



Republic of Serbia

RATEL

Republic
Telecommunication
Agency



REGULATORY FRAMEWORK AND TELECOMMUNICATION MARKET IN THE REPUBLIC OF SERBIA

*Milan Janković, Ph.D.EE
Executive Director*



- **The Republic Telecommunication Agency (RATEL) is an independent regulatory body defined under the Telecommunications Law in 2003.**
- **The Law provided the conditions for creating an **OPEN MARKET**, as a result of:**
 - - **introduction of liberalization of the monopolized sector,**
 - - **proposed measures of harmonization with the EU regulations,**
 - - **free access to telecom networks and facilities,**
 - - **introduction of equal competition.**



Republic of Serbia

RATEL

Republic
Telecommunication
Agency

RATEL 2/3

- **RATEL's principal task of is to provide conditions for further development of the telecom sector and satisfy public interests through:**
 - **regulation by applying cost-based market economy,**
 - **introduction of new operators,**
 - **introduction of new services,**
 - **enhancement of the quality of existing services.**



Republic of Serbia

RATEL

Republic
Telecommunication
Agency

RATEL 3/3

- **RATEL's competences:**
 - **Issuance of licenses, permits and authorizations,**
 - **Numbering,**
 - **Tariff regulation,**
 - **Control of leased lines and usage of ducts,**
 - **Interconnection,**
 - **Universal service,**
 - **Technical inspections,**
 - **Definition of standards,**
 - **Issuance of approvals for import.**



Republic of Serbia

RATEL

Republic
Telecommunication
Agency

RATEL's results so far 1/4

- **The Republic Telecommunication Agency became operational and began working on **19th December 2005**.**
- **At the moment there are 75 experts employed**
- **Having regulation of telecom market as its aim, RATEL adopted and published most of the required bylaws:**
 - **planning, usage, control and monitoring of frequencies,**
 - **technical inspections,**
 - **standards and certificates,**
 - **service provision (voice services, Internet, CATV...),**
 - **a part of the Rules on numbering,**
 - **the Rules on networks, interconnection, universal service, development of a tariff policy together with introduction of cost-base principles and user protection are underway.**



Republic of Serbia

RATEL

Republic
Telecommunication
Agency

RATEL's results so far 2/4

- **Frequency Allotment Plan for analogue FM and TV stations**
- **Numbering Plan for telecom networks**
- **> 25 Rules published in the Official Gazette**
- **> 10 000 radio station licenses were issued**
- **> 800 technical permits – certificates were issued**
- **> 150 technical inspections were performed**
- **> 1200 approvals for import of goods were issued**
- **Records of 161 ISPs and 70 cable operators, based on registration.**
- **120 ISPs and 61 CATV entered the Agency's register and were granted work authorization.**
- **> 1000 clients of the Agency.**



Republic of Serbia

RATEL

Republic
Telecommunication
Agency

RATEL's results so far 3/4

- **Licenses have been issued to 5 TV and 5 radio networks (257 transmitters) with national coverage**
- **Licenses have been issued to 20 TV and 14 radio stations for the area of the city of Belgrade.**
- **License for mobile network and services – Telenor ASA, Norway**
- **Replacement of the license for mobile network and services – “TELEKOM SRBIJA” Joint Stock Co.**
- **License for mobile network and services – Mobilkom Austria, registered as TopNet in Serbia**
- **Replacement of the license for fixed network and services – “TELEKOM SRBIJA” Joint Stock Co.**



Republic of Serbia

RATEL

Republic
Telecommunication
Agency

RATEL's results so far 4/4

- ***RRC-06 Conference***, Geneva, 2006, New plan for digital broadcasting, enabling the coverage of the territory of Serbia with 32-48 different TV programs and 12-16 radio programs.
- ***SEE Broadband Conference***, Belgrade, 2006, 2007
- ***SEE Observatory Forum***, Zagreb, 2006, Sofia, 2007.
- ***SEE Regulatory Brainstorming Session***, Ohrid, 2006, Budva, 2006, Belgrade, 2007.
- Since late September 2006, RATEL has been officially registered with the ITU in Geneva, on behalf of the Republic of Serbia, as the representative for the regulatory issues.
- ***ITU 7th Global Symposium for Regualtors***, Dubai, UAE, February 2007.



