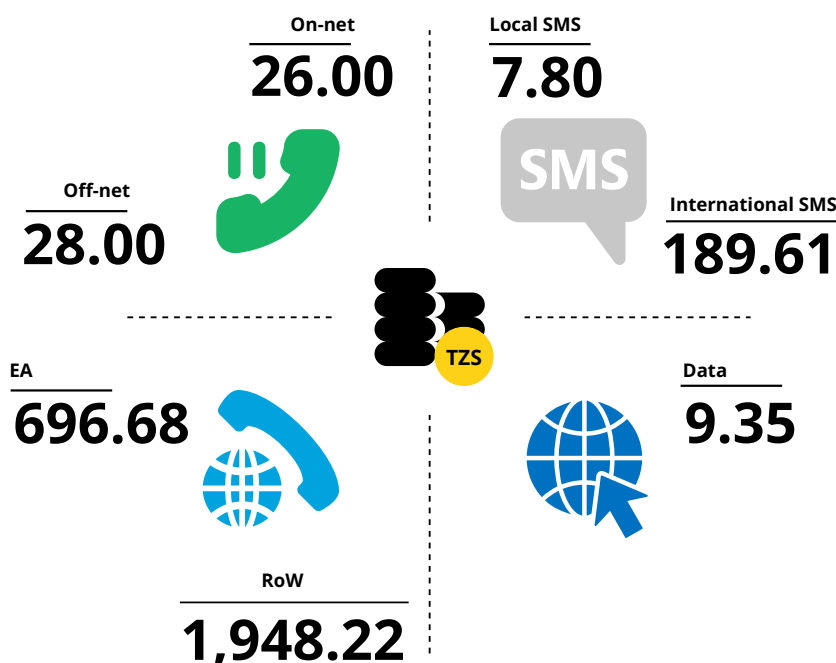
	2019	2020	2021	2022	2023
Mobile Subscriptions	47,685,232	51,220,233	54,044,384	60,192,331	70,215,144
Fixed Subscriptions	76,288	72,469	71,834	84,696	75,732
Total Subscriptions	47,761,520	51,292,702	54,118,218	60,277,027	70,290,876
PENETRATION	78%	81%	88%	98%	111%

1.2 Telecommunication tariffs

This section presents average basic and bundle tariffs (Tax inclusive) for voice, SMS and data services, for local, East Africa (EA) and Rest of the World (RoW).

1.2.1 Basic tariff (Pay as You Go)

Basic tariffs are the prices charged for voice, SMS and data services without subscribing to a bundle. They are also known as Pay as You Go or standard tariffs.



The changes in telecommunication basic tariffs applied in the quarter ending July and September 2024 are shown in the Table 1.2 below:

Table 1.2.1 Telecommunication basic tariff (in TZS) change

	On-net	Off-net	EA	RoW	Local SMS	International SMS	Data
June 2024	26.00	28.00	713.16	1,869.45	7.80	189.61	9.35
September 2024	26.00	28.00	696.68	1,948.22	7.80	189.61	9.35
% Change	0%	0%	-2%	4%	0%	0%	0%

As shown in the summary above, while on-net, off-net, data, and local and international SMS tariffs remained unchanged. However, there was a decrease in EA tariffs by 2% and an increase in RoW tariffs by 4%.

1.2.1.1 Voice tariffs (in TZS)

The voice tariffs for the quarter ending September 2024 for local and international services per operator are shown in Table 1.2.1.1. These are one-minute voice charges when a consumer makes a local or international call without subscribing to a bundle.

Table 1.2.1.1 Local and international voice tariffs (in TZS) per operator

Operator	On-net	Off-net	EA	RoW
AIRTEL	30.00	30.00	614.40	1,426.60
HALOTEL	10.00	20.00	875.00	1,565.00
TIGO	30.00	30.00	1,030.00	1,673.33
TTCL	30.00	30.00	217.60	2,871.33
VODACOM	30.00	30.00	746.40	2,204.83
Industry Average	26.00	28.00	696.68	1,948.22

Table 1.2.1.1 shows no difference in charges when calling within and outside the network. All operators charge one minute at TZS 30, except Halotel, who charges TZS 10 (on-net) and TZS 20 (off-net).

The industry average for local voice tariff in the quarter ending September 2024 remained the same at TZS 26 and TZS 28 for on-net and off-net respectively, as in quarter ending June 2024.

Table 1.2.1.1 further shows that international voice tariffs differ across networks, unlike local tariffs with the exception of Halotel. The industry average rate of one minute for making calls to East Africa and Rest of the World (RoW) are TZS 696.68 and 1,948.22 respectively.

1.2.1.2 SMS and data tariffs (in TZS)

The local and international Pay as You Go tariffs (Tax inclusive) for SMS and data as of September 2024 are shown in Table 1.2.1.2.

Table 1.2.1.2 SMS and Data tariffs (in TZS)

Operator	Local SMS	International SMS	Data (in TZS per MB)
AIRTEL	8.00	215.00	9.35
HALOTEL	5.00	95.00	9.35
TIGO	8.00	215.00	9.35
TTCL	10.00	138.06	9.35
VODACOM	8.00	285.00	9.35
Industry Average	7.80	189.61	9.35

The industry average tariffs for the local SMS (TZS 7.80), data (TZS 9.35) and international SMS (TZS 189.61) for September 2024 have remained the same as in the quarter ending June 2024.

1.2.2 Bundle tariffs (in TZS)

The disaggregated bundle tariffs (per unit prices - Tax inclusive) of one voice minute, one SMS and one MB of data for consumers subscribed to bundled telecom services are shown in Table 1.2.2a below.

Table 1.2.2a Disaggregated bundle tariffs (in TZS)

Period	On-net	Off-net	SMS	Data
Apr- Jun 2024	4.66	6.18	1.42	2.16
Jul- Sept 2024	4.75	6.34	1.47	2.17
% Change	1.9%	2.5%	3.3%	0.3%

The above summary indicates that unit bundle tariffs have changed at different rates for the quarter ending September 2024 compared to the quarter ending June 2024 as shown in Table 1.2.2a.

The tariffs for the quarter ending September 2024, as shown in Table 1.2.2b indicate that the industry average tariffs for disaggregated bundled services are generally lower than the pay-as-you-go tariffs.

Table 1.2.2b Disaggregated bundle tariffs (in TZS)

Operator	On-Net	Off-Net	SMS	Data
Airtel	4.19	7.04	1.58	2.05
Halotel	3.02	4.76	1.00	2.16
Tigo	4.67	6.61	1.28	2.06
TTCL	7.48	7.48	2.26	2.26
Vodacom	4.39	5.80	1.21	2.32
Industry average	4.75	6.34	1.47	2.17

The industry average bundle tariff per unit of service for on-net voice, off-net voice, SMS and data has increased to TZS 4.75, TZS 6.34, TZS 1.47 and TZS 2.17 respectively in the quarter ending September 2024 from TZS 4.66, TZS 6.26, TZS 1.42 and TZS 2.16 respectively, in the quarter ending June 2024.

1.2.3 Industry average tariffs (in TZS)

The industry average basic and bundle tariffs for telecommunications services are shown in Table 1.2.3.

Table 1.2.3 Industry average for basic and bundle tariffs (in TZS)

	On-Net	Off-Net	SMS	Data
Average basic tariff	26.00	28.00	7.80	9.35
Average bundle tariff	4.75	6.34	1.47	2.17

It is shown that average tariffs for all Pay as You Go are almost five times greater compared to bundle unit tariffs, hence attracting majority of users (99.9%) to subscribe to bundle services.

1.2.4 Trend of industry average basic tariffs (in TZS) over the past five years

In the past five years, the trend of domestic and international industry average basic tariffs for voice calls and SMS are shown in Table 1.2.4a, 1.2.4b and 1.2.4c, respectively.

Table 1.2.4a Trend of average basic local tariffs per minute in TZS over the past five years

	2019	2020	2021	2022	2023
On-net	149.00	57.00	34.00	32.00	29.00
Off-net	189.00	57.00	34.00	32.00	30.00

Table 1.2.4a shows that the industry average tariffs for on-net and off-net calls dropped considerably between 2019 and December 2023, and the two converged in 2020. Convergence between on-net and off-net tariffs continued from 2020 to 2022. The noted alignment between on-net and off-net tariffs is linked to a significant drop in the interconnection charges during the same period.

Table 1.2.4b Trend of average basic international tariffs (in TZS) per minute over the past five years

	2019	2020	2021	2022	2023
EA	770.00	830.00	966.00	1,103.00	1,171.00
RoW	1,357.00	1,379.00	1,564.00	1,817.00	1,776.00

While the trend for local tariffs shows a close convergence, the tariffs for EA and RoW, as shown in Table 1.2.4b, have different trends over time as they depend on rates imposed by international traffic carriers and termination charges.

Table 1.2.4c Trend of average basic local and international SMS tariffs in TZS over the past five years

	2019	2020	2021	2022	2023
Local SMS	36.00	20.00	13.00	11.00	11.00
International SMS	160.00	176.00	172.00	193.00	200.00

Also, in the past four years, the trend of industry average bundle tariffs is shown in Table 1.2.4d.

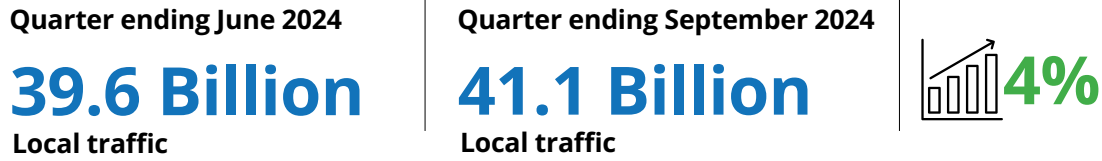
Table 1.2.4d Trend of average bundle tariffs in TZS over the past four years

	2020	2021	2022	2023
On-net	9.38	7.84	7.27	4.90
Off-net	11.21	8.69	7.78	6.30
SMS	3.45	3.35	2.69	1.37
Data	1.73	1.61	1.86	2.14

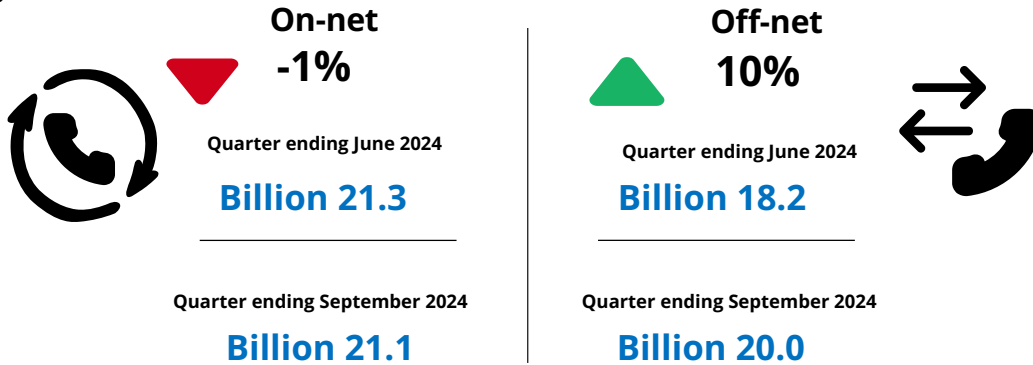
1.3 Telecom voice traffic statistics

1.3.1 Local voice traffic (in minutes)

The local on-net and off-net voice traffic for the quarter ending June 2024 and September 2024 are summarised below.



The summary indicates that in the quarter ending September 2024 there was an increase in local voice traffic by 4%.



Further, it is shown in Table 1.3.1 that July 2024 was the busiest month compared to other months of the quarter.

Table 1.3.1 On-net and off-net voice traffic (in minutes)

	July	August	September	Total
On-net	7,188,565,697	7,009,335,392	6,890,640,823	21,088,541,912
Off-net	6,907,084,322	6,683,441,109	6,442,809,635	20,033,335,066
Total	14,095,650,019	13,692,776,501	13,333,450,458	41,121,876,978

Table 1.3.1 shows that around 41.1 billion minutes were spent in the quarter ending September 2024 compared to 39.6 billion minutes in the quarter ending June 2024. Further, the on-net traffic was higher than off-net traffic throughout the quarter.

1.3.1.1 Percentage share of local voice traffic

The share of on-net and off-net local voice traffic are shown in Chart 1.3.1.1a.

Chart 1.3.1.1a Percentage share of local voice traffic as of September 2024

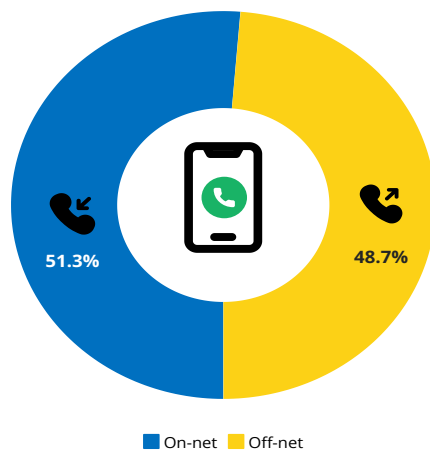


Chart 1.3.1.1a shows that more voice minutes were spent on on-net calls (51.3%) than off-net calls (48.7%). This observation indicates that people preferred calling within the same network.

The traffic minutes share per operator for on-net and off-net traffic calls shown in Chart 1.3.1.1b and Chart 1.3.1.1c indicate that more on-net and off-net traffic were generated in the Airtel network (38.8% and 30.5%, respectively).

Chart 1.3.1.1b Shares of on-net traffic by operator

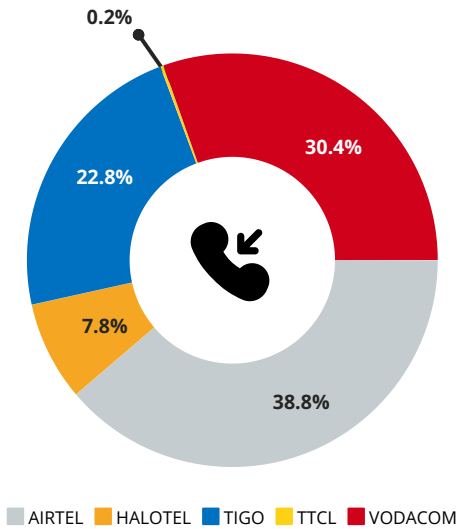
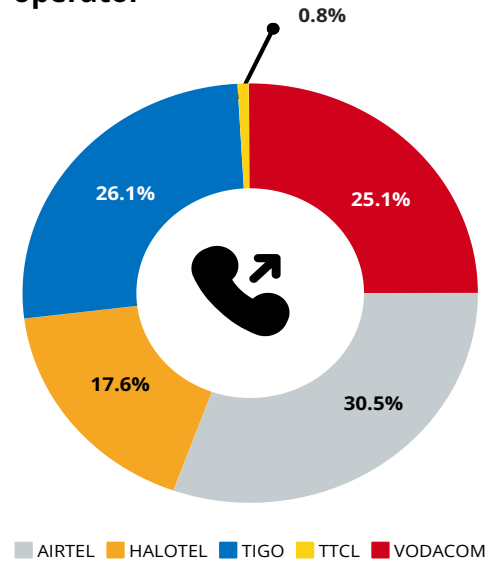


Chart 1.3.1.1c Shares of off-net traffic by operator



1.3.1.2 Trend of local voice traffic over the past five years

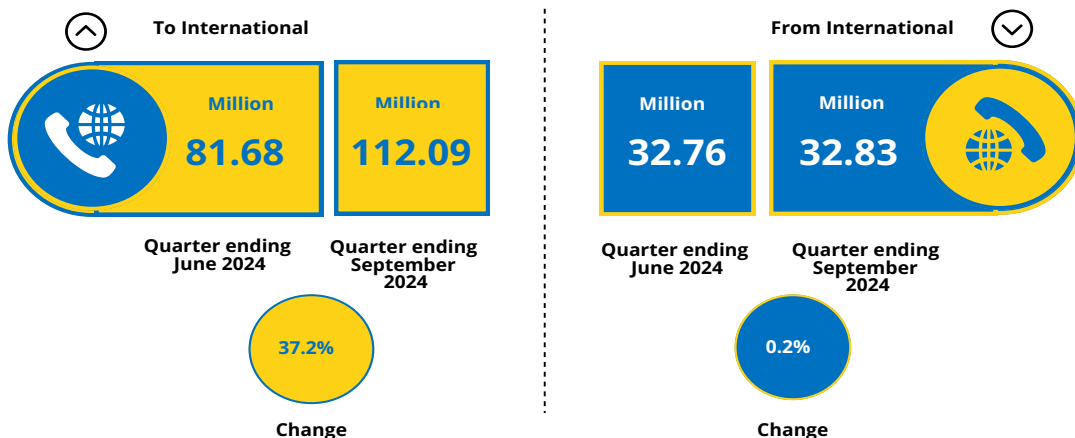
The trend of local voice traffic in minutes over the past five years has been increasing by an average of 9% and 61% for on-net and off-net, respectively, in each year from 2019 to 2023 as shown in Table 1.3.1.2.

