



REPORT 3 – COUNTRY COMPARATIVE REPORT
SUPPLY OF SERVICES IN MONITORING OF SOUTH EAST EUROPE
- TELECOMMUNICATIONS SERVICES SECTOR AND RELATED
ASPECTS

MARCH 2007

The opinions expressed in this study are those of the authors and do not necessarily reflect the views of the European Commission.

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I. INTRODUCTION

The significance of the telecommunications sector is being increasingly recognised among economists. It is not only an important service industry in its own right, but it is also a critical support element for other service industries and the enabling infrastructure for the information society.

This explains why telecommunications policies have occupied a central position in the economic development of nations. There is broad international agreement that these policies should be based on a fair competitive environment and that this can best be achieved by having a regulatory function that is separated from telecommunications operations. There is also a strong trend toward privatisation because state ownership is no longer deemed necessary for the achievement of national communications objectives and because such ownership may interfere with fair competition. In addition, privatisation represents a welcome source of revenue for the state.

In the European Union, the regulatory environment for the telecommunications sector, or the electronic communications¹ sector as it is called now, has gone through a continuous development for more than fifteen years, starting with the publication of the famous “Green Paper” in 1987. This development is characterised by four major phases:

1. The second step is normally referred to as the “1998 acquis” because the provisions became effective at the national level in that year². This step is also often referred to as “full liberalisation” because it eliminated all special and exclusive rights. The framework was characterised by:
 - its authorisation regime, which permitted the use of individual authorisations for public telephony services as well as all establishment of infrastructure, whether terrestrial or radio based;
 - asymmetric regulations with special conditions for operators with significant market power (SMP). These were based on a rather simplistic criterion of having 25% market share or more in a few broadly defined areas of activity, such as public fixed telephony networks and services. If deemed to have SMP, a number of pre-defined requirements would automatically apply.
2. The third step will be referred to in this report as the “2003 acquis”³. The main changes from the “1998 acquis” are:
 - an extensive use of general authorisations whereby telecommunications activities can be started without prior permission from the regulator. Only activities that require access to limited resources may be subject to individual authorisations;
 - the designation of SMP can only be decided for fairly narrowly defined markets after rigorous analysis based on competition law principles. Where an operator is found to have SMP, the regulator has a choice of remedies in the form of special obligations to address specific exposures to fair competition in the market concerned;
 - the inclusion of broadcasting networks in the same framework in recognition of technological convergence between all forms of electronic communications.
3. The fourth step is represented by the “2006 review”. On June 29, 2006 the European Commission published a communication on the review of the EU regulatory framework for electronic communications networks and services. The Commission has proposed two major changes:
 - Spectrum liberalisation that would facilitate spectrum trading and provide more flexibility of use for spectrum owners;
 - Streamlining of the market analysis notification procedure with a view to simplify the procedures.

1 The sector is now referred to as the electronic communications sector because, due to technology convergence, the current framework also applies to broadcasting networks. In this report, the term electronic communications is used when describing aspects that relate specifically to the new regulatory framework. Otherwise, the term telecommunications is used to describe general aspects that do not relate to a specific regulatory framework.

2 Specifically, all enabling measures should have been adopted by December 31, 1997.

3 This framework is also often referred to as the “2002 acquis”. The directives that define this regime were adopted in 2002 and became effective at the national level in 2003. Because the “1998 acquis” is a widely accepted term and it refers to the year when the regulations became effective at the national level, it is more logical to use the term “2003 acquis”.

In addition, the Commission has proposed several other changes.

The Commission is expected to adopt a revised recommendation on relevant markets in February 2007. The Commission is also expected early in 2007 to propose to Council and Parliament amendments to the directives forming the EU regulatory framework. It is expected that this will lead to further adjustments in the regulatory framework and possibly a new *acquis* around 2010.

The regulatory development, which has taken place over fifteen years, has been compressed into a much shorter period for the ten new EU Member States. They negotiated their membership based on the 1998 *acquis*. However, while these negotiations took place, the EU was already in the process of adopting the 2003 *acquis* and the new Member States had to transpose these directives before they entered the EU on May 1, 2004.

These regulatory developments are largely supported by in-depth monitoring of the developments in the national markets, which are subject to continuous scrutiny in the form of annual implementation reports. The latest (11th) report was released in February 2006.

The reports examine major developments in the market, analyse the implementation of the key regulatory principles covered by the regulatory framework and draw conclusions intended to contribute to ensuring compliance with the European regulatory framework as well as providing a knowledge base for further regulatory developments.

South East Europe is a region that includes countries that are potential candidates for membership in the European Union, some in the shorter term and other countries in a longer-term perspective. As part of the preparation for EU enlargement, monitoring of their telecommunication markets, as significant drivers of economic growth, is being performed. The resulting report, similar to those for the EU Member States, will be prepared every 9 months in the period from 2005 to 2007. The project, called "Monitoring of South East Europe - telecommunications services sector and related aspects", is funded by the EC Directorate-General Information Society and Media, and performed by Cullen International.

The reports cover the following countries:

- Albania;
- Bosnia & Herzegovina. This country includes two administrative divisions, the Federation of Bosnia & Herzegovina and Republika Srpska in addition to the district of Brčko. The country is included in the report as one entity because there is common legislation and a common regulatory authority;
- Bulgaria;
- Croatia;
- Montenegro;
- Romania;
- Serbia, including Kosovo, which has a separate status defined by UNSCR 1244. Serbia and Kosovo have different legislation and separate regulatory authorities and are therefore dealt with separately in this report.
 - Serbia;
 - Kosovo;
- The former Yugoslav Republic of Macedonia;
- Turkey.

All these countries and geographic units are in the process of adopting and/or implementing the EU regulatory framework for electronic communications. Their position on the regulatory development ladder varies from Romania's very advanced status, which has adopted the 2003 *acquis* and is well into its implementation, to countries that are still grappling with the tasks of establishing the initial conditions for a competitive telecommunications sector.

This is the third of a series of four reports that are monitoring their progress in regulatory developments as well as the effects to be observed in the markets.

II. OBJECTIVES AND METHODOLOGY

The overall objective of the project is to assist the EC and the countries' representatives in monitoring the progress made by each country towards compliance with the EU rules for electronic communications.

The report presents factual information. It is not the intention to pass judgment on the relative merits of the policies pursued or to evaluate progress made toward policy objectives. Each reader may make his or her own assessment based on the many indicators provided in the report.

At the request of the European Commission, the scope and methodology for this report closely follows the previous reports on "Monitoring of EU Candidate Countries – Telecommunication Services Sector", performed by IBM Business Consulting Services. These reports have been used as models for this report with appropriate changes.

In the data collection process, we have relied heavily on the support of the local national regulatory authorities and/or representatives of the Ministries responsible for telecommunications policies. The principal sources of information for this report are listed in the table below:

Country	Source of information in this report	Website
Albania	Telecommunications Regulations Entity (TRE)	http://www.ert.gov.al
Bosnia & Herzegovina	Communications Regulatory Agency (RAK)	http://www.rak.ba/
Bulgaria	Communications Regulation Commission (CRC)	http://www.crc.bg/
Croatia	Croatian Telecommunications Agency (HAT)	http://www.telekom.hr/
Montenegro	Agency for telecommunications and postal services of the Republic of Montenegro	http://www.agentel.cg.yu/
Romania	National Regulatory Authority for Communications and Information Technology (ANRC)	http://www.anrcti.ro/
Serbia (including Kosovo ¹)		
<i>Serbia</i>	Republic of Serbia - Republic Telecommunications Agency (RATEL)	http://www.ratel.org.yu
<i>Kosovo</i>	Telecommunications Regulatory Authority (TRA)	http://www.art-ks.org
The former Yugoslav Republic of Macedonia	Agency for Electronic Communications (AEC)	http://www.aec.mk/
Turkey	Telecommunications Authority (TA)	http://www.tk.gov.tr/
1) under UNSCR 1244		

Table 1 – Principal sources of information

Notes:

Montenegro: Postal services law (Official Gazette of the Republic of Montenegro, № 46/2005) included the postal services into the regulatory scope of the Agency. Accordingly, the Agency adopted changes to its Statute, and a new name – Agency for telecommunications and postal services of the Republic of Montenegro.

Romania: On December 29, 2006 National Authority for Communications Regulation (ANRC) was transformed into the National Regulatory Authority for Communications and Information Technology (ANRCTI) by the Government Emergency Ordinance No. 134/2006.

The information collection process has consisted of four information packages, each with its own reference date:

1. Organisational information. This package included information of an institutional and organisational nature. The reference date was July 1, 2006.
2. Price information. This package included a range of wholesale and retail prices. The reference date was July 1, 2006.
3. Regulatory information. This package included indicators of a regulatory nature, such as competitive safeguards, numbers of licences issued, etc. The reference date was July 1, 2006.

4. Market information. This package included various forms of statistics from the telecommunications market. The reference date was July 1, 2006 for information that represents the situation on a certain date. Information that represents the results over a period of time, such as annual revenues, relate to 2005, which is the last year for which results were available when this report was written. In some cases, this report also includes information that is more current. The dates are then noted in the report.

The report makes numerous comparisons with the corresponding EU information taken from the 11th Implementation Report by the European Commission. This is the latest implementation report available at the time this report was developed. Most of the information in the 11th Implementation Report represents market data on September 1, 2005. One should therefore bear in mind that the EU data represents information that is 10 months older than the information presented from South East Europe in this report.

This report covers ten geographic units with different status. Most of them are internationally recognised as countries, but in the case of Kosovo, it is a territory under international administration.

The choice of geographic units has been made according to their legislative and institutional framework for telecommunications regulations. For this reason, the country of Bosnia & Herzegovina is presented as a single geographic unit because its constituent parts have common legislation and a common regulator. Nevertheless, Bosnia & Herzegovina has three incumbent operators.

Table 2 provides basic information on the geographic units, with some additional information when necessary to explain their status. It also introduces the short two letter country codes based on the international ISO codes that will be used as identification in graphs elsewhere in the report. In addition, each incumbent operator in Bosnia & Herzegovina has been allocated its own code, which is used in certain graphs.

The countries and geographic units are presented in the alphabetical order by the name of the country. Special territories within a country are presented after the Member States. Consequently, Kosovo is presented after Serbia within the country of Serbia.

This sequence of countries and geographic units is maintained throughout this report, even if the full context of the alphabetical order is not always displayed and the alphabetic order of the two letter ISO codes is different.

Cullen International has contracts with independent telecommunications experts in each country and geographic unit. They have provided additional advice and guidance on the national level. The majority of the information presented in this report has been provided by the national regulatory authorities and/or the ministries in the geographic units, but in some cases, the information has been supplemented and/or corrected with other, and sometimes more recent, sources.

Country	ISO country code / special code	Comments
Albania	AL	
Bosnia & Herzegovina	BA	<p>Bosnia & Herzegovina includes two administrative divisions:</p> <ol style="list-style-type: none"> 1. The Federation of Bosnia & Herzegovina 2. Republika Srpska <p>In addition, there is a district, Brčko, which is under international administration</p> <p>There are three incumbent operators in the different regions.</p> <ol style="list-style-type: none"> 1. BH Telecom d.d Sarajevo (referred to as BA-bh in graphs). The operator is active in the Federation of Bosnia & Herzegovina. It is the only operator in some cantons and shares the market with HT Mostar in other cantons. 2. Telekom Srpske a.d. Banja Luka (referred to as BA-ts in graphs) is the incumbent operator in Republika Srpska. 3. Hrvatske Telekomunikacije d.o.o. Mostar (referred to as BA-ht in graphs) is active in the Federation of Bosnia & Herzegovina. It is the only operator in some cantons and shares the market with BH Telecom in other cantons. <p>Fixed telephony services in the District of Brčko (not identical to the pre-war Brčko Municipality) are provided by Telekom Srpska. Mobile services are provided by all three mobile operators.</p>
Bulgaria	BG	

Country	ISO country code / special code	Comments
Croatia	HR	
Montenegro	XM	Montenegro is an independent country, separated from Serbia & Montenegro following a referendum on May 21, 2006.
Romania	RO	
Serbia (including Kosovo ¹)	CS	Serbia is the remaining part of Serbia & Montenegro after the separation of Montenegro. It includes the territory of Kosovo (see below).
<i>Serbia</i>	XS	
<i>Kosovo</i>	XK	Kosovo is a territory under interim international administration and has its own telecommunications ministry and regulations. Under UN resolution UNSCR 1244, the actual administration of Kosovo is carried out by the UN without the involvement of the government of Serbia. For that reason, it is reported separately from Serbia in this report.
The former Yugoslav Republic of Macedonia	MK	The constitutional name of the country is "Republic of Macedonia". However, the country is not recognised under this name by parts of the international community. The EU refers to the country by the provisional reference under which it was admitted to the UN: "the former Yugoslav Republic of Macedonia". The country code "MK" is used by ISO and some other organisations, but this does not prejudice the outcome of the negotiations on the name of the country that are taking place at the United Nations.
Turkey	TR	

1) under UNSCR 1244

Table 2 - List of participating countries and their country codes

Note:

Most of the two-letter country codes are the international two-letter ISO codes. They are also used for Internet domain names as provided by IANA (Internet Assigned Numbers Authority). These codes provide a well-defined and widely understood two-letter code for the different countries. Serbia, Montenegro, and Kosovo do not have separate two-letter codes officially assigned by ISO. However, the structure allows so-called user-assigned code elements. The codes indicated in the table above are used by Eurostat and other organisations that need to identify Serbia, Montenegro, and Kosovo individually with two letter codes. (Ref. Europe in Figures, Eurostat Yearbook 2005.). It should be noted that a procedure has been started to allocate new two (and three) -letter codes from IANA and ISO to Montenegro. If and when adopted, ME will be used instead of XM.

All the countries and geographic units in this region aspire to membership of the European Union. All of them are in negotiations and procedures that ultimately may lead to this goal. The status of each unit's relationship with the European Union is indicated in the table below.

Country	Relationship with the EU
Albania	Stability and Association Agreement signed on June 12, 2006
Bosnia & Herzegovina	Negotiations on Stability and Association Agreement are ongoing
Bulgaria	Member State from January 1, 2007
Croatia	Candidate country. Negotiations ongoing.
Montenegro	Montenegro decided to be independent on May 21, 2006. Negotiations for a Stability and Association Agreement were started in September 2006.
Romania	Member State from January 1, 2007
Serbia (including Kosovo ¹)	
<i>Serbia</i>	Opened talks on Stability and Association Agreement in October 2005.
<i>Kosovo</i>	The status of Kosovo will depend on the outcome of negotiations that started in December 2005.

Country	Relationship with the EU
The former Yugoslav Republic of Macedonia	Stability and Association Agreement into force in April 2004. EU Council decision to grant candidate status in December 2005, but without determining a date for when negotiations can start.
Turkey	Candidate country. Negotiations ongoing.
1) under UNSCR 1244	

Table 3 - Status of the relationships between SEE countries and the EU

The EU has established⁴ an “Instrument for Pre-Accession Assistance” which will provide funding for pre-accession activities over the period from 2007 to 2009. The budget is shown in the table below.

Pre-Accession assistance for 2007-2009				
Pre-accession assistance envelopes, in Million euro	2006	2007	2008	2009
Albania	45.5	61.0	70.7	81.2
Bosnia & Herzegovina	51	62.1	74.8	89.1
Croatia	140	138.5	146.0	151.2
Montenegro	59.5	31.4	32.6	33.3
Serbia (including Kosovo ¹)				
<i>Serbia</i>	19.5	186.7	190.9	194.8
<i>Kosovo</i>	167	63.3	64.7	66.1
Former Yugoslav Rep. of Macedonia	43.6	59.5	70.2	81.8
Turkey	500	497.2	538.7	566.4
1) under UNSCR 1244				

Table 4 – Pre-accession funding

⁴ EU Enlargement Newsletter, November 8, 2006

III. SUMMARY OF STATUS AND RECENT DEVELOPMENTS

The status of the telecommunications sector in any given country can be broadly characterised in terms of its four main networks:

- public switched telephone network (PSTN);
- mobile network(s);
- leased lines;
- broadband network(s).

This chapter presents the status of these four networks and the major regulatory conditions that set the stage for further development, in particular for broadband networks. It draws on information presented later in this report and information contained in the first two reports in this series⁵.

A. Public Switched Telephony Network

In most European countries, the PSTN, which has been developed over more than 100 years, is now declining in terms of the number of subscribers and revenue. This is also the case for most of the countries and geographic units in South East Europe. Considering developments for the 8 month period since the second report (reference date November 1, 2005) to this report (reference date July 1, 2006), Albania, Bosnia & Herzegovina and the former Yugoslav Republic of Macedonia have registered slight growth in terms of main subscriber lines per 100 population. In Montenegro, Romania, Serbia and Kosovo this indicator has been more or less stable, while Bulgaria, Croatia, and Turkey have had a decline.

For the region as a whole, the penetration of PSTN subscribers in terms of main lines per 100 population declined from 25.8 to 25.5. The decline of the PSTN can normally be explained by the availability of alternative communication opportunities over mobile and broadband facilities. However, a rapid decline may also be a symptom of strong tariff rebalancing without sufficient customer protection in terms of a low usage tariff option. This can create a situation where low-income users are forced to terminate their subscription because it is no longer affordable to them.

While there has been a slight price increase for local calls in Croatia, there has been no major price increases for local calls in this period. In Turkey, the price for local calls has been reduced.

All countries and geographic units except Albania and Kosovo have low usage options available.

It is beyond the scope of this report to perform a sophisticated tariff analysis in order to determine where the countries and geographic units stand on tariff rebalancing. However, a simple comparison of local and international tariffs against EU averages suggests that they fall into two distinct clusters.

- Bulgaria, Croatia, Romania and Turkey have tariffs for local calls that are just below the EU average in nominal currency. The corresponding comparison with PPP currency shows that the local tariffs are well above the EU average. The same group of countries have tariffs for international calls, for example to the UK, that are close to the EU average in nominal currency. This combination of tariffs suggests that a fair amount of tariff rebalancing has been accomplished. However, none of these countries claim that their tariff rebalancing has been completed. There have been significant price reductions in tariffs of international calls by the incumbent operator in Turkey (15.6% to the UK) since the previous report.
- Another group of countries with Albania, Bosnia & Herzegovina, Montenegro, Serbia and the former Yugoslav Republic of Macedonia have tariffs for local calls that are significantly lower than the EU average in nominal currency. Yet, their tariffs for an international call, for example to the UK, are at the EU average or significantly higher, in particular for Bosnia & Herzegovina and the former Yugoslav Republic of Macedonia. Serbia has only recently started its tariff rebalancing. Tariff rebalancing in the other countries have been in progress somewhat longer. Montenegro has established a target date of 2010 for completion of tariff rebalancing. There have been significant

⁵ Report 1 – Country comparative report, August 29, 2005 and Report 2 – Country comparative report, May 22, 2006. Both reports are available from the European Commission's website at: http://europa.eu.int/information_society/activities/internationalrel/dialogue_coop/enlargement/index_en.htm and from Cullen International's website at: <http://www.cullen-international.com> under "studies",

price reductions in tariffs of international calls by the incumbent operator in Albania (45.5% to the UK) and the former Yugoslav Republic of Macedonia (20.8% to the UK) since the previous report.

Kosovo has the distinction of having relatively high local tariffs, close to the EU average in nominal currency, and at the same time international tariffs that are significantly higher than the EU average, even if there has been a significant price reduction (54.2% to the UK) since the previous report. Kosovo considers that their tariffs are rebalanced.

In the period since the previous report, i.e. from November 1, 2005 to July 1, 2006, there has been significant tariff rebalancing action in particular in four cases:

- In Albania, tariffs have been significantly reduced for international calls.
- In Serbia, both local and long distance tariffs have been increased, while certain international tariffs have been slightly reduced.
- In Kosovo, local tariffs have been increased, while long distance and international tariffs have been reduced.
- In the former Yugoslav Republic of Macedonia, there have been significant reductions in international tariffs.

NB. All these tariff comparisons have been carried out based on prices in national currencies in order to eliminate price movements caused by currency exchange movements.

An overview over the tariff changes in the period is shown in the table below.

Country / unit	Fixed monthly	Local calls	Long distance	International near country	International distant country
Albania					-46%
Bosnia & Herzegovina		+	-	+	-
Bulgaria					
Croatia					
Montenegro					
Romania					
Serbia (including Kosovo ¹)					
<i>Serbia</i>		+103%	+27%	-3%	
<i>Kosovo</i>	+57%	+15%	-9%	-16%	-29%
The former Yugoslav Republic of Macedonia				-13%	-32%
Turkey		-2%		+3%	+2%
1) under UNSCR 1244					

Table 5 – Relative tariff changes in national currency for telephony services

This study has also reported on the price for incoming international calls. It turns out that all countries and geographic units that are included in this report have relatively high inbound tariffs from the relatively distant countries in Western Europe and the United States. The incoming calls are also very similar (or identical) from the UK and the US for all countries. For countries that have succeeded in reducing the cost of their outgoing calls, such as Bulgaria, Romania and Turkey, the incoming calls cost three to four times the cost of outgoing calls.

The difference in tariffs between outgoing calls and incoming calls appears to be a reflection of the old ITU accounting range system, which previously defined tariffs for international calls. This seems to indicate that there has not yet been sufficient competitive pressure on the rates for termination of international calls and or that the national termination rates defined by the RIOs of the SMP operators are not yet available for termination of international calls.

Another important subject for fixed telephony is how Voice over IP operators are treated in a regulatory sense. The table below provides a quick summary:

Country / unit	Possibility to provide VoIP services	Comments
Albania	Difficult	The regulatory conditions for the provision of VoIP are still undecided.
Bosnia & Herzegovina	Relatively difficult	VoIP is considered to be telephony, for which a rather high licence fee is required.
Bulgaria	Relatively easy	Simple VoIP can be provided under a general authorization for data transmission services if no numbering resources are required. If numbering resources are used to provide the service, an individual licence for data transmission is required. VoIP that doesn't meet QoS can also be provided without any licence. However, if certain conditions are met, such as meeting quality of service criteria defined for the telephony service, VoIP is considered telephony, for which a relatively high licence fee is required.
Croatia	Easy	VoIP is a special class of service which requires notification. The notification fee is quite low.
Montenegro	Difficult	VoIP is considered to be telephony, for which a very high licence fee is required.
Romania	Easy	VoIP may be considered to be telephony, which in any case can be offered on the basis of a notification. The exact conditions applicable and whether it will be considered a publicly available telephone service (PATS) will depend on the service characteristics.
Serbia (including Kosovo ¹)		
<i>Serbia</i>	Difficult	Requires a licence similar to a telephone licence if numbering resources are used. Such licences are granted following a public tender procedure with conditions defined by the Ministry. Some forms of VoIP without use of numbering resources can nevertheless be provided under a general licence (approval) from the NRA.
<i>Kosovo</i>	Difficult	VoIP is considered to be telephony and requires an individual telephony license, for which a rather high licence fee is required. International telephony is under special rights for the incumbent operator until December 31, 2007. This means that international VoIP may not be legally offered before that date.
The former Yugoslav Republic of Macedonia	Easy	VoIP may be considered to be telephony, which in any case can be offered on the basis of a notification. The exact conditions applicable and whether it will be considered a publicly available telephone service (PATS) will depend on the service characteristics.
Turkey	Medium	VoIP is considered to be telephony, for which a relatively high licence fee is required.
1) under UNSCR 1244		

Table 6 – Overview of VoIP regulations

As this table shows, there are many different approaches. Since VoIP represents a significant competitive challenge for PSTN today, the countries and territories where the subject is still undecided, may represent a barrier to entry of alternatives that are now technically viable. Furthermore, where VoIP always are considered “telephony” and thus requiring a telephony licence regardless of the technical solution, is considerably tougher than its treatment in the EU framework, in particular if the telephony authorisation is onerous.

B. Mobile networks

Most countries and geographic units demonstrate strong growth in mobile networks. The average subscriber penetration rate increased from 59% on November 1, 2005 to 66% on July 1, 2006. The growth rates ranged from a slight decline⁶ in Montenegro from 104% to 99% to 34% growth in Bulgaria in the period from mid 2005 to July 1, 2006.

In all countries and geographic units, the number of mobile subscriptions surpasses by far the number of fixed telephony subscriptions.

The strong growth in mobile penetration is based on a competitive situation with two or three operators in each market. 3G networks have been licensed in Bulgaria (3 operators), Croatia (3 operators) and Romania (2 operators⁷). The Bulgarian operators start operations in 2006. One of the Croatian operators, Tele2 had delayed its introduction of 3G until the end of 2006. The other two Croatian operators and two of the Romanian operators are currently active.

Kosovo is an exception with the relatively low mobile penetration of 19.25% and a modest growth from 16% at the beginning of 2005⁸.

The mobile tariffs compare relatively favourably with those in the European Union. In most cases, the tariffs are positioned below the median values presented in the 11th Implementation Report of the European Commission. Albania represents the exception with prices that would rank among the highest in the EU, in particular for the medium and high usage baskets. In addition, Bulgaria has medium and high usage basket tariffs that are above the EU median. Kosovo and Turkey are above the EU median for the high usage basket, while Croatia is above the EU median for the medium usage basket.

In the period from November 1, 2005 to July 1, 2006 there have been significant reductions in Bosnia & Herzegovina. For Croatia and Turkey, the picture is more mixed, with some prices being increased and other decreased.

A summary of tariff changes for those countries where comparative price information is available, is shown in the table below.

Country / unit	OECD baskets		
	Low	Medium	High
Albania			
Bosnia & Herzegovina	-10%	-8%	-18%
Bulgaria			
Croatia	-1%	+15%	-31%
Montenegro			
Romania			
Turkey	-1%	-3%	+25%

Table 7 – Relative changes in OECD basket prices in national currency

C. Leased lines

Leased lines, normally from the incumbent operator, constitute important building blocks for operators when establishing new networks. In the previous regulatory framework of the EU (the 1998 acquis), leased lines were seen as an important part of the SMP concept and cost oriented tariffs were required.

With the new regulatory framework (the 2003 acquis), this requirement was carried forward as Market 7 for “The minimum set of leased lines (comprising the specified types of leased lines up to and including 2 Mbit/s as referenced in Article 18 and Annex VII of the Universal Service Directive)”.

⁶ Montenegro has the highest mobile penetration in the region and is above the EU average. The decline is explained by seasonal variations caused by prepaid cards purchased by tourists.

⁷ Two additional 3G licenses were granted late 2006 to RCS&RDS and Telemobile (Zapp).

⁸ The penetration numbers from Kosovo includes only subscribers from Vala900, which is the only licensed mobile operator in Kosovo. There are other operators that operate without a license.

While alternative networks are now available so that there are alternative providers of leased lines in many Member States, most market analyses have concluded that the incumbent operators continue to have significant market power.

For the countries and territories in South East Europe the tariffs and availability of leased lines is an important competitive parameter.

Tariffs for national leased lines compare well with prices in the EU. The 64 Kbit/s lines are priced below or near the EU average in all countries and territories except Albania and the former Yugoslav Republic of Macedonia. Similarly, for 2 Mbit/s lines, the tariffs are below or near the EU average except for the former Yugoslav Republic of Macedonia.

In the period from November 1, 2005 to July 1, 2006 there were significant price reductions for leased lines in Bosnia & Herzegovina.

In most other cases, there were no price movements in the period. A summary of the price changes is shown in the table below.

Country / unit	64 Kb 2 km	64 Kb 200 km	2 Mb 2 km	2 Mb 200 km	34 Mb 2 km	34 Mb 200 km
Albania						
Bosnia & Herzegovina	-8%	-20%	-19%	-23%	-19%	-42%
Bulgaria						
Croatia						
Montenegro						
Romania		+5%				
Serbia (including Kosovo ¹)						
<i>Serbia</i>						
<i>Kosovo</i>						
The former Yugoslav Republic of Macedonia						
Turkey						
1) under UNSCR 1244						

Table 8 – Relative price changes for leased lines in national currencies

The situation is also positive for international leased lines. The prices for such lines are for so-called half-circuits, which covers the part of the circuit that is located within the country. However, Albania, Bosnia & Herzegovina, and the former Yugoslav Republic of Macedonia have tariffs that are significantly higher than the EU average for all the different alternatives that have been included in this report.

In the period from November 1, 2005 to July 1, 2006 there were significant price reductions in Kosovo and some modest price increases in Croatia. A summary is shown in the table below.

Country / unit	64 Kb 200 km near country	64 Kb UK	2 Mb near country	2 Mb UK
Albania				
Bosnia & Herzegovina				
Bulgaria				
Croatia		+6%		+11%
Montenegro				
Romania				

Country / unit	64 Kb 200 km near country	64 Kb UK	2 Mb near country	2 Mb UK
Serbia (including Kosovo ¹)				
<i>Serbia</i>				
<i>Kosovo</i>	-50%	-67%	-50%	-62%
The former Yugoslav Republic of Macedonia				
Turkey				
1) under UNSCR 1244				

Table 9 – Relative price changes for international leased lines in national currencies

D. Interconnection rates

The establishment of cost oriented interconnection rates is of fundamental importance for a competitive telecommunications market. It is also a difficult and time-consuming task for regulators to carry out the analysis necessary to determine the correct price level. Often regulators have to rely, at least initially, on benchmark information or rather crude models. As methods that are more sophisticated are applied, it has proved possible in many cases over time to arrive at rates that are more correct.

This normally has resulted in downward adjustments of the termination rates. This is simply because the regulator who has to take a decision on termination rates will tend to avoid imposing any rates that are below cost. Therefore, errors or lack of precision tend to favour the incumbent operators. As methods that are more sophisticated are applied, the margin of error is reduced and prices can be set closer to the correct level.

In the period from November 1, 2005 to July 1, 2006 there have been significant reductions in the termination rates for fixed networks in Bulgaria and Romania. In the same period, there have also been significant price increases in Serbia (which can be part of a tariff rebalancing effort). A summary table of tariff changes is show below.

Country / unit	Local FF	Single transit FF	Double transit FF	Local MF	Single transit MF	Double transit MF
Albania						
Bosnia & Herzegovina						
Bulgaria	-8%	-7%	-21%			-29%
Croatia						
Montenegro						
Romania	-1%	-9%	-11%	-1%	-9%	-11%
Serbia (including Kosovo ¹)						
<i>Serbia</i>				+386%	+386%	na
<i>Kosovo</i>						
The former Yugoslav Republic of Macedonia						
Turkey						
1) under UNSCR 1244						

Table 10 – Relative price changes for termination rates in national currencies (peak time rates)

After these changes in termination rates, many countries and territories have rates that are about 50% higher than the EU average for Fixed-to-Fixed termination. However, in cases the rates are much higher by a factor of three or more. This is the case in particular for Montenegro.

According to EU regulatory framework, if the termination rate to a fixed network is subject to cost orientation, the rates must be the same regardless whether the originating network is a fixed or a mobile network. This is because there is no difference in cost whether the originating network is one or the other.

However, not all countries and territories have succeeded in establishing cost-oriented rates for mobile to fixed termination and in some countries, mobile operators do not benefit from local and single transit rates. Because all termination from fixed to mobile networks is national, the same principle is applied for termination from mobile to fixed.

Only Bosnia & Herzegovina, Romania and Turkey apply correctly the same termination rates regardless of originating network.

E. Broadband access

Broadband access is an important indicator because it provides much of the basis for the service based information society economy. Without a broad base of broadband users, the national economy will not benefit from participation in these markets and the gap in the standard of living when compared to other modern economies may widen rather than being narrowed.

Broadband penetration is measured by the number of subscriptions for access solutions that provide Internet access at speeds equal to or higher than 144 Kbit/s.

The use of broadband access has been extremely low when compared to the situation in the EU, but several countries can show impressive growth figures. In October 2005, the EU average⁹ was 11.45%. Behind this average was a significant variation between countries, ranging from 1% in Greece to 23.8% in the Netherlands.

The average in South East Europe was 3.16% on July 1, 2006. As in the EU, there is a significant variation between countries and geographic units. The average ranges from almost no broadband access reported in Albania to 5.47% in Romania.

Four countries have broadband access penetration rates that are significantly higher than the other countries in the region:

1. The leading country is Romania with 5.47%. This represents a growth of 57% since November 1, 2005. However, 42% of this number is made up from subscribers to a mobile network using CDMA/EV-DO¹⁰ and other mobile 2G and 3G technologies. A significant number of these subscribers use their mobile phone for connection to the Internet, but only half of them make regular use of this capability in addition to normal voice services.

The second most important broadband technology in Romania is cable modem (Cable TV technology) which accounts for 27.7% of the total number.

xDSL, which in the EU represents the largest technology and is seen as the main driver for broadband growth, plays a rather minor role in Romania, but has grown from about 1% of all the lines to 3.8% from November 1, 2005 to July 1, 2006. This growth is almost matched by fibre to the home, which has also has grown from about 1% to 3.4%.

It is interesting to note that the incumbent operator has a very small share of the broadband access subscriptions. Even if it is growing rapidly in relative terms, it still accounts for less than 3.5% of the total number of subscriptions. Alternative operators are providing the rest, mostly from their own networks. Use of the incumbent's network through local loop unbundling, bitstream or resale is insignificant.

⁹ 11th Implementation Report from the European Commission, February 2006

¹⁰ EV/DO stands for Evolution-Data Optimized. It provides download access with typical speeds around 300-500 kbit/s.

2. Croatia is the second country in the region with 4.4% penetration. The growth has been 118% in the eight-month period from November 1, 2005. The incumbent operator has a market share of almost 80% all of which is xDSL. In addition, there is another 6% from alternative operators using the resale option of the incumbent. The remaining 15% are provided by alternative operators through 3G (11%), cable modems (3%) and other technologies including WIFI, leased lines and satellites.
3. Bulgaria now takes third place in the region. In our previous report, Bulgaria was reported as having only 0.26 broadband connections per 100 population. However, this indicator has been significantly understated due to a reporting problem, as cable TV providers had not reported their broadband connections with the use of cable modems. Now that these connections have been reported, it turns out that there are 239,583 such connections. With this new information, Bulgaria is reported as having a penetration of 4.2%, similar to the level of Croatia.

We have no basis for comparison with the previous number of cable modems, so we cannot provide an overall growth figure for Bulgaria. However, we can estimate the growth in the other technologies. This indicates an impressive growth of the incumbent's xDSL installations as well as the emerging use of fixed wireless access, fibre access and other technologies by alternative operators. Like in Romania, the market share of alternative operators is quite impressive as they provide over 80% of all connections.

4. The fourth country is Turkey with 3.16%. From November 11, 2005 to July 1, 2006 the number of broadband connections in Turkey grew from 1,150,616 to 2,133,047 (an increase of 85%). Most of the connections are based on xDSL provided by the incumbent operator. Less than 1% of all connections are provided by alternative operators, who provide broadband solutions through the resale option of the incumbent operator. 1.6% of the connections are provided by the incumbent operator through cable modems and leased lines.

There is a considerable difference in the penetration levels in this group of four leading countries and the rest. The four leading countries also happen to be among the most populous in the region and this fact leads to an average for the region that is reaching 3.16%. However, there are several countries that fall far below this average. In Albania, there has been growth from 272 lines to 361, but even so, the broadband penetration in practical terms is almost zero. In addition, Bosnia & Herzegovina, Montenegro, Serbia¹¹, Kosovo, and the former Yugoslav Republic of Macedonia have penetration¹² of less than 1%.

Experience in the EU has demonstrated that broadband growth is largely a function of a good regulatory environment. Member States that have been more successful with adapting their regulations, for example in the area of local loop unbundling and bitstream access, can show higher growth rates than countries with less appropriate regulations. The following quote from the "Broadband market competition report" by the ERG¹³ makes the case:

The market data analysis and the country studies both lead to the conclusion that the following hypothesis can explain the market development both in terms of competition and penetration / growth of penetration:



Regulation leads to competition, which then incites investment, which in turn pushes penetration.

A similar trend can be detected in South East Europe. It is probably not by coincidence that the four countries that have been "accession countries" for the longest period of time, and thus have the longest experience with the EU's regulatory framework, can demonstrate the highest penetration figures in the region.

¹¹ The information on number of cable modems and FWA connections in Serbia is based on estimates.

¹² This is based on the official broadband penetration figures. These do not include WIFI subscriptions under the SurfMacedonia project, which is a project initially funded by USAID to provide broadband connections to public schools in the former Yugoslav Republic of Macedonia.

¹³ Broadband market competition report, ERG document (05/23), May 26, 2005

Because the regulatory situation in this region is much less harmonised between countries and geographic units than is the case in the EU, it is necessary to investigate a broader range of topics in order to understand to what extent the regulatory environment constitutes conditions that are attractive to investors and thus likely to generate such development as explained in the ERG document. The basic challenge in many cases is to bring the regulatory environment in line with the requirements laid down by the EU framework.

A potential investor will typically ask questions such as:

- Is the country stable? Is the legal system transparent and predictable? Is there legal certainty and fair enforcement?
- Have telecommunications tariffs been rebalanced, or must the investor assume significant price changes ahead when making his business plans?
- What are the market access conditions? Are there high fees and complex procedures in order to be authorised to operate?
- What competitive safeguards are in place, such as reference interconnection offers, carrier selection and pre-selection, number portability, and reference unbundling offers?
- Does the incumbent operator provide wholesale offerings that enable fast roll-out of nationwide services without the need to make heavy up-front investments before a client base has been established?

These questions are relevant for investments in all types of telecommunications services, but they are particularly relevant for investments in broadband access networks. Because broadband access is increasingly justified on the basis of “triple play” solutions, where the customer is offered both telephony service and TV reception in addition to Internet access, such access networks are also dependent upon the regulations that apply to telephony networks and services. For example, where a broadband access provider offers telephony services over his network, he will have to be authorised as a provider of public telephone networks and services and all competitive safeguards that apply to telephony become relevant.

F. National regulatory authority

All countries and geographic units included in this report have now established regulatory authorities through legal provisions aimed at ensuring their independence.

In Serbia, the Telecommunication Agency (RATEL) was established on May 23, 2005 with the appointment of its Managing Board. The staffing of RATEL started in September 2005. By July 1, 2006 the staffing was not yet completed although the Executive Director and several heads of department had been appointed, as well about 20 professional employees, most of them in the Frequency Spectrum Department.

In the former Yugoslav Republic of Macedonia, the Agency for Electronic Communications formally commenced operations on July 1, 2005, when the old Telecommunications Directorate ceased to exist. Prior to that, the Agency had existed as a temporary arrangement.

As in every country, true independence of a regulator is not something that can be fully ensured through legislation. National legal traditions and culture play important roles and independence is a quality that must be earned over time and proven in testing situations.

G. Market access

In theory, all forms of networks and services have been fully liberalised in all countries and geographic units included in this report, with only two exceptions:

- In Albania, there are telephony licences defined for national operations (Class I) and rural operations (Class II), but no there is no licensing category for urban areas.
- In Kosovo, the incumbent will maintain exclusive control over access to international gateway facilities until December 31, 2007.

However, for reasons such as lack of appropriate secondary legislation for authorisation, extremely high authorisation fees, or lack of a viable reference interconnection offering there are de facto barriers to entry for fixed network operations (including broadband operations with voice traffic) in several countries:

- Authorisation frameworks in Montenegro and in Serbia do not define a one-off licence fee for the provision of fixed telecommunications networks and services. The licences have to be awarded following a public tender procedure with a minimum bid amount to be set by the government. In Montenegro, the incumbent operator had paid a one-time licence fee of €6 million. In addition, there is an annual fee of €120,000 for an international traffic licence plus 1% of revenue per year.
- In the former Yugoslav Republic of Macedonia, the lack of tariff rebalancing has caused problems with the interconnection prices to the extent that market entry has been delayed.

The EU framework requires that general authorisations without the need for prior approval shall be used in all cases that do not require use of limited resources. Furthermore, the fees associated with such authorisations shall not be higher than what is necessary to cover the administrative costs of the NRA.

Only Romania has fully implemented this framework so that it applies effectively to all providers of public electronic communications networks and publicly available electronic communications services. The former Yugoslav Republic of Macedonia has also implemented this framework in legislation, but its practical implementation has been delayed, as explained above, because of tariff rebalancing problems.

The rest of the countries and geographic units still require individual licences (and payment of licence fees) in order to operate public telephony networks and services. Nevertheless, Bulgaria is in the process of adopting the 2003 acquis before becoming an EU Member State by year-end 2006 and Croatia has a quite low licensing fee (€2,700).

H. SMP regulations and reference interconnection offer

In the period from November 1, 2005 to July 1, 2006 the following new SMP designations have taken place:

- In Albania, mobile operators have been designated after their previous designation had expired.
- In Bulgaria, one additional mobile operator has been designated.
- In Turkey, two additional mobile operators have been designated.

After these new designations, the status is that all countries and geographic units with one exception have designated their incumbent operators as having significant market power for fixed telephony. In Albania, the incumbent operator was designated as having SMP in 2004, but the designations were only valid for one year. The process of market analysis and decision on SMP designation has not yet been completed.

Mobile operators have also been designated as having significant market power in all countries and territories except one. The exception here is the former Yugoslav Republic of Macedonia.

The analysis leading to SMP designation varies as some countries have implemented the 1998 acquis, which has quite broad market definitions and automatic application of remedies following designation. Only Romania and the former Yugoslav Republic of Macedonia have fully adopted the 2003 acquis, which requires a more substantial market analysis for a set of rather narrowly defined markets and which allows more flexibility in the application of remedies. Nevertheless, some of the other countries are being more specific on the market definitions than required under the 1998 acquis. Turkey has in fact carried out market analysis for the first 16 markets according to the European Commission Recommendation. Croatia has adopted secondary legislation for market analysis according to the 2003 acquis, but has not yet completed the analysis of any market according to this methodology. (See section IV.D.3 for more details).

One of the first requirements from a provider designated as having SMP in a fixed network is to publish a reference interconnection offer, which is a key enabling factor for many types of competitive activities.

On July 1, 2006 such reference offers had been published in all countries and geographic units except Albania, Serbia, and Kosovo.

In Kosovo, the incumbent has submitted a RIO to the NRA. It is still under consideration.

Even though the RIOs exist, there had been no interconnection agreements on July 1, 2006 between fixed operators in Bosnia & Herzegovina¹⁴, Montenegro and the former Yugoslav Republic of Macedonia¹⁵.

In the period from November 1, 2005 to July 1, 2006 there has been growth in the new RIO agreements, in particular in Bulgaria, Croatia, Romania and Turkey.

I. Carrier selection and pre-selection

In the period from November 1, 2005 to July 1, 2006 there has been some progress on carrier selection:

- Bosnia & Herzegovina has established a target implementation date of October 1, 2006 for all categories of calls for carrier selection and October 1, 2007 for all categories of calls for carrier pre-selection.
- Bulgaria took a decision to implement carrier selection and pre-selection for calls to mobile networks on July 11, 2006. Carrier selection has been available in Bulgaria since June 2004, and carrier pre-selection since January 2005, but only for long-distance and international calls.
- Croatia, which had implemented carrier pre-selection for fixed networks prior to 2005, has now also implemented carrier selection, which has been operational since July 1, 2006 for all categories of calls.
- Romania has implemented carrier pre-selection from June 2006 for all categories of calls.
- Turkey has both carrier selection and pre-selection requirements for long distance and international calls, but has suffered from technical delays. These have now been resolved and interconnection agreements for carrier selection and pre-selection are now being processed.

Serbia has defined a carrier selection and pre-selection requirement in its primary law, but has not yet started implementation or defined a target date for their introduction.

Montenegro launched a consultation on the introduction of carrier selection and pre-selection in November 2006.

Albania and Kosovo have still not taken any decision to require carrier selection and pre-selection.

J. Number portability

There have been developments in Croatia in the period from November 1, 2005 to July 1, 2006 as implementation work has been carried out for number portability in the mobile network. It was intended to become operational on July 1, 2006 but has been subject to implementation delays¹⁶.

