4. PUBLIC MOBILE TELECOMMUNICATIONS NETWORKS AND SERVICES

Mobile market continues with a positive growth trend in 2008. The coverage rate of the public mobile networks is constantly rising, both in terms of territory and population. Meanwhile, the service usage is growing in volume, while new services based on the latest technologies are being continuously introduced.

There are three mobile operators present in the Serbian market:

- **Telecommunications company Telekom Srbija a.d. - Mobilna telefonija Srbije MTS,** owned by Public company for PTT traffic Srbija (80%) and OTE, Greece (20%) (license replaced on 01.08.2006)
- **Telenor d.o.o. Belgrade**, 100% owned by Sonofon A/S, Denmark, owned by Telenor ASA, Norway (license issued on 01.09.2006)
- **Vip mobile d.o.o. (member of Mobilkom Austria Group)**, owned by Telekom Austria Group, Austria (license issued on 01.12.2006).

Table 6. Number of Subscribers in the Past Three Years — Source: RATEL

	2006	2007	2008
Number of subscribers	6,643,700	8,452,642	9,618,767
Penetration (%)	88.60	112.73	128.28

All three operators were granted a license for public mobile telecommunications network and public mobile telecommunications network services in accordance with GSM/GSM1800 and UMTS/IMT-2000 standards, issued by the Republic Telecommunication Agency. The licenses were issued for the territory of the Republic of Serbia, for a period of 10 years, which can be extended upon the expiration for another 10 years without a special request from the operator, provided the requirements under the License are fulfilled. Vip Mobile d.o.o. was granted a license on 01.12.2006, but began operating in July 2007.

The Norwegian company Telenor has been present in the Serbian telecom market since 31 July 2006, when it had been issued a license for public mobile telecommunications network and public mobile telecommunications network services in accordance with GSM/GSM1800 and UMTS/IMT-2000 standards, in a bidding procedure. Through this procedure, Telenor bought the company Mobi63. This is the biggest direct foreign investment in Serbia so far.

Telenor d.o.o. is a member of Telenor Group, which operates throughout Europe and Asia. Telenor Group has ownership in thirteen mobile operators, which also include some of the operators in the region, namely, Panon in Hungary and Promonte in Montenegro.

In 2007 Telenor began with the commercial use of UMTS network enabling video calls and additional services based on high speed data transmission.

In 2008 Telenor built 540 new base stations.

MTS - Mobilna telefonija Srbije, as a branch of the Telecommunications Company Telekom Srbija a.d., was founded in June 1997, and in August 1998 it began to operate through a GSM standard based network. In December 2006, MTS began with the commercial operation of a 3G network with the latest HSDPA technology. During 2008, the operation of the 3G network was intensified 2008. The number of 3G network subscribers rose from 70 thousand in 2007 to approximately 490 thousand in 2008. In addition to the Serbian market, , Telekom Srbija a.d. is present as a mobile operator in Republic of Srpska and Montenegro, as well.

In 2008, Telekom Srbija a.d. built 524 new base stations.

The third licence for mobile operator was granted to Vip mobile d.o.o. Vip mobile is a member of the Mobilkom Austria Group, present in eight European countries, including the following countries in the region: Croatia, Bulgaria and Macedonia.

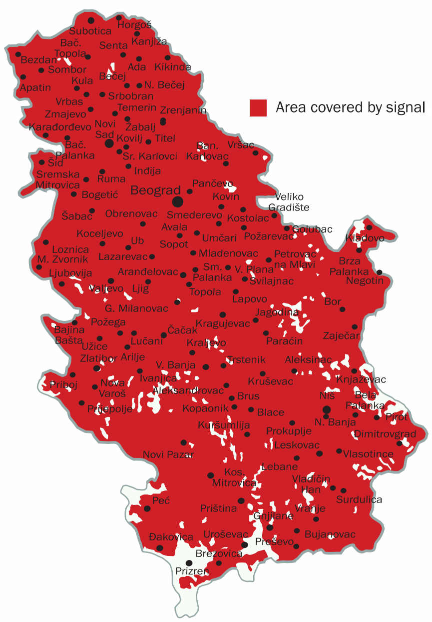
In addition to 320 million euros paid for the licence, during 2008 Mobilkom Austria made considerable investments in the development of infrastructure and hired a large number of professionals, thus making the biggest greenfield investment in Serbia so far.