Table 1.3.1.2 Trend of local voice traffic in minutes for the past five years

	2019	2020	2021	2022	2023
On-net Traffic	55,812,036,633	54,561,254,851	51,673,651,476	62,678,814,642	77,770,241,513
Off-net Traffic	11,570,993,820	27,084,539,242	43,194,917,029	60,064,367,493	67,100,445,506
Total	67,383,030,453	81,645,794,093	94,868,568,505	122,743,182,135	144,870,687,019

1.3.2 International voice traffic

The voice traffic in minutes to/from international are summarised below.



The summary shows an increase in traffic minutes to and from international in this quarter. The traffic minutes to international increased by 112.1%. Moreover, there was an increase of 0.2% in traffic minutes from international. This result shows that subscribers originated more calls to international than received from international in this quarter.

Total traffic to/from East Africa (EA) and Rest of the World (RoW) for the quarter ending September 2024

	July	August	September	Total
To East Africa	24,922,006	37,936,673	38,330,088	101,188,767
From East Africa	9,005,411	9,058,028	8,731,400	26,794,839
To the Rest of the World	3,427,592	3,527,043	3,946,229	10,900,864
From the Rest of the World	1,962,754	2,012,347	2,057,038	6,032,139

1.3.2.1 Percentage share of voice traffic to/from EA

Share of voice traffic to/from EA are shown in Chart 1.3.2.1.

Chart 1.3.2.1 Share of voice traffic to/from EA

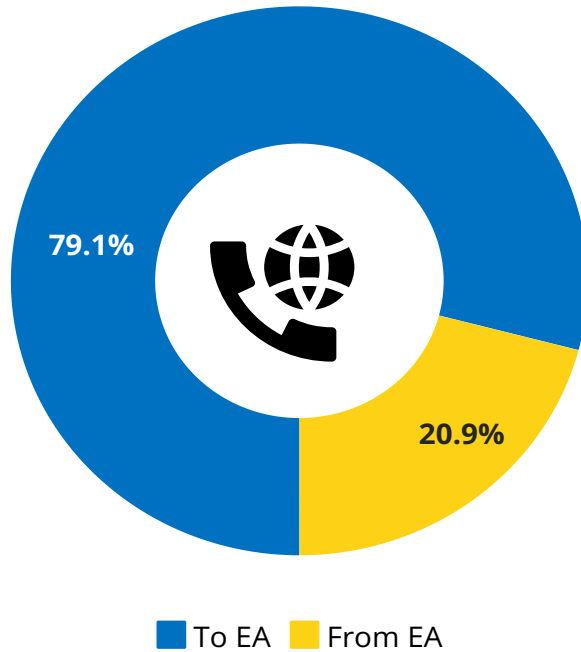


Chart 1.3.2.1 shows that voice traffic to EA countries is almost 3 times the traffic from EA countries. This observation indicates that in the quarter ending September 2024, subscribers spent more minutes communicating to EA countries.

1.3.2.2 Percentage share of voice traffic to/from RoW

Share of voice traffic to/from EA are shown in Chart 1.3.2.2.

Chart 1.3.2.2 Voice traffic shares to/from RoW

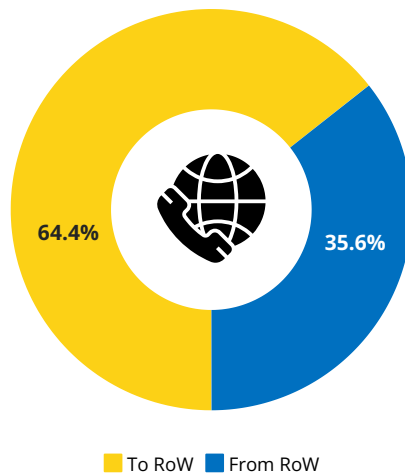


Chart 1.3.2.2 shows that voice traffic to RoW is 1.8 times the traffic from RoW. This observation indicates that, in the quarter ending September 2024, subscribers spent more minutes communicating to RoW.

1.3.2.3 Trend of EA and RoW voice traffic over the past five years

The trend of voice traffic to/from EA and RoW is shown in Table 1.3.2.3.

Table 1.3.2.3 Trend of EA and RoW voice traffic in minutes for the past five

	2019	2020	2021	2022	2023
To EA	14,252,483	9,738,521	9,097,165	8,927,113	95,473,684
From EA	21,989,062	15,406,649	15,853,362	13,594,473	34,994,641
To RoW	43,297,997	38,014,133	24,856,947	26,034,131	19,510,999
From RoW	45,100,536	45,172,263	49,885,142	33,374,619	23,681,940

As shown in Table 1.3.2.3, more traffic generally comes from EA and RoW than outgoing to the same destinations. However, the traffic to and from EA has been decreasing, and the same trend is noted for the traffic to and from RoW, except for 2023, when the traffic to and from EA has significantly risen.

1.4 Telecom SMS traffic

1.4.1 Local SMS traffic

The summary of SMS traffic for the quarter ending June 2024 and September 2024 is shown below.

Quarter ending June 2024
50.8 Billion

Quarter ending September 2024
47.6 Billion

Change
-6% ↓

Period	On-net SMS	Off-net SMS	Total
April to June 2024	21.5 Billion	29.3 Billion	50.8 Billion
July to September 2024	20.2 Billion	27.4 Billion	47.6 Billion
% Change	-6%	-7%	-6%

The summary shows a decrease in SMS traffic in this quarter. The on-net and off-net SMS traffic decreased by 6% and 7% respectively. The overall local SMS traffic decreased by 6%.

The local SMS traffic for the quarter ending September 2024 is detailed in Table 1.4.1 below.

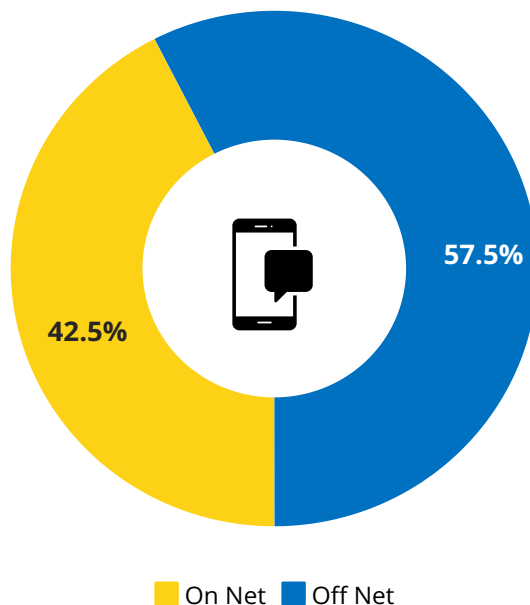
Table 1.4.1 Local SMS traffic

	July	August	September	Total
On-Net SMS	6,895,050,369	6,574,187,597	6,753,568,865	20,222,806,831
Off-Net SMS	9,422,353,981	8,867,820,554	9,084,678,095	27,374,852,630
Total Local SMS	16,317,404,350	15,442,008,151	15,838,246,960	47,597,659,461

Table 1.4.1 shows changes for both on-net and off-net SMS traffic in this quarter. The month of July experienced the highest traffic compared to August and September.

For the whole period, the off-net SMS traffic share was higher (57.5%) than on-net (42.5%). This indicates that in the quarter, more SMS were sent across networks. Generally, the percentage shares for the on-net and off-net SMS traffic are shown in Chart 1.4.1.

Chart 1.4.1 Percentage of local SMS traffic



1.4.2 Trend of local SMS over the past five years

The trend of local SMS over the past five years is shown in Table 1.4.2.

Table 1.4.2 The trend of local SMS traffic in the past five years

	2019	2020	2021	2022	2023
On-net SMS	53,787,444,093	61,971,569,487	58,875,779,663	65,358,270,089	84,818,793,761
Off-net SMS	51,650,529,287	71,072,186,913	78,200,512,436	88,154,239,625	121,727,776,013
Total	105,437,973,380	133,043,756,400	137,076,292,099	153,512,509,714	206,546,569,774

1.4.3 EA and RoW SMS traffic

The trend of EA and RoW SMS traffic is shown in Table 1.4.3.

Table 1.4.3 EA and RoW SMS traffic

	July	August	September	Total
To East Africa	144,770	163,135	144,069	451,974
From East Africa	2,906,066	3,790,707	2,330,727	1,390,335
To the Rest of the World	459,226	452,329	478,780	9,027,500
From the Rest of the World	496,549,532	548,094,184	483,726,932	1,528,370,648

It is shown in Table 1.4.3 that more SMS were received than sent to RoW. Further, more SMS traffic were received from EA than sent to EA. The proportions of SMS sent and received are shown in Chart 1.4.3a and 1.4.3b.

Chart 1.4.3a Percentage share of SMS traffic to/from EA

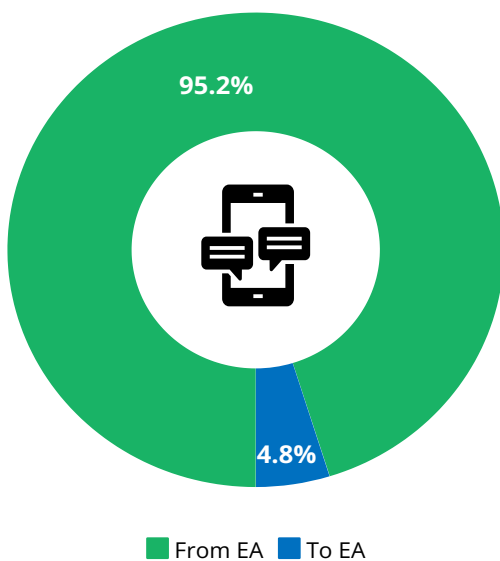
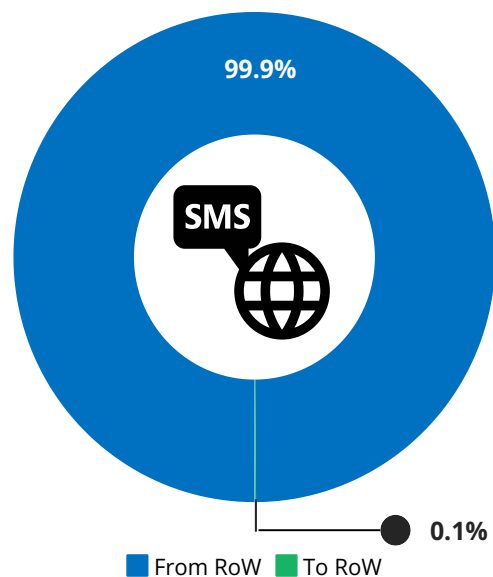


Chart 1.4.3b Percentage share of SMS traffic to/from RoW



1.4.4 Trend of EA and RoW SMS over the past five years

The trend of EA and RoW SMS for the past five years is shown in Table 1.4.4.

Table 1.4.4 Trend of EA and RoW SMS traffic in the past five years

	2019	2020	2021	2022	2023
Outgoing to EA	3,850,602	1,235,692	1,425,624	1,700,525	2,233,288
Incoming from EA	48,376,608	50,880,982	89,717,530	58,344,672	37,592,410
outgoing to RoW	6,834,308	2,718,443	3,191,041	3,574,956	5,448,764
Incoming from RoW	3,201,524,787	3,935,379,714	4,599,468,894	4,664,200,079	5,562,047,440

1.5 User devices statistics

User devices are the key driver in promoting the uptake of telecommunication/ICT services. The status of devices attached to operators' networks is shown in Table 1.5.

Table 1.5 User devices attached to operators' networks

Device Type	Number of devices	Penetration
Mobile Phone/Feature phone	55,200,552	84.83%
Smartphone	22,029,561	33.85%
Handheld	1,587,843	2.44%
Modem	650,138	1.00%
Portable include Personal Digital Assistant (PDA)	58,778	0.09%
Tablet	437,892	0.67%
Module	52,897	0.08%
WLAN Router	174,072	0.27%
Dongle	100,421	0.15%
Internet of Things (IoT) Devices	136,418	0.21%
Vehicle	12,655	0.02%
Computer	12,018	0.02%
Wearable	9,300	0.01%
Device for the Automatic Processing of Data (APD)	3,251	0.00%

As of September 2024, the penetration of smartphones increased to 33.85% from 31.55% recorded in June 2024. Furthermore, penetration of feature phones also increased from 82.6% in June 2024 to 84.83% in September 2024. The penetration for other devices is as indicated in Table 1.5.

1.6 Number of telecom towers per region

Table 1.6 presents the distribution of physical towers across various regions of Tanzania as of the quarter ending June 2024.

Table 1.6 Distribution of telecom towers per region

Region	Number of Telecom Towers
Tanzania Mainland	
Arusha	409
Manyara	205
Kilimanjaro	334
Ruvuma	316
Dar es Salaam	1156
Pwani	303
Dodoma	415
Njombe	176
Tanga	395
Morogoro	421
Tabora	329
Mwanza	423
Geita	202
Kagera	355
Mara	273
Shinyanga	262
Iringa	274
Mbeya	379
Songwe	108
Katavi	94
Rukwa	205
Simiyu	144
Singida	211
Kigoma	287
Lindi	223
Mtwara	287
Zanzibar	
Mjini Magharibi	227
Kusini Pemba	53
Kaskazini Pemba	55
Kaskazini Unguja	25
Kusini Unguja	37
Total	8583

1.7 Radio base stations distribution

Table 1.7 presents the distribution of deployed Base Transceiver Stations (BTS), NodeB, eNB and gNB across regions of Tanzania, reflecting the extent of 2G, 3G, 4G, and 5G network coverage as of the quarter ending September 2024.

Table 1.7 Distribution of radio base stations per region

Region	Number of radio base stations			
	BTS (2G)	NodeB (3G)	eNB (4G)	gNB (5G)
Tanzania Mainland				
Arusha	669	643	629	29
Dar-es-salaam	2272	2441	2414	570
Dodoma	649	575	575	43
Geita	376	353	328	6
Iringa	374	320	313	4
Kagera	489	446	406	1
Katavi	156	133	132	1
Kigoma	467	409	384	3
Kilimanjaro	528	510	498	7
Lindi	333	251	266	1
Manyara	324	266	270	1
Mara	396	358	347	4
Mbeya	552	531	522	16
Morogoro	647	587	574	9
Mtwara	403	336	325	1
Mwanza	723	694	674	25
Njombe	297	255	252	3
Pwani	451	419	415	11
Rukwa	274	229	214	1
Ruvuma	423	329	331	2
Shinyanga	351	336	299	6
Simiyu	268	228	205	2
Singida	322	288	274	3
Songwe	233	198	191	13
Tabora	509	449	397	4
Tanga	604	534	524	3
Zanzibar				
Kaskazini Pemba	58	58	54	0
Kaskazini Unguja	74	76	75	4
Kusini Pemba	63	63	58	1
Kusini Unguja	113	114	113	4
Mjini Magharibi	181	208	201	55
Total	13,579	12,637	12,260	834

The country exhibits a substantial foundation in 2G and 3G technologies, with 13,579 BTS and 12,637 NodeB demonstrating a well-established mobile communication infrastructure. 4G technology, while not as widespread as 2G and 3G, still shows significant coverage with 12,260 eNBs. However, 5G infrastructure increased by 6% to 834 gNBs, concentrated primarily in urban areas like Dar es Salaam and Mjini Magharibi. Notably, Dar es Salaam leads in all categories, underscoring its status as the country's major hub for connectivity. The data underscores a progressive transition towards advanced mobile technologies, emphasising the need for enhancing 4G and introducing 5G networks to meet future communication demands.

