



**Tanzania Communications  
Regulatory Authority**

# **Communications Statistics**

**Quarter ending June 2024**

**Version 1.1**

## About this report

This report presents communication statistics for the fourth quarter of the financial year 2023/2024. The report provides statistics on telecommunication, mobile money, Internet, broadcasting, postal and courier and other ICT-related services for the quarter.

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

<b>1</b>	<b>Telecommunication Statistics</b>	<b>1</b>
1.1	Telecom subscriptions statistics	1
1.1.1	Telecom Subscriptions for P2P	1
1.1.2	Telecom Subscriptions for M2M communications	2
1.1.3	Operators' subscriptions market shares	2
1.1.4	Subscriptions to mobile and fixed networks	3
1.1.5	Quarterly change in subscriptions per operator	3
1.1.6	Telecom services subscriptions by region	4
1.1.7	Trend of telecom subscriptions over the past five years	5
1.2	Telecommunication tariff statistics	5
1.2.1	Voice tariffs (in TZS)	6
1.2.2	SMS and data tariffs	6
1.2.3	Disaggregated bundle tariffs (in TZS)	7
1.2.4	Industry average of tariffs	7
1.2.5	Trend of industry average basic tariffs over the past five years	8
1.3	Telecom traffic minutes statistics	9
1.3.1	Local traffic minutes	9
1.3.2	International traffic	10
1.4	Telecom SMS traffic	12
1.4.1	Local SMS traffic	12
1.4.2	Trend of local SMS over the past five years	14
1.4.3	EA and RoW SMS traffic	14
1.4.4	Trend of EA and RoW SMS over the past five years	15
1.5	User devices	15
1.6	Number of telecom towers per region	16
1.7	Number of Base Transceiver Stations (BTS) per region	17
<b>2</b>	<b>Mobile Money Services Statistics</b>	<b>19</b>
2.1	Mobile money subscriptions	19
2.2	Mobile money Transactions	20
<b>3</b>	<b>Internet Services Statistics</b>	<b>21</b>
3.1	Internet subscriptions	21
3.2	Internet usage per month	22
3.3	Internet link capacity	22
3.4	Roll out of mobile broadband network and quality of internet speed	23
3.5	Country Code Top Level Domains	24
<b>4</b>	<b>Broadcasting Services Statistics</b>	<b>25</b>
4.1	Active decoders	25
4.2	Sold decoders	25
4.3	Active decoders in the past five years	27
4.4	Cable TV subscriptions	27
4.5	Trend of cable TV subscriptions in the past five years	29
<b>5</b>	<b>Postal &amp; Courier Services Statistics</b>	<b>30</b>
5.1	Subscription to postal receptacles	30
5.2	Courier customers	30
5.3	Local posted items	30
5.4	International posted items	31
5.5	Local delivered items	32
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	34
<b>6</b>	<b>Quality of Services &amp; Frauds Attempts Statistics</b>	<b>35</b>
6.1	Quality of services (QoS) for the telecom subsector	35
6.2	Coverage of broadcasting network	43
6.3	Fraudulent attempts	44
<b>7</b>	<b>Number of Licenses and Certificates</b>	<b>47</b>
7.1	Licenses	47
7.2	Certificates	48
<b>8</b>	<b>Conclusion</b>	<b>49</b>

# 1. Telecommunication Statistics

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

## 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 to human communication (Person to Person - P2P) and those for machine communication (Machine to Machine - M2M). The total number subscriptions (SIM cards and fixed lines - P2P and M2M) has increased from 73.4 million during the previous quarter (quarter ending March 2024) to 76.6 million subscriptions in June 2024. That is an increase of 4.3%, as summarized below.

As of March 2024

**73.4 Million**

As of June 2024

**76.6 Million**



**4.3%**

### 1.1.1 Telecom subscriptions for P2P

**72.5 Million**

As of March 2024



**75.6 Million**

As of June 2024

Change

**4.3%**

The SIM cards subscribed for P2P per operator in the quarter ending June 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
April	19,189,159	9,116,374	20,345,932	1,637,782	22,326,386	72,615,633
May	19,385,937	9,458,261	20,747,230	1,639,871	22,569,413	73,800,712
June	19,507,893	9,821,837	21,517,857	1,651,331	23,089,088	75,588,006

The statistics in Table 1.1.1 show an average monthly increase of 2% in total subscriptions within the quarter (between April and June 2024).

### 1.1.2 Telecom subscriptions for M2M communications

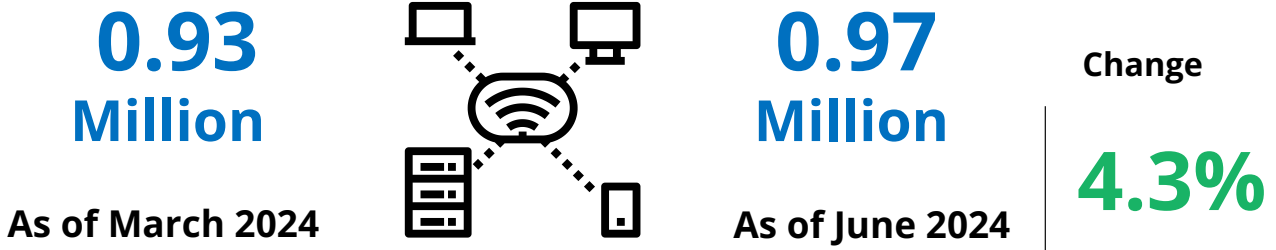


Table 1.1.2 shows SIM cards subscribed for M2M communications per operator for the quarter ending June 2024.

**Table 1.1.2 Number of telecom subscriptions for M2M communication per operator**

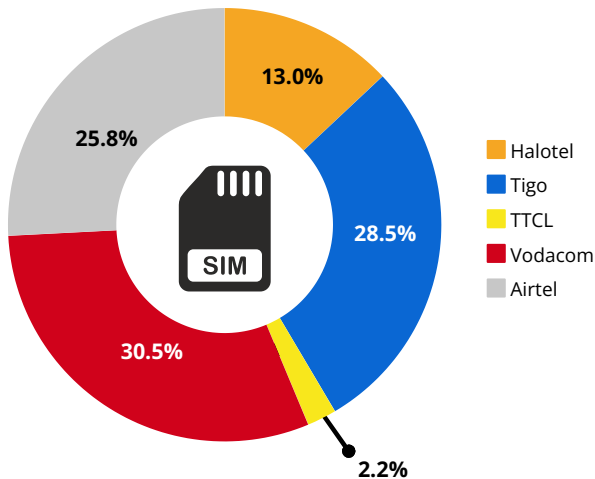
MONTH	AIRTEL	HALOTEL	TIGO	TTCL	VODACOM	TOTAL
April	323,273	54,920	24,859	6,542	533,906	943,500
May	330,413	56,140	24,800	6,514	539,083	956,950
June	329,292	57,340	24,755	6,512	551,541	969,440

### 1.1.3 Operators’ subscriptions market share

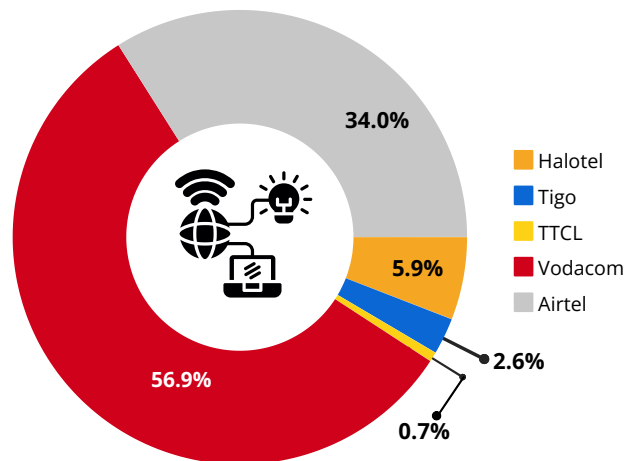
Chart 1.1.3a and 1.1.3b show the telecom market share by subscriptions per operator. For P2P, it is shown that there is no operator with a market share greater than 35%, which is the minimum level for market dominance. This observation signifies no dominant operator, indicating healthy competition among the operators.

However, for M2M, Vodacom controls the market with more than half (56.9%) of all M2M subscriptions, as shown in Chart 1.1.3b. Airtel ranks second with 34.0%, 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 June 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
April	72,578,053	37,580	943,500	73,559,133
May	73,779,616	21,096	956,950	74,757,662
June	75,566,518	21,488	969,440	76,557,446

### 1.1.5 Quarterly change in subscriptions per operator

There was an increase in P2P subscriptions in the quarter ending June 2024 of around 1.3 million. Chart 1.1.5a indicates the change in P2P subscriptions as of June 2024.

**Chart 1.1.5a Quarterly change in P2P subscriptions by operator**

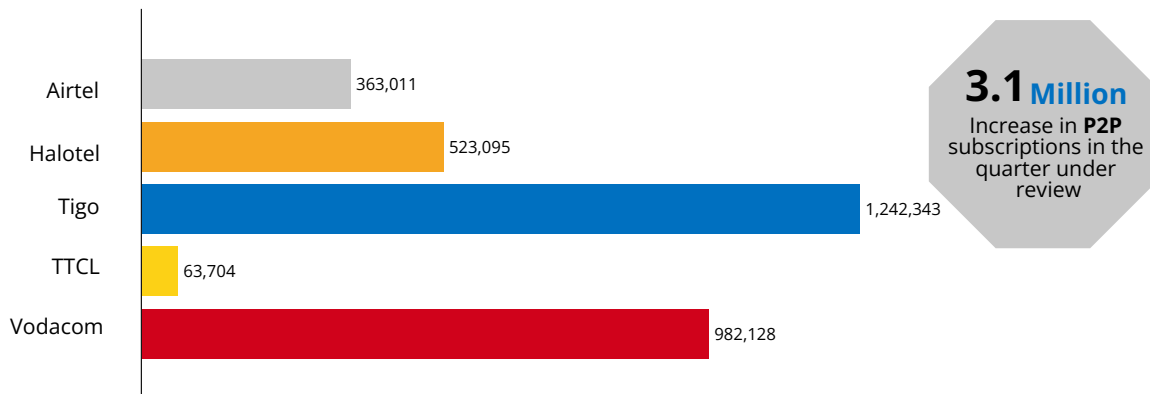
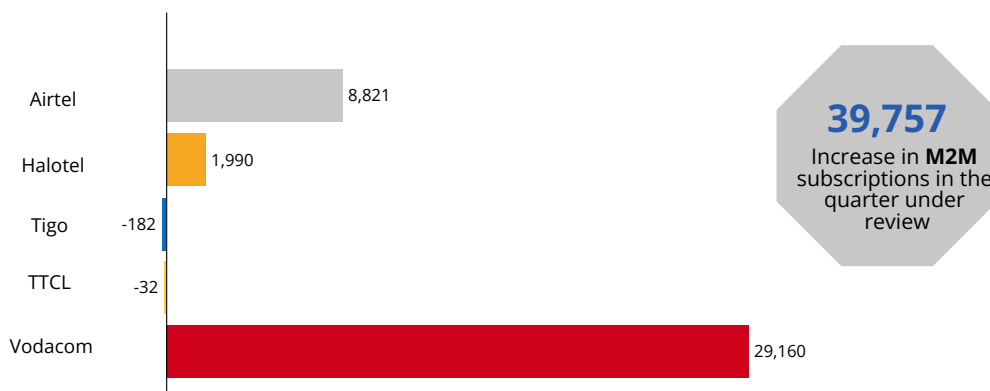


Chart 1.1.5b indicates the change in M2M subscriptions as of June 2024. There was an increase in M2M subscriptions in the quarter ending March 2024 of around 26,998.

**Chart 1.1.5b Quarterly change in M2M subscriptions per operator**



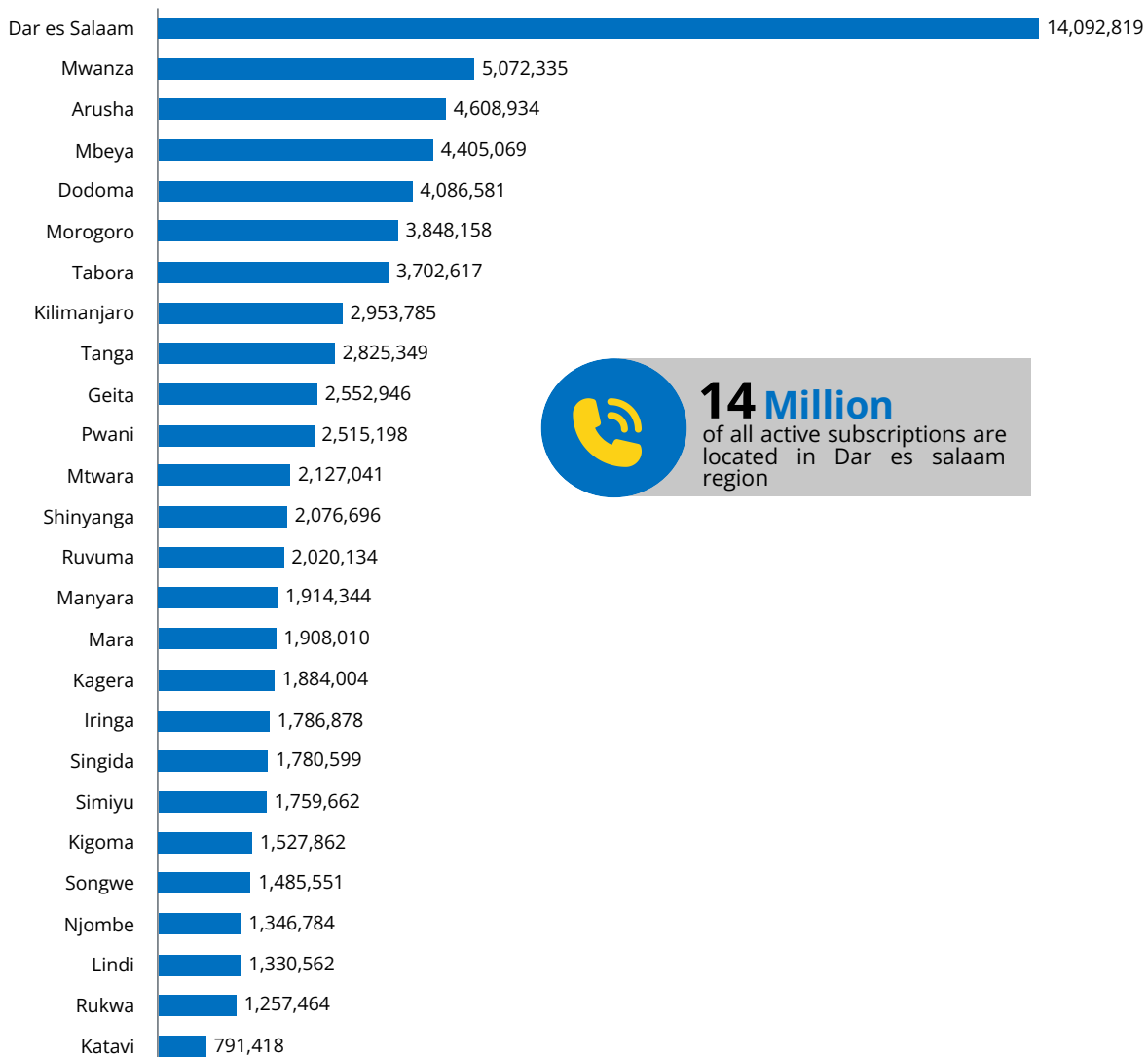
### 1.1.6 Telecom services subscriptions by region

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 14.1 million of all active subscriptions, Mwanza ranks second with 5.1 million subscriptions, Arusha ranks third with 4.6 million subscriptions, Mbeya ranks fourth with 4.4 million subscriptions, and Dodoma ranks fifth by having 4.1 million of all active subscriptions.

