РЕПУБЛИКА МАКЕДОНИЈА
АГЕНЦИЈА ЗА ЕЛЕКТРОНСКИ КОМУНИКАЦИИ

Report on development of the Electronic communication market Quarter 4

2013

Content:

Contents

1. Introduction 6
1.1 Main indicators for electronic communication market development in the forth quarter of 2013 ..8
2. Fixed telephony 10
2.1 Total number of fixed lines 13
2.2 Total outgoing traffic (minutes) and total number of outgoing calls 14
2.3 Total volume of traffic (minutes) carrier selection and carrier pre-selection 14
2.4 Total traffic (minutes) terminating in the fixed networks and total traffic that transits through the network at a fixed location 14
3. Mobile telephony 20
3.1 Number of active subscribers 22
3.2 Market share according to subcribers 24
3.3 Types of subscribers and average number of initiated calls and minutes per subscriber 25
3.4 Total outgoing telephone traffic 26
3.5 Sent SMS and MMS 30
4. Access to Internet 33
5. Transmission of radio and TV services to end-users 39
6. Leased lines 42
8. Number portability 44
9. Bundled services 47
10. Notified operators/service providers 50

Charts

Chart 1 Notified and active operators/service providers (state December 31, 2013) 7
Chart 2 Number of fixed lines and changes of the indicator of number of fixed lines per 100 inhabitants 15
Chart 3 Fixed line market share (state December 31, 2013) 16
Chart 4 Average number of outgoing calls per subscriber (monthly) from public fixed telephony networks in the forth quarter of 2013 17
Chart 5 Average volume of outgoing traffic (in minutes) per subscriber from public fixed telephony network in the forth quarter of 2013 18
Chart 6 Number of active mobile subscribers and indicator for numer of active subscribers by population 100 22
Chart 7 Market share of mobile operators by subscribers in fourth quarter 2013 23

Chart 8 Market share of income of operators providing mobile communication services (retail level) in the fourth quarter of 2013 24
Chart 9arket share of income of operators providing mobile communication services (retail level) in the fourth quarter of 2013 25
Chart 10Ratio of pre-paid and post-paid subscribers by quarters in 2012 and 2013 25
Chart 11 Volume of outgoing traffic (in thousands of minutes) initiated by public mobile communication networks by quarters in 2012 and 2013 26
Chart 12 Share by volume of realized outgoing traffic (total realized minutes) (%) (state on Desember 31, 2013) 27
Chart 13 Average amount of outgoing traffic (in minutes per month) per subscriber initiated by a public mobile communications network for the fourth and third quarter of 2013 and fourth quarter of 2012 28
Chart 14 Average numbers of calls (per month) per subscriber initiated in the public mobile telephone network for the fourth and third quarter of 2013 and fourth quarter of 2012 29
Chart 15 Share in the total number of sent SMS messages in the forth quarter of 2013 30
Chart 16 Share in the total number of sent MMS messages in the forth quarter of 2013 30
Chart 17 Market share of revenues per operator from providing mobile communication services (wholesale) in the forth quarter of 2013 32
Chart 18 Broadband technology market share 4Q/2014 37
Chart 19 Market share according to the number of active fixed broadband subscribers per operator on 31.12.2013 38
Chart 20 Transmission of TV services to end-users, state in the forth quarter of 2013 41
Chart 21 Market share by operators on broadcasting market , state in the forth quarter of 2013 41
Chart 22 Number portability (fixed and mobile) period from 31st of March 2011until 31st of December 2013 44
Chart 23 Market share in total number of number portability in fixed networks (as of 31.12.2013 година) 45
Chart 24 Market share in total number of number portability in mobile networks (as of 31.12.2013 година) 45
Chart 25 Proportion of single and bundle service subscribers (as of 31.12.2013) 47
Chart 26 Market share per operator according to the number of subscribers who use bundled services (two services) in the forth quarter of 2013 48
Chart 27 Market share per operator according to the number of subscribers who use bundled services (three services) in the forth quarter of 2013 49

Tables

Table 1 List of services for notification of firms 6
Table 2 Main indicators for electronic communication market development in the forth quarter of 2013 8
Table 3 Indicators- Access to public telephony network at fixed location and publicly available local, national and international calls at fixed locations * 11
Table 4 Market share of alternative operators / service providers in regards to fixed lines (state 31st of December, 2013) 16
Table 5 Average duration of subscriber initiated call (in seconds) in quarters for 2013 and 2012 19
Table 6 Indicators – mobile telephony 20
Table 7Average duration of conversations per subscriber (in minutes) individually per operator 29

Table 8 Indicator-Wholesale 31
Table 9 Indicators- Access to narrowband and broadband Internet * 35
Table 10 Indicators – Number of active broadband subscribers by speed for 4Q/2013 37
Table 11 Indicators- Transmission of radio and TV services to end-users 40
Table 12 Indicator- Leased lines* 43
Table 13 Indicators– Number of leased lines in a wholesale level* 43
Table 14 Indicators – Bundled services 47

This report is of an informal nature. The same is based on regularly collected information and financial data submitted each three months in the Agency for electronic communication in a form of quarter reports for provision of relevant services pursuant to the Guidelines for provision of information and financial data for market analysis adopted by the Commision as a body of the Agency on 03.09.2013. In the report the indicators are present that are relating exclusively on the status of the market in the stated quarter. The AEC does not take responsibility for the quality of the report with data received by the operators/service providers. In certain cases the AEC may not determine the irregularities in the reports/data until it makes comparison of more successive quarters. Therefore the AEC would like to note that in all tables small variations from the real data are possible.

1. Introduction

The report on the development of the electronic communications market is based on the information and data of the quarterly reports submitted by the public communications network operators and by the providers of public communications services in a form of quarter reports as per the Rulebook on providing information and financial data for market analysis no. 1303-1495/2of 03.09.2013, as well as other data at disposal to the Agency for Electronic Communications (hereinafter: AEC).

According to the official records of AEC on notified and active providers on the market for electronic communications in Republic of Macedonia in 4Q/2013, the following information is available:

Table 1 List of services for notification of firms

Notified services		
S1	Providing of public available telephone services on fixed location for national and/or international traffic	
	Notified -48	**Active – 39**
S2	Providing of public available telephone services on public mobile communication network for national and/or international traffic	
	Notified – 10	**Active - 4**
S3	Services for transmission or routing of national and/or international traffic	
	Notified – 20	**Active – 17**
S4	Services for data transmission for narrowband or broadband access to Internet (bit speed ≥ 256 kbit/s)	
	Notified – 127	**Active - 111**
S5	Services related to radio-diffusion, as: transmission of terrestrial radio broadcasting services, transmission of terrestrial TV broadcasting services, reemission of broadcasting of radio content services, reemission of broadcasting of TV content services	
	Notified – 84	**Active - 82**
S6	Services of renting of public electronic communication network, such as leased lines	
	Notified – 29	**Active - 27**
S7	Other services	
	Notified – 19	**Active – 16**

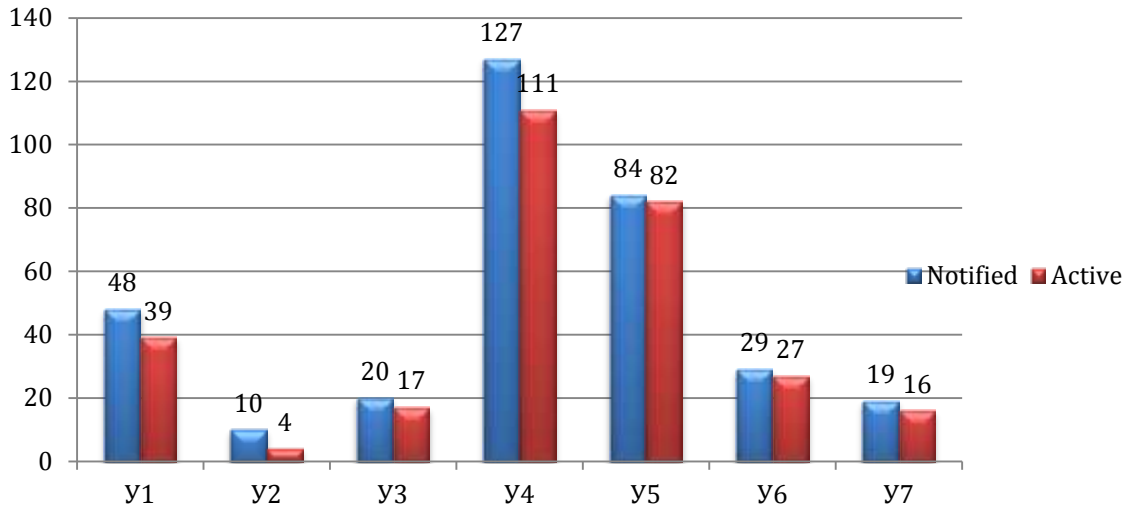


Chart 1 Notified and active operators/service providers (state December 31, 2013)

1.1 Main indicators for electronic communication market development in the forth quarter of 2013

Table 2 Main indicators for electronic communication market development in the forth quarter of 2013

	Indicator	Q4 2013	Q3 2013	Change (%)	Q4 2012	Change (%)
1.	Total numberof fixed lines	396,523	399,379	-0.72%	408,318	-2.89%
2.	Total numberof fixed lines per population	19.22	19.38	-0.83%	19.82	-3.03%
3.	Total number of mobile subsribers	2,237,250	2,276,379	-1.72%	2,235,460	0.08%
4.	Total number of broadband internet subscribers over fix network	108.48	110.51	-1.84%	108.52	-0.04%
5.	Total number of broadband internet subscribers over mobile network	338,486	330,798	2.32%	312,272	8.39%
6	Total number of narowband internet subsrcibers over mobile network (2G/3G)	801,669	807,810	-0.76%	766,522	4.59%
7	Total number of subscribers of TV services	339,923	333,786	1.84%	/	/

Table 2 presents the main indicators for the electronic communications market of Republic of Macedonia, the forth quarter and third quarter of 2013, as well the changes expressed as percentage points.

The value of the indicators on number of active subscribers per 100 inhabitants, displayed in table 2 for 4Q2012 and 3Q2013 are calculated based on the estimation of number of population of

2.059.794 in accordance with official data from the State Statistics Office, reference date 31.12.2011, while for quaret 4 of 2013 they are calculated in accordance with the estimate from 31.12.2012, which is 2.062.294 inhabitants.

In order to present the numbers of active lines of subscribers of particular importance is the definition of active subscribers especially for the period relevant for defining the active subscriber which is in a frame from 3 to 12 months. Throughout the whole report, the data for active lines/subscribers refers to active subscribers who have initiated some electronic communications service in the last three months. The definitions for active subscribers of the respective service are provided in the Rulebook on providing information and data for market analysis..

2. Fixed telephony

Of the 48 notified entities in the official record of AEC as of the forth quarter of 2013, 39 entities were providing public telephony services available at a fixed location for national and/or international traffic, as follows:

1. Macedonian Telecom -Skopje,
2. ONE-Skopje,
3. Blizoo- Skopje ,
4. Aikol -Stip,
5. Neotel -Skopje,
6. Infel Net Plus Skopje,
7. T-Mobile- Skopje,
8. Akton -Skopje,
9. PC4all-Skopje,
10. Tuse-Ohrid,
11. Inside- Ohrid,
12. Netplus-Ohrid,
13. Triocompany-Ohrid,
14. Staelt -Prilep,
15. Spajder Kompjuteri - Struga,
16. Alban Net-Debar,
17. Memtel-Resen,
18. Pejoski Sped- Kicevo,
19. Media Net Kompjuters- Kocani,
20. Kompjunet Inzinering- Makedonska Kamenica,
21. M- Inzinering- Stip,
22. Netplus Komunikacii- Skopje,
23. Dip Blue Plus-Prilep,
24. Stork Impeks- Skopje,
25. Arista Sistemi- Strumica,
26. Ibo Konekcion- Prilep,
27. Pegaz Press-Skopje,
28. Istel- Skopje.
29. Hometal - Skopje,
30. Pantel International- Skopje,
31. GIV Ivan- Gostivar,
32. Net Cable-Strumica,
33. Telesmart Telecom- Skopje,
34. Mobile Connect Telecom -Skopje,
35. Mobik Telecommunicacii - Skopje,
36. Vin Sat Vinica,
37. Altar Sat- Ohrid,
38. Sanet Kabelsat- Strumica,
39. Net Connect -Skopje.

Table 3 Indicators- Access to public telephony network at fixed location and publicly available local, national and international calls at fixed locations *

Indicators		Q4 2013	Q3 2013	Change (%)	Q4 2012	Change (%)
1.	Total numbers of fixed lines	396,523	399,379	-0.72%	408,318	-2.89%
-residential		354,523	356,765	-0.63%	364,912	-2.85%
-business		42,000	42,614	-1.44%	43,406	-3.24%
2.	Fixed lines by technologies	396,523	399,379	-0.72%	408,318	-2.89%
2.1.	PSTN	23,810	60,570	-60.69%	129,436	-81.60%
-residential		21,964	50,096	-56.16%	109,045	-79.86%
-business		1,846	10,474	-82.38%	20,391	-90.95%
2.2.	ISDN	318	5,064	-93.72%	8,995	-96.46%
-residential		0	95	-100.00%	285	-100.00%
-business		318	4,969	-93.60%	8,710	-96.35%
2.2.1.	ISDN BRA	240	4,710	-94.90%	8,632	-97.22%
-residential		0	95	-100.00%	285	-100.00%
-business		240	4,615	-94.80%	8,347	-97.12%
2.2.2.	ISDN PRA	78	354	-77.97%	363	-78.51%
-business		78	354	-77.97%	363	-78.51%
2.3	Coper (VoIP)	244,451	207,820	17.63%	150,913	61.98%
-residential		211,626	187,315	12.98%	142,636	48.37%
-business		32,825	20,505	60.08%	8,277	296.58%
2.4.	Wireless lines	33,730	34,337	-1.77%	35,715	-5.56%
-residential		32,413	33,138	-2.19%	34,702	-6.60%
-business		1,317	1,199	9.84%	1,013	30.01%
2.4.1	WiMax (VoIP)	691	684	1.02%	655	5.50%
-residential		399	407	-1.97%	604	-33.94%
-business		292	277	5.42%	51	472.55%
2.4.2	Calls to mobile networks	32,687	33,318	-1.89%	34,736	-5.90%
-residential		31,731	32,462	-2.25%	33,835	-6.22%
-дebusiness		956	856	11.68%	901	6.10%
2.4.3	Wi-Fi (VoIP)	352	335	5.07%	324	8.64%
-residential		283	269	5.20%	263	7.60%
-business		69	66	4.55%	61	13.11%
2.5.	Lines through coahial network (VoIP)	52,208	50,484	3.41%	47,604	9.67%
-residential		49,464	47,735	3.62%	45,006	9.91%
-business		2,744	2,749	-0.18%	2,598	5.62%
2.6	LAN (VoIP)	30,330	30,582	-0.82%	28,120	7.86%
-residential		28,965	29,203	-0.81%	26,516	9.24%
-business		1,365	1,379	-1.02%	1,604	-14.90%

Indicator		Q4 2013	Q3 2013	Change (%)	Q4 2012	Change (%)
2.7	FTTx (VoIP)	11,676	10,522	10.97%	7,535	54.96%
-residential		10,091	9,183	9.89%	6,722	50.12%
-business		1,585	1,339	18.37%	813	94.96%
3.	Total number of CS users	/	/	/	/	/
4.	Total number of CPS users	19,901	21,390	-6.96%	26,454	-24.77%
5.	Total calls	51,817,845	53,538,047	-3.21%	69,144,236	-25.06%
-on-net calls		32,151,185	33,341,061	-3.57%	44,386,968	-27.57%
-off-net calls in RM		12,485,724	12,385,998	0.81%	15,530,951	-19.61%
-calls to mobile networks in RM		6,180,371	6,588,334	-6.19%	7,663,480	-19.35%
-international calls		1,000,565	1,222,654	-18.16%	1,562,837	-35.98%
6.	Total traffic in minutes	127,672,111	128,364,244	-0.54%	162,304,031	-21.34%
-on-net traffic		80,740,869	81,102,670	-0.45%	103,894,873	-22.29%
-off-net traffic in RM		34,473,902	33,780,566	2.05%	42,670,698	-19.21%
-traffic to mobile network in RM		8,992,040	9,481,934	-5.17%	10,952,134	-17.90%
-Total international traffic		3,465,300	3,999,074	-13.35%	4,786,326	-27.60%
7	CS and CPS traffic	4,509,006	5,608,872	-19.61%	8,161,803	-44.75%
8	Total national traffic terminating in fixed network	71,858,202	72,572,785	-0.98%	80,477,781	-10.71%
9	Total national transiting traffic	5,972,040	5,935,181	0.62%	6,580,532	-9.25%

2.1 Total number of fixed lines

The total number of fixed lines as presented in Table 3 is broken down by technology and by type of subscribers (residential and business). Table 3 shows the state of the fixed telephony market by number of fixed lines (technologies and types of subscribers) and carried telephony traffic expressed as number of calls and minutes.

