

STATISTICS REPORT FOR TELECOM, MEDIA AND BROADCASTING SECTOR AS OF THE FOURTH QUARTER (OCTOBER-DECEMBER) OF THE YEAR 2023

**Disclaimer:** Information provided in this report is subject to alteration in case of any revision or update deemed necessary.

## TABLE OF CONTENTS

TABLE	E OF CONTENTS	i
LIST C	OF TABLES	ii
LIST C	OF FIGURES	iii
REPOF	RT SUMMARY	iv
1. MO	OBILE TELEPHONE SERVICES	1
1.1.	Mobile subscriptions	1
1.2.	Market share for mobile (SIM cards) subscriptions	2
1.3.	Mobile Voice, and SMS tariff structure	3
1.4.	Mobile traffic statistics	4
1.4	4.1. Mobile outgoing and incoming international voice traffic	4
1.4	4.2. Market shares for mobile outgoing voice traffic	5
1.4	4.3. Average calling time (Minutes/call)	5
1.4	4.4. Outgoing and incoming international SMS traffic	6
1.4	4.5. Market shares for outgoing on net, off net and international SMS traffic	6
2. RC	DAMING	7
2.1.	Roaming subscribers	7
2.2.	Roaming traffic	8
3. FE	XED TELEPHONE SERVICES	9
3.1.	Fixed telephone subscriptions	9
3.2.	Fixed telephone traffic	10
3.3.	Fixed telephone service tariff	11
4. IN	TERNET SERVICE PROVISION	12
4.1.	Internet subscriptions	12
4.2.	International internet bandwidth	14
4.3.	Mobile internet tariff	15
5. EN	MPLOYMENT IN TELECOMMUNICATION SECTOR	16
6. Ml	EDIA AND BROADCASTING	18
6.1.	Licensed media operators	18
6.2.	Pay TV subscriptions	18
6.3.	Decoders sold	19
6.4.	Pay TV staff	20

# LIST OF TABLES

Table 1: Key ICT indicators	iv
Table 2: Comparison of active mobile subscriptions per operator by contract type	1
Table 3: Mobile telephone voice tariff (in Frw) per minute per operator as of Q4 2023	3
Table 4: SMS tariff structure (in Frw) as of Q4 2023	4
Table 5: Outgoing and incoming traffic per operator as of the 4 <sup>th</sup> quarter 2023	4
Table 6: Average minutes per call per operator in the 4 <sup>th</sup> quarter 2023	5
Table 7: SMS traffic (in numbers) as of the fourth quarter 2023	6
Table 8: International average roaming subscribers as of the 4 <sup>th</sup> quarter 2023	7
Table 9: Outgoing and incoming roaming traffic (in minutes) as of the fourth quarter 2023	8
Table 10: Fixed telephone subscriptions as of December 2023	9
Table 11: Outgoing mobile and fixed telephone incoming traffic as of 4 <sup>th</sup> quarter 2023	11
Table 12: Fixed telephone service tariff structure (in Frw) per minute as of Q4 2023	11
Table 13: Internet subscriptions per category as of December 2023	12
Table 14: Fixed internet subscriptions by speed	13
Table 15: Number of staffs employed in telecommunication sectors as of December 2023	16
Table 16: Trends of Licensed media operators from December 2022 to December 2023	18
Table 17: Number of Pay TV subscribers as of December 2023	18
Table 18: Trend of decoders sold from 4 <sup>th</sup> quarter 2022 to 4 <sup>th</sup> quarter of 2023	19
Table 19: Number of staffs employed by Pay TV operators as of December 2023	20

# LIST OF FIGURES

Figure 1: Trend of mobile subscriptions and penetration rate from Q4 2022 to Q4 2023	2
Figure 2: Market share trends for mobile (SIM cards) subscriptions per operator	2
Figure 3: Trend of average mobile voice tariff (in Frw) per minute	3
Figure 4: Outgoing on net, off net and international voice traffic's market share as of the 4 <sup>th</sup>	quarter
2023	5
Figure 5: Outgoing on net, off net and international SMS traffic market share as of the fourth	quarter
2023	6
Figure 6: Trend of roaming subscribers from Q4 2022 to Q4 2023	7
Figure 7: Trend of fixed telephone subscriptions and penetration rate	9
Figure 8: Market share trends for fixed telephone subscriptions per operator as of Dec-2023	10
Figure 9: Trend of internet subscriptions and internet subscriptions per 100 inhabitants	13
Figure 10: Fixed internet subscriptions by technology	14
Figure 11: Trend of international internet bandwidth (Mbps) from Q4 2022 to Q4 2023	15
Figure 12: Standard mobile internet tariff (Frw/MB) as of Q4 2023	15
Figure 13: Telecom staff by gender as of December 2023	17
Figure 14: Market share for Pay TV active subscribers per operator as of December 2023	19

## REPORT SUMMARY

This report compiles the information from telecom operators, 4G wholesaler, Internet Service Providers (ISPs), Media and Broadcasting operators as per their license obligations for the period starting from 1<sup>st</sup> October to 31<sup>st</sup> December 2023.

