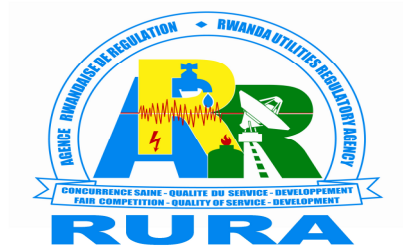


REPUBLIC OF RWANDA



RWANDA UTILITIES REGULATORY AGENCY

**STATISTICS AND TARIFF INFORMATION
IN TELECOM SECTOR AS OF DECEMBER
2011**

CONTENTS

1. MOBILE AND FIXED TELEPHONE SERVICE	3
1.1. SUBSCRIPTIONS, MARKET SHARE EVOLUTION AND COVERAGE	3
1.2. TARIFF STRUCTURE	5
1.3. TRAFFIC STATISTICS	7
2. INTERNET SERVICE PROVISION	9
2.1. BROADBAND INTERNET SUBSCRIBERS	11
2.2. BROADBAND INTERNET MARKET SHARE	11
2.3. INTERNATIONAL INTERNET BANDWIDTH	12
3. EMPLOYMENT IN TELECOM SECTOR	12
4. TELECOM REVENUES AND INVESTMENTS FOR THE FOURTH QUARTER 2011	13

LIST OF TABLES

Table 1: Number of mobile and fixed telephone service subscribers per operator	3
Table 2: Mobile telephone network coverage as of December 2011per type of coverage and per operator	5
Table 3. Evolution of the volume of terminated telephone calls for the Year 2011 in minutes per type of call.....	8
Table 4. Licensed internet service providers as of December 2011.....	10
Table 5. Internet subscribers per category per operator.....	11
Table 6. International internet bandwidth per operator as of December 2011	12
Table 7. Employment status in telecom sector as of September 2011.....	12
Table 8:Total revenues and investments from telecom sector as of September 2011	13

LIST OF FIGURES

Figure 1: Development of the subscriber base per type of telephone service for the period 2002 - 2011.....	4
Figure 2: Evolution of the number of postpaid and prepaid mobile subscribers per operator for the Year 2011	4
Figure 3: Evolution of mobile telephone service market share per operator for the last three quarters.	5
Figure 4. Evolution of mobile telephone voice and sms tariff structure per operator for the period October to December 2011.....	6
Figure 5: Per minute fixed line tariff as of December 2011 (in RWF).....	7
Figure 6: Evolution of the voice traffic market share per operator and per type of call for the last three quarters of year 2011	8
Figure 7: Evolution of the market structure on international voice traffic for the last three quarters of year 2011.....	9
Figure 8. Total outgoing traffic market share for year ended 2011.....	9
Figure 9. Development of the internet penetration rates.....	10
Figure 10. Evolution of fixed broadband market share for the last two quarters.....	11

1. MOBILE AND FIXED TELEPHONE SERVICE

1.1. SUBSCRIPTIONS, MARKET SHARE EVOLUTION AND COVERAGE

As of December 2011, the major players in mobile telephony included MTN Rwandacell and TIGO Rwanda Ltd and the penetration rate continues to increase while the fixed telephone subscriptions growth remains stagnant with a decreasing trend as compared to last quarter status. Below is the status as of December 2011.

Table 1: Number of mobile and fixed telephone service subscribers per operator

Operators	Active subscribers		Fixed Teledensity	Mobile Teledensity	General teledensity
	Mobile Active subscribers	Fixed Telephony			
MTN Rwanda	2,892,827	10,014	0.36%	41.5%	41.86%
TIGO Rwanda	1,553,367				
RWANDATEL	-	28,887			
Total	4,446,194	38,901			

Table above indicates that mobile penetration rate reached **41.6%** as of December 2011 against 40.2% in September 2011 representing 3.4% increase as compared to the third quarter of year 2011 and 25% increase as compared to December 2010.

The overall target for mobile telephony by the end of 2011 which was 3,730,102 was already exceeded by 19%.

The number of subscribers on fixed network on the other hand slightly decreased in December 2011 to 38,901 down from 39,664 in December 2010. This makes a 2% decrease as compared to the previous year. The decrease was mainly due to Rwandatel decreasing number of subscribers to the fixed telephone network. It is also important to notice that until December 2011, TIGO does not have any subscriber on its fixed network. The figures 1,2 and 3 below visualize the trend in

subscription for both the fixed and mobile telephone services from 2002 to 2011, the evolution of prepaid and postpaid subscribers and the market share.

