5. INTERNET SERVICES

The rate of Internet service usage largely depends on the level of development of the access infrastructure and technology. Judging from the number of users, the dial-up access remains the most common one, also which is realized via ISDN PRI interface or Telekom Srbija's SMIN (Serbian Multiservice Internet Network) in addition to the conventional way. Also, Telekom Srbija provided broadband access through its network infrastructure, through ADSL modems placed with the end-user. In addition to these technologies, Internet access is also possible through cable (through a network developed by a cable operator), wireless and UMTS (3G) of the mobile operators.

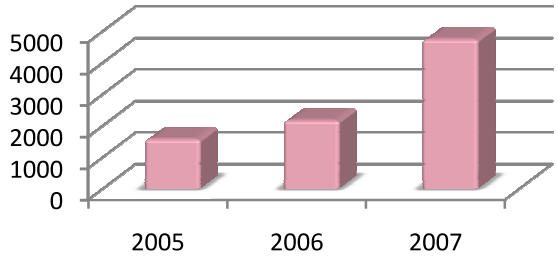
Table 10. Number of Providers According to the Access Technology

Number of providers according to access	2005	2006	2007
Dial-up	34	51	60
Cable modem	5	9	14
Optical cable	0	0	/
Wireless access	38	75	118
xDSL	12	16	23
Total	66	109	159

Source: RATEL

In 2007, the total revenue from Internet service increased by 118% compared with the previous year, which suggests there is a great potential for the development of the Internet, which is an inseparable part of the modern ICTs in Serbia. In view of the planned investments by the operators and the regulatory activities of the Agency in the following period, a positive development and progress of information society in Serbia cab be expected.

Figure 43. Revenues from the Internet in RSD million

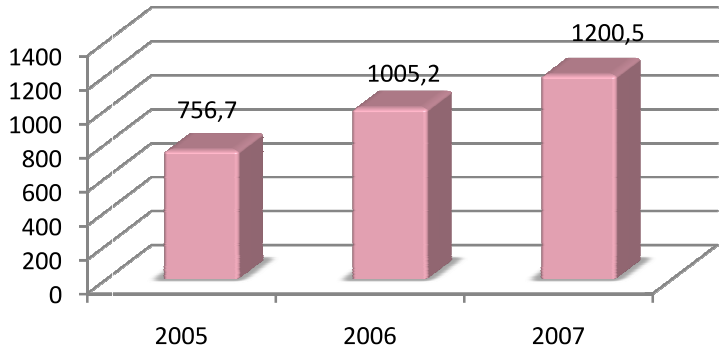


Source: RATEL

1.2 million users

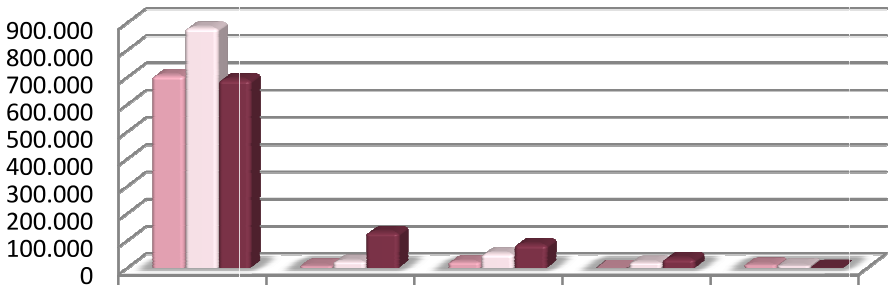
The total number of the Internet users in 2007 amounted to around 1.2 million, which is an increase of 19% (Figure 44.). As for the technologies, the dial-up access still prevails with slightly over 50% of the total number of users. Nevertheless, it should be noted that the number of dial-up users decreased by one fifth compared with the previous year, whereas the number of broadband Internet marked a considerable increase. Such trend is expected to continue making broadband access a dominant one , in view of an increasing demand for as faster Internet of a higher quality.