**Table 1: Key ICT indicators** 

INDICATORS	Q3 2023	Q4 2023	% change between Q3-23 and Q4-23			
SUBSCRIPTIONS						
Mobile subscriptions	12,538,106	12,763,076	1.79			
Fixed subscriptions	9,175	8,361	-8.87			
Mobile (SIM) penetration rate (%)	93.04	94.18	1.22			
Fixed telephone penetration rate (%)	0.068	0.062	-9.39			
VOICE TRAFFIC IN MINUTES						
On-Net Voice Traffic	6,186,854,069	5,511,947,145	-10.91			
Outgoing Off-Net Voice Traffic	3,114,700,163	3,264,010,152	4.79			
International Outgoing mobile voice traffic	9,287,266	14,189,448	52.78			
International Incoming mobile voice traffic	15,696,644	19,566,211	24.65			
ROAMING SUBSCRIBERS						
Average Roaming-in (Foreign subscribers)	611,263	577,918	-5.46			
Average Roaming-Out (Own subscribers)	549,896	615,647	11.96			
ROAMING TRAFFIC						
Total incoming minutes received by roamers	136,891,387	153,438,591	12.09			
Total outgoing minutes made by roamers	2,876,585	3,182,919	10.65			
SMS TRAFFIC						
On-net SMS	846,947,976	695,134,033	-17.92			
Outgoing Off-net SMS	144,133,466	147,045,649	2.02			
Outgoing International SMS	926,975	891,057	-3.87			
Incoming International SMS	504,740	1,131,102	124.10			
DATA/INTERNET						
Internet subscriptions	9,352,218	9,339,894	-0.13			
Internet subscriptions per 100 inhabitants	69.40	68.92	-0.69			
Equipped international internet bandwidth (Mbps)	301,604	328,384	8.88			
Used international internet bandwidth (Mbps)	159,005	185,270	16.52			
MEDIA AND BROADCASTING						
Number of Television stations	17	19	11.76			
Number of Radio FM stations	29	29	0.00			
Active Pay TV subscribers	106,712	136,452	27.87			
Registered Pay TV subscribers	521,404	539,624	3.49			

#### 1. MOBILE TELEPHONE SERVICES

## 1.1. Mobile subscriptions

During the fourth quarter of the year 2023, the operators providing mobile telephone services were MTN Rwandacell Plc and Airtel Rwanda Ltd. The number of active mobile subscriptions reported at the end of December 2023 were 12,763,076 active SIM cards. Table 2 illustrates the comparison of active mobile subscriptions per operator.

Table 2: Comparison of active mobile subscriptions per operator by contract type

Name of operator	December 2022			December 2023			Quarterly
	Postpaid	Prepaid	Total	Postpaid	Prepaid	Total	Variation
MTN Rwandacell Plc	142,053	6,946,853	7,088,906	174,165	7,718,381	7,892,546	11.3%
Airtel Rwanda Ltd	7,395	3,905,777	3,913,172	9,121	4,861,409	4,870,530	24.5%
Total	149,448	10,852,630	11,002,078	183,286	12,579,790	12,763,076	16.0%

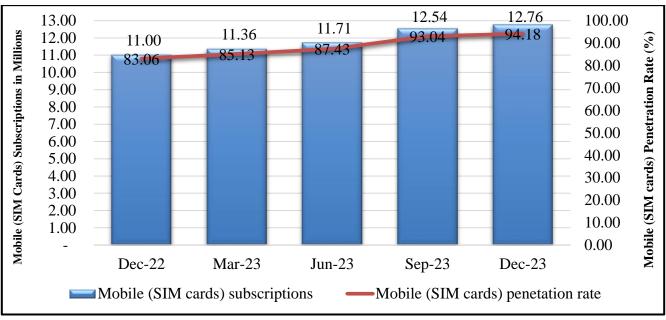
Source: Operators' reports

In December 2023, the number of active mobile subscriptions in the country increased by 16% from 11.0 Million Active SIM cards recorded as of December 2022 up to 12.76 million as of December 2023. As a result, the active mobile-cellular telephone (SIM cards) subscriptions per 100 people increased from 83.06% as of December 2022 up to 94.18% as of December 2023.

The Figure 1 displays the trends of active mobile subscriptions and penetration rates.

<sup>&</sup>lt;sup>1</sup> Active mobile subscriptions refer to the number of SIM cards which generated revenues to the operator within 90 days.