Regions with the lowest contribution to the country’s total subscriptions are Kaskazini Unguja 69,990 subscriptions, Kusini Unguja 105,323 subscriptions, and Kusini Pemba 111,138 subscriptions.

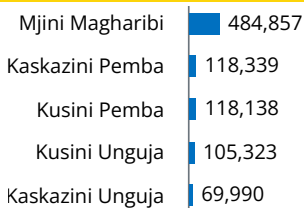
**Chart 1.1.6 Telecom services subscriptions by region**

#### Tanzania Mainland



**14 Million**  
of all active subscriptions are located in Dar es salaam region

#### Zanzibar



**484,857**  
Of all active subscriptions are located in **Mjini Magharibi**

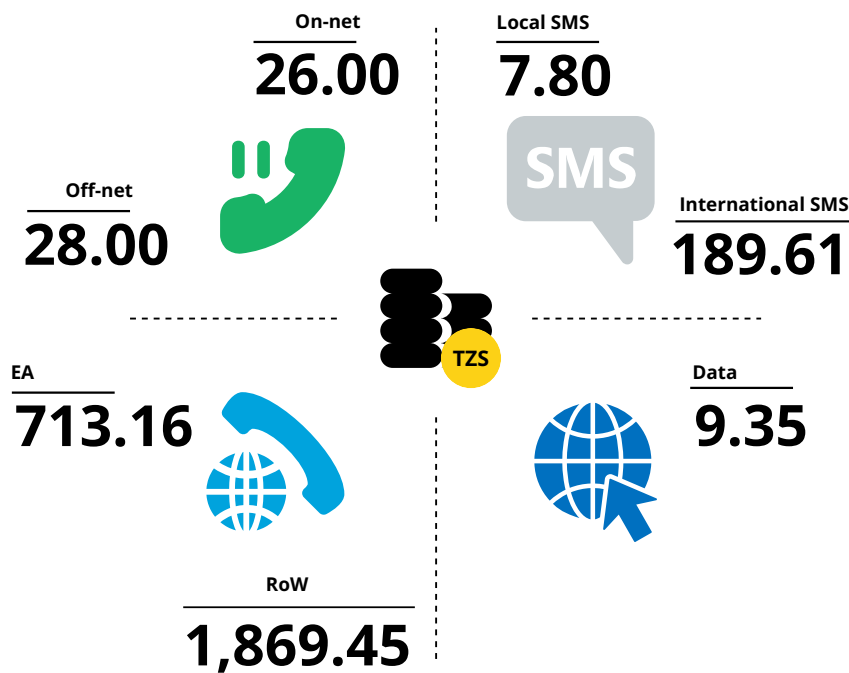
### 1.1.7 Trend of telecom subscriptions over the past five years

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
<b>Total Subscriptions</b>	<b>47,761,520</b>	<b>51,292,702</b>	<b>54,118,218</b>	<b>60,277,027</b>	<b>70,290,876</b>
<b>PENETRATION</b>	<b>78%</b>	<b>81%</b>	<b>88%</b>	<b>98%</b>	<b>111%</b>

### 1.2 Telecommunication tariff statistics



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). The basic tariffs applied in the quarter ending March and June 2024 are shown in the Table 1.2 below:

**Table 1.2 Telecommunication tariff (in TZS) change**

	On-net	Off-net	EA	RoW	Local SMS	International SMS	Data
March 2024	26.00	28.00	727.80	1,899.00	7.80	189.61	9.35
June 2024	26.00	28.00	713.16	1,869.45	7.80	189.61	9.35
<b>% Change</b>	<b>0%</b>	<b>0%</b>	<b>-2%</b>	<b>-2%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>

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



## 1.2.1 Voice tariffs (in TZS)

The voice tariffs for the quarter ending June 2024 for local and international services per operator are shown in Table 1.2.1. These are one-minute voice charges when a consumer makes a local or international call without subscribing to a bundle.

**Table 1.2.1 Local and international voice tariffs (in TZS) per operator**

Operator	On-net	Off-net	EA	RoW
AIRTEL	30.00	30.00	614.40	1,426.00
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	217.00	2871.33
VODACOM	30.00	30.00	829.40	1811.00
<b>Industry Average</b>	<b>26.00</b>	<b>28.00</b>	<b>713.16</b>	<b>1,869.45</b>

Table 1.2.1 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 June 2024 remained the same at TZS 26 and TZS 28 for on-net and off-net respectively, as in quarter ending March 2024.

Table 1.2.1 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 713.16 and 1,869.45, respectively.

## 1.2.2 SMS and data tariffs (in TZS)

The local and international PAYG tariffs (Tax inclusive) for SMS and data as of June 2024 are shown in Table 1.2.2.

**Table 1.2.2 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
<b>Industry Average</b>	<b>7.80</b>	<b>189.61</b>	<b>9.35</b>

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

### 1.2.3 Disaggregated 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 1.2.3a below.

**Table 1.2.3a Disaggregated bundle tariffs (in TZS)**

Period	On-net	Off-net	SMS	Data
Jan - Mar 2024	4.50	6.07	1.37	2.17
Apr- Jun 2024	4.66	6.18	1.42	2.16
<b>% Change</b>	<b>3.4%</b>	<b>1.8%</b>	<b>4.1%</b>	<b>-0.6%</b>

The above summary indicates that unit bundle tariffs have changed for the quarter ending June 2024 compared to the quarter ending March 2024. Tariffs for on-net, off-net voice, and SMS have increased at different rates, while the unit data tariff in bundle has decreased by 0.6% as shown in Table 1.2.3a.

The tariffs for the quarter ending June 2024, as shown in Table 1.2.3, indicate that the industry average tariffs for disaggregated bundled services are generally lower than the pay-as-you-go (PAYG) tariffs.

**Table 1.2.3b Disaggregated bundle tariffs (in TZS)**

Operator	On-Net	Off-Net	SMS	Data
Vodacom	4.43	6.27	1.42	2.35
Tigo	5.38	6.37	1.44	2.15
Airtel	4.19	6.16	1.06	2.04
Halotel	2.05	4.85	1.02	2.05
TTCL	7.23	7.23	2.18	2.19
<b>Industry Average</b>	<b>4.66</b>	<b>6.18</b>	<b>1.42</b>	<b>2.16</b>

The industry average bundle tariff for on-net voice, off-net voice and SMS has increased to TZS 4.66, TZS 6.18 and TZS 1.42 respectively in the quarter ending June 2024 from TZS 4.50, TZS 6.07 and TZS 1.37 respectively, in the quarter ending March 2024. Additionally, unit bundle tariffs for data decreased to TZS 2.16 from TZS 2.17.

### 1.2.4 Industry average tariffs (in TZS)

The industry average tariffs for basic and bundled telecommunications services are shown in Table 1.2.4.

**Table 1.2.4 Industry average for basic and bundle tariffs**

	On-Net	Off-Net	SMS	Data
Average basic (PAYG) tariff	26.00	28.00	7.80	9.35
Average bundle tariff	4.66	6.18	1.42	2.16

It is shown that average tariffs for all PAYG are almost five times greater compared to bundled unit tariffs. That is the reason for the majority of users (99.9%) to subscribe to bundled services.

### 1.2.5 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 1.2.5a, 1.2.5b and 1.2.5c, respectively.

**Table 1.2.5a 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 1.2.5a 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 December 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 1.2.5b Trend of average basic international tariffs (in TZS) per minute in TZS over the past**

	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 1.2.5b, have different trends over time as they depend on rates imposed by international traffic carriers and termination charges .

**Table 1.2.5c 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 1.2.5d.

**Table 1.2.5d 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 traffic minutes statistics

#### 1.3.1 Local traffic minutes

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

Quarter ending March 2024

**35.0 Billion**

Local traffic

Quarter ending June 2024

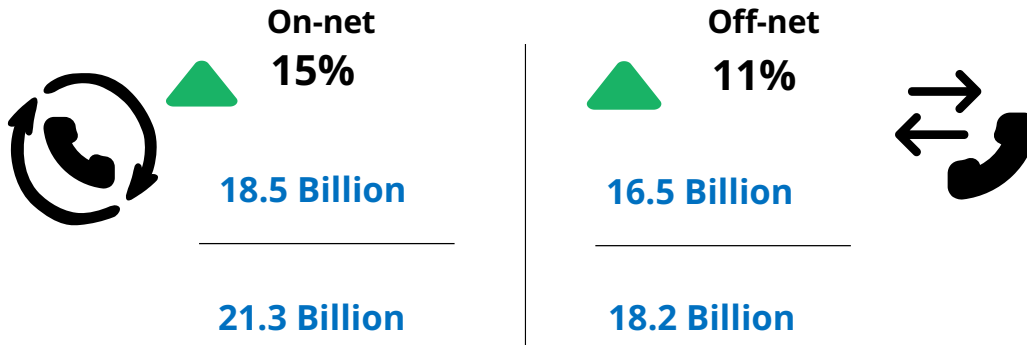
**39.6 Billion**

Local traffic

Change



The summary indicates that in the quarter ending June 2024 there was an increase in local traffic minutes by 13% .



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

**Table 1.3.1 On-net and off-net traffic minutes**

	April	May	June	Total
On-net	7,730,477,933	6,715,804,600	6,898,488,248	21,344,770,781
Off-net	5,422,755,747	6,195,893,145	6,605,651,384	18,224,300,276
<b>Total</b>	<b>13,153,233,680</b>	<b>12,911,697,745</b>	<b>13,504,139,632</b>	<b>39,569,071,057</b>

Table 1.3.1 shows that around 39.56 billion minutes were spent in the quarter ending June 2024 compared to 35 billion minutes in the quarter ending March 2024. Further, the on-net traffic was higher than off-net traffic throughout the quarter.

#### 1.3.1.1 Percentage share of local traffic minutes

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

**Chart 1.3.1.1a Percentage share of traffic minutes as of June 2024**

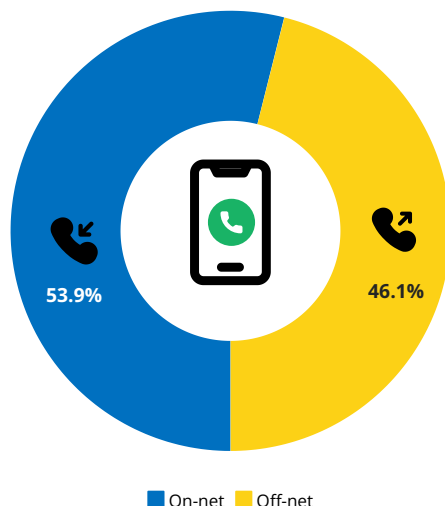
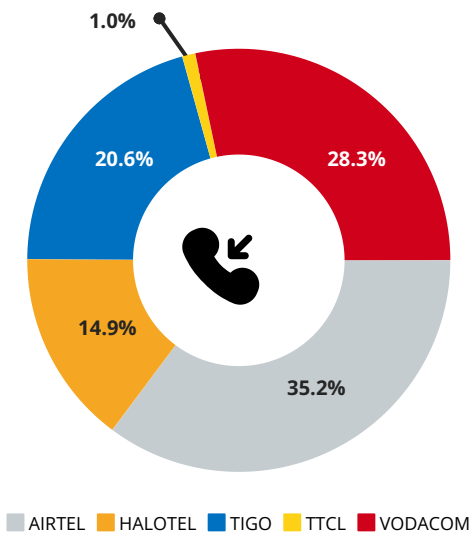


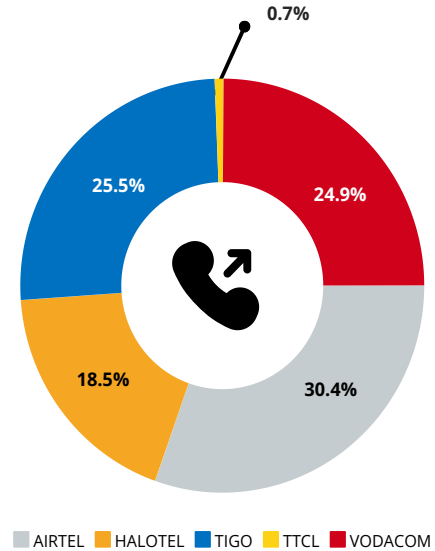
Chart 1.3.1.1a shows that more voice minutes were spent on on-net calls (53.9%) than off-net calls (46.1%). This observation indicates that people preferred calling within the same network.

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 (35.2% and 30.4%, respectively).

**Chart 1.3.1.1b Shares of on-net traffic by operator**



**Chart 1.3.1.1c Shares of off-net traffic by operators**



**1.3.1.2 Trend of local traffic minutes over the past five years**

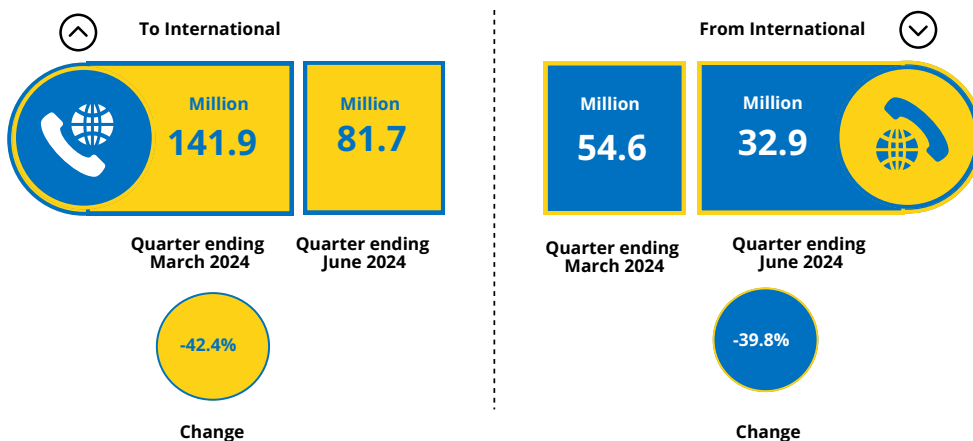
The trend of traffic minutes over the past five years has been increasing by an average of 9% and 61% for on-net and off-net, respectively, in each year from 2019 to 2023. The trend of local traffic minutes is shown in Table 1.3.1.2.