Point 1 of Table 3 shows that in regards to the market access to public telephony network at a fixed location, the number of fixed lines (all technologies) in the forth quarter of 2013 has dropped by 0.72% compared to third quarter of 2013, whereas compared to the forth quarter of 2012, the number of lines has dropped by 2,89%,

In recent years Macedonian Telekom has transformed the existing traditional network in fully converged network based on IP. According to this migration that was done in the period from 2011 until 2013, Macedonian Telekom removed all local and regional stations and made replacement with fully IP based network elements. On the user side, Macedonian Telekom realized the migration by installing integrated access devices where it joins the standard phone devices, so the user does not need to replace the traditional telephone device. Hence, this migration has significant effects in reduction of analogue telephone lines as well as increase of the VoIP lines. Thus the number of PSTN lines compared to the previous quarter decreased by 60,69 % as compared to the fourth quarter of 2012 this reduction amounts to 81.60 %, the number of ISDN lines decreased by 93,72 % compared to the third quarter of 2013 as compared to the fourth quarter of 2012 decrease by 96,46%. Moreover the number of VoIP network through copper lines has increased by 61.98% year on year as compared to the previous quarter may have noticed an increase of 17, 63%.As it can be seen from the table the number of lines through wireless technologies in the fourth quarter of 2013 is 33. 730 hence it can be seen drop by 1.77 % comparing to the previous quarter and decline of 5.56% compared to the fourth quarter of 2012.

The lines through coaxial network (VoIP) increased by3, 41 % compared to the previous quarter as compared to the fourth quarter of 2012 increased by9,67%.

The number of LAN network is 30.330, decreasing by 0,82% compared to the third quarter of 2012 as compared to the fourth quarter of 2012 increased by 7,88%.

Major part of the cable operators lease their network to the notified operators that are active in the market of fixed telephony services and provide access to the public telephone network at fixed location. Thus, several cable operators which operate in several region in Macedonia lease their network to the operator Neotel and those are Net - Prilep Cable , Channel 16 - Resen , D - KTV - Struga , Spider - Gevgelija , Vince Vinica , Yup I - Radovish Pyramid - Delcevo Viva Net - Berovo Inela Tech- Kavardaraci and others. As it can be seen from the table in the fourth quarter of 2013 the number of lines through optical network (FTTH) amounting to 11,676, grew by 54.96 % year-on-year, while less than a quarter have increased by 10 97 %.

T -Mobile offers to its subscriber's packages that include access to the network at a fixed location and publicly available telephone services at a fixed location. Hence access to the network at a fixed location T - Mobile proved by using the carrier pre selection services. The number of subscribers who use pre-selection of all alternative operators in Macedonia amounted to 19,901 in the fourth quarter of 2013.

2.2 Total outgoing traffic (minutes) and total number of outgoing calls

In point 6 of the table is given the total outgoing traffic (minutes) in the market of publicly available telephone services at a fixed location. Namely, although the market supply increases as more operators are operating and offering a variety of services to the end users, the overall traffic volumes in the fourth quarter of 2013 in comparison with the previous year declined to 21.34 % , while compared the third quarter of 2013 decreased by 0.54 % . The same is observed in the total number of outgoing calls, hence this parameter compared to the fourth quarter of 2012 decreased by 25.06 %, while compared to the third quarter of 2013 the number of calls has decreased by 3.21 % .

2.3 Total volume of traffic (minutes) carrier selection and carrier pre-selection

In point 7 of the table is given the total volume of traffic in minutes with the service carrier selection and pre-selection which amounts to 4,509,006 minutes respectively compared to the previous quarter where it shows drop in traffic of 19.61 % as compared to the fourth quarter of 2012, a decrease of 44.75 % .

2.4 Total traffic (minutes) terminating in the fixed networks and total traffic that transits through the network at a fixed location

In point 8 of the table is given the total volume of traffic terminating in the fixed networks that in the fourth quarter of 2013 is 71,858,202 minutes, or decreased by 0.98 % compared to the previous quarter and declined by 10.71 % compared to the fourth quarter of 2012. In point 9 of the table is given the traffic transiting through the network at fixed location (single and double transit) where at in the fourth quarter of 2013 amounted to 5,972,040 minutes compared to the previous quarter increased by 0.62 % while compared to the fourth quarter of 2012 dropped by 9.25 % .

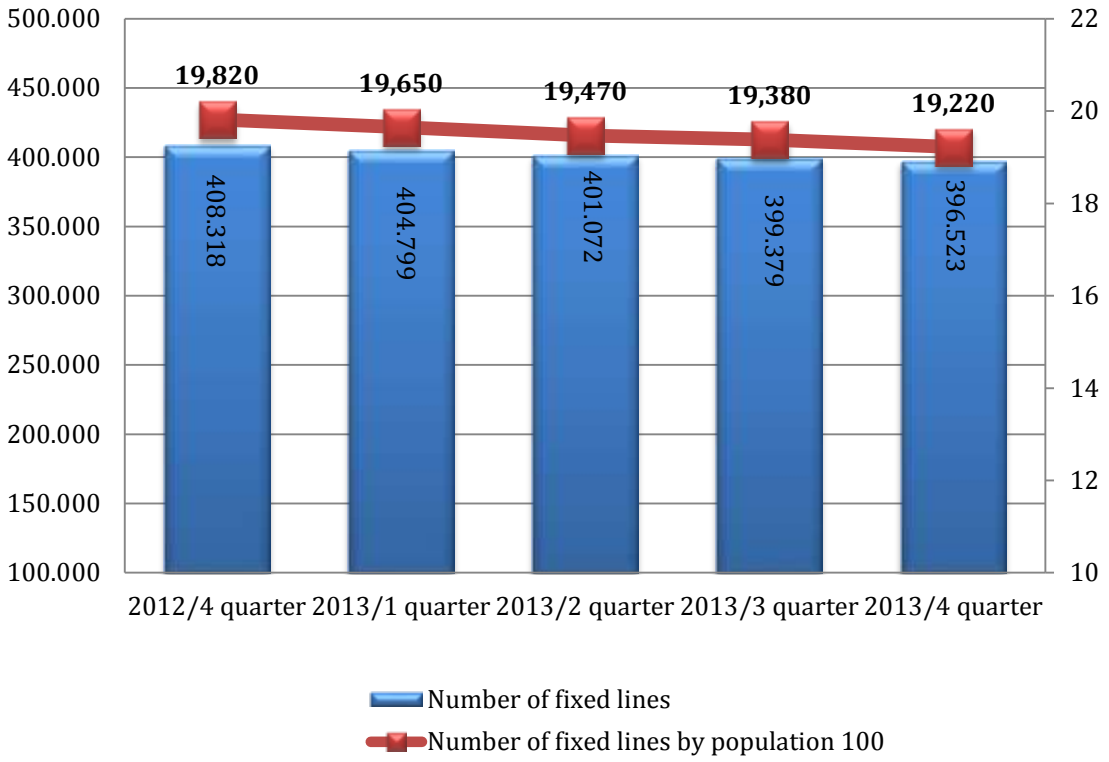


Chart 2 Number of fixed lines and changes of the indicator of number of fixed lines per 100 inhabitants

Chart 2 shows the number of fixed lines and the change of the indicator of number of fixed lines per 100 inhabitants on the retail market for access to public fixed telephony network during the whole quarters of 2013 and the forth quarter of 2012. It is clear that the number of fixed lines per 100 inhabitants in the above shown five quarters has continuously been declining from the forth quarter of 2012 where amounted to 19,82% and in the same quarter the next year the amount felt to 19.22%.

The value of the indicator - number of fixed lines per 100 inhabitants for the forth quarter of 2013 was calculated in accordance with the official data from the State Statistics Office, reference date 31.12.2012 which is 2.062.722 inhabitants ,whereas for the remaining periods was calculated in accordance with the estimated population of 2.059.794 inhabitants, reference data 31.12.2011.

Table 4 Market share of alternative operators / service providers in regards to fixed lines (state 31st of December, 2013)

N	Operator	Q4 2013	Q3 2013	Change (%)	Q4 2012	Change (%)
1	Macedonian Telekom	62.65%	63.01%	-0.36%	65.54%	-2.89%
2	ONE	16.00%	16.17%	-0.17%	15.44%	0.56%
3	Neotel	3.99%	3.96%	0.03%	3.95%	0.04%
4	Aikol	5.60%	5.56%	0.04%	4.89%	0.71%
5	Blizoo	10.33%	9.92%	0.41%	8.97%	1.36%
6	Infel Net Plus	1.13%	1.10%	0.03%	0.98%	0.15%
7	T-Mobile	0.27%	0.27%	0.00%	0.24%	0.03%
8	Giv Ivan	0.02%	0.02%	0.00%	/	/
		Q4 2013	Q3 2013	Change(%)	Q4 2012	Change (%)
SMP operator		62.65%	63.01%	+/0,36%	65.54%	+/2,89%
Alternative operators		37.35%	36.99%		34.46%	

Table 4 presents the market share of alternative operators / service providers in regards to fixed lines. Starting from the second quarter of 2008, when most of the alternative operators / service providers entered on the market, they increased their market share over time (in revenue and traffic) in the fixed telephony market, which was also not an exception in 2013. In the forth quarter of 2013 the market share of alternative operators / service providers by number of fixed lines accrued to 37, 35% which is a 0.36% growth compared to the previous quarter.

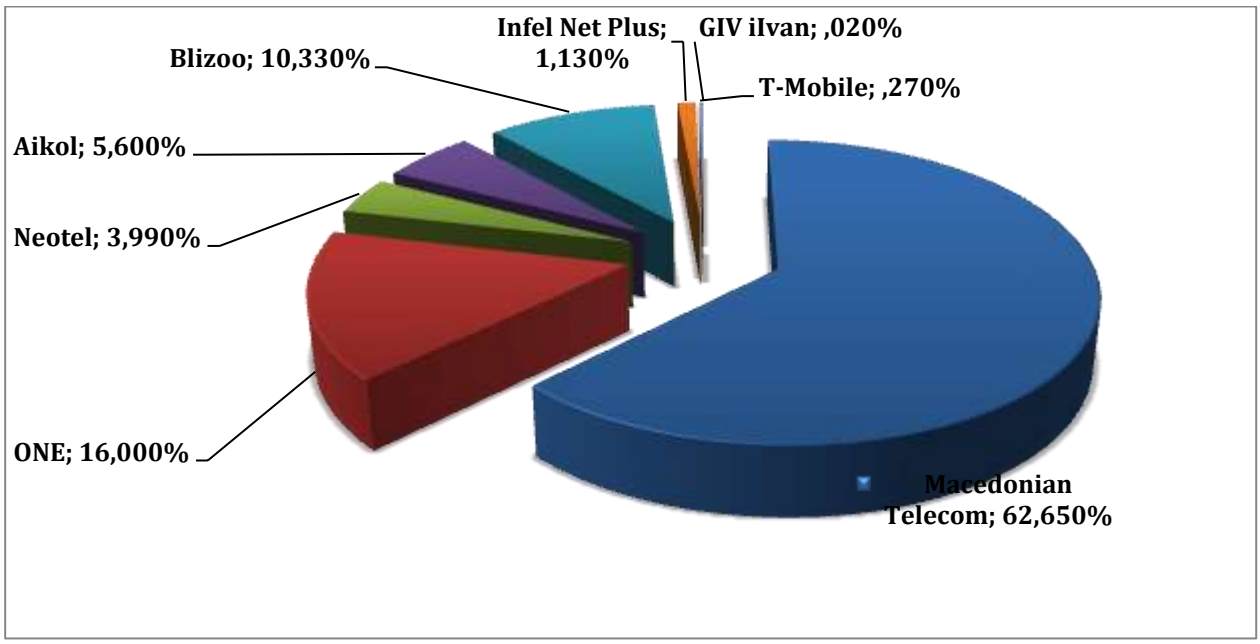


Chart 3 Fixed line market share (state December 31, 2013)

Chart 3 shows the market share of operators / service providers in regards to fixed lines in the forth quarter of 2013. Of the total number of fixed lines, the market share of Macedonian Telecom (SMP operator) is 62,65%, while from the alternative operators / service providers, ONE has the biggest share with 16,00%, followed by Blizoo (10,33%), Aikol (5.60%), Neotel (3,99%) Infel Net Plus (1.13%), T-Mobile (0.27%), and GIV Ivan (0.02%).

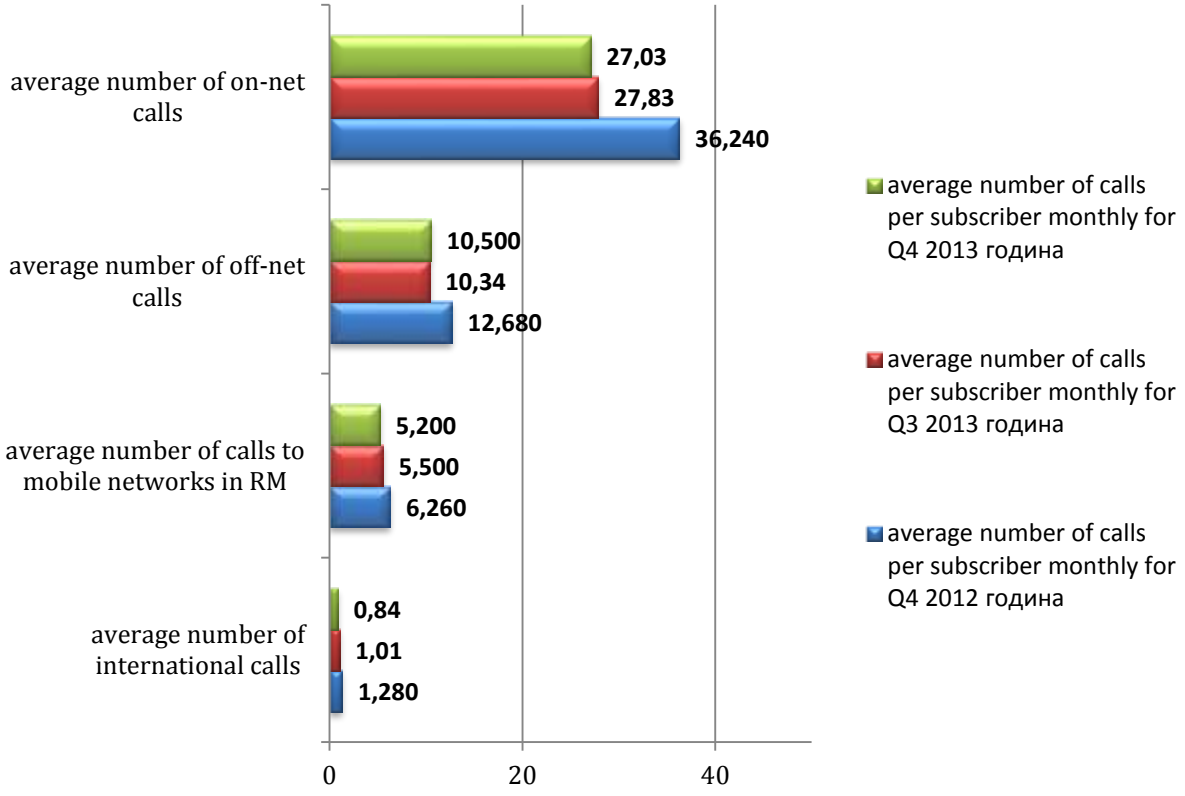


Chart 4 Average number of outgoing calls per subscriber (monthly) from public fixed telephony networks in the forth quarter of 2013

Chart 4 presents the average number of outgoing calls per subscriber (monthly) from public telephony network in the forth and third quarter of 2013 and the forth quarter of 2012.