Figure 1: Trend of mobile subscriptions and penetration rate<sup>2</sup> from Q4 2022 to Q4 2023

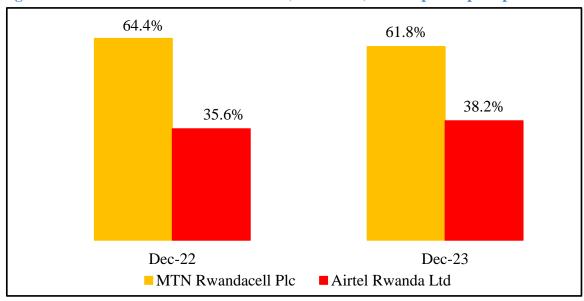


Source: Operators' reports

## 1.2. Market share for mobile (SIM cards) subscriptions

In December 2023, the market shares in terms of active SIM cards for Airtel Rwanda Ltd increased by 2.6 percentage points up to 38.2% whereas that for MTN Rwandacell Plc dropped by the same margin reaching 61.8% in comparison to December 2022 publications.

Figure 2: Market share trends for mobile (SIM cards) subscriptions per operator



 $<sup>^2</sup>$  Mobile (SIM cards) penetration rate (%) is computed with reference to the sum of active SIM cards over the Rwandan population published by National Institute of Statistics of Rwanda.

## 1.3. Mobile Voice, and SMS tariff structure

During the fourth quarter, the average standard tariff for calling by mobile phone within a telecom operator was 40 Frw/Min while also 40 Frw/Min was between telecom operators and 90 Frw/Min to call in One Area Network Countries.

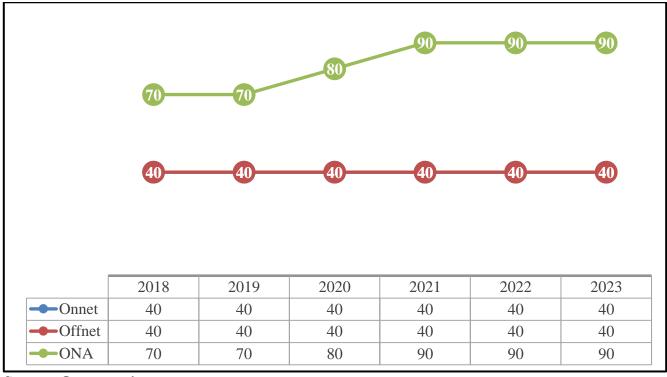
Table 3: Mobile telephone voice tariff (in Frw) per minute per operator as of Q4 2023

Destination	MTN Rwandacell Plc	Airtel Rwanda Ltd	Average
Onnet	45	35	40
Offnet	45	35	40
One Area Network	90	90	90

Source: Operators' reports

During the fourth quarter 2023, the standard average tariff for calling by mobile telephone within a telecom operator and between telecom operators was 40 Frw/Min and 40 Frw/Min. The standard average voice tariff for calling in One Area Network Countries was 90 Frw/min.

Figure 3: Trend of average mobile voice tariff (in Frw) per minute



During the fourth quarter 2023, the average tariff for sending a message within a telecom operator, between telecom operators, in ONA countries, and international was 8.5 Frw, 20.5 Frw, 42.5 Frw, and 79.5 respectively. A subscriber on Airtel Rwanda's network can send a short text message to any subscriber on Airtel operating in other African countries at 26 Frw.

Table 4: SMS tariff structure (in Frw) as of Q4 2023

SMS Tariff	MTN Rwandacell Plc	Airtel Rwanda Ltd	Average
Onnet tariff	12	5	8.5
Offnet tariff	26	15	20.5
ONA	45	40	42.5
Rest of the World	80	79	79.5

**Source: Operators' reports** 

#### 1.4. Mobile traffic statistics

## 1.4.1. Mobile outgoing and incoming international voice traffic

In the fourth quarter of 2023, the total volume of minutes originating within mobile networks were 5.5 billion minutes, the total minutes originating from mobile networks to other domestic networks were 3.2 billion minutes and the total minutes from mobile networks to international networks were 14.1 million minutes. The number of minutes from international networks were 19.5 million minutes to local mobile networks.

Table 5: Outgoing and incoming traffic per operator as of the 4th quarter 2023

Voice traffic	MTN Rwandacell Plc	Airtel Rwanda Ltd	Total			
	inutes					
On net	3,739,302,016	1,771,857,392	5,511,159,408			
Off net	753,191,894	2,510,309,942	3,263,501,836			
International	12,608,174	1,557,584	14,165,758			
Incoming minutes						
International	16,258,524	3,291,946	19,550,470			

### 1.4.2. Market shares for mobile outgoing voice traffic

During the fourth quarter 2023, the 68% of the total on net minutes generated by mobile networks were for MTN Rwandacell Plc and 32% for Airtel Rwanda Ltd. The off-net minutes 'market shares for MTN Rwandacell Plc and Airtel Rwanda Ltd were 23% and 77% respectively. The 89% of minutes from local mobile networks to international networks were generated by MTN Rwandacell Plc whereas the remaining 11% were for Airtel Rwanda Ltd.

quarter 2023 Off net On net International Airtel Rwanda Ltd MTN Rwandacell 11% Airtel Rwanda Plc Ltd 23% **MTN** Rwandacell Plc Airtel MTN Rwandacell 68% Rwan Plc da Ltd 89% 77%

Figure 4: Outgoing on net, off net and international voice traffic's market share as of the 4<sup>th</sup> quarter 2023

**Source: Operators' reports** 

## **1.4.3.** Average calling time (Minutes/call)

In the fourth quarter 2023, the average minutes per call within mobile telecom networks were 2.5, average minutes per call to call other domestic networks were 2.7 while the average minutes per call from Rwanda mobile networks to international networks were 2.8. The average minutes per call from international networks to Rwanda mobile networks were 2.0.