Figure 1: Development of the subscriber base per type of telephone service for the period 2002 - 2011.

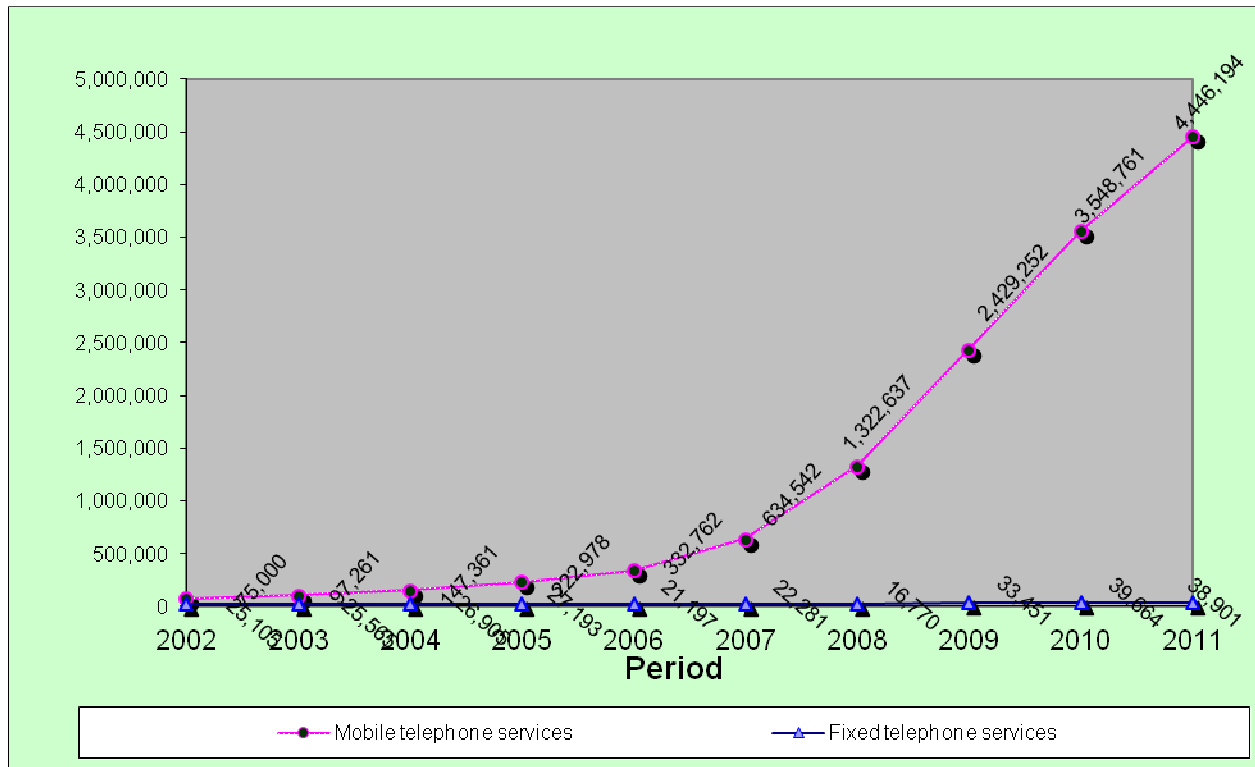
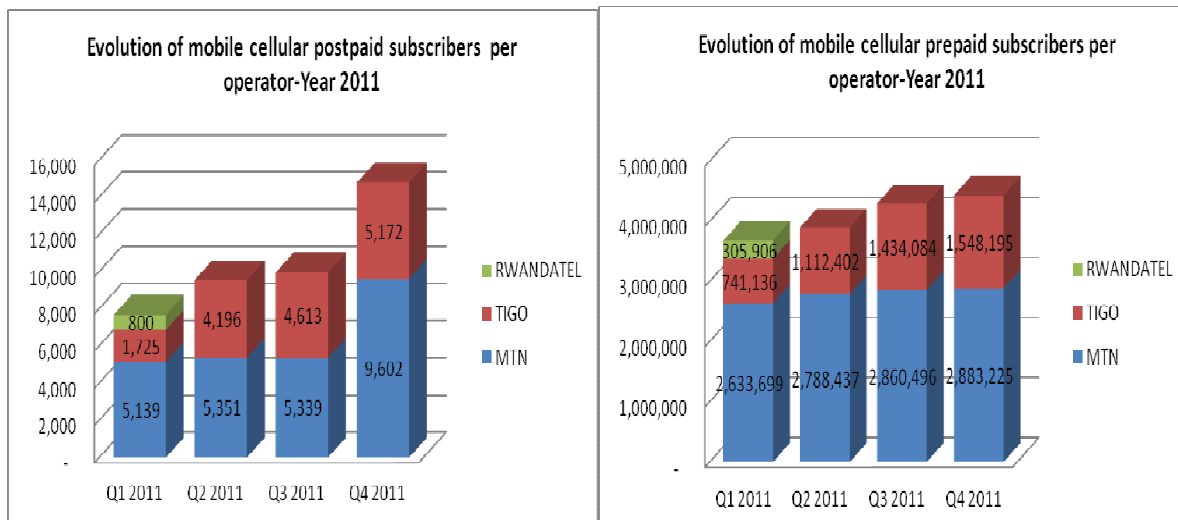