As it can be seen from the graph in the fourth quarter of 2013 the average number of call per subscriber is 43.56 per month. Most are accomplished on-net and is 27.03 calls (62.05 %) . The number of off-net calls in RM is significantly lower and amounts to 10.50 calls (24.10 %) while the calls to mobile networks in the Republic of Macedonia and the calls to international networks amounted to 5.20 calls (11.93 %) or 0 , 84 calls (1.93 %) to networks in foreign countries .

Compared with the third quarter of 2013 can be seen that the average number of calls (per month) on-net, to mobile network in RM, and international number of calls is reduced while the off net number of calls in RM is increased. Compared with the fourth quarter of 2012, the situation is identical except that compared to this quarter the average number of calls to other fixed networks in the country is reduced.

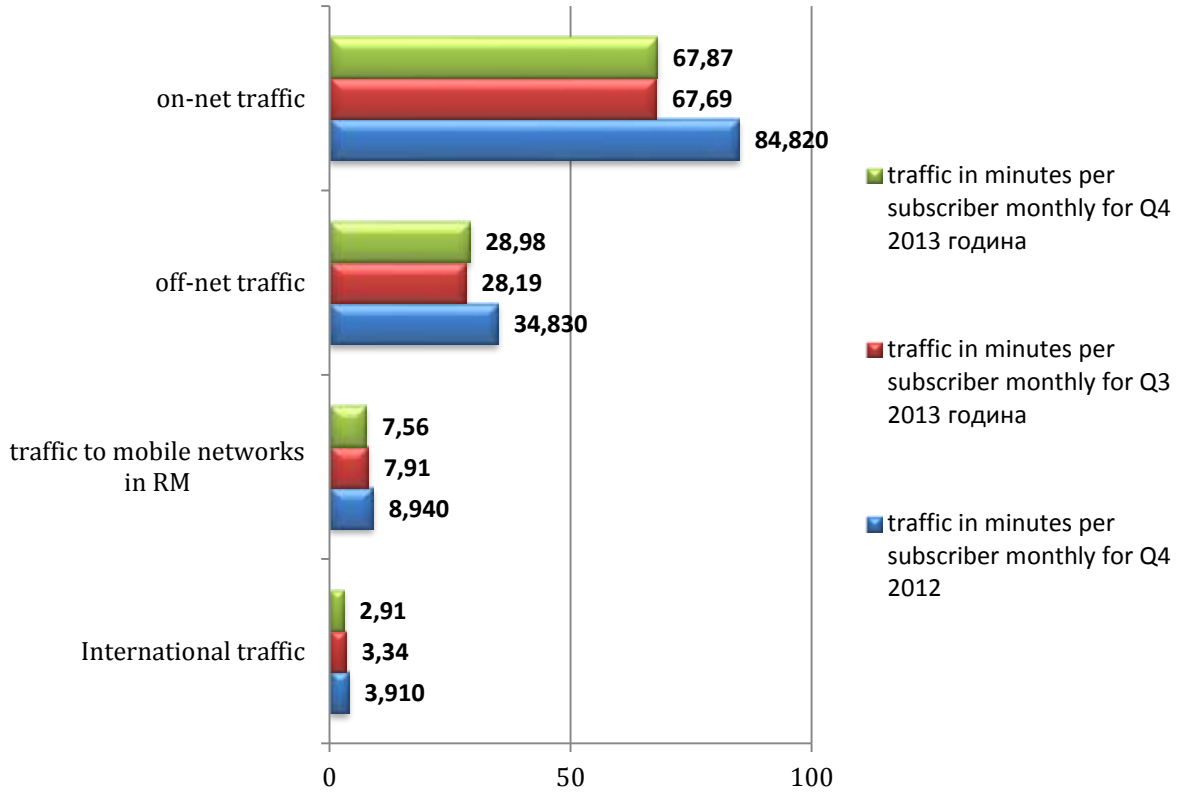


Chart 5 Average volume of outgoing traffic (in minutes) per subscriber from public fixed telephony network in the forth quarter of 2013

In Chart 5, is given the average volume of monthly outgoing traffic from public telephony networks per subscriber (expressed in minutes) for the forth quaerter and third quarter of 2013 and forth quarter of 2012.

As it may be seen on Chart 5, the average volume of monthly outgoing traffic from public telephony networks per subscriber (expressed in minutes) in the forth quarter of 2013 was 107,33 minutes. Most of the traffic was within the same network at 67,87 minutes or 63.24% expressed as a percentage. The traffic to other fixed networks in RM is significantly lower and is 28.98 minutes or 27% of the total average monthly traffic per subscriber. The average traffic to mobile networks in the R Macedonia and the average international traffic (to networks in foreign countries) is 7.56minutes (7.04%) and 2.91 minutes (2.71%) resepectively.

Compared with the third quarter of 2013 can be seen decrease of the volume of traffic to mobile networks in the Republic of Macedonia and to networks in foreign countries while volumen of traffic to other fixed networks in RM and its own network has a slight increase. By comparing the fourth quarter of 2012, it can be observed reduction of outgoing traffic per subscriber per month to all destinations.

Table 5 Average duration of subscriber initiated call (in seconds) in quarters for 2013 and 2012

Бр.	Operator	Q4 2013	Q3 2013	Change(%)	Q4 2012	Change (%)
1	Makedonski Telekom	141	137	3.05%	133	6.02%
2	ONE	170	169	0.35%	171	-0.58%
3	Neotel	128	125	2.28%	125	2.40%
4	Aikol	175	171	2.60%	167	4.79%
5	Blizoo	177	173	2.17%	168	5.36%
6	Infel net plus	144	146	-1.11%	206	-30.10%
7	T-Mobile	187	172	8.71%	152	23.03%
8	Giv Ivan	91	107	-15.07%	/	/

In table 5 is given the average duration of subscriber initiated call of all operators providing publicly available telephone services at fixed locations for the third and fourth quarter of 2013 and fourth quarter of 2012 , and the change in percent (%) .

It is calculated based on the volume of traffic initiated calls (in minutes) divided by the number of calls in the relevant operator. As it can be seen from the table in the fourth quarter of 2013 the average length of a call initiated by the subscriber in the preceding quarter growth recorded all operators except Infel Net Plus and GIV Ivan who has seen the largest decline of 15.07 %. Of those who grew the biggest growth shows T -Mobile from 8.71 %. Comparing the fourth quarter of 2012, the largest increase in average length of subscriber initiated conversation has T -Mobile by 23.03 % while the largest decline shows Infel Net Plus 30.10 % .

3. Mobile telephony

Of the 10 notified entities in the official records of the AEC, in the fourth quarter of 2013 provided publicly available telephony services in public mobile communication network for national and/or international traffic, including:

1. T-Mobile Skopje,
2. ONE Operator Skopje,
3. VIP Operator Skopje,
4. Albafonee Skopje.

Table 6 Indicators – mobile telephony

Бр	ИНДИКАТОР	Q4 2013	Q3 2013	Промена (%)	Q4 2012	Промена (%)
1.	Number of active mobile subscribers	2.237.250	2.276.379	-1,72%	2.235.460	0,08%
residential pri-paid		1.329.512	1.392.409	-4,52%	1.369.614	-2,93%
residental post-paid		637.594	617.159	3,31%	598.972	6,45%
bussiness post-paid		270.144	266.811	1,25%	266.874	1,23%
2.	Number of SMS	91.609.749	93.308.018	-1,82%	116.961.383	-21,68%
3.	Number of MMS	232.522	240.178	-3,19%	229.205	1,45%
4.	Total traffic (minutes)	1.206.434.555	1.175.700.093	2,61%	1.097.918.934	9,88%
Total on - net traffic		988.207.321	974.849.090	1,37%	937.788.644	5,38%
Total of - net traffic in RM		184.975.816	163.538.412	13,11%	134.713.097	37,31%
Total traffic to fix networks in RM		24.818.437	25.295.413	-1,89%	18.827.602	31,82%
Total international traffic		6.486.781	8.344.535	-22,26%	6.589.591	-1,56%
Total traffic realized by subscribers of domestic operator that had call abroad		1.946.200	3.672.643	-47,01%	n.a.	/
5.	Total number of calls to mobile networks	653.049.377	652.165.323	0,14%	628.942.731	3,83%
Total numbers of on - net calls		512.641.729	518.458.690	-1,12%	512.728.327	-0,02%
Total numbers of of - net calls in RM		123.786.014	114.915.655	7,72%	100.078.192	23,69%
Total numbers of calls to fix networks in RM		13.047.302	13.889.724	-6,07%	12.344.326	5,69%
Total number of international calls		3.574.332	4.891.254	-26,92%	3.791.886	-5,74%

In Table 6 are given indicators of the mobile telephony market - Retail where data are given for the fourth and third quarter of 2013 and the change in%, data for the fourth quarter of 2012 and the change compared with the fourth quarter of 2013.

Table 6 shows the percentage drop of 1.72% in the number of active mobile subscribers in the fourth quarter of 2013 compared to the previous quarter and an increase of 0.08% compared to the same quarter of previous year.

As seen from the table, the majority of residential subscribers use pre-paid services against the using of post-paid services.

The numbers of post-paid subscribers are increasing and residential post-paid subscribers grew by 3.31% from the previous quarter as compared to the same quarter of the previous year increased by 6.45%, the business grew by 1.25 % compared to the previous quarter as compared to the fourth quarter of 2012 increased by 1.23%.

From Table 6 can also be seen a decrease in the number of sent SMS messages, which is 1.82% compared to the previous quarter as compared to the fourth quarter of 2012 also has decreased by 21.68%. In the total number of MMS messages sent in the fourth quarter of 2013 marked an increase of 3.19% compared to the previous quarter and an increase of 1.45% compared with the fourth quarter of 2012.
In the realized total traffic minutes noticeable is an increase of 2.61% compared to the same quarter last year and significant growth of 9.88 % compared to fourth quarter of 2012. This total generated traffic in the fourth quarter of 2013 we examined by destinations can also be seen in terms of growth in the previous quarter traffic in its own network and to other mobile networks in RM noticeable decline in traffic to fixed communications networks in the Republic of Macedonia and to networks in foreign countries . Largest Growth in traffic to other mobile networks in the Republic of 13.11 % while year-on- year this traffic has grown by 37.31 %.

At the traffic generated by subscribes of domestic operators that had traffic outside the state in the fourth quarter of 2013 can be observed decline of 47.01% compared to the third quarter of 2013.

In the total numbers of calls carried on mobile communication networks we can be observed growth of 0.14% compared to the previous quarter and increase of 3.83% compared to fourth quarter of 2012. With the number of calls divided by destinations we can notice increase is in a number of calls to other mobile communication networks in the RM of 7.72% compared to the previous quarter, while all other destinations have decreased the number of calls.

3.1 Number of active subscribers

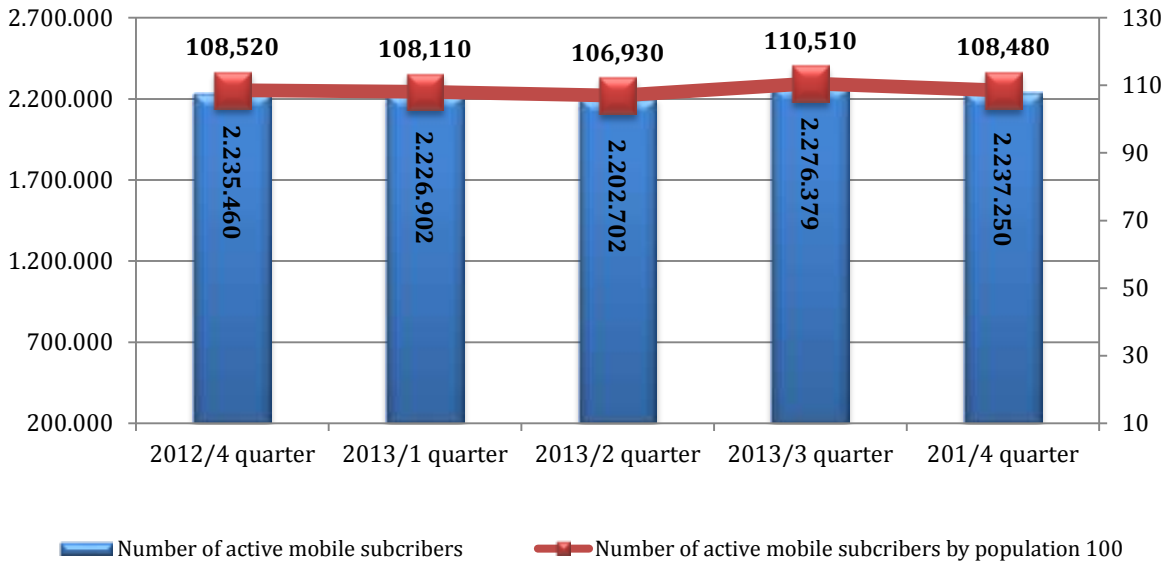


Chart 6 Number of active mobile subscribers and indicator for numer of active subscribers by population 100

The graph 6 describes the number of active subscribers in mobile telephony and the number of active subscribers, according to population 100 for all four quarters of 2013 and fourth quarter of 2012. The value of the indicator number of active subscribers, according to the population 100 in the fourth quarter of 2012 is calculated based on the estimate of the number of population (2.059.794) according to data from the State Statistical Office, the reference date 31.12.2012.

Data on the number of Active subscribers refers to those subscribers in the last three months, caused in some way electronic communication event. Under electronic communication event is considered a call, answer a call, sending/ receiving message, sending data (including GPRS) or perform other services (payment of a monthly subscription payment voucher for pre-paid etc.). On 31.12.2013, the fourth operators have a total of 2.237.250 active subscribers.

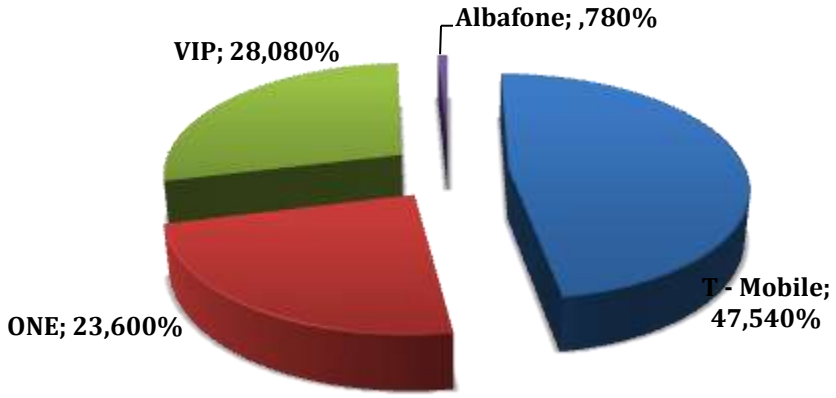


Chart 7 Market share of mobile operators by subscribers in fourth quarter 2013

Data from Chart 7 describes the share of the three mobile operators in the mobile market by number of active subscribers (as of 31.12.2013). It shows that T-Mobile accounts for 47.54%, operator ONE accounts with 23.60% while VIP Operator contributes 28.08% of the total number of active subscribers in the last three months which caused in some way electronic communication event. Beginning from the fourth quarter of 2013 to market mobile services and began offering virtual mobile operator (resale) Albafonee Skopje; its market share in the fourth quarter of 2013 is 0.78%.