Table 6: Average minutes per call per operator in the 4<sup>th</sup> quarter 2023

Voice traffic	ce traffic MTN Rwandacell Plc Airtel Rwanda Ltc		Combined				
	Average outgoing minutes per call						
On net	2.3	2.8	2.5				
Off net	2.1	2.9	2.7				
International	3.3	1.3	2.8				
Average incoming minutes per call							
International	2.1	1.8	2.0				

## 1.4.4. Outgoing and incoming international SMS traffic

In the fourth quarter 2023, the total volume of SMS traffic originating within mobile networks were 695.1 million SMS, the total SMS traffic originating from mobile networks to other mobile networks were 147.0 million SMS and the total SMS traffic from mobile networks to international networks were 0.8 million SMS. The number of SMS from international networks to Rwanda were 1.1 million SMS.

Table 7: SMS traffic (in numbers) as of the fourth quarter 2023

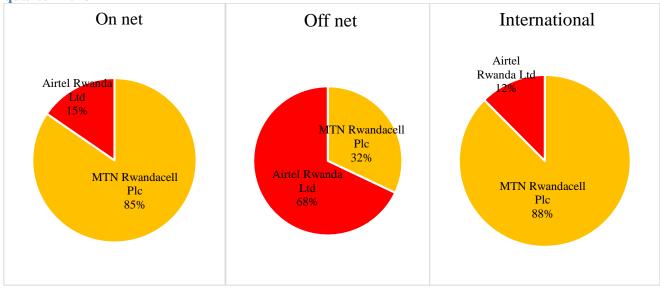
Destination MTN Rwandacell Pla		Airtel Rwanda Ltd	Total			
Outgoing SMS						
On net	588,018,374	107,115,659	695,134,033			
Off net	47,114,298	99,931,351	147,045,649			
International	780,134	110,923	891,057			
Incoming SMS						
International	400,454	730,648	1,131,102			

**Source: Operators' reports** 

## 1.4.5. Market shares for outgoing on net, off net and international SMS traffic

In the fourth quarter 2023, the 85% of the total on net SMS were for MTN Rwandacell Plc and 15% of Airtel Rwanda Ltd. The 68% of off net SMS were for Airtel Rwanda Ltd and the 32% for MTN Rwandacell Plc. The 88% and 12% of SMS from local mobile networks to international networks are generated by MTN Rwandacell Plc and Airtel Rwanda Ltd respectively.

Figure 5: Outgoing on net, off net and international SMS traffic market share as of the fourth quarter 2023



## 2. ROAMING

## 2.1. Roaming subscribers

The international average roaming subscribers recorded during the fourth quarter of the year 2023 stood at 577,918 foreign subscribers roamed on local networks whereas 615,647 Rwanda subscribers roamed on foreign networks.

Table 8: International average roaming subscribers as of the 4<sup>th</sup> quarter 2023

Destination	MTN Rwandacell Plc	Airtel Rwanda Ltd	Total
Roaming-in (Foreign subscribers)	307,549	270,368	577,918
Roaming-out (Own Subscribers)	362,576	253,071	615,647

**Source: Operators' reports** 

During the fourth quarter 2023, the average number of roamers-out increased by 12% up to 615,647 from 549,897 subscribers reported in Q3 2023 whereas the average number of foreign subscribers roaming on local networks decreased by 5.5% to 577,918 as compared 611,263 subscribers for the previous quarter.

Figure 6: Trend of roaming subscribers from Q4 2022 to Q4 2023

611,363
615,647
577,918

448,337

Q4 2022 Q1 2023 Q2 2023 Q3 2023 Q4 2023

Average Roaming-in (Foreign subscribers)

Average Roaming-out (Own Subscribers)

## 2.2. Roaming traffic

In the fourth quarter 2023, the total volume of outgoing traffic generated by foreign subscribers roaming in Rwanda was 1.59 million minutes and the total minutes generated by Rwanda mobile networks 'subscribers roamed outside the country was 1.59 million minutes. On the other hand, the total incoming traffic on foreign subscribers roamed in Rwanda was 25.4 million minutes whereas the incoming minutes to Rwanda subscribers roamed on foreign networks was 127.9 million minutes.