Figure 28. Mobile operators - Telenor Source: Telenor Srbija

telenor

Official Data	
Name	Telenor d.o.o.
Head office	Belgrade
Ownership	100% Sonofon A/S
Number of employees	1205
Percentage of territory covered by GSM network signal	84.21%
Percentage of population covered by GSM network signal	93.23%
Percentage of territory covered by UMTS network signal	9.85%
Percentage of population covered by UMTS network signal	34.88%
Number of base stations	1820

Figure 29. Mobile Operators – Telekom Srbija a.d. Source: Telekom Srbija a.d.

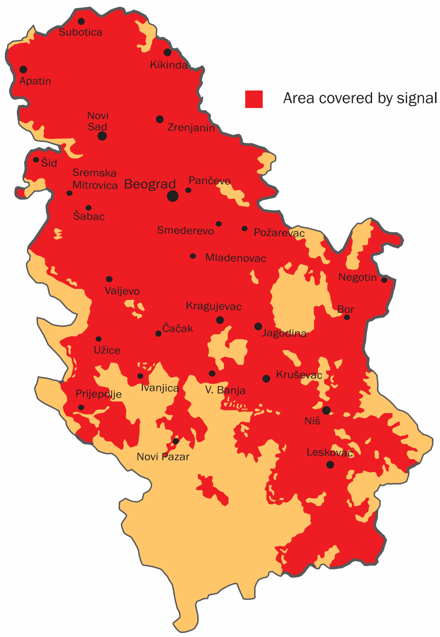


mt:s

MOBILNA TELEFONIJA SRBIJE

Official Data	
Name	Telekom Srbija a.d.
Head office	Belgrade
Ownership	80% JP PTT „Srbija“ 20% OTE, Greece
Number of employees	658
Percentage of territory covered by GSM network signal	87.54%
Percentage of population covered by GSM network signal	92.25%
Percentage of territory covered by UMTS network signal	29.50%
Percentage of population covered by UMTS network signal	55.85%
Number of base stations	1798

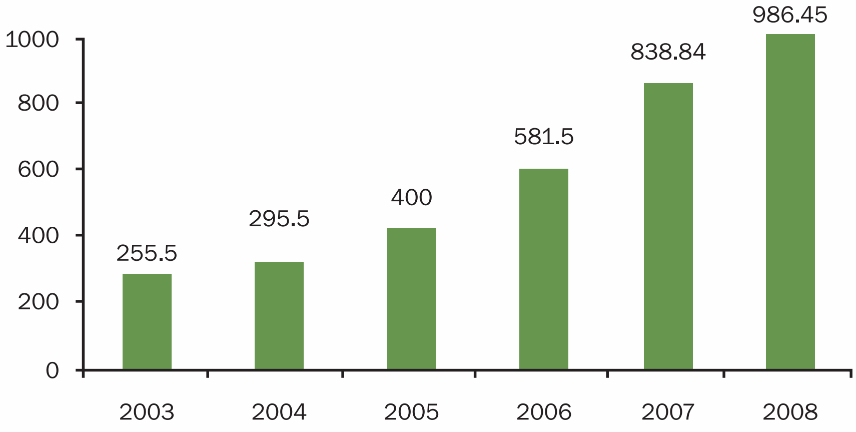
Figure 30. Mobile Operators – Vip mobile Source: VIP



Official Data	
Name	Vip mobile d.o.o
Head office	Belgrade
Ownership	100% Mobilkom Austria
Number of employees	613
Percentage of territory covered by GSM network signal	56.63%
Percentage of population covered by GSM network signal	73.90%
Percentage of territory covered by UMTS network signal	2.42%
Percentage of population covered by UMTS network signal	25.83%
Number of base stations	727

The revenues from the mobile network services in 2008 reached 986.45 million euros, this being a 9% increase in respect to 2007. (Figure 31).