Serbia has defined a requirement in its primary law, but no implementation date has been set. Turkey has number portability under study and there are plans to adopt a regulation by the end of 2006.

Albania, Bosnia & Herzegovina, and Montenegro have not yet decided on number portability or published any planning information.

K. Local loop unbundling and reference unbundling offer

The previous report covering the period from January 1 to November 1, 2005, could state that there had been significant progress on local loop unbundling. In the subsequent period, from November 1, 2005 to July 1, 2006, the picture is more mixed and there have been a couple of setbacks:

- Bosnia & Herzegovina now expects the RUO to become compulsory in 2008 rather than 2006.
- In Bulgaria, the RUO became obligatory from the beginning of 2005. However, after 18 months there are not yet any unbundled local loops in practice.

¹⁴ The first three interconnection agreements among the incumbent operators (BH Telecom, Telekom Srpske) and alternative fixed operators were signed in December 2006

¹⁵ The first interconnection agreement between the incumbent, MakTel, and the alternative fixed operator, On.Net, was signed on November 15, 2006.

¹⁶ Number portability for mobile operators became operational from October 1, 2006.

On the other hand:

- In Romania, the RUO has already been in place since July 2004. In the period from December 31, 2005 to July 1, 2006 the number of unbundled local loops grew from 8,373¹⁷ to 45,346 lines.
- In the former Yugoslav Republic of Macedonia the RUO was approved in April 2006.
- In Turkey, the RUO has now been through a public consultation period and is expected to become effective in the third quarter of 2006.

Albania, Montenegro, and Serbia have still not taken decisions on whether to require local loop unbundling. Serbia, although there are commercially based wholesale solutions available, has a need to introduce RUO regulations in order to be aligned with the EU framework.

L. Privatisation

a) Albania

In July 2004, Government decision 416 defined that 76% of Albtelecom shares would be sold, including the mobile branch "Eagle Mobile". The tender for privatization of Albtelecom was conducted in mid-2005, and was won by the Turkish Calik Enerji Telekomunikasyon and Turk Telekom consortium for €121 million. In October 2005, the parliament rejected the sale arguing that the process, which had been carried out by the previous socialist government was flawed. However, in September 2006 the government announced that it might renegotiate the terms of privatisation with the Turkish consortium. If negotiations fail, a new tender will be announced.

b) Bosnia and Herzegovina

In December 2006, Serbia's incumbent, Telekom Srbija, won the tender for the privatisation of the state-controlled 65% of the Republika Srpska's incumbent operator, Telekom Srpske, with a bid of €646 million. Telekom Srpske operates in the three telecommunications sectors: fixed telephony, mobile telephony and as an Internet provider.

c) The former Yugoslav Republic of Macedonia

The former Yugoslav Republic of Macedonia has reduced its share in the incumbent operator Maktel from 47% to 37%.

M. Other important developments

In this section we present a short summary of the other important developments that have taken place in the period since the previous report, i.e. between November 1, 2005 and July 1, 2006:

- Institutional developments - Croatia has completed a co-operation agreement between the NRA for electronic communications and the competition authority.
- Fixed Wireless Access (FWA) developments – There has been significant increase in licences granted in Bulgaria, Croatia and Romania.
- Additional cable TV operators have been authorised in Albania, Bosnia & Herzegovina, Bulgaria and Romania.
- There has been growth in fixed network operators in Croatia and Romania as well as the former Yugoslav Republic of Macedonia.
- Turkey has adopted a new regulation on the funding of Universal Service.
- Turkey has also adopted a new regulation on rights of way for network operators.
- Growth in number allocations for alternative operators suggests growth in particular for Bulgaria, Croatia and Romania.

¹⁷ An observant reader may note that the number of unbundled local loops in Romania is higher than the number of broadband xDSL connections provided by alternative operators through local loop unbundling. The explanation is that there are some unbundled local loops that are used for xDSL at speeds that are under the threshold to be characterised as broadband.

- Several countries have reported improvements in quality of service, such as Albania, Bosnia & Herzegovina, Bulgaria, Croatia and Romania. Turkey has reported unusually high unsuccessful call rate for international traffic.

IV. GENERAL OVERVIEW

The report contains many indicators reflecting the state of development of the national telecommunications markets, which are presented in this chapter.

The information collected suggests that there are great differences among the individual countries in terms of relative size, per capita, penetration, pricing, regulatory regime and data availability.

A. Introduction and general background information

1. Currencies, exchange rates and value added tax

All prices and values that are shown in this report and relating to 2005 have been converted to euro using the average exchange rate for 2005 as presented in Table 4 below. The average exchange rate for 2004 is used in some tables that present information relating to 2004. Value added tax has been included in consumer related prices, such as residential tariffs. Value added tax has not been included in business tariffs.

Country	Currency	Average exchange rate for year 2004	Average exchange rate for year 2005	Exchange rate as of 30.6.2006	Value added tax
Albania	Albanian lek	127.6700	124.1800	123.2700	20%
Bosnia & Herzegovina	Bosnian mark	1.9560	1.9560	1.9560	17%
Bulgaria	Bulgarian lev	1.9558	1.9558	1.9558	20%
Croatia	Croatian kuna	7.6712	7.4000	7.2443	22%
Montenegro	euro	1.0000	1.0000	1.0000	17%
Romania	New Romanian lei	4.0532	3.6234	3.5686	19%
Serbia, including Kosovo ¹					
Serbia	Serbian dinar	72.5820	82.9074	84.9995	18%
Kosovo	euro	1.0000	1.0000	1.0000	15%
The former Yugoslav Republic of Macedonia	Macedonian denar	61.3377	61.2958	61.1919	18%
Turkey	New Turkish lira	1.7673	1.6700	2.0170	18%
1) under UNSCR 1244					

Table 11 - Basic currency and exchange rate information

Notes:

The information has been provided by the NRAs, which have consulted their national banks, ministries of finance and or national statistical offices.

Montenegro and Kosovo use the euro as their official currency.

In order to obtain a clearer understanding of the national price levels it is useful to adjust prices with purchasing power parity indices (PPP). Such indexes aim to establish the exchange rate that will permit a euro in a reference country to have an equivalent purchasing power in another country.

Because different countries have different currencies with different exchange rates, the PPPs cannot be directly compared. In order to have a common yardstick, we can construct price level indices (PLI) by dividing the PPP by the nominal exchange rate. A price level index of 50 means that the average price level is 50% of the price level in the reference country. Conversely, in that case a euro will have a purchasing power that is twice what it is in the reference country.

PPP for many European countries are calculated in the European Comparison Programme, which is managed and co-ordinated by Eurostat. Data collection under this programme is continuous, but cyclical,

with each cycle or round of surveys taking five years to complete. Annual comparisons are made by “rolling” data collected in one year over to subsequent years.

The West Balkan Countries (WBC) are not part of the European Comparison Programme, but a pilot project is now ongoing to develop PPPs based on the same methodology. It is funded primarily by Eurostat and the regional CARDS programme and the task is managed by the Statistical Office of the Republic of Slovenia with technical guidance from the OECD.

The WBC programme published its first results in July 2005¹⁸ when two partial indicators were presented for:

- food, beverages and tobacco (referred to in subsequent charts as partial PPP-1; and
- clothing and footwear (partial PPP-2).

The information for these indicators was collected in the autumn of 2003.

The WBC indicators were presented together with comparable information from selected EU and South East European countries. Thus, these indicators were available for all the countries covered by this report. These partial indicators were used in the previous report¹⁹ in order to have a better understanding of the national retail prices.

However, Eurostat warns that care should be taken when drawing conclusions from PPP comparisons. This warning is even more appropriate when making comparisons based on partial PPP indicators that are two years old.

Eurostat has now made PPP available for five countries representing 2005 values. The five countries are Bulgaria, Croatia, Romania, the former Yugoslav Republic of Macedonia, and Turkey. Therefore, these values are used in this report even though it means that these price comparisons can only be made for five countries.

Figure 1 - Price level indices below presents the PPP information²⁰ in the form of price level indices.

¹⁸ Eurostat: Statistics in Focus, Economy and finance, 30/2005

¹⁹ Report 2 – Country comparative report, May 22, 2006.

²⁰ In Report 2, price comparisons were made for all countries and geographic units using partial PPP, because they were the only indicators available at the time. The partial PPPs had been calculated on the basis of data from 2003 for the food, beverage and tobacco sector and for clothing and footwear sector. The full PPPs that are now available for the five countries are lower than the partial PPPs. Thus, when converting nominal euros to PPP euros, the prices will appear more expensive in this report than they were with partial PPP conversion in Report 2.

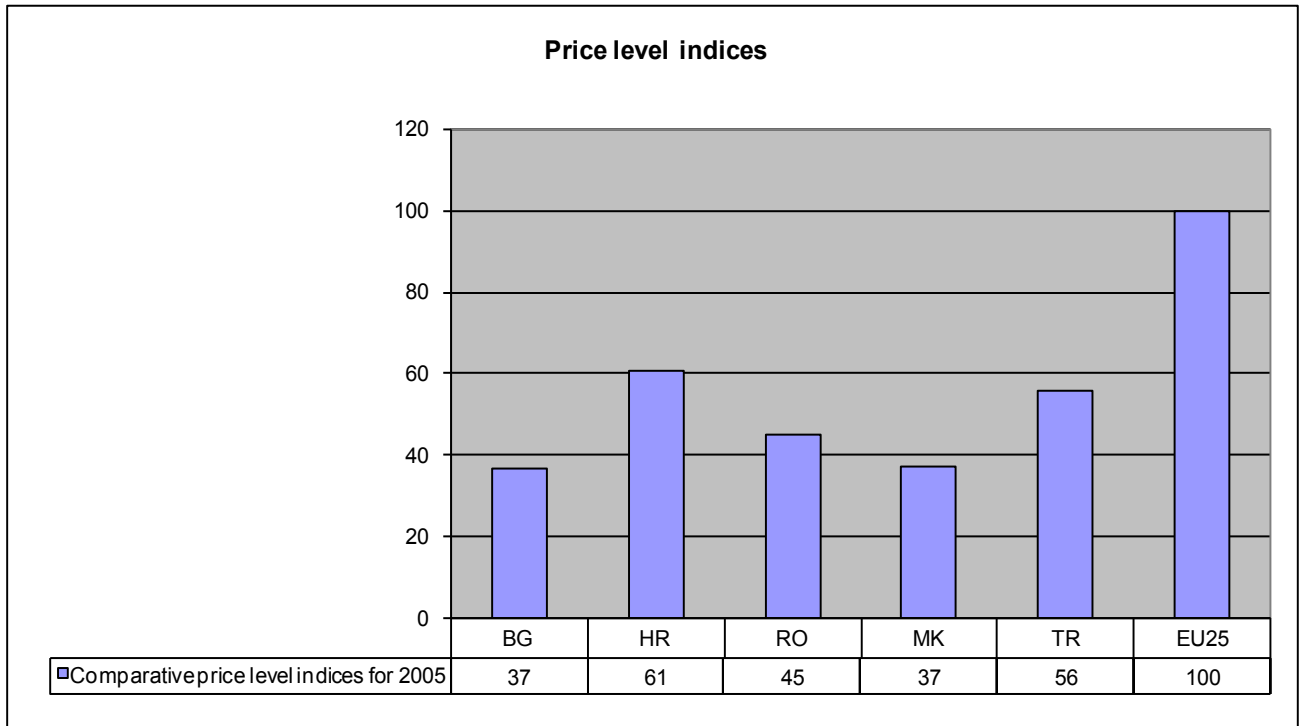


Figure 1 - Price level indices

2. Population and households

This table provides basic information on population and households. It is based on data received from the national authorities and should therefore be the most reliable information available for the end of 2006. However, a word of warning may be appropriate. For many countries, the information is based on a census that may be some years old. This is particularly true for the number of households. In addition, population figures may be based on an old census with growth projections to provide an estimate for later periods. For many countries, this projection has not been updated for 2006 and the projection for 2005 is used instead. This projection is also used to represent the mid-year 2006 population.

For some of the Balkan territories there is a significant problem with refugees that creates uncertainty about the population count.

Country	Inhabitants year end 2005	Inhabitants year end 2006	Percentage of EU population as of year end 2006	Households year end 2005
Albania	3,149,147	3,162,506	0.69	745,890
Bosnia & Herzegovina	3,871,000	3,871,000	0.84	1,200,790
Bulgaria	7,718,750	7,718,750	1.68	2,921,887
Croatia	4,442,000	4,442,000	0.97	1,477,344
Montenegro	625,000	627,000	0.14	191,047
Romania	21,623,849	21,623,849	4.70	7,320,202
Serbia, including Kosovo ¹				
Serbia	7,498,001	7,498,001	1.63	2,521,190
Kosovo	1,965,000	1,965,000	0.43	311,100
The former Yugoslav Republic of Macedonia	2,035,000	2,035,000	0.44	567,785
Turkey	72,520,000	72,974,000	15.87	17,487,336
SEE	125,447,747	125,917,106	27.38	34,744,571
EU25	456,448,500	459,938,443		
1) under UNSCR 1244				

Table 12 – Population

Notes:

The national information has been provided by the NRAs on the basis of information from the national statistical organisations.

Albania: Data are estimations from INSTAT, based on 2001 census. Number of households is derived by dividing the projected population for 2006, with the average number of people per household in 2001.

Bosnia & Herzegovina: Inhabitants end 2005 is used as best estimate of inhabitants end 2006

Bulgaria: Inhabitants end 2005 is used as the best estimate of inhabitants at the end of 2006. Number of households based on the most recent data available from 2001.

Croatia: Inhabitants end 2005 is used as the best estimate of inhabitants at the end of 2006.

Montenegro: Most recent information is for 31.12.2003 – population is 620,145, households are 191,047. 2005 and 2006 data are projections.

Romania: The latest census of population and dwellings was made in March, 2002. After that date, estimates have been developed. The information on households is from the census. Inhabitants end 2005 is used as the best estimate of inhabitants at the end of 2006.

Serbia: Inhabitants end 2005 is used as the best estimate of inhabitants at the end of 2006.

Kosovo: Inhabitants end 2005 is used as the best estimate of inhabitants at the end of 2006.

The former Yugoslav Republic of Macedonia: The number of inhabitants and households is the same as the one given for 2004, from the official report of the State Statistic Authority of the Republic of Macedonia.

Turkey: The number of households is a projection based on the census of 2000.

The EU population has been taken from Eurostat's population projection database.

3. National economy

The countries and geographic units in this report belong to the least developed regions in Europe. However, they are demonstrating strong economic growth with an average growth rate of 12% from 2004 to 2005, measured in nominal euros.

In terms of GDP per capita in 2005, Croatia is in a category by itself with an average that is almost twice that of Turkey, which is in second place on this list. Croatia's GDP per capita was just below €7,000, while the other countries range between €1,266 and €4,023.

Romania is shown with the strongest national growth rate in the region with 35% from 2004 to 2005. However, this is a result that has been strongly influenced by changes in the currency exchange rate. Measured in the national currency, RON, the growth rate is still impressive with 17%.

On the other hand, in absolute terms, the Turkish economy outweighs all the others by far. The Turkish GDP, with 291 billion euro in 2005 is more than twice all the other countries and geographic units combined. The information is expressed in nominal euro.

NB. A note of caution on the reliability of national GDP figures for this region. In many cases, there are several sources of GDP estimates that can vary substantially. In addition, the GDP estimates from the same source may be revised. In this report, we have used the most recent estimates as explained in the notes below. However, this means that the estimate for GDP in 2005 may not always be the same as the estimate made 9 months ago and reflected in the previous report (Report 2) in this series.

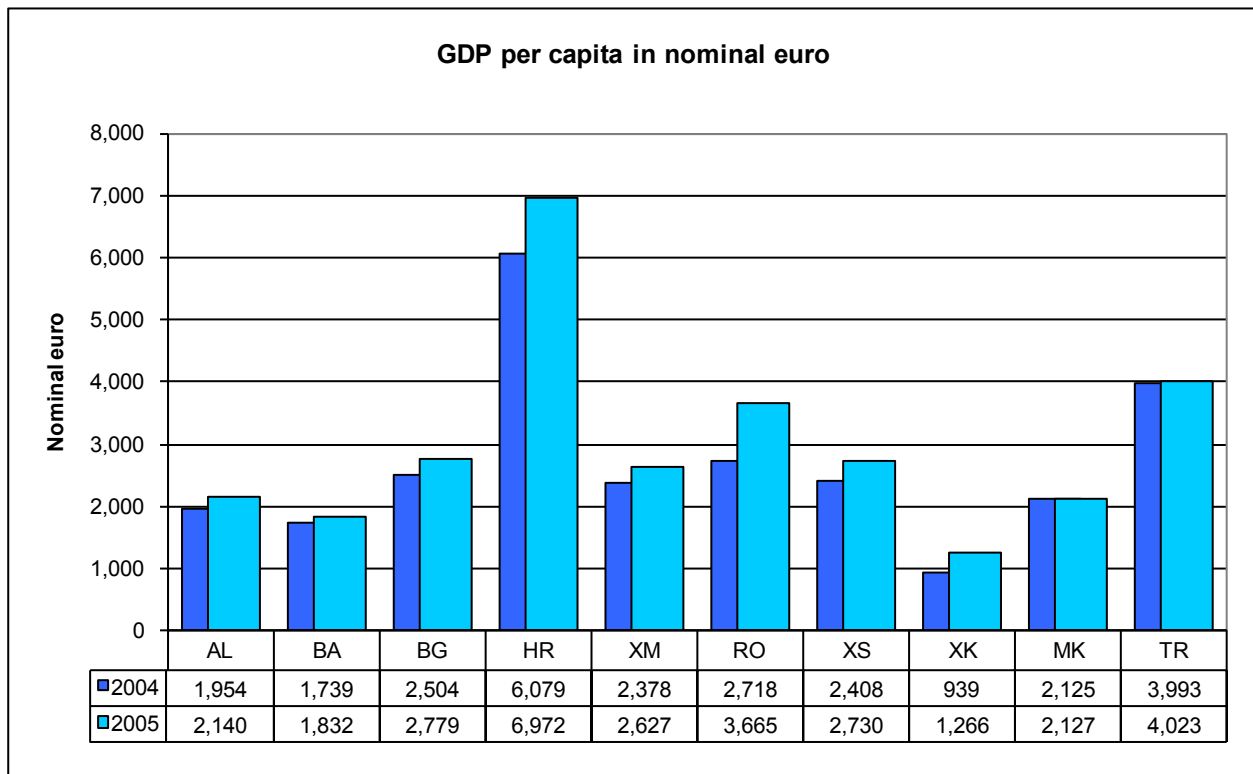


Figure 2 – GDP per capita in nominal euro for 2004 and 2005

Country	GDP Nominal euro (billion)		Per capita nominal euro	
	GDP 2005	GDP 2006	GDP 2005	GDP 2006
Albania	6.739	7.299	2140	2308
Bosnia & Herzegovina	7.277	7.587	1832	1960
Bulgaria	21.448	22.960	2779	2975
Croatia	30.950	32.370	6972	7287
Montenegro	1.580	1.709	2627	2726
Romania	79.258	93.042	3665	4303
Serbia, including Kosovo ¹				
Serbia	20.468	na	2730	na
Kosovo	2.488	2.563	1266	1304
The former Yugoslav Republic of Macedonia	4.327	na	2127	2130
Turkey	291.738	na	4023	na
SEE	466.273		3717	
EU25	10,409.05		22,703	
1) under UNSCR 1244				

Table 13 - GDP in the territories and EU expressed in billion nominal euro for 2005 and estimate for 2006

Notes:

The information has been provided by the NRAs in most cases. Specifically, the sources are:

Albania: GDP 2006; estimate by Ministry of Finance

Bosnia & Herzegovina: "Staff Report", International Monetary Fund, 2005. An estimate by the Central Bank of Bosnia & Herzegovina provides an estimate for 2005 that is 6.3% higher.

Bulgaria: GDP 2005= Source: National Statistical Institute, www.nsi.bg. GDP 2006= Forecast data of the Agency for Economic Analysis and Forecasting, <http://www.aeaf.minfin.bg/>, http://www.aeaf.minfin.bg/cms/docs/bg/ops/m_economy/budget2006_sept.pdf

Croatia: The estimates for 2005 are made by the Central Bureau of Statistics in Zagreb. The estimate for 2006 represents a growth estimate of 4-6% presented by IMF in September 2006.

Montenegro: Bulletin of Central Bank of Montenegro, June 2006 (www.cb-cg.org)

Romania: GDP 2005: estimate by the National Institute of Statistics. 2006: forecast by the National Commission for Prognosis.

Serbia: 2005: Information from the National Bank of Serbia. 2006 estimate is based on an extension of an estimate for the first quarter of 2006. This projects a small decrease of 1% in GDP from 2005 to 2006 in local currency. Most of the difference shown in the figures in this report are due to exchange rate differences.

Kosovo: 2005: Data from the annual report of the Main Bank of Pristina published in May 2006. Another estimate supplied by Kosovo Chamber of Commerce (KCC) is 3.5% lower. 2006: Estimate based on International Monetary Fund (IMF) projections that there would be a 3% increase in GDP. (source Kosovo Chamber of Commerce)

The former Yugoslav Republic of Macedonia: The value of GDP and GDP per Capita is the same as the one given for 2004, from the official report of the State Statistic Authority of the Republic of Macedonia

Turkey: 2005: Turkstat. 2006: will be officially announced by the Turkish Statistical Institution (Turkstat) by the end of the 1st quarter 2007.

The EU25 GDP value has been taken from Eurostat's database for national accounts represented in current prices.

4. Telecommunications market

The table below shows the estimated size of the telecommunications markets in 2005. Information on the Internet market and the market for data and leased lines is not available for all geographic units. The size of the market is therefore somewhat underestimated for these units. Not all of the geographic units have Cable TV operators and, in some cases, Cable TV operators exist but have not reported their revenues.

Turkey has by far the largest telecommunications market and represents about half of the total market presented in this report. Turkey's market, which is valued at €8.655 billion, represents more than 3% of the total EU market.

At the other end of the scale is Kosovo, with a market of about €170 million²¹.

²¹ The numbers for Kosovo are based primarily on a report of fixed telephony revenue. The mobile revenue is an estimate, which also includes revenues from non-licensed operators.

Country	Market estimate 2005 Million euro	GDP 2005 Billion euro	Percent of GDP
Albania	417	6.74	6.18
Bosnia & Herzegovina	550	7.28	7.55
Bulgaria	1,403	21.45	6.54
Croatia	1,758	30.95	5.68
Montenegro	184	1.58	11.67
Romania	3,000	79.26	3.79
Serbia, including Kosovo ¹			
Serbia	927	20.47	4.53
Kosovo	169	2.49	6.79
The former Yugoslav Republic of Macedonia	337	4.33	7.78
Turkey	10,453	291.74	3.58
SEE	19,198	466.27	4.12
EU25	273,000	10,409.05	2.62
1) under UNSCR 1244			

Table 14 - Market value overview

Notes:

Albania: The information is based on the present method of collecting statistical data from the Public Telecommunications Operators. Revenue for fixed incumbent includes the revenue from its internet service provision. Other private ISPs use fixed lines for Internet services, but their revenues are not reported. There are also private Cable TV operators with revenue that has not been reported

Bosnia & Herzegovina: In 2005, the first phase of Price and Tariffs Rebalancing was implemented and Income from international calls was considerably reduced and this led to a shrinkage of 56 million euro in the telecommunications market for 2005. Information provided by the incumbent operators.

Bulgaria: The revenue from fixed Internet access is included as fixed data services. "Other services" include revenues from leased lines, satellite and wireline radio and telex.

Croatia: Fixed data includes only revenues from IT technology (ISP and VoIP revenues). "Other services" include revenues from leased lines, data networks, etc.

Montenegro: Source: Annual report of the Agency for telecommunication of the Republic of Montenegro for 2005.

Romania: The information is based on estimates by the NRA.

The former Yugoslav Republic of Macedonia: The market value estimate for the full year of 2005 is based upon market statistics for the 2nd half of 2005. The regulation which obliges operators and service providers to report technical and financial data to the Agency for Electronic Communications was adopted on the 7th of July 2005 and there is no legal basis to obtain data prior to this date.

Turkey: Internet and leased lines revenues have been reported as fixed data revenue.

The EU25 estimate of market value is taken from the 11th Implementation Report of the European Commission, which is the implementation report that provides market data for 2005.

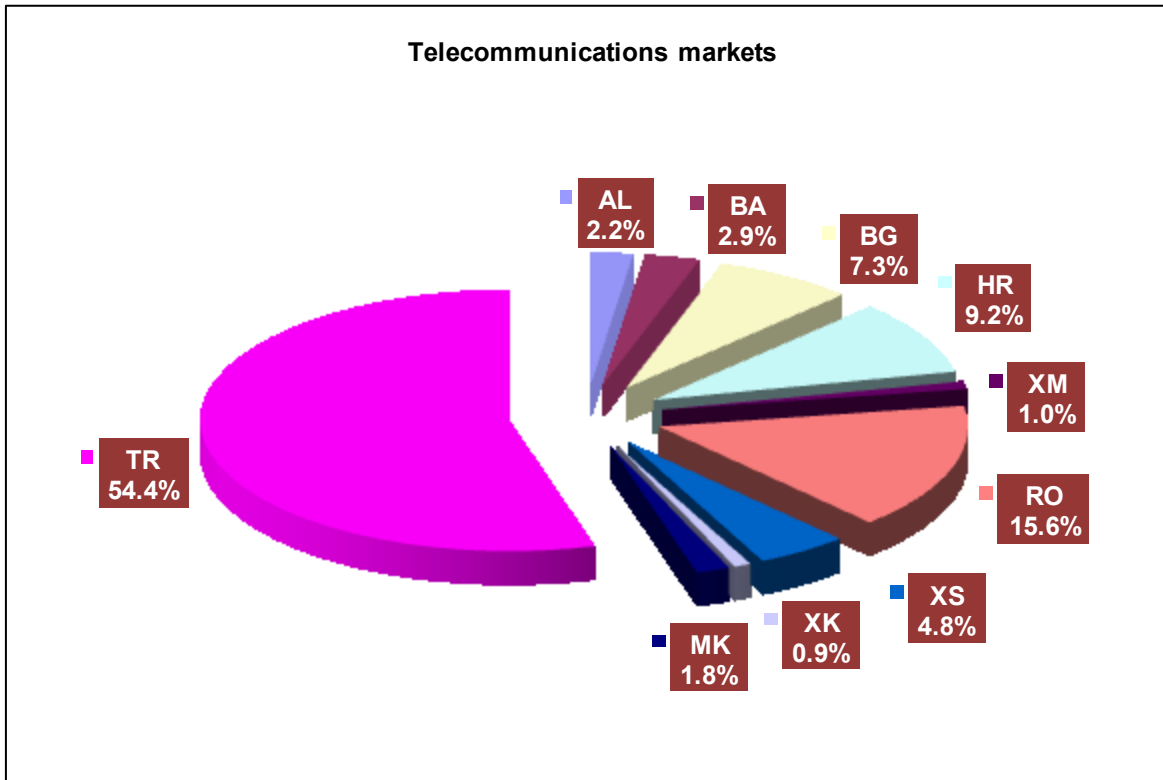


Figure 3 – Relative size of the telecommunications markets

Note:

See notes under Table 8 above.

In Figure 4 below, the total telecommunications market is broken down into five categories:

- fixed telephony services;
- mobile services;
- fixed data services (including Internet services);
- cable TV services;
- other services (for example satellite services).

The information is derived from the existing national procedures for collecting information from the operators. These procedures have not been co-ordinated among all the countries and geographic units in order to produce comparable information according to a common specification. The information presented in this report should therefore be seen as indicative rather than providing the definitive picture.

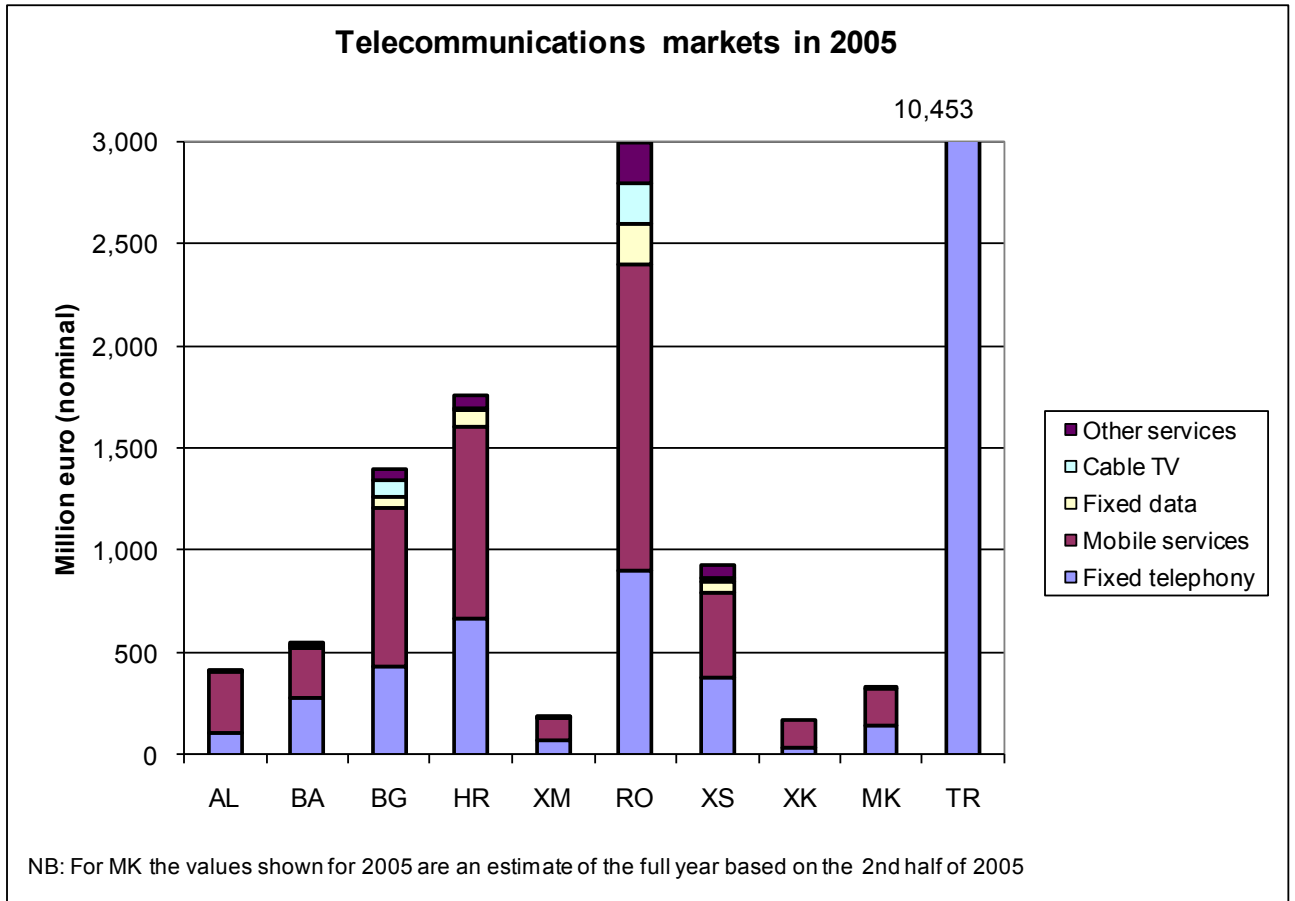


Figure 4 - Market value breakdown

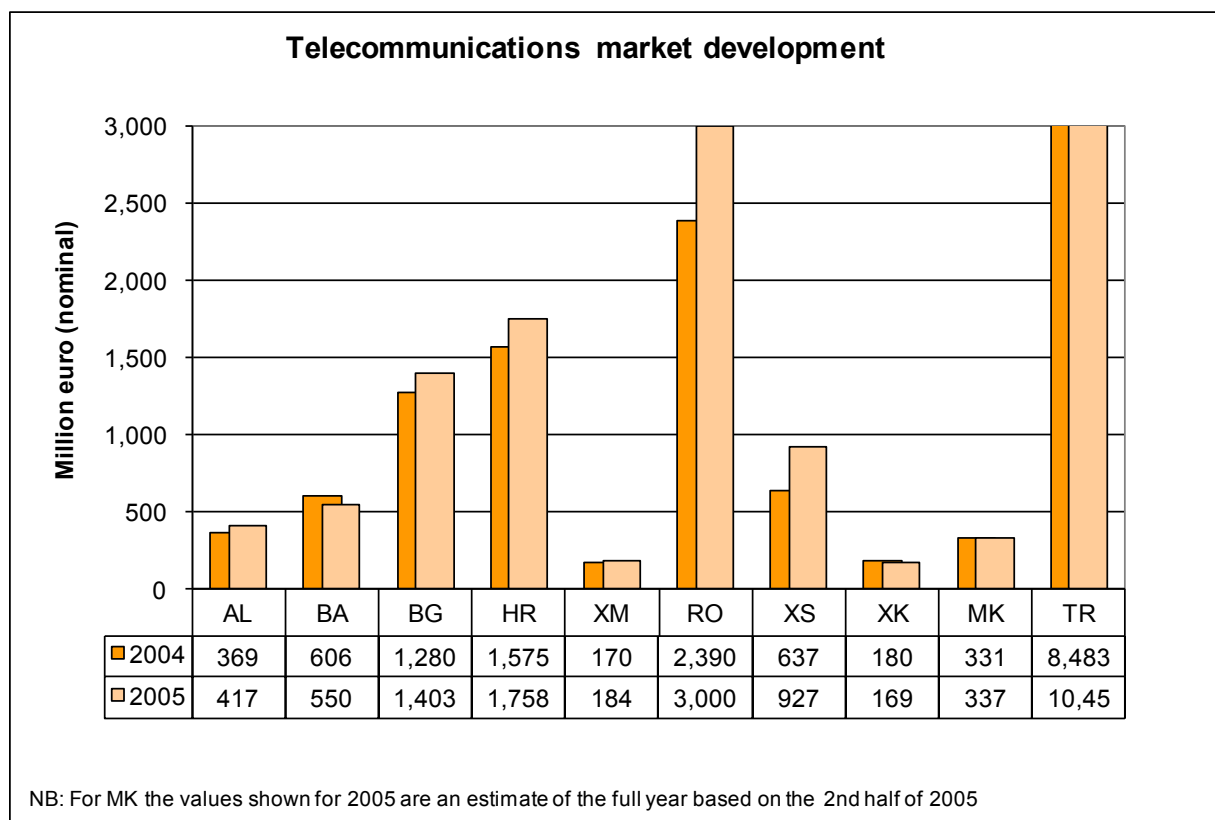


Figure 5 – Telecommunications market development

Notes:

All countries: Please refer to the notes under Table 8.

Turkey: Turkey's telecommunications market is almost three times larger than that of Romania, which has the second largest market. In the graph, the total value for Turkey is outside the scale.

It is also useful to see the size of the telecommunications market compared to the population. Figure 6 below shows that Croatia and Montenegro have the highest spending on telecommunications with around €400 and €300 per capita per year, clearly driven by their mobile telephony markets. In all countries and geographic units, the market for mobile services is higher than the market for fixed telephony services.

By comparison, the E-communications sector in the EU in 2005 was €273 billion²², which represented a spending of €598 per capita.

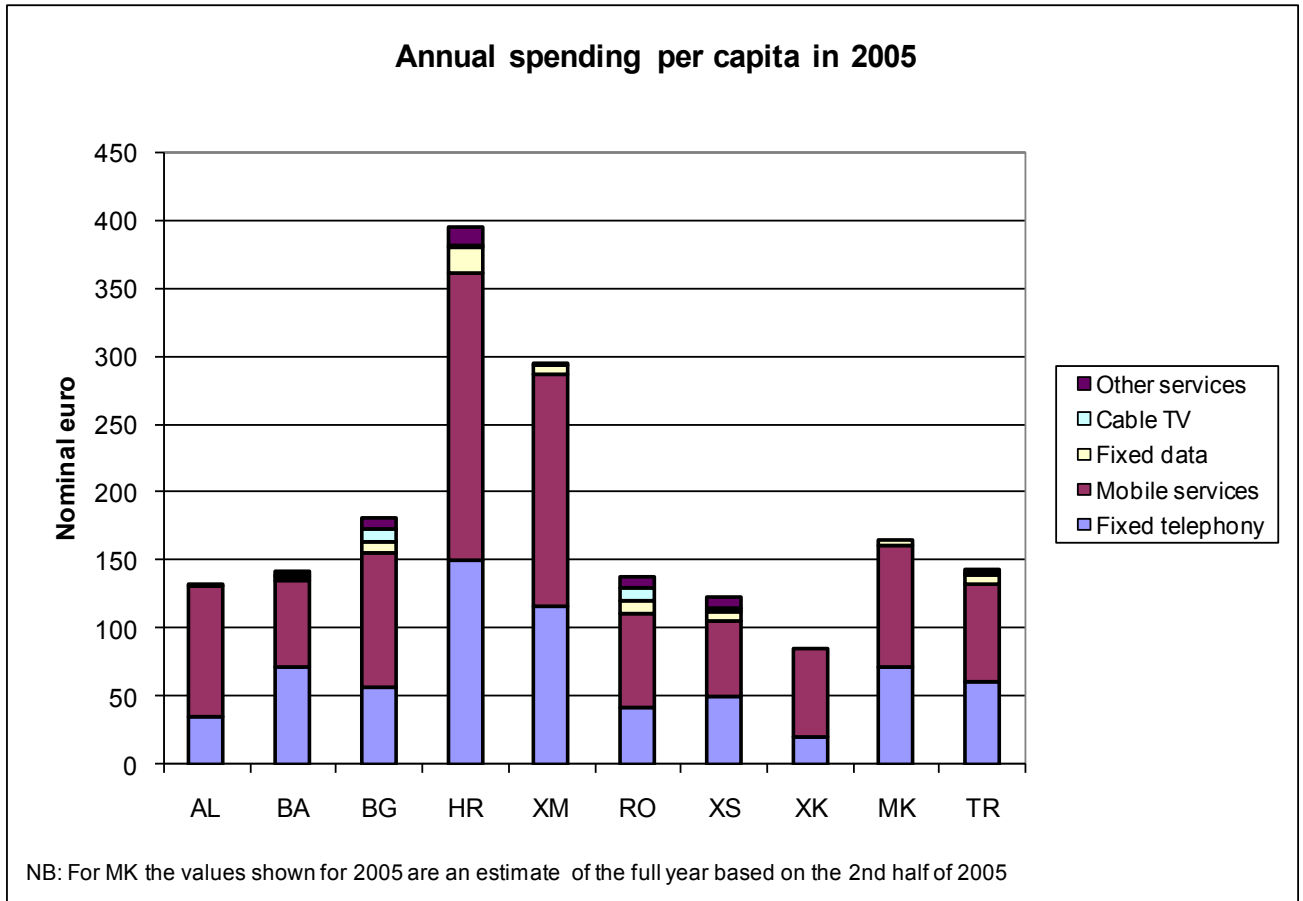


Figure 6 – Telecommunications markets per capita in nominal euro

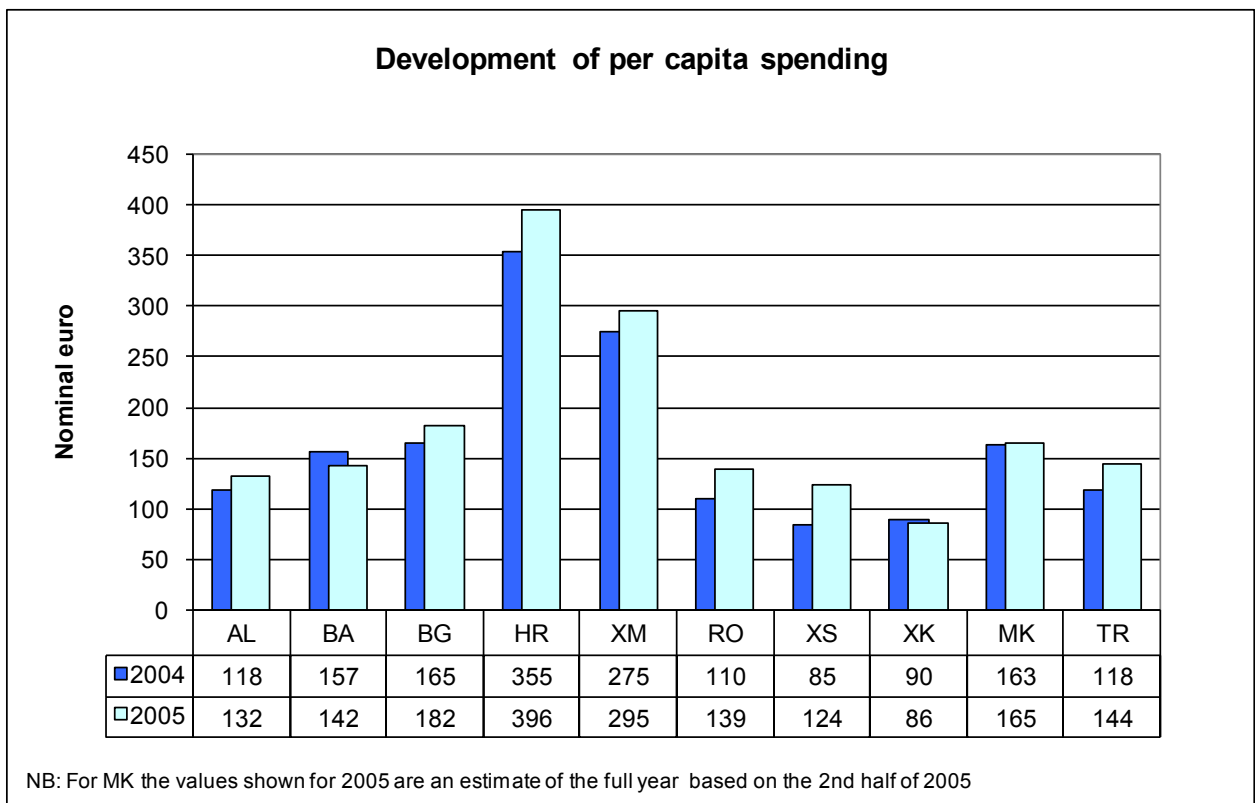


Figure 7 – Development of per capita spending

Furthermore, it is meaningful to examine the total telecommunications markets measured in relation to the national GDP. This indicator is presented in the figure below.

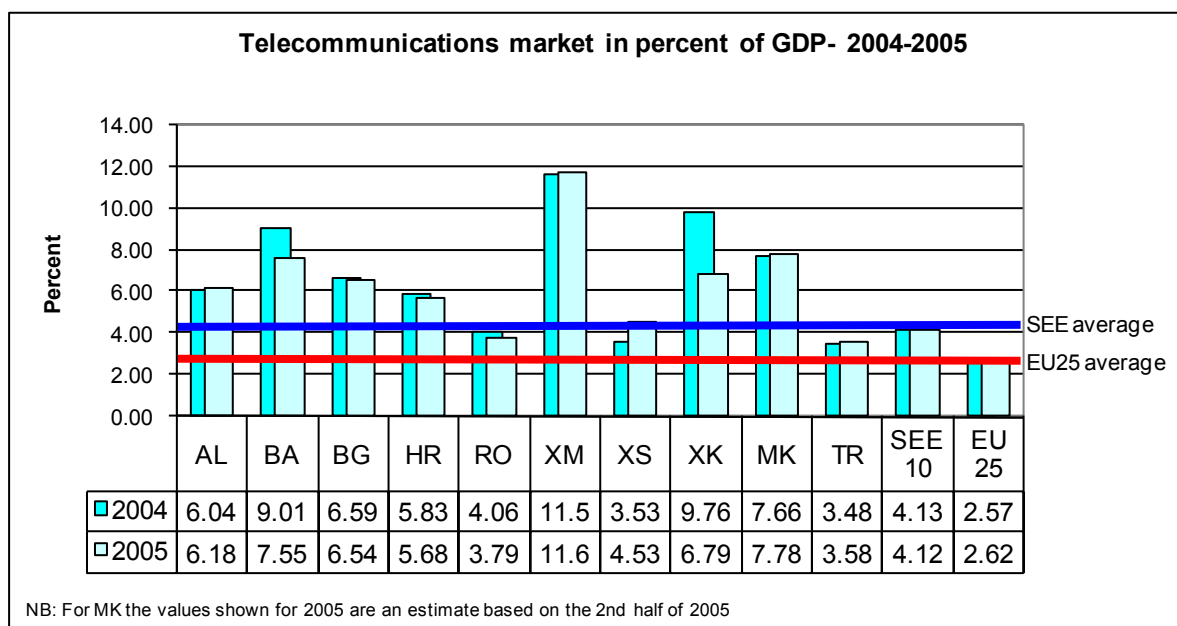


Figure 8 – Telecommunications market in percent of GDP in 2004 and 2005

Notes:

The GDP value for the EU has been provided by Eurostat.