Table 9: Outgoing and incoming roaming traffic (in minutes) as of the fourth quarter 2023

Destination	Foreign subscribers roaming on local			Own subsci	ribers roaming	g on foreign
	networks				networks	
	MTN	Airtel	Total	MTN	Airtel	Total
Outgoing	1,071,940	520,135	1,592,075	1,469,176	121,668	1,590,844
Incoming	11,132,777	14,362,707	25,495,484	124,305,758	3,637,349	127,943,107
Total	11,132,777	14,362,707	25,495,484	125,774,934	3,759,017	129,533,951

#### 3. FIXED TELEPHONE SERVICES

## 3.1. Fixed telephone subscriptions

In the fourth quarter 2023, the operators offering fixed telephone services were Liquid Telecom Ltd, MTN Rwandacell Plc, Airtel Rwanda Ltd and BSC Ltd that offers voice-over-IP (VoIP) subscriptions only.

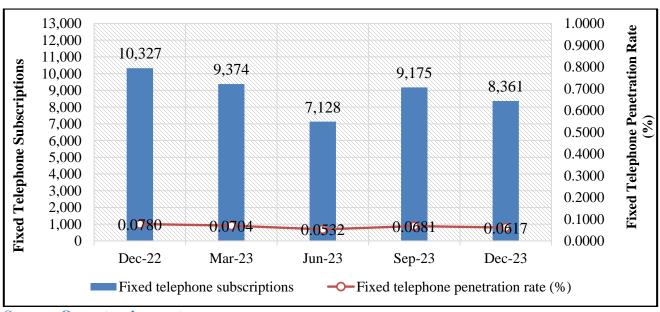
Table 10: Fixed telephone subscriptions as of December 2023

Name of Operator	Fixed telephone subscriptions	Fixed telephone penetration rate $(\%)^3$
MTN Rwandacell Plc	217	
Airtel Rwanda Ltd	6,460	
Liquid Telecom Ltd	628	0.0617
BSC Ltd	1,056	
Total	8,361	

Source: Operators' reports

The number of fixed telephone subscriptions decreased from 10,327 as of December 2022 up to 8,361 lines recorded at the end of December 2023. The fixed telephone subscriptions per 100 people have also decreased up to 0.0617% as of December 2023 in comparison to 0.078% reported at the end of December 2022. The Figure 7 illustrates Trend of fixed telephone subscriptions and penetration rate.

Figure 7: Trend of fixed telephone subscriptions and penetration rate



<sup>&</sup>lt;sup>3</sup> Fixed telephone penetration rate (%) is computed with reference to the sum of active numbers of analogue-fixed telephone lines and VoIP over the Rwandan population as projected by National Institute of Statistics of Rwanda.

In the fourth quarter 2023, the market shares in fixed telephone subscriptions for Airtel Rwanda Ltd decreased by 1.3 percentage points to 77.3%, and that for Liquid Telecom Ltd declined by 0.1 percentage points to 7.5%. The market shares for BSC Ltd increased by 0.4 percentage points to 12.6% and that for MTN Rwandacell Plc have increased up to 2.6% in comparison to 1.6% for the publications of the 4<sup>th</sup> quarter of 2022.

AIRTEL RWANDA LTD

12.6%	12.2%
12.6%	12.2%
12.6%	12.6%
12.6%	12.6%
13.6%	12.6%
14.6%	12.2%
15.6%	12.2%
16.6%	16.6%
16.6%	16.6%
16.6%	16.6%
17.3%	77.3%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	78.6%
18.6%	7

Figure 8: Market share trends for fixed telephone subscriptions per operator as of Dec-2023

**Source: Operators' reports** 

## 3.2. Fixed telephone traffic

In the fourth quarter 2023, the total volume of minutes originating within operators by fixed telephone lines were 0.7 million minutes, the total minutes originating from one operator to other operators were 0.5 million minutes and the total minutes from Rwanda fixed telephone lines to international networks were 23,690 minutes. The number of minutes from international networks to local fixed telephone lines were 15,741 minutes.

Table 11: Outgoing mobile and fixed telephone incoming traffic as of 4th quarter 2023

Voice traffic	MTN Rwandacell Plc	Rwandacell Plc   Airtel Rwanda Ltd   Liquid Telecom Ltd   '		Total		
Outgoing minutes						
On net	493,324	293,952	460	787,736		
Off net	37,327	158,908	312,081	508,316		
International	7,949	30	15,711	23,690		
Incoming minutes						
International	15,095	181	466	15,741		

**Source: Operators' reports** 

# 3.3. Fixed telephone service tariff

In the fourth quarter 2023, the average tariff for calling by fixed telephone within telecom operator was 30 Frw, while calling across telecom operators was 36.7 Frw, and 196.1 Frw to call in One Area Network Countries.

Table 12: Fixed telephone service tariff structure (in Frw) per minute as of Q4 2023

Destination	Liquid Telecom Ltd	MTN Rwandacell Plc	Airtel Rwanda Ltd	Average
On net	10	45	35	30
Off net	30	45	35	36.7
One Area Network	408.28	90	90	196.1

## 4. INTERNET SERVICE PROVISION

## 4.1. Internet subscriptions<sup>4</sup>

As of December 2023, there were 9,277,634 active SIM cards connected to the internet within the last 90 days and 62,260 active fixed internet subscriptions were reported. The 48.4% of mobile internet subscriptions were detected on 2G network whereas the 28.2% and 23.4% were on 3G and 4G network respectively. The table below shows the internet subscriptions per operator and per technology.