3.2 Market share according to subcribers

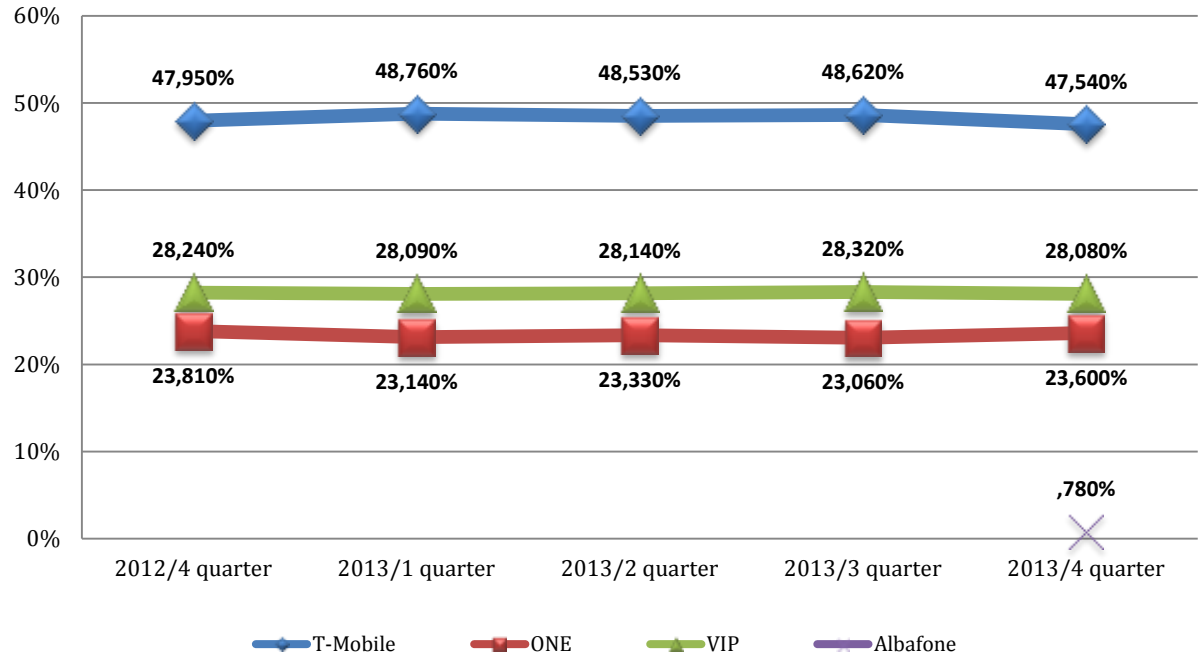


Chart 8 Market share of income of operators providing mobile communication services (retail level) in the fourth quarter of 2013

In chart 8 is given the market share of mobile operators in RM in revenues generated from the provision of mobile communication services in the retail market for the fourth quarter of 2013. As can be seen from the graph has the largest market share of T -Mobile 59.90 % followed by VIP operator with 29.23 % , ONE operator with 20.74 % and 0.13 % Albafonee . Market shares are calculated on the total income is the sum of revenues : service initiation call, the monthly fee , the transfer of data from the terminal equipment , SMS , MMS from from roaming (traffic , SMS and data) and other income .

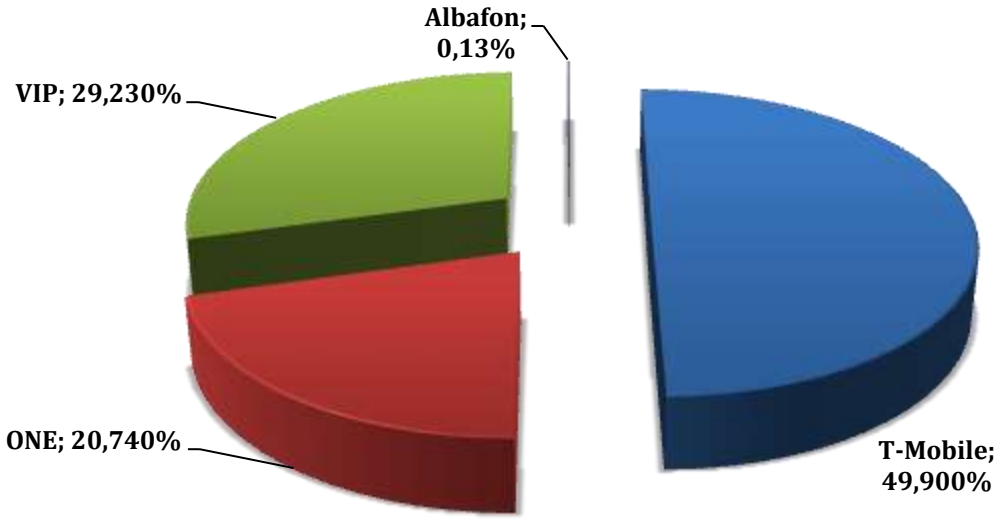


Chart 9 Market share of income of operators providing mobile communication services (retail level) in the fourth quarter of 2013

Chart No. 9 given the market share of mobile operators in RM in revenues generated from the provision of mobile communication services in the retail market for the fourth quarter of 2013. As can be seen from the graph has the largest market share of T -Mobile 59.90 % followed by VIP operator with 29.23 % , ONE operator with 20.74 % and 0.13 % Albafonee . Market shares are calculated on the total income is the sum of revenues : service initiation call, the monthly fee , the transfer of data from the terminal equipment , SMS , MMS from from roaming (traffic , SMS and data) and other income .

3.3 Types of subscribers and average number of initiated calls and minutes per subscriber

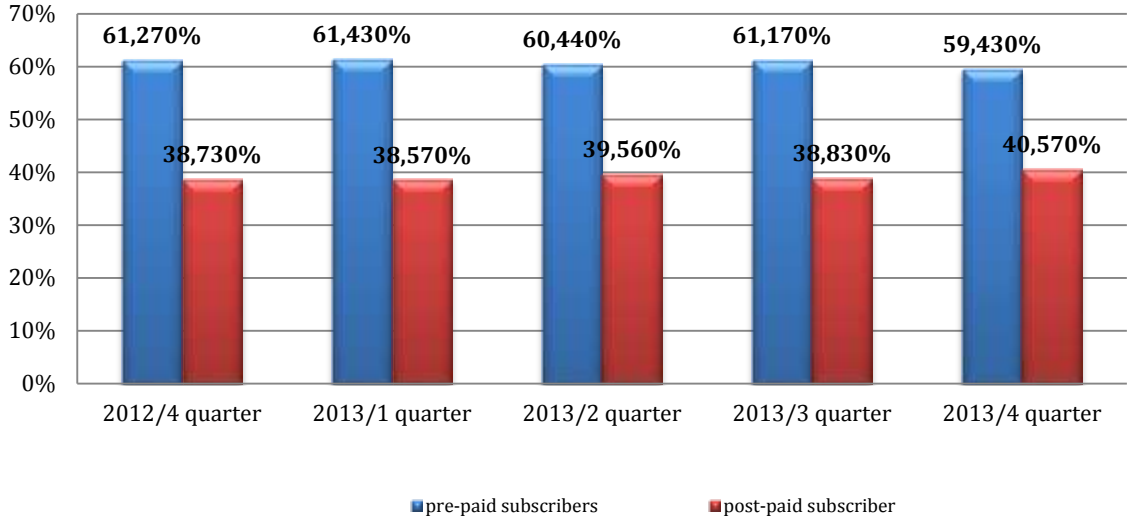
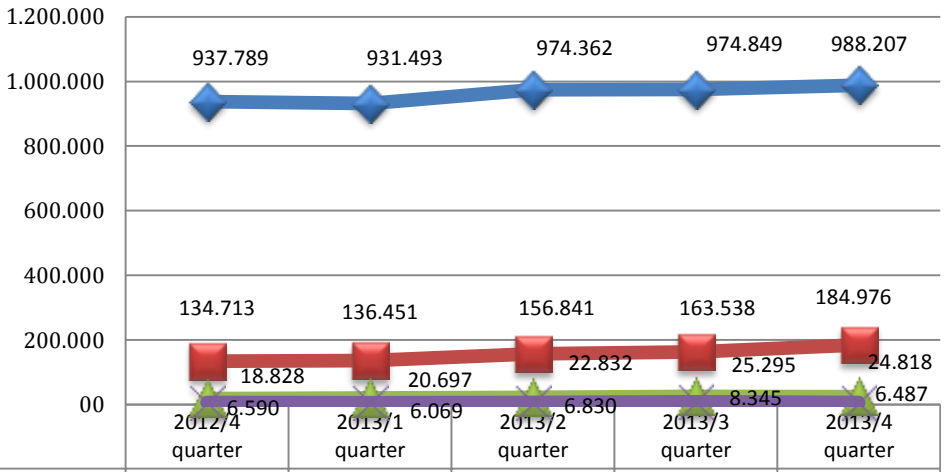


Chart 10Ratio of pre-paid and post-paid subscribers by quarters in 2012 and 2013

In the chart number 10 is presented the ratio of pre-paid and post-paid subscribers for 2012 and 2013. From the chart it can be seen that the time displayed in the share of post-paid subscribers increased by 1.84 percentage points, while the market share of pri-paid subscribers is the same.

3.4 Total outgoing telephone traffic



	2012/4 quarter	2013/1 quarter	2013/2 quarter	2013/3 quarter	2013/4 quarter
Total traffic in own network	937.789	931.493	974.362	974.849	988.207
Traffic to other mobile networks in RM	134.713	136.451	156.841	163.538	184.976
Traffic to fixed networks in RM	18.828	20.697	22.832	25.295	24.818
Traffic to networks in foreign countries	6.590	6.069	6.830	8.345	6.487

Chart 11 Volume of outgoing traffic (in thousands of minutes) initiated by public mobile communication networks by quarters in 2012 and 2013

In the chart 11 is given the volume of realized outgoing traffic (in thousands of minutes) initiated by public mobile communication networks in the 2012 and 2013. From the chart can be seen larger volume of outgoing traffic to its own network than to other mobile networks. Outgoing traffic to fixed telephone networks in RM and to networks in foreign countries has significantly lower volume.

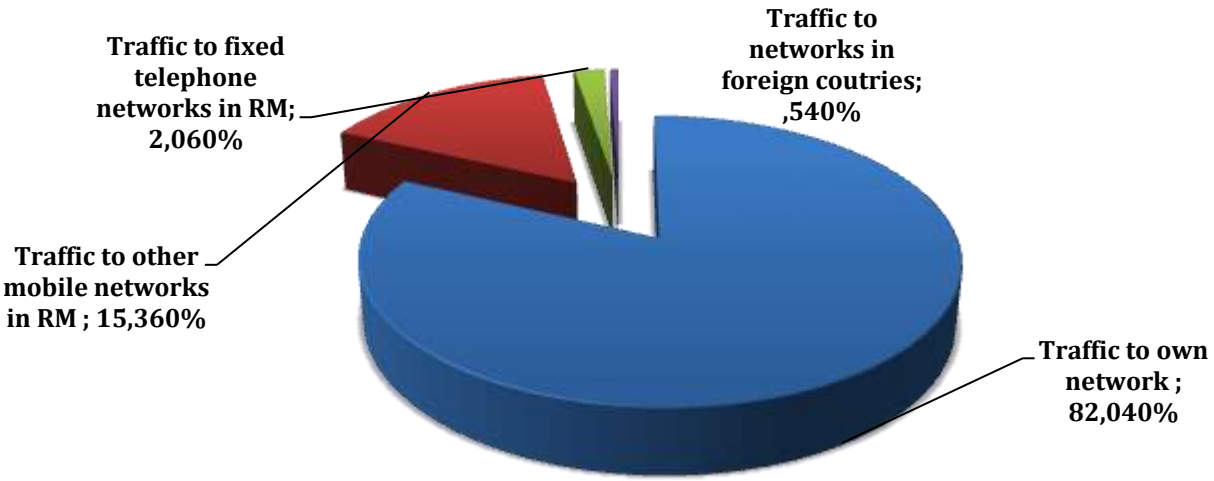


Chart 12 Share by volume of realized outgoing traffic (total realized minutes) (%) (state on Desember 31, 2013)

In the chart number 12 is given a share of realized outgoing traffic (%) initiated by public mobile networks in the fourth quarter of 2013. From the chart can be seen that the highest percentage of 82.04 % goes to the total initiated traffic which terminate in own network, while the total outgoing traffic in other mobile networks in RM participate with 15.36% of the total realized outgoing traffic. The traffic to fixed networks in RM and traffic to networks in foreign countries participate marginally with 2.06% (to fixed networks) and 0.54% (to networks in foreign countries) in the total realized outgoing traffic.

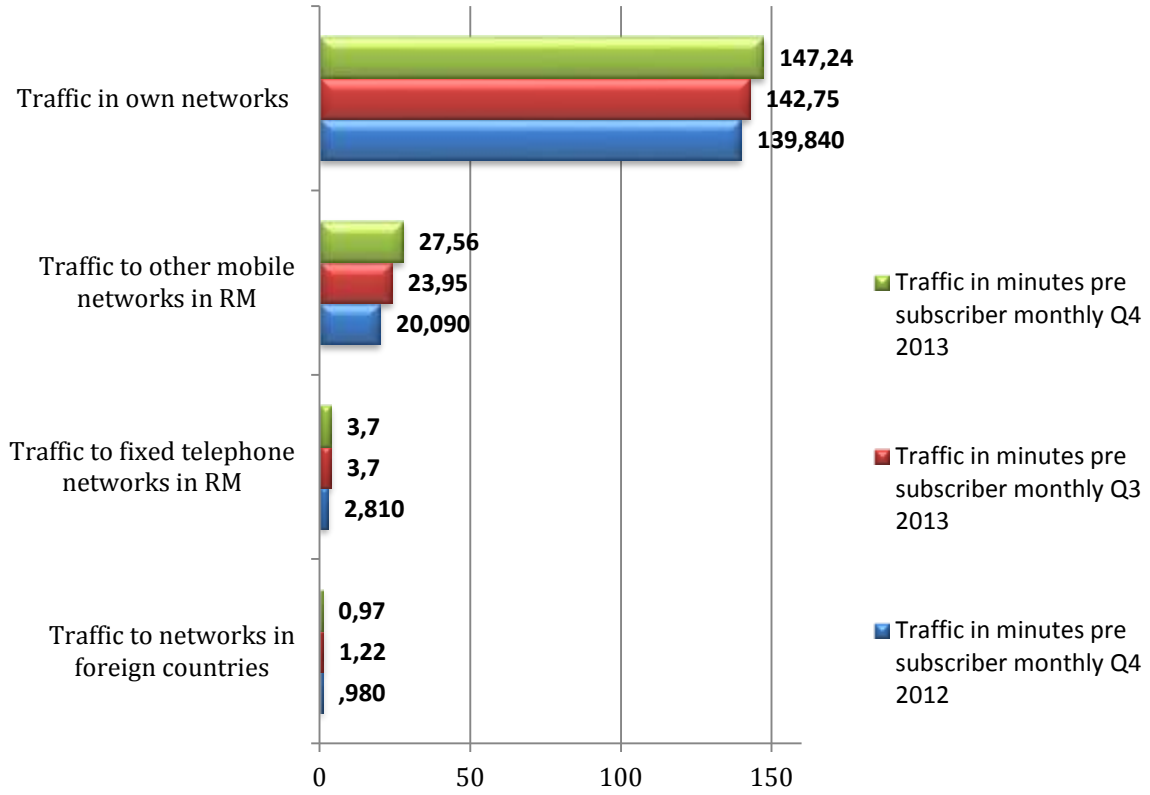


Chart 13 Average amount of outgoing traffic (in minutes per month) per subscriber initiated by a public mobile communications network for the fourth and third quarter of 2013 and fourth quarter of 2012

In the chart number 13 is given the average volume of outgoing traffic (in minutes per month) per subscriber initiated by a public mobile communications network in the fourth and third quarter of 2013 and in the fourth quarter of 2012 . From the graph can be perceived that in the fourth quarter of 2013 the subscribers talk in average of 179.46 minutes. Most of them are accomplished in their own network and is 147.24 minutes (82.04%). The traffic to other mobile networks in RM is significantly lower and the amount is 27.56 minutes (15.36%), while the traffic to fixed networks in RM and to networks in foreign countries is 3.70 minutes (2.06%) and 0.97 minutes (0.54%) to networks in foreign countries.