**Table 1.3.1.2 Trend of local traffic 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
<b>Total</b>	<b>67,383,030,453</b>	<b>81,645,794,093</b>	<b>94,868,568,505</b>	<b>122,743,182,135</b>	<b>144,870,687,019</b>

**1.3.2 International traffic minutes**

The traffic minutes to/from international are summarised below.



The summary shows a decrease in traffic minutes to and from international in the quarter under review. The traffic minutes to international decreased by 42.4%. Moreover, there was a decrease of 39.8% in traffic minutes from international. This result shows that subscribers originated more calls to international than received from international in the quarter under review.

Total traffic to/from EA and RoW for the quarter ending June 2024 is summarized in Table 1.3.2.

	April	May	June	Total
To East Africa	22,515,520	22,059,514	27,204,086	<b>71,779,120</b>
From East Africa	8,901,296	9,140,291	8,717,595	<b>26,759,182</b>
To the Rest of the World	3,069,485	3,540,826	3,294,860	<b>9,905,171</b>
From the Rest of the World	2,101,111	2,169,739	1,877,725	<b>6,148,575</b>

Table 1.3.2 shows that more traffic minutes to EA were generated in June 2024 and RoW were generated in May 2024 compared to other quarter months. On the other hand, more traffic minutes were received in May 2024 from EA and RoW.

### 1.3.2.1 Percentage share of traffic to/from EA

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

**Chart 1.3.2.1 Share of traffic minutes to/from EA**

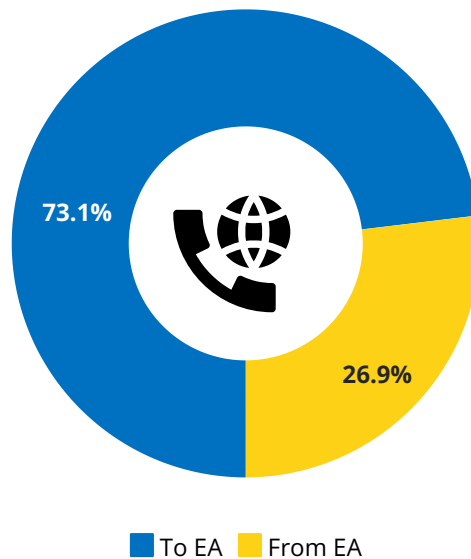
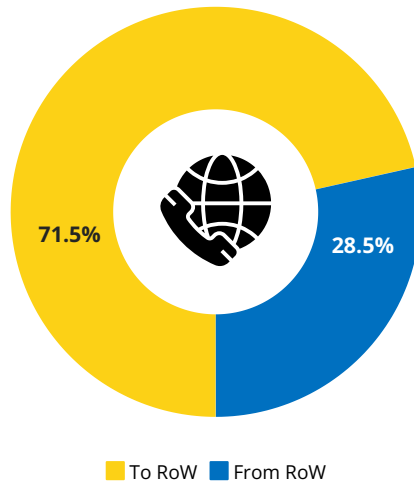


Chart 1.3.2.1 shows that traffic minutes to EA countries is almost 3 times the traffic from EA countries. This observation signifies that, in the quarter ending June 2024, subscribers spent more minutes communicating to other EA countries.

### 1.3.2.2 Percentage share of traffic to/from RoW

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

**Chart 1.3.2.2 Traffic minute shares to/from RoW**



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

Chart 1.3.2.2 shows that traffic minutes to RoW is 1.6 times the traffic from RoW. This observation signifies that, in the quarter ending June 2024, subscribers spent more minutes communicating to RoW.

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

**Table 1.3.2.3 Trend of EA and RoW traffic minutes for the past five years**

	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 March 2023 and June 2024 is shown below.

**Quarter ending March 2024**

**50 Billion**

**Quarter ending June 2024**

**51 Billion**

**Change**



Period	On-net SMS	Off-net SMS	Total
January to March 2024	21 Billion	30 Billion	50 Billion
April to June 2024	22 Billion	29 Billion	51 Billion
<b>% Change</b>	<b>4%</b>	<b>-1%</b>	<b>1 %</b>

The summary shows an increase in SMS traffic in the quarter under review. The On-net SMS traffic increased by 4%, while off-net SMS declined by 1%. The overall local SMS traffic increased by 1%.

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

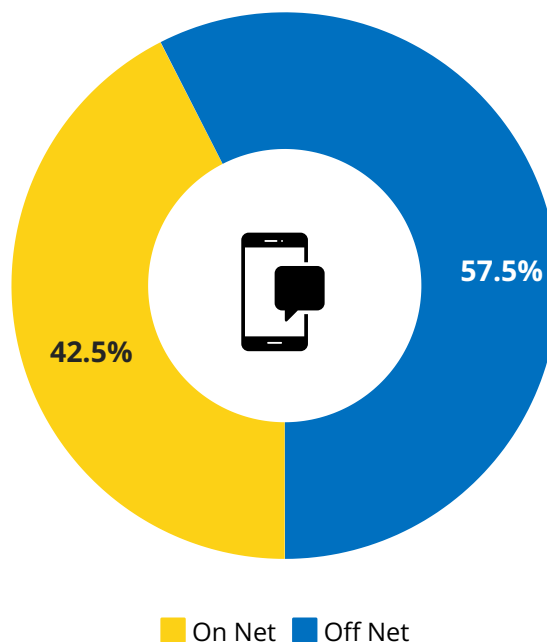
**Table 1.4.1 Local SMS traffic**

	April	May	June	Total
On-Net SMS	6,932,295,340	7,203,404,875	7,451,989,685	<b>21,587,689,900</b>
Off-Net SMS	9,157,888,984	9,823,641,855	10,270,957,086	<b>29,252,487,925</b>
<b>Total Local SMS</b>	<b>16,090,184,324</b>	<b>17,027,046,730</b>	<b>17,722,946,771</b>	<b>50,840,177,825</b>

Table 1.4.1 shows changes for both on-net and off-net SMS traffic in the quarter under review. The month of June experienced the highest traffic compared to April and May.

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
<b>Total</b>	<b>105,437,973,380</b>	<b>133,043,756,400</b>	<b>137,076,292,099</b>	<b>153,512,509,714</b>	<b>206,546,569,774</b>

### 1.4.3 EA and RoW SMS traffic

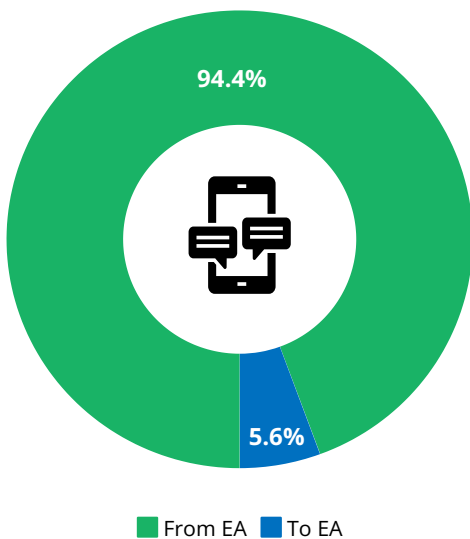
The trend of EA and RoW SMS traffic is shown in Table 1.4.3.

**Table 1.4.3 EA and RoW SMS traffic**

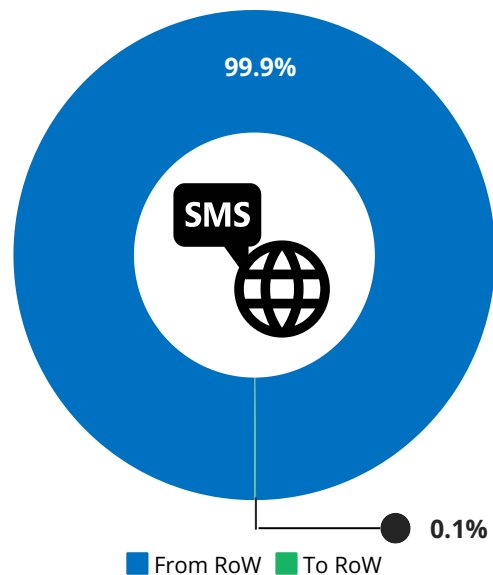
	April	May	June	Total
To East Africa	165,959	151,155	160,107	<b>477,221</b>
From East Africa	2,758,867	2,639,579	2,684,588	<b>8,083,034</b>
To the Rest of the World	335,667	363,601	432,508	<b>1,131,776</b>
From the Rest of the World	460,963,153	448,305,579	455,786,491	<b>1,365,055,223</b>

It is shown in Table 1.4.3 that more SMS were received from RoW than were 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

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	53,749,787	82.60%
Smartphone	20,528,165	31.55%
Handheld	1,619,257	2.49%
Modem	634,103	0.97%
Portable(include PDA)	60,132	0.09%
Tablet	414,909	0.64%
Module	54,027	0.08%
WLAN Router	145,452	0.22%
Dongle	100,684	0.15%
IoT Device	126,763	0.19%
Vehicle	13,900	0.02%
Computer	11,900	0.02%
Wearable	7,721	0.01%
Device for the Automatic Processing of Data (APD)	2,489	0.00%

As of June 2024, penetration of smartphones increased to 31.55% from 30.92% recorded in March 2024. Furthermore, penetration of feature phones also increased from 81.18% in March 2024 to 82.6% in June 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 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
<b>Tanzania Mainland</b>	
Arusha	404
Dares salaam	1158
Dodoma	414
Geita	201
Iringa	275
Kagera	352
Kigoma	288
Kilimanjaro	332
Lindi	217
Manyara	203
Mara	266
Mbeya	368
Songwe	113
Morogoro	421
Mtwara	292
Mwanza	422
Pwani	305
Rukwa	204
Ruvuma	318
shinyanga	257
Singida	214
Tabora	327
Tanga	392
Simiyu	144
Katavi	93
Njombe	175
<b>Zanzibar</b>	
Mjini Magharibi	214
Kusini Pemba	60
Kaskazini Pemba	48
Kaskazini Unguja	37
Kusini Unguja	37
<b>Total</b>	<b>8,551</b>

## 1.7 Number of Base Transceiver Stations (BTS) per region

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

**Table 1.7 Distribution of Base Transceiver Stations per region**

Region	Number of BTS, NodeB, eNB and gNB			
	2G	3G	4G	5G
<b>Tanzania Mainland</b>				
Arusha	659	629	611	27
Dar-es-salaam	2261	2431	2402	541
Dodoma	637	562	551	41
Geita	374	349	320	6
Iringa	375	305	289	2
Kagera	486	434	387	1
Katavi	157	128	126	0
Kigoma	468	397	360	3
Kilimanjaro	521	505	485	7
Lindi	312	229	229	0
Manyara	322	263	252	1
Mara	391	348	329	3
Mbeya	554	520	497	15
Morogoro	633	565	539	9
Mtwara	397	330	304	0
Mwanza	715	674	649	23
Njombe	298	243	236	2
Pwani	443	408	397	6
Rukwa	279	220	198	1
Ruvuma	422	312	301	1
Shinyanga	349	327	288	5
Simiyu	268	223	192	1
Singida	321	278	262	3
Songwe	238	198	183	11
Tabora	503	441	380	2
Tanga	600	530	511	1
<b>Zanzibar</b>				
Kaskazini Pemba	59	59	55	0
Kaskazini Unguja	79	80	77	2
Kusini Pemba	59	60	57	1
Kusini Unguja	115	116	115	2
Mjini Magharibi	175	202	195	37
<b>Total</b>	<b>13,470</b>	<b>12,366</b>	<b>11,777</b>	<b>754</b>

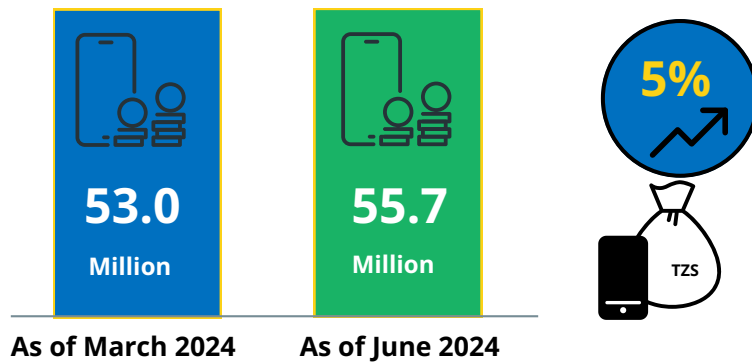
The country exhibits a substantial foundation in 2G and 3G technologies, with 13,470 BTS and 12,366 NodeB demonstrating a well-established mobile communication infrastructure. 4G technology, while not as widespread as 2G and 3G, still shows significant coverage with 11,777 eNBs. However, 5G infrastructure is developing, with only 754 gNBs, concentrated primarily in urban areas like Dar es Salaam and Mjini Magharibi, indicating the initial phases of 5G deployment. 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 5% from 53 million accounts in the quarter ending March 2024 to 56 million in June 2024.



**Table 2.1 Mobile money service subscriptions (number of accounts)**

	April	May	June
Airtel Money	10,829,037	10,868,814	11,028,579
Halo Pesa	4,167,689	4,379,419	4,567,319
Tigo Pesa	17,006,217	17,266,651	17,827,565
T-Pesa	1,401,910	1,412,639	1,422,381
M-Pesa	20,233,904	20,416,700	20,677,223
Azam Pesa	87,957	99,602	209,661
<b>Total</b>	<b>53,726,714</b>	<b>54,443,825</b>	<b>55,732,728</b>

Table 2.1 shows that mobile money accounts are increasing at an average rate of 1.9% per month during the quarter under review. Market share on mobile money subscriptions is shown in Chart 2.1.