2. Mobile Money Services Statistics

This section presents statistics on mobile money services provided by Mobile Network Operators (MNOs) in

2.1 Mobile money subscriptions

Mobile money subscriptions refer to the count of all active SIM cards with mobile money service accounts that have registered an activity/have been used at least once in the past three months. The subscriptions increased by 9% from about 56 million accounts in the quarter ending June 2024 to about 61 million in September 2024.

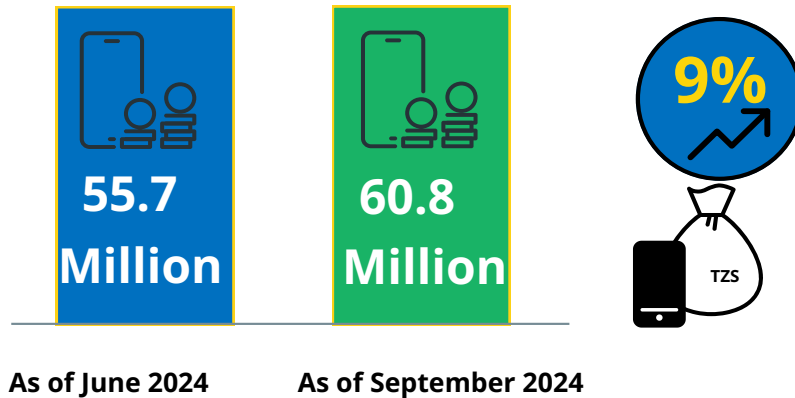
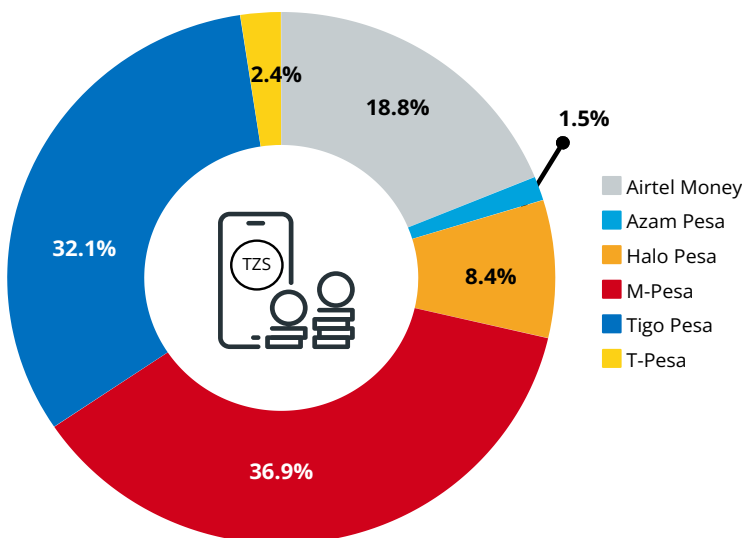


Table 2.1 Mobile money service subscriptions (number of accounts)

	July	August	September
Airtel	11,197,981	11,319,425	11,435,679
Azam	631,364	829,041	891,751
Halotel	4,781,535	4,915,390	5,096,559
Vodacom	21,387,479	21,811,045	22,445,464
Tigo	18,707,319	18,514,018	19,492,440
TTCL	1,434,579	1,445,981	1,453,640
Total	58,140,257	58,834,900	60,815,533

Chart 2.1 Market share on mobile money subscriptions



89%
Of the mobile money market is controlled by MPesa, Tigo Pesa na Airtel Money

Chart 2.1 indicates that the mobile money market is very competitive as Tigo Pesa, M-Pesa, and Airtel money control around 89% of the market share by subscription, led by M-Pesa with 36.9% market share.

2.2 Mobile money transactions

Mobile money transactions refers to the number of deposits and transfers from one account to another in the past three months. The mobile money transactions for the quarter ending September 2024 are shown in Table 2.2a below.

Table 2.2a Mobile money transactions

	July	August	September
Airtel	87,014,790	89,257,370	92,666,780
Azam	1,867,674	1,807,564	5,052,925
Halotel	30,675,639	33,192,501	35,044,286
TTCL	658,305	500,960	502,976
Tigo	83,656,081	86,972,073	87929210
Vodacom	79,089,897	73,786,751	89,685,384
Total	282,962,386	285,517,219	310,881,561

The trend of mobile money transactions for the past five years, as shown in Table 2.2b, indicates that transactions have increased from 3 billion in 2019 to 5.3 billion, representing a 19% annual growth rate. During the same period, average transactions per subscriber decreased from 117 to 100 transactions per annum.

Table 2.2b Trend of mobile money transactions in the past five years

Year	No. of Subscriptions	No. of Transactions	Average No. Trans/Subs
2019	25,864,318	3,021,142,958	117
2020	32,268,630	3,412,210,062	106
2021	35,285,767	3,752,084,894	106
2022	40,953,496	4,195,899,414	102
2023	52,875,129	5,273,086,154	100

3. Internet Services Statistics

3.1 Internet subscription

The subscription to mobile and fixed Internet, the primary means of Internet access, is defined as the total number of lines, including SIM cards and fixed lines, that have accessed and used internet services in the last three months, regardless of the technology used (FTTX, GPRS, 3G, 4G, 5G, among others).

The summary of internet subscriptions for the quarter ending September 2024 are shown below.

As of June 2024

39.3 Million

As of September 2024

41.4 Million



There was an increase of 5% in subscriptions from 39.3 million as of June 2024 to 41.4 million as of September 2024.

Monthly internet subscriptions for the quarter ending September 2024 are shown in Table 3.1a. The table shows that mobile wireless is the mostly preferred compared to other internet services. As of September 2024, it comprises of 99.7% of all subscriptions.

Table 3.1a Monthly internet subscriptions for the quarter ending September 2024

Reporting Month	Mobile Wireless Subs	Fixed Wireless Subs	Fixed Wired Subs	Total
July	40,238,289	49,905	67,485	40,355,679
August	40,614,846	52,893	68,684	40,736,423
September	41,246,748	59,605	70,192	41,376,545

Internet subscriptions by technology as of September 2024 is shown in Table 3.1b

Table 3.1b Internet subscriptions by technology for the quarter ending September 2024

Technology	July	August	September
2G	18,112,328	18,306,340	18,340,688
Mobile Broadband Subs	22,125,961	22,308,506	22,906,060
FTTH Subs	58,030	59,656	59,743
FTTO Subs	9,455	9,028	10,449
Other Broadband Subs	49,905	52,893	59,605
Total	40,355,679	40,736,423	41,376,545

Mobile broadband is the most popular means of accessing internet, with 22,906,060 subscriptions. 2G technology holds significant usage with 18,340,688 subscriptions. Fibre technologies like Fiber to the Home (FTTH) and Fiber to the Office (FTTO) have fewer subscriptions, at 59,656 and 9,028 respectively. This is shown in Table 3.1b.

Table 3.1c Mobile wireless subscriptions per Operator for the quarter ending September 2024

Reporting Month	Mobile Wireless Subs
TTCL	1,514,264
Tigo	13,391,905
Halotel	4,470,738
Airtel	10,363,269
Vodacom	11,506,572
Total	41,246,748

Chart 3.1 Mobile wireless market share per Operator for the quarter ending September 2024

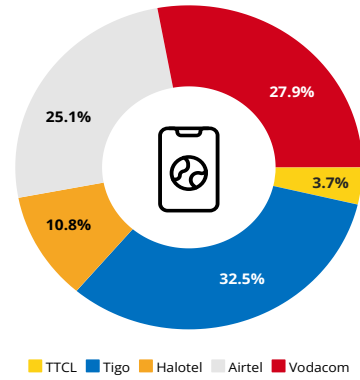


Chart 3.1 Fixed internet subscriptions per Operator for the quarter ending September 2024

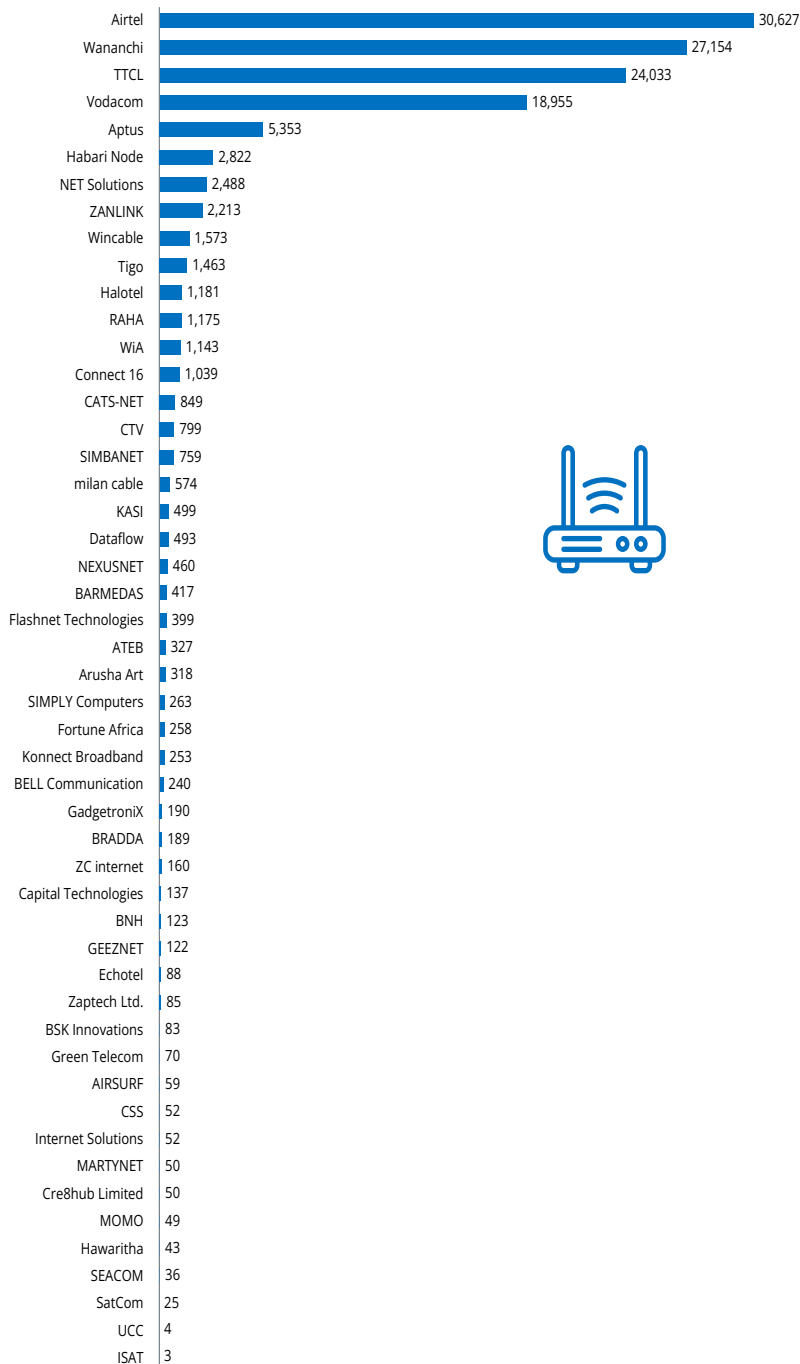


Chart 3.1 Trend of Internet subscriptions over the past five years

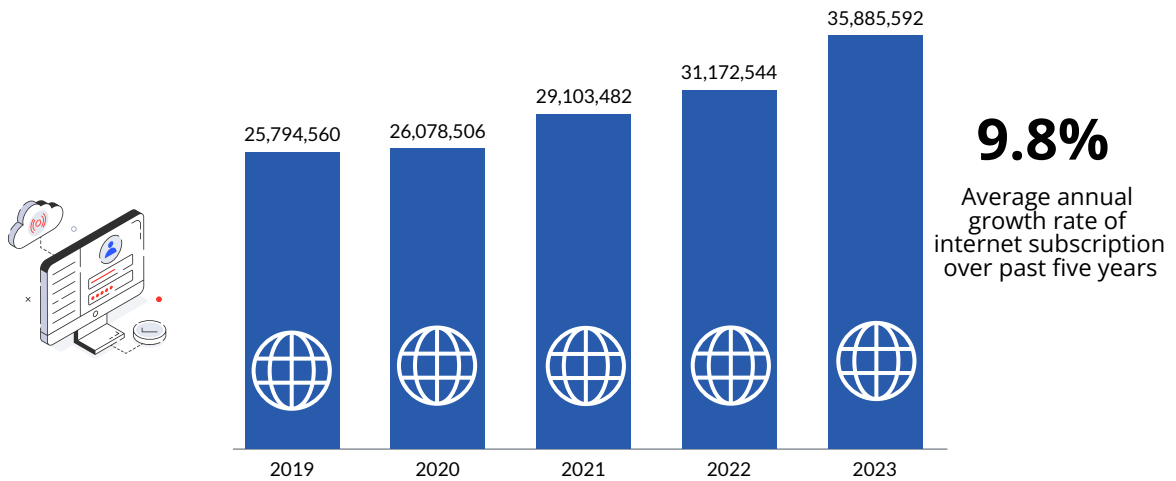


Chart 3.1 indicates an average annual growth rate of 9.8% in internet subscriptions over the past five years. Subscriptions rose from 25.8 million in 2019 to 35.9 million in 2023.

3.2 Internet usage per month

Internet usage is counted as the amount of data traffic (in Petabytes) used in a given period. (Note that 1 Petabyte = 1000³ Megabytes). The summary for internet usage is shown below.

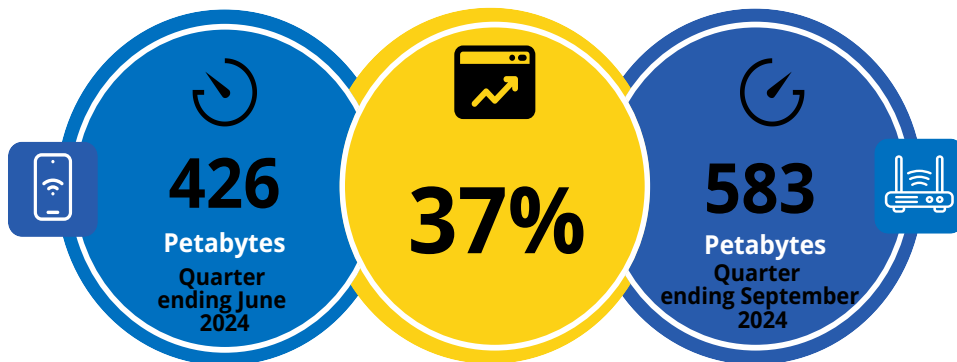


Table 3.2 Amount of data used in the quarter ending September 2024

	July	August	September
MB	187,513,225,054	195,058,997,727	200,886,387,461
Subs	40,355,679	40,736,423	41,376,545
MB Per Subscriptions	4,647	4,788	4,855

Data traffic in megabytes shown in Table 3.2 indicates that 4,855 MB per subscriber were used in September which is higher than July and August 2024.

3.3 Internet link capacity

For international links, the outgoing and incoming capacity support internet usage locally and internationally. Table 3.3 shows that the country has a 15,332.00 Gbps duplex capacity for new activation.

Table 3.3 International Internet Capacity as of September 2024

Reporting Month	Outgoing capacity (Gbps)	Incoming capacity (Gbps)
Total /Owned	17,200.00	17,200.00
Activated	1,868.00	1,868.00
Available for new activation	15,332.00	15,332.00

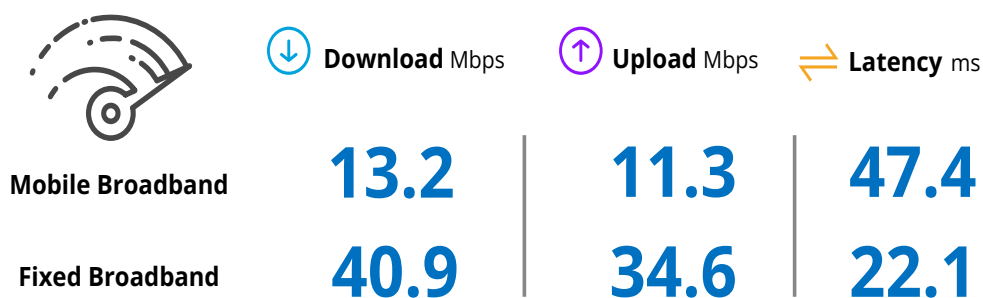
3.4 Roll out of mobile broadband network and quality of Internet speed

Investment in the telecommunication infrastructure has increased the rollout of mobile broadband networks coverage and speed as shown in Table 3.4.