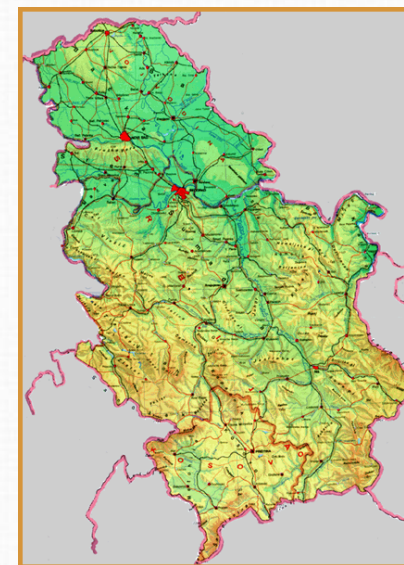
Republic of Serbia

RATEL

Republic
Telecommunication
Agency

Serbia Overview

- **Population: *7.498 million inhabitants***
(excluding Kosovo and Metohija)
- **Total area: *88,361 km²***
- **GDP for year 2006: *ca. €16.116bn.***
- **Average monthly gross salary in
December 2006: *ca. €274.77 net,*
*€401.84 gross***
- **Total income from telecommunication
services in 2006: *ca. € 1.3 million* (40% more than 2005)**
- **Share in GDP: *5.6%* (4.5% in 2005)**





Republic of Serbia

RATEL

Republic
Telecommunication
Agency

Telecommunication market

Type of service	N° of subscribers	Penetration rate
<i>Fixed telephony in use</i>	<i>2 719 402</i>	<i>36.3%</i>
<i>Mobile telephony</i>	<i>6 643 722</i>	<i>88.6%</i>
<i>Internet</i>	<i>1 005 161</i>	<i>13.4%</i>
<i>Cable TV</i>	<i>541 856</i>	<i>7.2%</i>
<i>Broadband</i>	<i>121 600</i>	<i>1.62%</i>

Source: RATEL
on date 31.12.2006.



Republic of Serbia

RATEL

Republic
Telecommunication
Agency

Fixed telephone network

Indicator	
Number of main (fixed) lines connected to analogue exchanges	213 745
Number of main (fixed) lines connected to digital exchanges	2 505 657
Digitalisation rate of fixed network	88.63%
Percentage of party lines	11%
Waiting list for main lines	428 576
Revenue from fixed telephone service	430 million EUR

Source: RATEL
on date 31.12.2006.






Republic of Serbia

RATEL

Republic
Telecommunication
Agency

Mobile network

Indicator	Telekom Srbija 	Telenor 	Mobilkom 
Mobile cellular subscribers: postpaid subscribers	226 368	461 262	0
Mobile cellular subscribers: prepaid subscribers	3 560 177	2 003 074	0
Number of subscribers to IMT-2000 (3G)	8,442	-	-
Percent coverage of mobile cellular network (land area)	90.78% without Kosovo	75%	0%
Revenue from GSM service	390 million EUR		0

Source: RATEL
on date 31.12.2006.



Republic of Serbia

RATEL

Republic
Telecommunication
Agency

Cable TV

Indicator	
Number of Cable TV operators	68
Cable TV subscribers	541 856
Revenue from Cable TV service	23.9 million EUR
Estimated number of Cable TV subscribers in 2010	2 million

**Source: RATEL
on date 31.12.2006.**



Republic of Serbia

RATEL

Republic
Telecommunication
Agency

Internet

Indicator	
Number of Internet providers	153
Dial-up Internet subscribers	888,067
ADSL Internet subscribers	25 349
Wireless Internet subscribers	24 245
International Internet bandwidth	8,644 Mbps
Revenue from Internet services	26.2 million EUR

Source: RATEL
on date 31.12.2006.



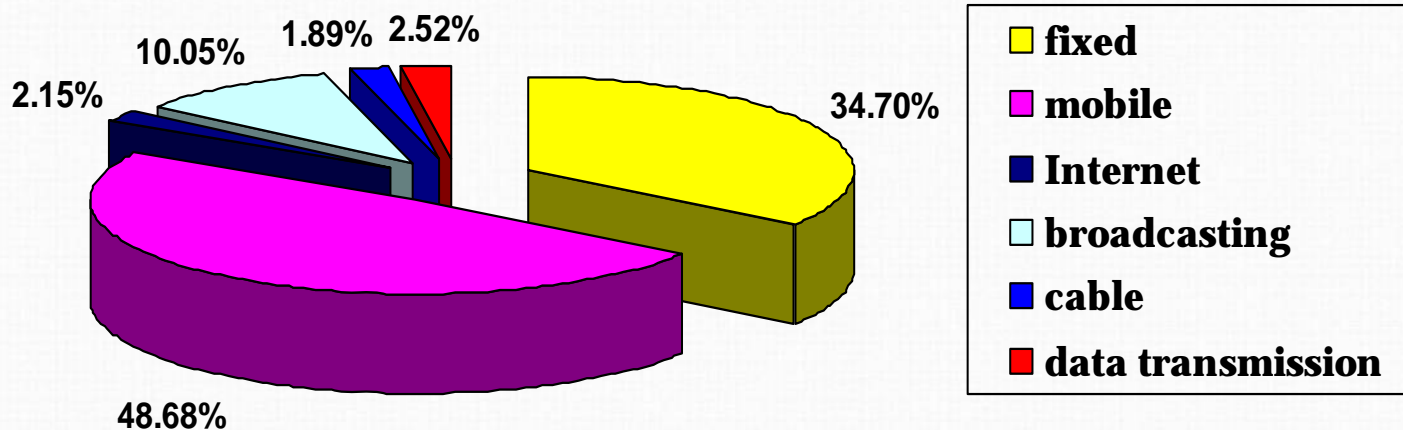
Republic of Serbia

RATEL

Republic
Telecommunication
Agency

2006 Telecom Market Overview 1/2

Income distribution



Source: RATEL
on date 31.12.2006.