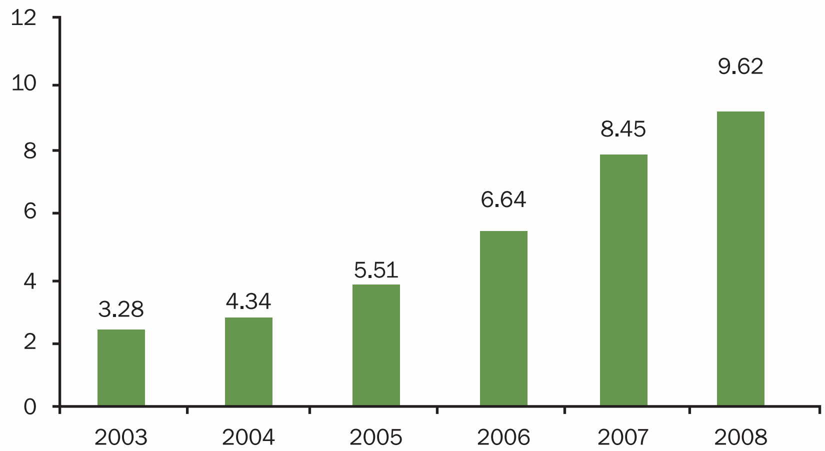
Figure 31. Total Revenues from Mobile Telephony (mn euros) Source: RATEL



9.62 million of users

The total number of mobile users in 2008 grew by 16% amounting to 9,618,767, thus continuing the growth tendency of the recent years.

Figure 32. The Total Number of Mobile Users (mn) Source: RATEL



The number of users exceeded the number of inhabitants for the second year in a row, the penetration rate in 2008 being 128.27%.

Figure 33. Mobile Penetration Source: RATEL

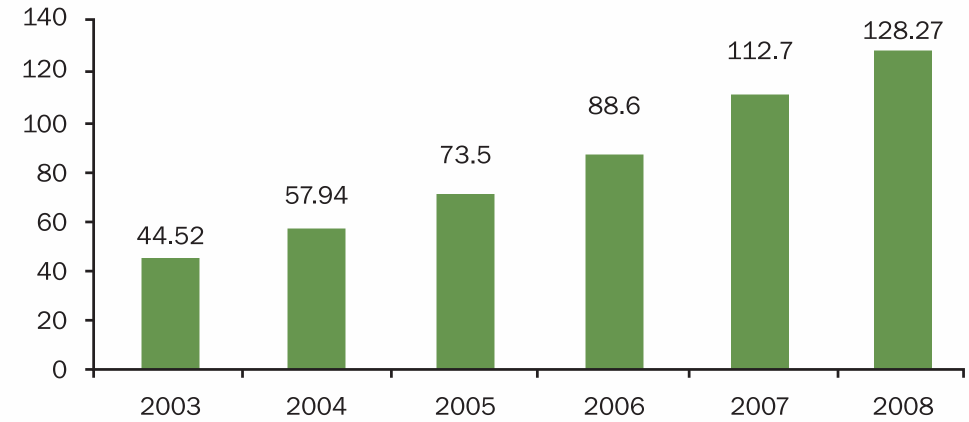
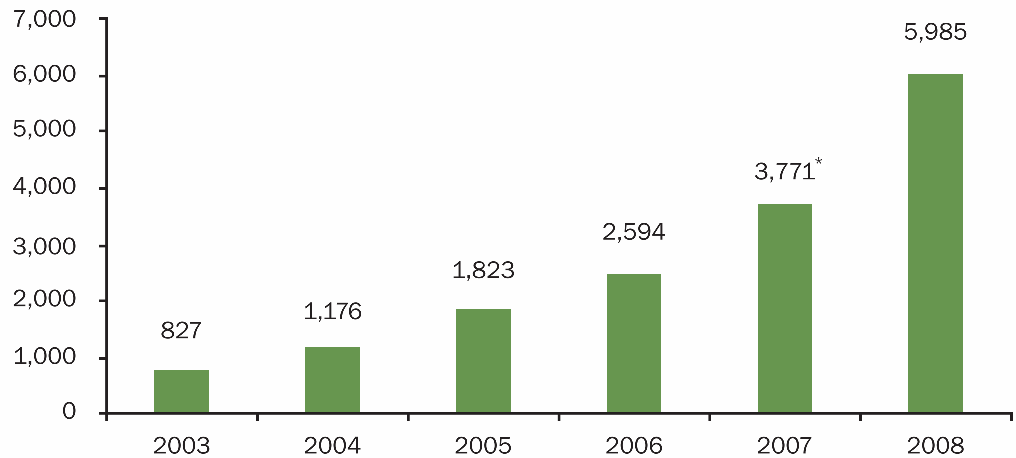