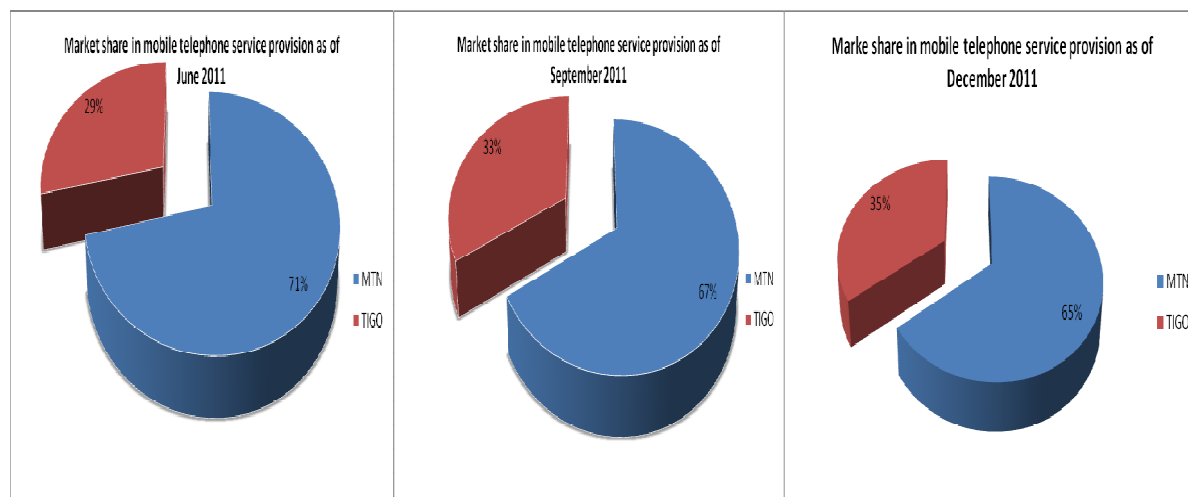
Figure 2: Evolution of the number of postpaid and prepaid mobile subscribers per operator for the Year 2011



In all cases prepaid subscribers represent more than 99.5% of the total subscribers as depicted from the above graphs. However, it can be noticed that postpaid subscribers increased significantly

during the last quarter of the year 2011 mainly due to an 80% increase of MTN postpaid subscribers during the same quarter

Figure 3: Evolution of mobile telephone service market share per operator for the last three quarters.



MTN Rwanda is still leading in mobile subscribers with 65% of the market share followed by Tigo which has 35%. However, the market share of MTN has been decreasing for past three quarters in favor of TIGO. The coverage for each network is depicted from the table below:

Table 2: Mobile telephone network coverage as of December 2011 per type of coverage and per operator