**Chart 2.1 Market share on mobile money subscriptions**

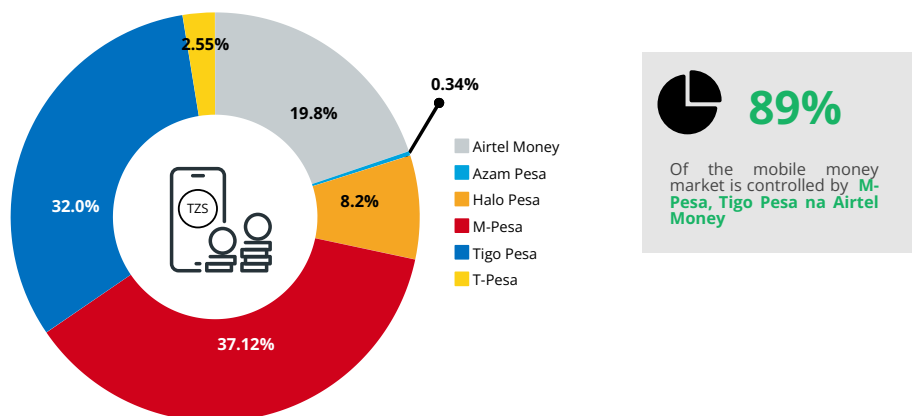


Chart 2.1 indicates that the mobile money market is very competitive as Tigo Pesa, M-Pesa, and Airtel money control around 89% of the market share by subscription, led by M-Pesa with 37.2% market share.

## 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 June 2024 are shown in Table 2.2a below

**Table 2.2a Mobile money transactions**

	April	May	June
Airtel Money	80,277,100	85,227,370	82,886,440
Halo Pesa	25,533,525	27,443,484	28,345,804
T-Pesa	444,972	505,872	516,093
Tigo Pesa	76,884,115	82,947,791	78,870,524
M-Pesa	96,057,195	102,286,270	104,625,748
Azam Pesa	47,036	64,805	69,508
<b>Total</b>	<b>279,243,943</b>	<b>298,475,592</b>	<b>295,314,117</b>

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

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

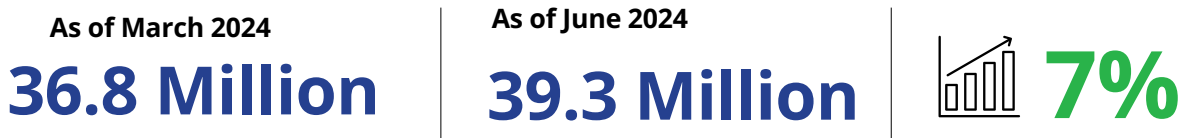
Year	No. of Subscriptions	No. of Transactions	Average No. Trans/Subs
2019	25,864,318	3,021,142,958	117
2020	32,268,630	3,412,210,062	106
2021	35,285,767	3,752,084,894	106
2022	40,953,496	4,195,899,414	102
2023	52,875,129	5,273,086,154	100

## 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 June 2024 are shown below.



There was an increase of 7% in subscriptions from 36.8 million as of March 2024 to 39.3 million as of June 2024.

Monthly internet subscriptions for the quarter ending June 2024 are shown in Table 3.1a. The table shows that mobile wireless is the mostly preferred compared to other internet services. As of June 2024, it comprises of 99.6% of all subscriptions.

**Table 3.1a Monthly internet subscriptions for the quarter ending June 2024**

Reporting Month	Mobile Wireless Subs	Fixed Wireless Subs	Fixed Wired Subs	Total
Apr	37,189,561	56,311	35,126	<b>37,280,998</b>
May	38,152,800	60,328	34,865	<b>38,247,993</b>
Jun	39,214,908	56,130	40,439	<b>39,311,477</b>

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

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

Technology	April	May	June
2G Subs	16,624,295	16,890,831	17,740,031
Mobile Broadband Subs	20,565,266	21,261,969	21,474,877
FTTH Subs	49,782	54,967	50,398
FTTO Subs	6,529	5,361	5,732
Other Broadband Subs	35,126	34,865	40,439
<b>Total</b>	<b>37,280,998</b>	<b>38,247,993</b>	<b>39,311,477</b>

Mobile broadband is the most popular means of accessing internet, with 39,311,477 subscriptions. 2G technology still holds significant usage with 17,740,031 subscriptions. Fibre technologies like Fiber to the Home (FTTH) and Fiber to the Office (FTTO) have fewer subscriptions, at 50,398 and 5,732 respectively. This is shown in Table 3.1b



**Chart 3.1 Trend of Internet subscriptions over the past five years**

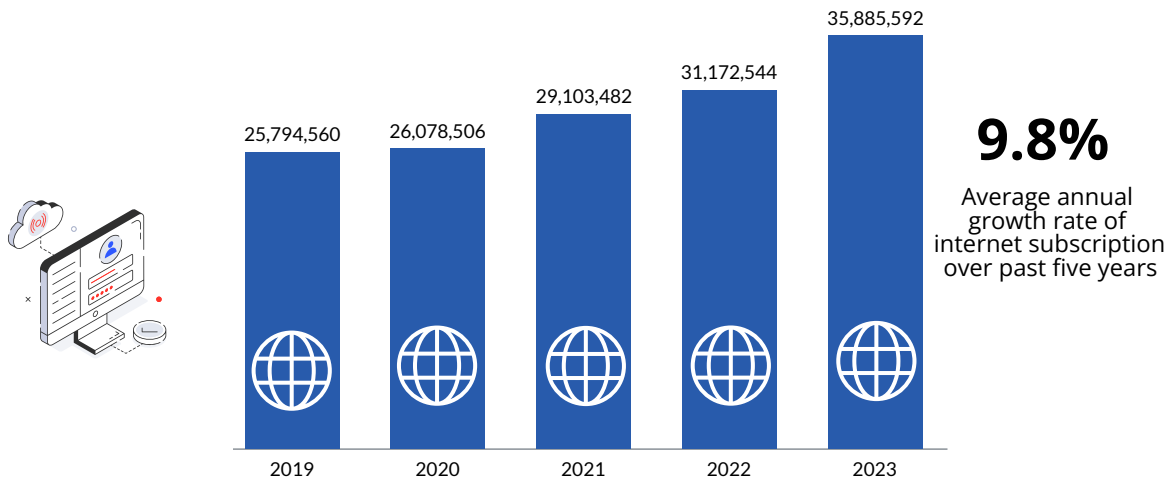
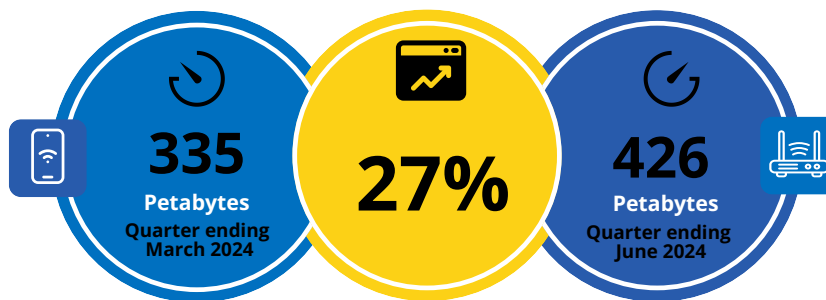


Chart 3.1 indicates an average annual growth rate of 9.8% in internet subscriptions over the past five years. Subscriptions rose from 25.8 million in 2019 to 35.9 million in 2023.

### 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 =1000<sup>3</sup> Megabytes). The summary for internet usage is shown below.



**Table 3.2 Amount of data used in the quarter ending June 2024**

	Apr	May	June
MB	140,000,149,653	136,754,260,519	149,067,375,618
Subs	37,280,998	38,247,993	39,311,477
MB Per Subscriptions	3,755	3,575	3,792

Data traffic in petabytes shown in Table 3.2 indicates that 3,714 MB per subscriber were used in June which is higher than April and May 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 15,544.81 Gbps duplex capacity for new activation.

**Table 3.3 International Internet Capacity as of June 2024**

Reporting Month	Outgoing capacity (Gbps)	Incoming capacity (Gbps)
Total /Owned	17,200.00	17,200.00
Activated	1,655.19	1,655.19
Available for new activation	15,544.81	15,544.81

### 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 June 2024**

S/N	Indicator	Category	March 2024		June 2024	
1	Percentage of the population covered by a mobile broadband network signal (3G, 4G or higher)	3G	88%		89%	
		4G	80%		83%	
		5G	13%		15%	
2	Percentage of Geographical coverage by mobile network signal (3G, 4G or higher)	3G	72%		73%	
		4G	64%		69%	
		5G	1%		2%	
3	Network Quality Indicator: Average download and upload speeds (in Mbit/s)		<b>Upload speed</b>	<b>Download speed</b>	<b>Upload speed</b>	<b>Download speed</b>
		<b>Mobile broadband</b>	11.1 Mbps	11.4 Mbps	12 Mbps	12 Mbps
		<b>Fixed broadband speed</b>	35.1 Mbps	42.1 Mbps	35 Mbps	40 Mbps

Significant achievements were attained in the sector during this quarter, as shown in Table 3.4, including expanding 4G and 5G coverage to reach population coverages of 89% and 15%, respectively.

### 3.5 Country Code Top Level Domains

The total cumulative number of registered domain names increased from 29,968 at the end of March 2024 to 30,698 by the end of June 2024, as shown in Table 3.5.

**Table 3.5 Number of domain names**

S/N	Zone	March 2024	June 2024
1	co.tz	23,600	24,085
2	or.tz	2,541	2,652
3	ac.tz	1,083	1,146
4	go.tz	890	902
5	.tz	1,549	1,614
6	sc.tz	243	244
7	ne.tz	35	31
8	me.tz	8	8
9	info.tz	3	2
10	hotel.tz	3	3
11	Mobi.tz	5	5
12	tv.tz	5	3
13	mil.tz	3	3
<b>Total</b>		<b>29,968</b>	<b>30,698</b>

## 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 TV has the most significant number of active decoders (subscriptions) followed by StarMedia Limited.

**Table 4.1 Number of active decoders per operator as of June 2024**

	DTT	DTH	Total
Agape Associates Limited	1,840	0	1,840
Azam Media Limited	206,527	863,176	1,069,703
Basic Trasmision Limited (Digitek)	15,000	0	15,000
Basic Trasmision Limited (Continental)	38,020	30,842	68,862
Multichoice Tanzania Limited (DSTv)	0	233,607	233,607
Star Media Limited	269,248	266,063	535,311
Zuku	0	23,106	23,106
<b>Total</b>	<b>530,635</b>	<b>1,416,794</b>	<b>1,947,429</b>

### 4.2 Sold decoders

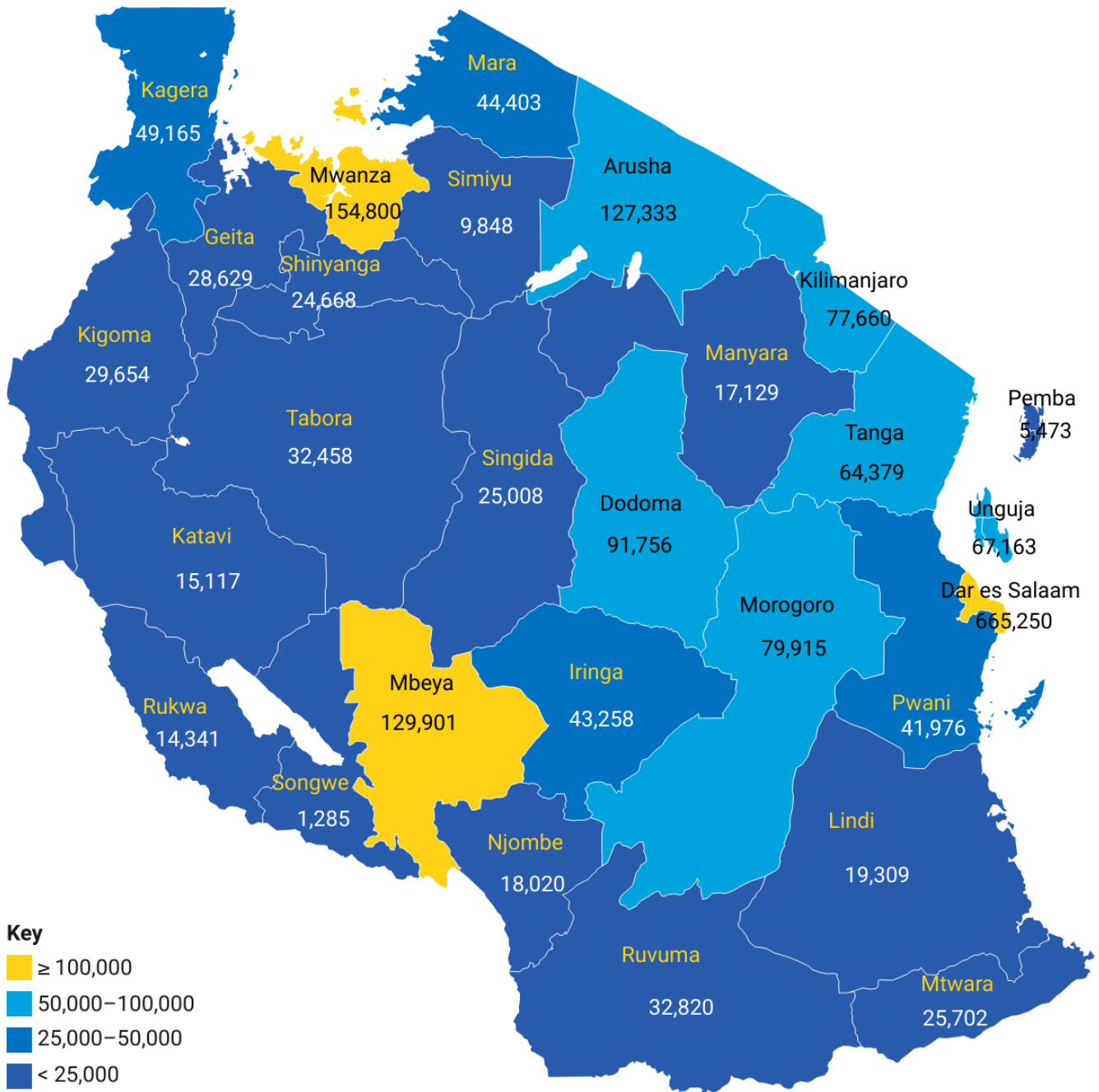
The number of sold decoders as of June is shown in Table 4.2 below. Startimes so far has sold more than half (55%) of all sold decoders.