Figure 34. Total Ongoing Traffic (mn Minutes) Source: RATEL



* The total traffic for 2007 does not include the data for Vip mobile

Along with the number of users, the total traffic in 2008 grew as well, amounting to approximately 5.9 billion minutes of calls, which is an increase of 58% compared with the previous year. Annual average of traffic per users in 2008 was 622 minutes, this being an increase of 31% in respect to 2007, when each user spent around 475 minutes, on the average, talking on the cell phone.

The number of sent SMSs i MMSs continues to grow. During 2008, each users sent 820 SMSs on the average, whereas the total number of SMSs amounted to 7.9 billion. This resulted in an increase of 76% in respect to 2007, when the total of 4.4 billion messages or 475 messages per user were sent.

In 2008, there were 21.6 million MMSs sent, which is an increase of 28.5% in respect to 2007.

Figure 35. Number of Sent SMSs/MMSs (mn) Source: RATEL

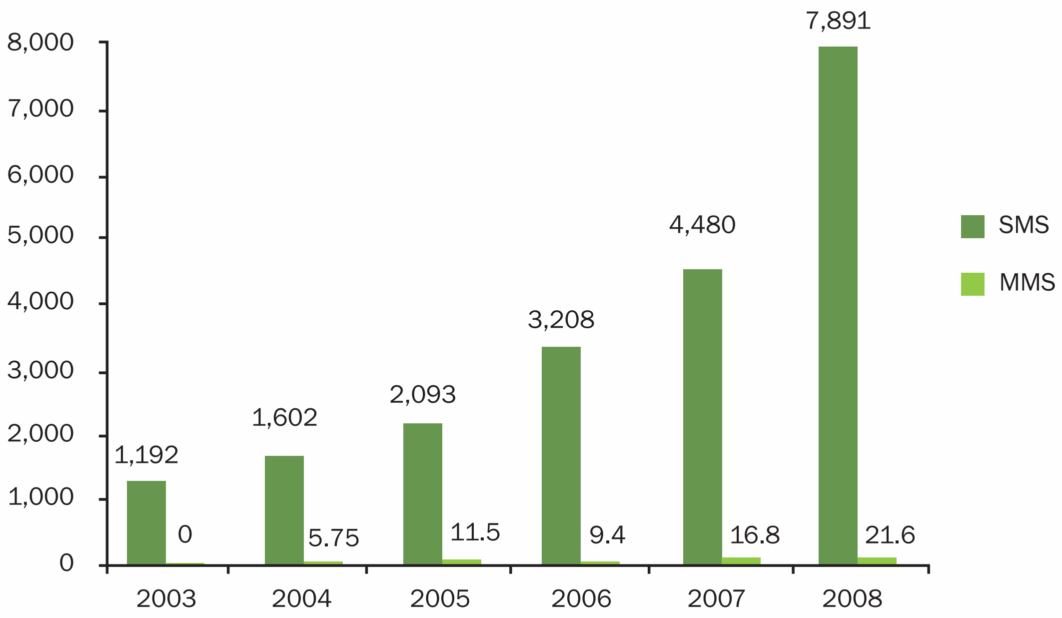
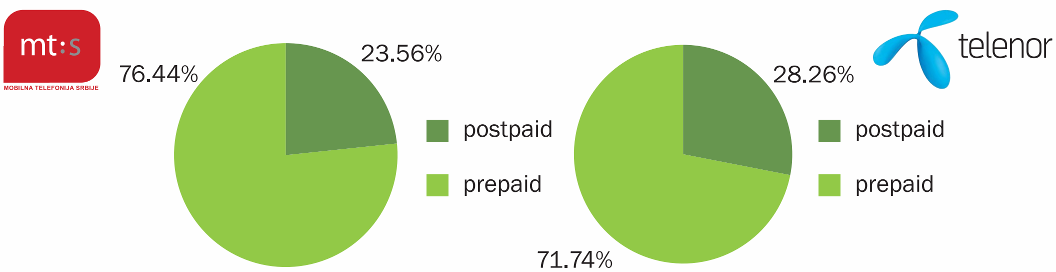