Table 3.4 Network coverage and quality of internet speed for mobile and fixed as of September 2024

S/N	Indicator	Category	June 2024	September 2024
1	Percentage of the population covered by a mobile broadband network signal (3G, 4G or higher)	3G	89%	90.1%
		4G	83%	84.9%
		5G	15%	18%
2	Percentage of Geographical coverage by mobile network signal (3G, 4G or higher)	3G	73%	73.6%
		4G	69%	70.2%
		5G	2%	2.2%

Significant achievements were attained in the sector during this quarter, as shown in Table 3.4, including expanding 3G, 4G and 5G coverage to reach population coverages of 90.1%, 84.9% and 18%, respectively. Furthermore, the geographical coverage for 3G, 4G and 5G has expanded to 73.6%, 70.2% and 2.2% respectively.



3.5 Country Code Top Level Domains

The total cumulative number of registered domain names increased from 30,698 at the end of June 2024 to 31,584 by the end of September 2024, as shown in Table 3.5.

Table 3.5 Number of domain names

S/N	Zone	June 2024	September 2024
1	co.tz	24,085	24,796
2	or.tz	2,652	2,696
3	ac.tz	1,146	1,160
4	go.tz	902	913
5	.tz	1,614	1,706
6	sc.tz	244	256
7	ne.tz	31	33
8	me.tz	8	9
9	info.tz	2	2
10	hotel.tz	3	2
11	Mobi.tz	5	5
12	tv.tz	3	2
13	mil.tz	3	4
Total		30,698	31,584

4. Broadcasting Services Statistics

This section presents statistics on the number of television (TV) subscriptions through Digital Terrestrial Television (DTT), Digital to the Home (DTH), and Cable Television (Cable TV) as well as the population coverage of broadcasting signals in the country.

4.1 Active decoders

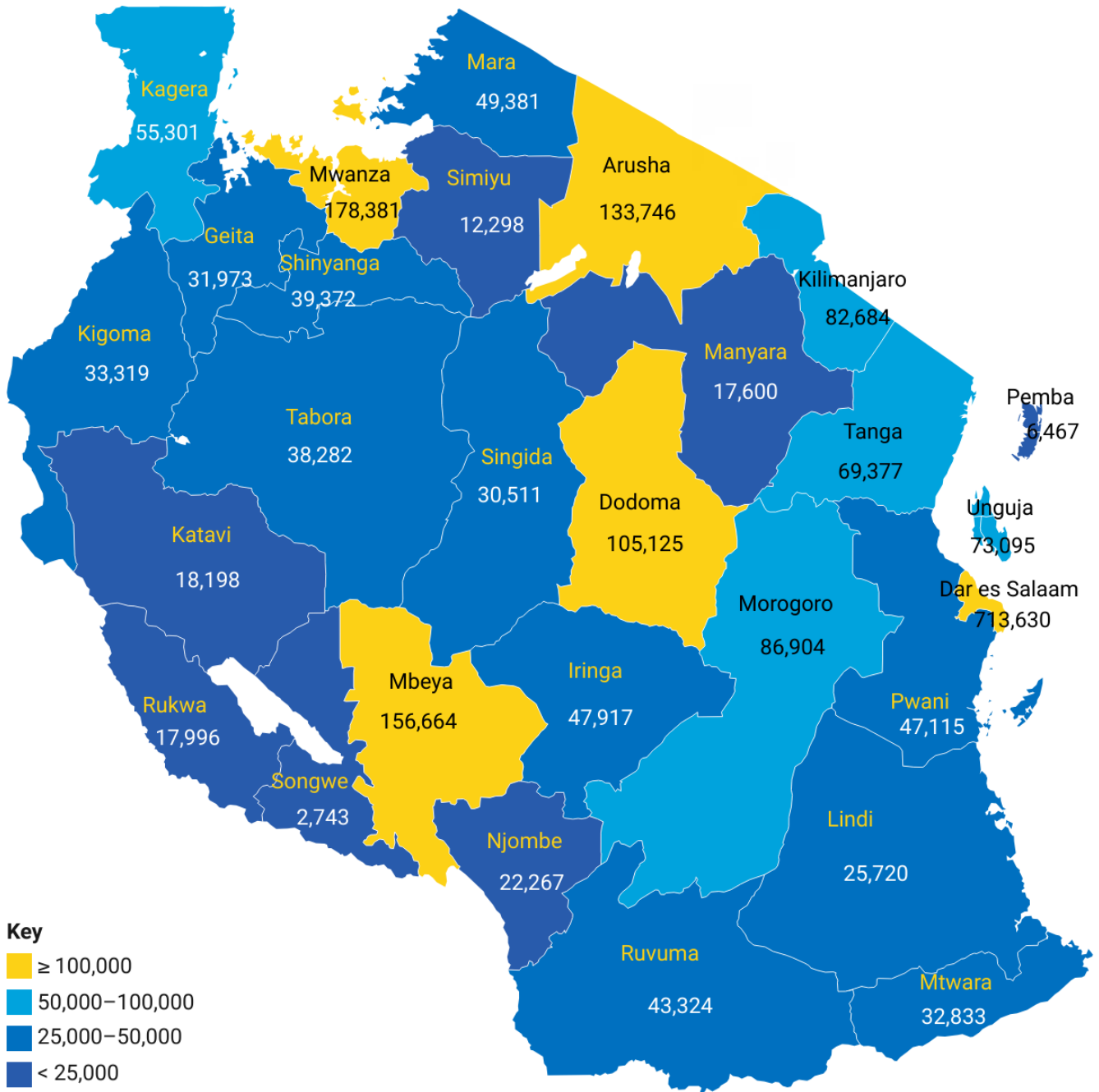
The number of active decoders (set-top boxes which were subscribed to a paid TV package) accessing TV broadcasting services is shown in Table 4.1. As it is shown in Table 4.1, Azam Media Limited has the most significant number of active decoders (subscriptions) followed by StarMedia Limited.

Table 4.1 Number of active decoders per operator as of September 2024

	DTT	DTH	Total
Agape Associates Limited	1,840	0	1,840
Azam Media Limited	271,962	1,084,702	1,356,664
Basic Trasmisions Limited (Digitek)	15,000	0	15,000
Basic Trasmisions Limited (Continental)	37,659	31,309	68,968
Multichoice Tanzania Limited (DSTv)	0	234,415	234,415
Star Media Limited	230,000	247,236	477,236
Zuku	0	21,687	21,687
Total	556,461	1,619,349	2,175,810

Based on the regional distribution of active decoders shown in Map 4.2, Dar es Salaam is ranked first with 713,630 active decoders, followed by Mwanza with 178,381 active decoders, Mbeya is ranked third with 156,664 active decoders and Arusha is ranked fourth with 133,746 decoders as shown in Map 4.1

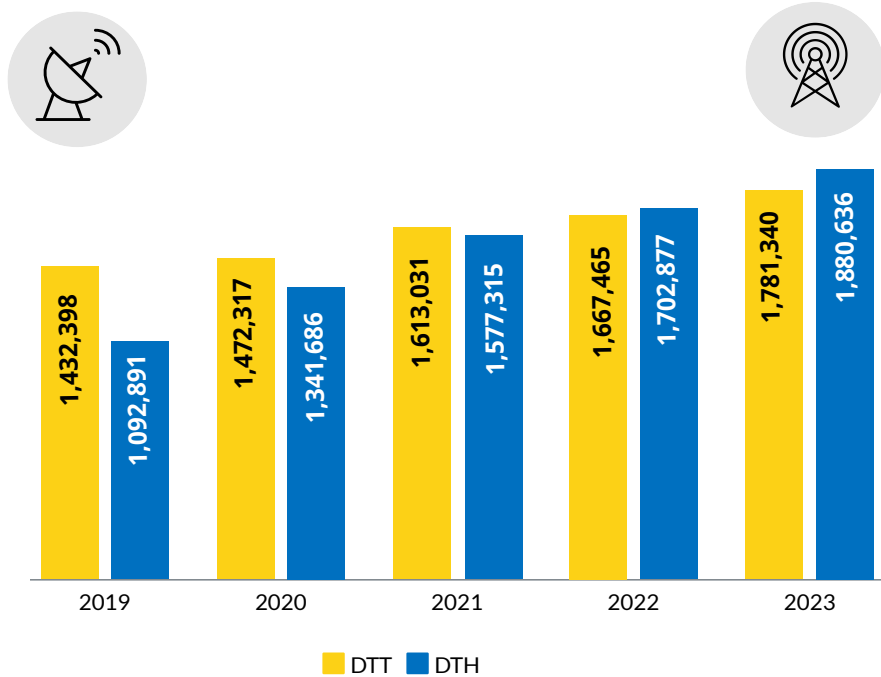
Map 4.1 Number of Active Decoders per Region



4.2 Sold decoders in the past five years

The number of sold decoders in the past five years per type of service (DTT or DTH) are shown in

Chart 4.2 Trend of sold decoders over the past five years



There is a growing trend in DTT and DTH subscriptions, as shown in Chart 4.3, from year to year, where as of 2023 the number of sold decoders was the highest.

4.3 Cable TV subscriptions

The number of cable TV subscriptions increased by 2% from 18,820 as of June 2024 to 19,153 as of September 2024, as shown below.

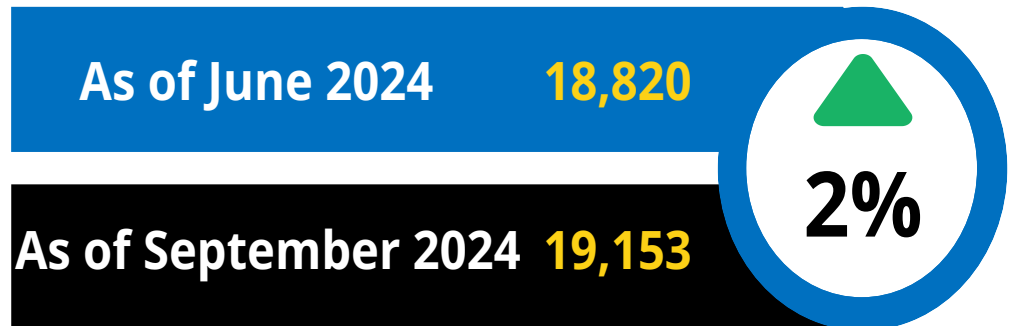
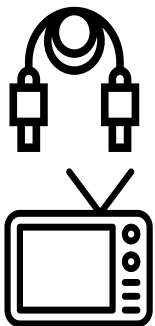
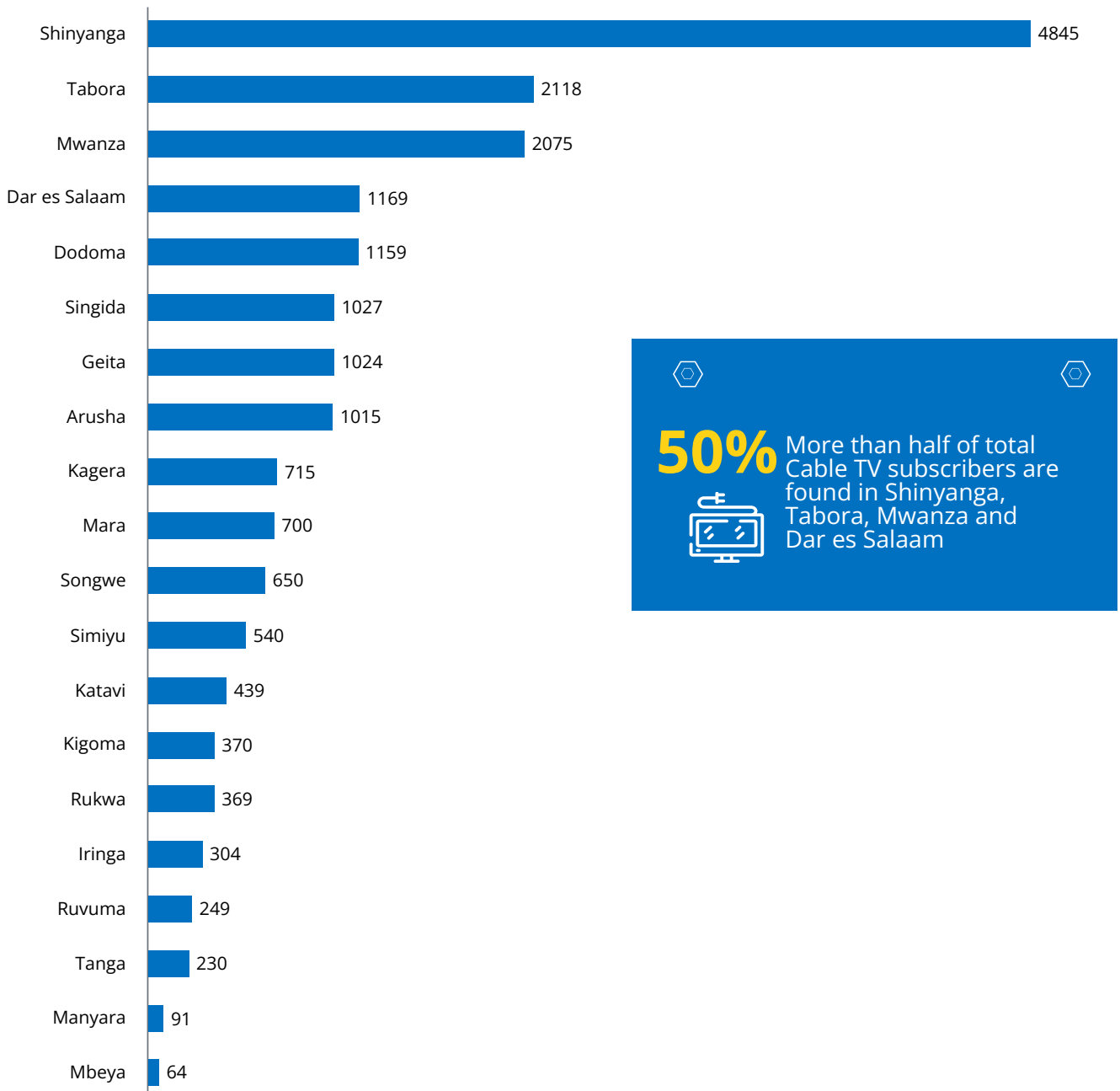


Chart 4.3 Cable TV subscriptions in Tanzania as of September 2024



Among all regions of Tanzania mainland, Shinyanga leads by having 4,845 Cable TV subscriptions, followed by Tabora with 2,118, Mwanza with 2,075 and Dar es Salaam with 1,169 and. Regions with the least Cable TV subscriptions are Mbeya, which has 64 subscriptions; Manyara, which has 91 subscriptions; and Tanga, which has 230 subscriptions.

4.4 Trend of cable TV subscriptions in the past five years

Cable TV subscriptions increased, especially between 2020 and 2022, but decreased in December 2023, as shown in Table 4.5. The decrease in subscriptions might be attributed to the increased penetration of DTT and DTH in the country.

Table 4.5 Trend of Cable TV subscription for the past five years

	2019	2020	2021	2022	2023
Subscriptions	15,245	14,350	19,739	22,295	16,223

4.5 Coverage of broadcasting network

The broadcasting signal coverage shown in Table 4.6 highlights significant disparities among DTT, DTH, and FM broadcasting technologies. DTH provides complete coverage geographically and in terms of population, serving as a critical resource for reaching remote areas.

Table 4.6 Broadcasting signal coverage as of September 2024

Indicator	September 2024
Percentage of the population covered by DTT signal	58%
Percentage of the population covered by DTH signal	100%
Percentage of the population covered by FM broadcasting signal	78%
Percentage of the geography covered by DTT signal	33%
Percentage of the geography covered by DTH signal	100%
Percentage of the geography covered by FM broadcasting signal	56.5%

5. Postal & Courier Services Statistics

This section presents statistics for postal and courier customers, posted and delivered items, such as mail, parcels and documents, to and from domestic, East Africa (EA) and the Rest of the World (RoW).