The market value for the EU25 in 2005 is from the 11th Implementation Report by the European Commission.

It will be seen that the average spending on telecommunications in the SEE countries of around 4% of GDP is significantly higher than in the EU, where the average is around 2.6% when cable TV revenues are included. This is of course a reflection of the fact that the SEE countries have a lower GDP per capita than the EU 25. However, it is also indicative of the important role of the telecommunications sector in these countries, which should provide a platform for further growth of the national economies. Increased growth in GDP should lead to the telecommunications markets representing a lower percentage of GDP.

B. The National Regulatory Authority

The information in this chapter is intended to reflect the situation as it existed on July 1, 2006.

The establishment of an independent regulator is a cornerstone of the EU regulations for telecommunications. The basic requirement is set out in the Framework Directive²³, which requires certain regulatory tasks, such as the granting of individual authorisations, to be carried out by bodies that are legally distinct and functionally independent from activities that are associated with ownership or control of services and networks.

This requirement does not rule out that regulatory tasks may be shared among two or more regulatory bodies, as long as the sharing arrangement is clearly defined and published. Neither is there any direct provision against declaring a ministry as having certain regulatory powers. However, it is common practice across the EU to establish a regulatory authority that is also independent of the ministry. The reasons for this are:

- to create some distance between policy creation and policy execution. The ministry is responsible for policy and primary legislation. The NRA is responsible for the day-to-day functioning of the law. The ministry can provide guidance and set objectives, but normally, cannot instruct the NRA in any specific case. It is also normal that the ministry retains the powers to enter into agreements with international organisations that have the character of international treaties. However, that does not

²³ 2002/21/EC - Framework Directive Article 3

exclude participation by the NRA in international organisations, and there are special international organisations created for the NRAs;

- to reduce the likelihood of regulatory decisions being made on the basis of political favours;
- to increase confidence among market participants of a level playing field by insulating the regulatory body against political changes. Changes should be made through the legal system rather than by new political appointments;
- that the Ministry is often involved with the ownership of the incumbent operator. There is no requirement in the EU framework that Member States must privatise. Indeed, the requirement for the NRA to be legally distinct and functionally independent from activities associated with ownership is set out in recognition of the fact that such ownership is legitimate. On the other hand, where the State no longer has ownership of any operator, there is no need to investigate whether the necessary independence has been established.

This section first investigates the involvement of the states in ownership of telecommunications operators. It then presents information on the key factors that must be considered in the context of NRA independence.

1. State ownership

The next table presents information about the states' involvement in ownership of telecommunications operators. Further information about the structure of ownership of incumbent operators and major mobile operators is presented below in Table 15.

The table shows that almost all countries and geographic units have some state involvement in ownership. Montenegro has been the first country in the region, where the privatisation process of the incumbent operator was completed on April 1, 2005 by selling the 51.12% share owned by the State to Magyar Telecom. Bulgaria completed its privatisation process, but retained a golden share that permits the government to veto decisions by the board of the incumbent operator.

In Croatia, Romania, the former Yugoslav Republic of Macedonia, and Turkey the state only holds a minority share as the control in the incumbent telecom operators was taken over by strategic partner. Privatisation process has been ongoing in the Republika Srpska of Bosnia & Herzegovina and in Serbia. Further steps in privatisation of the incumbent telecom operator and the state-owned broadcasting transmission company are envisaged in Romania.

Country	Ownership by State		
	Name of operator	Percentage ownership by the State	Which government unit is responsible for ownership functions
Albania	<ul style="list-style-type: none"> • Albtelecom sh.a (with Eagle Mobile) • AMC sh.a. 	<ul style="list-style-type: none"> • 100% • 12.6% 	Ministry of Economy, Trade and Energy
Bosnia & Herzegovina	<ul style="list-style-type: none"> • BH Telecom d.d. Sarajevo • Telekom Srpske a.d. Banja Luka* (until December 2006) • Hrvatske Telekomunikacije d.o.o. Mostar 	<ul style="list-style-type: none"> • 90% • 65% • 62.76% 	Entity governments (in Federation and in Republika Srpska)
Bulgaria	Bulgarian Telecommunications Company	Golden share	Ministry of Transport
Croatia	HT- Hrvatske Telekomunikacije d.d. (Croatian Telecom Inc.)	42%	Government unit responsible for ownership functions is not defined.
Montenegro	Telecom Montenegro Inc.	0%	
Romania	<ul style="list-style-type: none"> • S.C. RomTelecom S.A. • National Radiocommunications Co. (Radiocom) 	<ul style="list-style-type: none"> • 45.99% • 100% 	Ministry of Communications and Information Technology (MCTI)

Country	Ownership by State		
	Name of operator	Percentage ownership by the State	Which government unit is responsible for ownership functions
Serbia (including Kosovo ¹⁾)			
<i>Serbia</i>	<ul style="list-style-type: none"> Telekom Srbija Mobi63** (until August 2006) 	<ul style="list-style-type: none"> 80% (through the 100% state-owned Public Enterprise of PTT Serbia) 70% (through the 100% state-owned Public Enterprise of PTT Serbia) 	Ministry of Capital investment
<i>Kosovo</i>	PTK (The Post and Telecommunications Enterprise of Kosovo)	100%	UNMIK (through Kosovo Trust Agency)
The former Yugoslav Republic of Macedonia	A.D. Makedonski Telekomunikacii	36.81% plus one golden share	Ministry of Finance
Turkey	<ul style="list-style-type: none"> Turk Telekom Avea İletişim Hizmetleri A.Ş. (former TT&TIM, GSM Operator) 	<ul style="list-style-type: none"> 45% plus one golden share 18% through Turk Telekom 	The Treasury, but the Ministry of Transportation is responsible for operational activities of Turk Telekom
1) under UNSCR 1244			

Table 15 – State ownership

Notes:

Albania: The tender for privatization of Albtelecom was conducted in mid-2005, and was won by the Turkish Calik Enerji Telekomunikasyon and Turk Telekom consortium for €121 million. In October 2005, the parliament rejected the sale arguing that the process, which had been carried out by the previous socialist government was flawed. However, in September 2006 the government announced that it might renegotiate the terms of privatisation with the Turkish consortium. If negotiations fail, a new tender will be announced. In addition, a group of Albanian businessmen have promised that they will offer a bid of 200 million euros to the Government if the agreement with the Turkish company is cancelled.

Bosnia & Herzegovina: *In December 2006, Serbia's incumbent, Telekom Srbija, won the tender for the privatisation of the state-controlled 65% of the Republika Srpska's incumbent operator Telekom Srpske with a bid of €646 million.

Croatia: The Act on Privatization of Hrvatske Telekomunikacije d.d. (Official Gazette no. 65/99) and the Act on Amendments to the Act on Privatization of Hrvatske Telekomunikacije d.d. (Official Gazette no. 68/01) provide for the further procedure of privatization of T-HT, whereby the government will offer at least 20% of T-HT shares to public bidding. In addition to its ownership in the incumbent operator, the Croatian state also owns 100% share in three other companies that are engaged in telecommunications:

- HEP – Hrvatska elektroprivreda d.d. (Croatian Power Utility, Inc.) – Network services.
- HŽ – Hrvatske željeznice d.d. (Croatian Railways, Inc.) – Network services.
- OIV – Odasiljaci i veze d.o.o. – Transmitters&Communications Ltd.

Montenegro: On April 1, 2005 the State sold its ownership (51.12%) in Telecom Montenegro to Magyar Telekom

Romania: MCTI is planning to float the shares held by the Romanian state on the stock exchange in 2007.

Serbia: **In August 2006 the Norwegian company Telenor completed acquisition of the Serbian mobile operator Mobi63 (now Telenor Serbia), following an auction held on July 31, 2006, for a total amount of €1,513 million.

2. NRA independence

After having established a regulatory authority as a separate legal entity, it is important to guarantee its independence by ensuring effective structural separation of regulatory functions from activities associated with ownership or control of undertakings providing electronic communications networks or services.

Table 16 below presents the NRAs own assessment of its independence and provides some of the main criteria that are normally used as indicators of independence.

In addition to structural separation of the NRAs, several other factors are important when considering its independence:

- Appointment of the NRA management - The appointments are normally made for a specific term of office with some protection against arbitrary dismissal. The appointments are made either by Parliament or by the Council of Ministers. A parliamentary appointment is normally seen to provide a higher level of independence, because there is better protection against political replacements. Nevertheless, it has been observed in the region that there have been examples of changes in NRA management following elections.
- Dismissal - The rules of dismissal are also important. Normally, the appointed decision makers stay in office for a defined period of time, typically five or six years, and can only be dismissed in this period under a limited set of well defined circumstances. It is also normal that a dismissal must be performed by the same body that made the appointment. The rules for appointment and dismissal are found in Table 16.
- Resources – The NRA must be properly resourced so that it can carry out its tasks. This is addressed below in Table 17.
- Financing – It is important that the NRA does not depend on political favours for its financial integrity. This is addressed below in Table 18.
- Powers – Independence may be illusory unless the NRA has the necessary powers to carry out its tasks. This is addressed below in Table 19.
- Appeals – Independence is also related to appeal procedures. If appeals go to a ministry that is also an owner of a telecommunications operator, the independence may be illusory. This is addressed below in Table 20.

Country	Separation of regulatory functions	
	Is there a separate independent NRA?	If yes, how is independence assured?
Albania	Yes. Telecommunications Regulations Entity (TRE)	The independence of TRE is assured by the Law on Telecommunications, No. 8618 of June 14, 2000. <ul style="list-style-type: none"> • Status as an independent legal entity • Board proposed by Government and approved by Parliament for 5 years term of office. Board members cannot be nominated for more than two additional terms • Board members can only be dismissed by Parliament for reasons defined by law • Board members are not allowed to own telecommunications operators • Self-financed, budget approval by Council of Ministers (see note) • Excess revenue goes to state budget
Bosnia & Herzegovina	Yes. Communications Regulatory Agency (RAK)	RAK Council is nominated by government and approved by Parliament. Only Parliament can dismiss the Council. General Director is nominated by Council of RAK and approved by Council of Ministers, for a four-year period. Council of Ministers has exclusive right to dismiss General Director under defined conditions.
Bulgaria	Yes. Communications Regulation Commission (CRC)	The independence of CRC as NRA is ensured by the Telecommunications Act – Articles 19, 20, 22, 23, 27-29, 31, 33, 38. <ul style="list-style-type: none"> • Separate legal entity • Members of the CRC: <ul style="list-style-type: none"> • Chairman appointed and dismissed by Council of Ministers • Deputy chairman and two members appointed and dismissed by National Assembly • One member appointed and dismissed by the President of Bulgaria

Country	Separation of regulatory functions	
	Is there a separate independent NRA?	If yes, how is independence assured?
Croatia	Yes. Croatian Telecommunications Agency (HAT)	Independence is assured by the Law on Telecommunications. According to Article 8, HAT is autonomous, non-profit, and independent. The HAT Council: <ul style="list-style-type: none"> • Appointment by Parliament • Dismissal can only be decided by Parliament under certain pre-defined circumstances
Montenegro	Yes. Agency for Telecommunications and postal services of the Republic of Montenegro	Defined by the provisions of the Telecommunications Law <ul style="list-style-type: none"> • Appointment by the government (proposal by Council of Ministers, confirmation by National Assembly) • Dismissal by Government (proposal by Council of Ministers, confirmation by National Assembly) only under circumstances defined by the Law • Conflict of interest forbidden by law • Self-financed • Empowered to adopt regulations without government approval
Romania	Yes. ANRC	ANRC independence is assured by the Government Emergency Ordinance No. 79/2002 on the general regulatory framework for communications, approved with amendments and completions by Law No. 591/2002, with the subsequent amendments and completions, as follows: <ul style="list-style-type: none"> • The ANRC President and vice-president are appointed by the Prime Minister for a five year term • The president and the vice-president may be revoked by the Prime Minister for violation of the provisions of the Emergency Ordinance or for criminal conviction by a definitive court decision • ANRC is self-financed (does not rely on the State budget) • Transparency and impartiality obligations in the exercise of the ANRC powers • Staff not allowed to hold shares or board positions in telecom companies • Appeals against NRA decisions to the Court of Appeals
Serbia (including Kosovo ¹)		
<i>Serbia</i>	Yes. Republic Telecommunications Agency (RATEL)	The independence of RATEL is assured by the Telecommunications Law, inter alia, through: <ul style="list-style-type: none"> • Status of independent legal entity • Members of Managing Board are appointed and dismissed by the Parliament upon recommendation of the government • Self-financing • Conflict of interest forbidden by the Law

Country	Separation of regulatory functions	
	Is there a separate independent NRA?	If yes, how is independence assured?
Kosovo	Yes. Telecommunications Regulatory Authority (TRA)	Defined by the provisions of the Telecommunications Law (UNMIK/REG 2003/16) <ul style="list-style-type: none"> • Status of independent legal entity (Law on Telecommunication, section 4-1) • Self financing • Appointment by the Assembly upon recommendation by the Minister of the Transport and Telecommunications • A board's member term shall be for a period of five years from the date of the Member's appointment. The number of terms a member may serve is limited to two, • Upon a two-third vote of the members, the Board shall remove a Member on the ground of professional incompetence, misconduct or a conflict of interest, • Authorized to issue regulations and instruction for the implementation of the present Law
The former Yugoslav Republic of Macedonia	Yes. Agency for Electronic Communications	<ul style="list-style-type: none"> • NRA Commission to be approved by the Parliament for a five-year term. It can only be dismissed by Parliament on the basis of conditions defined by law • Director of the Agency is selected by the Commission on the basis of a public tender for a five-year term. The Director can be dismissed by the Commission on the basis of conditions defined by law
Turkey	Yes. Telecommunications Authority (TA)	<ul style="list-style-type: none"> • The TA is an independent legal entity • Board members are appointed by the Council of Ministers, with the approval of the President of the Republic, for a period of five years and may be re-elected • Board members can only be dismissed before the expiration of a term by the Council of Ministers for inability to work due to serious disease or illness, professional misconduct or conviction of criminal offences • Self-financed
1) under UNSCR 1244		

Table 16 - NRA separation from ownership of telecommunications operators

Notes:

Albania: Law no. 9584 of July 17, 2006 on "salaries, honoraries and structures of independent constitutional institutions and other independent institutions created by law". According to the new law, the budget of organizations such as TRE will be defined in the annual budget law adopted by the parliament. Previously such organizations were self-financing and their budgets and structures were simply approved by the government. This may have some negative impact on the independence of the NRA.

Romania: On December 29, 2006 National Authority for Communications Regulation (ANRC) was transformed into the National Regulatory Authority for Communications and Information Technology (ANRCTI) by the Government Emergency Ordinance No. 134/2006.

3. NRA staffing

Table 17 below presents the number of employees at the beginning of 2005 and 2006 as well as the status on July 1, 2006. Many of the NRAs are rather large organisations that require a certain amount of administrative overhead. Furthermore, the NRAs often have staff that work on equipment approvals or inspection duties. Therefore, the table also presents the number of employees that are engaged in key regulatory tasks as set out by the EU regulatory framework. These are professional employees, typically lawyers and economists, responsible for

- frequency licensing;
- number management;
- market analysis;

- reference interconnection offers;
- reference unbundling offers;
- competitive safeguards, including:
 - significant market power obligations;
 - carrier selection and pre-selection;
 - number portability;
 - cost accounting;
- price regulation;
- universal service;
- dispute resolution in commercial disputes;
- consumer complaints.

However, it is difficult to make a judgment of what is a reasonable or adequate level of staffing. There are many individual, as well as national, characteristics that enter into such an evaluation. Another important factor that affects staffing of the NRAs is to what extent the NRAs are using external consultants.

Country	Employees of NRAs on:			Employees handling telecoms regulatory tasks on:	Employees handling radio frequency monitoring tasks on:
	1.1.2005	Status 1.1.2006	Status 1.7.2006	1.7.2006	1.7.2006
Albania	36	39	39	18	3
Bosnia & Herzegovina	86	86	89	9	16
Bulgaria	217	219	203	76	35
Croatia	66	80	78	35	16
Montenegro	29	37	37	17	22
Romania	194	200	219	57	0-see note
Serbia (including Kosovo ¹)					
<i>Serbia</i>	NRA not yet established	15	54	21	8
<i>Kosovo</i>	20	30	31	8	3
The former Yugoslav Republic of Macedonia	94	95	95	4	12
Turkey	454	451	536	102	22

1) under UNSCR 1244

Table 17 - Employees of NRAs and employees directly handling telecommunications regulatory tasks

Note:

Albania: Until July 1, 2006 the employees handling radio frequency monitoring tasks were included in the number of employees handling telecommunications regulatory tasks.

Bosnia & Herzegovina: Frequency monitoring tasks are handled by 11 employees in the frequency spectrum department and 5 employees in the monitoring department.

Bulgaria: The number of CRC staff decreased compared to the previous period due to reductions in the state administration of Bulgaria. Concerning the upcoming responsibilities of CRC related to the EU 2003 framework implementation, from July 1, 2006, the CRC staff was increased by 10 vacancies: 2 for the legal directorate and 8 for the market regulation directorate.

Croatia: Regulatory tasks are handled by 18 regulatory experts and 17 employees dealing with frequency licensing with spectrum management topics (different from frequency monitoring tasks).

Montenegro: The number of employees handling telecommunications regulatory tasks does not include technical and support staff. In addition, it does not include personnel on a one-year work trial.

Romania: The ANRC does not deal with the spectrum tasks. This is the responsibility of IGCTI, an autonomous authority

with distinct legal personality in the field of radio communications and information technology, directly subordinated to the Romanian Government, wholly financed by own resources.

Serbia: The number of employees handling telecommunications regulatory tasks does not include support and technical staff (secretaries, accounting, etc).

Table 18 below presents information on the operational budgets of the NRAs for 2005 and 2006 in thousands of euro as well as the sources of revenue.

The EU regulatory framework assumes that the NRAs will be self-financing and that their fees only cover their administrative costs, except when allocating limited resources. The EU regulatory framework also requires that general authorisations be used for all activities except those that depend on limited resources. Because general authorisations represent a simple and inexpensive task, it follows that the corresponding authorisation fees (or notification fees) must be modest. Where authorisation fees represent a significant part of the revenues, it could be an indication of a situation where the fees are at a level that represents a barrier to market entry.

The term “authorisation fees” is used as to describe fees for all types of service authorisations, including individual licences. The countries that rely on authorisations fees for a significant part of their revenue are in particular Bosnia & Herzegovina and Bulgaria.

A financing approach more in line with the EU regulatory framework is to rely mainly on revenue related fees.

Country	Operational budget for 2005 in thousand euro	Source of financing of 2006 budget	Operational budget for 2006 in thousand euro
Albania	2,029	Revenues from the previous years: 44.4%. Revenues during the year 2005: 55.6%, of which: <ul style="list-style-type: none"> • Authorisation fees: 30.8% • Frequency fees: 68.8% • Numbering fees: 0.2% • Others: 0.2% 	1,934
Bosnia & Herzegovina	2,518	<ul style="list-style-type: none"> • Authorisation fees (63%) • Numbering fees (29%) • Frequency fees (8%) 	2,556
Bulgaria	4,653	<ul style="list-style-type: none"> • One-time authorisation fees (78.9%) • Annual fixed authorisation fees (7.5%) • Annual fixed frequency fees (10.4%) • Number fees (2.7%) • Others (0.5%) 	4,946
Croatia	9,075	<ul style="list-style-type: none"> • Revenue related fees (40.1%) • Numbering fees (41.7%) • Frequency fees (13.6%) • Other (4.6%) 	8,656
Montenegro	1,800	<ul style="list-style-type: none"> • Revenue related fees (98%) • Frequency fees (2%) 	1,800
Romania	9,524	<ul style="list-style-type: none"> • Revenue related fees (98.4%) • Other revenues (1.6%) 	4,479

Country	Operational budget for 2005 in thousand euro	Source of financing of 2006 budget	Operational budget for 2006 in thousand euro
Serbia (including Kosovo ¹⁾)			
<i>Serbia</i>	566	The 2006 budget is financed by: <ul style="list-style-type: none"> • Annual fixed authorisation fees (15%) • Frequency fees (70%) • Other types of fees (15%) 	5,319
<i>Kosovo</i>	600	Funds allocated from the Kosovo Consolidated Budget for the TRA establishment and its first year of operation (2004). Otherwise: <ul style="list-style-type: none"> • Authorisation fees • Numbering fees and • Frequency fees 	794
The former Yugoslav Republic of Macedonia	3,891	<ul style="list-style-type: none"> • Frequency fees (52%) • Supervision fees (19%) • Numbering fees (18%) • Concession fees (11%) 	4,114
Turkey	27,910	<ul style="list-style-type: none"> • Frequency fees (71%) • Radio device certificate fees (14%) • Contribution share for NRA's expenses (9%) • Other (6%) 	122,847
1) under UNSCR 1244			

Table 18 - Operational budget of NRAs for 2005 and sources of financing

Notes:

Montenegro: Operators have the obligation to pay 1% of total annual income in the previous year (revenue-related fees) to the Agency. The exact amount of the Agency's budget is still not known, because the financial statements for the fiscal year 2005 are not ready yet. The operational budget for 2006 is projected at the same level as in 2005.

Serbia: The NRA's initial budget in its first six months of operation was foreseen as a loan from the State. The State loan was granted in October 2005 for an amount of CSD 48 million (566 thousand euro). The loan will be repaid from RATEL's future revenues generated from the fees payable by public telecommunications operators.

4. Dispute resolution

The Framework Directive, article 20 sets out a requirement for the NRAs to issue binding decisions to resolve commercial disputes arising in connection with obligations under the regulatory framework.

The Universal Service Directive, Article 34 sets out a requirement for transparent, simple, and inexpensive out-of-court procedures for disputes that involve consumers, but does not specify that this is a responsibility of the NRA.

Table 19 below shows whether the NRAs are authorised to resolve commercial disputes and describes the applicable procedures and the sanctions that are at the NRA's disposal to ensure that its decisions are respected.

Country	Type of commercial disputes that can be resolved by NRAs	Dispute resolution procedures and deadlines	Sanctions
Albania	<p>Law No. 8618 on Telecommunications, article 43 and article 52(11):</p> <ul style="list-style-type: none"> failure to reach an interconnection agreement; disputes on numbering. <p>NRA may interfere on its own initiative if operators with SMP fail to fulfil the requirements set in article 42, or if competition principles of the market are violated, under article 45.</p>	<p>Law No. 8618 on Telecommunications, article 43:</p> <ul style="list-style-type: none"> NRA involvement after 2 months of failed negotiations NRA issues a binding order to settle the dispute within one month after a failure to reach agreement has been filed at TRE 	<p>Law on Telecommunications, articles 94-96:</p> <ul style="list-style-type: none"> finances
Bosnia & Herzegovina	<p>Failure to reach an interconnection agreement</p>	<p>Law on Communications, article 16:</p> <ul style="list-style-type: none"> NRA intervention after 6 weeks of failed negotiations on request of the involved operators NRA issues binding decision within 6 (in exceptional cases 10) days from receiving the request 	<p>Law on Communications, article 46:</p> <ul style="list-style-type: none"> Oral and written warnings Fines up to €75,000 or €150,000 if repeated violation Requirement to stop the activities for a period not exceeding 3 months Revocation of a licence
Bulgaria	<p>Telecommunications Law, articles 124, 136, 142, 181:</p> <ul style="list-style-type: none"> failure to reach an interconnection agreement, network access or leased lines agreement; failure to reach an agreement on shared use of facilities 	<p>Telecommunications Law, articles 124 – 124g (amendment no. 77 of November 2005):</p> <ul style="list-style-type: none"> NRA involvement after 2 months of failed negotiations on request of one of the operators Special commission appointed by NRA acts as a mediator in the dispute If agreement is not reached within further 30 days, on request of the operators involved in the dispute NRA can issue binding instructions. Binding instructions must be issued within 3 months from receiving the request 	<ul style="list-style-type: none"> Financial penalties Requirement to stop the activities
Croatia	<ul style="list-style-type: none"> Disputes between operators and between operators and providers of services Disputes between providers and end-users, except those concerning payment of debts 	<p>Telecommunications Law, article 56:</p> <ul style="list-style-type: none"> NRA intervention after 45 days of unsuccessful negotiations on request of the involved operators NRA issues binding decision within 45 (in exceptional cases 75) days from receiving the request NRA's decision must be implemented within 15 days from the day of its 	<p>Telecommunications Law, articles 116a, 117:</p> <ul style="list-style-type: none"> Written warning Administrative fines, from €690 to €69,000 Order to stop activities

Country	Type of commercial disputes that can be resolved by NRAs	Dispute resolution procedures and deadlines	Sanctions
		issue to the parties unless a different term is determined by decision.	
Montenegro	<ul style="list-style-type: none"> • Disputes between operators concerned with interconnection and provision of leased lines • Disputes between service providers and end users 	Telecommunication Law, articles 33, 37 and 60: <ul style="list-style-type: none"> • NRA intervention after 90 days of unsuccessful negotiations on request of the involved operators • NRA issues decision within 60 days (in the case of leased lines dispute, 30 days) from receiving the request • If the dispute is not resolved by NRA, operators may submit it to the administrative court 	Telecommunication Law, articles 68-70: <ul style="list-style-type: none"> • Fines • Order to stop activities
Romania	<ul style="list-style-type: none"> • Disputes between providers of electronic communications networks and services • Disputes between end users and service providers concerned with the enforcement of the provisions of Law No. 304/2003 on the universal service and users' rights 	NRA may settle disputes applying two procedures: <ol style="list-style-type: none"> 1) Mediation procedure, shall be completed within 30 days 2) Contentious procedure, can be used directly, or after failed mediation: <ul style="list-style-type: none"> • Appointment of a commission to deal with the case • Preliminary solution allowing 15 days for parties to comment • NRA decision within 4 months from the start of the settlement procedure • Decision can be appealed within 30 days to the Court of Appeal 	<ul style="list-style-type: none"> • Administrative fines
Serbia (including Kosovo ¹)			
<i>Serbia</i>	Telecommunications Law, article 9: <ul style="list-style-type: none"> • Disputes between telecommunications operators about interconnection, special access and provision of leased lines • Disputes between operators and end users 	Telecommunications Law, article 47: <ul style="list-style-type: none"> • NRA intervention after 3 months of unsuccessful negotiations on request of the involved operators • NRA issues binding decision within 60 days from receiving the request 	<ul style="list-style-type: none"> • Administrative fines from €4,133 (CSD 300,000) to €41,133 (CSD 3,000,000)

Country	Type of commercial disputes that can be resolved by NRAs	Dispute resolution procedures and deadlines	Sanctions
Kosovo	Law on Telecommunication (UNMIK/REG 2003/16), section 11(2): Disputes involving service providers, end users, owners of land and facilities	UNMIK/REG 2003/16, section 11: <ul style="list-style-type: none"> • NRA may undertake dispute resolution procedure either on request of one of the parties or on its own motion • NRA issues binding decision within 6 weeks from receiving the request • Service provider must comply within 30 days 	<ul style="list-style-type: none"> • Administrative fines according to Administrative Instruction No. 2004/3 on telecommunications fees and fines by the Ministry of Transport and Telecommunication
The former Yugoslav Republic of Macedonia	Disputes involving operators of communications networks and providers of communications services	Electronic Communications Act, article 122: <ul style="list-style-type: none"> • The NRA can resolve conflicts on the request of the parties, or take action on its own • Maximum time for NRA to reach a decision is 4 months • Disputes can be settled applying mediation or arbitration procedure • Mediator chosen by the parties or by the NRA within seven days • Arbitrators appointed by NRA Commission, the Minister and other interested parties for 5 years. • Result of arbitration is binding, final and enforceable 	<ul style="list-style-type: none"> • Administrative fines • Temporary or permanent ban on operations
Turkey	Access and interconnection	<ul style="list-style-type: none"> • Parties may call in the NRA after 3 months of failed negotiations • After calling in the NRA, the parties still have 6 weeks (extendable to 10) to reach an agreement • NRA decides within 4 months (extendable to 6) 	<ul style="list-style-type: none"> • Administrative fines up to 3% of turnover
	Roaming Roaming Ordinance of March 8, 2002	<ul style="list-style-type: none"> • NRA has 15 days to decide if a request is accepted or not • NRA expects parties to reach agreement in 4 weeks • If agreement is not reached, NRA will decide 	<ul style="list-style-type: none"> • Administrative fines minimum 1% maximum 3% of turnover
1) under UNSCR 1244			

Table 19 - NRAs powers in dispute resolution

Notes:

Albania: In summer 2006, TRE succeeded in forcing the incumbent fixed operator and two mobile operators to reach interconnection agreements that led to some price reductions. According to the Law No. 8618 other types of disputes, including disputes between operators and authorities or private owners for property disputes (article 12), disputes related to the protection of networks and eventual damages (article 14) are resolved in law courts.

5. Appeal procedures

Article 4 of the Framework Directive, specifies that all decisions by the NRA shall be subject to appeal to a body which is independent of the parties involved. Therefore, this requirement sets out a similar requirement of independence for the appeal body as exists for the NRA itself.

In addition, the article sets out several requirements for the appeal mechanism:

- The appeal body may be a court, but it can also be a non-judicial body. If so, there is a requirement for a second appeal instance by a court or a tribunal.
- The decision of the NRA shall stand during the appeal process unless the appeal body decides otherwise.
- The appeal body must be able to take the merits of the case into consideration and not only rule on procedural grounds.

The appeal mechanism must be available not only to the parties involved, but also to any user affected by the decision.

Table 20 explains how the national appeal arrangements meet these requirements.

In most entities, the appeals against NRA decisions can be submitted directly to the national court system, with the exception of Albania, Bosnia & Herzegovina and the former Yugoslav Republic of Macedonia, where the first appeal instance is a non-judicial administrative body. In Albania, depending on the case, this could be either the Ministry or the NRA Board, while in Bosnia & Herzegovina and the former Yugoslav Republic of Macedonia this is the NRA Council. In Bosnia & Herzegovina, Bulgaria, Montenegro and the former Yugoslav Republic of Macedonia there are also restrictions on the appeal body's capacity to rule on merits of the case. In Bulgaria, Romania and Kosovo, the appeal body may suspend the NRA's decision pending the outcome of the appeal.

Country	Appeal body	NRA decision stands pending appeal decision?	Can appeal body rule on merits of a case?	Third party rights of appeal?
Albania	TRE decisions that nullify or amend the terms and conditions of licences: First instance: Minister of Public Works, and Telecommunications Second instance: First instance Albanian Courts Complaints on fines issued by inspectors: First instance: Board of TRE Second instance: First instance Albanian Courts	Yes	Yes	Yes
Bosnia & Herzegovina	First instance: Council of the Agency Second instance: Court of Bosnia & Herzegovina	Yes	When the NRA decision is made upon strictly defined discretionary rights of the NRA to decide (given by Law), the appeal body cannot rule on merits.	Yes, if it can prove that it has a legal interest in the case.

Country	Appeal body	NRA decision stands pending appeal decision?	Can appeal body rule on merits of a case?	Third party rights of appeal?
Bulgaria	Supreme Administrative Court	Yes. However, the Court may suspend the immediate entry into force.	No, the appeal body can only judge on the correct application of the law. However, the court's decision may contain reasons and instructions upon the merits of the case, which CRC should follow.	Only directly involved parties can appeal. If a General Administrative Act is issued, everyone who is affected can appeal.
Croatia	Administrative Court	Yes. According to the Telecommunications Law of 2003 (Article 13, §§ 3-6), and the Law on general administrative procedure. The Agency may also decide to suspend the decision during the appeal under very specific conditions but only if a party has filed an appeal with the administrative court in due time and the other party's rights are not affected by the suspension.	Yes	Yes, if it can prove that it has a legal interest in the case.
Montenegro	Supreme Administrative Court	Yes	No, the Supreme Administrative Court can only judge on the correct application of the law.	Yes, if it can prove that it has a legal interest in the case.
Romania	First instance: Bucharest Court of Appeal Second instance: High Court of Cassation and Justice	The Court may decide to suspend the NRA decision if certain conditions are met.	Yes	Yes
Serbia (including Kosovo ¹)				
<i>Serbia</i>	Supreme Court	Yes	Yes	No
<i>Kosovo</i>	Kosovo Courts	The Court may decide to suspend the NRA decision	Yes, the appeal body can rule both on the merits of the case and on the correct application of the law.	No, third parties not affected by the decision or, as it is stated in the law, "without legal interest in the case", do not have the right of appeal.

Country	Appeal body	NRA decision stands pending appeal decision?	Can appeal body rule on merits of a case?	Third party rights of appeal?
The former Yugoslav Republic of Macedonia	First instance: Commission of the Agency for electronic communications Second instance: Administrative Court (according to the Law on Administrative Disputes of May 19, 2006, procedures to be applied from May 28, 2007)	Yes	No, the appeal body can only judge on the correct application of the law.	No, only a directly involved party can appeal.
Turkey	Administrative Court Council of State	Yes	Yes. The appeal body can judge both on the procedure and the merits of the NRA decision.	Yes. Anybody who is affected by an NRA decision has the right of appeal.
1) under UNSCR 1244				

Table 20 - Appeal procedures against NRA decisions

Notes:

Albania: Law 8618 article 95 defines appeal procedures for TRE decisions that forbid or change conditions of licences: within 10 days from the declaration of the TRE decision, the interested party has to appeal to Minister of Transport and Telecommunications, the latter must decide within 30 days from the date of appeal. The minister's decision may be appealed in the Court following the Law for Civil Procedures. For fines, the procedure is: within 10 days from TRE's decision, the appeal must be presented to TRE's board, which has 30 days to take its decision, after that the interested party may appeal to the district Law Court within 5 days.

Kosovo: Kosovo has a special form of appeal procedure in addition to the one presented above. Within three months from the final decision, which may be the NRA's decision or the appeal body's decision, any party, including those not affected by the decision, can make a request to the Public Prosecutor. He may accept the request, and then start an appeal, or he may reject it. Whichever way, he must take a decision within one month from receiving the request. The Public Prosecutor may also start an appeal on its own, without any party making a request. This procedure is known as the "Request for Defending the Legality" and presents a legal solution to a binding, but illegal decision made by the court. In such a case, the Public Prosecutor must take action within three months. This procedure, for example, was initiated in April 2005 in connection with the dispute over validity of the second GSM licence issued by the NRA.

6. Frequency management

Table 21 below provides information on which regulatory bodies are responsible for:

- frequency allocation – which includes the decision on the national frequency plan; and
- frequency assignments – which are the decisions on who is licensed to use frequencies in the national frequency plan. Frequencies for the military sector are normally decided outside this framework.

In Bosnia & Herzegovina and Turkey, the NRAs are responsible for both frequency allocation and frequency assignment. In other entities, spectrum allocation is carried out by the government or responsible ministry, while the NRA is responsible for spectrum assignments. In Albania, Montenegro and Turkey, spectrum assignment tasks are further divided, with the NRA being responsible for spectrum assignments for telecommunications and the broadcasting authority – for spectrum assignments for broadcasters. In Kosovo, UNMIK in practice remains largely responsible for allocation and assignment of spectrum resources.

Country	Frequency allocation	Frequency assignment	Legal basis
Albania	Council of Ministers	<ul style="list-style-type: none"> Telecommunication Regulations Entity (TRE) – for telecommunications National Council of Radio and Television – for broadcasting 	<p>Law on Telecommunications No. 8618 of June 4, 2000, article 70</p> <p>National frequency plan approved by the Government of Albania, (Decision No. 379 of May 31, 2001) amended by the Council of Ministers, (Decision No. 123 of March 2, 2006)</p>
Bosnia & Herzegovina	Communications Regulatory Agency (RAK)	RAK	Law on Communications of 2002, Articles 30, 31, 32
Bulgaria	National Radio Frequency Spectrum Council (CNRFS) with the Council of Ministers	Communications Regulation Commission (CRC)	Telecommunications Act (State Gazette, issue 88/ October 7, 2003), articles 9-11 and 28,
Croatia	Ministry of the Sea, Tourism, Transport and Development	Croatian Telecommunications Agency (HAT)	Law on Telecommunications, articles 76 and 84
Montenegro	Government of Montenegro (on the proposal of the NRA)	<ul style="list-style-type: none"> Agency for telecommunications of the Republic of Montenegro – for telecommunications Broadcasting Agency – for broadcasting 	Telecommunications Law of 2000, article 12 (9)
Romania	The Ministry of Communications and Information Technology	Inspectorate General for Communications and Information Technology (IGCTI)	<p>Government Emergency Ordinance No. 79/2002, with the subsequent amendments and completions: Article 8 (1), Article 14 (1)</p> <p>Law No. 510/2004 on the reorganisation of the IGCTI (with subsequent amendments), article 12, paragraphs (2) and (4)</p>
Serbia (including Kosovo ¹)			
<i>Serbia</i>	Ministry of Capital Investments decides on frequency allocation plan and adopts frequency assignment plan (on the proposal of the Republic Telecommunication Agency)	Republic Telecommunications Agency (RATEL)	Telecommunication Law (Official Gazette of Republic of Serbia, No 44/03) and Frequency Allocation Plan (Official Gazette of Republic of Serbia, No 112/04)
<i>Kosovo</i>	UNMIK (FMO - Frequency Management Office)	<ul style="list-style-type: none"> TRA and FMO – for telecommunications TRA in coordination with Independent Media Commission (IMC) – for broadcasting 	Law on Telecommunications (UNMIK/REG 2003/16), Articles 22 and 36
The former Yugoslav Republic of Macedonia	Agency for electronic communications	Agency for electronic communications	Law on electronic communications of March 2005

Country	Frequency allocation	Frequency assignment	Legal basis
Turkey	Telecommunications Authority	<ul style="list-style-type: none"> • Telecommunications Authority – for telecommunications • Radio and Television Supreme Council (RTSC) – for broadcasting 	Wireless Law No 2813, Articles 9 and 11 Telegram and Telephone Law No. 406, articles 2-3
1) under UNSCR 1244			

Table 21 - Frequency allocation and assignment

Note:

Kosovo: The TRA has proposed a Memorandum of Understanding between TRA and FMO. This is currently being reviewed by UNMIK Office of the Legal Advisor.

7. Regulatory framework for broadcasting networks

The 2003 acquis in the EU has brought all forms of electronic communications under the same regulatory framework. This was driven by the convergence of new digital technologies so that all forms of networks will compete in the delivery of voice, data, Internet, radio, and television communications, including the broadcasting networks.

While the EU framework does not rule out that regulatory tasks can be shared among two or more authorities in a well-defined manner, the thrust of this legislation is to bring all forms of electronic communications networks, including broadcasting networks, under a common regulatory framework under a single regulator.

There are two considerations that make this particularly important for decisions on frequencies used for broadcasting:

1. Over the next few years, the broadcasting industry will phase out analogue transmission in favour of digital technologies. This will release significant amounts of radio frequency spectrum, which can then be used for other purposes. The determination of the frequency allocation that best serves the public interest requires a clear and transparent spectrum policy that takes into account the interests of all spectrum users.
2. Digital broadcasting transmission technologies increasingly permit the capacity available to broadcasting networks to be used for non-broadcasting applications. There is a possibility that frequency licence conditions currently granted for broadcasting networks may focus too narrowly on broadcasting objectives and thus restrict these networks from participation in other markets. This may pose a potential threat to efficient radio frequency utilisation.

Most EU Member States, with very few exceptions, have decided to have a single regulatory authority responsible for all types of frequencies available for civil purposes. The relative priorities of broadcasting, telecommunications, and other use of radio frequencies are normally determined at a relatively high political level through the adoption of the national frequency plan.

Table 22 explains whether the broadcasting networks are covered by the same regulatory framework as other telecommunications and electronic communications activities and, in particular, it lists:

- the authorities involved in regulating broadcasting and their responsibilities;
- the legal basis for broadcasting regulations; and
- whether the frequency assignment for broadcasters is provided by the same authority as for telecommunications. As shown in Table 21, the spectrum allocation is a centralised function in all entities carried out by the same regulatory body, while the situation may differ for spectrum assignment.

In all entities there is a separate broadcasting authority responsible for licensing of broadcasters and content-related topics, with the exception of Bosnia & Herzegovina where the Communications Regulatory Authority is also acting as a broadcasting regulator. Spectrum assignments for broadcasting in most entities are carried out by the same authority as for telecommunications, with the exception of Albania, Montenegro and Turkey where the broadcasting spectrum assignment is a separate responsibility of the broadcasting authorities.

Country	Broadcasting regulatory authorities	Legal basis	Are frequency assignments carried out by the same authority for broadcasting as for telecommunications?
Albania	National Council of Radio and Television (KKRT)	Law No. 8410 of Sept. 30, 1998 on Radio and Television (with amendments)	No, National Council of Radio and Television assigns spectrum to broadcasters
Bosnia & Herzegovina	Communications Regulatory Agency (RAK)	Law on Communications, Official Gazette of BiH, No. 33/02, November 12, 2002	Yes, by RAK
Bulgaria	Council for Electronic Media	Law on Radio and Television of November 1998 (with amendments)	Yes, by CRC
Croatia	Council for Electronic Media	Law on Electronic Media, Official Gazette No. 122, July 30, 2003	Yes, by HAT
Montenegro	Broadcasting Agency (ARD)	Broadcasting Law of April 2004	No, Broadcasting Agency assigns spectrum to broadcasters
Romania	National Audio-visual Council (CNA)	Law no. 504 of July 11, 2002 on Radio and Television Broadcasting	Yes, by IGCTI
Serbia (including Kosovo ¹)			
<i>Serbia</i>	Republican Broadcasting Agency (RRA)	Broadcasting Law of July 2002 (with amendments)	Yes, by RATEL
<i>Kosovo</i>	Independent Media Commission (IMC)	Law on Independent Media Commission and Broadcasting, promulgated by the SRSG on July 8, 2005	The Law on Independent Media Commission and Broadcasting foresees that the IMC shall coordinate the assignment of broadcasting spectrum with TRA. The practical aspects of this coordination have not been defined yet.
The former Yugoslav Republic of Macedonia	Broadcasting Council	Law on Broadcasting Activity	Yes, by AEC
Turkey	Radio and Television Supreme Council (RTSC)	Law No. 3984 on the foundation and broadcast of Radio and Television of April 13, 1994	No, RTSC assigns spectrum to broadcasters
1) under UNSCR 1244			

Table 22 - Regulatory treatment of broadcasting networks

8. Cooperation between NRA and competition authority

There is a considerable overlap between the regulatory framework for electronic communications in the EU (the 2003 acquis) and general competition law. The competition law obviously applies to mergers and concentration in the telecommunications sector. In addition, the general competition framework for dominance and its abuse apply in parallel with the ex ante provisions defined by the sector specific directives.

Furthermore, the 2003 acquis relies largely on competition law principles, in particular for market analysis and the designation of significant market power.