Table 13: Internet subscriptions per category as of December 2023

Name of operators	Fixed in subscr		Mobile internet subscriptions		ptions	Total subscriptions	
Name of operators	Narrowband (<256kbps)	Broadband (≥256kbps)	GPRS&EDGE	3G	4G	per operator	
MTN Rwandacell Plc	85	10,350	2,572,037	1,941,780	1,229,657	5,753,909	
Airtel Rwanda Ltd		1,269	1,921,361	677,244	836,872	3,436,746	
Axiom Networks Ltd		147				147	
4NetAfrica Ltd		7				7	
BSC Ltd		3,407			16,991	20,398	
BCS Ltd		12				12	
Liquid Telecom Ltd		18,094				18,094	
CBNET Ltd		40			735	775	
G-Max Ltd		6			1,112	1,118	
ISCO ISP Ltd		22			540	562	
NET LINK Ltd		9			808	817	
Piramie INC		1			621	622	
Simba Supermarket					88	88	
KOPA Telecom		57			6,760	6,817	
BK Techouse		101			1,133	1,234	
FASTNET		10			4,034	4,044	
Mango Telecom Ltd		19			61,238	61,257	
RTN Ltd					1,667	1,667	
Smart Broadband Ltd		1			1,058	1,059	
TNSP		14			516	530	
NETPRO Ltd					1,382	1,382	
GVA Rwanda		25,161			_	25,161	
Starlink Rwanda Ltd		3,448			_	3,448	
<b>Total subscriptions</b>	85	62,175	4,493,398	2,619,024	2,165,212	9,339,894	
Subscriptions per 100 inhabitants	0.00	0.46	33.16	19.33	15.98	68.92	

<sup>&</sup>lt;sup>4</sup> Internet subscriptions combine the number of active SIM cards (mobile internet) connected to the internet at least once within 90 days and active fixed internet subscriptions.

During the quarter under review, the total number of internet subscriptions increased by 12.2% to reach 9.34 million from 8.327 million reported at the end of December 2022 whereas there was a decline of 0.1% in comparison to the Q3 2023 publications. The internet subscriptions per 100 inhabitants for December 2023 increased by 6.1 percentage points up to 68.92% as compared to December 2022.

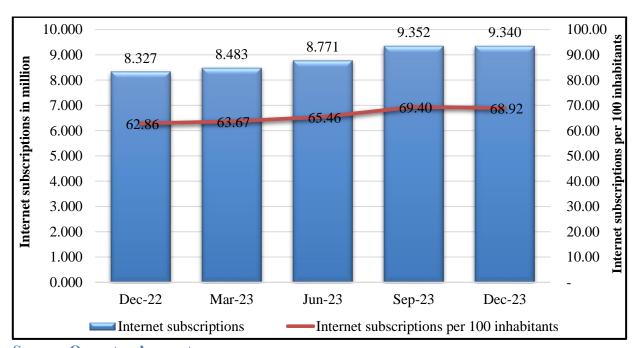


Figure 9: Trend of internet subscriptions and internet subscriptions per 100 inhabitants<sup>5</sup>

**Source: Operators' reports** 

During the fourth quarter 2023, the fixed internet subscriptions increased by 30.1% in comparison to the fourth quarter 2022 publications. The 99.9% out of all fixed internet subscriptions were subscribed to broadband speed which is greater or equal to 256 kbps as per ITU definitions.

Table 14: Fixed internet subscriptions by speed

Speed	Fixed internet subscriptions				
	December 2022	December 2023			
< 256 kbps	85	85			
[256 kbps-2Mbps [	1604	1425			
[2 Mbps -10 Mbps [	4772	5201			
[10 Mbps-30Mbps [	33660	18763			
[30 Mbps < 100Mbps [	6954	29083			
≥ 100 Mbps	782	7703			
Total	47,857	62,260			

<sup>&</sup>lt;sup>5</sup> Internet subscriptions per 100 inhabitants: This rate is the total internet subscriptions over the Rwandan population as projected by National Institute of Statistics of Rwanda.

During the fourth quarter 2023, the highest number of fixed internet subscriptions was connected to the fiber-to-the home/building, whereas the lowest fixed internet subscriptions are DSL technology. The decrease of DSL subscriptions was due some customers who shifted from DSL technology to fiber optic. The Figure 10 illustrates the distribution of fixed internet subscriptions per technology.

Fiber-to-the home/building

53,630

43,390

Terrestrial fixed wireless

DSL

98

3,480

32

Dec-22

Figure 10: Fixed internet subscriptions by technology

**Source: Operators' reports** 

## 4.2. International internet bandwidth

During the fourth quarter 2023, the total equipped international internet bandwidth available in the country was 328,384 Mbps whereas the average used internet bandwidth was 185,270 Mbps. The Figure below shows the trend of international internet bandwidth from Q4 2022 to Q4 2023.