**Table 4.2 Number of sold decoders per operator as of June 2024**

	DTT	DTH	Total
Azam Media Limited	259,456	977,302	1,236,758
Basic Trasmision Limited (Continental)	110,145	98,186	208,331
Multichoice Tanzania Limited (DSTv)	0	243,491	243,491
Star Media Limited	1,500,591	631,022	2,131,613
Zuku	0	23,501	23,501
<b>Total</b>	<b>1,870,192</b>	<b>1,973,502</b>	<b>3,843,694</b>

Based on the regional distribution of active decoders shown in Map 4.2, Dar es Salaam is ranked first with 665,250 active decoders, followed by Mwanza with 154,800 active decoders, Mbeya is ranked third with 129,901 active decoders and Arusha is ranked fourth with 127,333 decoders as shown in Map 4.2

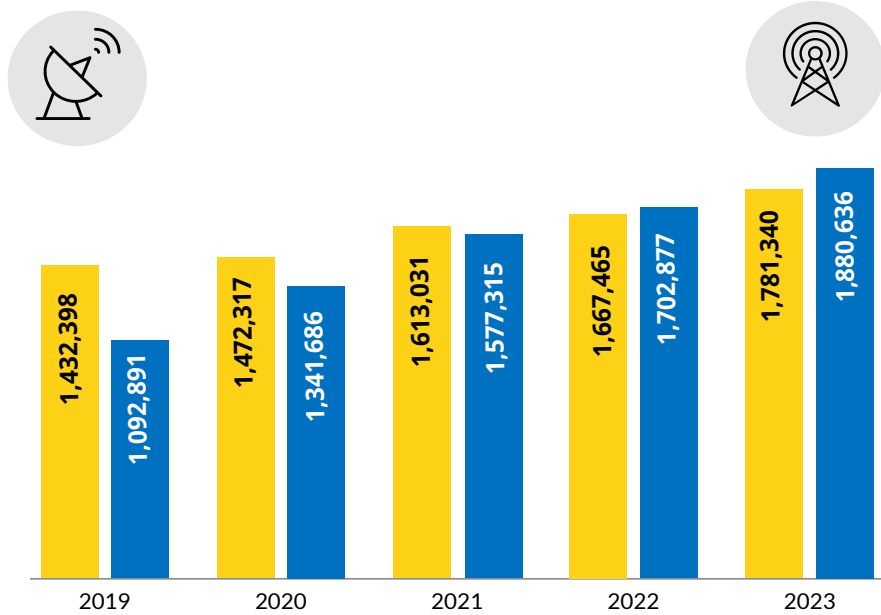
**Map 4.2 Number of Active Decoders per Region**



### 4.3 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

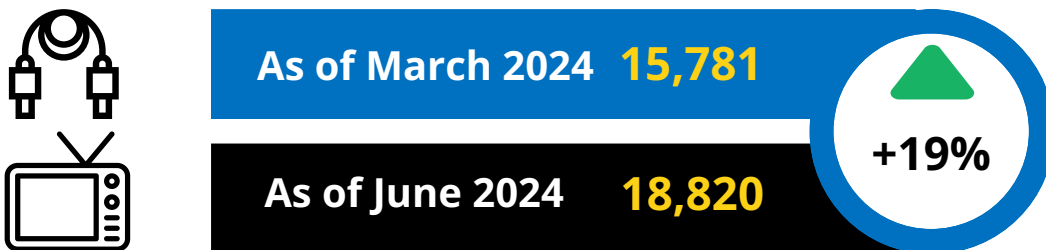
**Chart 4.3 Trend of sold decoders over the past five years**



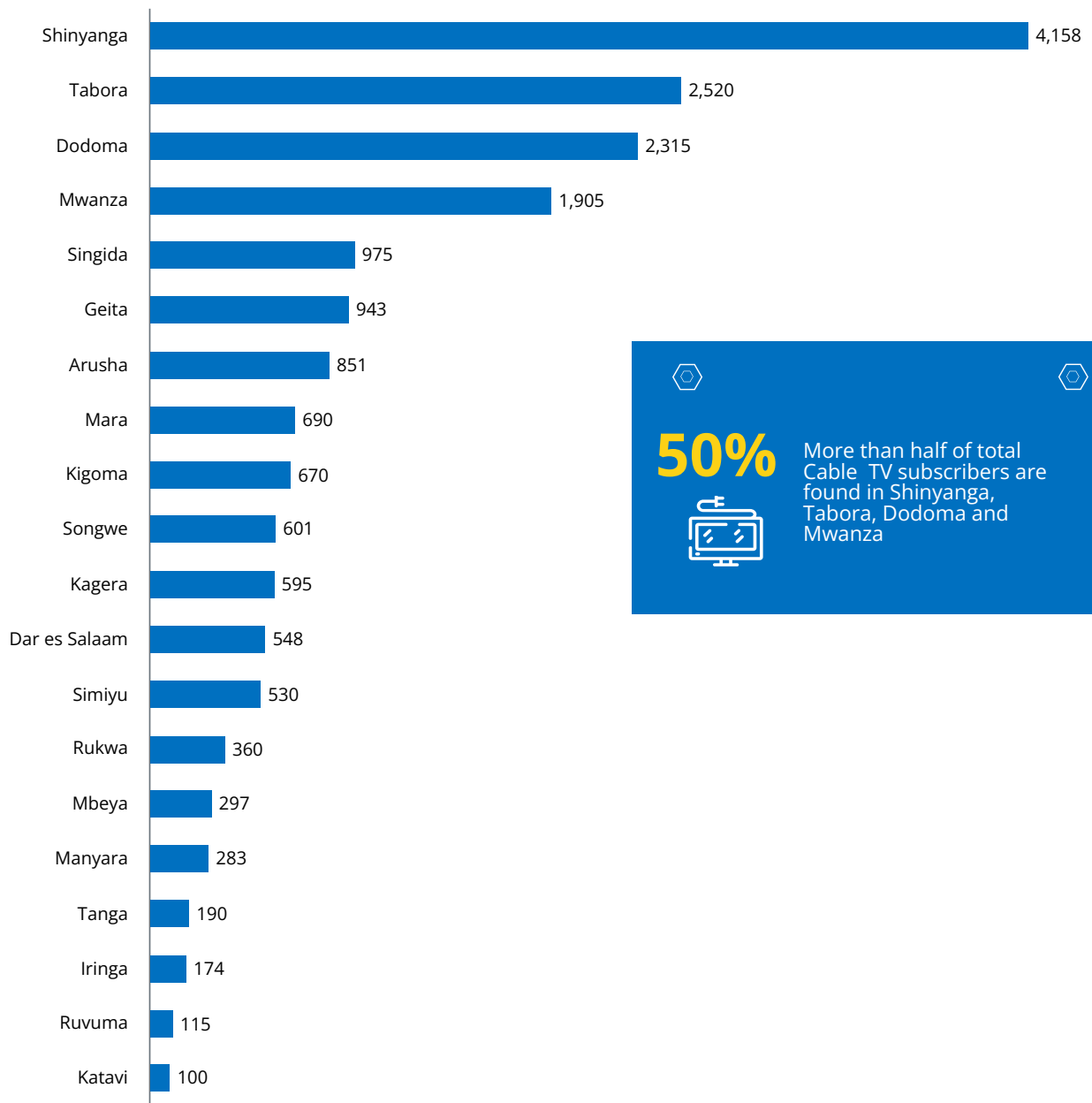
There is a growing trend in DTT and DTH subscriptions, as shown in Chart 4.3, from year to year, where as of 2023 the number of sold decoders was the highest.

### 4.4 Cable TV subscriptions

The number of cable TV subscriptions increased by 19% from 15,781 as of March 2024 to 18,820 as of June 2024, as shown below.



**Chart 4.4 Cable TV subscriptions in Tanzania as of June 2024**



Among all regions of Tanzania mainland, Shinyanga leads by having 4,158 Cable TV subscriptions, followed by Tabora with 2,250, Dodoma with 2,315 and Mwanza with 1,905. Regions with the least Cable TV subscriptions are Katavi, which has 100 subscriptions; Ruvuma, which has 115 subscriptions; and Iringa, which has 174 subscriptions.

---

## 4.5 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



## 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 local (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 April to June 2024, there is 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
April	158,183	10,009	<b>168,192</b>
May	158,183	10,009	<b>168,192</b>
June	158,183	10,009	<b>168,192</b>

### 5.2 Courier customers

Courier customers for the period under review are shown in Table 5.2.

**Table 5.2 Courier customers**

Reporting Month	Corporate Customers	Individual Customers	Total
April	768	52,106	<b>52,874</b>
May	305	53,456	<b>53,761</b>
June	638	54,041	<b>54,679</b>

Data in Table 5.2 indicates that the number of individual courier service customers for the months of April and May 2024 was higher than that of corporate customers.

### 5.3 Local posted items

The number of posted items within the country (local) has decreased by 58% from 1,314,596 items between January and March 2024 to 549,974 items between April and June 2024.

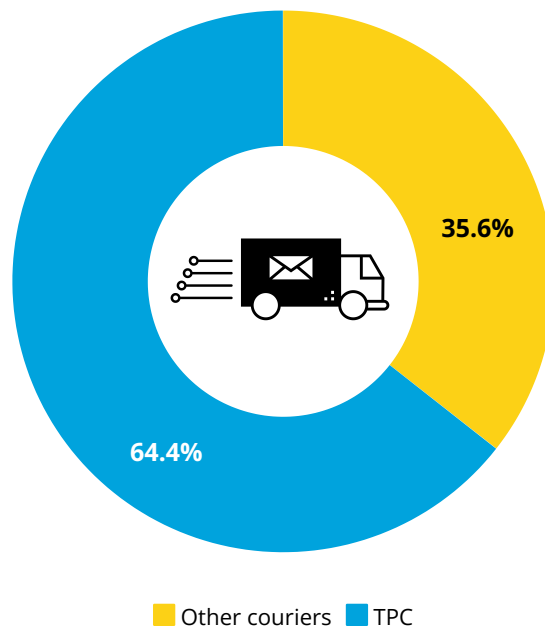
The number of local posted items in the quarter under review is shown in Table 5.3. The statistics show that documents were the most posted items in the quarter under review, followed by letter mails. packets were the least posted items in the quarter.

**Table 5.3 Local posted items for the quarter ending June 2024**

Reporting Month	Letter Mails	Parcels	Packets	Documents	Cargo	Total
April	47,619	66,927	2,263	77,734	3	194,546
May	58,635	68,107	1,821	96,850	10,000	235,413
June	49,577	21,096	2,052	49,413	68	122,206
	<b>155,831</b>	<b>156,130</b>	<b>6,136</b>	<b>223,997</b>	<b>10,071</b>	<b>552,165</b>

The market shares for the items sent locally by courier services providers and Tanzania Posts Corporation (TPC) are shown in Chart 5.3. The chart shows that TPC holds a significant share (64.4%) of all local posted items.

**Chart 5.3 Market share for the local posted items**



### 5.4 International posted items

The number of international items posted through TPC and Courier decreased by 51%, from 107,696 between January and March 2024 to 53,071 items between April and June 2024, as in the summary below.

	Jan to Mar 2024	Apr to Jun 2024	% Change
TPC	68,731	39,308	-43%
Other Couriers	38,965	13,763	-65%
<b>Total</b>	<b>107,696</b>	<b>53,071</b>	<b>-51%</b>

Further, the summary shows that the items posted internationally through TPC decreased (43%) compared to those posted through courier.

Table 5.4 below shows the number of internationally posted items. The statistics shown in Table 5.4 indicate that letter mails are the most posted items to international in the quarter under review, followed by documents and parcels.

**Table 5.4 Number of internationally posted items**

Reporting Month	Letter Mails	Parcels	Packets	Documents	Cargo	Total
April	14,486	5,146	25	3,558	118	23,333
May	15,449	184	8	2,128	19	17,788
June	4,049	3,742	36	3,770	353	11,950
<b>Total</b>	<b>33,984</b>	<b>9,072</b>	<b>69</b>	<b>9,456</b>	<b>490</b>	<b>53,071</b>

## 5.5 Local delivered items

The total number of local delivered items through TPC and Courier was 521,189. In comparison to the number of local posted items in Table 5.5, the statistics show that 30,976 items were not delivered.

**Table 5.5 Local delivered items for the quarter ending June 2024**

Reporting Month	Letter Mails	Parcels	Packets	Documents	Cargo	Total
April	47,222	65,128	2,250	99,588	0	<b>214,188</b>
May	33,102	22,126	2,848	85,066	0	<b>143,142</b>
June	70,552	50,617	2,195	40,495	0	<b>168,859</b>
	<b>150,876</b>	<b>137,871</b>	<b>7,293</b>	<b>225,149</b>	<b>0</b>	<b>521,189</b>

## 5.6 International delivered items

The summary of international delivered items is shown below. Generally, the items decreased by 33% from 302,494 between January and March 2024 to 203,702 items between April and June 2024. TPC experienced a tremendous decrease of about 65%.

	Jan to Mar 2024	Apr to Jun 2024	% Change
TPC	151,820	53,493	-65%
Other Couriers	150,674	150,209	-0.3%
<b>Total</b>	<b>302,494</b>	<b>203,702</b>	<b>-33%</b>

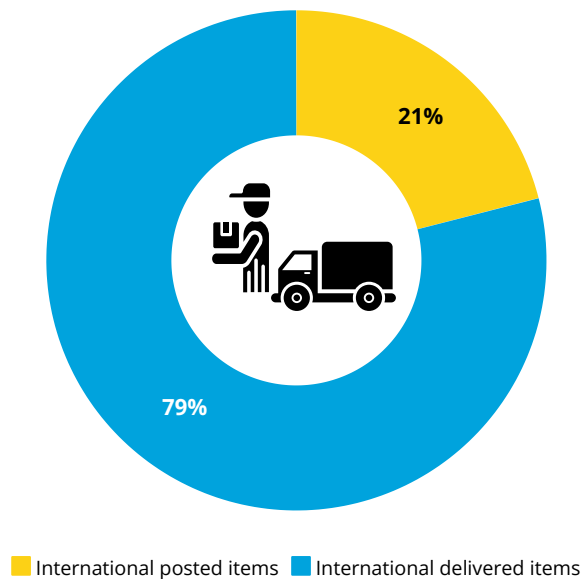
The international delivered items are shown in Table 5.6. Letter mail was the majority of items delivered in the quarter under review. Cargo were the least delivered items in the quarter.

**Table 5.6 International delivered items for the quarter ending June 2024**

Reporting Month	Letter Mails	Parcels	Packets	Documents	Cargo	Total
April	43,039	20,722	1,985	3,141	331	69,218
May	43,390	20,854	1,317	1,924	274	67,759
June	39,518	22,506	2,559	1,701	441	66,725
<b>Total</b>	<b>125,947</b>	<b>64,082</b>	<b>5,861</b>	<b>6,766</b>	<b>1,046</b>	<b>203,702</b>

The market shares of international posted and delivered items are shown in Chart 5.6. The chart shows that Tanzanians post fewer items (21%) compared to delivered.

