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# Development and Improvement of the Quality of the Mobile Services at the Mobile Market in Macedonia

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**Abstract.** To determine the strategic direction for the development of electronic communications market in the part of mobile telecommunication services in Republic of Macedonia, the Agency for electronic communication has made an assessment of the regulatory progress and that has been made in recent years. The needs are in order to obtain a clear strategy for the development of the mobile telecommunication market in Macedonia, and primarily will create a clear picture in the: technical, financial, operational and competitive segments. Republic of Macedonia at this moment has 2 mobile operators with own network and the third mobile virtual operator. They are with excellent prospects in this direction and potential that enables low-cost services to the users. This shows that in Macedonia the telecommunication services are with high quality and the lower prices. They are currently among the lowest in the region and in Europe. The analysis in this paper are made according to the actual results achieved of the situation on the mobile market and some basic recommendations for their better development, better quality and better prices.

Keywords: prices, customers, mobile market, mobile operator, electronic communications, competition, revenue

#### Introduction

In order to confirm the strategic direction for the development of electronic communications market in Macedonia, the Agency has made an assessment of the regulatory progress that was performed in a period of one year, according to the received data and their analysis. This assessment can provide a clear picture of the development of the market and will present the current market situation in Macedonia from technical, financial, operational and competitive standpoint, compared with the market in 2015.

### **Mobile market**

In 2014 four companies provided public available telephone services in the public mobile communication network for national and / or international traffic, and they were:

- 1. T-Mobile Skopje
- 2. ONE-Operator Skopje
- 3. VIP Operator Skopje
- 4. Albafon Skopje. (Mobile virtual network operator) (VMO)

In 2015 there were two mobile telecommunication operators on the market : T-Mobile AD Skopje joined to the mother company Makedonski Telekom AD Skopje (Deutsche Telekom Group), ONE Operator Skopje and VIP Operator Skopje joined in to a new company named one.VipAD Skopje and Albafon Skopje (MVNO) went bankrupt.

In 2016 there were and still are (until now) two mobile operators with own network and the third mobile virtual operator.

- 1. Makedonski Telekom AD Skopje
- 2. Vip Skopje
- 3. Lycamobile Macedonia started to work (June 2016)

From the table 1,we can see the percentage decrease of 1,59% in the number of active subscribers in mobile telephony in 2016, compared to the previous year. It is obvious that the majority of residential subscribers prefer to use prepaid services rather than using postpaid services. The number of postpaid subscribers is increasing and residential postpaid subscribers grew by 3,26% for a one year period, business subscribers dropped by 10,35% for the same period. On the other hand, in 2016 we can notice a decrease in the number of SMS messages compared to 2015, which is 5,33%.

We can see that from the total traffic realized in 2016 there is dropped, compared to the previous year, in the traffic to all destinations, with the exception of traffic in the own mobile network, which has grew by 7,95%. There is big difference in the total number of calls to fixed networks in 2016 compared to the previous year, where the numbers are dropped by 46,64%, while the traffic to the networks in the foreign countries has dropped by 28,29%. It is important to note that the lowest drop is recorded in the traffic towards the other mobile networks in RM, which is 11,92%.

Finally, regarding the total number of calls in mobile networks in 2016 we can see growth by 2.46% over the previous year.

	2016	2015	Difference
Residential prepaid subscribers	1.045.224	1.070.504	-2,36 %
Residential postpaid subscribers	736.169	712.921	3,26 %
Business postpaid subscribers	269.101	300.158	-10,35 %
Number of active subscribers in mobile telephony	2.050.494	2.083.583	-1,59 %
Number of SMS messages	352.039.880	371.858.864	-5,33 %
Total number of calls in own mobile network	1.931.260.264	1.789.075.228	7,95 %
Total number of calls to other mobile networks in RM	609.052.217	691.452.608	-11,92 %
Total number of calls to fixed networks in RM	38.125.791	71.452.728	-46,64 %
Total number of calls to networks in foreign countries	9.032.423	12.595.423	-28,29 %
Total number of calls in mobile networks	2.621.849.130	2.564.575.987	2,23

 Table 1: Indicators of the mobile market – Retail, where the data are given for 2016 and 2015 and the difference given in%.