This means that the electronic communications sector is supervised by both a telecommunications authority and a competition authority, each with different responsibilities and perspectives. However, it is the responsibility of each authority to consider both legal frameworks whenever they take a decision. It

shall not be possible for one authority to take a decision that would in contradiction with the other authority's decisions.

In practice, this requires a good co-operation between the two authorities with some agreement on which authority shall take the lead in different types of cases and procedures to make sure that the views of the other authority are taken into account when necessary. It is recommended that these principles be set out in a formal agreement between the two parties.

Table 23 examines whether or not such formal agreements have been established.

Country	Competition authority	Formal agreement between NRA and Competition Authority
Albania	<p>The Competition Authority was created in February 2004, under the Law No. 9121 of July 28, 2003 on Protection of Competition. The Authority is responsible for competition in general, including the monitoring of competition in the electronic communications sector.</p> <p>It is composed of a Commission - a collegiate body of 5 members appointed by Parliament - and a Secretariat as an administrative and investigative body. At the same time, the Tirana District Court is also authorised to apply the competition rules.</p>	<p>TRE and Competition Authority cooperate on specific topics.</p> <p>TRE and Competition Authority are currently negotiating a Memorandum of Understanding.</p>
Bosnia & Herzegovina	<p>Competition Council at the state level was established in 2003. In addition, the Offices of Competition and Consumers Protection were set up in the Federation of Bosnia & Herzegovina and the Republika Srpska.</p>	No
Bulgaria	<p>Competition Protection Commission (CPC) is the national competition authority that monitors all sectors including electronic communications, according to the provisions of the Competition Protection Act.</p>	<p>On May 16, 2005 the CRC and the Commission on Protection of Competition (CPC) concluded an agreement on co-operation for matters that affect competition in the communications sector.</p> <p>Joint working group of CRC and CPC experts has elaborated draft Methodology for market analyses under the EU 2003 framework.</p>
Croatia	Croatian Competition Agency (CCA)	<p>Yes</p> <p>On July 14, 2006 CCA and the Croatian Telecommunications Agency (HAT) concluded the Agreement on co-operation in the area of competition in the telecom services market. Under the 2003 Telecommunications Act, particular activities relating to competition have been exempted from the jurisdiction of CCA. According to these separate rules, establishing the existence of dominant position and its abuse in the telecom markets falls under the exclusive jurisdiction of HAT as a sectoral regulator, whereas CCA as a market regulator of general jurisdiction remains in charge of restrictive agreements between undertakings and control of concentrations in the telecom markets. With the view to eliminating negative or positive conflict of competence the Agreement specifies the methods of communication and coordination between these two authorities taking into account the split of jurisdiction in question</p>
Montenegro	<p>No such authority exists.</p> <p>Agency for telecommunications also has the responsibility for protecting competition in electronic communication sector.</p>	No

Country	Competition authority	Formal agreement between NRA and Competition Authority
Romania	Competition Council	On July 14, 2004 the ANRC signed a Collaboration Protocol with the Competition Council. The document establishes the terms under which the institutions coordinate their efforts with a view to promote competition in the electronic communications and postal sectors, as well as to protect end-user rights and interests. The two institutions develop a common annual action plan for competition in the electronic communications and postal services markets.
Serbia (including Kosovo ¹)		
<i>Serbia</i>	According to the new Law on Protection of Competition, (Official Gazette of RS, No. 79/05), the competition authority is an independent regulatory body called Competition Commission.	There is no formal agreement between NRA and Competition Commission.
<i>Kosovo</i>	No such authority exists. Law on Competition No. 2004/36 (UNMIK Reg. 2004/44), article 20 (1) provides for the establishment of “an independent competition regulatory body to be known as the Kosovo Competition Commission (KCC). The KCC shall have the responsibility and authority to enforce the competition law and to promote competition among undertakings and consumer welfare in Kosovo.”	No
The former Yugoslav Republic of Macedonia	Under the Law on Protection of Competition of January 11, 2005 the Commission for Protection of Competition was established on February 15, 2005.	Article 21 of the Law on Electronic communications states: <ul style="list-style-type: none"> • The Agency and the Commission for Protection of Competition shall exchange data and information they need in exercising their responsibilities, where the scope of exchange of information shall be limited to data and information that is relevant and proportionate to the purpose for which they are exchanged. • In the implementation of relevant market analysis and determination of significant market power under this Law, the Agency shall cooperate with the Commission for Protection of Competition.
Turkey	Competition Authority	Relationship between the Competition Authority and the Telecommunications Authority is set up on the basis of the Wireless Law No. 2813, (Article 7/m).
1) under UNSCR 1244		

Table 23 - Cooperation between NRA and competition authority

C. Regulations – market access

The information in this chapter reflects the situation, as it existed on July 1, 2006.

This chapter provides information on the liberalisation status and authorisation frameworks for the provision of public fixed telecommunications networks, voice telephony services and data services, and on the status of competition in the fixed and mobile markets.

1. Market access

Table 24 below summarises the liberalisation status of public fixed telecommunications networks and services on the local, domestic long distance and international level. This table only addresses the legal framework enabling liberalisation, while its practical implementation could be assessed based on the actual number of licensed operators and the proportion of numbering resources shown, respectively, in Table 32 and Table 33 below.

Liberalisation in Albania has been implemented gradually: starting with rural local networks in 1998, moving to domestic long distance networks in July 2003 and international networks in January 2005. However, there is no established licensing framework for local networks in urban areas.

Bosnia & Herzegovina liberalised local and domestic long distance services, as well as data services in 2002. International networks are opened for competition from January 1, 2006.

Bulgaria, Croatia, and Romania were the first SEE countries to introduce full liberalisation of local, domestic long distance, and international networks and services on January 1, 2003, followed by Montenegro – on January 1, 2004.

In Serbia, the market liberalisation was formally introduced by the new Telecom Law of April 2003, but its actual implementation is delayed pending adoption of the enabling secondary legislation.

In Kosovo, liberalisation of fixed networks and services was formally introduced by the Law on Telecommunications of May 12, 2003. However, the NRA has only recently completed the secondary legislation on authorisations that would enable market entry for alternative providers. Furthermore, the incumbent will maintain exclusive control over access to international gateway facilities until December 31, 2007.

In the former Yugoslav Republic of Macedonia, liberalisation of public fixed telecommunications networks and services was originally foreseen from January 1, 2005 but its implementation was delayed until the second half of 2005 when the secondary legislation required under the Law of Electronic Communications of March 5, 2005 was finally adopted.

In Turkey, domestic long-distance and international networks have been liberalised from January 1, 2004, while liberalisation of local services took place in July 2005.

Country	Liberalisation status for fixed public telecommunications networks and services			
	Local	Domestic long distance	International	Comments
Albania	Rural local networks liberalised from 1998 Urban local networks are not explicitly defined in the law. Albtelecom was granted exclusive rights for urban telephone services until at least June 30, 2003 (Council of Ministers Decision No. 692, of December 27, 2002).	Liberalised from July 2003	Liberalised from January 1, 2005	Law No. 8287 of February 18, 1998, Article 4 liberalised rural local networks (replaced by the Law No. 8618 of June 14, 2000) Council of Ministers Decision No. 464 of July 3, 2003 liberalised domestic long-distance and international services Law No. 8618 of June 14, 2000 liberalised provision of public payphones from June 2000
Bosnia & Herzegovina	Liberalised from July 1, 2002	Liberalised from July 1, 2002	Liberalised from January 1, 2006	-
Bulgaria	Liberalised from January 1, 2003	Liberalised from January 1, 2003	Liberalised from January 1, 2003	Liberalisation introduced by §10 of the Final & Transitional Provisions of the Telecom Act of 1998

Country	Liberalisation status for fixed public telecommunications networks and services			
	Local	Domestic long distance	International	Comments
Croatia	Liberalised from January 1, 2003	Liberalised from January 1, 2003	Liberalised from January 1, 2003	-
Montenegro	Liberalised from January 1, 2004	Liberalised from January 1, 2004	Liberalised from January 1, 2004	Article 27, Telecommunications Law of 2000 (Official Gazette of the Republic of Montenegro, No. 59/2000)
Romania	Liberalised from January 1, 2003	Liberalised from January 1, 2003	Liberalised from January 1, 2003	-
Serbia (including Kosovo ¹)				
<i>Serbia</i>	Liberalisation formally introduced by the Telecom Law of April 2003	Liberalisation formally introduced by the Telecom Law of April 2003	Liberalisation formally introduced by the Telecom Law of April 2003	Article 32, Telecommunication Law of April 2003, introduces liberalisation, but its implementation started in September 2005 with the establishment of RATEL. Telekom Srbija was declared as SMP operator (March 24, 2006 – Decision on determining of the public telecommunications operator of fixed telephony network services with SMP)
<i>Kosovo</i>	Formally liberalised in 2003	Formally liberalised in 2003	Provision of services formally liberalised in 2003 PTK maintains exclusive control over access to the international gateway facilities until December 31, 2007.	In 2006 the TRA has completed: <ul style="list-style-type: none"> • Ten types of licences for telecommunications services • Form of licence application and award procedure for individual licences • Administrative regulations • Frequency regulations
The former Yugoslav Republic of Macedonia	Liberalisation introduced by the Electronic Communications Law of March 5, 2005	Liberalisation introduced by the Electronic Communications Law of March 5, 2005	Liberalisation introduced by the Electronic Communications Law of March 5, 2005	Secondary legislation enabling competitive market entry was adopted by end 2005.
Turkey	Liberalised from July 1, 2005	Liberalised from January 1, 2004	Liberalised from January 1, 2004	Telecommunications Act (Law No. 4502, Official Gazette Jan 29, 2000)
1) under UNSCR 1244				

Table 24 - Liberalisation of public fixed telecommunications networks and services

Note:

Albania: Full liberalisation in Albania has been linked to the privatisation of Albtelecom, which was supposed to have been completed in 2005. However, the result of the tendering procedure has been suspended by the new government, which came into power after elections in summer 2005.

Table 25 addresses the liberalisation status of data networks and services, which in all SEE countries are now open to competition. Furthermore, the liberalisation of data networks in most countries took place a few years before opening fixed networks for the competitive provision of voice telephone services.

In Bulgaria, liberalisation started in 1993, when the first individual licence for the operation of a public data communications network and the provision of data services was issued to a joint venture of BTC and Sprint International. Infrastructure was partly liberalised in 1993, removing restrictions on building new infrastructure, subject to refusal by the incumbent to provide required transport facilities. Later on, five or seven individual licences to provide data services were granted under the Telecom Act of 1998.

In Romania, data networks and services have been liberalised since 1992.

In Turkey, the provision of data services was liberalised on June 10, 1994 and the first licences to service providers were issued in March 2002 following the establishment of the NRA on January 27, 2002 under the Law No. 4502. However, the provision of data networks remained under the incumbent's monopoly until January 1, 2004.

Country	Liberalisation status for data networks and services		
	National	International	Comments
Albania	Liberalised from 1998	Liberalised from 1998	Article 4 of the Law No. 8287 of February 18, 1998 There are 4 licences for the provision of national data networks and 2 licences for regional data networks.
Bosnia & Herzegovina	Liberalised from July 1, 2002	Liberalised from July 1, 2002	-
Bulgaria	Liberalised from 1993	Liberalised from 1993	Under the TA of 2003, there are two types of regimes for data networks and services, depending on the scarce resource use, respectively based on individual or class licences.
Croatia	Liberalised from 1999	Liberalised from 1999	-
Montenegro	Liberalised from January 1, 2004	Liberalised from January 1, 2004	Article 27 in Telecommunications Law of 2000 (Official Gazette of the Republic of Montenegro, No. 59/2000)
Romania	Liberalised from 1992	Liberalised from 1992	-
Serbia (including Kosovo ¹)			
<i>Serbia</i>	Liberalisation formally introduced by the Telecom Law of April 2003	Liberalisation formally introduced by the Telecom Law of April 2003 Requirement to use the incumbent's network for international traffic until June 2005	Liberalisation introduced by Telecommunications Law of April 2003 Several ISPs were registered as service providers with the Ministry under the previous Telecom Law. In addition to the public fixed operator, data services are also offered by Cable TV providers via their own infrastructure.

Country	Liberalisation status for data networks and services		
	National	International	Comments
Kosovo	Liberalised from May 2003	Liberalised from May 2003 Requirement to use the incumbent's network for international traffic until December 31, 2007	The first ISP authorisations were issued to DardaNet (PTK subsidiary), IpkoNet, and Kujtesa on May 18, 2005.
The former Yugoslav Republic of Macedonia	Liberalised from February 1998	Liberalised from February 1998 Requirement to use the incumbent's network for international traffic until April 2000.	Provision of VoIP was not allowed until January 1, 2005
Turkey	Data services liberalised from June 10, 1994 Data networks – from January 1, 2004	Data services liberalised from June 10, 1994 Data networks – from January 1, 2004	Turk Telekom's monopoly over fixed telephone networks and voice telephony services expired on January 1, 2004.
1) under UNSCR 1244			

Table 25 - Liberalisation of data networks and services

2. Authorisation frameworks for terrestrial services

Under the EU 2003 regulatory framework, article 3 of the Authorisation Directive (2002/20/EC) establishes a general authorisation regime for the provision of electronic communications networks and/or services. Undertakings may be required to notify the intention to commence the provision of electronic communication networks or services and to submit information required to allow the national regulatory authority (NRA) to keep a register or list of providers. However, there is no requirement to obtain an explicit decision by the NRA before the start of activities.

Only Romania and the former Yugoslav Republic of Macedonia currently have authorisation frameworks in place that are in line with the provisions of the Authorisation Directive. In all other countries, an individual or a class licence is required, with some variations depending on whether the business activities involve the use of scarce resources, such as spectrum and numbers.

Bulgaria and Turkey are currently drafting new legislation intended to transpose the EU 2003 regulatory framework and, in particular, to introduce the general authorisation regime in line with the Authorisation Directive.

Table 26 summarises the authorisation framework for the provision of public fixed telephony networks and services.

Country	Authorisation requirements for fixed telephony	
	Fixed networks	Telephony services
Albania	Individual licence Individual licences are classified in two categories: <ul style="list-style-type: none"> Category I - national fixed or mobile public telephony. The number of licences is decided by the government. Category II - public telephony in rural areas, paging, global services of mobile individual communications (and other services that use frequencies). General licences are issued for Internet services, data transmission services, value added services, public services of paid telephones (coins or prepaid cards), and other services not classified in individual licences (Law No. 8618 of June 14, 2000). Effectively, a 'general licence' is an individual authorisation issued by the NRA.	Individual licence
Bosnia & Herzegovina	Individual licence	Individual licence
Bulgaria	Individual licence	Individual licence
Croatia	Individual licence	Individual licence
Montenegro	Individual licence	Individual licence

Country	Authorisation requirements for fixed telephony	
	Fixed networks	Telephony services
Romania	General authorisation with notification	General authorisation with notification
Serbia (including Kosovo ¹)		
<i>Serbia</i>	Individual licence	Individual licence
<i>Kosovo</i>	Individual licence	Individual licence
The former Yugoslav Republic of Macedonia	General authorisation with notification	General authorisation with notification
Turkey	Turk Telekom operates under the Concession Agreement	Type 1 Telecommunications Licence (for local telephony service providers), issued following an auction Type 2 Telecommunications Licence (for national and international long distance telephony service providers)
1) under UNSCR 1244		

Table 26 - Licensing requirements for public fixed telecommunications networks and services

Table 27 summarises licensing requirements for wireless local loop (WLL). Fixed wireless access subscriber access applications such as WLL could represent reliable and cost effective complements or alternatives for providing voice and data services, especially in the SEE countries where the penetration of fixed networks is still relatively low and unbundled access to the incumbent's copper local loops is not available.

Country	Licensing requirements for wireless local loop				
	Licensing requirements	Legal basis	Auction vs. beauty contest	Frequency bands	Status and number of awarded licences
Albania	Individual licence	Law No. 8618 of June 14, 2000 Council of Ministers Decision No. 692 of December 27, 2002	Public tender (international bid)	3.4-3.6 GHz 10.5 GHz 26 GHz	2 local licences in the 3.4-3.6 GHz (valid until January 2006)
Bosnia & Herzegovina	Individual licence which includes a frequency licence	Regulations on the use of the particular spectrum band	Beauty contest	3.4 – 3.6 GHz	None
Bulgaria	Free regime (no licensing or authorisation) (for private networks)	Article 48(1)2 of TA; Article 2(1) of Ordinance No. 14 of August 18, 2004	Free regime	WLL: 2400 – 2483.5 MHz 5150 – 5350 MHz 5470 – 5 725 MHz	N/A
	Registration under general licence (for public operators)	Article 49(1)1 of TA, Regulation No. 13 of 2003 on the types of telecommunications activities subject to individual licensing and to registration under general licence	Registration	WLL: 2400 – 2483.5 MHz 5150 – 5350 MHz 5470 – 5 725 MHz	97 registered operators (on July 1, 2006)
	Individual licensing for point-to-multipoint (PMP) FWA in the following bands:	Article 49(2)1 of TA; Ordinance on the Rules of Procedure for Fixed service, August 12, 2004			

Country	Licensing requirements for wireless local loop				
	Licensing requirements	Legal basis	Auction vs. beauty contest	Frequency bands	Status and number of awarded licences
	<ul style="list-style-type: none"> • 3.4 – 3.6 GHz (for public networks) • 3.6 – 3.8 GHz (for private networks only) • 26 GHz • WLL DECT (Limited use as fixed application) 		<p>Auction</p> <p>first come – first served</p> <p>first come – first served</p>	<p>PMP FWA: 3.4 – 3.6 GHz</p> <p>3.6 – 3.8 GHz</p> <p>DECT 1880 – 1900 MHz networks only</p>	<p>4 national licences</p> <p>1 licence</p> <p>5 national licences (expected)</p> <p>2 local DECT networks for fixed application are licensed to BTC</p>
Croatia	Licence for provision of public services, individual licence for base stations, licence exemption for user terminals	Law on telecommunications, By-law on concessions and licences for provision of telecommunications services	Public tender on the basis of a beauty contest	3.4 – 3.6 GHz for FWA; 24.5 – 26.5 GHz for FWA	35 regional licences in the 3.4 – 3.6 GHz
Montenegro	Special licence	Rulebook of issuing and register general and special licences (Official Gazette No. 08/2002) Plan of Frequency Allocation of Montenegro (Official Gazette No. 11/2005)	Public tender	3.4 – 3.6 GHz 10.15 – 10.30 GHz 24.5–26.5 GHz 27.5–29.5 GHz	None 3 national licences in the 3.4 – 3.6 GHz expected
Romania	General authorisation from ANRC and frequency licence granted by the Inspectorate General for Communications and Information Technology (IGCTI) is required	Article 4 para. (2) and Article 14 para. (1) from Government Emergency Ordinance No. 79/2002 on the general regulatory framework for communications	Auction	3.4 – 3.6 GHz 24.5 – 26.5 GHz	175 local licences in the 3.5 GHz band to 5 operators 10 national licences in the 3.5 GHz band to 7 operators 44 local licences in 26 GHz band to 3 operators 4 national licences in 26 GHz band to 4 operators
Serbia (including Kosovo ¹)					
<i>Serbia</i>	Individual licence	Article 33 of the Telecommunications Law of 2003	Not decided	3.4 – 3.6 GHz 10.15 – 10.30 GHz 24.50 – 26.50 GHz	None
<i>Kosovo</i>	Individual licence	Article 22 (2) of the Telecommunications Law	Not decided	Not decided	None

Country	Licensing requirements for wireless local loop				
	Licensing requirements	Legal basis	Auction vs. beauty contest	Frequency bands	Status and number of awarded licences
The former Yugoslav Republic of Macedonia	General authorization with notification to AEC and permission for using radio frequencies	Law on Electronic communications of 2005	Public tender	3.4-3.6 GHz 5.150-5.350 GHz 5.470-5.725 GHz 24.5-26.5 GHz 27.5-29.5 GHz	None
Turkey	Individual licence	The Annex Ordinance on FWA of Authorisation Ordinance	Auction (planned)	24.5-26.5 GHz	None
1) under UNSCR 1244					

Table 27 - Licensing requirements for wireless local loop

Notes:

Albania: In June 2004 TRE's Board Decision provided for the freeing up of the relevant spectrum from the licenced undertakings by January 2006.

Bulgaria: By decision No. 1047 of May 16, 2006 CRC announced an intention to issue individual licences to carry out telecommunications through point-to-multipoint (P-MP) telecommunication networks in the 26 GHz band with national coverage. By decision No. 1787 of September 5, 2006 CRC approved individual licence to carry out telecommunications through P-MP telecommunication network in the 26 GHz band with national coverage. By decision No. 1810 of September 5, 2006 CRC announced a public tender procedure. The procedure to award 5 national licences is ongoing.

In October 2005, two auctions were held, one for two class A licences and the other for three class B licences of the P-MP type. As a result, 4 companies received 10-year licences in the range 3.5 GHz, with national coverage: Trans Telekom, Cablenet, Nexcom Bulgaria, and Mobiltel.

Croatia: By the end of 2006, HAT had issued 42 regional licences (concessions) for BWA spectrum in the 3.5 GHz band covering 10 out of 20 Croatian counties and the District of Zagreb. Each concession has a 5-year validity period with the spectrum fees varying between Kuna 135,000 - 270,000 (€18,000 - 37,000), depending on a region, in the first year of operations, and 0.1% of the total service revenue in the remaining years.

Montenegro: On January 4, 2007 the Agency for Telecommunications and Postal Services announced a public tender procedure for three special licences for provision of public telecommunications networks and services using FWA in the 3.4 – 3.6 GHz band, with national coverage.

Kosovo: TRA received requests from interested parties for deploying infrastructure for FWA and is currently working on drafting a National Strategy document for FWA. This is expected to be completed in early 2007. After this strategy is completed, TRA will announce available spectrum for assignment by public tender.

The former Yugoslav Republic of Macedonia: On December 4, 2006 AEC announced its intention to launch a public tender procedure to award fixed wires access licences in the 3.4 – 3.6 GHz band.

Table 28 summarises the authorisation requirements for Internet service providers (ISPs), and where ISPs have the right to interconnection whether the call origination or call termination model is used for settlements between the incumbent operator and ISPs.

The call termination model, where the incumbent pays interconnection charges to the ISP for terminating Internet traffic and then bills the retail customer, prevails in Croatia and Kosovo, and is proposed in Albania. In Bulgaria and Serbia, both call origination and call termination models are used. In Romania and Turkey, despite the ISP's right to interconnection, no interconnection agreements exist in practice between the incumbent and ISP. As a result, an alternative arrangement is used, where ISPs bill the end user for Internet access, while the incumbent bills separately for the line usage (including fixed charge and calling charge).

Country	Authorisation requirements for ISP	Interconnection	
		Right to interconnection	Call origination or termination
Albania	General (class) licence Internet licences issued by TRE are classified as: PoP, local, regional, national or backbone.	Yes	Call termination model proposed in the draft Interconnection Agreement that is currently under discussion.

Country	Authorisation requirements for ISP	Interconnection	
		Right to interconnection	Call origination or termination
Bosnia & Herzegovina	General (class) licence	Yes	Call origination
Bulgaria	General (class) licence Individual licence is required to provide public services using numbers from the national numbering plan or radio frequencies.	Yes Interconnection is permitted but under commercial agreement	Both models are applicable, subject to commercial agreement.
Croatia	General authorisation with notification	Yes	Call termination
Montenegro	General (class) licence	Yes	Call origination
Romania	General authorisation with notification	Yes Not applied in practice	Neither call termination nor call origination model is used, as there are no interconnection agreements between ISPs and the incumbent.
Serbia (including Kosovo ¹)			
<i>Serbia</i>	General (class) licence	Yes	Call origination and termination
<i>Kosovo</i>	Individual licence	Yes	Call termination
The former Yugoslav Republic of Macedonia	General authorisation with notification	ISP has a right to interconnection with SMP operator and other operators	Call origination
Turkey	General authorisation with notification	Yes Not applied in practice	Neither call termination nor call origination model is used, as there are no interconnection agreements between ISPs and the incumbent. The ISP bills the customer for Internet access and the incumbent bills the customer for the line usage (fixed charge and calling charge). There is no revenue sharing between ISPs and the incumbent.
1) under UNSCR 1244			

Table 28 - Licensing requirements for Internet Service Providers

Note:

Montenegro: An ISP needs a special (individual) licence instead of general (class) licence in the case of providing VoIP services or in the case of building an own network, as defined in the Rulebook of providing the public Internet service (Official Gazette of the Republic of Montenegro, № 65/2005).

Table 29 addresses the NRA's official position on, and authorisation requirements for, the provision of voice telephony services over Internet protocol (VoIP).

Under the EU 1998 acquis, the status of VoIP on the EU level has been outlined in the "Commission Communication on the Status of voice on the Internet under Community Law, in particular under Directive 90/388/EC", the purpose of which was not to regulate VoIP services in the same way as voice telephony if they were not substitutable. Currently, there is neither specific EU-level VoIP regulation, nor any specific voice telephony regulation, which is the consequence of technology neutrality emphasised in the new regulatory framework. Under the EU 2003 package, VoIP providers operate under the same general authorisation regime as any other communications providers.

Only Romania and the former Yugoslav Republic of Macedonia currently have in place authorisation frameworks that are in line with the provisions of the Authorisation Directive.

In Bulgaria, VoIP telephony services had been offered freely even before the liberalisation on January 1, 2003 as long as the service did not qualify with the specific quality of service (QoS) requirements set for the fixed voice telephone service. On the other hand, compliance with QoS requirements is a minimum requirement for an authorisation that gives the right to interconnect (under RIO conditions of the incumbent). Therefore, VoIP service providers seeking the right to interconnect are required to apply for the fixed voice telephony licence.

In Croatia, under the Telecommunication Law of 1999, VoIP was considered a part of Internet service, so that no further authorisation was needed. Under the Law of 2003, VoIP has been defined as separate service requiring an authorisation with notification. Moreover, the authorisation fees for VoIP were initially kept unusually high: a €33,000 one-off fee plus an annual fee of 1% of revenue. The by-law on payments of fees for provision of telecommunication services amended on February 17, 2005, lowered the one-off fee by a factor of 50 to €670, and the annual fee was lowered tenfold, to 0.1%.

In Montenegro and in Kosovo, the provision of VoIP is subject to an individual licence similar to other fixed voice telephony services. In Serbia, the licensing requirements (individual or general licence) depend on whether the service involves the use of numbering resources. In Turkey, the provision of VoIP requires a long distance telephony service licence and is subject to the same conditions as the fixed voice telephony service.

Country	Voice over IP authorisation requirements		
	Official position on voice over IP	Date of liberalisation	Licensing requirements
Albania	No official position (currently under discussion)	None	-
Bosnia & Herzegovina	All forms of VoIP are considered as telephony	January 1, 2006	There is no licensing or authorisation regime specifically for VoIP, but a fixed voice telephony licence is required
Bulgaria	No official position If the VoIP services do not meet the QoS parameters: R factor – not less than 75; one-way delay > 150 millisecond, set out by Article 3, all. 2 of Regulation No. 12 of May 5, 2004 for fixed voice telephony service, they are not allowed to apply for a voice licence with rights to interconnect under RIO.	Not regulated	Provision of VoIP services requires a voice telephony licence if the service meets specific QoS requirements for voice telephony. Otherwise it can be provided under: <ul style="list-style-type: none"> • an individual licence for data transmission services if the service uses numbering resources • a general licence for data transmission services if the service does not use of numbering resources. VoIP that doesn't meet QoS can also be provided without any licence, Unlicensed VoIP providers use OLOs in order to access incumbent's customers.
Croatia	The right to provide VoIP telecommunications services is acquired by a legal or natural person by submitting a written notification to the Agency.	June 30, 1999	General authorisation with notification
Montenegro	VoIP has to be authorised as telephony services.	January 1, 2004	Special (individual) licence

Country	Voice over IP authorisation requirements		
	Official position on voice over IP	Date of liberalisation	Licensing requirements
Romania	Based on the principle of technological neutrality, VoIP services are considered telephony services if they fall within the scope of the definition of the publicly available telephony services, provided for by Article 2, par (1) (c) of Law No. 304/2003 <i>on the universal service and users' rights relating to electronic communications networks and services</i> . <i>ANRC is currently reviewing its position on other types of VoIP services.</i>	January 1, 2003	General authorisation with notification
Serbia (including Kosovo ¹)			
<i>Serbia</i>	Licensing requirements (individual or general) licence determined by the use of numbering resources.	Liberalisation formally introduced by the Telecom Law of April 2003	Provision of VoIP services with the use of numbering resources requires an individual licence. Provision of VoIP services without the use of numbering resources is subject to a general licence ('approval') from RATEL.
<i>Kosovo</i>	VoIP has to be authorised as public fixed voice telephony services.	-	Individual licence Secondary legislation on authorisation regime adopted in September 2005.
The former Yugoslav Republic of Macedonia	The Electronic Communications Act is technology neutral. VoIP is treated as a publicly available telephony service.	March 5, 2005 (with entry into force of the new Electronic communications Law)	General authorisation with notification
Turkey	VoIP is permitted and requires a long distance telephony service licence.	January 1, 2004	Individual licence
1) under UNSCR 1244			

Table 29 - Voice over IP licensing requirements

Note:

Albania: There is an ongoing law amending initiative to consider public telephony services through IP protocols as well.

Table 30 below summarises the authorisation requirements for Cable TV networks.

In Albania, Romania, Serbia and the former Yugoslav Republic of Macedonia, an authorisation from two respective national authorities may be required: an authorisation from the national broadcasting authority for the provision of content over Cable TV networks, and an authorisation from the NRA responsible for telecommunications sector for the construction of cable infrastructure.

In Turkey, the Telecommunications Authority issued a regulation on the licensing of cable platform services (Ordinance Amending the Ordinance on the Authorisation of Telecommunications Services and Infrastructure, Official Gazette No 25718, February 5, 2005). Under the regulation, the provision of cable platform services requires a type 2 telecommunications licence valid for 20 years. Cable platform services are defined as the one-way and two-way provision of all kinds of sound, data, image, and radio/TV signals over the cable platform network, including telephone services as well as radio, TV, Internet and data. The authorisation also covers the establishment of infrastructure.

The authorisation frameworks for cable TV still has to be defined in Kosovo.

Country	Cable TV licensing			
	Availability of Cable TV licences	Licensing requirement	Number of national licences	Number of local licences
Albania	Available	<ul style="list-style-type: none"> Individual licence from the National Council of Radio and Television-NCRT Preliminary authorisation for the construction and final certification of cable network from TRE (Law No. 8410 on private and Public Radio and Television in the Republic of Albania of September 30, 1998. Articles 123, 127) 	-	38
Bosnia & Herzegovina	Available	Individual licence from RAK	-	52
Bulgaria	Available	General (class) licence (registration with CRC)	-	639
Croatia	Available	Individual licence from HAT	2	24
Montenegro	Available	Individual licence issued by the Broadcasting Agency	-	1
Romania	Available	<ul style="list-style-type: none"> General authorisation – ANRC Individual licences or notification from the National Audio-Visual Council (CNA) a 'technical notice' from the IGCTI 	-	The National Audio-Visual Council (CNA) granted 755 licences for Cable TV operators. Licences were granted in 9,685 localities.
Serbia (including Kosovo ¹)				
<i>Serbia</i>	Available	<ul style="list-style-type: none"> Individual licence from RRA General (class) licence from RATEL 	-	Authorisations for Cable TV operators are not yet issued. However there are 36 Cable TV operators, with 540,059 subscribers.
<i>Kosovo</i>	Authorisation requirements for Cable TV still to be defined	-	-	-

Country	Cable TV licensing			
	Availability of Cable TV licences	Licensing requirement	Number of national licences	Number of local licences
The former Yugoslav Republic of Macedonia	General authorisation with notification	<ul style="list-style-type: none"> Broadcasting programme permission from the Broadcasting Council, according to the Broadcasting Law (Official Gazette of Republic of Macedonia, No. 100/2005) General authorization with notification to AEC 	-	In the past, 65 concessions were awarded by the Broadcasting Council, covering local areas. Concession contracts are in the process of harmonization with the new legislation
Turkey	Cable TV licences are generally available to any organisation that wishes to operate nationally or locally.	Individual licence – Type 2 telecommunications licence	1	4
1) under UNSCR 1244				

Table 30 - Cable TV licensing requirements

Notes:

Bulgaria: Number of registrations under General Licence No 201 to carry out telecommunications through public cable telecommunications network for distribution of radio and TV programmes and provision of telecommunication services

Montenegro: All topics for Cable TV (conditions, licences) are regulated by Broadcasting Agency.

Serbia: Authorisation requirements for Cable TV is defined Rules on terms and conditions for radio and television programme distribution service provision via cable network and on the form and contents of the approval (Official Gazette of RS No. 95/06) July 28, 2006, adopted by RATEL

3. Authorisation fees

General authorisations as well as individual licences may be subject to authorisation fees. In many countries, such fees have been quite high in the period immediately after termination of monopoly rights. The high level of fees may be triggered by the fact that the telecommunications sector represents a potential source of revenues for the state budget as much as an objective to protect the incumbent operator. Regardless of the purpose, high authorisation fees may constitute a barrier to entry into the market and, in addition, they send signals that the market is not fully liberalised.

The regulatory framework of the EU, both the 1998 acquis and the 2003 acquis, requires authorisation fees to be limited to what is necessary to cover the administrative cost of the regulatory authority. Only those fees that are paid for access to limited resources may deviate from this criterion. In practice, this means that all fees levied by the NRA are affected by this requirement, with the exception of fees for:

- Radio frequency spectrum where demand exceeds supply.
- Numbering resources. Normally, the national numbering plan must be managed so there are sufficient numbers for all operators. Since the theoretical numbering space available is unlimited, the only limited resource in the longer term is special short numbers represented by a limited number of digits.
- Rights of way. In theory, rights of way can represent a limited resource under certain circumstances but normally, the availability of land and rights of way does not represent a limited resource.

Table 25 below provides an overview of one-off and annual fees the provision of public fixed telephony networks and services and Voice over IP services. These are two telecommunications services for which the number of operators cannot be limited because of resource constraints.

Country	Fixed telephony networks and services		Voice over IP services	
	One-off fee	Annual fee	One-off fee	Annual fee
Albania	Determined by public tender procedure	€56,370 (national PSTN). For rural network operators it is €160 per municipality.	Not defined	Not defined
Bosnia & Herzegovina	€511	Public fixed telephony networks and services: €255,600	No fees in addition to those for the fixed voice licence.	No fees in addition to those for the fixed voice licence.
		Public fixed telephony services: €35,800		
		Public fixed telephony networks: local - €2,500 regional - €5,000 national - €25,500		
Bulgaria	Public fixed telephony networks and services: €31,700	0.4% of annual revenue	No licence and no fees	No licence and no fees
	Public fixed telephony services via CS (carrier licence): €17,900 plus €3,800 (CS code)	0.4% of annual revenue plus €1,000 (BGN 2,000) annual fee for the CS code		
Croatia	€2,700	0.1% of annual revenue	€670	0.1% of annual revenue
Montenegro	Determined by public tender procedure (minimum set by the Ministry of Economy)	1% of annual revenue plus €120,000 for international traffic	Determined by public tender procedure (minimum set by the Ministry of Economy)	1% of annual revenue
Romania	0	Monitoring fee to be paid to ANRC of maximum 0.5% of annual turnover	0	Monitoring fee to be paid to ANRC of maximum 0.5% of annual turnover
Serbia (including Kosovo ¹)				
<i>Serbia</i>	Determined by public tender procedure (minimum set by the Ministry of Capital Investments) plus administrative fees for the issue of individual licence	0.1% of total revenue realised in the business year for which the fee is paid	Administrative fees for the issue of general licence ('approval') – if no numbers are used	0.1% of total revenue realised in the business year for which the fee is paid
<i>Kosovo</i>	National fixed services licence: €87,500 International telecommunications facilities licence: €50,000 International telecommunications services licence: €35,000	1% of gross annual turnover attributable to licensed activity	Not defined	Not defined
The former Yugoslav Republic of Macedonia	0	Between 0.1% - 0.5% of the annual gross revenue	0	Between 0.1% - 0.5% of the annual gross revenue

Country	Fixed telephony networks and services		Voice over IP services	
	One-off fee	Annual fee	One-off fee	Annual fee
Turkey	Public national fixed telephony networks and services: Type 1 (local telephony services) – determined by tender procedure Type 2 (long distance telephony services): A-type (CPS services) – €245,164 (494,495.28 YTL) B-type (CS services) – €108,961 (219,775.68 YTL) C-type (services provided through a 10-digit number provided by the TA) – €54,481 (109,887.84 YTL)	0.5% of net annual sales	VoIP services are covered by the long distance telephony services fees.	Annual fee of 0.5% of net annual sales is covered by the Annual fee for telephony services.
1) under UNSCR 1244				

Table 31 – Authorisation fees

Notes:

Bulgaria: VoIP operators are not covered by the Telecommunications Law and can operate legally without any rights and obligations stemming from this law. In particular, they do not have the right to interconnection and usually operate on the basis of retail-based ISDN origination and termination (see also notes for *Table 29* above). If they meet certain minimum quality criteria, they can alternatively choose to operate as licensed telephony operators.

Montenegro: The fees for fixed telephony networks and services are defined by Rulebook on determination of registration fees and licence fees of telecommunication operators and providers of telecommunication services (Official Gazette of the Republic of Montenegro, № 08/2002) and also by Rulebook on amendments to the Rulebook on determination of registration fees and licence fees for telecommunications operators and providers of telecommunication services (Official Gazette of the Republic of Montenegro, № 68/2004). The fee of €6,000,000 was paid by the incumbent operator. This is currently the only national licence for fixed telephony network and services.

Romania: The turnover is calculated as a ratio between:

- the expenses estimated for the current year, provided for in the ANRC's annual budget, amount from which other sources estimated revenues shall be deducted, and
- the cumulated turnover of all providers of public electronic communications networks, publicly available electronic communications services or postal services, meaning the amount provided for in their annual financial statements drawn up for the previous year.

Any service provider may request that only its incomes resulted from the provision of electronic communications networks or services, or from the provision of postal services be taken into account when determining the above mentioned cumulated turnover. In order to implement this option, the people obliged to pay a monitoring fee shall keep separate accounts for the activities related with the provision of electronic communications networks or services or, as the case may be, with the provision of postal services, in the same manner required if these activities were carried out by legally independent entities. Their financial reports shall be certified by an independent, legally authorised auditor, in accordance with the conditions established by ANRC.

The former Yugoslav Republic of Macedonia: The AEC on December 29, 2006 adopted a Bylaw on the methodology of calculating the annual remuneration for supervision of the market for electronic communications.

4. Status of fixed network competition

Table 32 provides information about the number of licensed operators in fixed telephony across the SEE countries. This is an essential indicator of the liberalisation of the fixed market and is provided for two types of licences:

- number of licences issued for provision of public voice telephony (local/national);
- number of licences issued for the operation of public network infrastructure and the provision of network services (local/national).

In Albania, in practice the alternative operators are only offering services in rural areas: all 46 active local operators are licensed for rural telecommunications. No licences have been issued so far to alternative long distance carriers, and Albtelecom remains the only provider of national long distance networks and services, although the market was formally liberalised in 2003. Similarly, in Montenegro, where the market was formally liberalised on January 1, 2004, the incumbent Telecom Montenegro remains the only licensed fixed telephony operator. In Serbia, secondary legislation on the authorisation framework was recently adopted, but Telekom Serbia is de facto the only operator of public voice telephony and network services.

In Bosnia & Herzegovina, the three regional incumbent operators remain the only providers of fixed networks and long-distance national telephone services. Competition is only present at the level of local services provision.

Country	Number of licences for provision of fixed telecommunications services							
	Public voice telephony				Network services			
	Local		National		Local		National	
	N° authorisations		N° authorisations		N° authorisations		N° authorisations	
	Registered	Active	Registered	Active	Registered	Active	Registered	Active
	Albania	53	46	1	1	2	2	4
Bosnia & Herzegovina	4	4	3	3	62	62	8	8
Bulgaria			19*	7*			19*	8*
			12**	6**				
Croatia	-	-	15	8	2	2	7	7
Montenegro	1	1	1	1	1	1	1	1
Romania	332	65	332	65	2404	1758*	2404	1758*
Serbia (including Kosovo ¹)								
<i>Serbia</i>	1	1	1	1	1	1	1	1
<i>Kosovo</i>	2	1	1	1	2	1	2	1
The former Yugoslav Republic of Macedonia	12	1	39	7	12	1	32	1
Turkey	1	1	35	35	1	1	1	1

1) under UNSCR 1244

Table 32 - Number of licences for provision of fixed telecommunications services

Notes:

Albania: Some of the rural operators may be providing services via wireless technologies.

Bosnia & Herzegovina: By July 1, 2006, there were 4 licensed providers of local fixed voice telephony service (<http://www.cra.ba/hr/telecom/db/?cid=4136>), and 62 licensed providers of local networks: 51 local and 11 regional (<http://www.cra.ba/hr/telecom/db/?cid=2466>)

Bulgaria: * Number of licensed/active alternative operators carrying out telecommunications through public fixed telecommunications network and provision of fixed voice telephone service.

** Number of licensed/active operators carrying out telecommunications through public telecommunications network for provision of the service carrier selection/carrier pre-selection.

Ten of the licensed operators and two of the active ones are authorised to provide both fixed voice telephone service and carrier services.

There had been no change in the number of registered operators by July 1, 2006. However, CRC still has no data for the number of active operators in mid-year 2006: the number of active operators at the end of 2005 is provided above.

Questionnaires for the telecommunications activities carried out by the fixed operators during the first half of 2006 will be distributed in October 2006, data will be provided additionally, as soon as it is available.

Croatia: An additional five licence holders for national public voice telephony became active in the provision of fixed telecommunications services between November 1, 2005 and July 1, 2006. There are now 8 active operators.

Romania: * provisional data; refers only to fixed and mobile telephony, internet, data transmission services, satellite, leased lines and audiovisual programme retransmission services that have reported statistical data.

Montenegro: Licence is issued to the fixed incumbent operator, Telecom Montenegro.

Kosovo: On September 8, 2006 IPKO Net LLC was issued a licence for national fixed telecommunications services. This is a second operator for fixed services and is the first alternative operator. The incumbent is PTK.

Turkey: Infrastructure Operation Services licences, which are related to network services are given regionally in Turkey. Number of Infrastructure Operation Services given regionally is 4 (excluding the incumbent).

Table 33 below shows the proportion of fixed numbers allocated to alternative operators, which is also an important indicator of the actual state of competition in the fixed market.

Country	Percentage of fixed numbers allocated to fixed incumbent operator	Percentage of fixed numbers allocated to fixed alternative operators
Albania	84.56 %	15.44 %
Bosnia & Herzegovina	99.70 %	0.30 %
Bulgaria	96.00 %	4.00 %
Croatia	95.53 %	4.47 %
Montenegro	100.00 %	0.00 %
Romania	42.45 %	58.55 %
Serbia, including Kosovo¹		
Serbia	100.00 %	0.00 %
Kosovo	100.00 %	0.00 %
The former Yugoslav Republic of Macedonia	100.00 %	0.00 %
Turkey	100.00 %	0.00 %
1) under UNSCR 1244		

Table 33 - Proportion of fixed numbers allocated to the fixed incumbent and to fixed alternative operators

Notes:

Bosnia & Herzegovina: 12,000 fixed numbers (0.3% of the total) have been allocated to alternative operators. RAK will allocate block numbers to the alternative operators if they request them.

Kosovo: TRA is currently working with all stakeholders on drafting a provisional (temporary) numbering plan, which shall enable alternative operators to offer fixed services. This should be completed by end of 2006.

The proportions indicated in the previous reports and from the table above are shown graphically in the next figure.