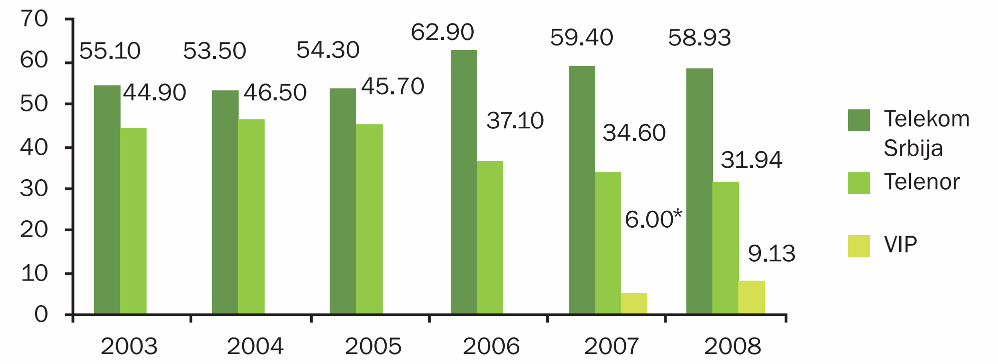
Figure 36. Prepaid/Postpaid Users by Operators * Source: RATEL



* The ratio of prepaid and postpaid users is given only for MTS and Telenor, since Vip mobile did not submit the data on the number of prepaid and postpaid users for 2008.

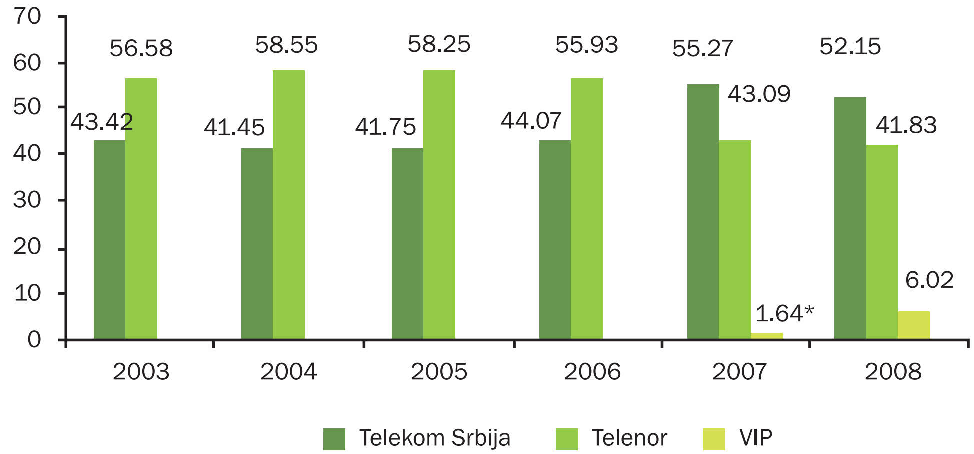
Figures 37 to 40 show the market share of the mobile operators in terms of the number of users, share of each operator in the total revenue and share in the total traffic.

Figure 37. Market Share in Terms of the Number of Users (%) Source: RATEL



* Vip mobile began with the operation in June 2007.