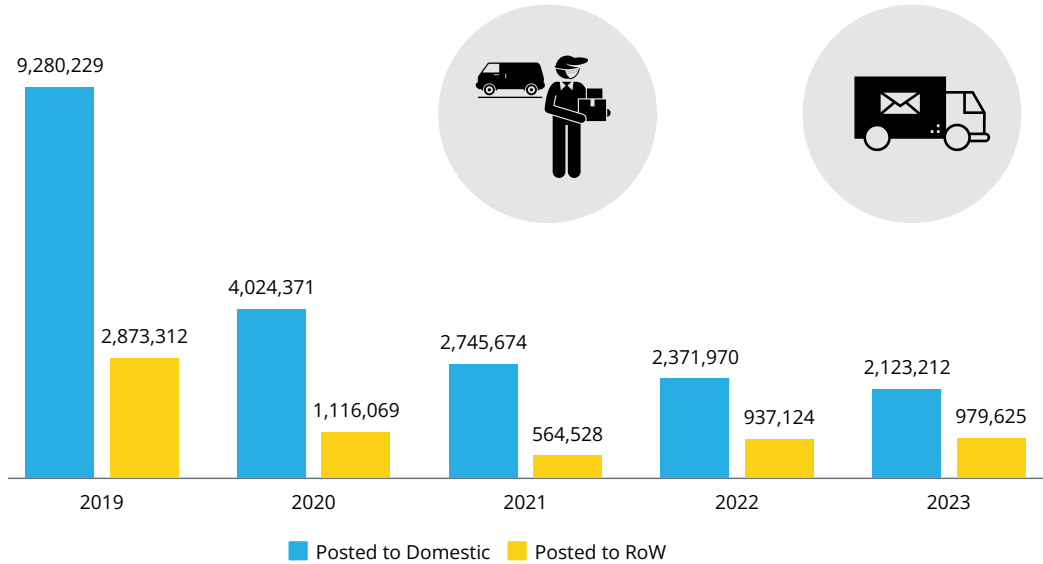
**Chart 5.6 Share of international posted and delivered items**



## 5.7 Trend of local 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 domestically and internationally 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**

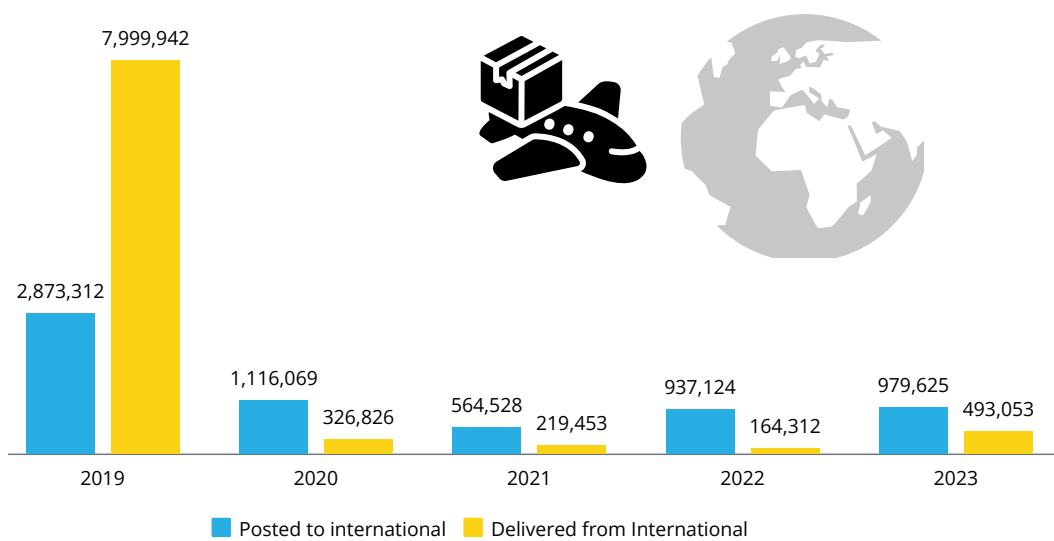


Chart 5.8 shows that the number of items posted to international destinations has decreased from 2,873,312 items in 2019 to 493,053 items in 2023. On the other hand, delivered items experienced an almost similar decreasing trend. However, more items have been posted to other countries than delivered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

# 6. Quality of Services & Frauds Practices Statistics

## 6.1 Quality of services (QoS) for the telecom subsector

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

### 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 twenty measured service areas. Airtel passed the target in nineteen out of twenty measured service areas. Vodacom passed the target in eighteen out of twenty measured service areas. Halotel and TTCL passed the target in seventeen out of twenty measured service areas as shown in

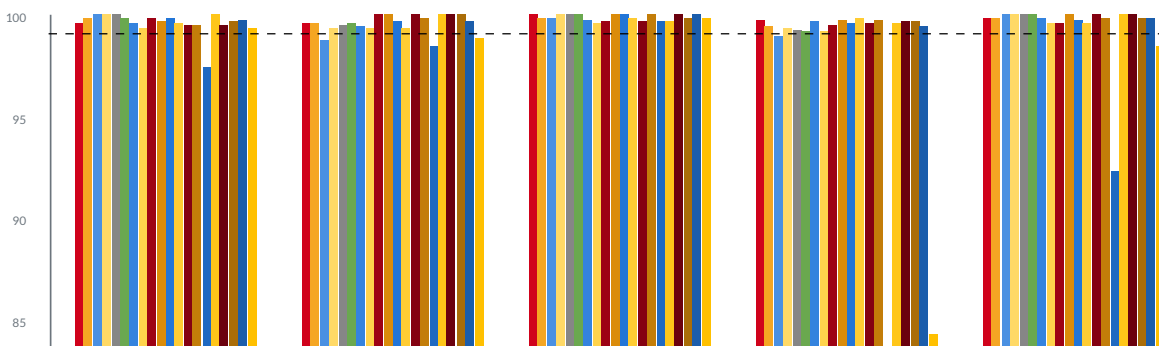


Chart 6.1.1. Network Availability (%) (Target is above 99%)

### 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%.

Airtel passed the target in all twenty measured service areas. Vodacom and Halotel passed the target in eighteen out of twenty measured service areas. Tigo passed the target in seventeen out of twenty measured service areas and TTCL passed the target in seven out of twenty measured service areas as shown in Chart

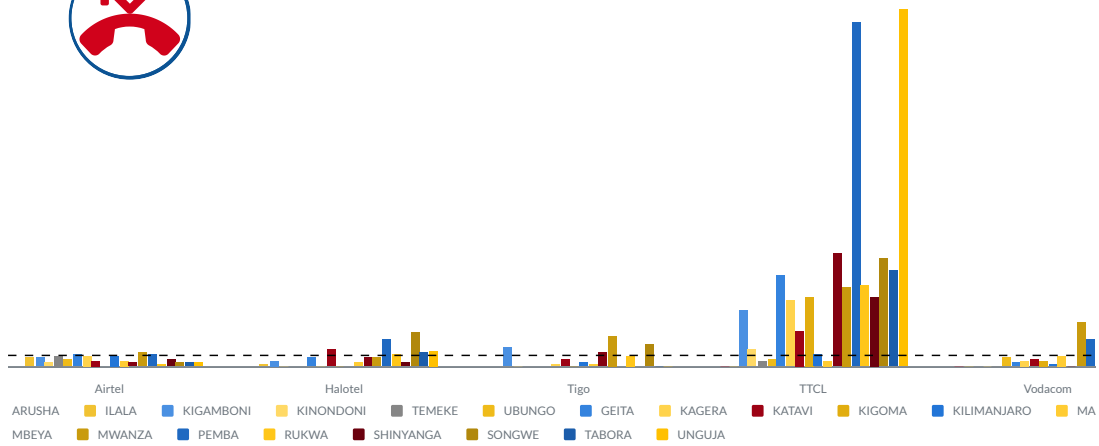


Chart 6.1.2 Comparative results on the Call Connection Failure Rate

### 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%.

Airtel, Vodacom, Halotel and Tigo passed the target in all twenty measured service areas, while TTCL passed the target in nineteen areas, as shown in Chart 6.1.3.

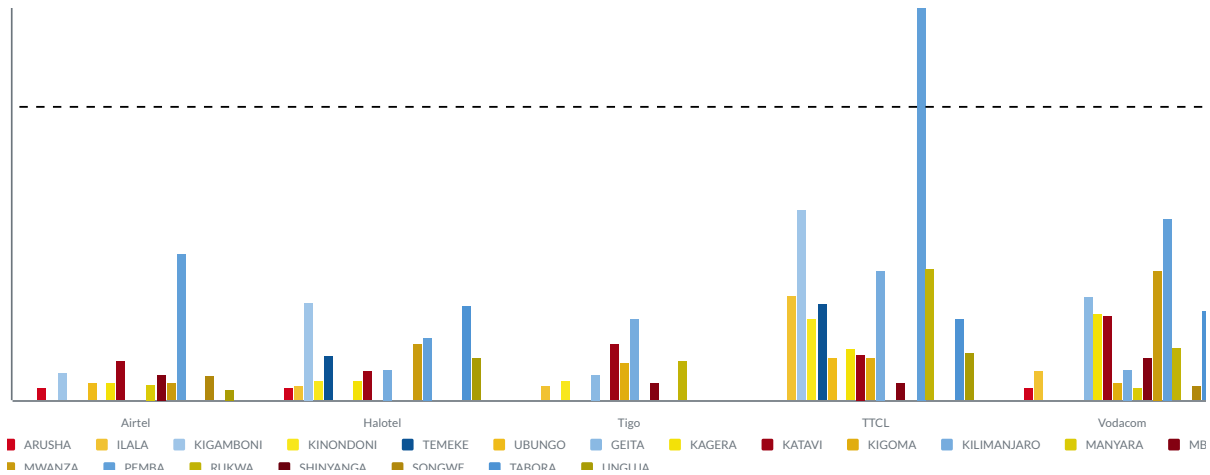


Chart 6.1.3. Comparative results on the Call Drop Rate.

### 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.

Airtel passed the target in all sixteen measure areas, Halotel passed in fourteen out of nineteen areas, Vodacom passed in thirteen out of seventeen areas, Tigo passed in three out of three measured service areas, and TTCL passed in three out of six measured service areas, as shown in Chart 6.1.4.

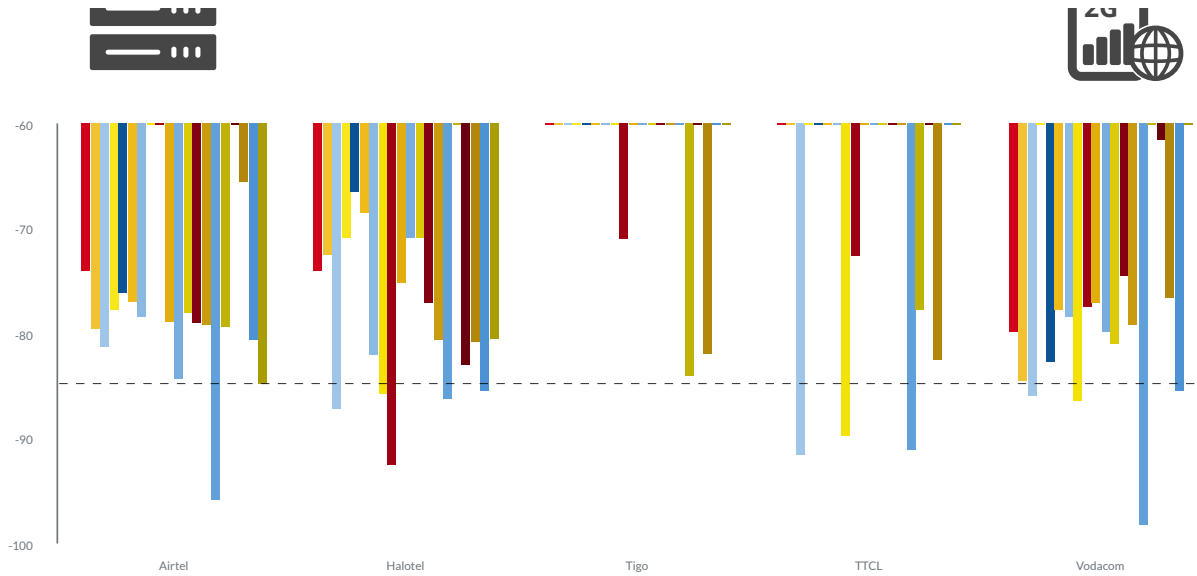


Chart 6.1.4. Comparative results on 2G Coverage.

### 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.

Tigo passed the target in all twenty measured service areas. Halotel and Vodacom passed the target in nineteen out of twenty measured service areas. Airtel passed the target in eighteen areas, while TTCL passed the target in seventeen service areas, as shown in Chart 6.1.5.

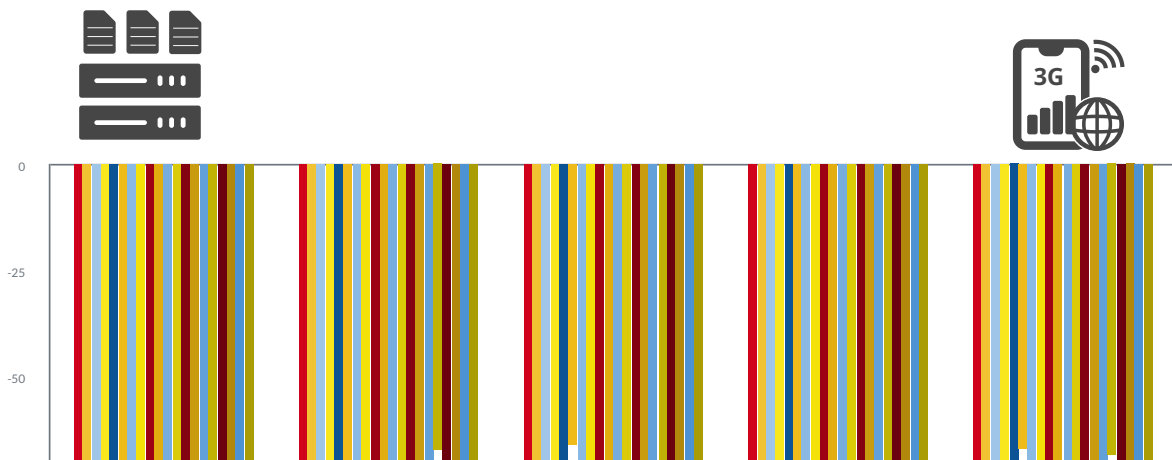


Chart 6.1.5. Comparative results on 3G Coverage.