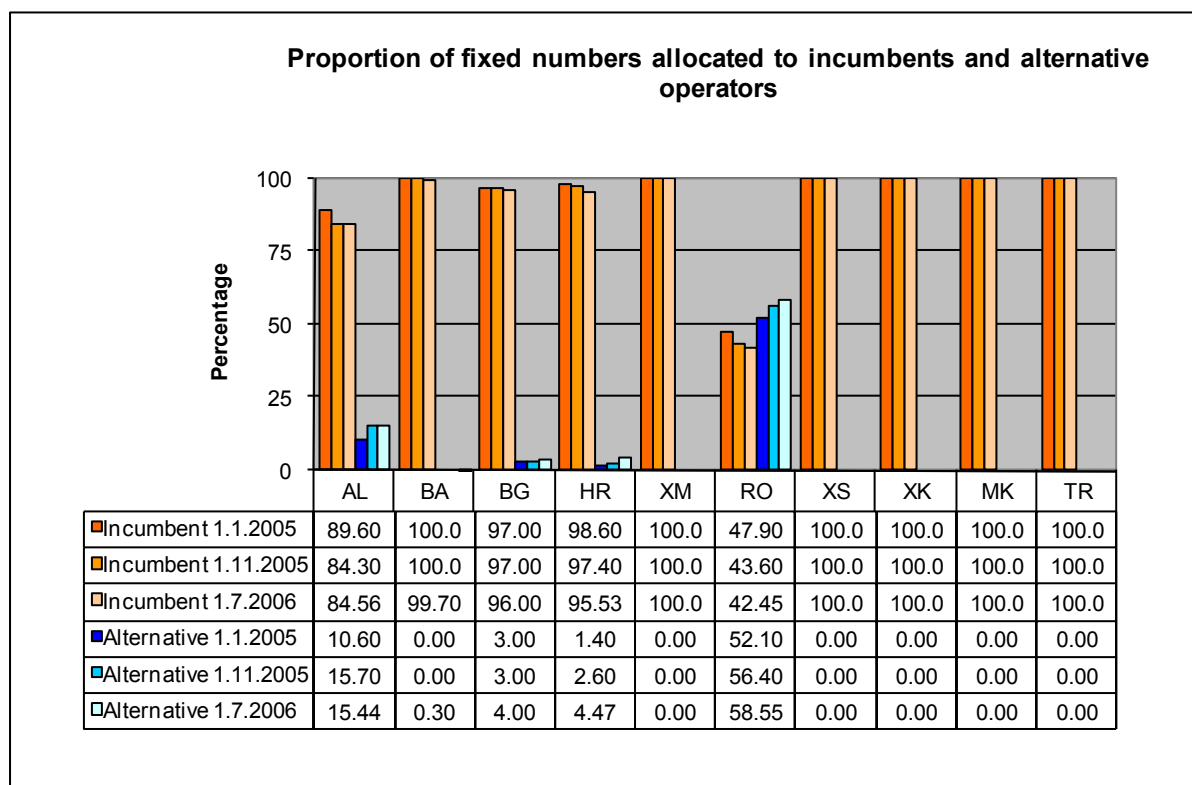


Figure 9 – Allocation of fixed numbers

The preceding figure shows that there have been slight increases in the proportion of fixed numbers allocated to alternate operators in Bulgaria, Croatia, and Romania (the change for Bosnia & Herzegovina is so small that it does not show on the figure). Romania is the only country where alternative operators have a greater allocation of fixed numbers than the incumbent has. However, as shown in *Table 59* only 14.74% of the lines in service are operated by alternative operators. No changes have been reported from the other countries and territories.

5. Radio networks and services

Table 34 shows 2G mobile licences granted in the SEE countries

Country	Number of 2G operators and licences for the provision of digital mobile services		
	GSM 900 licences Operator names	DCS (GSM 1800) licences Operator names	Sum 2G operators
Albania	<ul style="list-style-type: none"> Albanian Mobile Communications (GSM 900/1800) Vodafone Albania (GSM 900/1800) Eagle Mobile (GSM 900/1800) (not yet operational) 		3
Bosnia & Herzegovina	<ul style="list-style-type: none"> BH Telecom d.d. Sarajevo (GSM 900/1800) Telekom Srpske a.d. Banja Luka (GSM 900/1800) Hrvatske Telekomunikacije d.o.o. Mostar (GSM 900/1800) 		3
Bulgaria	Mobiltel AD (MTel) (GSM 900/1800) Cosmo Bulgaria Mobile EAD (GloBul) (GSM 900/1800) BTC Mobile EOOD (Vivatel) (GSM 900/1800)		3
	Radio Telecommunications Company operates an analogue network using the NMT 450i standard.		
Croatia	T-Mobile Hrvatska VIPnet	Tele2 (GSM 1800)	3
Montenegro	<ul style="list-style-type: none"> Promonte (GSM 900/1800) Monet (GSM 900/1800) 		2

Country	Number of 2G operators and licences for the provision of digital mobile services		
	GSM 900 licences Operator names	DCS (GSM 1800) licences Operator names	Sum 2G operators
Romania	<ul style="list-style-type: none"> Vodafone (former Mobifon) (GSM 900/1800) Orange România (GSM 900/1800) 	<ul style="list-style-type: none"> Vodafone (GSM 900/1800) Orange România (GSM 900/1800) Cosmote (former Cosmorom) 	3
	Zapp (Telemobil) operates a mobile network in the 450 MHz band: an original NMT 450 licence was extended to CDMA in 2001.		
Serbia (including Kosovo ¹)			
<i>Serbia</i>	<ul style="list-style-type: none"> Telekom Srbija a.d. (GSM 900/1800) Telenor Srbija (ex. Mobi63) (GSM 900/1800) Mobilkom Austria (GSM 900/1800) (since December 2006)* 		3
	Telekom Srbija operates an analogue network using the NMT 900 standard.		
<i>Kosovo</i>	<ul style="list-style-type: none"> Vala 900 	-	1
The former Yugoslav Republic of Macedonia	<ul style="list-style-type: none"> Mobimak AD Cosmofon AD 	-	2
Turkey	<ul style="list-style-type: none"> Turkcell İletişim Hizmetleri A.Ş. (GSM 900) Telsim Mobil Telekomünikasyon Hizmetleri A.Ş. (GSM 900) 	AVEA Telekomünikasyon Hizmetleri A.Ş., former TT-TİM (GSM 1800)	3
	An analogue NMT 450 network is operated by Türk Telekom.		
1) under UNSCR 1244			

Table 34 - Number of 2G operators and licences for the provision of digital mobile services

Notes:

Montenegro: On November 10, 2006 the Agency for Telecommunications and Postal Services announced a public tender to award two UMTS licences and one combined GSM 900/1800 and UMTS licence. The tender procedure is ongoing.

Serbia: In September 2006 the Norwegian company Telenor completed its acquisition of the Serbian mobile operator Mobi63 (now Telenor Serbia), following an auction held on July 31, 2006, for a total amount of €1,513 million. On December 1, 2006 the third GSM 900/1800 and UMTS licence was awarded to mobilkom Austria, the mobile subsidiary of the Telekom Austria Group.

Kosovo: On November 3, 2006 the Ministry of Transport and Communications and TRA launched a public tender procedure to award a second mobile licence based on GSM 900/1800. The tender procedure is ongoing.

The former Yugoslav Republic of Macedonia: On October 30, 2006 AEC announced a public tender procedure to award a third GSM 900/1800 mobile frequency licence and to grant additional GSM 1800 spectrum to the two current mobile operators. The tender procedure is ongoing.

Table 35 shows whether there is a specific obligation for the licensed mobile operators to provide access to virtual network operators and service providers (other than a general obligation to negotiate interconnection).

In Croatia, under Article 53(3) of the Telecommunications Law, mobile operators with SMP are required to accept all reasonable requests for so-called special access, which covers any category of service providers and virtual operators. The costs incurred from such a request shall be subject to a commercial agreement between the network operators and the service provider submitting the request, about which the operator must inform the Agency.

Country	Legal obligation for mobile operators to deal with			Commercial reality
	Service providers	Enhanced service providers	Mobile virtual network operators	
Albania	No	No	No	No
Bosnia & Herzegovina	No	No	No	No
Bulgaria	No	No	No	No
Croatia	Yes	Yes	Yes	No
Montenegro	No	No	No	No
Romania	No	No	No	No
Serbia (including Kosovo ¹)				
<i>Serbia</i>	No	No	No	No
<i>Kosovo</i>	No	No	No	No
The former Yugoslav Republic of Macedonia	No	No	No	No
Turkey	No	No	No	Yes, 1 airtime reseller is operating in the Turkish mobile market.
1) under UNSCR 1244				

Table 35 - Service providers and mobile virtual network operators

Notes:

Albania: Due to the relatively high prices of mobile, it seems that different operators playing a role of ESP use services from Albtelecom (i.e. fixed PSTN). Such operators offer services such as prepaid telephone cards etc.; for this purpose they exploit some communication capacities received from Albtelecom. There is no information about any serious involvement of mobile operators in SP/ESP/MVNO activities. The structure of the telecommunication services in general remains too simple to consider mobile support as [technically] obligatory. Despite legal obligations, tariffs define the degree of relations between mobiles and other service providers.

Montenegro: There are no defined conditions for service providers or virtual mobile network operators yet.

Kosovo: The TRA has adopted an authorisation regime, which provides the licensing framework for MVNOs.

Table 36 summarises information on 3G mobile licences granted in SEE countries.

Only in four countries – Bulgaria, Croatia, Romania and Serbia – have licences for 3G mobile networks based on the UMTS standard been granted so far. In Croatia and Romania, the licences were awarded following a beauty contest procedure, in Bulgaria and Serbia – by an auction.

In addition, in Romania, Telemobil SA was issued a licence to operate a CDMA 2000 network in the 450 MHz spectrum band. In Montenegro, a tender procedure for three UMTS licences (one combined with GSM 900/1800) is ongoing.

In other countries, the timing for issuing 3G licences has not been decided yet.

Country	Licensees	One-off fees	Annual spectrum fees	Deadline for service launch	Coverage and roll-out obligations
Bulgaria	May 11, 2005 <ul style="list-style-type: none"> • Mobiltel • GloBul • BTC Mobile 	Mobiltel: BGN 78m (€50m) for Class A licence (with 2x10 MHz and 1x5 MHz capacity) GloBul and BTC Mobile: BGN 42m (€21.5m) for the two Class B licences (with 2x5 MHz and 1x5 MHz capacity, each)	Annual spectrum fees: Class A licence - BGN 2.5m (€1.3m); Class B licences - BGN 1.5m (€775,000), each	May 2007	Class A licence: <ul style="list-style-type: none"> • 20% population by May 2007 • 55% population by May 2010 Class B licences: <ul style="list-style-type: none"> • 15% population by May 2007 • 50% population by May 2010
Croatia	October 2004 <ul style="list-style-type: none"> • T-HT Mobile; • VIPnet December 2004 <ul style="list-style-type: none"> • Tele2 	T-HT Mobile and VIPnet: Kuna 132m (€°17.6m) Tele2: Kuna 172m (€ 22.9m) for a combined 2G/3G concession All licensees: annual fee of 1% revenue from UMTS service	Annual fee of Kuna 5m (€ 670,000) for 5 MHz frequency block	T-HT Mobile and VIPnet: June 2005 Tele2: August 2005	T-HT and VIPnet: <ul style="list-style-type: none"> • 25% of population within two years after the grant of concession • 50% of population within five years after the grant of concession Obligations on Tele2: <ul style="list-style-type: none"> • 14% of population and 1% of territory within one year after the grant of concession; • 33% of population and 7% of territory within two years after the grant of concession; • 50% of population and 19% of territory within three years after the grant of concession; • 65% of population and 36% of territory within four years after the grant of concession; • 71% of population and 51% of territory within five years after the grant of concession.

Country	Licensees	One-off fees	Annual spectrum fees	Deadline for service launch	Coverage and roll-out obligations
Romania	November 12, 2004 <ul style="list-style-type: none"> • Vodafone • Orange NB Tender procedure for two additional UMTS licences is ongoing	\$35m payable in six instalments as follows: \$10.5m within 120 days after the notification announcing the winner of the auction; and the next five annual instalments, of \$4.9m each, starting from 2006	Each 3G licensee pays to IGCTI an annual tariff for the use of the spectrum: €1.2m/paired block of 2x5 MHz/ year; €600,000/ unpaired block of 5 MHz/year.	Individual commitments: January 1, 2005 for Vodafone (launched on April 22, 2005) 1 st quarter 2006 for Orange (launched on June 6, 2006)	The minimum coverage by Dec 31, 2011 shall comprise Bucharest and 10 major towns, chosen by the applicant. The coverage, distribution and deployment rate will be evaluated based on the candidates' commitment for three different deadlines: <ul style="list-style-type: none"> • December 31, 2005 • December 31, 2008 • December 31, 2011
Serbia	August 2006 Telekom Srbija September 2006 Telenor Srbija December 2006 Mobilkom Austria	Free of charge €320 million for GSM/UMTS licence €320 million for GSM/UMTS licence	For each combined GSM/UMTS licence: €940,000 (CSD 70 million) in the year of granting licence with pro rata reduction if less than a full year. 0.9% of total revenue for each subsequent year of operation	Within 6 months from the licence issue	Conditions apply to combined GSM/UMTS licences: 20% of the population and three major highways within 1 year 50% of the population and all highways within 2 years 80% of the population and 90% of the territory within 4 years from the licence issue

Table 36 - Information about assigned UMTS licences

Note:

Bulgaria: Since March 2006 MTel is offering 3G based services, GloBul is expected to launch them in September 2006.

Montenegro: On November 10, 2006 the Agency for Telecommunications and Postal Services announced a public tender to award two UMTS licences and one combined GSM 900/1800 and UMTS licence. Minimum one-off fees for the UMTS licences were set at € 2 million, and for the combined GSM 900/1800 and UMTS licence at € 6 million. The tender procedure is ongoing.

Romania: On October 26, 2006 IGCTI announced RCS&RDS, a major alternative fixed operator and cable TV provider, and Telemobil SA (Zapp), the operator of a CDMA network in the 450 MHz band, the winners in the public tender procedure for the two additional UMTS licences. Licences will be awarded within 120 days from October 13, 2006 upon payment of the first spectrum licence fee instalments amounting to \$10.5 million.

Serbia: In September 2006 the Norwegian company Telenor completed its acquisition of the Serbian mobile operator Mobi63 (now Telenor Serbia), following an auction held on July 31, 2006, for a total amount of €1,513 million. The total price covered the licence fees as well as Mobi63's assets.

Three frequency bands have been reserved for R-LAN systems by two European Radiocommunications Committee (ERC) Decisions:

Frequency band	ERC Decisions
2.400 – 2.483 GHz (max. 100 mW)	ERC Decision 01/07
5.150 – 5.350 GHz (indoor only max. 200 mW) 5.470 – 5.725 GHz (indoor and outdoor max. 1 W)	ECC Decision 04/08 (replaces ERC Decision 99/23)

Table 37 – ERC Decisions on frequency bands for R-LAN

Table 38 below shows whether:

- the full frequencies in the 2.4 GHz and 5 GHz bands are available for R-LAN systems;
- the operation of a public R-LAN network for the provision of public access to a licensed telecommunications network is subject to an individual licence or a general authorisation (with or without registration);
- the incumbent operates a commercial service.

Country	Public Radio Local Area Networks (R-LAN)			
	Full frequency bands available		Licensing requirements for provision of access to public network	Availability of commercial service by the incumbent operator
	2.4 GHz	5 GHz		
Albania	Yes	Yes	General authorisation	Yes
Bosnia & Herzegovina	Yes	Yes	General authorisation	No
Bulgaria	Yes	Yes	General (class) licence with prior notification to CRC	Yes
Croatia	Yes	Yes	General authorisation	Incumbent – No Others - Yes
Montenegro	Yes	No	Individual (special) licence only for public services, general licence for other	No
Romania	Yes	No (5.8 GHz only)	General authorization with notification to ANRC	No
Serbia (including Kosovo ¹)				
<i>Serbia</i>	Yes	Yes	General authorisation is foreseen	No
<i>Kosovo</i>	Yes	No	General authorisation is foreseen	No
The former Yugoslav Republic of Macedonia	Yes	Yes	Notification and permission for using radio frequencies	No
Turkey	Yes	Yes (indoor only)	There are no authorisation requirements for indoor applications but outdoor applications for 2.4 GHz band require a General Authorisation for Internet service provision.	No (see note)
1) under UNSCR 1244				

Table 38 - Public Radio Local Area Networks (R-LAN)

Notes:

Albania: Some RLAN services are offered by mobile operators (AMC (www.amc.al) and Vodafone (www.vodafone.al)).

Croatia: New general licences for LAN equipment will be issued by the Agency under the Bylaw on radio frequency allocation that entered into force from December 1, 2005.

Turkey: The incumbent operator has transferred its right to provide Internet access service to TTNET, the Internet service provider in which the incumbent has a majority shareholding.

D. Regulations – Competitive safeguards

The information in this chapter is intended to reflect the situation as it existed on July 1, 2006.

1. Carrier selection and pre-selection

Carrier selection and pre-selection are the basic mechanisms for enabling competition while a national market is being liberalised. Carrier selection allows a subscriber, who is connected to the incumbent operator's network, to select a competitive operator to perform local calls, long-distance calls, and or international calls by dialling a carrier selection sequence.

When carrier pre-selection is available, the subscriber can make a permanent (or semi-permanent) selection of an alternative operator for all calls or certain types of call.

Article 19 of the Universal Service Directive requires carrier selection and pre-selection from all operators of fixed telephony with significant market power.

The next two tables present the status for carrier selection and pre-selection. The very early phases of liberalisation are demonstrated by the fact that only about half of the geographic units have implemented these mechanisms by July 1, 2006. However, several countries have been making good progress.

Albania has made provisions for carrier selection in its numbering plan, but other aspects are still under consideration.

Bulgaria has both carrier selection and pre-selection for long distance and international calls and has recently implemented carrier selection and pre-selection for calls to mobile subscribers. There are 12 licensed operators for CS and CPS services and four of them were actively operating at the end of 2005.

In Croatia, the first three operators have started with carrier pre-selection activities.

Romania has carrier selection for all types of calls. Carrier pre-selection was implemented from June 30, 2006. There are 72 operators that have been allocated carrier selection codes. About half of the operators are active.

Turkey has recently implemented both carrier selection and pre-selection and the corresponding interconnection agreements are being signed. By July 1, 2006 35 operators had been allocated carrier selection codes and about half of them were active.

Serbia also has provisions for carrier selection in its Telecommunications Law of 2003, but its implementation requires further guidelines from the NRA, which is not yet established.

The former Yugoslav Republic of Macedonia, in its new Telecommunications Act of February 2005, has a legal requirement to introduce carrier selection and pre-selection by September 1, 2005 but these were still in the implementation phase on July 1, 2006.

Country	Carrier selection				
	Local calls	Long distance calls	International calls	Calls to mobile	Calls to non-geographical numbers
Albania	Not decided yet	Not decided yet	Not decided yet	Not decided yet	Not decided yet
Bosnia & Herzegovina	Implementation from 1.10.2006	Implementation from 1.10.2006	Implementation from 1.10.2006	Implementation from 1.10.2006	Implementation from 1.10.2006
Bulgaria	Not available	29.06.2004	29.06.2004	11.07.2006 (CRC Decisions No 1445 of 11.07.2006 and No 1446 to No 1457 of 11.07.2006)	Not available
Croatia	1.1.2003 Available 1.7.2006	1.1.2003 Available 1.7.2006	1.1.2003 Available 1.7.2006	1.1.2003 Available 1.7.2006	1.1.2003 Not available
Montenegro	Not decided	Not decided	Not decided	Not decided	Not decided
Romania	February 2003	February 2003	February 2003	February 2003	February 2003

Country	Carrier selection				
	Local calls	Long distance calls	International calls	Calls to mobile	Calls to non-geographical numbers
Serbia (including Kosovo ¹)					
<i>Serbia</i>	Not decided	Not decided	Not decided	Not decided	Not decided
<i>Kosovo</i>	Not decided	Not decided	Not decided	Not decided	Not decided
The former Yugoslav Republic of Macedonia	Regulation adopted Implementation ongoing	Regulation adopted Implementation ongoing.	Regulation adopted Implementation ongoing	Regulation adopted Implementation ongoing	Regulation adopted Implementation ongoing
Turkey	Carrier selection not implemented for local calls.	Technical requirements are fulfilled in December 2005 by incumbent operator. Interconnection agreements regarding carrier selection have been started to be signed between the incumbent and carriers in April 2006.	Technical requirements are fulfilled in December 2005 by incumbent operator. Interconnection agreements regarding carrier selection have been started to be signed between the incumbent and carriers in April 2006.	Technical requirements are fulfilled in December 2005 by incumbent operator. Interconnection agreements regarding carrier selection have been started to be signed between the incumbent and carriers in April 2006.	Technical requirements are fulfilled in March 2006 by incumbent operator. However, the interconnection agreements regarding carrier selection do not include calls to non-geographical numbers.
1) under UNSCR 1244					

Table 39 - Availability of carrier selection

Notes:

Bosnia & Herzegovina: The Council of Ministers of Bosnia & Herzegovina has adopted the Decision on introduction of carrier selection and set the deadline October 1, 2006.

Kosovo: Regulation on CS and CPS pending the approval of the provisional national numbering plan.

The former Yugoslav Republic of Macedonia: Two carrier selection codes 10ab have been issued by the Agency.

Country	Carrier pre-selection				
	Local calls	Long distance calls	International calls	Calls to mobile	Calls to non-geographical numbers
Albania	Not decided yet	Not decided yet	Not decided yet	Not decided yet	Not decided yet
Bosnia & Herzegovina	Implementation from 1.1.2007	Implementation from 1.1.2007	Implementation from 1.1.2007	Implementation from 1.1.2007	Implementation from 1.1.2007
Bulgaria	Not available	1.1.2005	1.1.2005	11.07.2006 (CRC Decisions No. 1445 of 11.07.2006 and No. 1446 to No. 1457 of 11.07.2006)	Not available
Croatia	1.1.2005	1.1.2005	1.1.2005	1.1.2005	Not available
Montenegro	Not decided	Not decided	Not decided	Not decided	Not decided
Romania	June 30, 2006	June 30, 2006	June 30, 2006	June 30, 2006	June 30, 2006
Serbia (including Kosovo ¹)					
<i>Serbia</i>	Not decided	Not decided	Not decided	Not decided	Not decided
<i>Kosovo</i>	Not decided	Not decided	Not decided	Not decided	Not decided

Country	Carrier pre-selection				
	Local calls	Long distance calls	International calls	Calls to mobile	Calls to non-geographical numbers
The former Yugoslav Republic of Macedonia	Regulation adopted Implementation ongoing	Regulation adopted Implementation ongoing	Regulation adopted Implementation ongoing	Regulation adopted Implementation ongoing	Regulation adopted Implementation ongoing
Turkey	Carrier pre-selection is not implemented for local calls	Technical requirements are fulfilled in March 2006 by incumbent operator. Interconnection agreements regarding carrier pre-selection have been started to be signed between the incumbent and carriers in July 2006.	Technical requirements are fulfilled in March 2006 by incumbent operator. Interconnection agreements regarding carrier pre-selection have been started to be signed between the incumbent and carriers in July 2006.	Technical requirements are fulfilled in March 2006 by incumbent operator. Interconnection agreements regarding carrier pre-selection have been started to be signed between the incumbent and carriers in July 2006.	Technical requirements are fulfilled in March 2006 by incumbent operator. Interconnection agreements regarding carrier pre-selection have been started to be signed between the incumbent and carriers in July 2006. However, the interconnection agreements do not include calls to non-geographical numbers.
1) under UNSCR 1244					

Table 40 - Availability of carrier pre-selection

Notes:

Bosnia & Herzegovina: The Council of Ministers of Bosnia & Herzegovina has adopted the Decision on introduction of carrier pre-selection and set the deadline July 1, 2007.

Kosovo: Regulation on CS and CPS is pending on approval of provisional national numbering plan.

The number of operators with allocated access code provides a good indicator of the level of competition in the national telephony markets. Given the early phase of liberalisation in this region, it is not surprising that most of the geographic units are still without any such alternative operators.

Croatia has fourteen operators with access codes. On July 1, 2006 the carrier selection procedures were not yet operational but 3 operators were using carrier pre-selection.

Romania has 76 operators with access codes and about half of these could be reached through carrier selection by November 1, 2005.

Turkey has 35 alternative operators with access codes, and almost half of these are active.

Country	Operators with allocated access code	Operators using CS for the provision of services	Operators using CPS for the provision of services
Albania	0	0	0
Bosnia & Herzegovina	0	0	0
Bulgaria	12	6	0
Croatia	14	0	3
Montenegro	0	0	0
Romania	76	32	0

Country	Operators with allocated access code	Operators using CS for the provision of services	Operators using CPS for the provision of services
Serbia (including Kosovo ¹)			
<i>Serbia</i>	2	0	0
<i>Kosovo</i>	0	0	0
The former Yugoslav Republic of Macedonia	2	0 (see note)	0
Turkey	35 (see note)	15	11
1) under UNSCR 1244			

Table 41 - Operators with allocated access codes and use of CS and CPS for provision of voice telephony

Notes:

Croatia: Since the previous report, two more operators have been allocated access codes and one more operator is using CPS for the provision of services.

Kosovo: Regulation on CS and CPS pending on approval of provisional national numbering plan.

The former Yugoslav Republic of Macedonia: * Carrier Selection function is in the phase of activation through RIO

Turkey: The access code is considered to be the "carrier selection code" and "carrier selection code" is defined as the code assigned by the Authority to the Carriers for call by call carrier selection.

2. Number portability

Another important competitive safeguard is number portability, which enables a subscriber to maintain his or her old telephone number when changing operator. This is particularly important for business users, for whom a change of telephone number is costly and represents a risk of loss of revenue.

Article 30 of the Universal Service Directive requires all operators of publicly available telephone services, mobile as well as fixed, to provide number portability.

Among the countries or geographic units being presented in this report, only Croatia has number portability in place, for both fixed and mobile networks.

Bulgaria has set a date for its introduction from January 1, 2009 for fixed telephony. This date was accepted by the European Commission some years ago because of Bulgaria's low degree of digitalisation²⁴ (51% on 30.06.2006). Number portability normally requires digital switches for its implementation. For mobile networks, this is normally not a problem and Bulgaria will implement number portability for mobile numbers from January 1, 2007. This date coincides with the date of accession for Bulgaria.

A legal requirement has been established in the former Yugoslav Republic of Macedonia (from March 2007). In Romania, it is foreseen from September 2007. Serbia has a provision for number portability in its Telecommunications Law of 2003, but its implementation requires further guidelines from the NRA, which is not yet established. Turkey plans to adopt a regulation toward the end of 2006. The other countries and geographic units have not yet taken a decision on number portability.

Kosovo does not have its own national prefix in the ITU's international numbering plan. Numbers in the fixed network use the +381 prefix of Serbia. A regime for number portability in the fixed network may be established during 2006. Only one of the mobile operators acting on the territory of Kosovo, Mobi63²⁵ (not authorised by TRA), is using numbers with the +381 prefix. Vala900, the only mobile operator authorised by TRA, has made an arrangement with Telecom Monaco for the use of non-geographic numbers that belong to Monaco's numbering plan. It is not clear how number portability can be implemented under these circumstances.

²⁴ Bulgaria's rate of digitalisation is increasing rapidly and is now 51%. At the beginning of 2004, it was 26%.

²⁵ Also known as Telenor Srbija, after Telenor's acquisition mid 2006.

Country	Geographic fixed numbers	Non-geographic fixed numbers	Mobile numbers
Albania	Not decided	Not decided	Not decided
Bosnia & Herzegovina	Not decided	Not decided	Not decided
Bulgaria	January 1, 2009	January 1, 2009	January 1, 2007
Croatia	January 1, 2005 (implemented July 2005)	January 1, 2005 (implemented July 2005)	October 30, 2005 (implemented October 2006)
Montenegro	Not decided	Not decided	Not decided
Romania	September 2007	September 2007	September 2007
Serbia (including Kosovo ¹)			
<i>Serbia</i>	Legal obligation not yet applied	Legal obligation not yet applied	Legal obligation not yet applied
<i>Kosovo</i>	Not decided	Not decided	Not decided
The former Yugoslav Republic of Macedonia	Legal requirement from March 5, 2007 Secondary legislation is in the phase of preparation	March 5, 2007	March 5, 2007
Turkey	Not yet Planned to issue regulation by the end of 2006	Not yet Planned to issue regulation by the end of 2006	Not yet Planned to issue regulation by the end of 2006
1) under UNSCR 1244			

Table 42 - Availability of number portability

Note:

Croatia: Mobile number portability was originally planned for October 2005 but some mobile operators had technical problems so the service could not be implemented as scheduled. Within two months of number portability becoming available on October 1, 2006 over 8,000 numbers had been ported.

3. SMP regulations

The concept of significant market power (SMP) is one of the central elements of the EU regulatory regime for electronic communications. Operators designated as having SMP may subsequently be subject to asymmetric ex-ante conditions often referred to as remedies. Such conditions, which apply only to SMP operators, typically set out requirements for competitive safeguards and regulatory obligations that are intended to protect alternative operators. Examples of such regulatory obligations are the requirements to meet all reasonable requests for network access, non-discrimination, cost orientation and transparency. The transparency requirement is often further defined as a requirement to publish a reference offer for specific wholesale products, such as interconnection or unbundled access to local loops.

Under the 1998 acquis, which prevails in the majority of SEE countries, with the exception of Romania and the former Yugoslav Republic of Macedonia, SMP is generally presumed to be present when an operator, fixed or mobile has 25% or more of a defined telecommunications market. The following four markets were defined under the ONP Interconnection Directive (97/33/EC):

- market for the public fixed telecommunications services and networks;
- market for the public mobile telecommunications services and networks;
- market for the leased line services; and
- national interconnection market.

Furthermore, the ONP Interconnection Directive also defined specific regulatory obligations for each market that should apply automatically to all operators designated as having SMP in that market.

In the 2003 framework, the definition of SMP is changed to bring it more into line with the concept of 'dominance' in EU competition law. Of particular note in this regard is that an operator is presumed to be dominant in a relevant market only when its market share exceeds 40%, instead of 25%. Any final

determination of SMP will, however, have to take other factors into consideration, such as the control of 'essential facilities' and the absence of potential competition. Furthermore, regulatory obligations on operators with SMP are not pre-defined in the legislation, but imposed by NRAs following a complex market analysis procedure of a set of specific national markets.

The EU 2003 regulatory framework has so far only been implemented in Romania. In the former Yugoslav Republic of Macedonia, the legal transposition is complete, but the practical implementation in terms of market analysis has not yet started.

The adoption of SMP regulations is normally a fairly straightforward process. Depending upon the designation procedures, the actual analysis required to come to a regulatory decision may be more or less demanding on a regulator.

The real challenge of applying SMP regulations in the real world is demonstrated by conflicts that arise between an SMP operator and a new entrant. Often, the regulatory authority has to intervene and resolve such conflicts.

It is difficult to find an indicator that can provide a useful measurement of effectiveness of a national SMP regime. The following table provides information on the status of the legal arrangement and on the operators that have been designated as having SMP.

The table below shows that all countries and geographic units have such a framework in place.

As mentioned above, only Romania has adopted the 2003 acquis and implemented a formal market analysis procedure. Since it was not an EU Member State prior to 2007, it has not had to notify the results of its market analyses to the European Commission and it has had more freedom than an EU Member State to define its own markets relevant for ex ante regulation. The information in the table below shows that Romania, as a consequence of applying competition law principles in defining relevant markets, as required by the 2003 acquis, has a segmented definition of the relevant markets, and consequently of the scope of SMP designation, and an increased flexibility in the way the remedies can be applied.

Croatia's regulatory framework combines elements from both the 1998 acquis and the 2003 acquis. A recent bylaw sets out procedures for market analysis according to the 2003 acquis. Until these market analyses are completed, the current SMP designations, which have been carried out according to the 1998 acquis, will apply.

Country	Legal basis for defining SMP and designating the organisations with SMP	SMP designation in practice: relevant markets and undertakings with SMP	SMP obligations imposed in each market
Albania	<p>Law No. 8618 of June 14, 2000 Definition of organisation with SMP (Article 2, Para. 11*) Designation as organisation with SMP by TRE (Article 17*) Interconnection obligations of organisation with SMP (Article 42*) The Law establishes a 25% market share threshold for SMP designation. TRE regulation on "Definition of SMP organisations in the market" of September 16, 2005. Law No. 9121 of July 28, 2003 "On Competition Protection" contains provisions on the 'relevant market' definition.</p>	<p>TRE decision of April 2006 designated the following operators as having SMP:</p> <ul style="list-style-type: none"> • Albanian Mobile Communications and Vodafone Albania on relevant markets as following: <ul style="list-style-type: none"> • Wholesale level - call termination in individual network; • Retail level - public mobile services. 	<ul style="list-style-type: none"> • Non-discrimination • Cost orientation • Transparency • Meet all reasonable requests for access and interconnection • Respect confidentiality • Tariff regulation • RIO

Country	Legal basis for defining SMP and designating the organisations with SMP	SMP designation in practice: relevant markets and undertakings with SMP	SMP obligations imposed in each market
Bosnia & Herzegovina	<p>Law on Communications 2003, Article 14 contains general provisions on designation of operators with SMP in the relevant markets based on competition law principles.</p> <p>Article 17 contains provisions on designation of operators with SMP in the leased lines market.</p> <p>The Law foresees that RAK shall review SMP designations annually.</p>	<p>Three incumbent operators: BH Telecom d.d. Sarajevo; Telekom Srpske a.d. Banja Luka; Hrvatske Telekomunikacije d.o.o. Mostar are designated as having SMP in the following markets:</p> <ul style="list-style-type: none"> • Provision of voice telephony service via a fixed network • Provision of voice telephony services via mobile networks • Provision of leased lines <p>SMP obligations were imposed when the licences were issued: on June 1, 2002 for public fixed telephony services and on October 12, 2004 for mobile services.</p>	<p>All SMP-operators are subject to obligations of:</p> <ul style="list-style-type: none"> • Non-discrimination • Cost orientation (applies to fixed network operations only) • Transparency • Meet all reasonable request for access • Respect confidentiality
Bulgaria	<p>Article 45(2) of the <i>Telecommunications Act</i> of October 7, 2003:</p> <p>Determined as operators having SMP may be telecommunication operators [...] carrying out telecommunications through:</p> <ul style="list-style-type: none"> • fixed telephone networks and providing fixed voice telephone services; • providing the leased lines service; • mobile telecommunications networks and providing voice telephone services through them. <p>National combined market for interconnection is not defined in the act.</p> <p>A 25% market share threshold is set for SMP designation.</p> <p>The methodology for the terms and order for designation of an operator with SMP is approved by <i>Decree No 155 of July 5, 2004</i> State Gazette No 61 of July 13, 2004.</p>	<ul style="list-style-type: none"> • Fixed telephone networks and services: BTC • Leased lines: BTC • Mobile telephone networks and services: Mobitel and Cosmo Bulgaria Mobile 	<p>BTC (fixed telephony network and services; leased lines) is imposed the full set of remedies defined in the TA:</p> <ul style="list-style-type: none"> • Non-discrimination • Meet all reasonable request for access • RIO and RUO • Transparency and access to information • Cost orientation • Accounting separation • Respect confidentiality • Co-location for interconnection • Provision of leased lines, special access, LLU and co-location <p>Mobitel and Cosmo Bulgaria Mobile (mobile networks and services) are only subject to obligations of:</p> <ul style="list-style-type: none"> • Non-discrimination • Transparency • Confidentiality
Croatia	<p>Telecommunication Law, (Article 51) establishes a 25% market share threshold for SMP designation on a relevant market.</p> <p>On October 20, 2005 the Agency Council adopted a <i>Decision on SMP providers</i> in four relevant product and geographic markets.</p> <p>These designations are valid until the market analysis of the 18 relevant markets defined according to the EU 2003 framework is carried out. The <i>Ordinance on conditions and</i></p>	<ul style="list-style-type: none"> • Public voice services on national level: Croatian Telecom (T-Com) • Transmission of voice, sound, data, documents, pictures and other in fixed network on national level: T-Com • Public voice services in mobile network on national level: Croatian Telecom (T-Mobile), VIPnet 	<p>All operators with SMP are subject to obligations of:</p> <ul style="list-style-type: none"> • Non-discrimination • Cost orientation • Transparency • Meet all reasonable request for access • Respect confidentiality • Accounting separation • Local loop unbundling • Price control

Country	Legal basis for defining SMP and designating the organisations with SMP	SMP designation in practice: relevant markets and undertakings with SMP	SMP obligations imposed in each market
	<i>procedures of relevant markets definition (Official Gazette 127/05) was adopted in October 2005.</i>	<ul style="list-style-type: none"> Interconnection on national level: T-Com, T-Mobile, VIPnet 	
Montenegro	Telecommunications Law (Official Gazette of the Republic of Montenegro, No. 59/2000) establishes a 25% market share threshold for SMP designation on a relevant market (Articles 3, 12, 28, 29, 37).	<ul style="list-style-type: none"> Fixed telephone networks and services: Telecom Montenegro Internet services: Internet Montenegro Mobile telephone networks and services: Promonte, Monet 	<ul style="list-style-type: none"> Non-discrimination Cost orientation Transparency Meet all reasonable requests for access Respect confidentiality
Romania	<p>Article 32 par. (1)-(3) of Government Emergency Ordinance No. 79/2002 sets out the legal basis for identification of relevant markets and for designating providers with SMP. Decision of president of ANRC No. 136/2002, with subsequent completions, identifies the following relevant wholesale markets:</p> <ul style="list-style-type: none"> Access to the fixed public telephone networks for the purpose of call origination, termination and transit Full or shared unbundled access to the twisted metallic pair local loop, for the purpose of providing broadband electronic communications services and publicly available telephone services at fixed locations Bitstream access to the twisted metallic pair, optical fibre, or coaxial cable local loop and to the radio local loop, for the purpose of providing broadband electronic communication services Terminating segments of leased lines Trunk segments of leased lines Access to the public mobile telephone networks operated by each mobile operator for the purpose of call termination <p>and the following relevant retail markets:</p> <ul style="list-style-type: none"> Access at a fixed location to a public telephone network for residential customers / for non-residential customers Local calls at a fixed location for residential / non-residential customers National calls at a fixed location for residential / non-residential customers 	<ul style="list-style-type: none"> Fixed retail and wholesale relevant markets: RomTelecom Mobile call termination: Vodafone Romania, Orange România, Telemobil (Zapp), Cosmote 	<p>Wholesale markets:</p> <p>Market for the access to the public fixed telephony networks for the purpose of call origination, termination and transit RomTelecom</p> <ul style="list-style-type: none"> Transparency (RIO) Non-discrimination Accounting separation Access to and use of specific network facilities Cost orientation <p>Market for terminating segments of leased lines RomTelecom</p> <ul style="list-style-type: none"> Transparency (RIO) Non-discrimination Accounting separation Access to and use of specific network facilities Cost orientation <p>Market for the full or shared access to the twisted metallic pair local loop for the purpose of providing broadband electronic communication services and publicly available telephony services at fixed locations RomTelecom</p> <ul style="list-style-type: none"> Transparency (RUO) Non-discrimination Accounting separation Access to and use of specific network facilities Cost orientation <p>Market for the access to the mobile telephony network, for the purpose of call termination Vodafone Romania & Orange România:</p>

Country	Legal basis for defining SMP and designating the organisations with SMP	SMP designation in practice: relevant markets and undertakings with SMP	SMP obligations imposed in each market
	<ul style="list-style-type: none"> • Calls at a fixed location to public mobile telephone networks for residential / non-residential customers • International calls at a fixed location for residential / non-residential customers 		<ul style="list-style-type: none"> • Transparency • Non-discrimination • Accounting separation • Access to and use of specific network facilities • Cost orientation <p>Cosmote & Telemobil:</p> <ul style="list-style-type: none"> • Transparency • Providing certain services and grant access to certain facilities <p>Retail markets: RomTelecom</p> <ul style="list-style-type: none"> • Forbidden to charge excessive prices • Forbidden to charge predatory prices • Services unbundling • Carrier selection (for access only) • Carrier pre-selection (for access only) • Accounting separation • Price cap (to be established)
Serbia (including Kosovo ¹)			
<i>Serbia</i>	Telecommunications Law, Article 4 (item 49) establishes a 20% market share threshold for SMP designation on a relevant market, which RATEL may modify to 25%. RATEL decision of March 24, 2006 designating Telekom Srbija as having SMP in public fixed telephone networks and services market.	<ul style="list-style-type: none"> • Fixed telephone networks and services: Telekom Srbija 	Telecommunications Law, Articles 9, 10, 39, 40, 43, 48, 52 and 111): <ul style="list-style-type: none"> • Requirement to meet all reasonable requests for network access • Special tariff regime • Provision of leased lines • Non-discrimination • Cost orientation • Transparency • Prohibition of cross-subsidisation
<i>Kosovo</i>	Telecommunications Act (UNMIK Regulation 2003/16), Section 44 establishes a 25% market share threshold for SMP designation on a relevant service market.	<ul style="list-style-type: none"> • Fixed telephone networks and services: PTK • Mobile networks and services: Vala 900 (PTK mobile subsidiary) 	<ul style="list-style-type: none"> • Non-discrimination • Cost orientation • Transparency • Meet all reasonable requests for access • Respect confidentiality

Country	Legal basis for defining SMP and designating the organisations with SMP	SMP designation in practice: relevant markets and undertakings with SMP	SMP obligations imposed in each market
The former Yugoslav Republic of Macedonia	Law on electronic communications, Article 146 designates the incumbent operator Makedonski Telekomunikacii as the operator having SMP until otherwise decided by the NRA.	Makedonski Telekomunikacii is designated as having SMP in the market for: <ul style="list-style-type: none"> fixed voice telephone networks and services; access to networks for data transmission and leased lines. 	<ul style="list-style-type: none"> Non-discrimination Cost orientation Transparency Meet all reasonable request for access Respect confidentiality Interconnection obligation Accounting separation Minimum set of leased lines Retail tariff regulation Carrier selection and pre-selection
Turkey	<ul style="list-style-type: none"> 'Communiqué on Principles and Procedures on the Determination of Operators Having Significant Market Power' of June 3, 2003 Decision no. 2005/880 of the Telecommunications Authority, Official Gazette of December 28, 2005 (SMP designations for GSM mobile markets: M15, M16) Decision of the Telecommunications Authority No 2006/DK-10/142, official gazette dated 17/03/2006 (SMP designation for fixed markets: M1, M2...M14) 	<ul style="list-style-type: none"> Fixed markets (M1, M2...M14): Türk Telekom Mobile call termination: Turkcell, Vodafone, Avea Mobile access and call origination: Turkcell 	All SMP-operators are subject to obligations of: <ul style="list-style-type: none"> Non-discrimination Cost orientation Transparency Meet all reasonable request for access Respect confidentiality Obligation to follow national and international QoS standards Reference Interconnection / Access Offer Accounting separation Co-location
1) under UNSCR 1244			

Table 43 - SMP regulations as a competitive safeguard

Notes:

Bulgaria: The last CRC market analyses²⁶ were carried out in May-June 2006 and

- by Decision No 1317/20.06.2006 BTC was designated as an SMP operator on the market of fixed telephone networks and services;
- by Decision No 1315/20.06.2006 BTC was designated as an SMP operator on the leased lines market;
- by Decision No 1316/20.06.2006 Mobilitel EAD and Cosmo Bulgaria Mobile EAD were designated as SMP operators on the mobile telephone networks and services market.

The designation of operators having SMP is done in a number of specific markets. Under the new regulatory framework in the EU (the 2003 acquis), the European Commission has defined 18 relevant markets to be analysed in order to determine one or more operators having SMP. Seven of these are retail markets. The other eleven are wholesale markets, three of which are related to fixed network interconnection (fixed call origination, termination and transit) and two – to mobile network interconnection (mobile call origination and call termination on individual mobile networks). The Access Directive (2002/19/EC) gives NRAs the flexibility to select which ex-ante access and interconnection obligations to impose on operators found to have significant market power (SMP) on a relevant wholesale market from an exhaustive list of obligations.