5.1 Subscription to postal receptacles

Tanzania Posts Corporation (TPC) provides basic postal services of letter boxes and private bags to private individuals and corporate customers. During the period from July to September 2024, there was no change in the number of letter boxes and private bags as shown in Table 5.1.

Table 5.1 TPC letter boxes and private bags

Reporting Month	No. of Letter Boxes	No. of Private Bags	Total
July	158,006	67	158,073
August	158,006	67	158,073
September	158,006	67	158,073

5.2 Courier customers

Courier customers for this quarter are shown in Table 5.2.

Table 5.2 Courier customers

Reporting Month	Corporate Customers	Individual Customers	Total
July	1,168	35,628	36,796
August	1,801	70,316	72,117
September	708	47,215	47,923

Data in Table 5.2 indicates that there were more individual courier service customers than corporate customers.

5.3 Domestic posted items

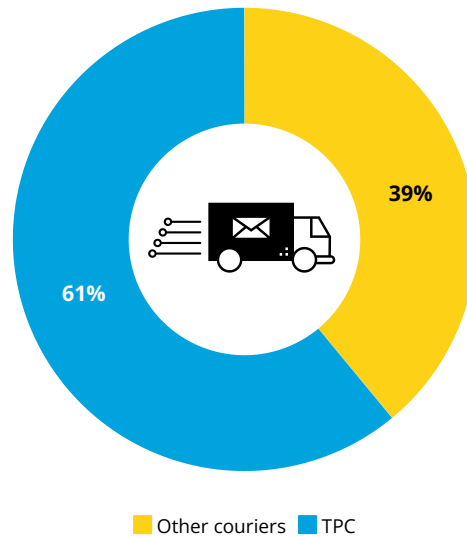
The number of domestic posted items in this quarter is shown in Table 5.3. The statistics show that documents were the most posted items in this quarter, followed by letter mails. Cargo were the least posted items in the quarter.

Table 5.3 Domestic posted items for the quarter ending September

Reporting Month	Letter Mails	Parcels	Packets	Documents	Postal Cargo	Total
July	55,999	64,289	5,391	55,592	114	181,385
August	57,709	17,660	2,595	64,622	799	143,385
September	52,882	63,729	4,805	49,201	134	170,751
	166,590	145,678	12,791	169,415	1,047	495,521

The market shares for the domestic posted items accounted by Tanzania Posts Corporation (TPC) was 61% while other courier services providers was 39% as shown in Chart 5.3.

Chart 5.3 Market share for the domestic posted items



5.4 International posted items

The number of international items posted through TPC and other couriers is shown in the Table 5.4a.

Table 5.4a Number of international posted items by TPC and private couriers

	Apr to Jun 2024	July to Sept 2024
TPC	39,308	18,483
Other Couriers	13,763	15,083
Total	53,071	33,566

Table 5.4b shows the number of international posted items which indicates that letter mails were the most posted items to international in this quarter, followed by documents and parcels.

Table 5.4b Number of international posted items

Reporting Month	Letter Mails	Parcels	Packets	Documents	Postal Cargo	Total
July	3,853	1,005	587	1,770	1,342	7,215
August	4,516	5,653	171	4,657	931	14,997
September	6,709	1,589	793	2,263	1,253	11,354
Total	15,078	8,247	1,551	8,690	3,526	33,566

5.5 Domestic delivered items

The total number of domestic delivered items through TPC and other couriers was 443,977. In comparison to the number of domestic posted items in Table 5.5, the statistics show that 51,544 posted items were not delivered.

Table 5.5 Domestic delivered items for the quarter ending September 2024

Reporting Month	Letter Mails	Parcels	Packets	Documents	Postal Cargo	Total
July	38,428	74,202	5,081	31,849	90	149,650
August	42,441	26,709	2,789	63,053	979	135,971
September	53,304	58,167	3,066	43,812	7	158,356
Total	134,173	159,078	10,936	138,714	1,076	443,977

5.6 International delivered items

The summary of international delivered items is shown in Table 5.6a.

Table 5.6a International delivered items for the quarter ending September

	Apr to Jun 2024	July to Sept 2024
TPC	53,493	38,668
Other Couriers	150,209	22,044
Total	203,702	60,712

The international delivered items in Table 5.6b shows that letter mail was the most delivered in this quarter. Cargo were the least delivered items in the quarter.

Table 5.6b International delivered items for the quarter ending September 2024

Reporting Month	Letter Mails	Parcels	Packets	Documents	Postal Cargo	Total
July	6,637	4,673	2,449	4,125	97	17,981
August	8,572	5,904	5,499	5,131	5	25,111
September	9,717	2,022	3,972	1,910	0	17,620
Total	24,926	12,599	11,920	11,166	102	60,712

The market shares of international posted and delivered items are shown in Chart 5.6. The chart shows that Tanzanians post fewer items (36%) compared to delivered (64%).

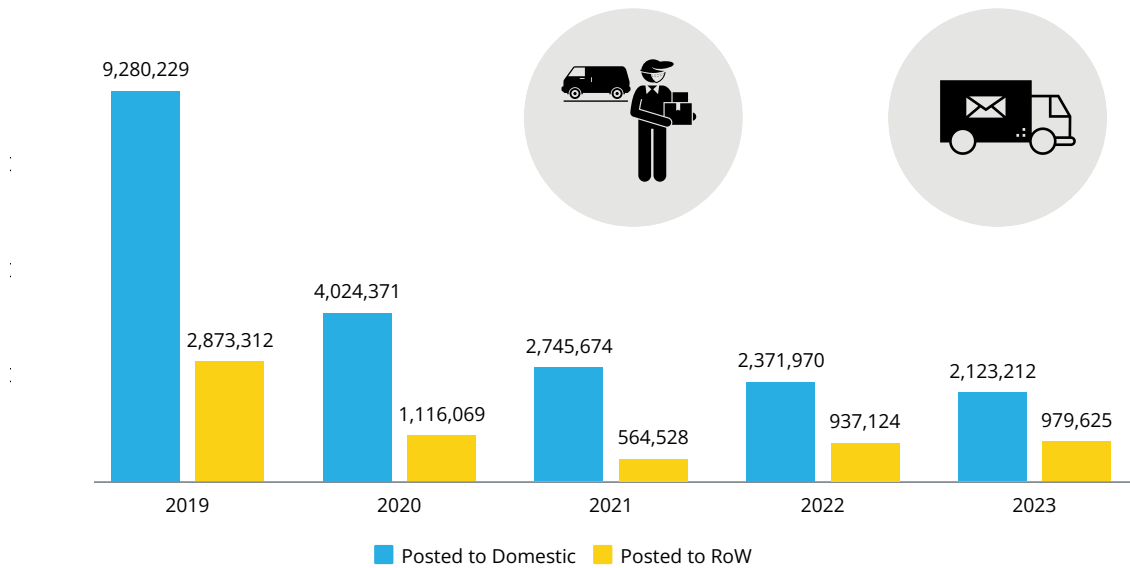
Chart 5.6 Share of international posted and delivered items



5.7 Trend of domestic and international posted items over the past five years

The trend of posted items over the past five years is shown in Chart 5.7.

Chart 5.7 Trend of posted items domestic and international over the past five years



It is shown in Chart 5.7 that more items were posted to domestic destinations than to international destinations. However, the number of posted items has decreased over time.

5.8 Trend of international posted and delivered items over the past five years

Chart 5.8 depicts the number of items posted and delivered from the international during the past five years.

Chart 5.8 Trend of posted items to international and delivered from international over the past five years

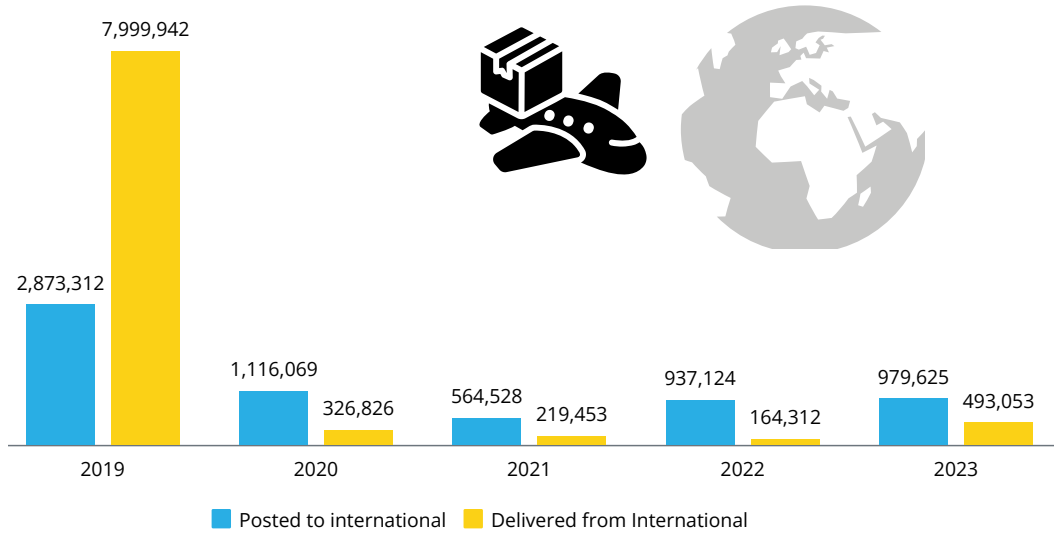


Chart 5.8 shows that the number of items posted to international destinations has decreased from 2,873,312 items in 2019 to 493,053 items in 2023. On the other hand, delivered items experienced an almost similar decreasing trend. However, more items have been posted to other countries than delivered from other countries.

6. Quality of Services, Compliance Indicators & Fraud attempts Statistics

6.1 Quality of services (QoS) for the telecom subsector

Measurements were conducted considering the QoS parameters and measurement methods specified in the Electronic and Postal Communications (Quality of Service) Regulations, 2018. The following is the summary of the results on the Quality of Service (QoS) of mobile networks in Tanzania from July to September 2024.

6.1.1 Network availability

Network Availability measures how well the mobile network is available when consumers want to use mobile network services. The threshold for compliance is greater than 99%.

Tigo passed the target in all fourteen measured service areas. Airtel and Vodacom passed the target in thirteen out of fourteen measured service areas. TTCL passed the target in twelve out of fourteen measured areas and Halotel passed the target in ten out of fourteen measured service areas as shown in Chart 6.1.1.

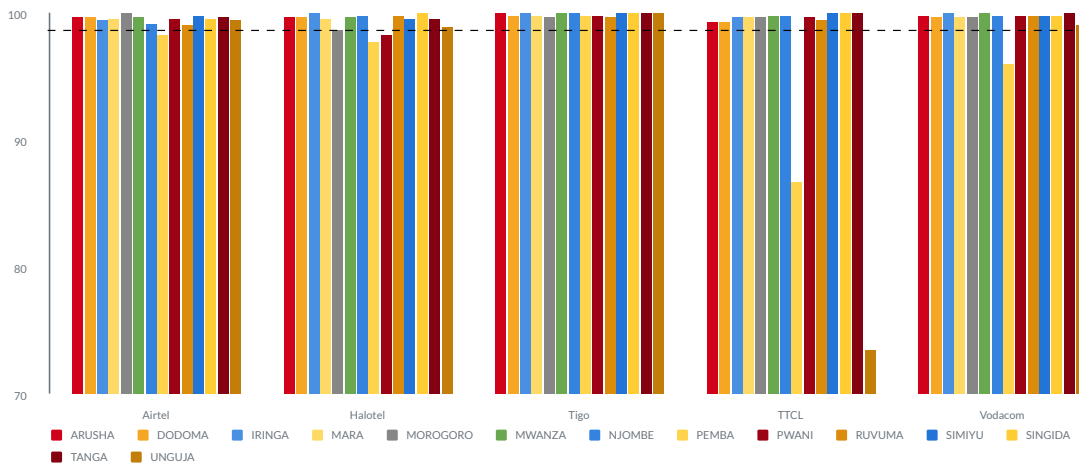


Chart 6.1.1. Network Availability (%) (Target is above 99%)

6.1.2 Call Connection Failure Rate (CCFR)

The Call Connection Failure Rate measures the percentage of calls that failed to connect after dialing due to technical reasons. The threshold for compliance is less than 2%.

Tigo passed the target in all fourteen measured service areas. Airtel passed the target in twelve out of fourteen measured service areas. Halotel and Vodacom each passed the target in eleven out of fourteen measured service areas. TTCL passed the target in six out of the fourteen measured service areas as shown in chart 6.1.2.

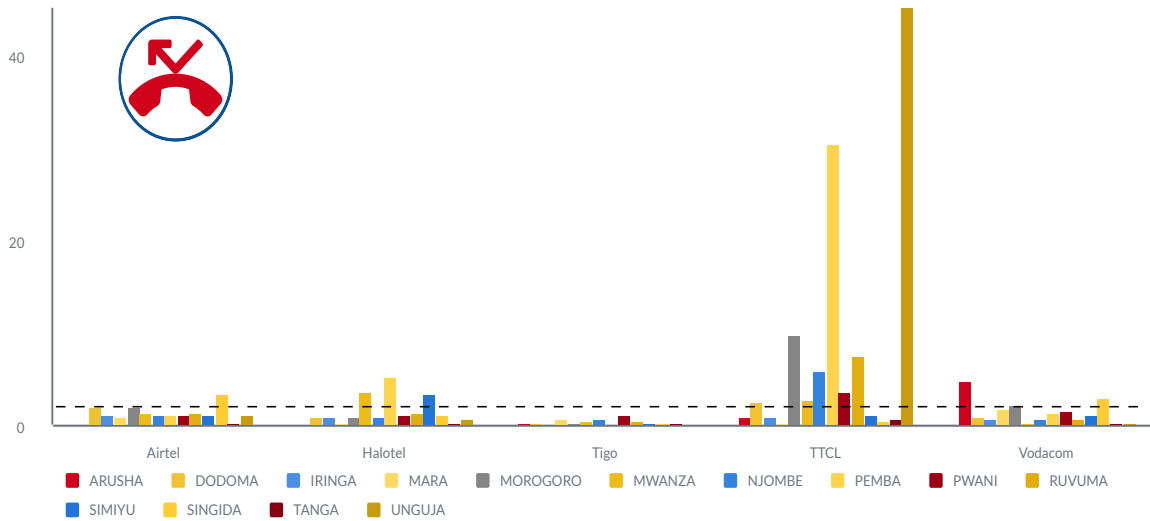


Chart 6.1.2 Comparative results on the Call Connection Failure Rate

6.1.3 Call drop rate

Call Drop Rate measures the percentage of calls cut off due to technical reasons before the speaking parties finish their conversation and one of them hangs up (dropped calls). The threshold for compliance is less than 2%.

All operators passed the target in all fourteen measured service areas as shown in Chart 6.1.3.