Figure 44. Number fo Internet users in Thousands



Source: RATEL

Figure 45. Number of Users according to Access Technology



	Dial-up	ADSL	Cable	Wireless	Other
2005	708.226	9.530	23.956	1.049	13.914
2006	882.611	26.126	54.598	21.968	10.210
2007	692.905	132.359	87.731	36.059	2.276

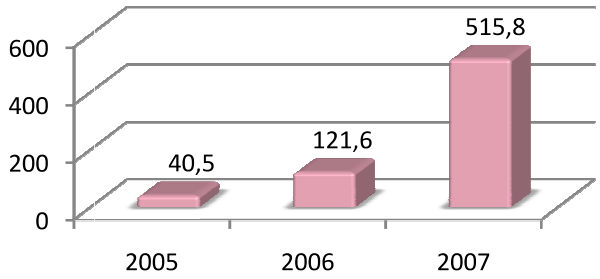
Source: RATEL

A rapid development of ICTs and a constant demand for faster and better service, together with the price cut brought about an increase in the number of broadband Internet users in 2007 four times higher compared with the previous year.

The greatest increase in the number of subscribers was seen with ADSL, which was five times higher compared with 2006. Also, there has been a constant growth (with a constant growth rate) in the number of cable modem Internet customers in the past three years. However, a sharp rise in the number of broadband users is a result of the introduced 3G technology in mobile networks in Serbia, enabling the end-user to have a broadband access to the Internet via cellular phones and data cards.

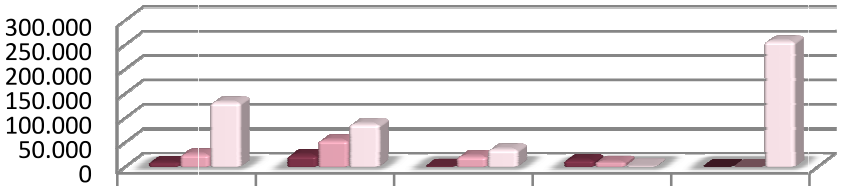
Such positive growth trend in terms of the number of users and QoS is of strategic importance for the development of telecommunications.

Figure 46. Number of Broadband Users in Thousands



Source: RATEL

Figure 47. Number of Broadband Users according to Technology

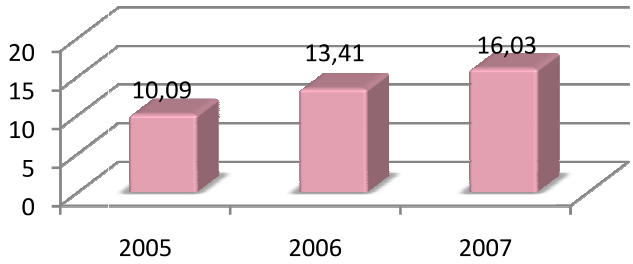


	ADSL	KDS	Bežični pristup	Ostalo	UMTS (3G)
2005	9.530	23.956	1.049	13.914	0
2006	26.126	54.598	21.968	10.210	0
2007	132.359	87.731	36.059	2.276	257.379

Source: RATEL

There was an increase in the penetration rate, which amounted to 16%, which is still below the EU average of 19%. However, a positive growth trend seen in the past three years, together with the constant development of the technology and QoS, are expected to narrow the gap in the years to come.

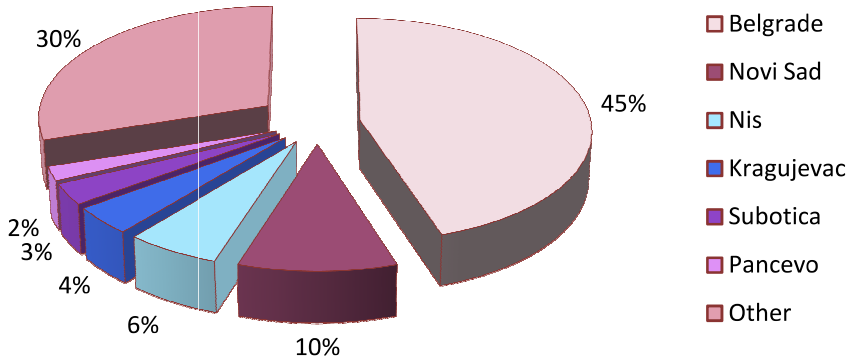
Figure 48. Internet Penetration (%)



Source: RATEL

Geographic distribution of the ISPs in Serbia is rather even – less than half operate in Belgrade, while around 20% operate in other large towns and 40% in the rest of Serbia.

Figure 49. Geographic Distribution of the ISPs



Source: RATEL

According to price lists published on ISPs' websites, it can be observed that a great variety of packages is offered, which provide different flows and different access technology to end-user.