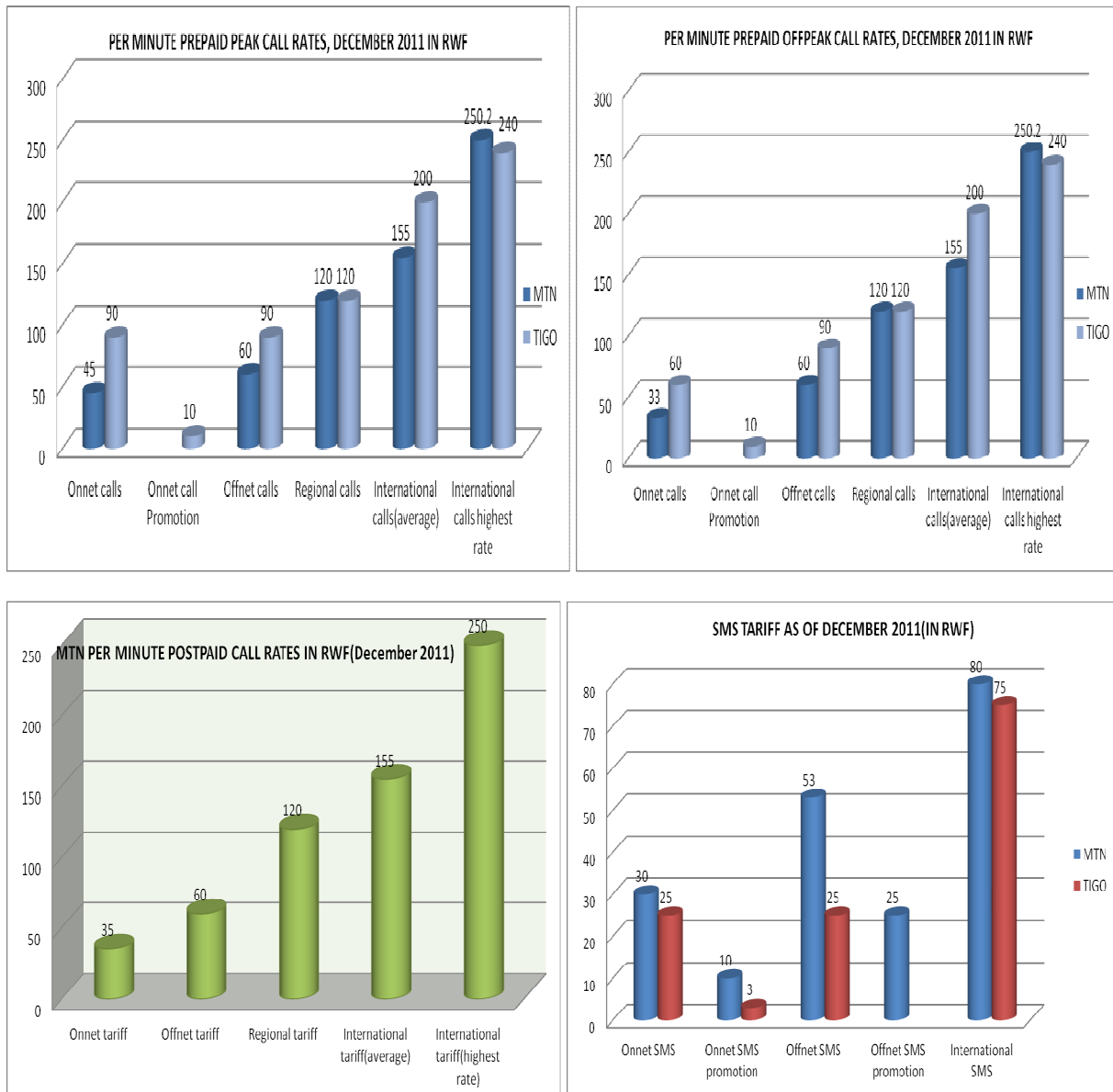
	Geographical coverage	Population coverage
MTN Rwanda	97.87%	97.32%
TIGO	72.94%	92.38%

1.2. TARIFF STRUCTURE

a) Mobile telephone Network

In general, the tariffs for mobile telephone calls remained stable from January to September 2011 as described below ;

Figure 4. Evolution of mobile telephone voice and sms tariff structure per operator for the period October to December 2011



The above figures indicate the following:

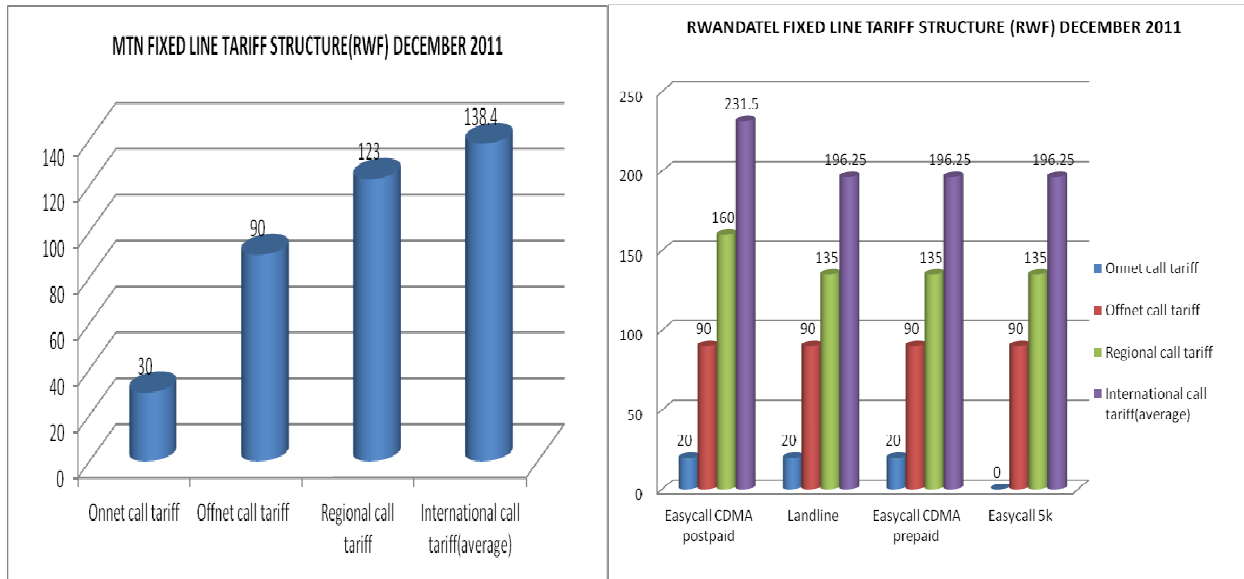
- TIGO is the cheapest in terms of international calls when considering the highest international rate. However, MTN emerge as the cheapest when considering the average tariff for all international destinations.
- TIGO continues to be the more expensive in terms of normal tariff for both onnet and offnet tariff, though the onnet tariff has never been applied due to the ongoing promotional tariff of Rwf 10.

- Following the recent interconnection rates review by RURA, MTN has subsequently reduced its retail offnet tariff from Rwf 90 to Rwf 60 per minute for prepaid customers and from 126 Rwf to 60 Rwf for postpaid customers, that is a 33% and 52% reduction for prepaid and postpaid customers respectively.
- TIGO is still the cheapest in terms of both normal tariff and also promotional tariff on onnet sms (10 Rwf for MTN and 3Rwf for TIGO)

b) Fixed telephone network

Rwandatel is the active telecom operator in terms of fixed line voice services. Below is the tariff structure for fixed line telephone as of December 2011.

Figure 5: Per minute fixed line tariff as of December 2011 (in RWF)



Rwandatel is 33% cheaper than MTN in terms of fixed onnet calls. However, MTN is cheaper in terms of international fixed calls when considering the average tariff for all international destinations.

1.3. TRAFFIC STATISTICS

a) Total outgoing mobile calls(in minutes) and quarterly traffic market share

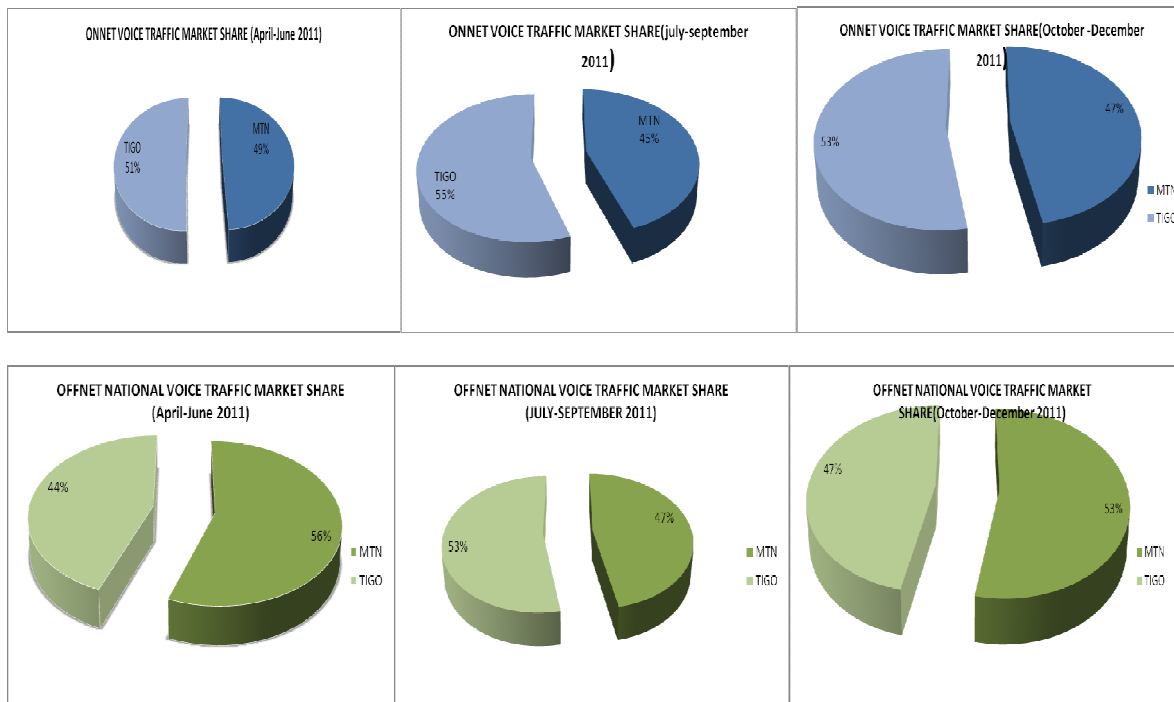
The table below indicates the actual total number of minutes terminated within the last three quarters:

Table 3. Evolution of the volume of terminated telephone calls for the Year 2011 in minutes per type of call.

	January-March 2011	April-June 2011	July-September 2011	October-December 2011	Total Traffic-Year 2011
Onnet calls	853,336,641	1,120,575,265	1,079,260,126	1,138,861,688	4,192,033,720
Offnet calls	10,335,887	8,589,012	11,185,090	11,892,467	42,002,456
International calls	20,795,085	20,337,417	23,040,564	35,664,450	99,837,516

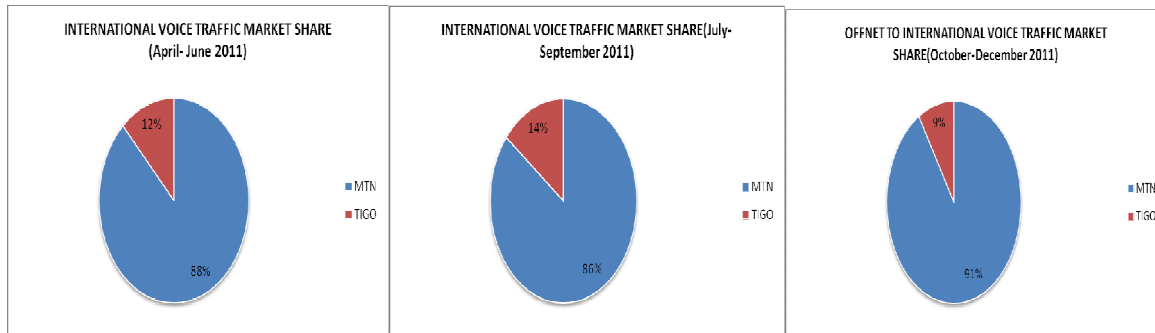
The fourth quarter of year 2011 experienced an increase of outgoing traffic at a proportion of 6% and 6% and 55% for onnet, offnet and international calls respectively. The voice traffic market share for the last two quarters is illustrated hereunder:

Figure 6: Evolution of the voice traffic market share per operator and per type of call for the last three quarters of year 2011



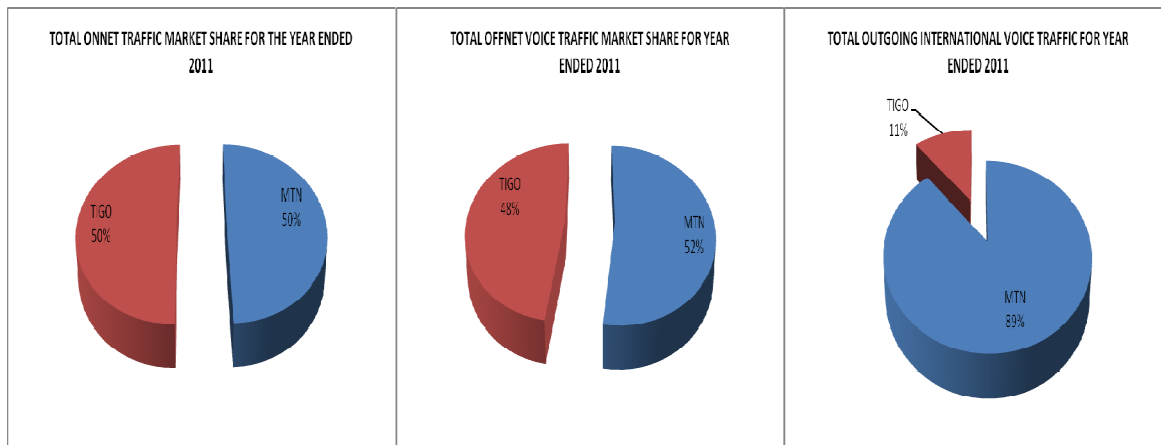
Though still with a bigger share for onnet traffic, TIGO market share decreased from 55% to 53% in favor of MTN from Q3 to Q4 2011. Similarly, during the same quarter MTN has gained 53% market share for offnet calls and this can be partly attributed to the recent decrease in MTN offnet per minute call rates by 33% subsequent to the last year wholesale price reduction.