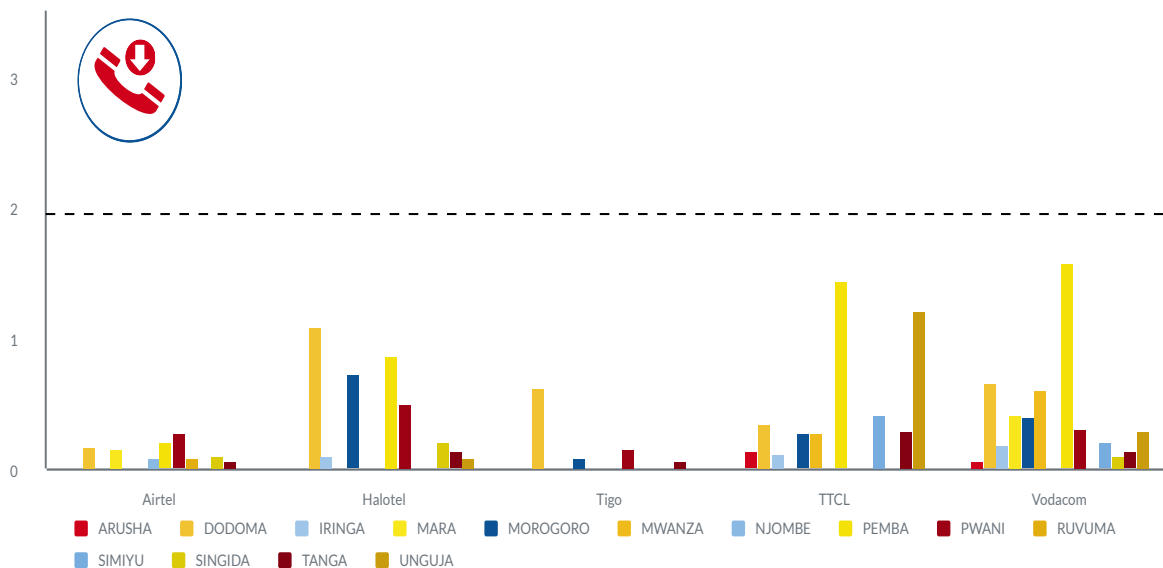


Chart 6.1.3. Comparative results on the Call Drop Rate

6.1.4 2G Service coverage

2G Service Coverage indicates how well service areas are covered by a particular mobile network operator signal for consumers to get mobile network service. Consumers cannot get 2G mobile network services in areas with no coverage or very poor coverage. The threshold for compliance for 2G technologies is -85 dBm.

Halotel passed in twelve out of fourteen measured service areas, Airtel passed the target in all eight out of nine measured service areas, , Vodacom passed in five out of ten measured service areas, TTCL passed in three out of five measured service areas, and Tigo passed in one out of two measured service areas, as shown in Chart 6.1.4.

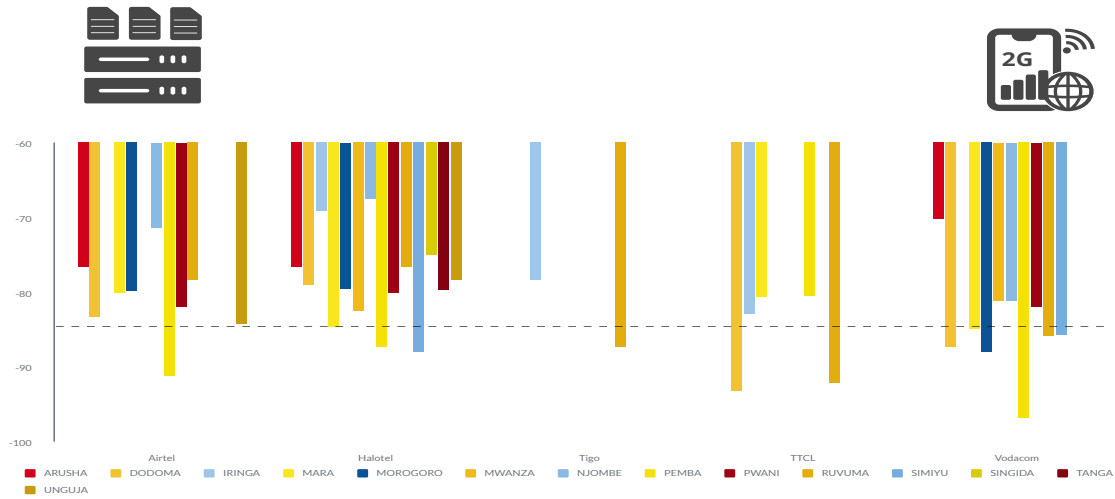


Chart 6.1.4. Comparative results on 2G Coverage.

6.1.5 3G Service coverage

The 3G Service Coverage indicates how well service areas are covered by a particular mobile network operator signal for consumers to get mobile network service. Consumers cannot get 3G mobile network services in areas with no coverage or very poor coverage. The threshold for compliance for 3G technologies is -85 dBm.

Halotel and Tigo passed the target in all fourteen measured service areas. Airtel and Vodacom each passed the target in thirteen out of fourteen measured service areas, while TTCL passed the target in twelve out of fourteen service areas, as shown in Chart 6.1.5.

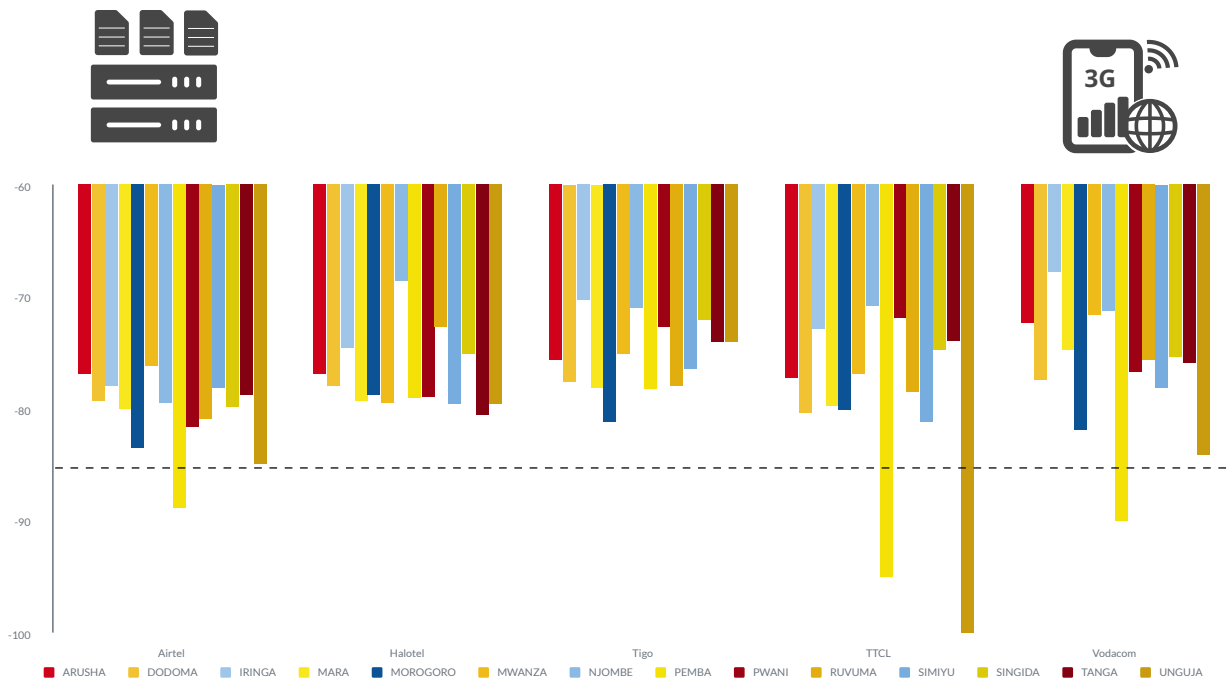


Chart 6.1.5. Comparative results on 3G Coverage.

6.1.6 4G Service coverage

4G Service Coverage indicates how well service areas are covered by a particular mobile network operator signal for consumers to get mobile network service. Consumers cannot get 4G mobile network services in areas with no coverage or very poor coverage. The threshold for compliance for 4G technology is -95 dBm.

Tigo and TTCL each passed the target in all fourteen measured service areas. Vodacom and Airtel each passed the target in twelve out of fourteen measured service areas and Halotel passed the target in eleven out of fourteen measured service areas, as shown in Chart 6.1.6.

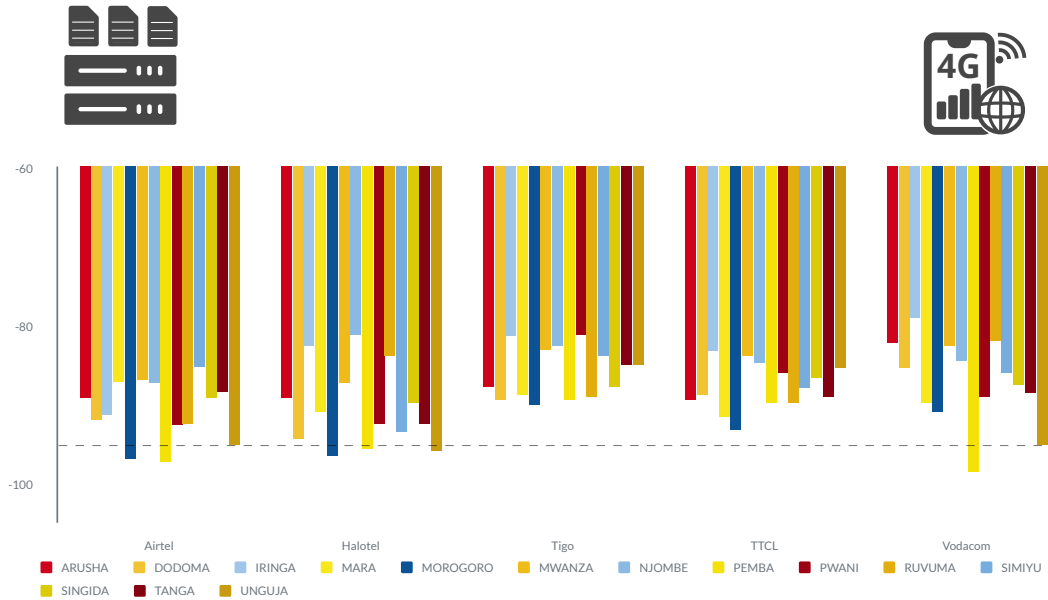


Chart 6.1.6. Comparative results on 4G coverage

6.1.7 Call Success Rate

Call Success Rate measures the percentage of calls completed successfully after dialling, such that they were neither blocked nor dropped. The threshold for compliance is equal to or greater than 95%.

Airtel, Tigo and Vodacom passed the target in all fourteen measured service areas. Halotel passed the target in thirteen out of fourteen measured service areas while TTCL in nine out of fourteen measure service areas, as shown in Chart 6.1.7.

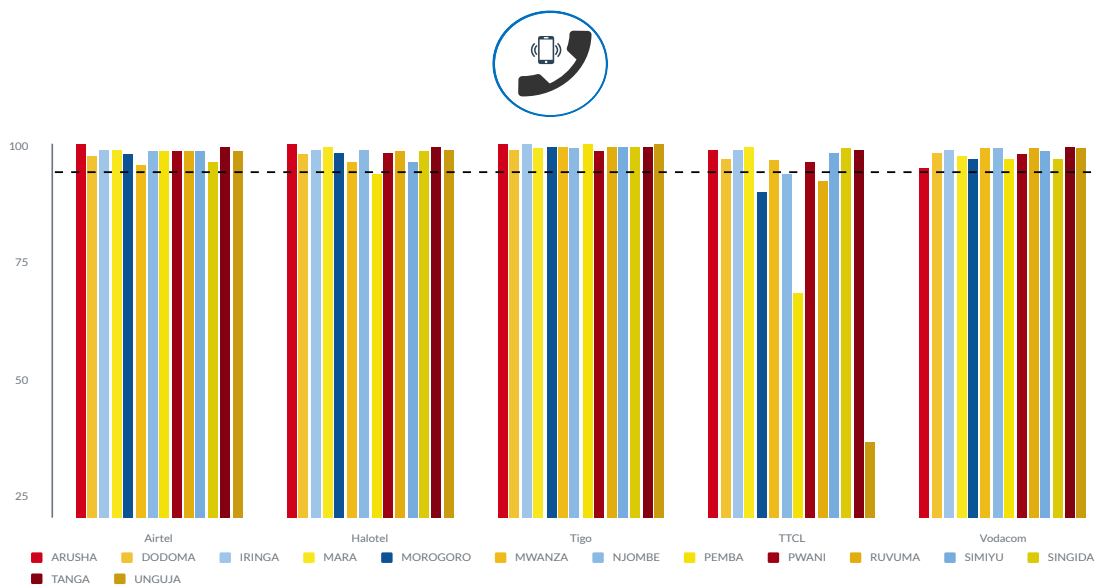


Chart 6.1.7. Comparative results on Call Success Rate.

6.1.8 Handover Success Rate

Handover Success Rate measures how well voice calls are transferred from one communication tower to another without dropping while the user moves. The threshold for compliance is equal to or greater than 98%.

Airtel, Halotel, Tigo and Vodacom passed the target in all fourteen measured service areas, while TTCL passed the target in twelve out of fourteen measured service areas, as shown in Chart 6.1.8.

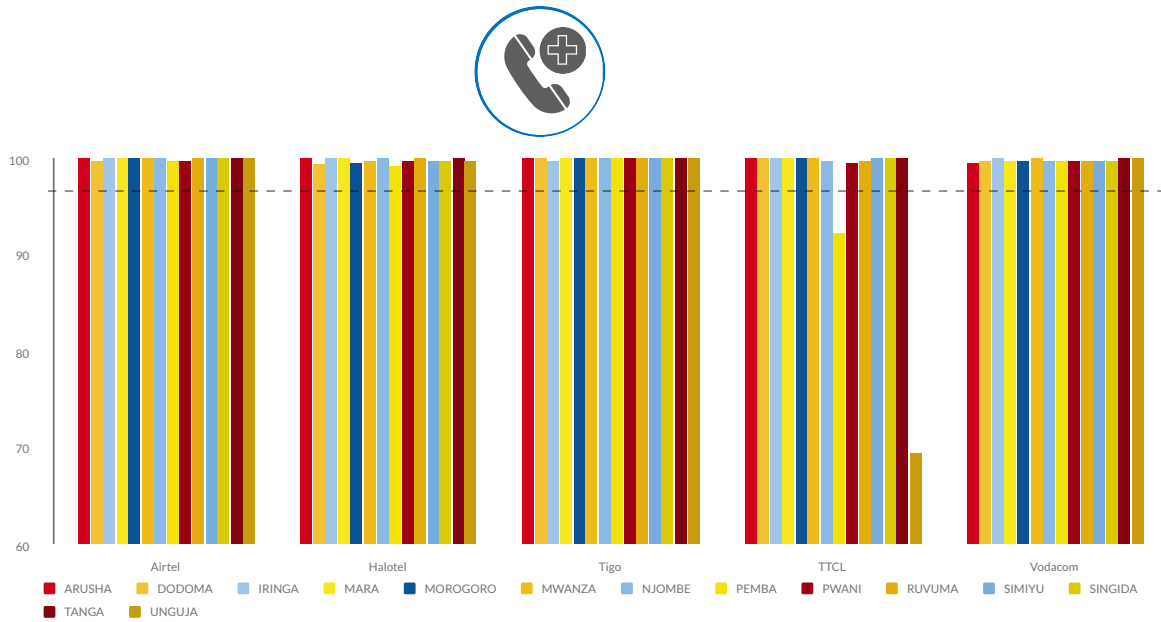


Chart 6.1.8. Comparative results on Handover Success Rate.

6.1.9 Voice Quality (MOS)

Voice Quality (MOS) is a measure of the perception of the audio quality of the conversation during a call. The MOS Score scale ranges from 1 to 5, with 1 being poor and 5 being excellent audio quality. The threshold for compliance is an average of all Voice Quality (MOS) measurement samples being greater than 3.5.

Airtel, Tigo, TTCL and Vodacom passed the target in all thirteen measured service areas, while Halotel passed the target in all ten out of ten measured service areas as shown in Chart 6.1.9.

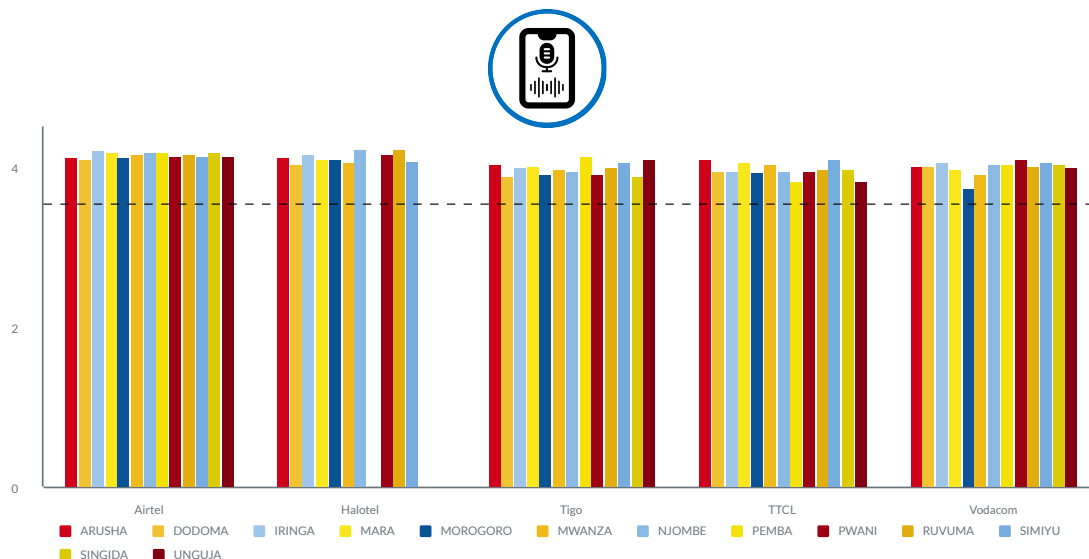


Chart 6.1.9. Comparative results on Voice Quality.