Compared with the third quarter of 2013 can be seen to reduce the volume of traffic per subscriber to networks in foreign countries while the fixed telephone network in RM will change and have seen an increase in traffic generated in the own network and other mobile networks in the country. Compared with the fourth quarter of 2012 in its own network traffic increased by 7.4 minutes per month per subscriber. It is also important to note that traffic to other mobile networks compared with the fourth quarter of 2012 increased by 7.47 minutes per month per subscriber. For traffic to fixed networks in the RM and to networks in foreign countries no major deviations in the period considered.

Table 7Average duration of conversations per subscriber (in minutes) individually per operator

No.	Operator	Q4 2013	Q3 2013	change %	Q4 2012	change %
1	T - Mobile	1.71	1.67	2.40%	1.58	8.23%
2	ONE	2.20	2.15	2.33%	2.13	3.29%
3	VIP	1.79	1.74	2.87%	1.74	2.87%
4	Albafone	1.65	/	/	/	/

In table 7 is shown the average duration of conversations per subscriber (in minutes) individually per operator. Compared with the previous quarter, the duration of the conversation per subscriber is increased at T-Mobile, ONE and VIP Operator while the Albafonee can not make comparations because the operator began operations in the fourth quarter of 2013.

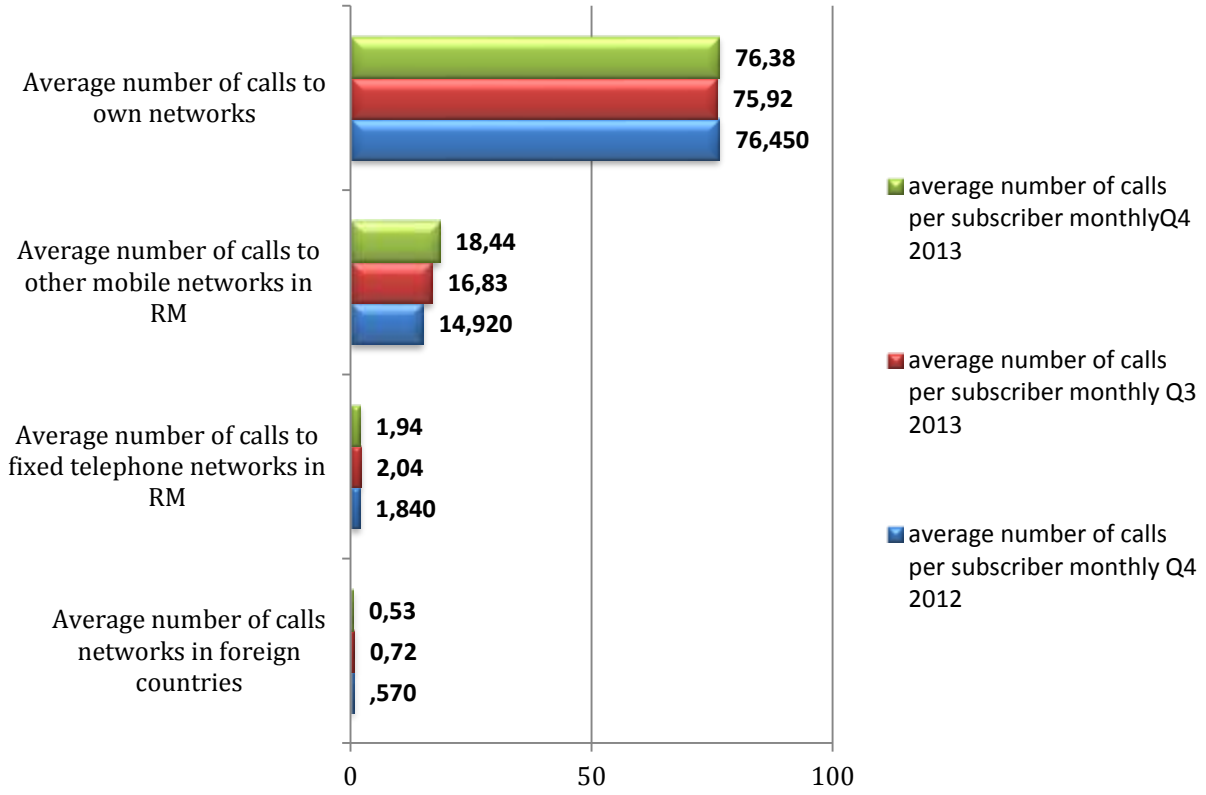


Chart 14 Average numbers of calls (per month) per subscriber initiated in the public mobile telephone network for the fourth and third quarter of 2013 and fourth quarter of 2012

In chart 14 is given the average number of calls (per month) initiated in the public mobile telephone network per subscriber in the fourth and third quarter of 2013 and fourth quarter of 2012. As can be seen from the chart in the fourth quarter of 2013 the subscribers in average initiated 97.30 calls per month. Most are accomplished in their own network and the amount is 76.38 calls (78.50%). The number of calls to other mobile networks in RM is significantly lower and the amounts is 18.44 calls (18.96%) while the amount in fixed telephone network in RM is 1,94 calls (2,00%) and to networks in foreign countries is 0,53 calls (0.55%).

Compared with the third quarter of 2013 can be seen that the average number of calls (per month) in their own network and to other mobile networks in the RM increased while decreased the average number of calls to fixed networks in the RM and to networks in foreign countries . Compared with the fourth quarter of 2012 the average number of calls to own network and to networks in foreign countries is reduced while increasing the number of calls to other mobile networks in the RM and to fixed networks in the country.

3.5 Sent SMS and MMS

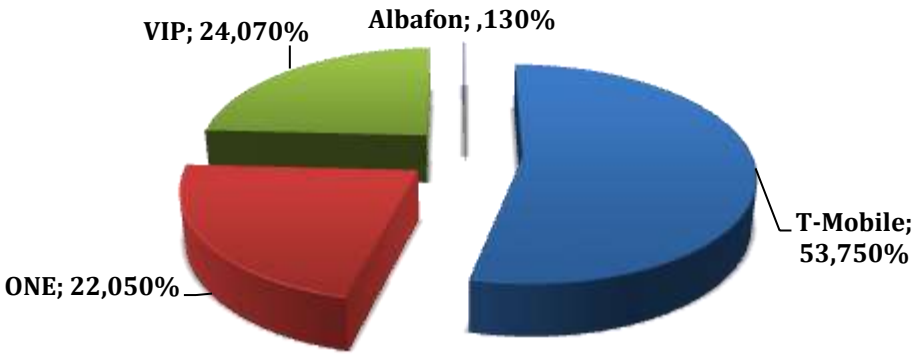


Chart 15 Share in the total number of sent SMS messages in the forth quarter of 2013

Chart 15 shows that T-Mobile's share was 53,75% in the total number of sent SMS messages in the forth quarter of 2013. The share of ONE was 22.05%, VIP Operator contributed with 24.07% while Albafonee with 0,13%.

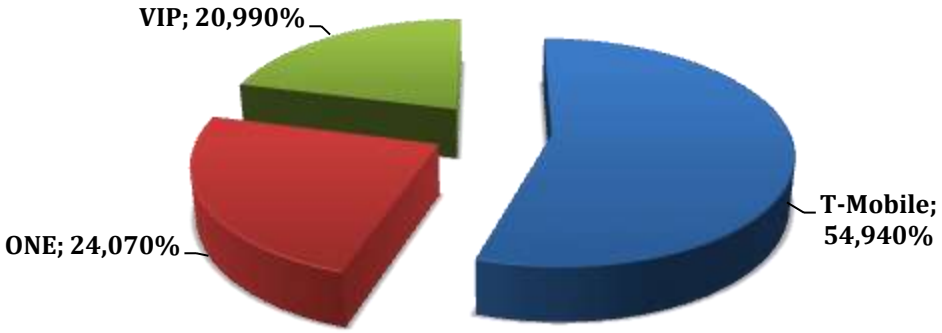


Chart 16 Share in the total number of sent MMS messages in the forth quarter of 2013

Chart 16 shows that T-Mobile generated 54,94% % of the total number of MMS messages in the second quarter of 2013. The shares of ONE and VIP Operator were 24,07% and 20,99%.respectively.

Table 8 Indicator-Wholesale

ИНДИКАТОР		Q4 2013	Q3 2013	Промена %	Q4 2012	Промена %
1	Traffic terminating in mobile networks (in minites)	205,350,090	197,513,613	3.97%	169,764,995	20.96%
-Total traffic from other mobile networks in RM		167,762,731	151,622,966	10.64%	124,748,010	34.48%
-Total traffic from other fixed networks in RM		9,157,060	9,558,480	-4.20%	11,434,401	-19.92%
-total traffic of network from foreign countries		26,209,584	32,918,266	-20.38%	33,582,584	-21.95%
-total traffic from foreign roamers		2,220,715	3,413,901	-34.95%	/	/
2	SMS terminating in mobile network	22,688,549	23,382,900	-2.97%	23,257,093	-2.44%
3	MMS terminating in mobile network	72,439	74,727	-3.06%	68,771	5.33%

Table 8 shows three indicators from the mobile telephony market - wholesale, where the data is given for the forth and third quarter of 2013 and the change in % and the data compared to the forth quarter of 2012 and the change in %.
In point 1 is given the traffic terminating in the mobile networks (in minutes), and this indicator grew by 3.97% in the previous quarter and in the same quarter of 2012 increased by 20.96%.

This indicator is divided according to where the originated traffic who terminates in mobile networks and the highest percentage goes to the traffic which originate from other mobile networks in RM which compared with the third quarter of 2013 increased by 10.64% as compared to the fourth quarter of 2012 grew by 34.48%.

The traffic originating from fixed communications networks in the Republic of Macedonia has been decreasing by 4.20% compared to the previous quarter, but compared to the same quarter of the previous year it is decreasing by 19.92 %. The traffic originating from the networks in foreign countries it is decreasing by 20, 38 % compared to the previous quarter, but compared to the fourth quarter of 2012 it has been decreased by 21.95 %. The traffic generated by foreigner-roamers that roam in the networks of the Macedonian operators has been decreased by 34.95 % compared to the third quarter of 2012.

The item 2 shows the total number of the SMS messages that end up in the public mobile networks where a decline by 2.97 % is noticed compared to the previous quarter, but compared to the fourth quarter of 2012 it has been decreased by 2. 44 %.

The item 3 shows the total number of the MMS messages that end up in the public mobile networks where a decline by 3.06 % is noticed compared to the previous quarter of 2013, but compared to the fourth quarter of 2012 shows growth of 5.33 %.

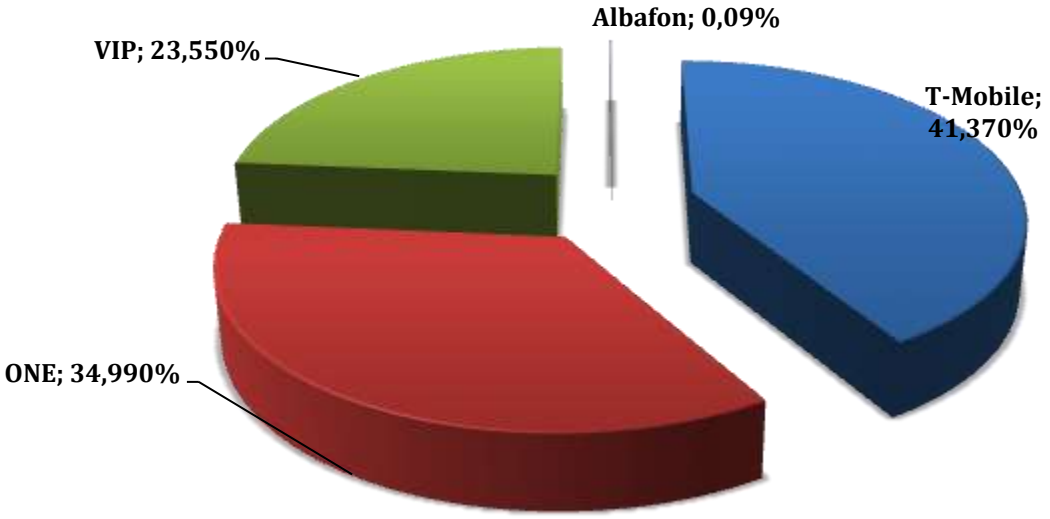


Chart 17 Market share of revenues per operator from providing mobile communication services (wholesale) in the forth quarter of 2013

Chart 17 shows the market share of revenues per operator from providing mobile communication services in a wholesale level from the forth quarter of 2013. As it can be seen from the chart T-Mobile has the highest market share of 41, 37%, followed by ONE operator with 34.99%, VIP Operator with 23.55% and Albafonee with 0.09%. The market share is calculated for the total revenue which presents sum of call termination service, national roaming, traffic from transit, SMS termination, MMS termination, roaming from foreign roamers which roam in the network of domestic operator and other revenues.

4. Access to Internet

From 127 notified legal entities in AEK official records, 111 were providing access to internet in the forth quarter of 2013:

1. Makedonski Telekom-Skopje,
2. Neotel-SKopje,
3. Drustvo za elektronski data servisi-Skopje
4. San Vajrless Skopje,
5. Istel Skopje,
6. Telesmart Telecom Skopje,
7. D.T.C. Corp-Skopje
8. VIP Operator-Skopje
9. Sing-plus Skopje
10. Near Skopje,
11. Ultranet ultra-Skopje
12. Sonnet-Skopje
13. ONE-Operator Skopje
14. Macedonia-Skopje on line,
15. Balkantel Skopje,
16. T-Mobile-Skopje
17. Robbie Stip,
18. Telenet com-Tetovo
19. Net cable-Strumica
20. A Trend-Strumica
21. Profi sound-Struga
22. Ms. KTV-Struga
23. L Cable Net-Struga
24. Channel 16 Resen
25. Angela Group-Resen
26. Yup I-Radovish
27. Andes-Studio Radovish
28. Cable Net-Prilep
29. Infel CTV-Ohrid
30. Altra CAT 2000 Ohrid
31. Combo 2003 Kumanovo
32. Gajtanless 2008 Krusevo
33. Global Net-Krusevo
34. Tranšped Trade-Kriva
35. Media Point-Kocani
36. Advansd Digital Network-Kicevo
37. Inella Tech-Kavadarci
38. Inella International Kavadarci,
39. G-on-Debar
40. Multimedia Network-Gostivar
41. Ivan Giv-Gostivar
42. Spider-net Gevgelija
43. Spider-Gevgelija
44. Five Net-Gevgelija
45. Maktelko-Bitola
46. Mix-net Bitola
47. Viva net-Berovo
48. BIV Pyramid-Delcevo
49. 2MG-Skopje
50. Digital Stojev CBS-Net-Kavadarci
51. Diginet-Strumica
52. Softnet EU-Skopje
53. They added Skopje,
54. Akton Skopje,
55. KDS-VT-Probishtip
56. Cable-Strumica
57. Digiplus net-Demir Hisar
58. Netlink-Strumica
59. Telegram korporation-Gostivar
60. Neonet Project,
61. Vin sat-Vinica
62. Exit com-Kicevo
63. Global communication-Radovish
64. Pella Digital 2008 - Struga
65. Mann Technology Telecom Skopje,
66. Astra-plus Kocani
67. Fikab Tetovo,
68. Surffri-Rankovce
69. Media Net-Skopje
70. Sato net-Brvenica
71. Ultranet systems-Bitola
72. BTV Net-Bitola
73. Kablekall-Kicevo
74. Cable treasury-Kocani
75. Philadelphia 2002 Kocani
76. K-Crystal-Struga
77. Net ipoks-Struga
78. Trend com-Stip
79. Mobik Telecommunications Skopje,
80. Beko net-Gostivar
81. Alpha Telecom Macedonia-Skopje
82. B-CTV-Struga
83. Spounet Skopje,
84. Cogent Macedonia-Skopje
85. Capitol keibl Skopje,
86. Space Tel-Net Skopje
87. Infinitinet Corporation Skopje,
88. Chulaknet-Bitola
89. Ri cable CAT-Skopje
90. Mint net-Radovish
91. Macedonian Broadcasting Council, Skopje,
92. Pantel International Skopje,

93.Di kabel -Debar,
94. Ca kom prom- Kumanovo,
95. B2 Net-Kicevo,
96. Trans Balkan - Skopje,
97. IP systems- Kumanovo,
98. Skrembl- Strumica,
99. KTV Pesna- Kicevo,
100. Sajber net Ana- Gostivar,
101. Kam net –Makedonska kamenica,
102. Blagost -Radovish,
103. Fiber Nertwork -Skopje,
104. Accеко-Skopje,
105. Enter- Ohrid,
106. BBB Internet Grup- Kumanovo,
107. Mobile Konekt – Skopje,
108. ITM komunikacii – Skopje,
109. Vin Sat Kabel –Vinica,
110. Novonet-Strumica,
111. Sanet Kabelsat- Vinica.