²⁶ The decision on mobile and leased lines markets was taken in December 2005.

The previous 1998 acquis defined four broader markets relevant for ex ante regulation, in such a way that they included both retail and wholesale aspects. These markets covered: public fixed telephony networks and services, leased lines, public mobile telephony networks and public mobile telephony services. In addition, the overall market for interconnection was defined in order to impose more specific regulatory obligations for mobile operators designated as having SMP in this market (provided that the mobile operator passes the additional test of having more than 25% market share in the combined fixed and mobile interconnection market). A public fixed telephone network operator designated as having SMP is always considered to have SMP on the interconnection market). Then a pre-defined set of specific regulatory obligations was imposed on SMP operators in each of the four markets according to the former ONP Interconnection Directive (97/33/EC). In particular, a cost orientation obligation was applied to interconnection charges of public fixed network operators with SMP and public mobile operators with SMP on interconnection market.

The table below shows whether national operators have been designated as having SMP in a market that implies specific interconnection obligations, and whether there is a requirement for their interconnection tariffs to be cost oriented subject to a specific type of cost orientation principle.

In Albania two mobile operators have been designated as having SMP. However, following the expiry of SMP designations in May 2005, the analysis of the fixed market is still ongoing.

In Bulgaria, the interconnection market is not defined as a relevant market in the Telecommunications Act and for this reason no specific cost orientation obligations can be imposed on public mobile operators with SMP. This may be based on a misinterpretation of the 1998 acquis, where the SMP regime is associated with the broader activities such as the fixed public telephone network and the public mobile telephone network.

In Serbia, the incumbent operator was designated as having SMP in the public fixed communications networks and services market.

Most of the geographic units have applied a cost orientation requirement for fixed network interconnection charges of operators with SMP. Albania, Croatia, Montenegro, Kosovo, Romania and Turkey also have regulations in place for cost orientation for the mobile operators with significant market power.

In the former Yugoslav Republic of Macedonia, the regulator has decided to require LRIC based cost accounting principles from July 2007.

Country	SMP operators		Cost orientation imposition on SMP operators			
	Fixed	Mobile	Fixed	Mobile	Cost base	Cost standard
Albania	No operator designated as having SMP at the moment, market analysis process is ongoing.	Albanian Mobile Communications and Vodafone Albania are designated as having SMP	Yes	Yes	Yes	N/A
	The regulation of the retail tariffs of the incumbent fixed operator, Albtelecom, is based on FAC methodology and on historical cost. At the moment there is no methodology for the regulation of mobile tariffs, either retail or wholesale. The interconnection charges recommended by TRE in May 2004 and April 2006 were based on an EU benchmark.					
Bosnia & Herzegovina	BH Telecom d.d. Sarajevo	BH Telecom d.d. Sarajevo	Yes	-	Bench-marking/ forward looking (see note below)	Bench-marking/ LRIC
	Telekom Srpske a.d. Banja Luka	Telekom Srpske a.d. Banja Luka	Yes	-	Bench-marking/ forward looking (see note below)	Bench-marking/ LRIC
	Hrvatske Telekomunikacije d.o.o. Mostar	Hrvatske Telekomunikacije d.o.o. Mostar	Yes	-	Bench-marking/ forward looking (see note below)	Bench-marking/ LRIC

Country	SMP operators		Cost orientation imposition on SMP operators			
	Fixed	Mobile	Fixed	Mobile	Cost base	Cost standard
	The combination of Benchmarking/LRIC methodologies means that the Agency has recommended the LRIC method in "A guide to setting up an interconnection regime in Bosnia & Herzegovina" and in the Rule on Interconnection No. 16/02. None of the incumbents have implemented LRIC or any other cost-oriented methodology and the Agency has applied the benchmarking based on the EU and SEE countries.					
Bulgaria	BTC	-	Yes	-	Current cost	Fully Distributed Cost
	MTel Cosmo Bulgaria Mobile		-	No	-	-
Croatia	HT- Hrvatske Telekomunikacije d.d.		Yes		Benchmarking	Benchmarking
		T-Mobile Hrvatska d.o.o.	-	Yes	Benchmarking	Benchmarking
		VIPnet d.o.o	-	Yes	Benchmarking	Benchmarking
Montenegro	Telecom Montenegro		Yes		Historic	Fully Distributed Cost
		Promonte		Yes	Historic	Fully Distributed Cost
		Monet		Yes	Historic	Fully Distributed Cost
	No specific cost orientation obligation has been defined by the NRA. Consultation on draft rulebook on regulatory cost orientation obligation is ongoing. The cost methodologies indicated above are the ones used in practice by operators.					
Romania	RomTelecom	-	Yes	-	Current cost	LRAIC
		Vodafone Romania	-	Yes	Current cost	LRAIC
		Orange România	-	Yes	Current cost	LRAIC
		Telemobil	-	No	-	
		Cosmote	-	No	-	
Serbia (including Kosovo ¹)						
<i>Serbia</i>	Telekom Srbija		Not decided			
<i>Kosovo</i>	PTK		Yes		Benchmarking	Benchmarking
		PTK (Vala 900)		Yes	Benchmarking	Benchmarking
The former Yugoslav Republic of Macedonia	Makedonski Telekomunikacii A.D.	None	Yes	-	Current cost*	Fully Distributed Cost
	The cost orientation methodology is proposed in the secondary regulation adopted by the NRA. Implementation of LRIC cost accounting methodology is foreseen starting from July 2007.					

Country	SMP operators		Cost orientation imposition on SMP operators			
	Fixed	Mobile	Fixed	Mobile	Cost base	Cost standard
Turkey	Turk Telekom		Yes		Costs+ Benchmarking	LRIC (combined with international benchmarking)
		Turkcell		Yes	Costs+ Benchmarking	LRIC (combined with international benchmarking)
		Vodafone		Yes	Costs+ Benchmarking	LRIC (combined with international benchmarking)
		Avea		Yes	Costs+ Benchmarking	LRIC (combined with international benchmarking)
1) under UNSCR 1244						

Table 44 - Operators declared as having SMP on interconnection and imposition of cost orientation

Notes:

Albania: Based on the Law (No 8618 of 14.6.2000, Article 46) interconnection tariffs must be cost oriented. Since 2004, because no specific methodology for cost calculation has been developed TRE has imposed interconnection tariffs based on EU benchmarks.

Bulgaria: No interconnection market defined according to the Bulgarian Telecommunications Act in force.

4. Reference interconnection offer (RIO)

One of the key factors in enabling a competitive telecommunications market is the establishment of a reference interconnection offer from the operator with significant market power. This is an offer, which must be available to all alternative operators in a non-discriminatory manner. The table below shows that Bosnia & Herzegovina, Bulgaria, Croatia, Montenegro, Romania, the former Yugoslav Republic of Macedonia and Turkey have established and published such offers. In Kosovo, the incumbent prepared the first draft RIO in October 2005. It has been submitted to the NRA, and approval is expected before end of year 2006.

An even better indicator of a competitive market is the number of interconnection agreements that have actually been concluded. Romania can demonstrate a rather impressive environment with 110 agreements concluded for fixed-to-fixed network interconnection.

Albania has not yet established a RIO but a total of 47 interconnection agreements between fixed networks are in place. This is due to its very special situation with one incumbent operator and a large number of small operators, which operate only in rural areas.

In Bulgaria, sixteen interconnection agreements have been concluded between fixed telephony operators. In addition, a significant number of operators are active with international and national long distance calls using VoIP technologies. Such activities do not require authorisation or notification to the NRA. However, since they do not have interconnection rights they were originally interconnecting locally through ISDN retail subscriptions. Now they are increasingly interconnecting through other licensed operators (OLOs) and benefiting from their interconnection agreements.

There are cross-territory interconnection agreements in place between Telenor Serbia (Mobi63) in Serbia and mobile operators in Montenegro. Both Mobi63 in Serbia and Promonte in Montenegro are subsidiaries of Telenor.

In Turkey, 25 agreements have been concluded for fixed-to-fixed network interconnection. These are mainly between Turk Telekom and long-distance carriers and between the long-distance carriers themselves.

Country	Status of RIO	Number of interconnection agreements		
		Fixed – Fixed	Fixed – Mobile	Mobile - Mobile
Albania	Not available	47	2	1
Bosnia & Herzegovina	Published November 1, 2005	0	0	0
Bulgaria	Published	14**+2**	4	3
Croatia	Published April 1, 2006	7	7	3
Montenegro	Published	0	2	1
Romania	Published February 2003	110	80	6
Serbia (including Kosovo ¹⁾)				
<i>Serbia</i>	Not available	No	Negotiation between Telekom Srbija and Telenor on RIO is ongoing.	No
<i>Kosovo</i>	Incumbent submitted RIO to the regulator	0	0	0
The former Yugoslav Republic of Macedonia	December 1, 2005 NRA has approved the technical and legal part of RIO. February 2006, NRA has approved the financial part of RIO.	1	2	1
Turkey	Published	25 (between the incumbent and long distance telephony operators)	3	3
1) under UNSCR 1244				

Table 45 - Reference interconnection offer of fixed incumbent operator and number of interconnection agreements

Notes:

Bulgaria: * SS7 agreements (SS7 is the signalling protocol for PSTN), ** H.323 agreements (H.323 is an ITU recommendation for voice and multimedia calls on IP networks.) According to the Bulgarian legislation in force, only SS7 is considered for interconnection. H.323 agreements are submitted to CRC for the sake of information.

Croatia: Two more fixed-fixed interconnection agreements have been concluded since the previous report (bringing the total to 7).

Montenegro: Reference interconnection offer of Telecom Montenegro is published on December 2004 and it can be found on Telecom's website (www.telekomcg.com). Telecom Montenegro has interconnection agreements with both mobile operators in Montenegro (Promonte and Monet). Also, there is signed interconnection agreement between mobile operators.

Kosovo: Approval of RIO by the regulator expected December 2006.
The former Yugoslav Republic of Macedonia: The first interconnection agreement between Maktel and the major alternative fixed operator On.net, controlled by the Slovenian incumbent operator Telekom Slovenije, was signed on November 15, 2006. 2 additional fixed operators are finalizing the procedures for interconnection with Maktel.

5. Reference unbundling offer (RUO)

The local loops of the telephony network that connect individual subscribers with the nearest switch have particular regulatory significance. They often represent half of the investment in the telephony networks and although competitive access technologies are emerging, they represent a facility that is particularly difficult to duplicate. For this reason, it is often considered an essential facility that must be capable of being shared by alternative operators in order to enable efficient competition.

In addition, new transmission technologies have enabled the local loop to carry digital data at broadband speeds and competitive access to this resource has been deemed as an indispensable instrument to accelerate the growth of broadband access.

In the EU, this topic was deemed sufficiently important to justify the adoption²⁷ of a “Regulation on unbundled access to the local loop”²⁸ in 2000, which also set out a requirement for the publication of a reference offer. The regulation has subsequently been replaced by a corresponding requirement in the Access Directive²⁹.

The existence of a reference unbundling offer is thus an indication that local loop unbundling has been introduced and that the local loop facilities of the incumbent operator is being made available to alternative operators under non-discriminatory terms and conditions.

There are many different technical alternatives for how local loop unbundling can be implemented. The two main alternatives are:

1. Full unbundling, whereby the alternative operator takes full control over the local loop.
2. Shared unbundling, whereby the alternative operator typically gets access to the xDSL channel, while the incumbent operator keeps the normal telephony channel.

In addition, there is another option for access to the local loop based on bitstream, whereby the incumbent operator hands over the digital traffic over the xDSL channel according to an agreed standard. Lastly, there is also wholesale line rental, which is a resale arrangement whereby another operator can perform the billing function, while the actual operation is carried out by the incumbent operator.

Each of these main alternatives can be implemented in different ways and there can be different solutions as to how and where the traffic is handed over from the incumbent to the alternative operator.

Only Romania has local loop unbundling in place and can demonstrate that around 45,000 loops have been unbundled. In Bulgaria, there has been a dispute over the RUO, and its practical implementation has been delayed. The legal requirement in Croatia went into force on October 20, 2005, but there are no practical results yet. In the former Yugoslav Republic of Macedonia the RUO was approved in April 2006, but there are as yet no practical examples of unbundled local loops.

Other countries and geographic units have adopted legal requirements for local loop unbundling, but have not yet started practical implementation. This is the case for Bosnia & Herzegovina. Kosovo and Turkey have established planning dates for its introduction.

In the other countries and geographic units, local loop unbundling has not yet been decided.

Country	RUO legally compulsory	When is RUO expected to become compulsory	Status of RUO (Number of unbundled loops)	Does RUO include bitstream access via xDSL?	Number of loops with bitstream access by alternative operators
Albania	No	Not decided	-	-	-
Bosnia & Herzegovina	Yes	January 1, 2008	-	-	-
Bulgaria	Yes	January 1, 2005	1	No	0
Croatia	Yes	October 20, 2005	-	No	-
Montenegro	No	Not defined yet	0	Not defined yet	0
Romania	Yes	July 2004	45,346 xDSL lines*	No	-

²⁷ A regulation can be adopted quite quickly if there is agreement between the European Commission, the Council, and the Parliament. When adopted, it is directly applicable at the national level. This is in contrast with directives, which typically takes a year or two to be adopted, followed by a period of transposition at the national level.

²⁸ Regulation (EC) No 2887/2000 of the European Parliament and of the Council of 18 December 2000 on unbundled access to the local loop

²⁹ Article 9.4 of the Access Directive (2002/19/EC)

Country	RUO legally compulsory	When is RUO expected to become compulsory	Status of RUO (Number of unbundled loops)	Does RUO include bitstream access via xDSL?	Number of loops with bitstream access by alternative operators
Serbia (including Kosovo ¹)					
<i>Serbia</i>	No	Not decided yet	-	Yes, access via ADSL	Several alternative providers offer bitstream access to the users.
<i>Kosovo</i>	No	2007	-	-	-
The former Yugoslav Republic of Macedonia	Yes	April 2006	-	-	-
Turkey	Draft RUO of the incumbent has been submitted to TA. The public consultation process has been completed and the RUO will be in force after approval by the TA	Q3 2006	-	-	-
1) under UNSCR 1244					

Table 46 - Reference unbundling offer (RUO) of fixed incumbent operator

Notes:

Bosnia & Herzegovina: The current situation is that the RUOs from the three incumbent operators should be approved by December 2007 and that the Rule on LLU and RUO will become a commercial reality in January 2008.

Bulgaria: By Decision No 1459/11.07.2006 CRC has approved a new Reference Unbundling Offer. BTC has made an appeal to the Supreme Administrative court. BTC and the operators are currently negotiating to align the agreements that have already been signed with the new RUO.

By the end of July 2006, 3 LLU agreements had been signed between BTC and other operators (Orbitel, Sectrum Net and Nexcom). At the beginning of 2006, BTC and Orbitel have signed a collocation agreement for the purposes of the LLU.

Croatia: The new RUO does not include bitstream access, but includes shared access. Bitstream access offer will be an annex to the offer for Internet access and it is going through an approval process and is expected to be approved in April 2007.

Montenegro: Activities on the reference unbundling offer were planned for 2005. Current status – in progress.

6. National roaming

When a country decides to increase its number of mobile operators, it is not unusual to provide some regulatory assistance to the new entrant by requiring the already established operators to allow national roaming on their networks. Otherwise, it would be very difficult for the new operator to get customers before achieving a degree of coverage comparable to the other operators.

National roaming requirements are not intended to be a permanent solution and normally have some conditions attached, such as:

- achievement of a minimum level of network coverage before national roaming is permitted;
- a maximum period during which the roaming is allowed;
- charges to be paid for the roaming services.

The table below shows that Bulgaria, Croatia, Kosovo and Turkey have such national roaming requirements in place.

Bosnia & Herzegovina also has national roaming requirements, but for a different reason. Their mobile operators operate regionally, and the national roaming requirement is intended to ensure that the regional

operators have national coverage. This is a requirement that has a political as well as a telecommunications regulatory dimension.

Country	National roaming requirements	Practical implementation
Albania	National roaming not required.	None
Bosnia & Herzegovina	Regional 2G operators must have national roaming with each other to ensure national coverage.	Yes, between regional 2G operators
Bulgaria	Licensed UMTS operators, having 2G networks with national coverage, are obliged to provide national roaming for a new operator, having no GSM network and having reached network coverage by population of 20% and having granted data transfer speed 144 Kbit/s.	None
Croatia	2G operators are obliged to provide national roaming for new 2G operators for at least three years after the new operator has reached a coverage of at least 20% of the population.	National roaming 2G – 2G: VIPnet – Tele 2
Montenegro	Not regulated	None
Romania	Not regulated	None
Serbia (including Kosovo ¹)		
<i>Serbia</i>	No national roaming requirements for 2G existing mobile operators	None
<i>Kosovo</i>	Not regulated	None
The former Yugoslav Republic of Macedonia	Not regulated	None
Turkey	2G operators are required to satisfy reasonable, economically proportionate, and technically feasible roaming requests of other operators working in the same field for permitting the use of the customer equipment of the requesting operator on their telecommunication system.	There is no roaming agreement between 2G operators.
1) under UNSCR 1244		

Table 47 - National roaming requirements for 2G operators

Note:

Croatia: National roaming between VIPNet and Tele2 does not take place in the Zagreb area.

7. Rights of way

Turkey has established a new legal framework for rights of way in 2006. A new ordinance clarifies in particular the procedures to be followed for access to private lands.

All the other geographic units have frameworks in place, which establish non-discriminatory rights of way for operators of public telecommunications networks. However, few of the frameworks provide very convincing and operator friendly solutions for network builders. When compared with some of procedures available in countries in Western Europe, it appears that the solutions suffer from:

- decentralised procedures requiring many different local and regional approvals;
- lack of clearly stated time limits for approval procedures;
- lack of efficient expropriation procedures applicable to public networks.

Romania has introduced new draft legislation on November 1, 2005, which would alleviate such shortcomings.

Country	Does legal framework provide for		
	Non-discriminatory rights of way?	Procedures for access to public land Responsible authorities?	Procedures for access to private land
Albania	Law no 8618 dated. 14.6.2000 Article 12: "The right to use public and private property"	Public land is used by public operators upon application to regional authorities Disagreements between a public operator and any authority are resolved in a legal court.	A public telecommunications operator, in conformity with the legislation in force, may enter into negotiations with owners of private land and facilities.
Bosnia & Herzegovina	Yes, under condition to apply for construction permission from the Municipal Authority and if telecommunication infrastructure corridors are planned in Country Plan for that Municipality.	If construction permission is obtained, the operator may use public land. Ref. Articles: 9, 14, 22, 34, 36 and 49 of the Law on Country Planning and Use of Land in Federation of Bosnia and Herzegovina ("Official gazettes FBiH", no. 52/02). Law on Country Planning in Republic Srpska ("Official gazettes RS", no. 84/02). Law on City Construction Land ("Official Gazettes FBiH", no. 67/05), Law on City Construction Land ("Official Gazettes RS", no. 86/03). Municipal authorities are responsible authorities where applicant will be advised on procedure.	The procedure defined in the Law must be applied to access private land. If public interest is established, expropriation may be applied, otherwise the operator must have permission from landowner.
Bulgaria	Yes, according to the Telecommunications Act public operators have the right of way through public and private properties and access to private property. This provides a sound legal framework but it is not efficient because there is no adequate compliance with the Urban Development Act (UDA) and relevant secondary legislation.	According to the TA, the concrete parameters for execution of rights of way shall be determined by an order of the regional governor, respectively of the mayor of the municipality.	The Telecommunications Act does not provide for expropriation. The rights of way must be agreed between the operator and the landowner. If no agreement, the decision is with the mayor of the municipality in compliance with the provisions of the UDA. However, this law only provides rights for property owners, not for operators.
Croatia	Yes. Telecommunications Act, article 21, guarantees that all broadcasters and telecommunication operators have a right to access public lands, following appropriate procedures, as described in the article 21.	Telecommunications Act, article 21(1) provides for use of public land after obtaining an approval from the state administration body responsible for that particular resource. Article 21(2) ensures that, in cases where this approval could not be obtained, and in which a public interest is established, there is a possibility of expropriation of the public or private land or real estate, under the general expropriation law.	The operator must have permission from the landowner. Request for approval can be according to article 21(1) of the Telecommunications Act, or expropriation procedure under general expropriation law, according to article 21(2). In accordance with the provisions of the Act of the Expropriation, operators can acquire ownership or usufruct of the real estate, when the usage is of interest of the Republic of Croatia.

Country	Does legal framework provide for		
	Non-discriminatory rights of way?	Procedures for access to public land Responsible authorities?	Procedures for access to private land
Montenegro	Yes All public network operators have non-discriminatory rights of way established by law (Chapter VI of Telecommunications Law of 2000).	Public land may be used by public operators upon application to an appropriate state or municipality administration.	No No expropriation procedure is defined by the Law.
Romania	Yes, for access to public property Article 26 par. (2) of Government Emergency Ordinance No. 79/2002 includes a non-discrimination clause. NB A new Rights of Way Bill is under way to be adopted. It will establish a detailed procedure for access to public property, including the conditions for the shared use of the facilities.	Yes Article 23 par.(1) of Government Emergency Ordinance No. 79/2002 establishes that public property can be used when certain public interest conditions are met: <ul style="list-style-type: none"> • it is in the public interest; • it does not go against city planning or the protection of the environment; • it is based on agreement by the parties or a court decision. Article 27 of Government Emergency Ordinance No. 79/2002 sets a time limit of four months for negotiations after which the courts will decide. Negotiations involve local governments (mayor or local council) or central government pending of ownership of specific land. Also, the owner or the holder of the administration right shall be in charge of the publication of the court decision. A copy of the court decision shall be delivered to ANRCTI, which is must make it available to any interested party.	Yes Article 23 par.(2) of Government Emergency Ordinance No. 79/2002 establishes that private land can be used if: <ul style="list-style-type: none"> • there is insignificant impact on the private property; • there are already installations and an additional installation will have insignificant impact; • the work does not contravene town or county planning; • there is an agreement by the parties or through court decision. Article 27 of Government Emergency Ordinance No. 79/2002 sets a time limit of four months from application to the proprietor after which the courts will decide.
Serbia (including Kosovo ¹)			
<i>Serbia</i>	The New TA specifies that all public network operators have non-discriminatory rights of way.	No	Article 87 of the Telecommunications Act provides legal support for access to private land.

Country	Does legal framework provide for		
	Non-discriminatory rights of way?	Procedures for access to public land Responsible authorities?	Procedures for access to private land
<i>Kosovo</i>	Yes All public network operators have non-discriminatory rights of way established by law.	Yes Public land may be used by public operators upon application to municipal authorities. Under Article 27 of the Law on Telecommunications, TRA may establish rules for the use of publicly and privately controlled property for telecommunications services and service providers.	Expropriation procedures may be used.
The former Yugoslav Republic of Macedonia	Yes All public network operators have non-discriminatory rights of way established by law.	State land may be used by public operators upon application to a responsible department with the Ministry of Finance for the purpose of establishing the right of use or defining the expropriation procedures.	Expropriation procedures may be used
Turkey	Yes	No	Yes
1) under UNSCR 1244			

Table 48 - Rights of way

E. Regulations – Universal service

The information in this section has July 1, 2006 as its reference date except where a different date is mentioned.

1. Scope of universal service

All countries and geographic units have now defined a scope of universal service in their legislation that corresponds broadly with the requirements of the EU acquis. However, Albania has only set out general requirements that do not include specific details for access to networks and telephony services. There is an intention to define the scope of universal service more specifically at a later stage.

Country	Network access	Voice telephony service access	Emergency services	Payphones	Common subscriber directories	Directory enquiry service	Legal base for disabled users
Albania	No	No	Yes	Yes	Yes	No	Yes
Bosnia & Herzegovina	Yes	Yes	Yes	Yes	Yes	Yes	See note
Bulgaria	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Croatia	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Montenegro	Yes	Yes	Yes	Yes	Yes	Yes	See note
Romania	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Serbia (including Kosovo ¹)							
<i>Serbia</i>	Defined in law, not yet applicable	Defined in law, not yet applicable	Defined in law, not yet applicable	Defined in law, not yet applicable	Defined in law, not yet applicable	Defined in law, not yet applicable	Yes
<i>Kosovo</i>	Yes	Yes	Yes	Yes	Yes	Yes	See note

Country	Network access	Voice telephony service access	Emergency services	Payphones	Common subscriber directories	Directory enquiry service	Legal base for disabled users
The former Yugoslav Republic of Macedonia	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Turkey	No	Yes	Yes	Yes	Yes	No	Yes
1) under UNSCR 1244							

Table 49 - Scope of USO

Notes to column on legal base for disabled users:

The final column of this table identifies whether or not the national telecommunications act includes provisions that are intended to assist disabled users. The following regimes are in place:

Albania: The entries reflect the situation as set out by Albanian legislation. Some of the requirements are not yet applicable. Bosnia & Herzegovina: the current arrangement includes special economic and technical conditions for disabled users. The monthly subscription fee includes 100 pulses free of charge. There are also pay phones especially adapted for disabled users. Special conditions for disabled users have been included in a document on universal service, which is not yet approved.

Bulgaria: According to Article 93 of the Telecommunications Act, the "provision of access to fixed voice telephone services under special conditions and/or provision of terminals, where appropriate, for the disabled or underprivileged people" is one of the elements of the universal telecommunications service.

Croatia: The legal requirement³⁰ is that "the telecommunications infrastructure and telecommunications equipment shall be designed, produced, installed and constructed in such a way as to also enable access and availability of public telecommunications services to disabled people". Two ordinances have been adopted on Universal Service: Ordinance on Unified Number for Emergency Services (September 2005), and an Ordinance on Universal Telecommunications Services (October 2005). The Agency has designated HT as the Universal Service Provider for 5 years starting from November 28, 2005.

Kosovo: According to the Law on Telecommunications, Section 21, TRA may establish additional conditions for authorizations, based upon class or category of services, which may include special arrangements for disabled people. Under Section 49, TRA is also authorized to adopt secondary legislation on the scope of USO, which may include specific measures for people with disabilities.

Other notes:

Montenegro: Secondary legislation is under preparation. Agency for telecommunication and postal services of Republic of Montenegro will compile the Draft Rulebook for Universal service until the end of this year (public consultation process is still in progress) and submit it to the Ministry of Economy of the Republic of Montenegro.

Serbia: Article 49 of the Telecommunications Law provides for a mandatory list of services that should be included in the scope of universal service. The universal service framework, however, should be approved through a separate decision by the Ministry on recommendation from RATEL.

2. Designation of universal service providers

Universal Service Directive 2002/22/EC requires any designation of a universal service (US) provider to be carried out by means of "an efficient, objective, transparent and non-discriminatory designation mechanism, whereby no undertaking is a priori excluded from being designated". These provisions enable the designation of one or more undertakings to guarantee the provision of universal service and may also designate different undertakings or sets of undertakings to provide different elements of universal service and/or to cover different parts of the national territory.

The table below shows the designation of the universal service providers in SEE countries:

- which operator(s) has been designated to provide the US obligations;
- the designation mechanism for the US providers and the legal basis;
- if there are some restrictions for a mobile operator to bid for the provision of a connection to the public telephone network at a fixed location.

³⁰ Article 11 of the Telecommunications Act of 2003 as amended in 2005.

Country	US providers	Designation mechanism for the US provider(s)	Eligibility of mobile operators for US designation
Albania	All public telecommunications operators are obliged to provide Emergency Services to their subscribers free of charge.	No designation mechanism	Yes
	Albtelecom (fixed incumbent) has an obligation to offer lower tariffs for services provided to disabled people.	Subsidised from State budget	No
	Public fixed telecommunication operators have obligations to provide public payphones in the licensed areas. The number of public payphones for the administrative zones are part of the license	No designation mechanism	No
	All public telecommunications operators, have territory coverage obligations for the licensed area.	No designation mechanism	Yes
Bosnia & Herzegovina	None	Not decided	No
Bulgaria	Bulgarian Telecommunications Company AD (Incumbent operator with SMP on the fixed networks and services market)	Legal basis: Telecommunications Law and the individual licence of the operator The operators having significant market power on the market for fixed telephone networks and services are designated by the CRC as universal service providers.	No
Croatia	HT-Hrvatske telekomunikacije d.d.	The Agency Council can decide one or more providers of public voice services to provide USO, or it can select the most favourable bidder for providing universal services on the basis of a public tender If as public voice service provider has a market share above 80%, the Agency Council obliges that provider to provide USO, without public tender. The public tender procedure can be invoked even if there is public voice service provider with market share above 80% in justified cases, especially for geographically limited areas or on the request of other public voice service providers. On 28 Nov. 2005, the Agency designated T-HT as a USO provider for five years term, without public tender.	Yes
Montenegro	None	Not decided	Yes (Draft version of rulebook)

Country	US providers	Designation mechanism for the US provider(s)	Eligibility of mobile operators for US designation
Romania	USO providers include: <ul style="list-style-type: none"> • GSM operators • Wire operators • Wireless (Radio) operators • Satellite operators. Specific examples are Orange Romania, Rartel, Radiocom and Vodafone by means of telecenters (see note)	Public tender (ANRC Decision no. 1074/2004)	Yes
Serbia (including Kosovo ¹)			
<i>Serbia</i>	None	Not decided	Yes, RATEL can designate any public telecommunications operator (Telecommunications Law, Article 50).
<i>Kosovo</i>	PTK. (Incumbent operator with SMP on the fixed networks and services market)	Not decided	Yes
The former Yugoslav Republic of Macedonia	None	Under article 35 of the Electronic Communications Act, AEC may designate one or several universal service providers, following a public tender procedure.	Yes
Turkey	Turk Telekom (in accordance with the concession agreement)	New framework under the Universal Service Law No. 5369 of June 16, 2005: On Jan. 27, 2006 the Ministry of Transport issued a draft ordinance on principles and procedures regarding the provision of universal services. The ordinance envisages that the Ministry can impose universal service obligations on other operators than Turk Telekom and use a tender procedure for that purpose. The Ministry also has authority to impose temporary universal service obligations on operators that have more than 70% market share in a given geographic market.	Yes
1) under UNSCR 1244			

Table 50 – Designation of US providers

Notes:

Bosnia and Herzegovina: Article 12 of the Communications Law provides for the scope of the universal service obligations and the designation mechanism for the universal service providers to be defined in a secondary legislation approved by the Council of Ministers. RAK has prepared a document on universal services which is not yet approved by Council of Ministers.

Romania: The Romanian USO legislation provides for the possibility to ensure the universal access to telephone, facsimile and Internet services in rural areas by means of so-called telecentres, serving the needs of a certain community. A telecentre is a public site endowed with at least 2 telephone sets, 2 computers and one fax machine, within which the end-users can make and receive local, national and international calls. A telecentre may also provide facsimile and data communications services at a transfer rate allowing functional access to the Internet. Between December 2004 and December 2006 ANRC organised tenders for the installation of telecentres in 331 localities. The telecentres in 124 of these localities are already functioning; the rest are due to be commissioned by mid-2007.

3. USO financing

Few of the geographic units have implemented compensation schemes for universal service cost in practice. Romania has done so, while in Bulgaria the universal service compensation fund was established in May 2005, but the incumbent operator has so far not submitted any claim for compensation.

The universal service cost compensation scheme in Romania has some innovative characteristics that merit additional comments.

- The contributions from the operators are constrained so that small operators with revenue less than €3 million do not have to pay. Larger operators paid 0.8% of turnover³¹ in 2004 and will pay 0.5% from 2005 to 2010. However, given that the contributions must not exceed a threshold of €2 million in 2005 and €3 million in 2006, the actual percentage applied to all contributors is calculated according to the formula: $\text{threshold}/\text{largest turnover}$ ³².
- The funds collected are used in particular to subsidise the establishment of telecentres in rural communities where no telecommunications exist. Each telecentre shall include at least two computers with operational access to the Internet, one facsimile machine, one uninterruptible power supply (UPS) device and two telephones. The assignment of operators for the establishment of telecentres is based on competitive bidding. Funds are also used for public telephones in rural areas.
- Mobile operators are eligible to receive compensation for the provision of universal service undertakings. Moreover, the mobile operator Orange Romania, the winner of the first round of auctions, was designated as universal service provider for the provision of access to the public telephone network, at a fixed location, by means of telecentres.

Turkey introduced a legal requirement for universal service funding under the authority of the Ministry of Transport and Communications in a new law of June 16, 2005. However, the net cost of universal service has not yet been calculated, no payments have been made. Operators with universal service obligations (currently Turk Telekom) has until April 2007 to provide the Ministry with the necessary information.

Moving on to other countries and geographic units, Croatia, Montenegro, Kosovo and the former Yugoslav Republic of Macedonia have adopted legislation that will permit them to introduce compensation schemes in the future.

Only Croatia, Montenegro, Romania and the former Yugoslav Republic of Macedonia have implemented the universal service provisions in such a way that the law keeps the door open for participation in the provision of universal service by mobile operators.

NB. According to Article 8 and Recital 8 in the Universal Service Directive, mobile networks may be used for the provision of universal service. This could potentially reduce the cost of universal service provision.

Albania and Bosnia & Herzegovina do not have legislation that enables cost compensation for universal service providers.

Table 51 below provides the status on whether cost compensation schemes are stipulated in the law and whether it is actually used in practice. In addition, the table also provides information on the existence of a legal provision on “play or pay”. Where such a provision exists, there is an opportunity for an operator to invest in universal service provision instead of paying cost compensation to another operator.

³¹ The turnover calculation is defined to exclude revenues obtained from the interconnection and roaming services provided on the wholesale market to the mobile telephony operators from outside Romania for their users while roaming in a Romanian network,

³² If the percentage applied to the largest turnover surpasses the threshold of 2 million euros for 2005 and 3 million euros for 2006, then the percentage (the 0.5%) is reduced to an amount which is applied to the largest turnover would not surpass the threshold. Therefore, this new percentage is calculated by dividing the threshold to the largest turnover (the outcome will be less than 0.5%) and is applied to all the contributors to the Universal Service Fund, taking into account the principle of non-discrimination.

Country	USO cost compensation scheme stipulated by law	Compensation scheme applied in practice	Legal provision for play or pay
Albania	No	No	No
Bosnia & Herzegovina	No	No	No
Bulgaria	Yes Article 104 – 112 of the Telecommunications Act	BTC has provided USO without compensation until now. Recovery scheme may be implemented if BTC applies for its proven US net costs since 2005. The first application for recovery of the US net costs for 2005 has had to be submitted by June 30, 2006 (Article 111 of TA); no submission so far.	No
Croatia	Yes	No	No
Montenegro	Yes (Draft version of rulebook)	No	Yes (Draft version of rulebook)
Romania	Yes <i>According to Article 13 par. (2) of Law No. 304/2003, the details of the cost compensation scheme are decided by the NRA.</i>	Yes Year 2004 Year 2005	No
Serbia (including Kosovo ¹)			
<i>Serbia</i>	Yes, USO cost compensation is foreseen by the Law (Article 50).	No	NRA should adopt it by the secondary legislation.
<i>Kosovo</i>	Yes	No	Yes
The former Yugoslav Republic of Macedonia	Yes	No	No
Turkey	Yes	Yes	Yes
1) under UNSCR 1244			

Table 51 - USO cost recovery scheme and application of the mechanism in practice

Notes:

Croatia: Based on relevant Telecommunications Act provisions, Article 29 of the USO ordinance specifies that the Agency shall create the USO fund upon minister's proposal. However, the Agency cannot establish the Fund if there is only one designated USO provider, or if there is a designated provider with more than 80% market share. All public voice service providers with more than 5% market share are obliged to pay to the Fund, in proportion to their respective market shares. (Note that this means that all providers with obligation will pay the same percentage of annual revenues. The percentage is set once a year by the Agency.) However, designated USO provider with more than 80% market share has no right to restitution.

Montenegro: Secondary legislation still under preparation. Agency for telecommunication and postal services of Republic of Montenegro will compile the Draft Rulebook for Universal service until the end of 2006 (public consultation process is still in progress) and submit it to the Ministry of Economy of the Republic of Montenegro.

Turkey: Although it is indicated that the USO Compensation scheme is applied, the net cost of universal service has not been calculated yet. Universal service revenues are being collected but no payments have been made. Turk Telekom has until April 2007 to provide the Ministry with the necessary information about the cost of providing the service.

4. Quality of service

Article 11 of the Universal Service Directive provides a requirement for NRAs to ensure that operators with SMP publish their quality of service (QoS) achievements according to standardised³³ QoS parameters, definitions, and measurement methods. The following Table 52 explains the various obligations on QoS that exist. It looks specifically at the existence of QoS obligations, the standards to be followed as well as the information on the publication of the measurements.

The information indicates that QoS obligations exist in most countries and geographic units and that the ETSI EG 201 standard is followed. However, only about half of the countries and geographic units make measurements available to consumers, as was the intention of the Universal Service Directive.

Country	NRA sets out QoS to SMP and other operators	SMP operators measure QoS according to	Measurements for most recent year published by NRA/SMP operator	Last publication in the national Official Journal (or other)
Albania	Yes	ETR 138/1994 ITU-T E426 WTDR-1994	Yes, based on licence conditions	http://www.ert.gov.al/ERT_alb/statistic/QoS.htm
Bosnia & Herzegovina	Yes	ETSI EG 201	No	No publication
Bulgaria	Yes	ETSI EG 201	Part of the QoS parameters are published in the CRC Annual Report 2005 (the report is adopted by CRC by Decision 1441 / 11.07.2006)	Data for the end of 2005 were published in the CRC annual report 2005.
Croatia	SMP and other operators	ETSI EG 201 769-1	Yes	NRA Internet pages (http://www.telekom.hr)
Montenegro	Yes (Draft version of rulebook)	ETSI EG 201 (Draft version of rulebook)	Yes (Draft version of rulebook)	No publication yet
Romania	Yes	Some minimal quality requirements are set out in ANRC President's Decision no. 138/2002.	No obligation to publish	-
Serbia (including Kosovo ¹)				
<i>Serbia</i>	NRA has not yet addressed the topic.	Community of YPTT technical requirements	No obligation to publish	"General Plan of Telephone Network", CYPTT, 1999 and 2005
<i>Kosovo</i>	Yes	ETSI EG 201	No obligation to publish	No publication
The former Yugoslav Republic of Macedonia	Yes	ETSI EG 201 769-1 (by-law document in preparation)	No obligation to publish	No publication

³³ The standards are set out in Annex III to the Universal Service Directive. This annex specifies ETSI EG 201 769-1 version 1.1.1 (April 2000)

Country	NRA sets out QoS to SMP and other operators	SMP operators measure QoS according to	Measurements for most recent year published by NRA/SMP operator	Last publication in the national Official Journal (or other)
Turkey	Yes, TA sets out QoS parameters for fixed operators having SMP and for all mobile operators.	ETSI EG 201 769-1 parameters for fixed line operators Concession Agreement and some of the ETSI EG 201 769-1 parameters for all mobile operators	Not yet, but obligation to publish sufficient and up to date information by operators is set out with the new QoS Ordinance.	Ordinance on QoS went into force on March 3, 2005. It requires operators to publish the related information every three months. Therefore, fixed line operators and all mobile operators QoS parameters had been sent to TA and these parameters were examined by TA.
1) under UNSCR 1244				

Table 52 - Application of Quality of service

Notes:

Albania: ETSI EG 201769 is in implementation phase.

Montenegro: Agency for telecommunication and postal services of Republic of Montenegro will issue the Rulebook for Quality of service until the end of this year (public consultation process is still in progress).

Romania: According to ANRC President's Decision No. 138/2002 some minimal quality requirements were imposed for the provision of the following electronic communications services:

- Publicly available telephony service
- Leased lines services
- Electronic communications services provided on the ISDN network
- Electronic communications services provided through networks using IP protocol.

The other table on QoS provides the actual results of the key measurements. These indicators provide useful information on the technical status of the network.

Some independent observers have questioned whether all the QoS information has been provided according to the ETSI standards. For example, some of the supply times may be a theoretical figure. It is not clear how the calculation has been carried out for subscribers that are on a waiting list or not easily connectable.

It would have been interesting to report on the time required to change from one operator to another. This indicator is not yet explicitly defined as a QoS requirement in the majority of countries and geographic units. This is perhaps understandable in view of the early stage of competition. Croatia reports that the change of operator should take five days when number portability is implemented.

However, with these reservations, the information provides a very wide range of performance characteristics.

Country	Supply time for initial connection	Fault rate per access line per year	Fault repair time (hours: minutes)	Unsuccessful call ratio	Call set-up time (seconds)
Albania	Not reported	0.044	0:50	0.15% for local calls 1.73% for national calls 1.73% for international calls	Not reported
Bosnia & Herzegovina	5 – 16 days It depends on technical possibilities	0.21 – 0.23	26 hours	0.29 – 0.4% for local calls 0.83 – 1.09% for long distance calls 3.8 – 5.31 for international calls	0.58 seconds

Country	Supply time for initial connection	Fault rate per access line per year	Fault repair time (hours: minutes)	Unsuccessful call ratio	Call set-up time (seconds)
Bulgaria	19 days	0.028	Up to 8 hours	0.41%	1.93
Croatia	55 calendar days	0.12*	28 hours*	1.01% total** 0.97% national calls 1.16% calls to national fixed network 1.16% calls to HT fixed network 0.18% calls to national mobile network 2.51% international calls	1.79 total** 1.71 national calls 0.87 calls to national fixed network 0.87 calls to HT fixed network 4.88 calls to national mobile network 4.60 international calls
Montenegro	Normally 1-2 days Max 7 days, if technical conditions are fulfilled	N/A	4	0% for local N/A for long distance	0.2 sec local calls
Romania	5 days for 95% of requests 5 days for 99% of requests	0.1509	8:15 for 80% of access line cases	1.82% for local calls 2.49% for national calls 6.86% for international calls	1.93 local calls (average) 2.50 national calls (average) 6.76 international calls (average)
Serbia (including Kosovo ¹⁾)					
<i>Serbia</i>	15 days (if technically possible)	0.300	61 50 (latest)	1.01% for local calls 5.7% for long distance calls	1.50
<i>Kosovo</i>	6.4 days	0.003	24	0.2%	0.50
The former Yugoslav Republic of Macedonia	5 days for answering the subscriber request 98.82% 7 days for instalment after signing the contract 99.57%	0.0897	95.51% of submitted faults are repaired within 1 working day	0.23% for local calls 3.21% for long distance calls 0.00% for international calls	3810 msec fixed to mobile 3461 msec international traffic
Turkey	3 days	Urban area: 0.058% Rural area: 0.133%	Urban area 15.99 hours Rural area 37.33 hours	7% for international traffic 1.2% for national traffic	2-3 sec for international calls
1) under UNSCR 1244					

Table 53 - ETSI standardised QoS indicators (1-5) of fixed incumbent operator

Notes:

Albania: The information provided refers to the first quarter of year 2006.

Fault rate per access line – is defined as in ETSI ETR 138 (July 1994) article 5.1). Unsuccessful call ratio – is defined as in ETSI ETR 138 (July 1994) article 5.2)

Bosnia & Herzegovina: The indicators are given as a range when they vary between the three incumbent operators.

Bulgaria: The information presented is the situation on December 31, 2005.

Croatia: *Unlike previous values where different methodology was used, these values are based on the official ETSI EG201 769-1 (2000-10) recommendation.

The statistics is valid for the period from January 1 to July 31 2006.

Supply time for initial connection – the value represents the worst case of the 95% of completed orders for the basic service (PSTN).

Fault rate per access line per year – the value represents the ratio for the basic service (PSTN).

Fault repair time – the value represents the worst case of the 80% of repaired valid faults on access line for the basic service (PSTN).

**Values are based on the official ETSI EG201 769-1 (2000-10) recommendation.

The statistics is valid for the period from January 1 to July 31 2006.