6.1.10 Download Mean Data Rate

Download Mean Data Rate is a measure of the rate of data transfer on a network. It measures how fast data is transferred from a file transfer protocol (FTP) server to a mobile device. The compliance threshold is average, greater or equal to 4000 kbps.

All operators passed the target in all fourteen measured service areas as shown in Chart 6.1.10.

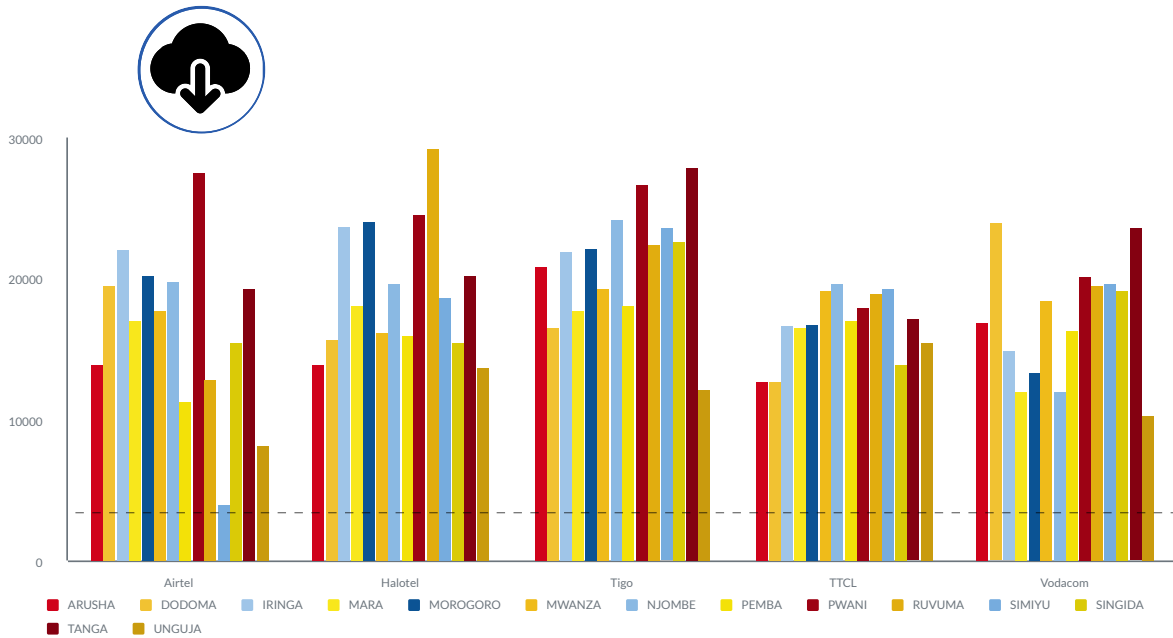


Chart 6.1.10. Comparative results on Download Mean Data Rate

6.1.11 Ping Round Trip Time

Ping Round Trip Time measures the time the user equipment takes to send a request and receive a response from the server. The threshold for compliance is average, being less than 400 ms.

All operators passed the target in all fourteen measured service areas, as shown in Chart 6.1.11.

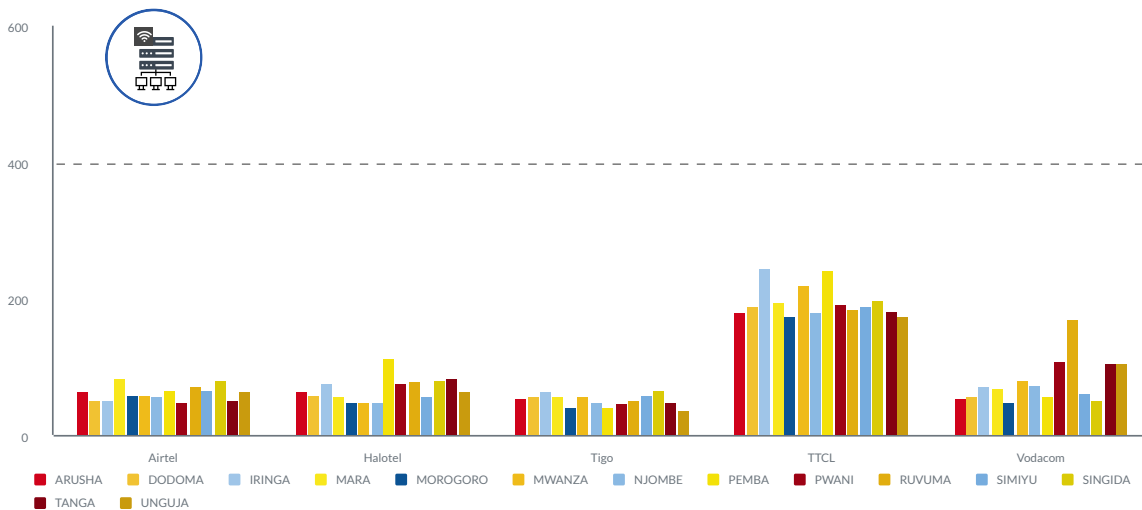


Chart 6.1.11. Comparative results on Ping Round Trip Time.

6.1.12 Attach Failure Ratio

Attach Failure Ratio refers to the percentage of failures when a mobile phone fails to connect to the network when powered ON or flight mode is turned OFF. The threshold for compliance is less than 2%.

Airtel passed the target in all fourteen measured service areas. Tigo and Vodacom passed the target in eleven out of fourteen measured service areas. Halotel passed the target in nine out of fourteen measured service areas, and TTCL in seven out of fourteen service areas, as shown in Chart 6.1.12.

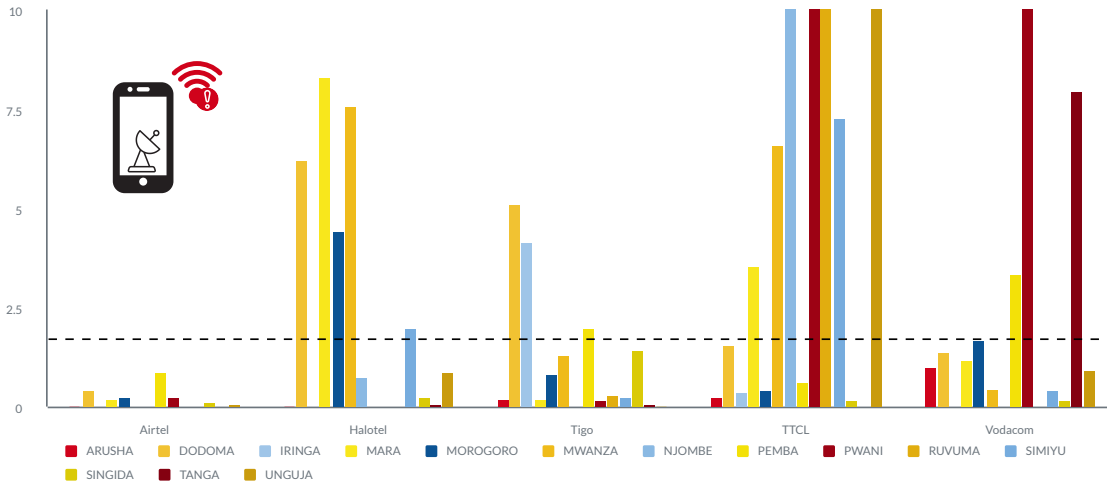


Chart 6.1.12. Comparative results on Attach Failure Ratio.

6.1.13 Attach Setup Time

Attach Setup Time refers to the time a mobile phone takes to connect to the network when powered ON or flight mode turned OFF. The threshold for compliance is less than 5 seconds.

All operators passed the target in all fourteen measured service areas measured service areas, as shown in Chart 6.1.13.

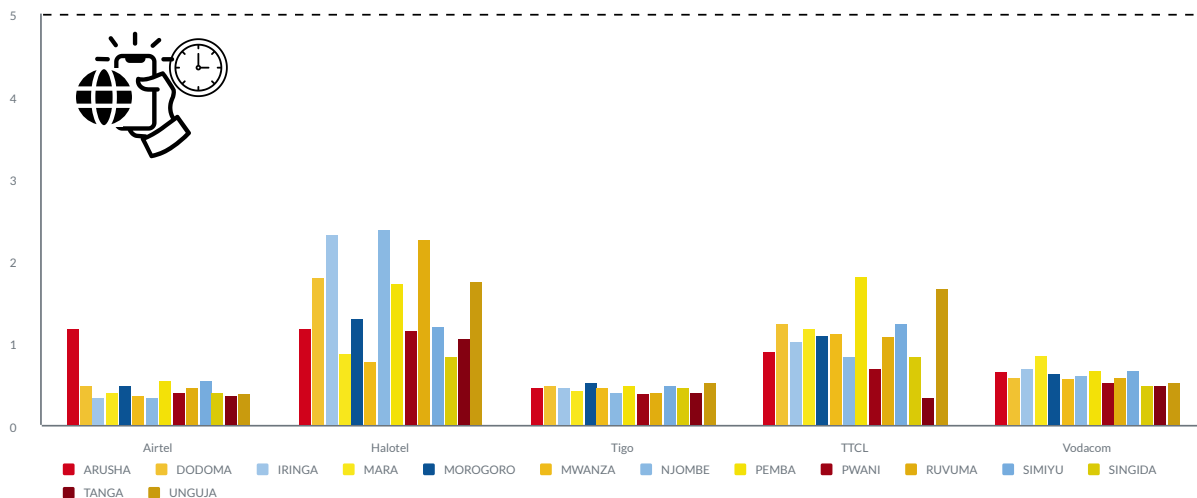


Chart 6.1.13. Comparative results on Attach Setup Time.

6.1.14 Call Setup Time

Call Setup Time measures the time a call takes to connect after dialling. The threshold for compliance is less than 10 seconds.

All operators passed the target in all fourteen measured service areas as shown in Chart 6.1.14.

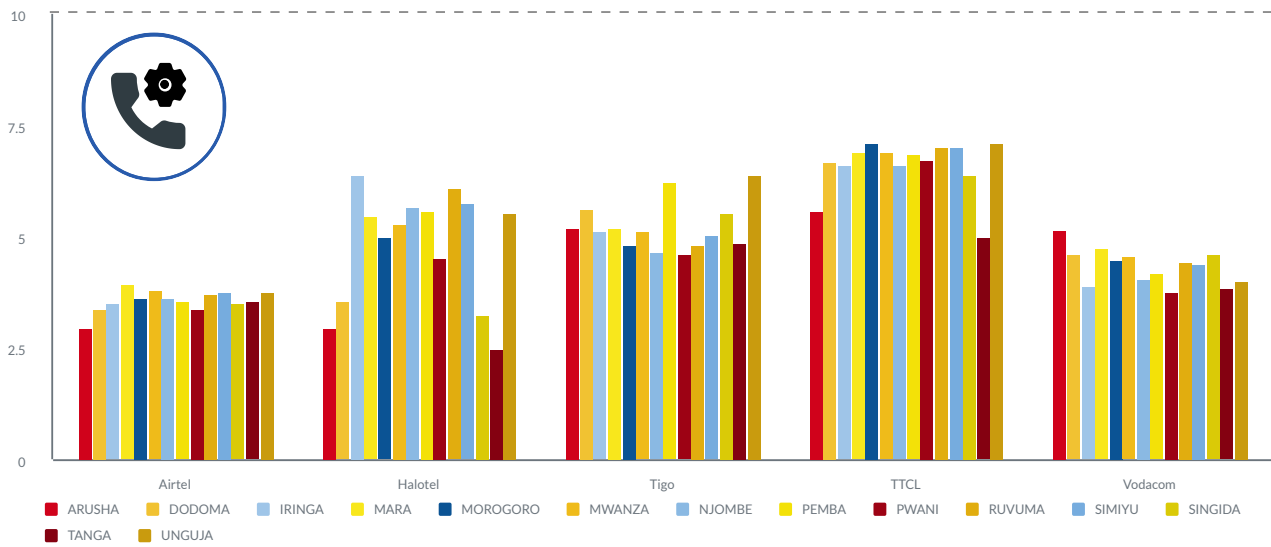


Chart 6.1.14. Comparative results on Call Setup Time.

The general quality of service results from July to September 2024 indicates that Airtel scored 97%, Vodacom 93, Tigo 98, Halotel 90% and TTCL scored 86% in performance, as shown in Table 6.1.

Table 6.1 Summary of QoS scores per MNO for Q3 and Q4 of 2023/2024

Operator	June 2024	September 2024	% Change
Airtel	98%	97%	-1%
Vodacom	96%	93%	-3%
Tigo	99%	98%	-1%
Halotel	93%	90%	-3%
TTCL	78%	86%	10%
Industry average	91%	92.6%	0.16%

6.2 Compliance indicators for the Broadcasting subsector

Content monitoring was carried out for National Broadcasters (Television and Radio). Compliance was based on the criteria of program line up submission and its adherence, and adherence to 90 minutes for presentation of news, program diversity, content of education nature and adherence to local content.

6.2.1 Program line up submission and its adherence

National Broadcasters are required to provide schedules (timing, order, and duration) and adhere to the programs submitted.

The compliance to program line up submission and adherence for television and radio stations for the quarter under review is shown in Table 6.2.1a and Table 6.2.1b respectively.

Table 6.2.1a Television program line up submission and adherence

Television name	Program Line Up Submission	Adherence to Program Line-Up Submitted
ITV	Compliant	Compliant
UTV	Compliant	Compliant
Tumaini TV	Compliant	Non-compliant
Channel Ten	Non-compliant	Non-compliant
East Africa TV	Compliant	Compliant
Star TV Tanzania	Compliant	Non-compliant
TBC 1	Compliant	Compliant
TV Imaan	Compliant	Compliant
Arise and Shine	Compliant	Non-compliant
WRM TV	Compliant	Non-Compliant
Clouds TV	Non-compliant	Non-compliant
Hope Channel Tanzania	Compliant	Non-compliant
Upendo TV	Compliant	Non-compliant
Mahaasin TV	Compliant	Non-compliant
Channel Ten Plus	Non-compliant	Non-compliant
TVE	Non-compliant	Non-compliant

Table 6.2.1b Radio program line up submission and adherence

Radio name	Program Line Up Submission	Adherence to Program Line-Up Submitted
Radio One	Non-compliant	Non-compliant
TBC Taifa	Compliant	Compliant
Adventist World Radio (AWR)	Compliant	Non-compliant
Clouds FM	Compliant	Compliant
East Africa Radio	Compliant	Compliant
EFM	Compliant	Compliant
Wasafi FM	Compliant	Compliant
TBC International	Compliant	Compliant
Radio Free Africa	Non-compliant	Non-compliant
Bongo FM	Non-compliant	Non-compliant
Radio Maria	Non-compliant	Non-compliant

6.2.2 Program diversity

National Broadcasters are required to provide broad range of content that is fairly diverse in providing information, education and entertainment content so as to cater for different tastes, cultures, and interests of Tanzanians.

The compliance to program diversity, content of educational nature, adherence to presentation of news for television and radio stations in this quarter is shown in Table 6.2.2a and Table 6.2.2b respectively.