Table 9 Indicators- Access to narrowband and broadband Internet *

N	Indicator	Q4 2013	Q3 2013	Change %	Q4 2012	Change %
1.	Narrowband subscribers fix line	375	425	-11.76%	637	-41.13%
-residential		11	16	-31.25%	40	-72.50%
-business		364	409	-11.00%	597	-39.03%
2.	Narrowband subscriber mobile (2G/3G)	801,669	807,810	-0.76%	766,522	4.59%
-residential		686,873	698,460	-1.66%	655,845	4.73%
-business		114,796	109,350	4.98%	110,677	3.72%
3.	Broadband subscribers fix lines	338,486	330,798	2.32%	312,272	8.39%
-residential		313,189	306,959	2.03%	290,433	7.84%
-business		25,297	23,839	6.12%	21,839	15.83%
3.1	Broadband subscribers xDSL	166,249	163,848	1.47%	156,722	6.08%
-residential		151,071	149,342	1.16%	142,898	5.72%
-business		15,178	14,506	4.63%	13,505	12.39%
3.2	Brodband subscribers CaTV network	89,643	82,848	8.20%	77,310	15.95%
-residential		85,986	79,657	7.95%	74,801	14.95%
-business		3,657	3,191	14.60%	2,509	45.76%
3.3	Broadband subscribers fiber optic	12,203	10,976	11.18%	7,880	54.86%
-residential		10,210	9,278	10.05%	6,785	50.48%
-business		1,993	1,698	17.37%	1,095	82.01%
3.4	broadband subscribers radio network	21,152	21,666	-2.37%	22,976	-7.94%
-residential		18,746	18,894	-0.78%	20,512	-8.61%
-business		2,406	2,772	-13.20%	2,464	-2.35%
3.5	Broadband subscribers leased lines	911	668	36.38%	890	2.36%
-residential		1	2	-50.00%	2	-50.00%
-business		910	666	36.64%	888	2.48%
3.6	Broadband subscribers -LAN network	48,328	50,792	-4.85%	46,494	3.94%
-residential		47,175	49,786	-5.24%	45,435	3.83%
-деловни		1,153	1,006	14.61%	1,059	8.88%

Table 9 point 1 shows the number of active narrowband residential and business subscribers in the fourth and third quarters of 2013 and fourth quarter of 2012, and the change in percent (%). It may be noted that the total number of narrowband subscribers in the fourth quarter of 2013 dropped by

11.76% compared with the previous quarter, while compared with the fourth quarter of 2012 the number of subscribers decreased by 41.13%.

In point 2 it is shown the number of narrowband subscribers through mobile network (2G/3G) which declined by 0.76% in the previous quarter and increased of 4.59% in compared to the fourth quarter of 2012. It is important to note that AEC changed the Guidelines and forms for quarterly reports - Appendix 2 mobile telephony, and now the number of broadband subscribers over mobile network (2G/3G) is summarized in one place. This is done with the aim of unifying the data of the operators who supplied individually subscribers only 2G or 2G/3G access and those who can not separate or show subscribers only 2G/3G access.

In point 3 it's shown the number broadband subscribers (not included subscribers by mobile networks) and their number is 338 499 subscribers or can be seen a growth of 2.32 % compared to the third quarter of 2013 year , while compared with the fourth quarter of 2012 the number of active subscribers increased by 8.39 % .The sub-items of item No.3 divided active subscribers to broadband internet access in technology. The point No.3.1 shows the number of subscribers to broadband access vby xDSL where it can be seen a growth of 1.47 % in the previous quarter and an increase of 6.08 % compared to the fourth quarter of 2012 year.

The point 3.2 shows the number of broadband subscribers of CaTV network which is 89,643 subscribers respectively, compared with the third quarter of 2013 there is an increase by 8.20 % as compared to the same quarter of 2012 there is an increase by 15 , 95 %. The point No.3.3 shows the number of broadband subscribers fiber optic and their number is 12 203 subscribers. Compared with the previous quarter there is an increase of 11.18 % compared with the fourth quarter of 2012 the number of broadband subscribers fiber optic has increased by 54.86 % .

The point 3.4 shows the number of broadband subscribers radio network which is 21,152 subscribers respectively compared with the previous quarter where there is a decrease by 2.37 % as compared to the fourth quarter of 2012 the number of subscribers decreased by 7.94 %. The point No.3.5 shows the number of broadband subscribers t leased lines , which is increased by 36.38 % compared with the third quarter of 2013 and an increase of 2.36 % compared to the fourth quarter of 2012. The point No.3.6 shows the number of broadband subscribers LAN, which declined by 4.85 % in the previous quarter and has increased of 3.94 % compared to the fourth quarter of 2012.

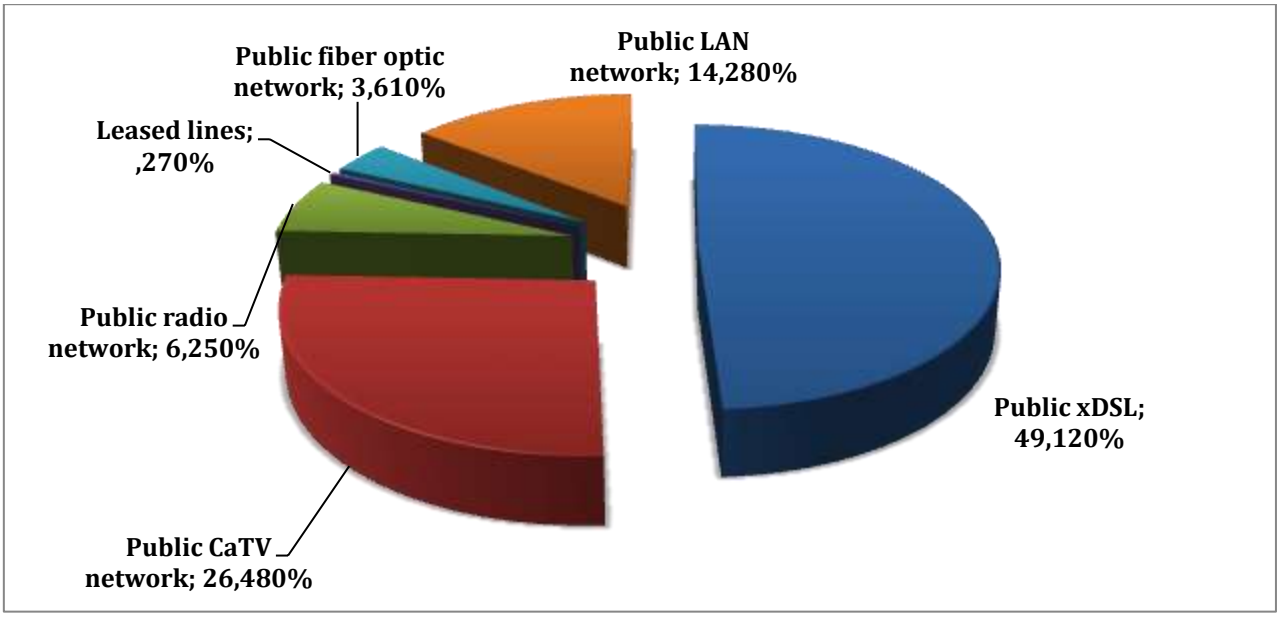


Chart 18 Broadband technology market share 4Q/2014

In Chart 18 is given broadband technology market share of the fourth quarter of 2013 and from the graph can be seen that the highest percentage belongs to those subscribers who have access to the Internet via a public xDSL which is 49,12 %. Then there are subscribers who have access to the Internet via a public CaTV network and their share is 26.48 % , followed by the LAN subscribers 14,28% , public radio network (not included subscribers through mobile networks) 6.25 %, public fiber optic network 3.61 % and 0.27 % for leased lines .

Table 10 Indicators – Number of active broadband subscribers by speed for 4Q/2013

<1 Mbps	1 Mbps ≤ download <2Mbps	2 Mbps ≤ download <4Mbps	4 Mbps ≤ download < 8Mbps	8 Mbps ≤ download <20Mbps	20 Mbps ≤ download <30Mbps	30Mbps ≤ download <50Mbps	50 Mbps ≤ download <100Mbps	≥ 100Mbps
27	4.790	86.784	105.347	123.563	4.672	3.635	9.655	13

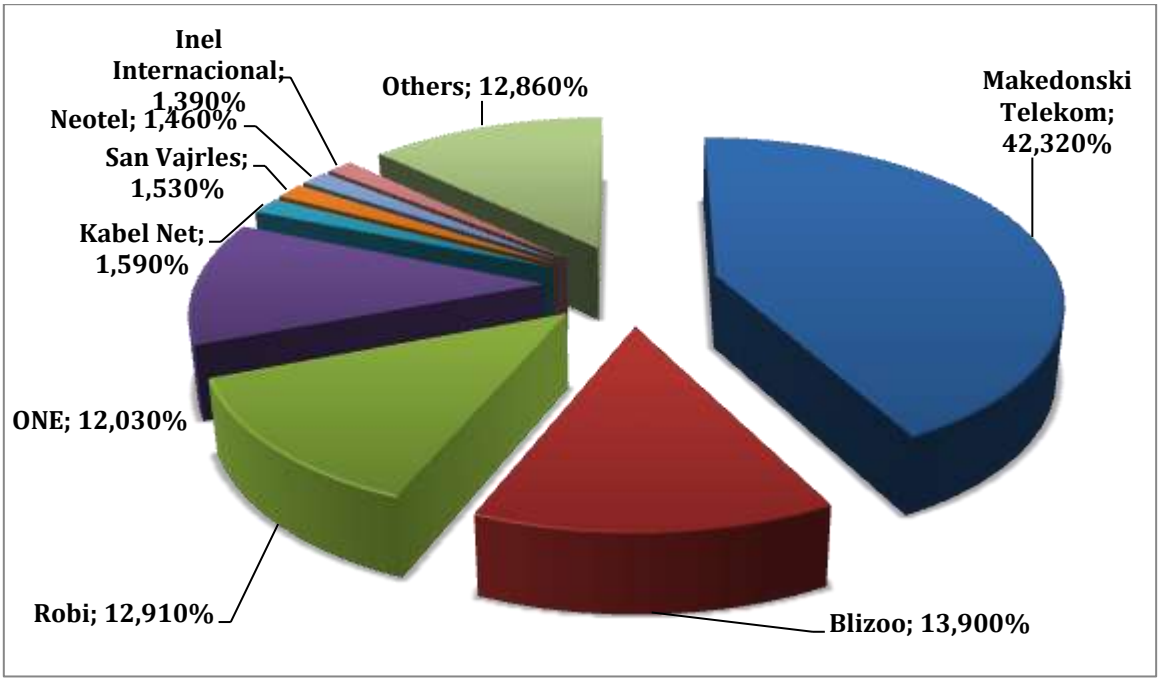


Chart 19 Market share according to the number of active fixed broadband subscribers per operator on 31.12.2013

In chart 19, is given the market share according to the number of active fixed broadband subscribers per operator for the fourth quarter of 2013. As it can be seen from the chart the highest market share has Macedonian Telecom 42.32% followed by 13.90% Blizoo, Robbie 12.91%, ONE 12.03%, Kabel Net 1.59%, San Vaerles1.53% , Neotel 1.46%, Inella International 1.39% and Other 12.86%.

5. Transmission of radio and TV services to end-users

Of the 84 notified entities in the official records of the AEC for provision of services related to broadcasting, such as terrestrial transmission of radio programming services, terrestrial transmission of television programming services, retransmission of radio programming service and retransmission of television programming service, only 82 entities were active in the forth quarter of 2013. Those are:

1. Blizoo Skopje,
2. System cable-Skopje
3. Ri-Go kable sat-Skopje
4. Body Net-Skopje
5. Total TV Skopje
6. ONE-Skopje
7. Makedonski Telekom Skopje,
8. Viva net-Berovo
9. Mix-net Bitola
10. Igmas net-Bitola
11. Omega-2 net Bitola
12. Galavizion 5 Company-Bitola
13. Sato net-Brvenica
14. Super-cable Brvenica
15. Kamsat-Vinica
16. Vin sat-Vinica
17. Kratelsat-Vinica
18. KTV 69- Vinica
19. Almako CAT-Gevgelija
20. Spider-Gevgelija
21. Spider-net Gevgelija
22. GIV Ivan-Gostivar
23. Multimedia Network-Gostivar
24. Super Hit-city,
25. G-on-Debar
26. BIV Pyramid-Delcevo
27. Interlajf Demir Kapija,
28. Omega net-Demir Hisar
29. Inella International Kavadarci,
30. Peshna-Kicevo
31. B2 Net-Kicevo
32. Astra-plus Kocani
33. Cable riz-Kocani
34. Philadelphia 2002- Kocani
35. Tranšped Trade-Kriva
36. Global Net-Krusevo
37. Altra CAT 200 Ohrid
38. Infel-Ohrid
39. Cable Net-Prilep
40. KDS-VT-Probishtip
41. Andes-Studio -Radovish
42. Yup I-Radovish
43. Channel 16- Resen
44. Cable-cam- Rosoman
45. Bambi net-Rostushe
46. L Cable Net-Struga
47. City KTV-Struga
48. Art-Net Struga
49. Ms. KTV-Struga
50. K-Crystal-Struga
51. Profi sound-Struga
52. Cable Net-Strumica
53. TRD Cable-Strumica
54. Skrembl-Strumica
55. Telenet com-Tetovo
56. Robbie- Stip
57. Pella Digital 2008 - Struga
58. Cable TV HDV-Skopje
59. Plus Miltimedia Digi-Skopje
60. Tringov max-Skopje
61. Inella Tech-Kavadarci
62. Space Tel-Net Skopje
63. Herbie Net One Project,
64. Multimedia-Net-Skopje
65. BTV-Net Bitola
66. Kabelkall-Kicevo
67. Skupi cables Skopje,
68. Kombo 2003 - Kumanovo
69. IP Systems -Kumanovo
70. Cyber Net Anna-Gostivar
71. Net-Cam -Macedonian Kamenica
72. Fiber Networks-Skopje
73. Empire Sat-Veles
74. Ass-CAT-Gostivar
75. IPTV-net-Skopje
76. Intercable- Skopje
77. Pet net-Gevgelija
78. VVV internet grup- Kumanovo
79. AS IPTV M- Skopje
80. Mikrokonekt- Skopje
81. Vinsat Kabel – Vinica
82. Sanet Kabelsat – Vinica

Table 11 Indicators- Transmission of radio and TV services to end-users

	Indicator	Q4 2013	Q3 2013	Change (%)	Q4 2012	Change (%)
1.	CaTv subscribers	178,955	178,330	0.35%	172,835	3.54%
2.	IPTV subscribers	88,125	84,213	4.65%	66,541	32.44%
3	DVB-T subscribers	58,277	57,719	0.97%	37,452	55.60%
4	Satellite TV subscribers*	14,566	13,524	7.70%	/	/
5	Total TV subscribers*	339,923	333,786	1.84%	/	/

Table 11 show the total number of active subscribers to TV services in the fourth and third quarters of 2013 and fourth quarter of 2012, and the change in percent (%). From the table it can be seen that the number of active subscribers of cable television in the fourth quarter of 2013 increased by 0.35% compared to the previous quarter.

In point 3 is given the number of DVB-T subscribers. The granting of permission for the use of radio frequencies in June 2009 the operator ONE AD Skopje (later transferred to Digi Plus Multimedia Skopje) began providing service via terrestrial digital TV transmitter (DVB-T) in November 2009. The number of subscribers who use DVB-T accounted for 58,277 subscribers compared with the last quarter may have noticed an increase of 0.97% as compared to the fourth quarter of 2012 the number of subscribers increased by 55.60%.
In point 4 is given the number of satellite TV subscribers that in the fourth quarter of 2013 grew by 7.70% in the previous quarter.