UCR and CST parameters are based on measurements done on all real traffic on Local Exchanges

TOTAL - all traffic (national, international, mobile)

NATIONAL – national traffic (fixed and mobile)

NATIONAL FIXED – national traffic for fixed network

HT FIXED NETWORK – national traffic for HT fixed network

TRAFFIC TO NATIONAL MOBILE NETWORK – traffic to all national mobile operators

INTERNATIONAL NETWORK – international traffic

Romania: Reference dates:

Supply time for initial connection – whole year 2005

Fault rate per access line per year – trimester II 2006

Fault repair time (hours: minutes) – trimester II 2006

Unsuccessful call ratio – trimester II 2006

Call set-up time (seconds) – trimester II 2006

F. Telephony market structure

The information presented in this section has January 1, 2006 as its reference date except for information that covers a complete year in which case the reference year is 2005.

1. Fixed network ownership

The breakdown of the ownership structure for the fixed incumbent operators is given in Table 54 below. The only countries that have completely privatised the incumbent operator are Bulgaria (although the State has retained a 'golden share') and Montenegro. The Bulgarian privatisation was completed in June 2004 when 65% was sold to Viva Ventures, a subsidiary of the US private equity fund Advent International. 34.78% of the shares are in public ownership via the Bulgarian stock exchange.

In Albania, the incumbent operator, Albtelecom, is 100% state owned and the Ministry of the Economy, Trade and Energy performs the 'ownership function'. In July 2004, Government decision 416 defined that 76% of Albtelecom shares would be sold, including the mobile branch "Eagle Mobile". The tender for privatization of Albtelecom was conducted in mid-2005, and was won by the Turkish company "Calik Enerjije". The privatization procedures were not approved by the parliament (an external audit revealed violations in the tender procedure). The Albanian government is currently negotiating a review of the sale contract points with "Calik Enerjije". If negotiations fail, a new tender will be announced. A group of Albanian businessmen have promised that they will offer a bid of 200 million euros to the Government in case the agreement with the Turkish company is cancelled.

In Croatia, Romania, and the former Yugoslav Republic of Macedonia, the State has less than a 50% holding. Deutsche Telekom is the strategic partner in Croatia (51%) and the former Yugoslav Republic of Macedonia (via Magyar Telekom (51%)), and Hellenic Telecommunications Organisation (OTE Greece) is the strategic partner in Romania with 54.01%.

In Bosnia & Herzegovina, there are three incumbent operators. BH Telecom (Sarajevo), which is 90% State owned (the Federal Ministry of Transport and Communications performs the ownership function) and 10% has been floated on the national stock exchange. Telecom Srpske (Banja Luka), which is 65% State owned (the Ministry of Traffic and Communications of Republika Srpska performs the ownership function) and 20% has been floated on the national stock exchange, 10% is held by a pension fund and the remaining 5% is held by a restitution fund. Hrvatske Telekomunikacije (Mostar), which is 62.76% State owned and Hrvatske Telekomunikacije Zagreb and Hrvatska Posta Zagreb own 30.29% and 6.95% respectively.

In March 2005 the Government of Montenegro sold its total shareholding in Telecom Montenegro to Magyar Telekom. Magyar Telekom now has a 76.53% shareholding. Private investors hold 17.4% and 6.07% is quoted on the Stock Exchange.

In Serbia, the State owns 80% of Telecom Serbia and OTE owns the remaining 20%. JP PTT Serbia, the organisation that holds the shares in Telecom Serbia, also holds a significant stake in Mobtel, which competes with Telecom Serbia's mobile operations.

In Kosovo, UNMIK is responsible for the 100% state ownership of PTK through the Kosovo Trust Agency (KTA). The KTA is a provisional body established by UNMIK regulation 2002/12.

Country Name of operator	State ownership Ownership share	Strategic partner Name of partner Ownership share	Investors Name (if known) Ownership share	Public Ownership share (Stock Exchange)
Albania • Albtelecom sh.a	Ministry of Economy, Trade and Energy 100%	No	No	0%
Bosnia & Herzegovina: • BH Telecom d.d. Sarajevo	Federal Ministry of Transport and Communications 90%	No	No	10%
• Telekom Srpske a.d. Banja Luka (see note)	Ministry of Traffic and Communications of Republika Srpska 65%	No	Pension fund 10% Restitution fund 5%	20%
• Hrvatske Telekomunikacije d.o.o. Mostar	Federal Ministry of Transport and Communications 62.76%	HT- Hrvatske Telekomunikacije d.d. Zagreb 30.29%	Hrvatska Pošta d.d. Zagreb 6.95%	-
Bulgaria	Ministry of Transport - golden share	Viva Ventures 65%	-	34.78%
Croatia • HT- Hrvatske Telekomunikacije d.d. (Croatian Telecom Inc.)	Government 42%	Deutsche Telekom 51%	Fund for homeland war veterans 7%	-
Montenegro	0.00%	Magyar Telecom 76.53%	Investors and citizens 23.47%	
Romania • S.C. ROMTELECOM S.A.	Ministry of Communications and Information Technology 45.99%	OTE Greece 54.01%	-	-
Serbia (including Kosovo ¹)				
<i>Serbia</i>	Public enterprise of PTT traffic "Serbia" owns 100% of JP PTT Srbija which owns 80% of the operator.	Hellenic telecommunications organization a.e. (OTE) 20%	-	-
<i>Kosovo</i>	UNMIK through Kosovo Trust Agency (KTA) 100%	None	None	None

Country Name of operator	State ownership Ownership share	Strategic partner Name of partner Ownership share	Investors Name (if known) Ownership share	Public Ownership share (Stock Exchange)
The former Yugoslav Republic of Macedonia • A.D. Makedonski Telekomunikacii	Ministry of Transportation and Communication 36.81%	Deutsche Telekom through Magyar Telecom 51%	International Finance Corporation – IFC 1.88%	A.D. Makedonski telekomunikacii 10.00% Other minority shareholders 0.31%
Turkey • Turk Telekom (Türk Telekomünikasyon A.Ş.)	State Owned Treasury 45%	Oger Telecom 55%	None	None

1) under UNSCR 1244

Table 54 - Ownership structure of fixed incumbent operators

Notes:

Bosnia & Herzegovina: On December 28, 2006 Telekom Serbia bought 65% of Telekom Srpske for €646 million from the government of Republika Srpska.

Montenegro: In March 2005 the government of Montenegro sold its ownership share to Magyar Telecom (former Matav) that is 59.5% controlled by Deutsche Telekom. Regarding the ownership structure, it is changing from day to day, because of fluctuation on stock exchange. According to the stock exchange reports, trading of Telecom's shares is very intensive.

Kosovo: PTK is currently engaged in talks and negotiation with Cable and Wireless for strategic partnership.

The ownership structure is also presented in the figure below.

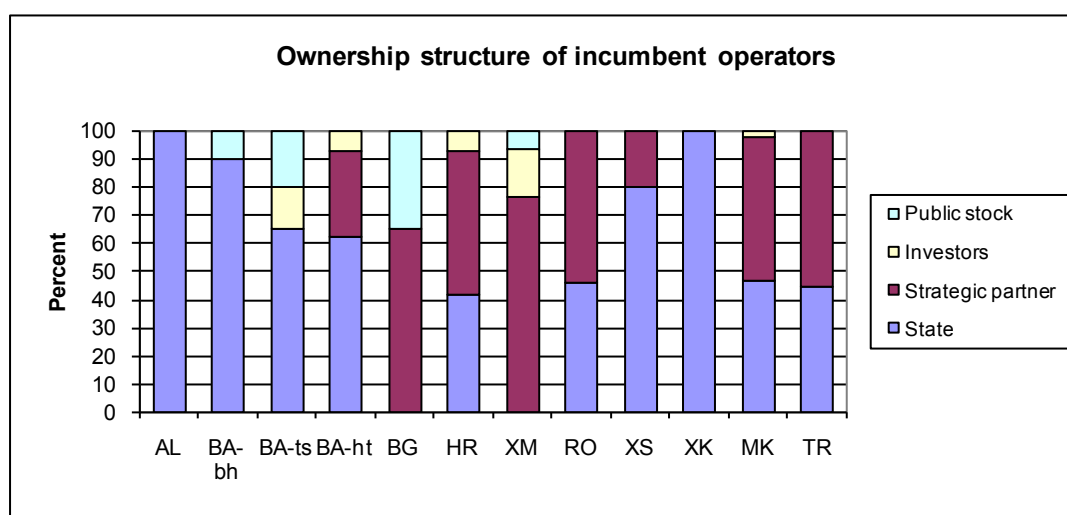


Figure 10 - Ownership structure of fixed incumbent operators

2. Financial ratios for incumbent operators

The most common financial ratios used when looking at the performance of telecommunications operators are: Return on Capital Employed (ROCE), which is the net profit before interest and taxes divided by the total capital employed; the Earnings Before Interest, Taxes, Depreciation and Amortization (EBITDA) margin, which is the EBITDA divided by operating revenues; and the Earnings Before Interest and Taxes (EBIT) margin, which is the EBIT divided by operating revenues.

a) Rate of Inflation

In mainstream economics, inflation is a rise in the general level of prices, as measured against some baseline of purchasing power.

The prevailing view in mainstream economics is that inflation is caused by the interaction of the supply of money with output and interest rates. In general, mainstream economists divide into two camps: those who believe that monetary effects dominate all others in setting the rate of inflation, and those who believe that the interaction of money, interest and output dominate over other effects. Other theories, believe that an inflation of the general price level and of specific prices is a result from an increase in the supply of money by central banking authorities.

Related terms include: deflation, a general falling level of prices, disinflation, the reduction of the rate of inflation, hyper-inflation, an out of control inflationary spiral, stagflation, a combination of inflation and poor economic growth, and reflation, which is an attempt to raise prices to counteract deflationary pressures.

The importance of the rate of inflation in this context is that if it is higher than the “Return On Capital Employed” (see below) then either in the short or long term, a telecommunications operator that is earning less money than the rate of inflation will be required to obtain further financing (which will probably not be a very interesting proposition for a potential investor as the lack of return makes it unlikely that the investment will be profitable). The only country where the rate of inflation is higher than the ROCE is Serbia.

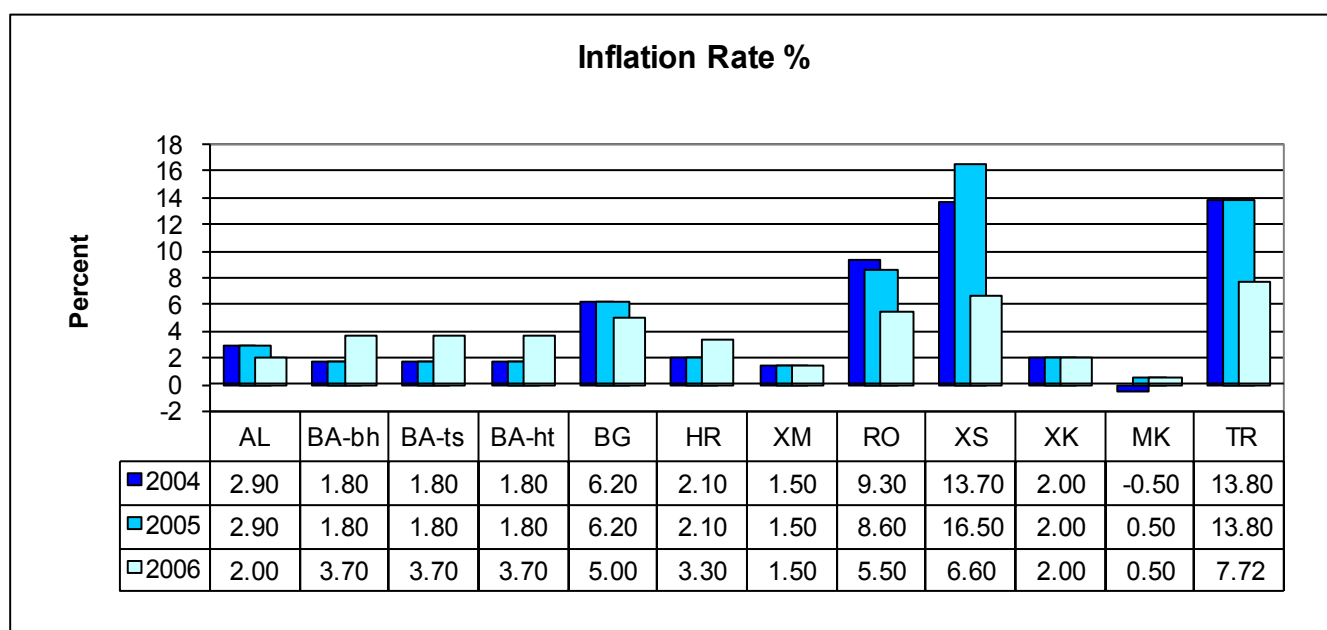


Figure 11 - Inflation Rate

Notes:

Croatia: The inflation rate used in Croatia is the CPI.

Montenegro: There are two inflation rates used in Montenegro: one is the CPI (1.5%) and the other is the RPI (4.3%).

Turkey: The inflation rate used for Turkey is the CPI.

b) ROCE

Return on Capital Employed (ROCE) is used as a measure of the returns that a company is realizing from its capital employed. The ratio can also be seen as representing the efficiency with which capital is being utilized to generate revenue. It is commonly used as a measure for comparing the performance between businesses and for assessing whether a business generates enough returns to pay for its cost of capital.

ROCE compares earnings with capital invested in the company and takes into account sources of financing. Net assets or capital employed are examined rather than total assets.

Capital Employed has many definitions. In general, it is the capital investment necessary for a business to function. It is commonly represented as total assets less current liabilities or fixed assets plus working capital.

The main drawback of ROCE is that it measures return against the book value of assets in the business. As these are depreciated, the ROCE will increase even though cash flow has remained the same. Thus, older businesses with depreciated assets will tend to have higher ROCE than newer, possibly better businesses. In addition, while cash flow is affected by inflation, the book value of assets is not. Consequently, revenues increase with inflation while capital employed generally does not (as the book value of assets is not affected by inflation).

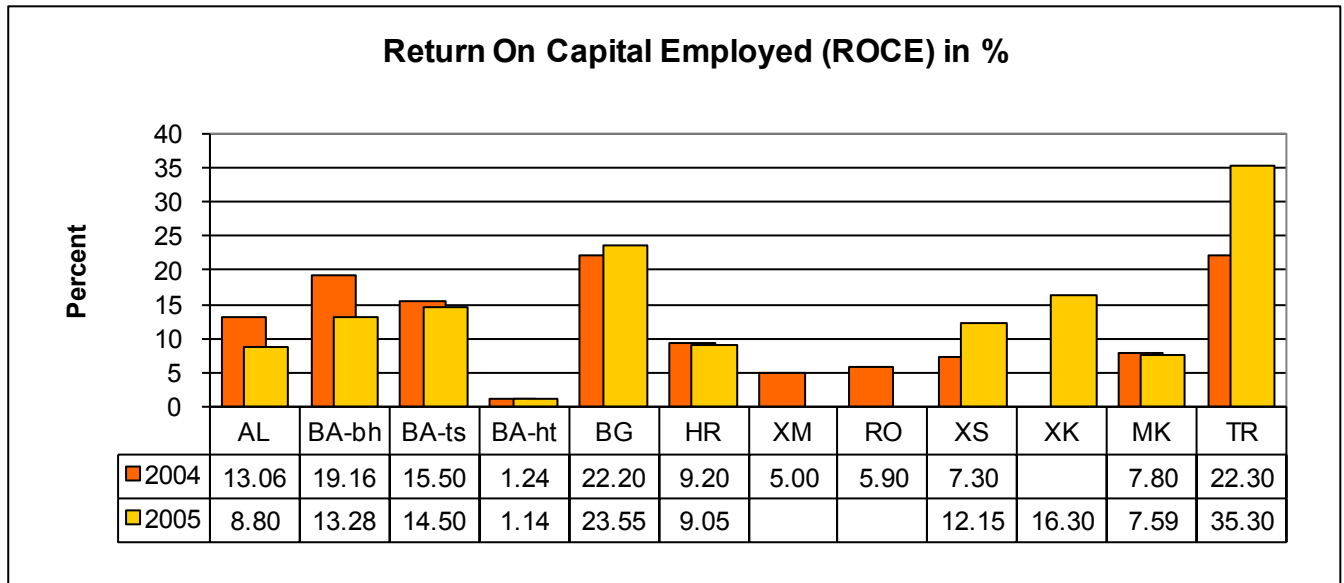


Figure 12 – Return On Capital Employed

Notes:

Montenegro: Telecom Montenegro's annual report for 2005 has not been adopted as it failed the audit procedure so no data is available for 2005.

Kosovo: The ROCE in Kosovo is not available for 2004 because of uncertainties about the cost of fixed assets, depreciation related to these and the allocation of costs to facilities.

Romania: The ROCE for 2005 is not available.

In all countries where the ROCE figure has been provided except Bosnia & Herzegovina (HT Mostar), Romania, and Serbia, it is higher than the inflation rate. It should be noted that the ROCE figures for the operators are not directly comparable.

c) EBITDA

A company's Net Income is distorted by decisions that the company made in previous years. This is because of the differences between accrual accounting and cash basis accounting. Some purchases can be depreciated or amortized over 20 years or more, with a negative impact on the Net Income long after the actual financial effects of the purchases have ceased. The EBITDA does not suffer this distortion, so investors can get a better idea of how profitable the company really is.

Depreciation of capital expenditures is a particularly strong factor. For example, if a company spends 5 million euros on new office equipment, the company will often decide to depreciate the purchase over its expected lifetime of five years. This way, in the first year, when the company calculates its "income" statement, it pretends that it has only spent 1 million euro that year on office equipment. The company's income statement paints a more optimistic picture than actually occurred that year. In each of the second, third, fourth and fifth years, the company also claims that it spent 1 million euro per year on office equipment. Hence, the company's financial picture was probably healthier than indicated by the income statement, since the 5 million euro had already been paid in the first year.

Capital expenditures typically vary from year to year. Accrual accounting accounts for this by spreading the expense of capital investments over the years in which they will be generating value for the company. EBITDA removes this effect. Investors can use EBITDA to approximate the fundamental earning power of the company's operations while separately factoring in the projected capital expenditures needed to maintain those operations. This is valuable because of the time value of money principle. An expenditure

is less costly if it is to be made several years into the future, because during the interim period the firm can use the cash for that expenditure to generate income in other ways.

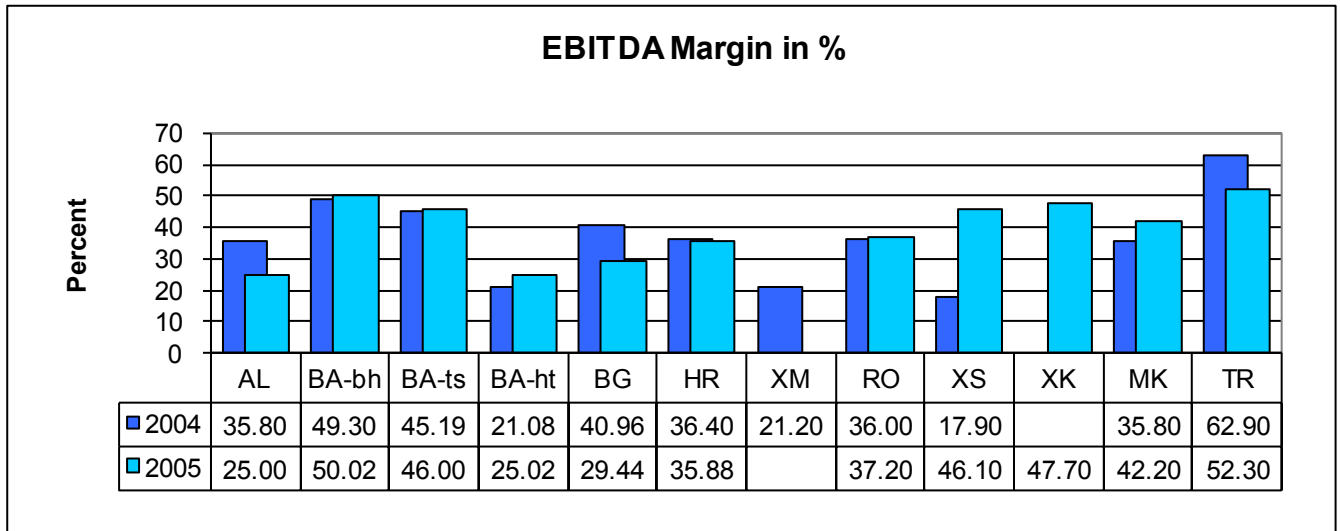


Figure 13 – Earnings Before Interest, and Taxes, Depreciation Amortization margin

Notes:

Montenegro: Telecom Montenegro’s annual report for 2005 has not been adopted as it failed the audit procedure so no data is available for 2005.

Kosovo: The EBITDA margin reported for Kosovo for 2004 (80%) is not shown because it is unlikely that it is an accurate figure given that the ROCE could not be calculated for 2004.

Practically all of the EBITDA figures are in the 30-50% range, which can be considered normal for a telecommunications operator. Exceptions to this are Albtelecom (which has experienced a significant decrease), HT Mostar (which has in fact improved slightly compared to 2004 but has seen a reduction in the already low EBIT margin – now down to 2.88%; and BTC Bulgaria. The reduction of margins in Bulgaria is a result of higher costs being experienced in 2005 than in 2004.

d) EBIT

Earnings before interest and taxes (EBIT), also known as operating income and operating profit, is a term used to describe a company’s earnings. To calculate EBIT, basic expenses (e.g., the cost of goods sold, selling and administrative expenses) are subtracted from revenues. Profit is later obtained by subtracting interest and taxes from the result.

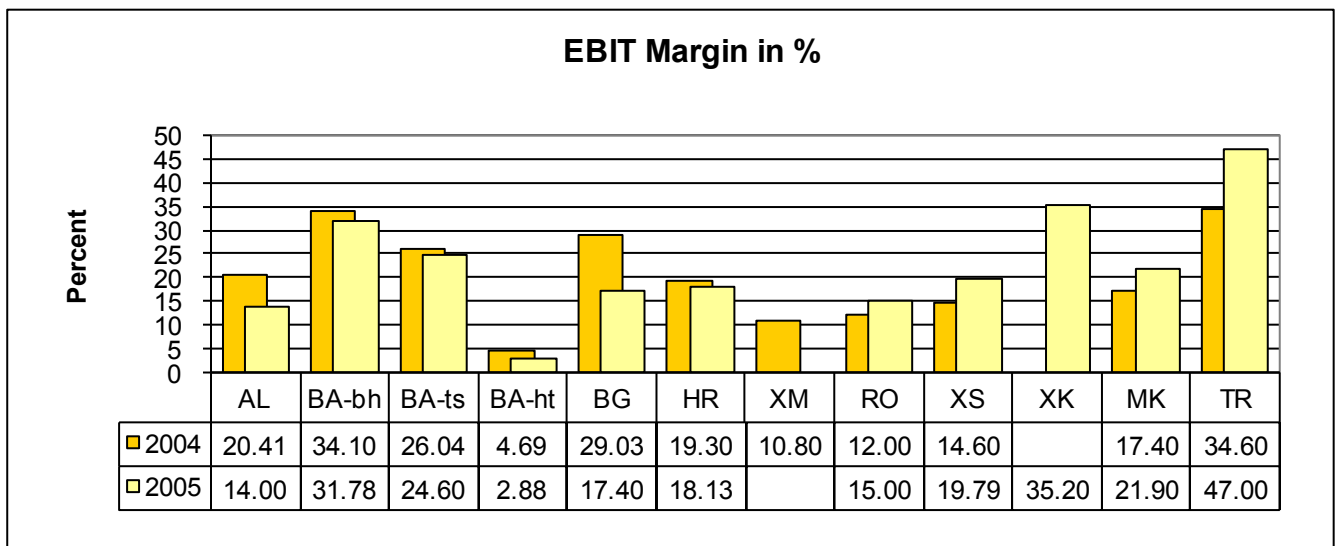


Figure 14 – Earnings Before Interest, and Taxes

Notes:

Montenegro: Telecom Montenegro's annual report for 2005 has not been adopted as it failed the audit procedure so no data is available for 2005.

Kosovo: The EBIT margin for Kosovo for 2004 (75.2%) is not shown because it is unlikely that it is an accurate figure given that the ROCE could not be calculated for 2004.

In keeping with the EBITDA reductions, Albtelecom (Albania) and BTC (Bulgaria) have experienced significant reductions in their EBIT margins.

e) Employees

Country	Code	Operator	Avg No of Employees	
			2004	2005
Albania	AL	Albtelecom	2,473	2,199
Bosnia & Herzegovina	BA-bh	BHT Sarajevo	3,056	3,055
Bosnia & Herzegovina	BA-ts	Telekom Srpske	2,721	2,719
Bosnia & Herzegovina	BA-ht	HT Mostar	1,221	1,193
Bulgaria	BG	BTC	17,251	12,564
Croatia	HR	Hrvatske Telekom	7,299	6,811
Montenegro	XM	Telecom Montenegro	1,168	1,168
Romania	RO	RomTelecom	19,048	15,316
Serbia, including Kosovo ¹				
Serbia	XS	Telecom Serbia	12,340	11,227
Kosovo	XK	PTK	570	637
The former Yugoslav Republic of Macedonia	MK	Makedonski Telekom	3,005	2,325
Turkey	TR	Turk Telekom	58,084	54,243

Table 55 – Average number of employees in the incumbent operators

Notes:

Bulgaria: BTC is being restructured and this is aiming at a reduction of personnel through "socially responsible" HR programmes, at several stages. In 2005, this led to a 27% reduction of the workforce. This reduction in the workforce has led to an increase in the number of fixed lines per employee (see below).

Romania: The number of employees for RomTelecom on January 1, 2005 was 18,382 while the average number of employees in 2004 was 19,048 and 15,316 in 2005. At the end of 2005 the number of employees for RomTelecom was 13,078. This reduction in staff explains the increase in the number of fixed lines per employee shown for November 2005 in the next figure.

f) Fixed Lines per Employee

The number of fixed lines per employee is an indication of the efficiency of a telecommunications operator (the more fixed lines per employee then the more efficient the operator can be considered to be).

The next figure shows the changes in the number of fixed lines per employee in the period January to July 2006. In most countries where a change in fixed line penetration has occurred during this period there has been a reduction in the number of lines (i.e. fixed line penetration rates are declining). However, there is an increase in the number of lines per employee in four countries. Between November 2005 and July 2006 the number of lines per employee has increased in Albania, Bosnia & Herzegovina (Telekom Srpske), Bulgaria, and Croatia while remaining relatively stable in the other countries and territories.

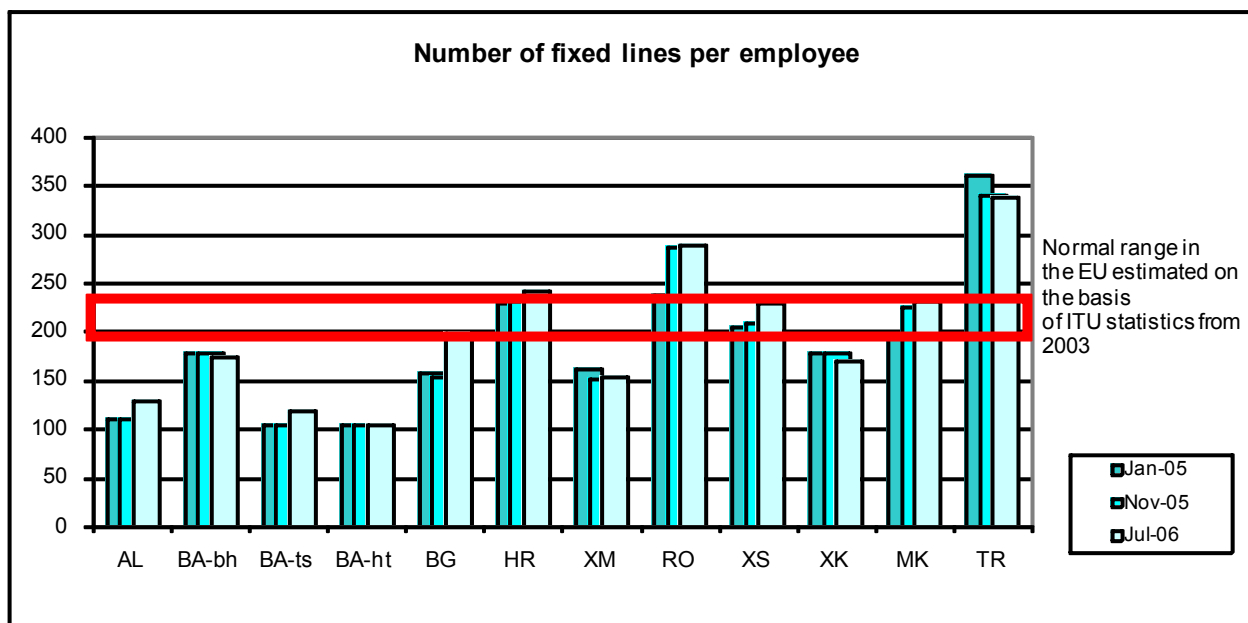


Figure 15 – Number of fixed lines per employee

Notes:

The 11th Implementation Report from the European Commission does not provide an EU average for the number of fixed lines per employee. Information on this indicator may be inferred from ITU statistics but the information does not provide a definitive value. Based on different assumptions, the ITU statistics from 2003 indicate that the average number of active lines per employee in the EU Member States is in the range from 189 to 223 (the ITU will not have more recent data available until March 2007).

The number of lines per employee in July 2006 is based upon the average number of employees for 2005.

Bulgaria: The increase shown for July 2006 is the result of restructuring activities (see above). The number of fixed lines per employee is the number of active lines, as opposed to the installed capacity.

3. Fixed network penetration

The fixed line penetration rates per 100 population are given in the table below. The numbers represent active subscriber lines. Subscriber lines that are connected to analogue switches are classified as “analogue lines”, while those connected to digital switches are classified as “digital lines”. ISDN subscriber lines can be basic or primary subscriptions. A basic subscription enables two telephone numbers and two simultaneous calls and are often used by households and smaller organisations. Primary rate subscriptions, which enable 32 simultaneous calls, are normally used for connecting larger organisations to the PSTN..

The number of simultaneous calls that can be transmitted over one or two pairs of copper wire is thus highly technology dependent. With xDSL and modern voice coding technologies, the number of simultaneous calls over a copper pair represents a very unstable indicator. A better and more stable indicator is the number of copper pairs in the subscriber networks.

In the tables and figures below, all ISDN subscriptions have been added into one category, but primary rate subscriptions count double because each subscription requires two subscriber lines (two copper pairs) for implementation.

The weighted average penetration in these countries is 25.5% (a decrease of approximately 0.5% in the nine months since the previous report). In general, the penetration rates are still lower than the overall EU25 average of about 45%³⁴. However, they compare more favourably with the new EU Member States as the weighted EU10 average is 31%. Nevertheless, the fixed line penetration rates have fallen in five countries and remain more or less static in the other five.

³⁴ Weighted average for EU25 from the Commission Staff Working Document Review of the Scope of Universal Service in Accordance with Article 15 of Directive 2002/22/EC. According to the same document, the weighted average penetration for EU15 was 48%.

A consequence of limited fixed line penetration rates will be a constraint to the number of households that could eventually subscribe to broadband services provided over fixed telephone lines.

Country	Analogue	Digital	ISDN	Total	Per 100 pop
Albania	4,231	260,655	116	265,002	8.42%
Bosnia & Herzegovina	59,527	802,414	7,799	869,740	22.47%
Bulgaria	1,151,517	970,170	1,050	2,122,737	27.50%
Croatia	0	1,349,184	47,965	1,397,149	31.45%
Montenegro	196	154,774	4,628	159,598	25.54%
Romania	363,311	3,503,356	1,024	3,867,691	17.89%
Serbia, including Kosovo ¹					
Serbia	549,312	1,717,154	25,706	2,292,172	30.57%
Kosovo	43,820	63,436	308	107,564	5.47%
The former Yugoslav Republic of Macedonia	0	453,662	15,544	469,206	23.06%
Turkey	0	14,267,360	1,590	14,268,950	19.68%
1) under UNSCR 1244					

Table 56 - Fixed lines per 100 inhabitants year mid 2006 (residential users)

Notes:

Bosnia & Herzegovina: There have been reductions in the number of analogue and digital lines in service

Bulgaria: Continued digitalisation has led to a reduction in the number of analogue lines in service. In addition, in 2006, the number of fixed digital lines includes the lines of alternative fixed operators, while in 2005 these were not included.

Country	Analogue	Digital	ISDN	Total	Per 100 pop
Albania	175	16,816	508	17,499	0.56%
Bosnia & Herzegovina	4,103	86,520	18,680	109,303	2.82%
Bulgaria	59,764	285,722	22,370	367,856	4.77%
Croatia		163,080	88,356	251,436	5.66%
Montenegro	0	16,760	3,188	19,948	3.19%
Romania	17,532	513,415	22,154	553,101	2.56%
Serbia, including Kosovo ¹					
Serbia	40,796	222,708	19,706	283,210	3.78%
Kosovo	0	0	476	476	0.02%
The former Yugoslav Republic of Macedonia	0	54,969	15,544	70,513	3.47%
Turkey	0	4,603,447	18,793	4,622,240	6.37%
1) under UNSCR 1244					

Table 57 - Fixed lines per 100 inhabitants year mid 2006 (business users)

Notes:

Bulgaria: The number of analogue business lines has dropped by almost 50% (54,000 less lines) but there has been no corresponding increase in the number of digital business lines (an additional 7,500 digital lines and 4,000 more ISDN lines). In addition, in 2006, the number of fixed digital lines includes the lines of alternative fixed operators, while in 2005 these were not included.

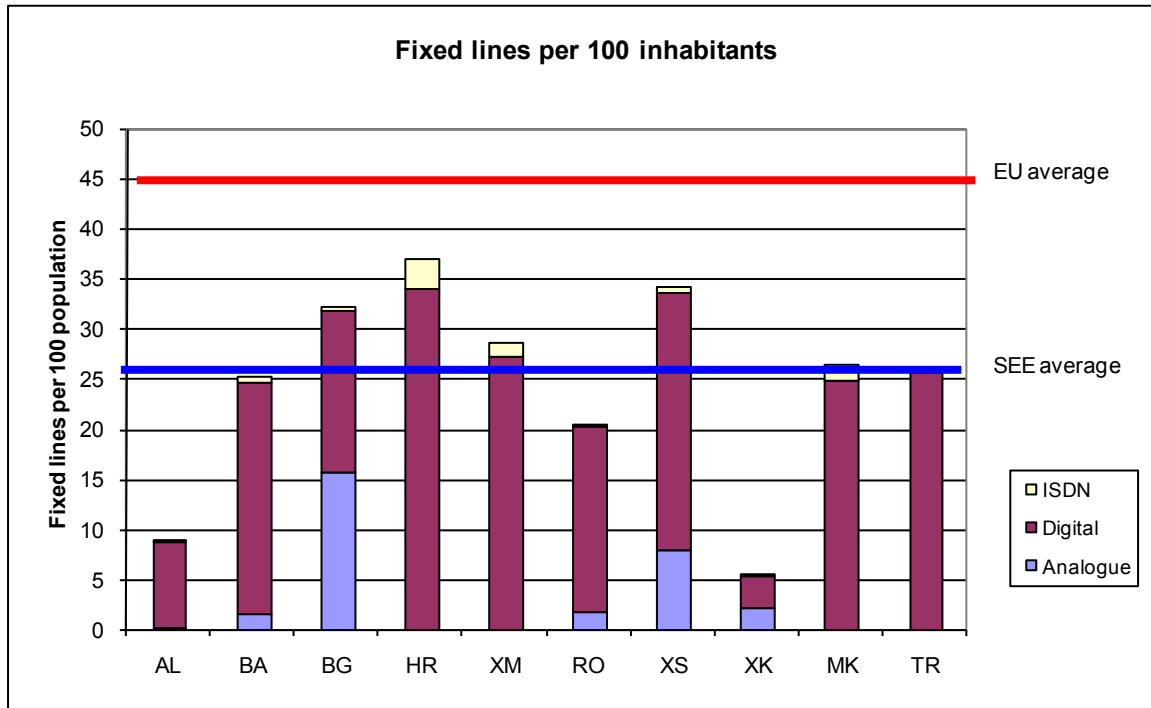


Figure 16 - Fixed lines per 100 inhabitants

Notes:

The EU 25 average is from the Commission Staff Working Document Review of the Scope of Universal Service in Accordance with Article 15 of Directive 2002/22/EC. The SEE average is the weighted average for the countries and geographic units calculated on the basis of the information in Table 48 and Table 49 above.

Figure 16 shows the percentage of fixed lines per 100 inhabitants broken down into ISDN, Digital and Analogue lines. Figure 17 below shows how the fixed line penetration rates have developed in the period January 2005 to July 2006.

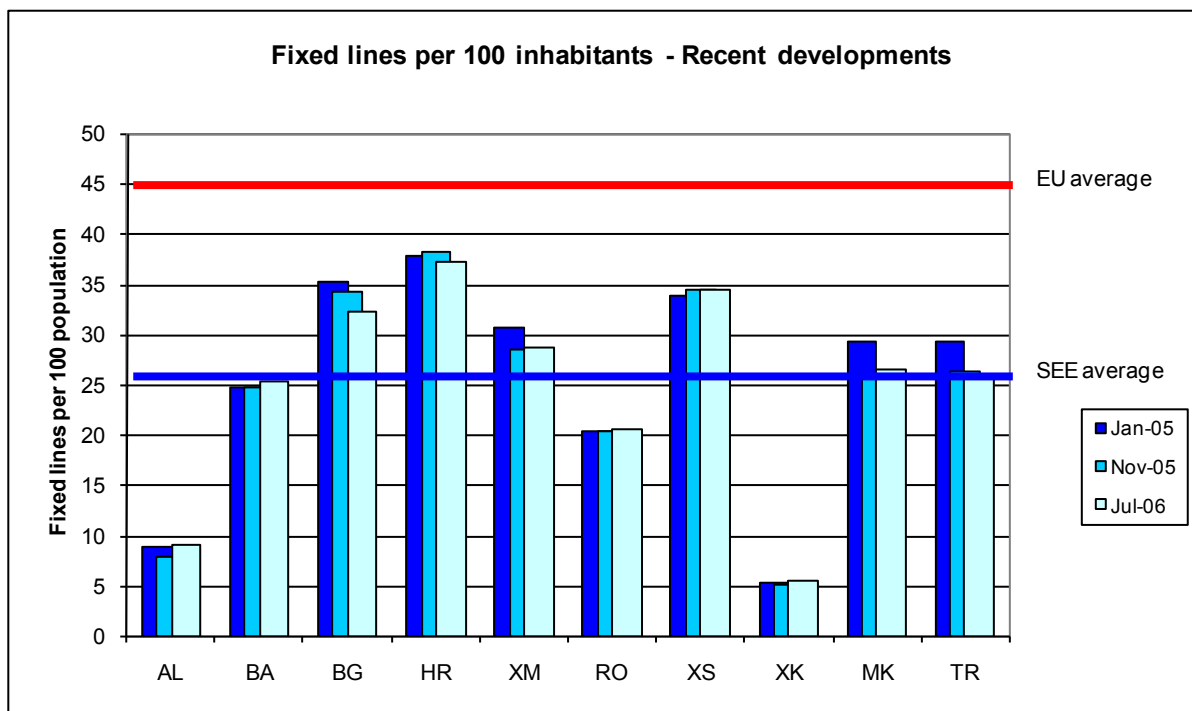


Figure 17 – Fixed lines per 100 population – January 2005 - July 2006

A consequence of low digitalisation rates is the inability to introduce xDSL services and other value added services. The digitalisation of the fixed networks is crucial for the provision of value-added services and for increasing the quality of service for customers. The data presented in Table 58 below is calculated on the basis of the number of digital fixed lines as a percentage of the total number of fixed lines.

All countries are making progress in the digitalisation of their networks. In Albania, the rural operators (12.4% of the total network) are 100% digital. Croatia and the former Yugoslav Republic of Macedonia are 100% digital since January 2003 and January 2004 respectively.

Bulgaria is digitalising the major cities before rural areas and its digitalization rate continues to grow significantly. Figure 18 shows that the proportion of analogue to digital lines is now almost 50-50 (compared to the 66-34 ratio in January 2005). According to Bulgaria's pre-accession negotiation commitments and the terms of BTC's licence the digitalization rate should reach 75–81% by the end of 2007. Nevertheless, there is still a strong fixed-to-mobile substitution in Bulgaria and the number of fixed lines per 100 population continues to fall.

Significant progress was also made in Romania, where digitalisation increased from 77% to 85% in 2005 and is now slightly higher than 91%.

Country	01/01/2004	01/01/2005	01/11/2005	01/07/2006
Albania	97.50	97.60	97.70	98.10
Bosnia & Herzegovina	85.27	89.93	92.45	94.85
Bulgaria	26.00	34.00	36.84	51.00
Croatia	100.00	100.00	100.00	100.00
Montenegro	98.00	99.80	99.87	99.90
Romania	74.00	77.15	84.54	91.40
Serbia, including Kosovo ¹				
Serbia	64.87	67.35	83.69	n/a
Kosovo	45.00	47.00	47.00	47.00
The former Yugoslav Republic of Macedonia	100.00	100.00	100.00	100.00
Turkey	90.77	97.12	97.78	97.87
1) under UNSCR 1244				

Table 58 - Digitalisation rate of fixed networks in percent

Notes:

Bulgaria: The status on November 1, 2005 is not available. The information shown is from June 30, 2005.

Kosovo: The value given for November 1, 2005 is as at January 1, 2005.

The former Yugoslav Republic of Macedonia – the source is Maktel's annual reports.

Figure 18 shows the extent of network digitalisation and the progress that has yet to be made in Bulgaria, Kosovo and Serbia. However, in the period from July 2005 to July 2006 there has been significant progress in Bulgaria, where the digitalisation rate has increased from 37% to 51%.

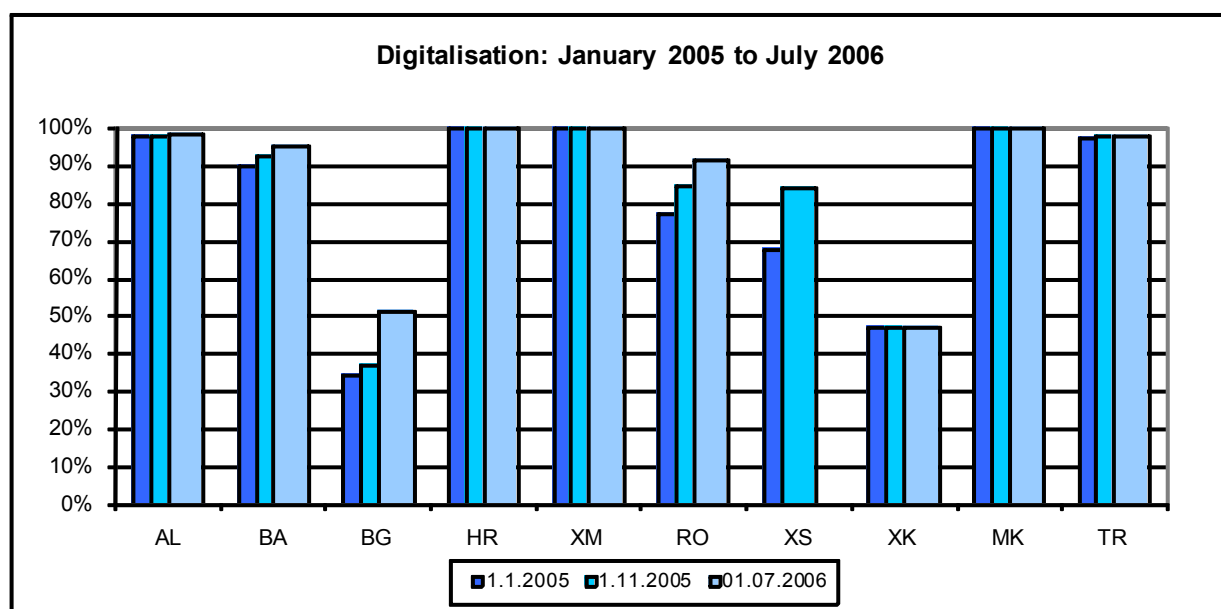


Figure 18 - Digitalisation rate of fixed networks in percent

Notes:

Serbia: The information is from 1.1.2006 rather than 1.11.2005.