Republic of Serbia

RATEL

Republic
Telecommunication
Agency

2006 Telecom Market Overview 2/2

Low use basket

	Average monthly bill*	Share of expenditure in monthly earnings
Fixed	907.32	4.18%
Mobile (prepaid)	488.63	2.25%
Television (RTS subscription)	300.00	1.38%
TOTAL	1695.95	7.81%

**on a monthly basis in
RSD, 1 EURO = 81RSD*

High use basket

	Average monthly bill*	Share of expenditure in monthly earnings
Fixed	907.32	4.18%
Mobile (prepaid)	488.63	2.25%
Television (RTS subscription)	300.00	1.38%
ADSL	1567.40	7.22%
Cable	404.73	1.86%
TOTAL	3668.76	16.90%

Source: RATEL
on date 31.12.2006.



Republic of Serbia

RATEL

Republic
Telecommunication
Agency

Comparative analysis 2005/2006

	2005.		2006.		Proportional increase in the number of users (%)	Absolute increase in the number of users (thousands)
	Number of users (thousands)	Penetration (%)	Number of users (thousands)	Penetration (%)		
Fixed	2,527.3	33.7	2,719.4	36.3	7.6	192.1
Mobile	5,510.7	73.5	6,643.7	88.6	20.6	1,133
Internet	756.7	10	1,005	13.4	32.8	248.3
Cable	530.5	7	541.9	7.2	2.15	11.4
Broadband	40.5	0.54	121.6	1.62	200.2	81.1

Source: RATEL
on date 31.12.2006.



Republic of Serbia

RATEL

Republic
Telecommunication
Agency

Information Society 1/5

1. POPULATION:

- **57% of persons have NEVER used a computer.**
- **70% of persons have NEVER used the Internet.**
- **70% of persons are using the Internet solely for e-mailing.**
- **43% of persons are NOT INTERESTED in using e-government services instead of going to public institutions.**
- **90% of persons have never purchased goods or services through the Internet.**

2. INDUSTRY:

- **90% of enterprises in Serbia have an Internet connection.**

Source:

Statistical Office of the Republic of Serbia.



Republic of Serbia

RATEL

Republic
Telecommunication
Agency

Information Society 2/5

1. TECHNICAL REQUIREMENTS

- **26.5%** of households have a computer.
- Internet penetration in the Serbia – **13.4%**.
- **85%** of connections have dial-up access.
- Almost **50%** of ISPs are based in Belgrade.
- The share of ISPs in the total telecom market income is only **2%**.

Source: RATEL
on date 31.12.2006.



Republic of Serbia

RATEL

Republic
Telecommunication
Agency

Information Society 3/5

Republic of Serbia signed:

- **Declaration of Principles and Plan of Action, World Summit on the Information Society, Geneva 2003 – Tunis 2005,**
- **Stability Pact Electronic South Eastern Europe Initiative,**

Based on that Government of the Republic of Serbia adopted:

- **Strategy for Telecommunications of the Republic of Serbia 2006-2010,**
- **The Strategy for the Development of the Information Society in the Republic of Serbia,**
- **The National Strategy for Economic Development of the Republic of Serbia 2006-2012.**



Republic of Serbia

RATEL

Republic
Telecommunication
Agency

Information Society 4/5

According to this documents:

- **Telecommunication Sector is the basis for the development of the other Economic Sectors and should directly provide development of the Information Society in Republic of Serbia according to the adopted EU standards**

RATEL's Goals and activities:

A1. Rational use of the frequency spectrum:

- **Development of by-laws defining unregulated bands:
2.4 and 5.5 GHz for the provision of a non-guaranteed quality of service.**
- **Development of regulations and launching of a public call for registration of persons interested in providing a guaranteed quality of service, for application of FWA in the band: 3.4-3.8 GHz.**
- **Development of regulation for the usage of CDMA systems (410-470 MHz).**
- **Development of regulations and launching of a public call for the application of satellite communications in cable and Internet services provision.**



A2. Use of advanced technologies in fixed networks:

- **Promote a speedy digitalization.**
- **Promote broadband usage and prepare the Strategy for the development of broadband access.**
- **Provide for an efficient development of the regulatory framework for the application of the latest technological solutions and make available all the advantages offered by these solutions to the service users.**

A3. Application of new services:

- **Support the application of: VoIP, TriplePlay, IPTV, DTV,..**
- **Initiate a campaign for promoting the usage of new technologies.**



Republic of Serbia

RATEL

Republic
Telecommunication
Agency

Thank you

Republic Telecommunication Agency

Višnjićeva 8

11 000 Belgrade

Republic of Serbia

Phone: +381 11 3229 970

Fax: +381 11 3232 537

www.ratel.org.yu

milan.jankovic@ratel.org.yu