In point 5 is given the total number of TV services subscribers and their number in the fourth quarter of 2013 amounted to 339,923, or compared with the previous quarter, the number of subscribers has increased by 1.84%.

*Number of satellite TV subscribers is incomparable to the previous year due to the inaccurate reporting of the data by one of the operators.

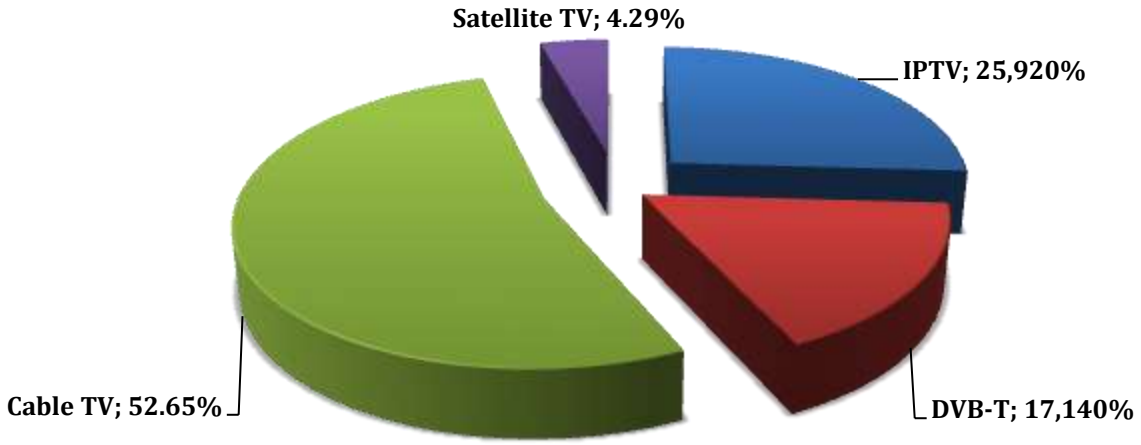


Chart 20 Transmission of TV services to end-users, state in the forth quarter of 2013

In chart 20 is given the market share (%) of TV services subscribers divided by technology for the fourth quarter of 2013. The market share of cable TV subscribers is 52.65%, subscribers of PTV have a share of 25.92% while the share of DVB-T subscribers and satellite television accounted for 17.14% and 4.29%.

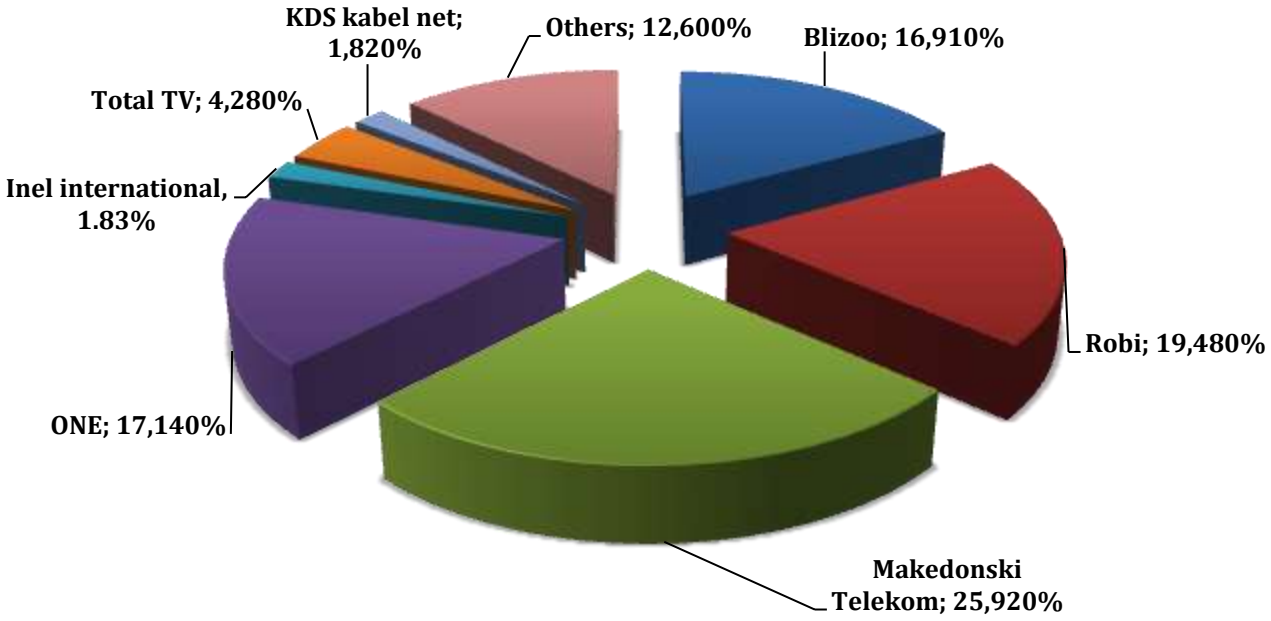


Chart 21 Market share by operators on broadcasting market , state in the forth quarter of 2013

6. Leased lines

Of the 29 notified entities in the official records of the AEC in the forth quarter of 2013, 27 entities provided leased line services over a public electronic communications network. Those were:

1. Makedonski Telekom- Skopje,
2. Neotel-Skopje,
3. Balkantel-Skopje,
4. JP MZ Infrastructura -Skopje,
5. Telesmart Telekom-Skopje,
6. Mepso-Skopje,
7. ONE-Skopje,
8. JP Makedonska radiodifuzija Skopje,
9. Akton- Skopje,
10. Blizoo-Skopje,
11. Dasto-Skopje,
12. Softnet EU –Skopje,
13. Pegas Pres Cable –Skopje,
14. Cosmoline-Skopje,
15. ITV Net – Skopje,
16. Viva net – Berovo,
17. Fikab-Tetovo,
18. TransBalkan Telekom – Skopje,
19. GIV-Gostivar,
20. Netfon – Skopje,
21. Pantel International – Skopje,
22. Man Technology – Skopje,
23. Net Kabel – Strumica,
24. Teleks – Skopje,
25. Mol Communications – Skopje.
26. Multimedija Net-Skopje,
27. Bulgartel- Skopje.

Table 12 Indicator- Leased lines*

Indicator		Q4 2013	Q2 2013	Change %	Q4 2012	Change %
1.	LAN (Ethernet)	0	0	0.00%	n.a.	/
2.	(Ethernet/MPLS/VLAN/SDH)	45	42	7.14%	n.a.	/
3.	copper/fiber optic (Ethernet/MPLS/ VLAN/SDH)	274	276	-0.72%	n.a.	/
4.	analoque leased line	262	268	-2.24%	n.a.	/
5.	copper/ fiber optic- (structured/64 Kbps)	44	45	-2.22%	n.a.	/
6.	copper/fiber optic- (structured/2 Mbps)	52	51	1.96%	n.a.	/
7.	WIMAX	0	0	0.00%	n.a.	/
8.	Other	16	16	0.00%	n.a.	/
Total		693	698	-0.72%	n.a.	/

Table 12 shows the number of installed leased lines for data connection (point-to-point or point-to-multipoint). The number of leased lines installed in the fourth quarter of 2013 declined compared to the previous quarter of 0.72%, as compared to the fourth quarter of 2012 cannot be made due to the changes in the forms of quarterly reports.

Table 13 Indicators– Number of leased lines in a wholesale level*

Indicator		Q4 2013	Q3 2013	Change %	Q4 2012	Change%
Terminating segments of leased lines						
1.	64 Kbps	0	0	0.00%	n.a.	/
2.	2 Mbps	778	774	0.52%	n.a.	/
3.	34 Mbps	0	0	0.00%	n.a.	/
4.	155 Mbps	29	29	0.00%	n.a.	/
5.	Above155 Mbps	0	0	0.00%	n.a.	/
Trunk segments of leased lines						
1.	64 Kbps	0	0	0.00%	n.a.	/
2.	2 Mbps	577	573	0.70%	n.a.	/
3.	34 Mbps	0	0	0.00%	n.a.	/
4.	155 Mbps	3	3	0.00%	n.a.	/
5.	Above155 Mbps	0	0	0.00%	n.a.	/
Terminating segments and trunk segments of leased lines						
1.	download ≤ 2 Mbps	0	0	0.00%	n.a.	/
2.	2 Mbps < download ≤ 10 Mbps	2	2	0.00%	n.a.	/
3.	10 Mbps < download ≤ 20 Mbps	6	3	100.00%	n.a.	/
4.	20 Mbps < download	58	55	5.45%	n.a.	/

8. Number portability

In order to encourage the process of creating a competitive electronic communications market starting from September 1, 2008 it was allowed geographic portability and number portability when changing the provider of a public communications network and that is the subscriber's right to retain the existing number when changing network termination point at the same geographic numbering area and/or change the public communication network. Chart 22 shows the number of subscribers who have exercised the right to retain the existing number in the period from 31st of March 2011 until 31st of December 2013.

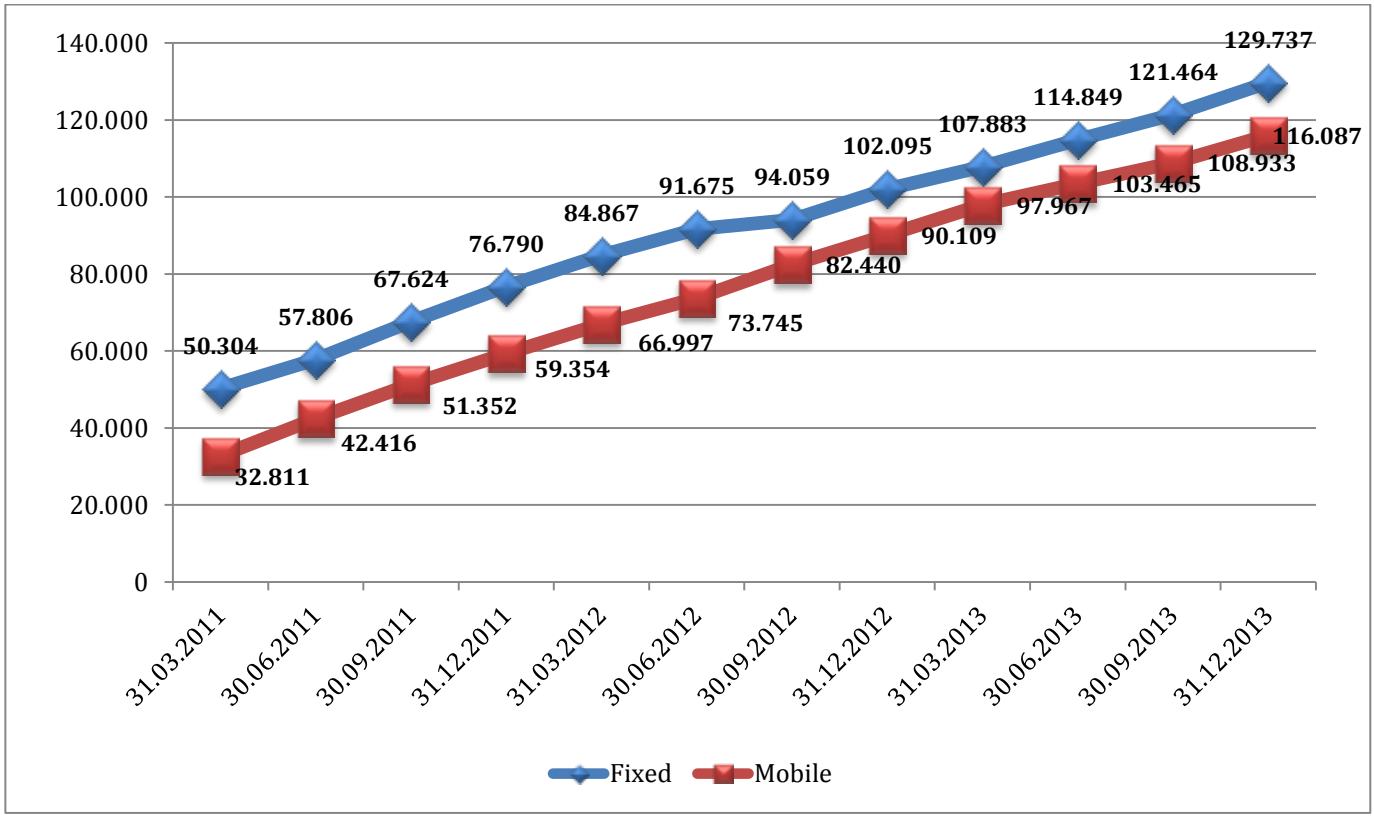


Chart 22 Number portability (fixed and mobile) period from 31st of March 2011until 31st of December 2013

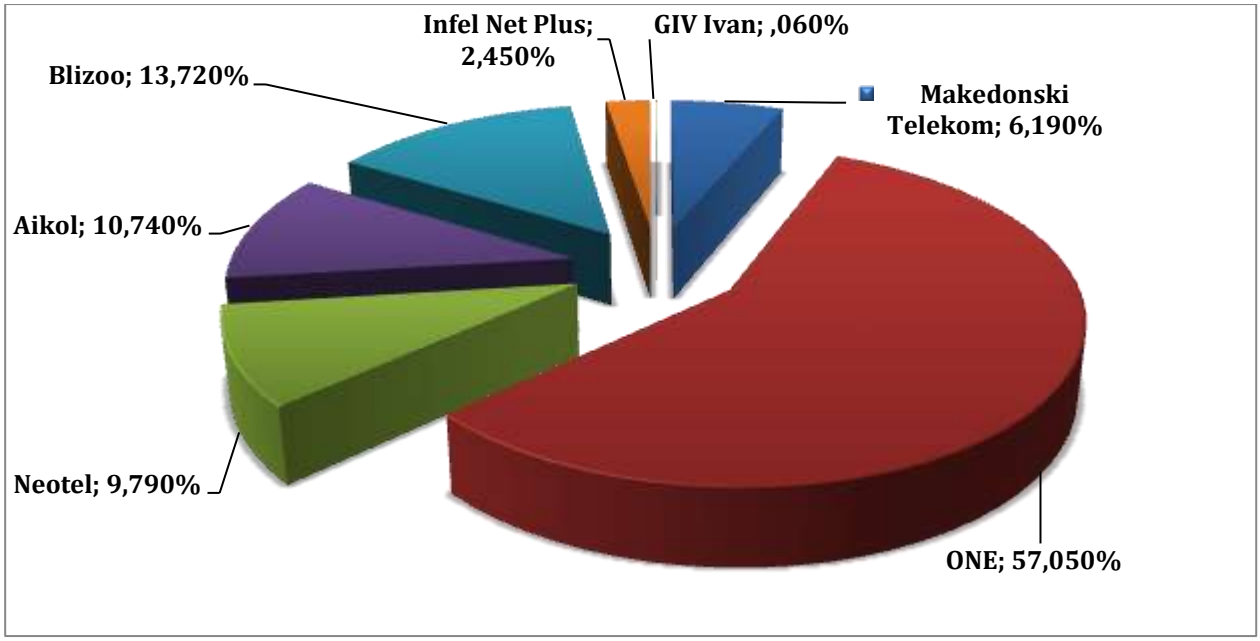


Chart 23 Market share in total number of number portability in fixed networks (as of 31.12.2013 година)

Chart 23 gives market share in total number of number portability in fixed networks until the end of the fourth quarter of 2013. As it can be seen from the graph the highest percentage of number portability is to ONE network operator and their share is 57,05%, followed by Blizoo with 13,72%, Aikol 10,74%, Neotel 9,79%, Makedonski Telekom 6,19%, Infelnet plus 2,45% and GIV Ivan 0,06%.