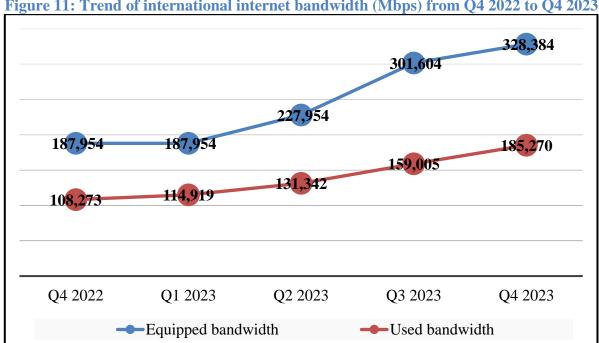
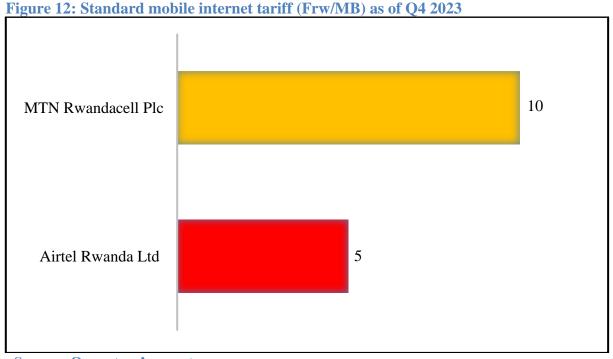


Figure 11: Trend of international internet bandwidth (Mbps) from Q4 2022 to Q4 2023

**Source: Operators' reports** 

#### 4.3. Mobile internet tariff

In the quarter under review, the standard tariff for mobile internet per MB was at 10 Frw on MTN Rwanda Ltd and 5 Frw on Airtel Rwanda Ltd networks.



## 5. EMPLOYMENT IN TELECOMMUNICATION SECTOR

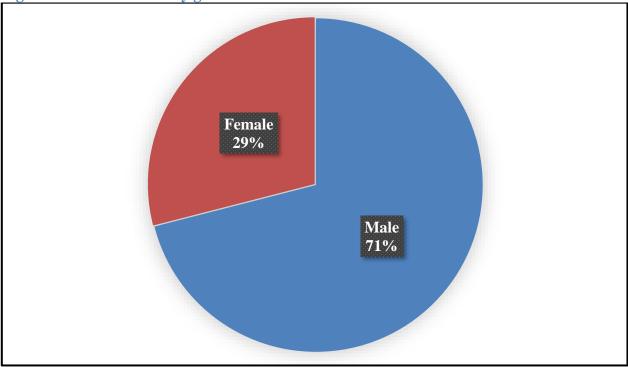
One thousand two hundred thirty-one (1,231) persons were employed in telecommunication sector at the end of December 2023; one thousand ninety-seven (1,097) are permanent staff whereas one hundred thirty-four (134) are temporary staff. There were also nine hundred thirty-five (935) outsourced staff employed by telecommunication sector. The table below illustrates the number of employed persons by operator.

Table 15: Number of staffs employed in telecommunication sectors as of December 2023

Operator	Тур	e of contract		Gend	ler	Domest foreign er		Outsou rced
	Temporary	Permanent	Total	Female	Male	Domestic	Foreign	staff
MTN Rwandacell Plc	5	336	341	120	221	335	6	660
Airtel Rwanda Ltd	0	120	120	23	97	117	3	188
Liquid Telecom Ltd	85	59	144	23	121	142	2	0
G-MAX	2	9	11	4	7	11	0	0
KOPA Telecom	1	19	20	6	14	20	0	0
Axiom Networks Ltd	0	22	22	6	16	20	2	0
4NetAfrica Ltd	0	2	2	1	1	2	0	0
TNSP	10	5	15	5	10	15	0	2
KTRN Ltd	0	98	98	13	85	95	3	0
Piramie INC	0	7	7	4	3	5	2	2
BSC Ltd	20	83	103	25	78	103	0	0
BCS Ltd	0	1	1	0	1	1	0	0
AC Group Ltd	0	74	74	20	54	74	0	0
FASTNET	1	8	9	3	6	9	0	2
ISCO ISP Ltd	0	4	4	1	3	4	0	0
SIMBA Supermarket	0	3	3	0	3	3	0	0
BK Techouse	4	40	44	7	37	43	1	0
Mango Telecom Ltd	0	108	108	63	45	107	1	0
NET LINK LTD	0	10	10	3	7	9	1	0
CBNET Ltd	2	1	3	1	2	3	0	0
RTN	0	20	20	7	13	20	0	0
Smart Broadband Ltd	0	2	2	0	2	2	0	0
NETPRO LTD	0	5	5	3	2	5	0	0
GVA Rwanda	4	61	65	19	46	64	1	81
Total	134	1,097	1,231	357	874	1,209	22	935

As of December 2023, three hundred fifty-seven (357) staff representing 29% of the total staff are female whereas the 71% are male as shown in the figure below. The four hundred seventy-seven (477) representing 51.0% percent of the total outsourced staff are female.