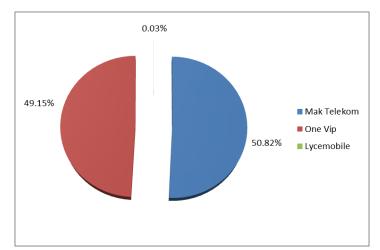


Figure 1: Market Share of the operators in the revenues from providing mobile communication services (retail level) in 2016

The chart 1 shows the market share of the mobile operators in Macedonia in the revenues generated from the provision of the mobile communications services in the retail market for 2016. From the figure 1 it can be seen that the largest market share has the mobile operator Makedonski Telekom with 50,82%, next is the One.VIP operator with 49,15% and the Lycemobile with 0.03%. The Market shares are calculated on the total income and it is the sum of revenues: service for call from a monthly subscription, the data transmission from the terminal equipment, SMS, from roaming (traffic, SMS and data) and the other revenue.

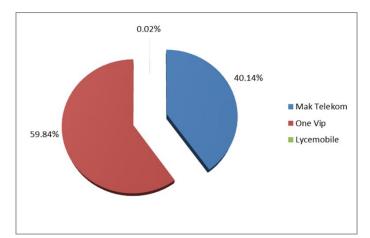


Figure 2: Market Share of the operators in revenues from providing mobile communications services (wholesale level) in 2016

The Chart 2 shows the market share of the mobile operators in Macedonia in the revenues generated from the provision of mobile communications services in the wholesale market for 2016. From the figure 2 it can be seen that the largest market share has the mobile operator One.VIP with 59.84%, next is the Makedonski Telekom with 40.14% and the Lycemobile with 0.02%. The results from the mobile operator Lycemobile are for 6 months having on mind that

this mobile operator started to work in June 2016. The Market shares are calculated on the total income and it is the sum of revenues: service for call termination, national roaming, transit traffic, termination of SMS and roaming by foreign subscribers located in Macedonia.

In accordance with the total revenues achieved in the market for electronic communications that are realized by the mobile operators, a drop of 2.58% in 2016may be noticed in comparison to 2015. In 2016, the total revenues from provision of public available telephone services on public mobile communication network for national / international traffic were 110.761.057,00 euro, while in 2015they were 113.694.618,00 euro.

# Recommendations for better development and improved quality of the mobile services

The major element of the market economy is free and effective competition. There is no market economy without competition and no competition without a market economy.

The Market competition is simple and effective tool and it ensures that the products and services offered to the consumers are with excellent quality and have competitive prices. The Competition and the free markets are the main power of the productivity, the efficiency, the product development, the innovation and an appropriate defining of the prices. The Competitive markets encourage better technologies and technological development in order to provide high-quality products and services to the customers with prices which are reflection to the costs of efficient producers.

It is a fact that the development of the mobile applications offering free Internet voice communication suppresses the voice traffic in any situation, whether it is in the network of the operator, including the operators in Macedonia or out of the borders of Macedonia. The same happens with messages. In this part, there is a huge reduction in the generated revenues. For these reasons, it is needed to join individual mobile services in packets of services and these packets of services would be more profitable for the operators and more attractive for the users. It even goes so far that all these packages of services are offered with good electronic equipment such as: good mobile phone, TV sets, PC's, Laptops, tablets, etc. This type of equipment is offered with several monthly repayments, which means that the equal monthly part of the cost of the equipment taken is added to the already defined monthly cost of the package.

There is no doubt that it is necessary and important for an operator to invest and develop its own network. The quality of the service offered to the customers affects the customer satisfaction and in their further using the services from the same operator. Every user wants quality of service and proper price for it. Invested versus received is a master key in the customers and the economic world.

#### **Conclusion:**

Nowadays, the market is liberalized with 2 mobile operators of public communication networks and 1 mobile virtual operator. They work well in the line of their financial reports. In that context, the market is developed and it follows the technical and technological development in the European and global significance. The Republic of Macedonia has excellent prospects in this direction and potential providing low-cost services to the users, which are actually the recommendations and objectives from the EU and ITU.With 2.3 million users, and 2 million people, all this shows that telecommunication services in Macedonia have high quality and the prices tend to be lower. They are currently among the lowest in the region and in Europe. The people in Macedonia are expecting higher quality and lower prices of the electronic communication services with the performance of the third virtual operator at the mobile market.

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