Figure 7: Evolution of the market structure on international voice traffic for the last three quarters of year 2011.



Though TIGO is the cheapest in terms of international calls, the above figures indicate that MTN is still dominant in terms of international calls volumes with 91% traffic market share which might be partly attributed to the bigger number of MTN subscribers.

Figure 8. Total outgoing traffic market share for year ended 2011



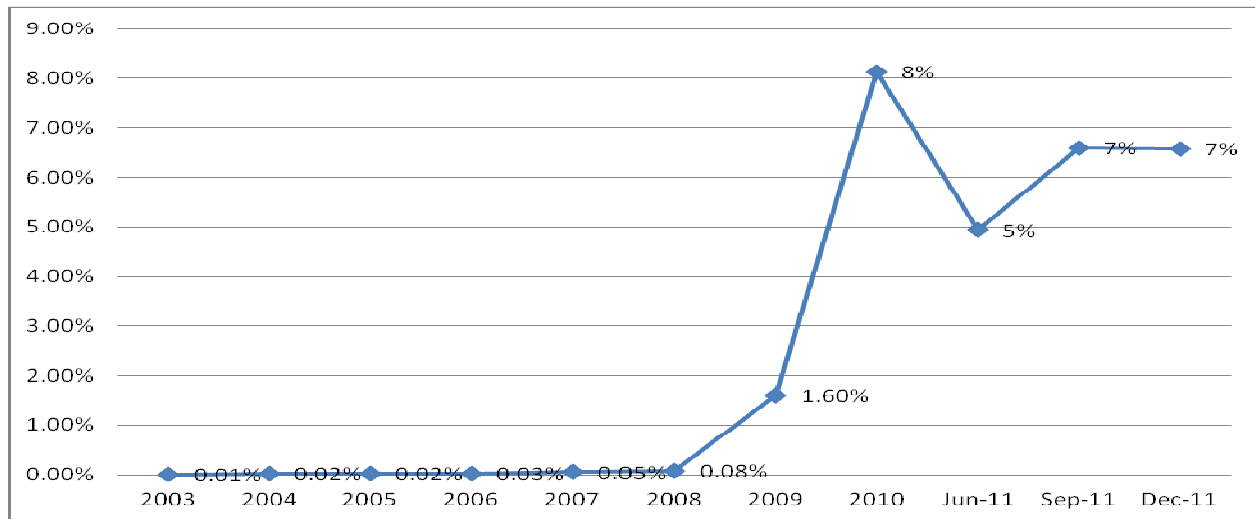
2. INTERNET SERVICE PROVISION

There are eleven (11) licensed Internet Service Providers across the country including National telecommunication service operators (fixed and mobile). The table below is a list of all the operators providing Internet Services (ISPs) as well as the internet penetration trend since 2003.

Table 4. Licensed internet service providers as of December 2011

ISPs	LICENSED FROM(Year)	STATUS
MTN Rwandacell S.A.R.L	2006	Operational
RWANDATEL S.A	2008	Operational
TIGO Rwanda S.A	2008	Operational
New Artel	2004	Operational
ISPA	2006	Operational
Altech Stream	2007	Operational
AUGERE	2008	Not yet Operational
4G NETWORKS	2009	Not yet Operational
BSC	2010	Operational
4G Rwanda	2011	Not yet Operational
AIRTEL	2011	Not yet Operational

Figure 9. Development of the internet penetration rates



2.1. BROADBAND INTERNET SUBSCRIBERS

The table below illustrates the breakdown of internet subscribers per category and per operator:

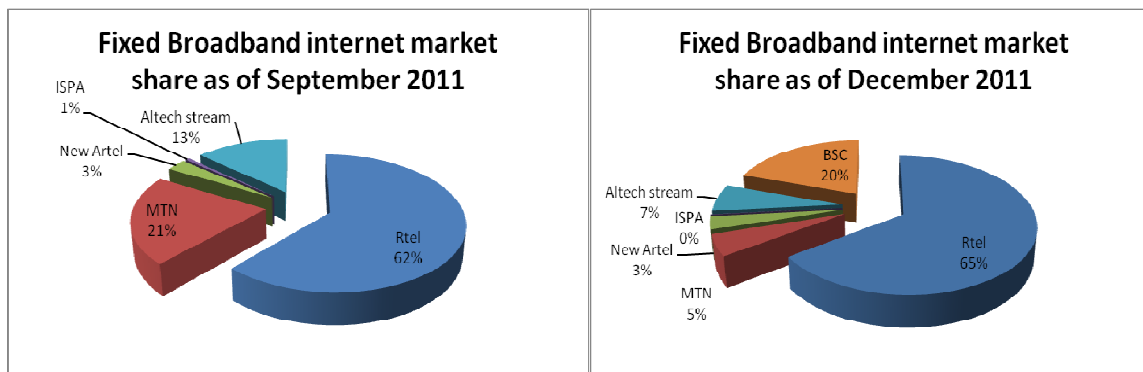
Table 5. Internet subscribers per category per operator

	Fixed internet		Mobile internet	Total
	Narrowband(≤ 256 kbps)	Broadband(≥ 256 kbps)		
RWANDATEL	474	2,383	0	2,857
MTN	584	185	504,186	504,955
TIGO	0	0	196,355	196,355
New Artel	0	114		114
ISPA	58	2		60
Altech stream	227	239		466
BSC	0	728		728
	1,343	3,651	700,541	705,535

2.2. BROADBAND INTERNET MARKET SHARE

The figures below compare broadband market shares in terms of subscribers for the last two quarters:

Figure 10. Evolution of fixed broadband market share for the last two quarters



2.3. INTERNATIONAL INTERNET BANDWIDTH

Below is the international bandwidth per operator as of December 2011

Table 6. International internet bandwidth per operator as of December 2011

Type	MTN Rwanda	Rwandatel	NEW ARTEL	ALTECH STREAM	TIGO RWANDA	ISPA	BSC
Uplink	775 Mbps	43 Mbps	155Mbps	313Mbps	67.5 Mbps	4 Mbps	300 Mbps
Downlink	775 Mbps	100 Mbps	155 Mbps	322 Mbps	67.5Mbps	4 Mbps	300 Mbps

3.EMPLOYMENT IN TELECOM SECTOR

Below is the employment status per operator in telecommunication sector as of December 2011:

Table 7. Employment status in telecom sector as of December 2011

	MTN	RWANDATEL	TIGO	ALTECH STREAM	NEW ARTEL	ISPA	BSC	Total
Total staff	327	231	149	13	50	11	59	840
Of which Female	78	38	24	3	4	2	14	163
Foreign staff	2	2	15	1	1	1	6	28

From the above table, the following are the observations:

- The total staff employed in telecom sector (7 operating ISPs) as of December 2011 amounts to **840** of which 39%, 28%, 18%, 2%, 6%, 1% and 7% are employed in MTN, Rwandatel, TIGO, Altech Stream, New Artel, ISPA and BSC respectively.
- **163** representing **19%** of the overall total staff are female whereas 24%, 16%, 16%, 23%, 8%, 18% and 24% are percentages of female staff out of the total employees in MTN, Rwandatel, TIGO, Altech Stream, New Artel, ISPA and BSC respectively.
- **28** staff representing **3%** of the total staff are foreign.

4. TELECOM REVENUES AND INVESTMENTS FOR THE FOURTH QUARTER 2011

Below are the non audited figures for revenues and investment for the last three quarters of the year 2011 for the three national telecom operators:

Table 8: Total revenues and investments from the three telecom operators for the year ended 2011

	Quarterly revenues in Rwf				Cumulative revenues and Investments in Rwf
	March 2011	June 2011	September 2011	December 2011	
Quarterly revenue in Rwf	21,783,030,208	23,529,232,253	27,351,717,632	26,391,498,684	99,055,478,777
Quarterly investments in Rwf	4,531,296,934	5,027,915,091	7,371,202,358	11,193,870,441	28,124,284,824