### 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 passed the target in all nineteen measured service areas. Vodacom passed the target in eighteen areas, Airtel passed the target in seventeen areas, Halotel in sixteen and TTCL passed the target in thirteen service areas, as shown in Chart 6.1.6.

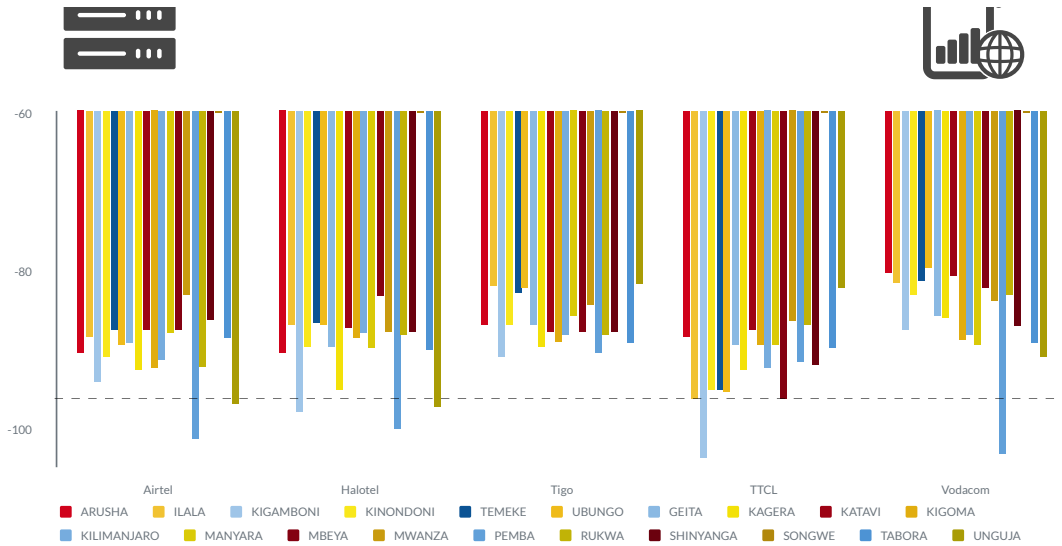


Chart 6.1.6. Comparative results on 4G Coverage.

### 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 Halotel passed the target in all twenty measured service areas. Vodacom passed the target in nineteen areas while TTCL in eight areas, as shown in Chart 6.1.7.

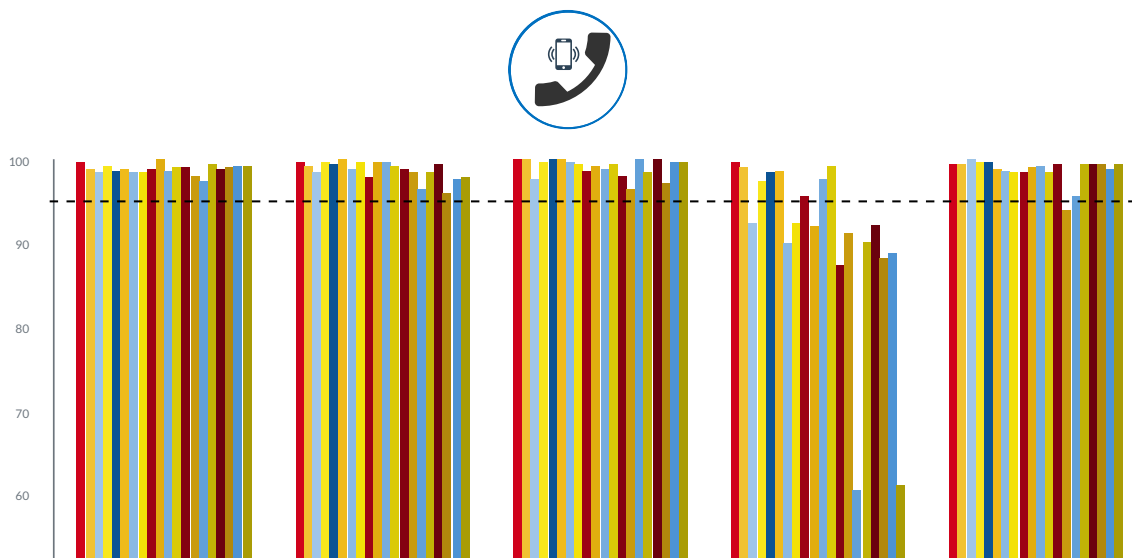


Chart 6.1.7. Comparative results on Call Success Rate.

### 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 twenty measured service areas, while TTCL passed the target in eighteen areas, as shown in Chart 6.1.8.

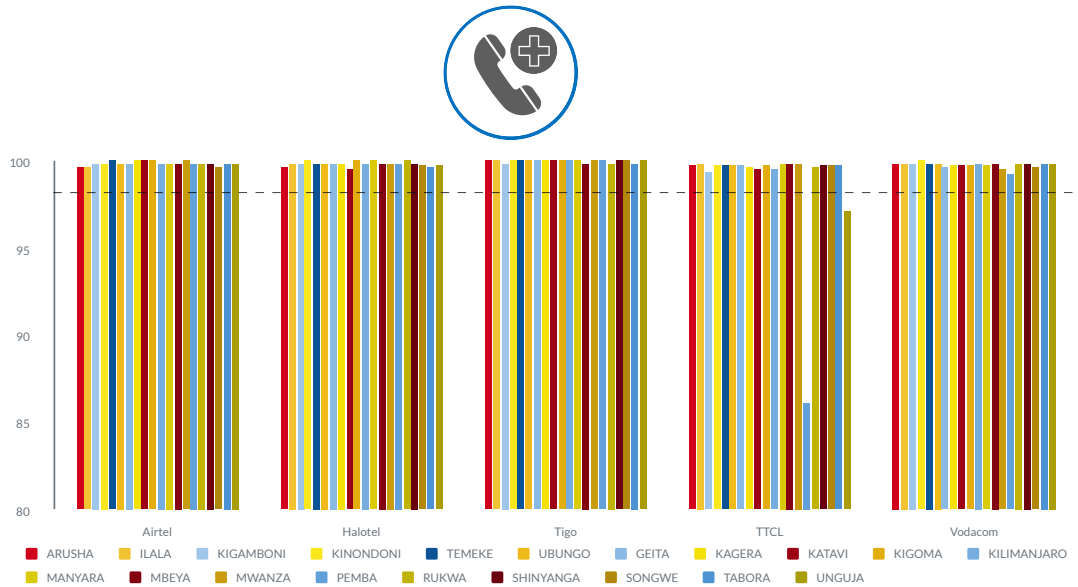


Chart 6.1.8. Comparative results on Handover Success Rate.

### 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, Halotel and Vodacom passed the target in all nineteen measured service areas, as shown in Chart 6.1.9.

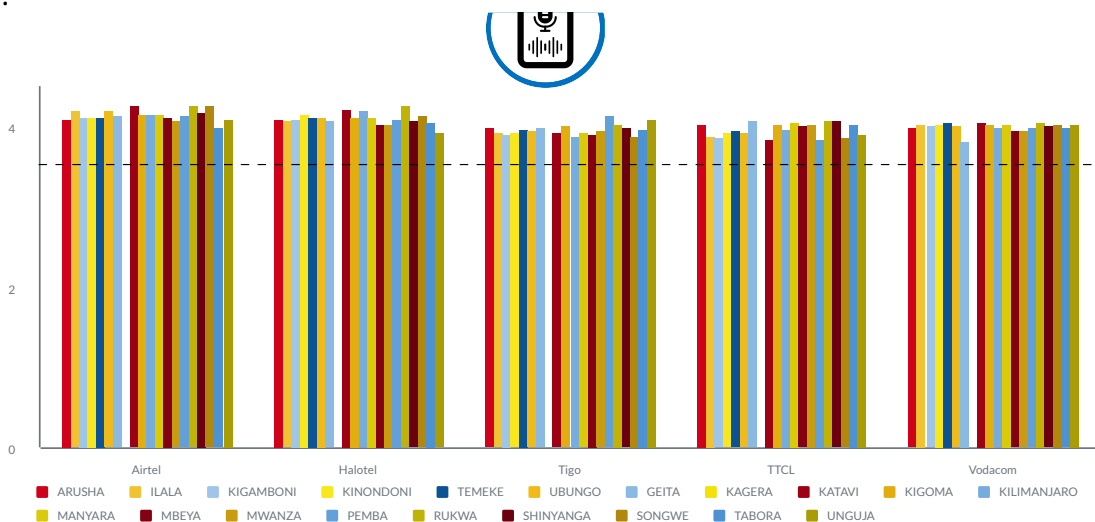


Chart 6.1.9. Comparative results on Voice Quality.

### 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.

Airtel, Vodacom, Tigo, and TTCL passed the target in all nineteen measured service areas, and Halotel passed the target in eighteen areas, as shown in Chart 6.1.10.

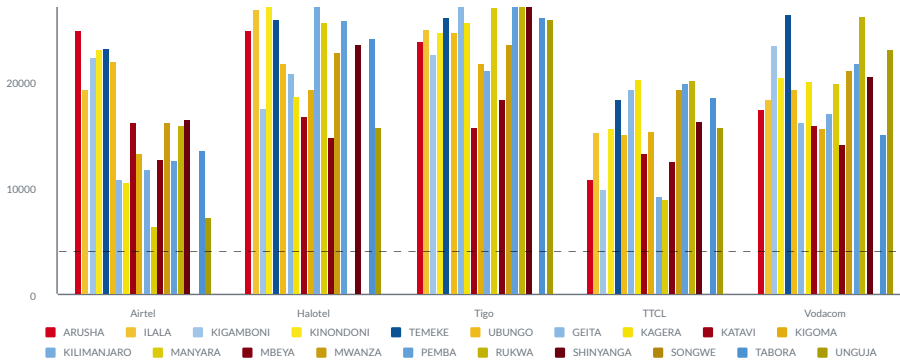


Chart 6.1.10. Comparative results on Download Mean Data Rate.

### 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.

Airtel, Tigo, TTCL, Halotel and Vodacom passed the target in all nineteen measured service areas, as shown in Chart 6.1.11.

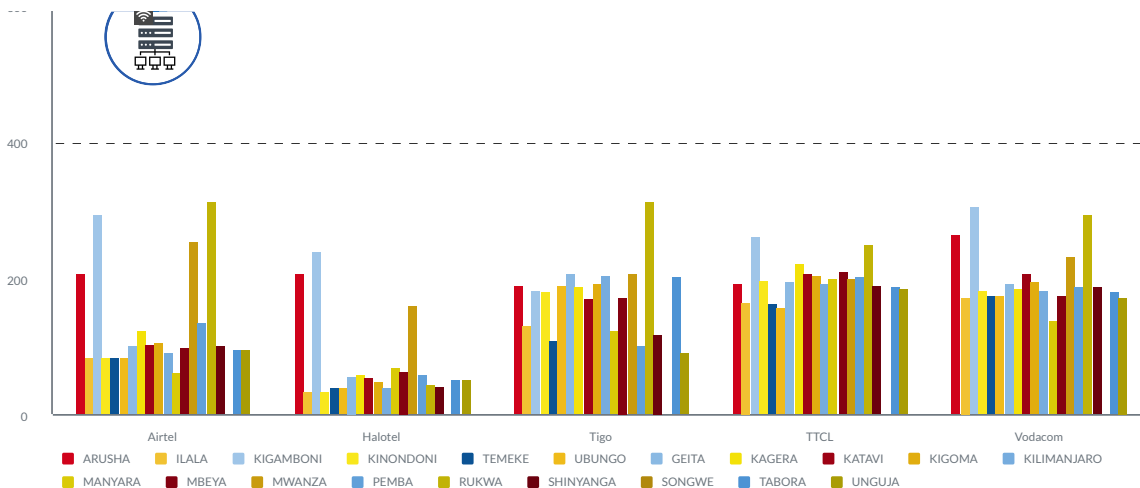


Chart 6.1.11. Comparative results on Ping Round Trip Time.

### 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%.

Tigo passed the target in all nineteen measured service areas. Airtel and Vodacom passed the target in eighteen out of nineteen areas. Halotel passed the target in seventeen service areas, and TTCL in three service areas, as shown in Chart 6.1.12.

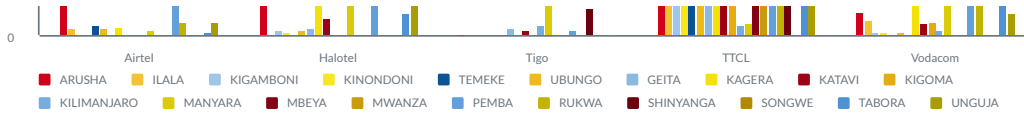


Chart 6.1.12. Comparative results on Attach Failure Ratio.

### 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.

Airtel, Halotel, Tigo, TTCL, Vodacom and Halotel passed the target in all nineteen measured service areas, as shown in Chart 6.1.13.

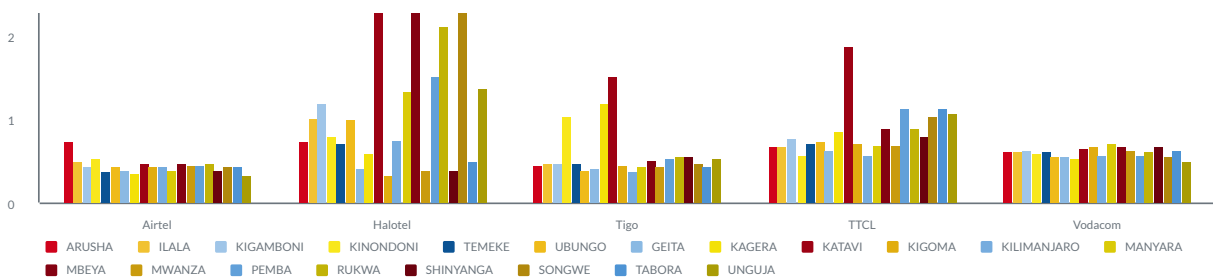


Chart 6.1.13. Comparative results on Attach Setup Time.

### 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.

Airtel, Halotel, Tigo, TTCL, Vodacom and Halotel passed the target in all twenty measured service areas, as shown in Chart 6.1.14.