Table 6.2.2a Television program diversity

Television name	Program diversity	Content of Education Nature	Adherence to 90 minutes for News
ITV	Compliant	Compliant	Compliant
UTV	Compliant	Compliant	Compliant
Tumaini TV	Compliant	Compliant	Compliant
Channel Ten	Compliant	Compliant	Compliant
East Africa TV	Compliant	Compliant	Non-compliant
Star TV Tanzania	Compliant	Compliant	Compliant
TBC 1	Compliant	Compliant	Compliant
TV Imaan	Compliant	Compliant	Non-compliant
Arise and Shine	Non-compliant	Non-compliant	Compliant
WRM TV	Non-compliant	Non-compliant	Non-compliant
Clouds TV	Compliant	Compliant	Compliant
Hope Channel Tanzania	Compliant	Compliant	Non-compliant
Upendo TV	Compliant	Compliant	Non-compliant
Mahaasin TV	Compliant	Compliant	Non-compliant
Channel Ten Plus	Non-compliant	Non-compliant	Non-compliant
TVE	Non-compliant	Non-compliant	Non-compliant

Table 6.2.2b Radio program diversity

Radio Name	Program Diversity	Content of Education Nature	Adherence to 90 minutes for News
Radio One	Compliant	Compliant	Compliant
TBC Taifa	Compliant	Compliant	Compliant
Adventist World Radio (AWR)	Compliant	Compliant	Non-compliant
Clouds FM	Compliant	Compliant	Non-compliant
East Africa Radio	Compliant	Compliant	Non-compliant
EFM	Compliant	Compliant	Non-compliant
Wasafi FM	Compliant	Compliant	Non-compliant
TBC International	Compliant	Compliant	Compliant
Radio Free Africa	Compliant	Compliant	Compliant
Bongo FM	Compliant	Compliant	Non-compliant
Radio Maria	Compliant	Compliant	Non-compliant

6.2.3 Adherence to local content

National Broadcasters are required to ensure that 60% of aired content is produced locally, reflecting the culture, language, and interests of the local audience.

The compliance to adherence to local content in the quarter under review is shown in Table 6.2.3a and Table 6.2.3b below.

Table 6.2.3a Television adherence to local content

Television name	Adherence to local content		
	Relevance to society	Language (Kiswahili or English)	60% local content production
ITV	Compliant	Compliant	Compliant
UTV	Compliant	Compliant	Compliant
Tumaini TV	Compliant	Compliant	Compliant
Channel Ten	Compliant	Compliant	Compliant
East Africa TV	Compliant	Compliant	Compliant
Star TV Tanzania	Compliant	Compliant	Compliant
TBC 1	Compliant	Compliant	Compliant
TV Imaan	Compliant	Compliant	Compliant
Arise and Shine	Compliant	Compliant	Compliant
WRM TV	Compliant	Compliant	Compliant
Clouds TV	Compliant	Compliant	Compliant
Hope Channel Tanzania	Compliant	Compliant	Compliant
Upendo TV	Compliant	Compliant	Compliant
Mahaasin TV	Compliant	Compliant	Compliant
Channel Ten Plus	Compliant	Compliant	Compliant
TVE	Compliant	Compliant	Compliant

Table 6.2.3b Radio adherence to local content

Radio name	Adherence to local content		
	Relevance to society	Language (Kiswahili or English)	60% local content production
Radio One	Compliant	Compliant	Compliant
TBC Taifa	Compliant	Compliant	Compliant
Adventist World Radio (AWR)	Compliant	Compliant	Compliant
Clouds FM	Compliant	Compliant	Compliant
East Africa Radio	Compliant	Compliant	Compliant
EFM	Compliant	Compliant	Compliant
Wasafi FM	Compliant	Compliant	Compliant
TBC International	Compliant	Compliant	Compliant
Radio Free Africa	Compliant	Compliant	Compliant
Bongo FM	Compliant	Compliant	Compliant
Radio Maria	Compliant	Non-compliant	Compliant

6.3 Quality of services (QoS) for the Postal and courier subsector

QoS measurement tests were carried out for domestic couriers during the period under review in relation to the delivery of items in Inter-town Zone A.

The tests were based on the speed of service from when an item has been posted at the originated office to when it arrives at the destination office or delivered to the customer as shown in Table 6.3.

Table 6.3 QoS indicator – Speed of delivery for Inter-Town Zone A Target: D +1 Days; > = 85%

Licence name	Compliance status
Air Tanzania	Compliant
Precision Air	Compliant
Tanz Movers	Compliant
Advanced Logistics	Compliant
Delex Courier & Logistics Limited	Compliant
Ellymo Company Limited	Compliant
Segax	Compliant
Geamos Co. Ltd	Non-compliant
Marathon Logistics	Non-compliant
Blaze	Non-compliant
Mwanga Logistics	Non-compliant
Sga Cash In Transit (T) Limited	Non-compliant
Almko Investment Limited	Non-compliant
Cmtl Group	Non-compliant
Couriemate	Non-compliant
Easy Movers	Non-compliant
Jonz	Non-compliant
Kleafast Couriers & Logistics	Non-compliant
Simba Courier	Non-compliant

TCRA has taken and will continue to take regulatory measures to all licencees who fail to comply with Quality of Service parameters as provided in the Electronic and Postal Communications (Quality of Service) Regulations, 2018.

6.4 Fraudulent attempts

Tanzania Mainland						
Region	Airtel	Halotel	Tigo	TTCL	Vodacom	Total
Rukwa	1,582	428	1,523	1,247	791	5,571
Morogoro	902	15	2,880	34	1,655	5,486
Mbeya	252	70	326	368	96	1,112
Dar es Salaam	246	29	533	54	97	959
Arusha	94	5	84	15	153	351
Kilimanjaro	5	3	117	5	205	335
Pwani	108	3	95	7	9	222
Mwanza	42	6	95	25	46	214
Tabora	14	26	36	111	11	198
Katavi	0	34	16	83	58	191
Songwe	1	46	77	42	0	166
Dodoma	6	7	110	6	3	132
Iringa	5	3	98	10	2	118
Tanga	6	5	88	4	4	107
Kagera	13	5	65	0	12	95
Ruvuma	3	3	61	12	2	81
Shinyanga	5	6	31	18	11	71
Singida	1	0	51	13	2	67
Geita	0	2	52	8	3	65
Kigoma	13	3	18	21	5	60
Manyara	35	3	17	4	1	60
Njombe	0	1	19	29	1	50
Mtwara	2	2	33	3	1	41
Mara	1	4	31	1	3	40
Lindi	2	0	21	4	2	29
Simiyu	0	2	11	2	1	16
Zanzibar						
Mjini Magharibi	70	0	50	1	1	122
Kaskazini Pemba	0	0	15	0	0	15
Kaskazini Unguja	0	0	12	0	0	12
Kusini Pemba	0	0	10	0	0	10
Kusini Unguja	0	0	6	0	0	6
Total	3,408	711	6,581	2,127	3,175	16,002

Table 6.3 shows fraudulent attempts per operator for the quarter ending June 2024 and September 2024. Tigo has recorded the highest number of fraudulent attempts compared to other MNOs, while Halotel has the least.

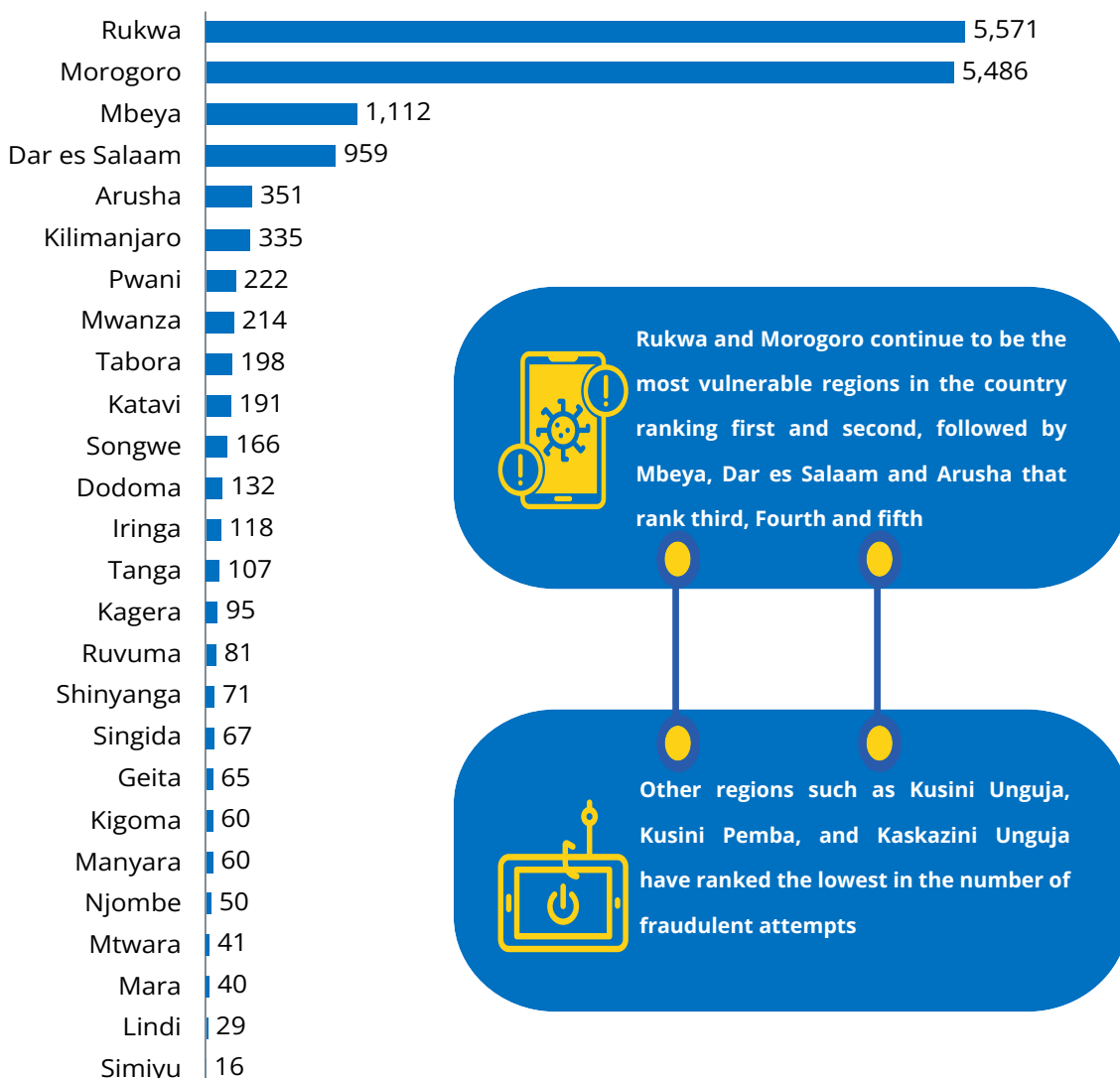
Table 6.3a Fraudulent attempts per operator

Quarter ending	Airtel	Halotel	Tigo	TTCL	Vodacom	Total
June 2024	6,069	469	10,242	2,093	3,384	22,257
September 2024	3,408	711	6,581	2,127	3,175	16,002
Percentage change	-44%	52%	-36%	2%	-6%	-28%

The results further show that fraudulent attempts for Halotel and TTCL have increased by 52% and 2% respectively. However, Fraudulent attempts for Airtel, Tigo and Vodacom have decreased by 44%, 36% and 6% respectively.

Chart 6.3a Distribution of fraudulent attempts per region in the quarter ending September

Tanzania Mainland



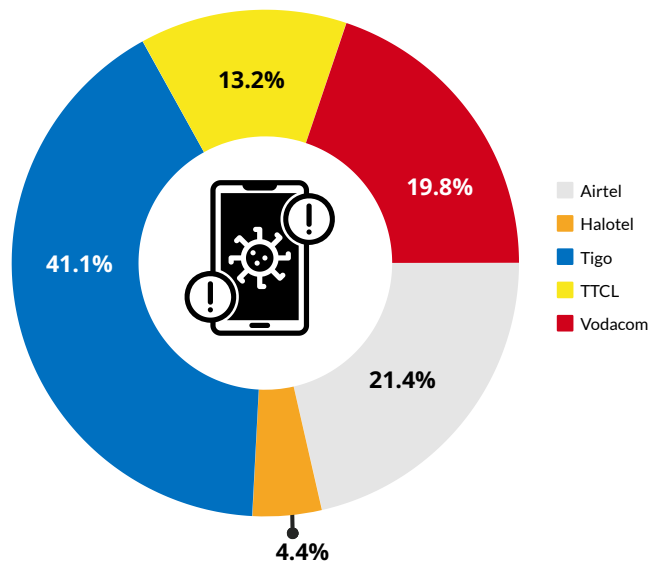
Zanzibar

Mjini Magharibi	122
Kaskazini Pemba	15
Kaskazini Unguja	12
Kusini Pemba	10
Kusini Unguja	6

Table 6.3b Fraudulent attempts per district for the four leading regions

Region	District	Fraudulent attempts
Rukwa	Sumbawanga	5198
	Nkasi	250
	Kalambo	122
Morogoro	Ifakara	3922
	Kilombero	1306
	Morogoro	127
	Kilosa	89
	Ulanga	21
	Mvomero	10
	Malinyi	8
	Gairo	3
Mbeya	Mbeya	993
	Mbarali	66
	Chunya	21
	Rungwe	21
	Kyela	11
Dar es Salaam	Ubungo	314
	Kinondoni	286
	Temeke	210
	Ilala	125
	Kigamboni	24

Chart 6.3b Fraudulent attempts per operator in the quarter ending September 2024



7. Number of Licenses and Certificates

7.1 Licenses

Telecommunications and Internet		
Category	Number	
	June 2024	September 2024
Network Facilities Licences	34	35
Network Services Licences	15	16
Application Services Licences	142	146
Aircraft Stations	169	176
Amateur Stations	20	23
Fixed VSAT Terminals	42	36
Mobile VSAT Terminals	2	2
Satellite Ground Earth Stations	1	1
Ship Stations	35	36
HF Radio Stations	23	21
VHF- UHF Radio Repeaters	2	2
VHF - UHF Radio Station with Pair of Frequency	118	109
VHF - UHF Radio Station with Single Frequency	192	184
Numbering	576	493
Broadcasting		
Category	Number	
	June 2024	September 2024
National Content Television (FTA) Licences	16	16
District Content Television (FTA) Licences	23	22
National Content Radio Licences	14	14
Regional Content Radio Licences	31	33
District Content Radio Licences	177	182
Community Radios	15	17
Community Televisions	-	-
National Content Televisions by Subscription	25	28
District Content Televisions by Subscription	1	1
National Content (support services)	3	3
Online Content Aggregators	5	6
Weblogs (Blogs)	64	66
Online Radios	9	10
Online Televisions	215	210
Cable Televisions	63	63

Postal and Courier		
Category	Number	
	June 2024	September 2024
International Courier	8	6
East Africa Courier	2	2
Intercity Transporters	71	76
Intracity Courier	18	16
Domestic Courier	46	47
Public Postal	1	1

7.2 Certificates

Category	Number	
	June 2024	September 2024
Global Maritime Distress and Safety Systems	152	177
Type Approval	4590	4774
Registration for Satellite Mobile Phones	32	32

8. Conclusion

The communications sector in the quarter ending September 2024 experienced significant progress and a notable increase in the adoption of communication services, driven by the continued healthy competition among service providers.

A significant achievement was the extensive expansion of mobile network coverage across the country, where, 3G coverage has reached 90% of the population, enhancing access to data services. Moreover, 4G coverage has reached 85% of the population, which has improved Internet connectivity. The expansion of 5G coverage to 18% of the population signifies faster speeds, reduced latency, and more reliable connections compared to other technologies which is vital for enabling other sectors of the economy. The development of robust communication infrastructure ensures reliability, affordability, and inclusivity warranting a connected society in this digital age. This underscores the critical role of communication services in fostering the digital economy and empowering citizens socially and economically.

Moreover, the broadcasting subsector saw a positive trend with 78% of the population covered by the FM radio signal and 58% of the population covered by the Digital Terrestrial Television (DTT) signal. This growth reflects the sector's dynamic evolution in response to user demands. These combined improvements across the communications sector are crucial for fostering a more connected and digitally empowered society.



Mwasiliano Towers,
20 Sam Nujoma Road,
14414 Dar es Salaam, Tanzania.
Email: dg@tcra.go.tz

 @tcra_tanzania