#### 6. MEDIA AND BROADCASTING

The section displays the cumulative number of licensed Television Stations, FM Radio Broadcasters, Online Media Houses, Pay TV operators, print media houses, International media houses, and Signal Distributors up to the end of December of the year 2023. It also includes the Pay TV subscriptions, decoders sold and employed persons by Pay TV operators.

## 6.1. Licensed media operators

As of December 2023, there was one (1) licensed signal distributor, four (4) pay TV operators, twenty-nine (29) FM radio stations, nineteen (19) television stations, fifteen (15) online media houses, nine (9) print media houses, and five (5) international media houses.

Table 16: Trends of Licensed media operators from December 2022 to December 2023

Category	Dec-2022	Mar-2023	June-2023	Sep-2023	Dec-2023
Signal distributors	1	1	1	1	1
Pay TV operators	4	4	4	4	4
FM Radio stations	29	29	29	29	29
Television stations	19	20	20	17	19
Online media houses	14	14	14	15	15
Print media houses	9	9	9	9	9
International media houses	2	2	2	5	5

Source: RURA database

## 6.2. Pay TV subscriptions

Registered Pay TV subscribers recorded at the end of the fourth quarter of the year 2023 were 539,624 whereas the active subscribers were 136,452.

Table 17: Number of Pay TV subscribers as of December 2023

Name of Pay TV	Registered subscribers	Active <sup>6</sup> subscribers
Azam Media Rwanda Ltd	14,682	1,453
Star Africa Media Ltd	349,191	25,992
Tele 10 Ltd	8,896	8,410
Canal+ Rwanda Ltd	166,855	100,597
Total	539,624	136,452

<sup>&</sup>lt;sup>6</sup> Active subscribers are the customers that generated revenues to the Pay TV operators during the reporting period.

During the quarter under review, the market shares for Canal+ Rwanda Ltd in active Pay TV subscriptions were 74%, 19% for Star Africa Media Ltd, 6% for Tele 10 Ltd and 1% for Azam Media Rwanda Ltd.

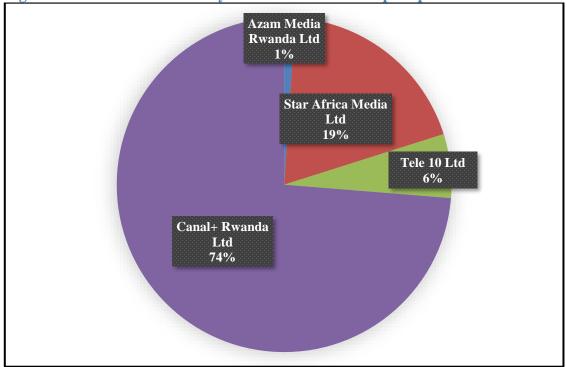


Figure 14: Market share for Pay TV active subscribers per operator as of December 2023

**Source: Operators' reports** 

#### 6.3. Decoders sold

During the fourth quarter of the year 2023, the number of decoders sold by Pay TV operators increased by 10.4% to twenty-seven thousand eight hundred forty-five (27,845) as compared to twenty-five thousand two hundred thirty (25,230) reported at the end of Q3 2023.

Table 18: Trend of decoders sold from 4th quarter 2022 to 4th quarter of 2023

<b>Number of Decoders Sold</b>	Q4 2022	Q1 2023	Q2 2023	Q3 2023	Q4 2023
Azam Media Rwanda Ltd	63	45	30	33	20
Star Africa Media Ltd	5,339	2,823	4,713	7,082	4,445
Tele 10 Ltd	1,914	231	2,631	6,220	4,290
Canal+ Rwanda Ltd	26,032	11,414	11,707	11,895	19,090
Total	33,348	14,513	19,081	25,230	27,845

## 6.4. Pay TV staff

The total number of persons employed by Pay TV operators as of December 2023 was one hundred seventy-eight (178) of which 57.3% are employed by Star Africa Media Ltd, 32.6% by Canal+ Rwanda Ltd, 8.4% by Tele 10 Ltd and 1.7% are employed by Azam Media Rwanda Ltd. The seventy (70) staffs representing 39.3% of the total staff are female.

Table 19: Number of staffs employed by Pay TV operators as of December 2023

Operator	Staff per type of contract			Staff j gend		Domesti foreign en	
	Temporary Permanent Total			Female	Male	Domestic	Foreign
Azam Media Rwanda Ltd	0	3	3	1	2	2	1
Star Africa Media Ltd	0	102	102	33	69	95	7
Tele 10 Ltd	0	15	15	6	9	15	0
Canal+ Rwanda Ltd	15	43	58	30	28	52	6
Total	15	163	178	70	108	164	14