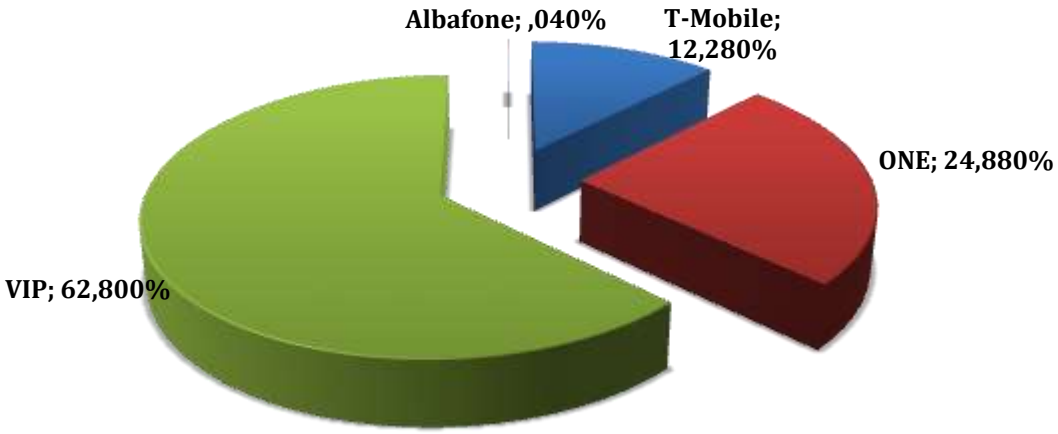


Chart 24 Market share in total number of number portability in mobile networks (as of 31.12.2013 година)

Chart 24 gives market share in total number of number portability in mobile networks until the end of the fourth quarter of 2013. As it can be seen from the chart the highest percentage of number portability is to VIP network operators and their share is 62.80%, followed by further ONE 24.88%, T-Mobile with 12.28% and Albafonee with 0, 04%.

9. Bundled services

Table 14 Indicators – Bundled services

Indicator		Q4 2013	Q3 2013	Change %	Q4 2012	Change %
Total number of subscriber for bundled services		289,812	283,182	2.34%	258,315	12.19%
1.	Bundled services-TV, internet	38,975	38,744	0.60%	36,922	5.56%
2.	Bundled services-TV, fixed telephony	17,473	16,939	3.15%	12,562	39.09%
3.	Пакет- Интернет, Фиксна тел.	75,576	75,039	0.72%	77,316	-2.25%
4.	Bundled services-TV, internet, fixed telephony	155,520	149,879	3.76%	128,028	21.47%
6.	Bundled services- other	2,268	2,581	-12.13%	3,487	-34.96%

In table 14 is given the number of subscribers who use bundled services in the forth and third quarter of 2013 and fourth quarter of 2012 and the change in percent. As it can be seen , the total number of subscribers who use bundled services has increased by 2.34 % compared to the third quarter of 2013 as compared to the fourth quarter of 2012 can be seen a growth of 12,19 %. Also in the table can be seen that the most subscribers use three bundled services including: fixed telephony, broadband and TV services, and their number compared to the third quarter of 2013 increased by 3.76 % as compared to the fourth quarter of 2012, this increase amounts to 21.47 %.

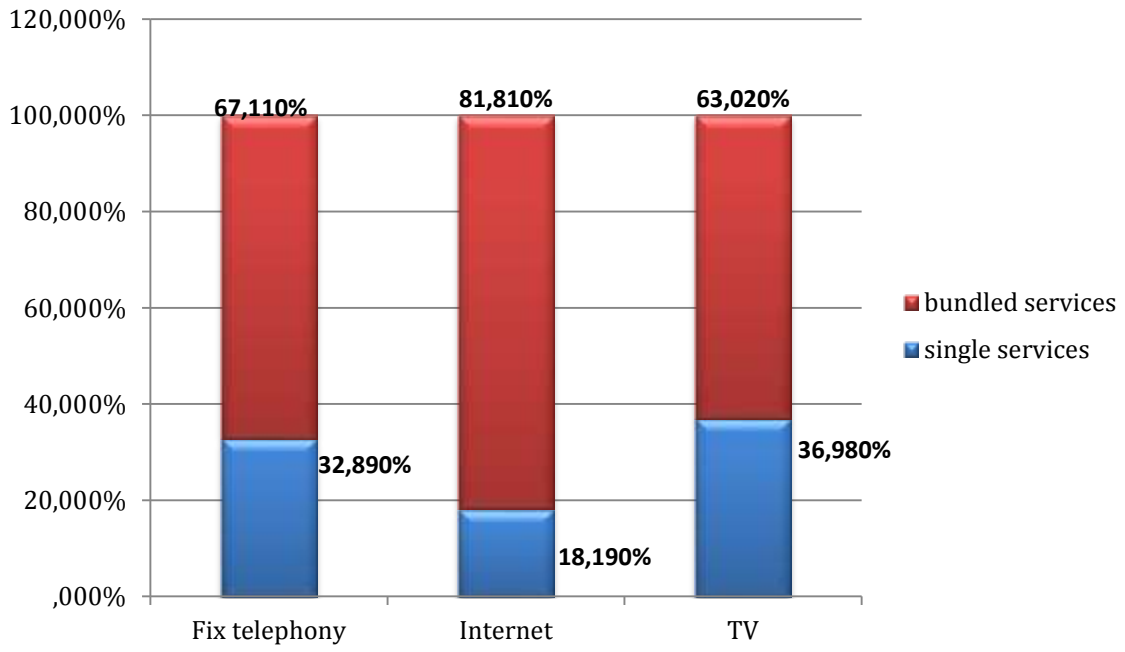


Chart 25 Proportion of single and bundle service subscribers (as of 31.12.2013)

Chart 25, gives the proportion of single and bundle service subscribers in the fourth quarter of 2013. From the chart it can be noticed that the total number of subscribers who use fixed telephony services, 67,11 % use this service as a bundle servic . Of the total number of subscribers using broadband internet access, 81.81 % use this service as a bundle service, while the total number of subscribers using TV Services, 63.02 % use this service as a bundle service.

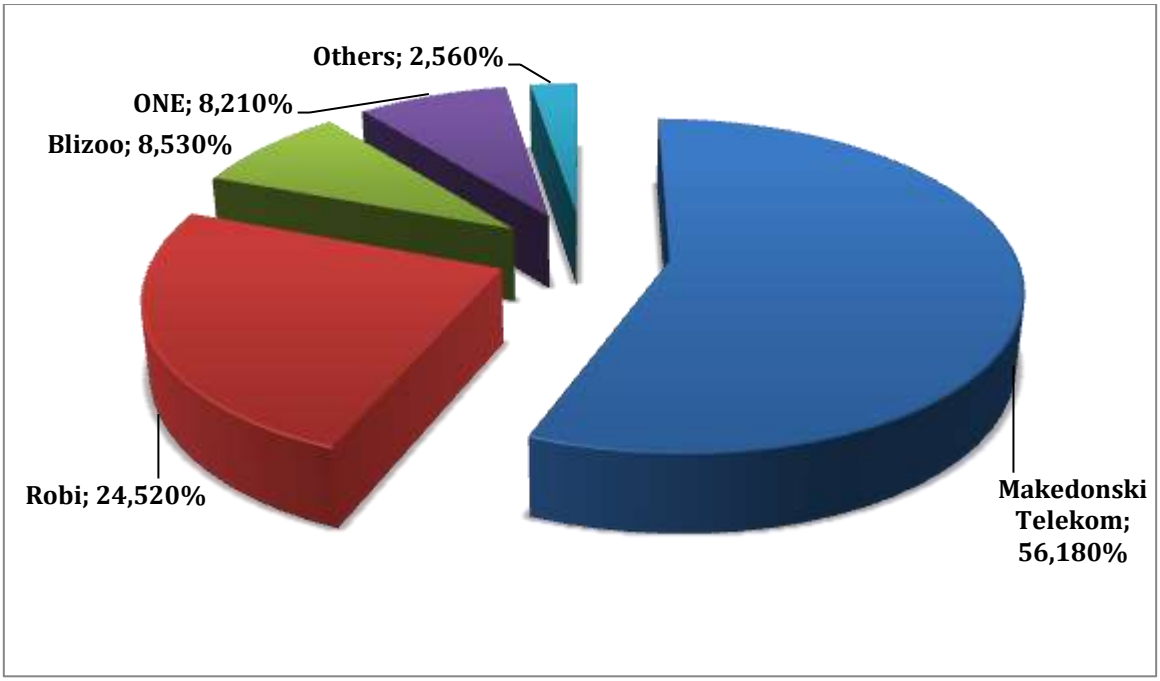


Chart 26 Market share per operator according to the number of subscribers who use bundled services (two services) in the forth quarter of 2013

Chart.26 gives market share per operator according to the number of subscribers who use bundled services (two services) in the forth quarter of 2013. As it can be seen from the graph the highest market share has Makedonski Telekom with 56.18%, followed by Robi 24,52%, ONE with 8.21% and other operators 2.56%.

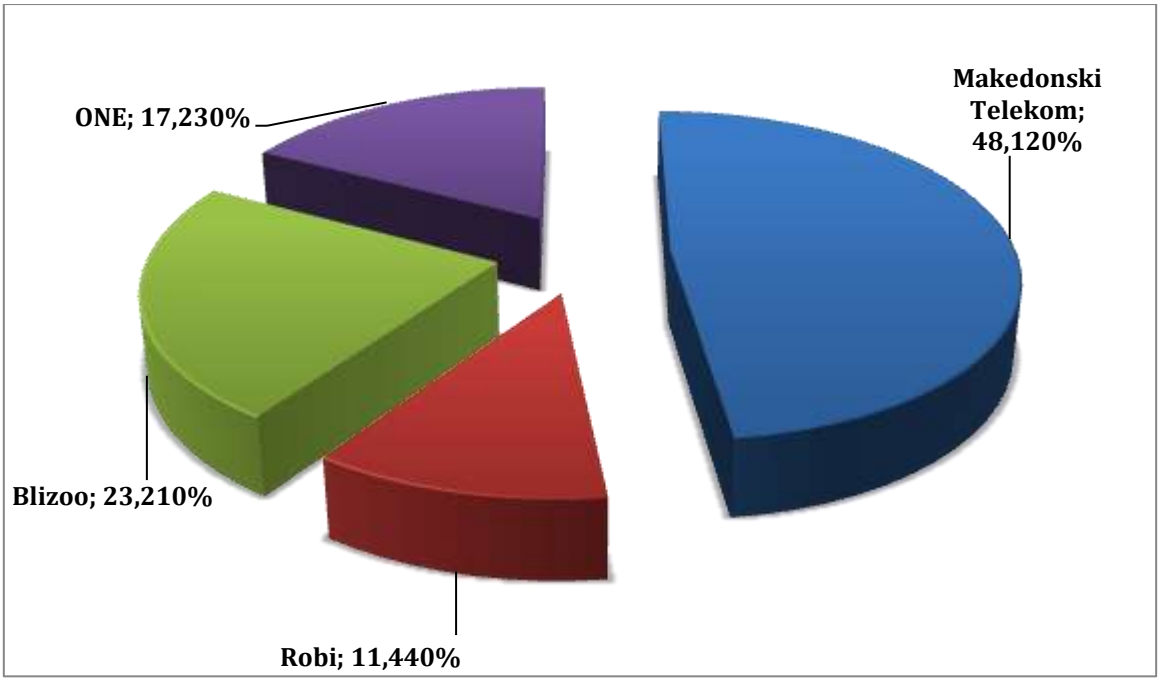


Chart 27 Market share per operator according to the number of subscribers who use bundled services (three services) in the forth quarter of 2013

Chart 27 gives market share per operator according to the number of subscribers who use bundled services (three services) in the forth quarter of 2013. As it can be seen from the chart the highest market share has Makedonski Telekom with 48.12%, followed by Blizoo 23.21%, ONE with 17,23% and Robi 11,44%.

10. Notified operators/service providers

Notified operators/service providers based on data which is prepared this document:

Makedonski Telekom Skopje , Near Skopje , Stip Aikol , Neotel Skopje , Infel Net Plus Ohrid , Skopje Anutel , T -Mobile Skopje , Skopje Akton , Zorins Net Skopje , Ultranet Ultra - Skopje , Skopje Nikomsistems , Pc4all Skopje , Ohrid Tushev , Inside Ohrid , Ohrid NetPlus , Trikompani Ohrid , Prilep Interspejs , Staelt Prilep , Struga Mergimtari , computers Spider - Struga , Debar - Net Alban , Memtel - Resen , Pejoski Sped - Kicevo Media - Net Computers Kocani , Computer Engineering - Macedonian Kamenica , M - Engineering - Stip , Bitola button and hydro - Gostivar.Drushtvo electronic data services, Skopje , Skopje Anica systems , Istel Skopje , Skopje Telesmart , Telesmart Telecom Skopje , D.T.C. Corp- Skopje , Skopje VIP Operator , Ultra - Skopje , Skopje Sing - plus , Net Soft - Skopje near Skopje , Skopje SONET - ONE - Operator Skopje , Macedonia on line Skopje , Skopje Balkantel , ITV Net Skopje Robbie Stip , Strumica Netkova , Trend A - Strumica , Struga VIP - Net , Channel 16 Resen , Resen - Angela Group , yup I - Radovish Andes - Studio Radovish Cable Net - Prilep , Ohrid Infel CTV , Altra CAT 2000 Ohrid , Kumanovo Combo 2003 , 2008 Gajtanless Krusevo , Krusevo - Net Global , Trade - Tranšped Kriva Eurostyle - Kriva Media point- Kocani Advansd Digital Network Kicevo , Inella Tech- Kavadarci Inella International - Kavadarci Spider Net - Gevgelija , Gevgelija Spider - Pat - Net Gevgelija Maktelko Bitola , Bitola Mix - net , GIV - Delcevo 2MG Skopje , Stojev digital- CBS - Net 2 - Kavadarci Diginet Strumica , Softnet EU Skopje Skopje They added , vortex computers Skopje , KDS - VT - Probishtip PE MR Infrastructure Skopje , PE Macedonian Broadcasting Skopje , Skopje MEPSO , Imperial C - Skopje , Skopje cable system , the cable - Ri sat Skopje , Body Net - Skopje , Skopje Total TV , Viva - net Berovo Igmas net Bitola , 2 Omega net - Bitola Galavizion 5 Company Bitola , net - Brvenica Sato , Super - cable Brvenica Kamsat Vinica , Win - CAT Vinica , Vinica Kratelsat , CTV - 69 Vinica , Gevgelija Almako CAT , GIV Ivan Gostivar , Gostivar Multimedia Network , Super hit - Town , D - on-Debar Interlajf Demir pepper, Omega net - Demir Hisar , Peshna - kicevo , B2 Net - Kicevo , Astra - plus Kocani , Kocani - Cable treasury , Philadelphia 2002 Kocani , Global Net - Krusevo , a net Herbie Project, cable - cam Rosoman Bambi net - Rostushe Cable l net - Struga Art Net - Struga , D - KTV - Struga , K - Crystal - Struga , Prof. sound - Struga , Strumica - Net Cable , Cable TRD Strumica , Strumica Skrembl , Telenet com - Tetovo , Pella Digital 2008 - Struga , Cable TV HDV - Skopje , Digi Plus Miltimedia Skopje . Deep blue plus - Prilep , Mann Technology Telecom Skopje , Gostivar - Telegram korporation , Tringov max - Skopje - Kumanovo Neonet , NetPlus Communications Skopje , tel Space Net Skopje , Exit com - Kicevo , global communication - Radovish Ultranet system - Bitola , Pella Digital 2008 - Struga , Skopje Media Net , Surffri - Rankovci , Fikab Tetovo , Skopje Multimedia Net Aris systems Strumica , Prilep Ibo connections , BTV - Net - Bitola , Cable Kall - Kicevo Skupi cable - Skopje , Macedonia - Skopje cogent , Spounet Skopje , Macedonia Alfa telecom Skopje , B - CTV - Struga , Pegasus Press Skopje , Bitola Chulak Net , Infinity Net Corporation Skopje , Mint net - Radovish , Ca Com Prom Project, Net Cable Strumica , Skopje Micro Connect , IP Systems Project, Cyber Net Anna - Gostivar , Kam Mak - Net . Kamenica , Fiber Networks , Skopje , goodness - Radovish Empire Sat - Chaska , Enter- Ohrid , Skopje Asseko , Pantel International Skopje , BBB Internet Group Project, IPTV AS M - Skopje Sanet Kabelsat Vinica , Novonet - Strumica Win CAT cable Vinica , BMI Communications Skopje , Skopje Mobile Connect .