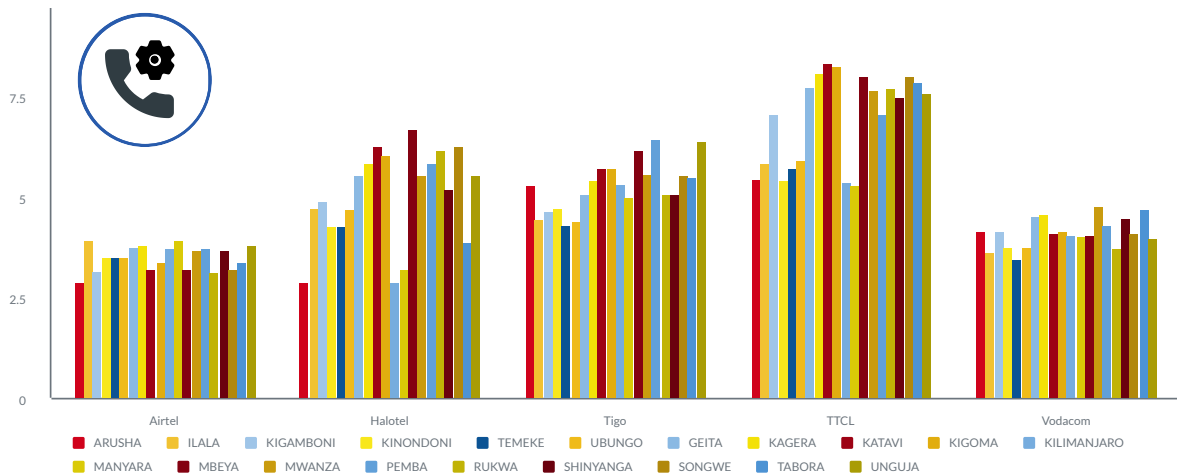


Chart 6.1.14. Comparative results on Call Setup Time.

The general quality of service results from January to March 2024 indicate that Airtel scored 98%, Halotel 93%, Tigo 99%, Vodacom 96%, and TTCL scored 78% 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	March 2024	June 2024	% Change
Airtel	97%	98%	0.8%
Vodacom	92%	96%	4.6%
Tigo	95%	99%	4.4%
Halotel	95%	93%	-1.5%
TTCL	70%	78%	10.7%
Industry average	90%	91%	3.8%

---

## 6.2 Coverage of broadcasting network

The broadcasting signal coverage shown in Table 6.2 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 6.2 Broadcasting signal coverage as of June 2024**

Indicator	June 2024
Percentage of the population covered by DTT signal	56%
Percentage of the population covered by DTH signal	100%
Percentage of the population covered by FM broadcasting signal	75.52%
Percentage of the geography covered by DTT signal	32%
Percentage of the geography covered by DTH signal	100%
Percentage of the geography covered by FM broadcasting signal	49.94%

## 6.3 Fraudulent attempts

Tanzania Mainland						
Region	Airtel	Halotel	Tigo	TTCL	Vodacom	Total
Morogoro	673	25	5,203	23	1,431	7,355
Rukwa	3,500	252	2,005	673	768	7,198
Mbeya	584	43	628	739	119	2,113
Dar es salaam	367	17	614	26	127	1,151
Arusha	383	22	113	7	415	940
Kilimanjaro	29	3	145	12	272	461
Tabora	58	11	59	294	10	432
Mwanza	89	5	170	24	55	343
Dodoma	33	3	141	17	8	202
Kagera	42	2	103	6	27	180
Pwani	30	5	115	5	15	170
Unknown	65	0	99	0	2	166
Katavi	0	12	18	53	75	158
Ruvuma	14	4	121	16	2	157
Tanga	30	1	115	3	3	152
Iringa	16	3	98	18	7	142
Singida	15	0	92	27	7	141
Songwe	0	37	25	64	0	126
Shinyanga	37	5	65	9	7	123
Mara	16	1	62	15	15	109
Kigoma	17	6	23	15	8	69
Manyara	32	4	22	3	1	62
Mtwara	14	0	33	0	2	49
Lindi	16	1	26	4	1	48
Njombe	0	4	6	24	0	34
Zanzibar						
Mjini Mgharibi	9	0	107	7	2	125
Kaskazini Unguja	0	0	5	0	0	5
Kusini Pemba	0	0	3	0	1	4
Kusini Unguja	0	0	2	0	0	2
Kaskazini Pemba	0	0	1	0	0	1
<b>Total</b>	<b>6,069</b>	<b>469</b>	<b>10,242</b>	<b>2,093</b>	<b>3,384</b>	<b>22,257</b>

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

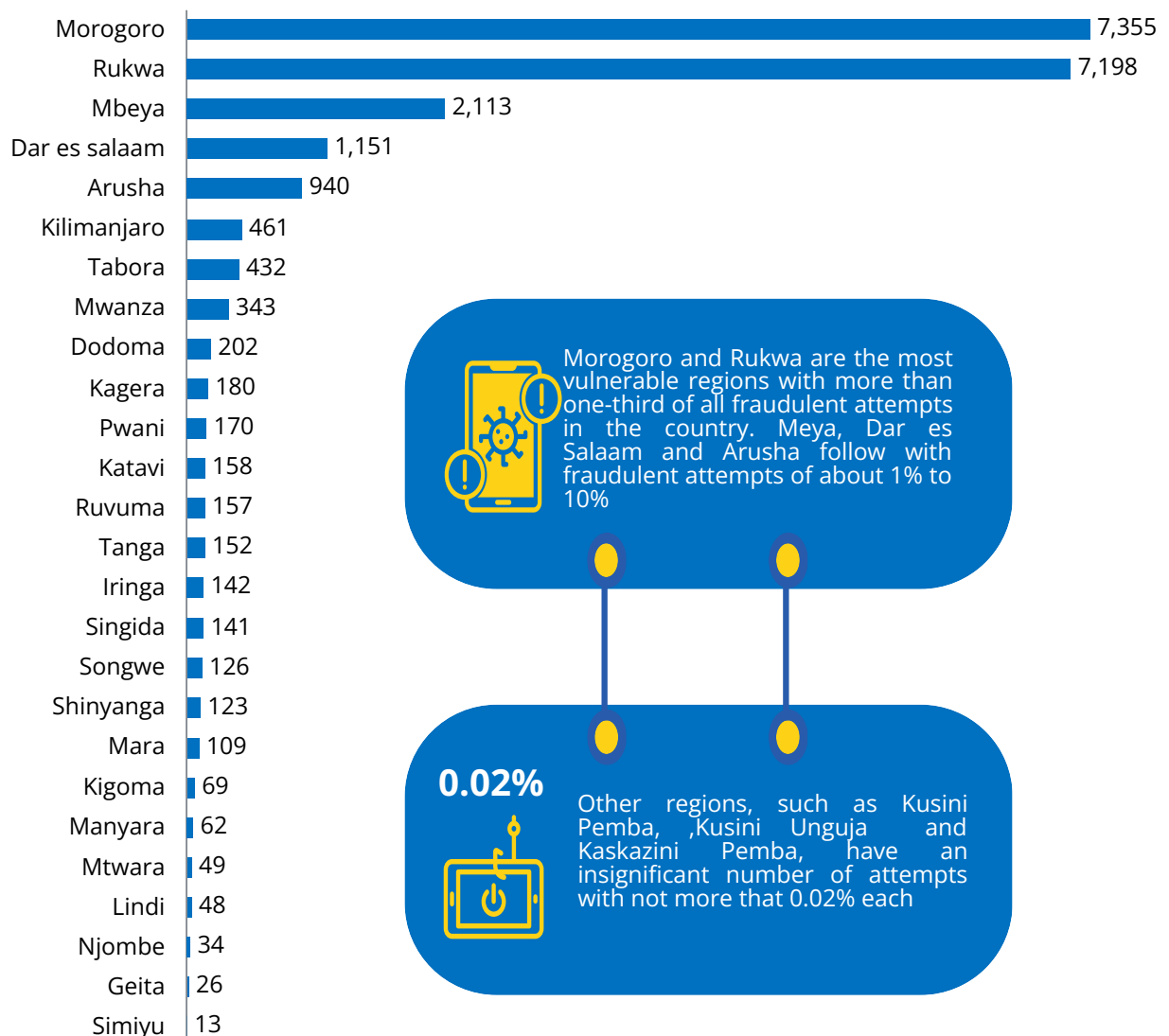
**Table 6.3 Fraudulent attempts per operator**

Quarter ending	Airtel	Halotel	Tigo	TTCL	Vodacom	Total
March 2024	5,120	148	6,012	2,304	3,735	17,319
June 2024	6,069	469	10,242	2,093	3,384	22,257
Percentage change	19%	217%	70%	-9%	-9%	57%

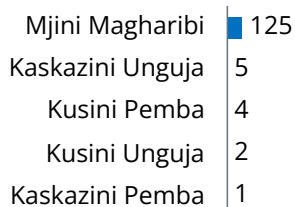
The results further show that fraudulent attempts for Airtel, Halotel and Tigo have increased by 19%, 217% and 70% respectively. However, Fraudulent attempts for TTCL and Vodacom have decreased by 9% each. Further, fraudulent attempts in the industry has increased by 57%.

**Chart 6.3a Distribution of fraudulent attempts per region in the quarter ending June 2024**

**Tanzania Mainland**

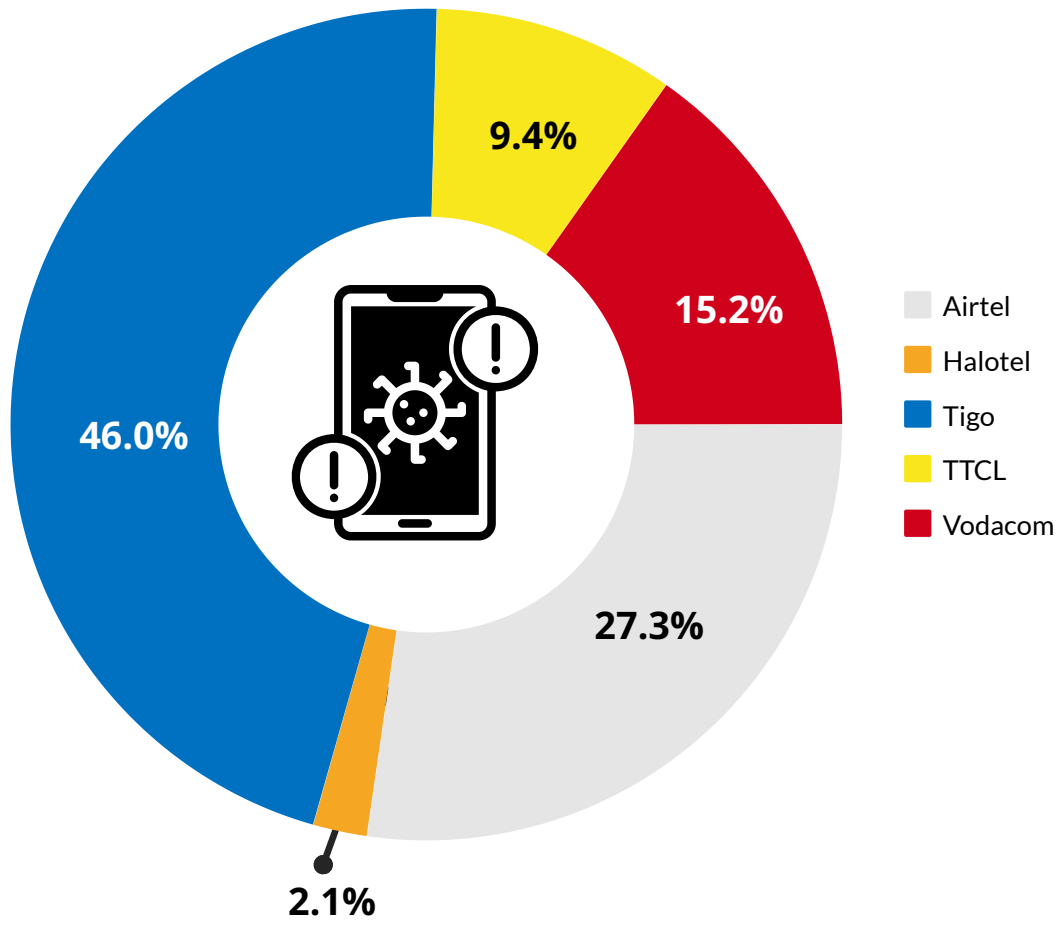


**Zanzibar**





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



# 7. Number of Licenses and Certificates

## 7.1 Licenses

Telecommunications and Internet		
Category	Number	
	March 2024	June 2024
Network Facilities Licences	35	34
Network Services Licences	14	15
Application Services Licences	135	142
Aircraft Stations	171	169
Amateur Stations	18	20
Fixed VSAT Terminals	45	42
Mobile VSAT Terminals	2	2
Satellite Ground Earth Stations	1	1
Ship Stations	47	35
HF Radio Stations	21	23
VHF- UHF Radio Repeaters	2	2
VHF - UHF Radio Station with Pair of Frequency	119	118
VHF - UHF Radio Station with Single Frequency	200	192
Numbering	536	576
Broadcasting		
Category	Number	
	March 2024	June 2024
National Content Television (FTA) Licences	16	16
District Content Television (FTA) Licences	24	23
National Content Radio Licences	14	14
Regional Content Radio Licences	31	31
District Content Radio Licences	169	177
Community Radios	17	15
Community Televisions	-	-
National Content Televisions by Subscription	16	25
District Content Televisions by Subscription	9	1
National Content (support services)	3	3
Online Content Aggregators	3	5
Weblogs (Blogs)	67	64
Online Radios	7	9
Online Televisions	231	215
Cable Televisions	60	63

Postal and Courier		
Category	Number	
	March 2024	June 2024
International Courier	6	8
East Africa Courier	1	2
Intercity Transporters	65	71
Intracity Courier	15	18
Public Postal	1	1
Domestic Courier	46	46

## 7.2 Certificates

Category	Number	
	March 2024	June 2024
Global Maritime Distress and Safety Systems	132	152
Type Approval	2281	2426
Registration for Satellite Mobile Phones	12	32

## 8. Conclusion

The communications sector in the quarter ending June 2024 experienced significant progress and a notable increase in the adoption of telecommunication services, driven by the continued competitiveness of service tariffs.

A significant achievement was the extensive expansion of mobile network coverage across various technologies, where, 3G coverage has reached 89% of the population, enhancing access to data services. In contrast, 4G coverage has reached 83%, which improved Internet speed and reliability. The extension of 5G coverage to 15% signifies faster speeds, reduced latency, and more reliable connections compared to other technologies. This is crucial for meeting today's demand for continuous connectivity, enabling advancements such as smart home devices (IoT), and enhanced mobile experiences.

Moreover, the broadcasting subsector saw a positive trend with 76% of the population covered by the FM signal and 56% of the population covered by the DTT signal, highlighting increased consumer engagement with digital broadcasting services. 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