Figure 38. Share in the Total Revenue from Mobile Services (%) Source: RATEL

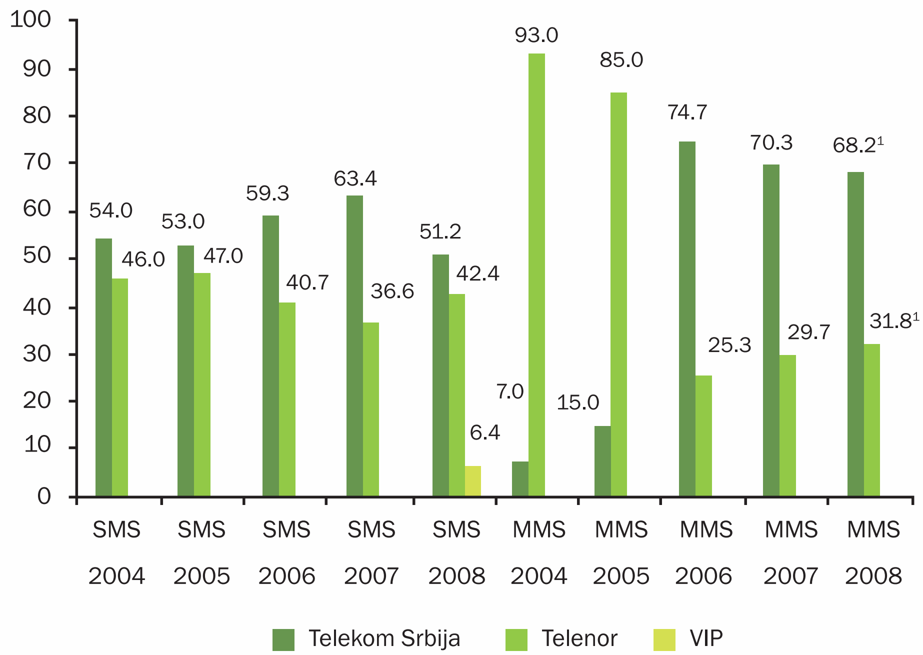


* Vip mobile began with the operation in June 2007.

Figure 39. Share in the Ongoing Traffic (%)* Source: RATEL

* The total outgoing traffic for 2007 does not include the data for Vip mobile.

Figure 40. Market Share in Terms of the Number of SMS-MMS (%) Source: RATEL



[1] The data on MMS for 2008 do not include the data for Vip mobile.

The competition in the Serbian mobile market was measured using the Herfindahl – Hirschman-Index (HHI).

HHI is an indicator used to determine the degree of concentration of a given market and it is defined as the sum of the squares of the market shares of each individual market share. Pursuant to the Telecommunications Law, the market share of the operators shall be identified by the number of users. The value of this index, in 2006, 2007 and 2008 equalled 5332, 4759 and 4684, respectively. The value of the index is decreasing every year, meaning that the competition in the mobile market is boosting, which is the result of the new entrant, the third operator, in the Serbian mobile market. The entry of Vip mobile in the Serbian mobile market has contributed to the raise of overall competition and further liberalization of this market.

The boost of competition in this sector has positive effect on end-users. The struggle for market share leads to the cut-down in the prices of the existing services, greater investments, introduction of new technologies and the offer of new services designed to meet the needs of the end-user. The operators are providing a vast range of services to the users. These include the following: voice mail, call divert, call waiting, conference call, sending and receiving SMSs, data transmission, incoming call identification, hidden identification, regular monthly itemized bill, connection/ disconnection upon request, change of tariff package, replacement of a damaged or lost SIM card, WAP, MMS service, etc. The introduction of the 3G network meant launching new services: real time video calls, video streaming, video clips, high speed Internet, etc.

Mobile market was fully liberalized in 2006, through relevant licence issuance. The sector is fully competitive, high quality services are offered, and the prices are among the lowest in Europe.

According to the survey of Business Monitor International, the expected growth for 2009 and 2010 is around 11% and 7%, respectively. The estimated penetration for 2010 is around 161%, when a significant slowdown in the growth of mobile subscribers in Serbia is expected.

Figure 41. Projected Growth Rate Related to the Mobile Telephony
Source: Business Monitor International, Serbia Telecommunications Report 2009, mart 2009