Kosovo numbers are from 1.1.2005. Information that is more current has not been provided

Party and group lines are those lines that serve two or more customers. These lines are a potential barrier to Local Loop Unbundling and, as far as customers are concerned, inhibit the use of value added services, especially xDSL and as such are an inhibitor to reliable internet access and usage.

Three countries have no party lines (Croatia, the former Yugoslav Republic of Macedonia, and Turkey). The percentage of party lines in Bulgaria has been steadily decreasing over the last few years (47.8% in June 2002 vs. 37% in January 2005 and slightly less than 29% in July 2006). These reductions could be

a direct result of Bulgaria’s network digitalisation. However, group and party lines still represent a sizeable proportion of the fixed lines in Bulgaria.

In Kosovo, it is a condition of PTK’s licence that all party lines must be removed by December 31, 2006.

In Serbia, there are about 391,000³⁵ party lines and these are mainly in the larger cities.

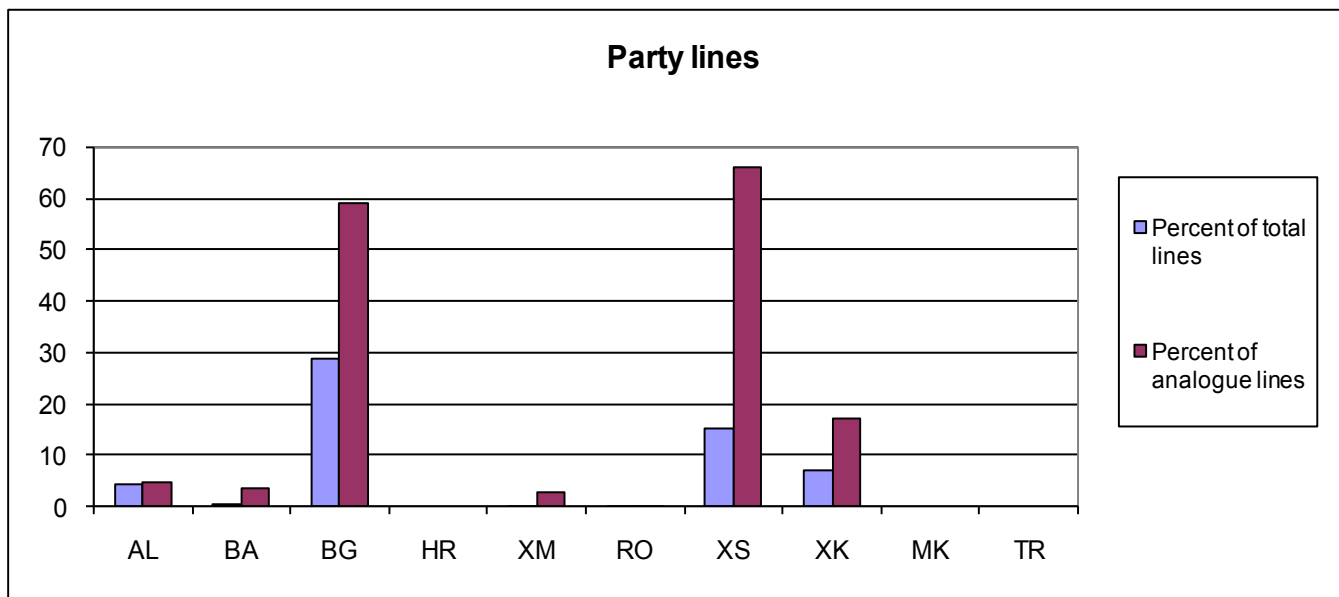


Figure 19 - Presence of party and group lines in fixed networks

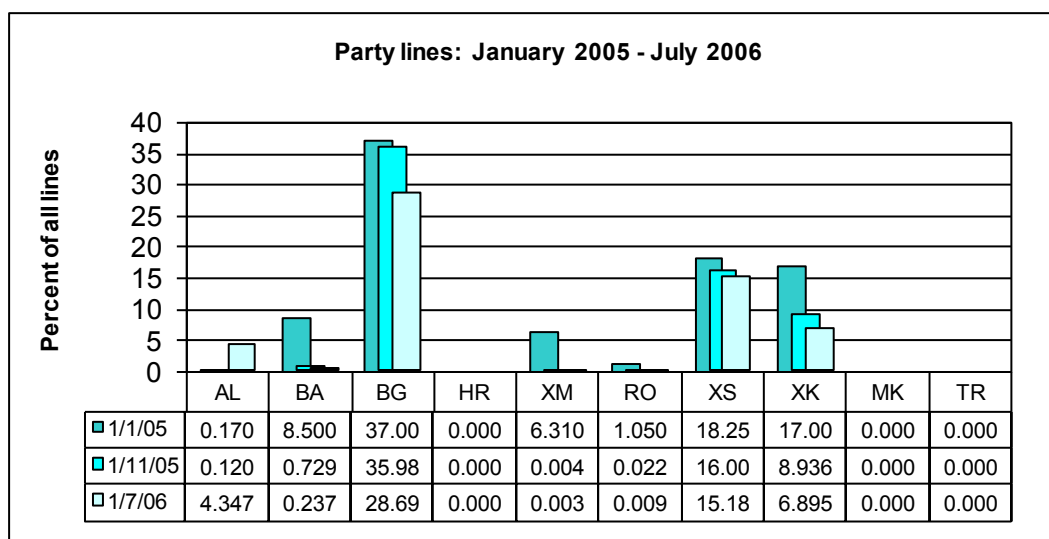


Figure 20 – Changes in party and group lines January 2005 to July 2006

In general, alternative operators have a very low percentage of the total number of fixed lines except in Albania where 12.4% of all lines are operated by alternative operators that have invested in their own fixed network infrastructure. However, these are considered to be ‘Rural Operators’ and do not provide services at a national level in competition with other operators.

In Bulgaria, a total of seven alternative operators had started operating fixed networks using digital lines by July 1, 2006, but the total number of lines in service is insignificant (less than 1% of all lines).

³⁵ Information from December 31, 2006

However, it is interesting to note that the alternative operators in Bulgaria seemed to be addressing the business, rather than the residential, sector.

In Romania, alternative operators accounted for almost 15% of the total lines. These operators have invested in their own fixed network infrastructure. In addition, there were almost 45,000 subscribers to alternative operators using carrier selection codes or ISDN lines acquired from other operators and 26,000 telephone lines over Internet.

There are no alternative operators in Montenegro or the former Yugoslav Republic of Macedonia.

Country	Residential			Business			Total number of lines	Percentage of lines of alternative operators
	Analogue lines / analogue switches	Analogue lines / digital switches	ISDN lines	Analogue lines / analogue switches	Analogue lines / digital switches	ISDN lines		
Albania	-	25,300	-	-	-	-	25,300	8.96%
Bosnia & Herzegovina	-	-	-	-	-	-	0	0.00%
Bulgaria	293	3,512	-	1,744	10,158	2,509	18,216	0.73%
Croatia	-	-	4	-	-	644	648	0.04%
Montenegro	-	-	-	-	-	-	0	0.00%
Romania	4	560,000	2	1,000	90,000	500	651,506	14.74%
Serbia, including Kosovo ¹								
Serbia	-	-	-	-	-	-	0	0.00%
Kosovo	-	-	-	-	-	-	0	0.00%
The former Yugoslav Republic of Macedonia	-	-	-	-	-	-	0	0.00%
Turkey	-	-	-	-	-	-	0	0.00%
1) under UNSCR 1244								

Table 59 - Number of fixed lines of alternative operators and percentage of these lines compared to the total number of fixed lines

4. Mobile service penetration

On average, the penetration rates for mobile services are triple those of fixed lines. In Albania, the mobile penetration rate is almost six times that of the fixed penetration rate while in Bosnia & Herzegovina it is slightly less than double.

Country	1.1.2003	1.1.2004	1.1.2005	1.1.2006	1.7.2006	Fixed sub. lines per 100 pop on 1.7.2006
Albania	26.00	34.00	38.61	48	52	8.93
Bosnia & Herzegovina	19.65	28.68	34.22	42.3	43.97	25.29
<i>BH Telecom d.d. Sarajevo</i>	9.87	14.57	16.88			
<i>Telekom Srpske a.d. Banja Luka</i>	7.39	10.56	13.07			
<i>Hrvatske Telekomunikacije d.o.o. Mostar</i>	2.39	3.55	4.27			
Bulgaria	33.00	45.00	61.00	80	90	32.54
Croatia	52.71	57.45	63.99	82.08	90.75	37.11
Montenegro	67.40	62.70	77.9	87.6	98.5	28.64
Romania	24.00	32.47	47.12	52.50	61.76	20.37

Country	1.1.2003	1.1.2004	1.1.2005	1.1.2006	1.7.2006	Fixed sub. lines per 100 pop on 1.7.2006
Serbia (including Kosovo ¹⁾)						
<i>Serbia</i>	32.14	43.80	57.94		73.50	34.35
• Telekom Srbija	18.14	23.80	30.98		39.92	
• Telenor Srbija (ex. Mobi63)	14.00	20.00	26.96		33.58	
<i>Kosovo</i>	13.50	15.20	16.00	18.00	20.00	5.20
The former Yugoslav Republic of Macedonia	18.00	29.88	49.02	62.38	65.46	26.52
• Mobimak						
• Cosmofon	18.00	25.73	36.94	43.38	44.06	
	0.00	4.15	12.05	19.00	21.40	
Turkey	33.50	39.40	48.90	61.07	68.04	25.89
¹⁾ under UNSCR 1244						

Table 60 - Mobile penetration

Notes:

Bosnia & Herzegovina: There are 3 mobile (GSM) incumbent operators in Bosnia & Herzegovina: "BH Telecom" with brand name of mobile network BH Line, "Telekom Srpske" with brand name of mobile network MOBI'S and "HT Mostar" with brand name of mobile network HT MObilne komunikacije.

Croatia: Pre-paid card subscribers are dropped after six inactive months.

Montenegro: Total number of mobile subscribers was 543,220 on 1st January 2006 and 610,837 on 1st July 2006. This increase can be explained by next facts: 1) Pre-paid card subscribers are dropped after 12 inactive months, 2) main tourist season (June-August) is the period when most number of pre-paid cards is sold.

Kosovo: The presented mobile penetration presents only Vala900 penetration and does not include the other operators' figures. According to TRA, the penetration of mobile telephony including illegal activities of unauthorised operators is estimated to be 47% in July, 2006. The pre-paid subscriber has to be active 1 month to be counted as a subscriber, this because of the market situation.

Romania: A pre-paid card has to be active at the end of the monitoring period in order to be counted as one/

In Albania, pre-paid cards are counted as subscribers if they are active within the last six months. In Bosnia & Herzegovina, there are 3 mobile (GSM) incumbent operators: BH Telecom – GSM-BH, Telekom Srpske – MOBI'S, HT Mostar – ERONET. In Bulgaria, both GSM operators have a 12-month period of activity for pre-paid cards after their last activation or recharge. In Croatia, pre-paid card subscribers not counted after nine inactive months. In Montenegro and Serbia, pre-paid card subscribers are not counted after 12 inactive months.

In Serbia, the figures for Mobtel in Table 60 are calculated for the territory of Serbia excluding the Kosovo and Metohia regions. The reference for the population data is the population census report from 2002 issued by the Statistical office of the Republic of Serbia. However, if the Kosovo region is included then the penetration rate is 10%. Because of the census boycott in Kosovo, figures have been obtained by an estimation of the population data. Pre-paid subscribers are dropped after 420 inactive days (13 months).

In Serbia, the mobile penetration figures for Telekom Serbia in Table 60 include a relatively small number of subscribers in Kosovo and Metohia. 84% of the territory and 94% of population are covered with more than 600 BTS (in 2000 it was 112 BTS). Pre-paid card subscribers are dropped after 11 months. In the 12th month, only incoming calls are permitted and in the 13th month, a customer can reactivate a number by paying the applicable subscription fee at the time of renewal.

The penetration figure for Kosovo only applies to PTK/VALA900 the only licensed mobile operator in Kosovo. For the other 'illegal' mobile operator in Kosovo, Mobtel, there are no published subscriber figures.

A pre-paid subscriber in Romania has to be active within the last twelve months in order to be counted as a subscriber.

The next figure shows how mobile penetration rates have increased from January 2005 to July 2006. In the same period, fixed line penetration rates have declined in some countries (see Figure 17).

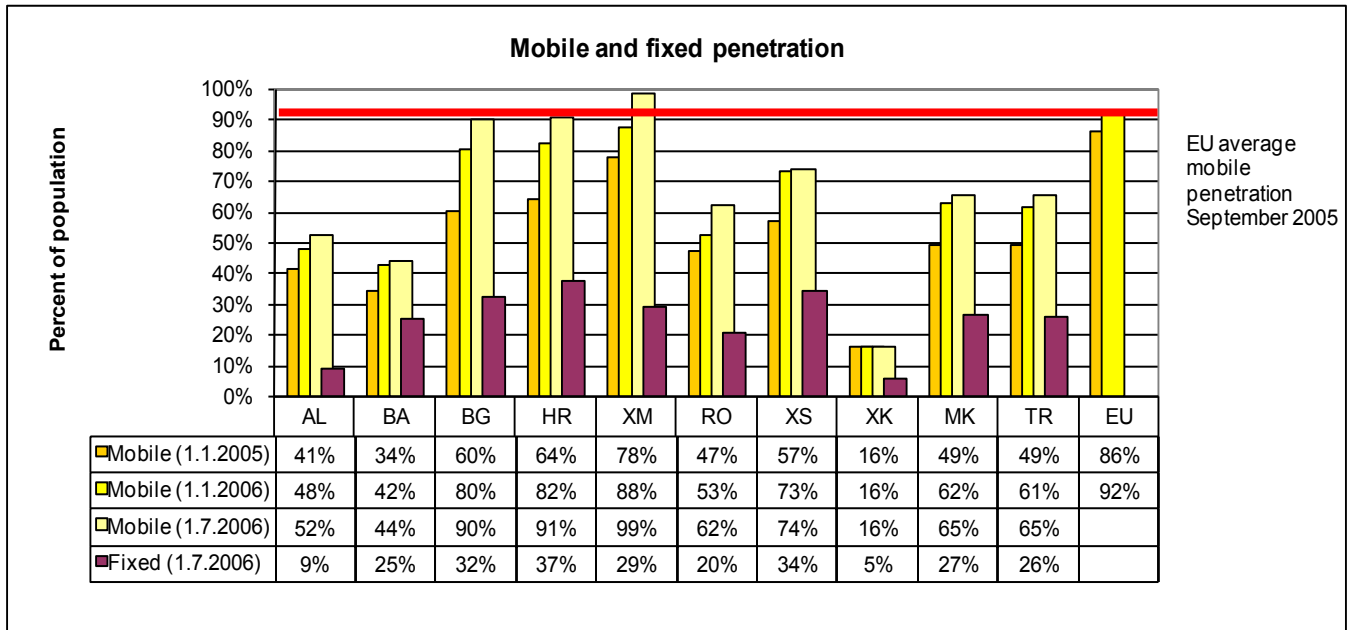


Figure 21 - Mobile and fixed penetration

Notes:

The EU averages are from the 11th Implementation report from the European Commission published in February 2006. The number represents the penetration measured by 2G subscriptions, but 3G subscribers from some EU countries are included as well.

5. Payphones

The number of payphones per 1,000 population is shown in the following table. There is quite a wide variation from 0.26 in Kosovo to 2.97 in Croatia, which represents one payphone per 336 inhabitants in Croatia and one payphone per 3,846 inhabitants in Kosovo.

In general, the figures have been essentially static over the last few years with very small variances in all the countries during the last reporting period (November 2005 to July 2006).

Country	1.1.2004	1.1.2005	1.1.2006	1.7.2006
Albania	0.47	0.47	0.47	0.46
Bosnia & Herzegovina	0.79	0.77	0.83	0.88
Bulgaria	2.70	2.65	1.99	2.00
Croatia	2.74	2.76	2.68	2.97
Montenegro	1.54	1.29	0.90	1.02
Romania	2.41	2.38	2.09	2.07
Serbia, including Kosovo¹				
Serbia	1.43	1.73	1.78	1.78
Kosovo	0.43	0.45	0.30	0.26
The former Yugoslav Republic of Macedonia	1.04	1.03	1.25	1.28
Turkey	1.08	1.08	1.09	1.13
1) under UNSCR 1244				

Table 61 - Number of payphones per 1,000 population

Notes:

Montenegro: There are three payphone operators in Montenegro: Post of Montenegro, Montenegro card, and Bristol Ltd.

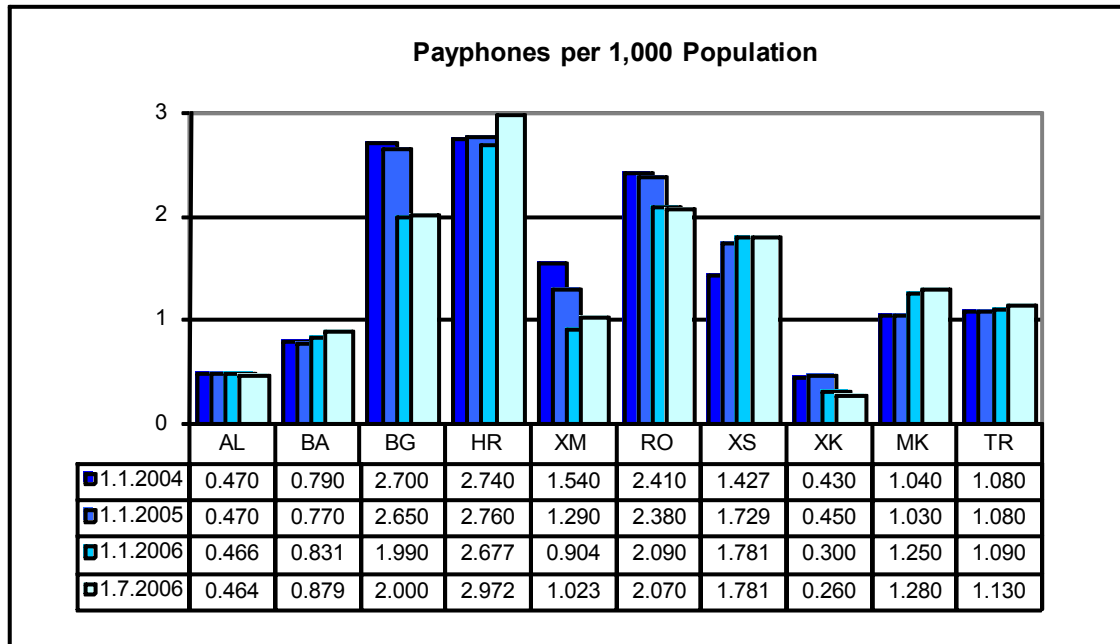


Figure 22 – Payphones per 1,000 population

G. Telephony tariffs – retail

The reference date for the information in this section is July 1, 2006.

One of the main objectives of a telecommunications policy based on competition is to provide all kinds of users, consumers, as well as business organisations, improved telecommunications offerings in terms of price, quality, and choice.

Telephony retail prices represent one of the most important indicators whereby the results can be judged. In a traditional monopolistic environment, fixed monthly charges and local call tariffs were typically priced significantly below cost in an effort to make telephony affordable to the majority of consumers. Because they had monopoly rights, the operators could compensate for the revenue loss by charging exorbitant prices for long distance and international calls. Such calls were primarily used by business, so the pricing method constituted a transfer from business to consumers.

This tariff principle becomes untenable in a competitive environment, where new entrants will concentrate on the high profit areas and stay out of the unprofitable ones. The pressure on long distance and international calls has been further augmented by advances in technology that has greatly reduced the impact of distance as a cost element.

The need for tariff rebalancing is thus evident. However, even if necessary, it can be a painful experience for many consumers, and it is a process that typically requires several years. In order to soften the rebalancing consequences for consumers, it is fairly normal to differentiate tariffs for business and consumer users. Differentiation takes place most often for monthly rentals, but can also be implemented for call units.

At the end of the process, businesses and most consumers will pay less for their total communications bill and or consume more communications services.

However, some consumers, typically low-income families, may experience that their total communications costs increase because of tariff rebalancing. It is therefore common to protect such users with special low-income tariff packages. These tariff options typically have monthly rental prices that are much cheaper than normal tariffs. The package also typically includes a limited number of free or cheap call units. Once this quota has been exhausted, the user will have to pay tariffs that are significantly more expensive than the normal tariff. The low-income tariff package is thus unattractive for normal consumers, but may meet the basic communications needs of a low-income family.

This section on retail telephony tariffs presents indicators that relate to these topics in order to enable a reader to form an assessment of the tariff situation in each of the countries and geographic units.

1. Basic information about tariffs

Table 62 provides some basic information about tariffs. It presents the status of rebalancing, primarily as it is assessed by the NRAs. Furthermore, it presents what type of tariff regulation exists for telephony services.

The table indicates that only Kosovo considers that tariff rebalancing has been completed. Bosnia & Herzegovina has started its tariff rebalancing plan with a first step on November 1, 2005. The plan will be executed in several steps.

The other countries and geographic units, except Serbia, are still in a rebalancing process. Serbia is a special case where there has been little rebalancing activity. Rebalancing requests from the incumbent operator have so far been refused on a political level in order to contain inflation.

Country	Status of tariff rebalancing (target date if established)	Type of tariff regulation	Public notice before tariff change
Albania	Ongoing	Cost based methodology	According to the law on Telecommunications, article 64, the operator should make them public through mass media at least 15 days before the new tariffs come into force.
Bosnia & Herzegovina	Ongoing	Principles established in regulation NRA approval of actual tariffs	1 month
Bulgaria	Ongoing	Price cap model + cost orientation and NRA (CRC) approval for regulated prices of BTC, as SMP on the markets of fixed voice telephony networks and fixed voice telephony services and leased lines for the following services: <ul style="list-style-type: none"> • fixed voice telephony service • interconnection • the minimum set of leased lines • specific access • LLU • shared usage of premises and equipment. 	7 days
Croatia	Ongoing	NRA approval + price cap	30 days
Montenegro	Target date: 2010	NRA approval	8 days
Romania	Ongoing No target date established	NRA approval	30 days
Serbia (including Kosovo ¹)			
<i>Serbia</i>	No tariff rebalancing	NRA approval	8 days if nomenclature and general conditions are not changed. If nomenclature or general conditions are changed, 30 days after publishing in Official Gazette those changes.
<i>Kosovo</i>	Yes	NRA approval	Before the entry into force

Country	Status of tariff rebalancing (target date if established)	Type of tariff regulation	Public notice before tariff change
The former Yugoslav Republic of Macedonia	No	Price cap	No
Turkey	No	Price cap	Before the entry into force
1) under UNSCR 1244			

Table 62 - Basic information about tariffs

Notes:

Bosnia & Herzegovina: Implementation of Rule on tariff rebalancing of voice telephony services in Bosnia & Herzegovina started on November 1, 2005.

Bulgaria: Since 17.04.2006 BTC has made requests twice to CRC for approval of new retail tariffs for fixed telephone service. With decisions No 1048/16.05.2006 and No 1458/11.07.2006 CRC has required changes from BTC.

Montenegro: Process of tariff rebalancing started in 2004, with target date in 2010. Period of 8 days before any tariff change is defined by Article 19 of Rulebook on the protection of customers of public telecommunication services (Official Gazette of the Republic of Montenegro, № 63/2003).

The next table presents the different charging mechanisms used by the incumbent operators. Traditionally, telephone calls have been measured by pulses. Each pulse would carry a certain price, and the time between each pulse would vary between different types of call. Pulse counting was a relatively simple way to collect traffic data using electromechanical counters. Most of the advanced telephone operators, using modern digital switches, have replaced pulse based traffic measurements by a time-based method, often measuring time down to each second. This method of measuring traffic provides more flexibility in the construction of tariffs.

Because, on average, subscribers will pay for a half period more than they consume, the shorter time intervals is in the interest of the subscribers.

Albania, Serbia, Kosovo and Turkey still have pulse based charging mechanisms with pulse periods for local calls with a typical pulse period length of between one and three minutes for local calls.

Bulgaria has a combination of time and pulse charging depending on the technical capabilities of the switches.

The other countries and geographic units have time based charging. Bosnia & Herzegovina and Croatia have time intervals of one second. In the case of Croatia, there is also a tariff option with a charging interval of 60 seconds. The other countries and geographic units have longer charging intervals.

Country	Charging system	Length of call unit	Setup-cost
Albania	Pulse based	Length of call unit applied in peak time is 120 seconds , and 180 seconds applied in off-peak time. These are the call units applied for local calls.	2.43 eurocent (3 Leke) for calls toward the mobile operators There are no set-up charges for any other calls, but for local calls the first two minutes are more expensive than subsequent minutes.
Bosnia & Herzegovina	Time based	1 second	No charge
Bulgaria	Time based (digital switches and analogue switches with technical possibility for reporting calls per time). Pulse based (analogue switches)	Seconds	5.62 eurocent for local and national long distance calls

Country	Charging system	Length of call unit	Setup-cost
Croatia	Time based	National calls: 60 seconds Fixed to mobile and international calls: 15 seconds Per second billing was introduced and has been available since April 1, 2005 as an option	No charge
Montenegro	Time based	Depends on the type of call (local, long distance, international) 30 seconds for local calls	No charge
Romania	Time based	60 seconds	No charge
Serbia (including Kosovo ¹⁾)			
<i>Serbia</i>	Pulse based	Depends on the type of call (local, long distance, international, non-geographic code)	No charge
<i>Kosovo</i>	Pulse based Time based tariffs available from February 1, 2006. Pulse units still used for some elements in the price list.	Depends on type of call (international, national, local etc.)	€ 0.04
The former Yugoslav Republic of Macedonia	Time based	60 seconds (local, long-distance, fixed to mobile) 20 seconds (international calls)	No charge
Turkey	Pulse based	Depends on type of call (international, national, local etc.) Pulse length for local calls: 1 minute	No charge
¹⁾ under UNSCR 1244			

Table 63 - Call charging system and initial charge application

Notes:

Albania: This is the call charging system of Albtelecom, which is the incumbent operator. The charging system is supposed to be time based, according to the operator's publications. However, the charging system is pulse based, for billing reasons.
Croatia: There are alternative packages with set-up cost both from the incumbent and from alternative operator.
Romania: ANRC approved RomTelecom tariff changes applicable from August 15, 2006.

2. Monthly subscription fees

Table 64 provides information on the monthly rental price for the fixed network for residential subscribers in nominal euro with value added tax included.

The prices in many of the tariff schemes include some free calls or call units. In order to compare prices between countries, these price differences have to be taken into account.

The corresponding graph is constructed in such a way that it shows both the net monthly cost (after deduction of the value of the free call units) as well as the value of the free call units. The total height of the column thus corresponds to the nominal monthly charge.

The graph, which also includes the level of the average EU monthly charge, clearly demonstrates the very low level of the monthly charges. Albania, Bosnia & Herzegovina, Montenegro and Serbia have particularly low charges. In Serbia, the value of the free call units exceeds the monthly subscription cost. Even when taking purchasing power parity into consideration, these countries and geographic units have monthly charges that are 1/3 or less than the EU average.

Croatia in particular, but also Bulgaria, Romania, the former Yugoslav Republic of Macedonia and Turkey have made progress with tariff rebalancing. These countries have monthly charges at a level that is typically about half the average level in the EU, but when taking purchasing power parity into account, their monthly charges are more in line with the EU average.

In addition, Table 64 provides information on special tariff schemes for low-income subscribers. The incumbent operators in Bulgaria, Croatia, Romania, the former Yugoslav Republic of Macedonia and Turkey operate such schemes. In addition, the incumbent operators in Bosnia & Herzegovina operate special low tariff schemes for families of soldiers that died in the war, disabled veterans, blind people, and other disabled people. Montenegro and Serbia have offerings with reduced tariffs for party lines (i.e. shared by two subscribers).

Country	Standard monthly rental including VAT	Nominal value of call units included in standard monthly rental	Low level package monthly rental	Nominal value of call units included in low level monthly rental
Albania	1.95	There are no "free" call units included in monthly rental	There is no low level package of monthly rental applied.	There are no call units included.
Bosnia & Herzegovina	3.26	Equivalent of 100 minutes of local calls in peak time - represents a value of 1.56	2.18* *special package	Equivalent of 120 minutes of local calls in peak time - represents a value of 1.87
	3.26	Equivalent of 100 minutes of local calls in peak time - represents a value of 1.20	1.63* *special package	Equivalent of 150 minutes of local calls in peak time - represents a value of 1.79
	3.26	Equivalent of 100 minutes of local calls in peak time - represents a value of 1.62	2.18* *special package	Equivalent of 100 minutes of local calls in peak time - represents a value of 1.62
Bulgaria	6.44 residential standard telephone line 6.14 residential party standard telephone line	40 minutes local calls (20 impulses) included represents a value of 0.37	Package "Economical usage of telephone services for residential subscribers": 3.99	Package "Economical usage of telephone services for residential subscribers": 30 minutes local calls (15 impulses) included represents a value of 0.28
			Package "Limited usage of telephone services for residential subscribers": 1.90	Package "Limited usage of telephone services for residential subscribers": 20 minutes local calls (10 impulses) included represents a value of 0.18

Country	Standard monthly rental including VAT	Nominal value of call units included in standard monthly rental	Low level package monthly rental	Nominal value of call units included in low level monthly rental
			<p>Package “Usage of telephone services for residential subscribers – disabled people group, for one definite telephone line”: 0.92</p>	<p>Package “Usage of telephone services for residential subscribers – disabled people I group, for one definite telephone line”: 120 minutes local calls (60 impulses) included represents a value of 1.10</p>
			<p>Package “Usage of telephone services for social and health institutions*, for one fixed telephone line”: 2.15 * determined annually till 30th January by lists of the relevant ministries</p>	<p>Package “Usage of telephone services for social and health institutions*, for one fixed telephone line”: 600 minutes local calls (300 impulses) included represents a value of 5.52</p>
			<p>All packages are approved by CRC. Consumption above the units included in the plan is usually charged at tariffs that are much higher than the tariffs in the standard calling plan.</p>	
Croatia	10.10	1.68	7.58	60 minutes of national traffic anytime and this represents a value of 4.65
Montenegro	3.00	No “free” call units included	2.25 For party lines	No “free” call units included
Romania	7.62	50 local minutes in peak time and 10 on-net national minutes in off-peak time, on incumbent network – representing a value of 2.20	5.83	no minutes included
Serbia (including Kosovo ¹)				
<i>Serbia</i>	0.56	150 pulses - representing a value of 0.63	For a party line, the monthly line rental charge is 25% lower than standard 0.42	150 pulses - representing a value of 0.63
<i>Kosovo</i>	6.33	1.84	NA	NA
The former Yugoslav Republic of Macedonia	7.69	The first 100 minutes in local and long-distance national traffic are included in the monthly fee representing a value of 1.93	4.24 Local traffic above €1.30 per month is charged at double the standard tariff	No

Country	Standard monthly rental including VAT	Nominal value of call units included in standard monthly rental	Low level package monthly rental	Nominal value of call units included in low level monthly rental
Turkey	5.82	-	3.64	100 pulses - representing a value of 3.63 (and 15% Special Communication Tax (SCT) is included.
1) under UNSCR 1244				

Table 64 - Standard and low-level monthly line rental charge of fixed incumbent operator for residential users in nominal euro including VAT

Notes:

The nominal values of call units included in the monthly rentals have been calculated as the cost that these call units (during peak hours, if that option was available) would have added to the bill.

Bosnia & Herzegovina: Special package referred to in this table is actually “social” package for religious communities, traditional crafts, and humanitarian organizations.

Romania: The prices shown in the table above are those applicable on July 1, 2006. Tariff increases in the monthly rental charges were implemented on August 15, 2006.

The next figure provides a graphical representation of the standard monthly rental in Table 56 above. It also displays the value of the free call units. It is constructed in such a way that the total height of the column represents the nominal value of the monthly rental. The top burgundy coloured segment represents the value of the free call units calculated on the basis of what a call unit costs after the free units have been exhausted.

It will be seen that for Serbia, the value of the free call units exceeds the monthly rental price.

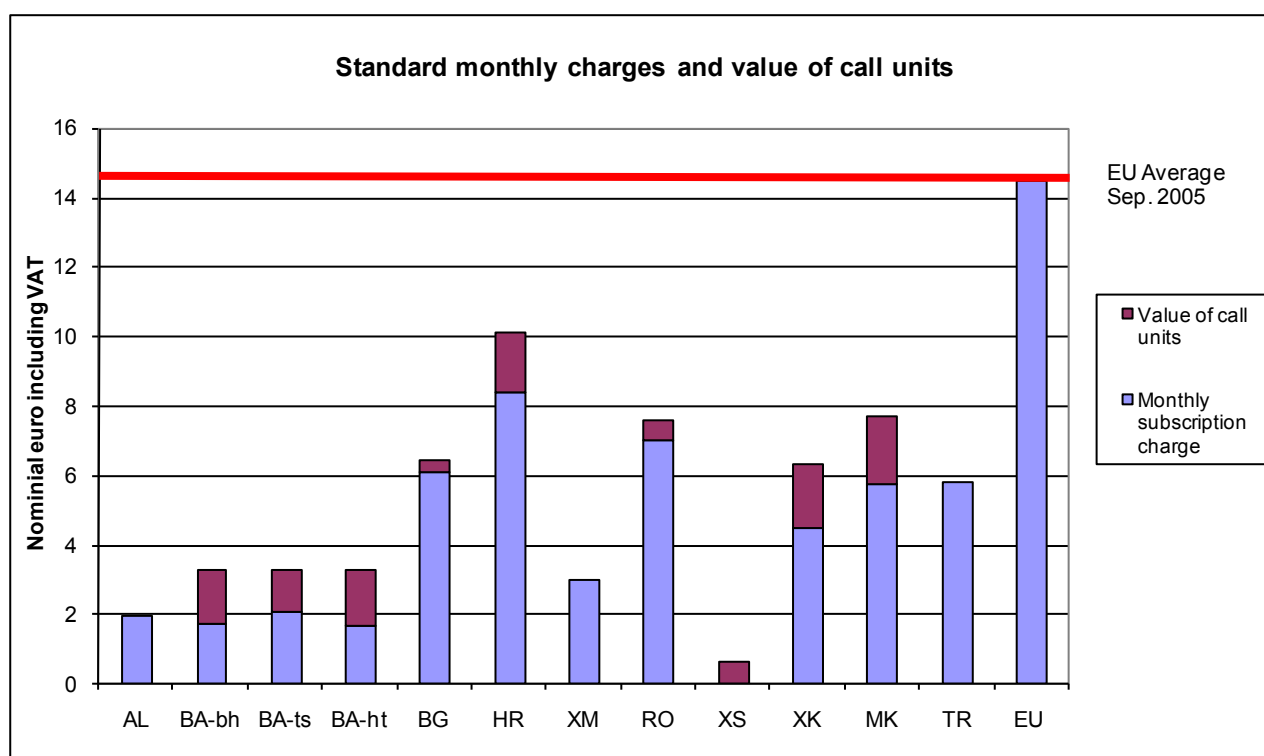


Figure 23 – Standard monthly rental and value of call units for residential users – nominal euro

Notes:

The monthly charge for Turkey includes a special 15% communications tax

The EU average is taken from the 11th Implementation Report from the European Commission, February 2006.

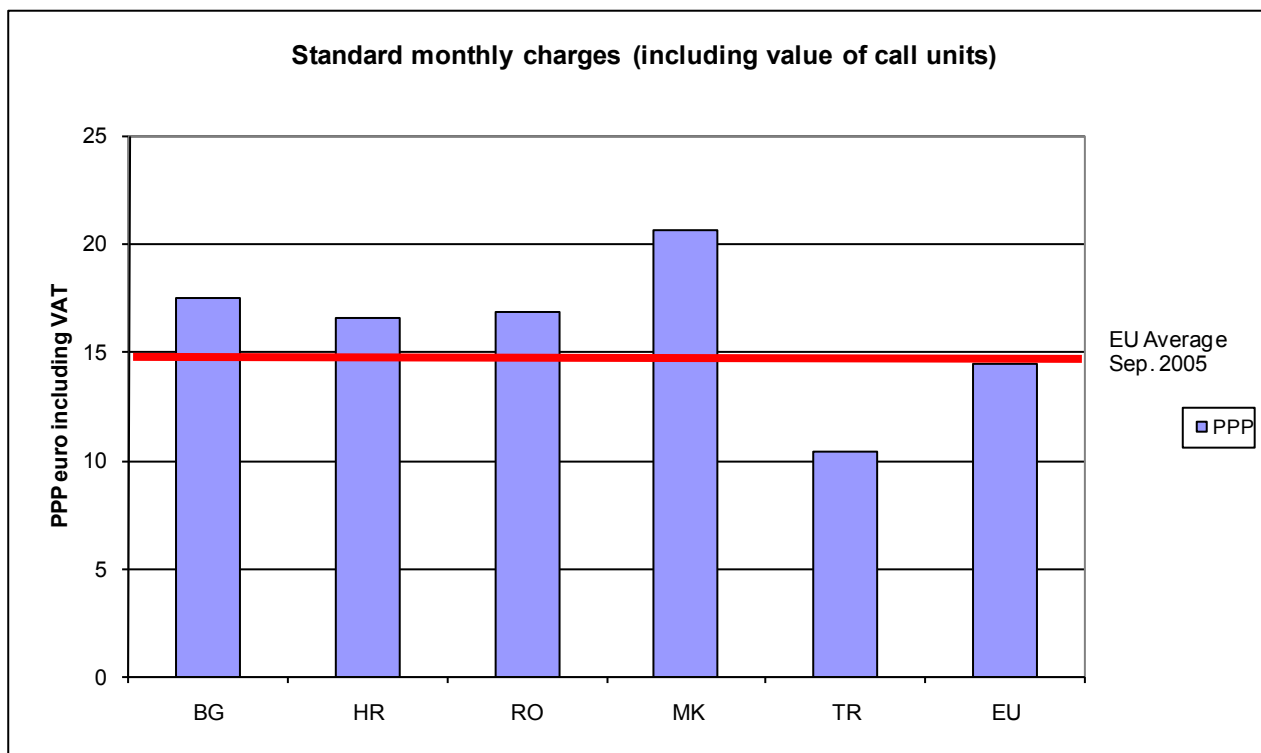


Figure 24 - Standard monthly rental (including value of call units) for residential users – PPP euro

Note:

The EU average is taken from the 11th Implementation Report from the European Commission, February 2006.

Figure 25 below shows how a low rental option compares with the normal monthly subscription charges. Not all countries have a low rental option. Bosnia & Herzegovina is indicated on the chart as not having a low rental option because their special tariff scheme for war victims is not generally available for low-income families.

The value shown in the figure is the nominal price paid by the subscriber. In several of the tariff schemes, the monthly rental includes a number of free call units. The value of the free call units (see Table 56) is not presented in the graph.

For Serbia and Turkey, the value of the free call units, when evaluated at the normal call charges, exceeds the nominal monthly rental.

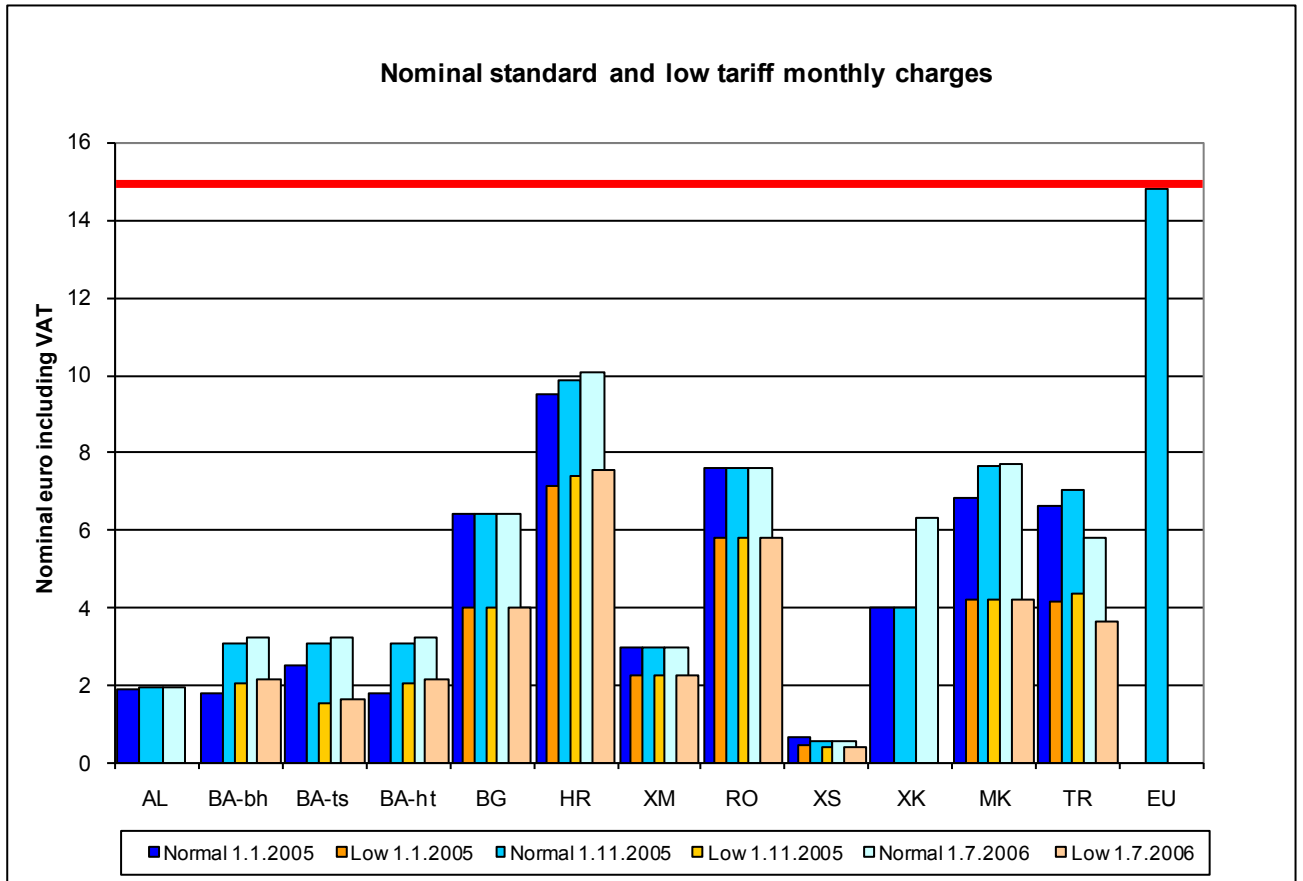


Figure 25 - Standard and low-level monthly line rental charge of fixed incumbent operator for residential users in nominal euro

In general, the monthly line rental charges have remained stable since January 2005. The increase in Bosnia & Herzegovina in November 2005 was due to all 3 operators increasing their rental charges to the same level. The increase in Kosovo is due to an increase in the rental charge, coupled with the inclusion of a certain number of 'free' minutes. However, even when the 'free' minutes are discounted from the price, as in the figure above, the result is an increase of more than 50% in the monthly rental. The variations seen for Croatia, Serbia, and Turkey are the result of fluctuations in the exchange rate to the euro (the prices have not changed).

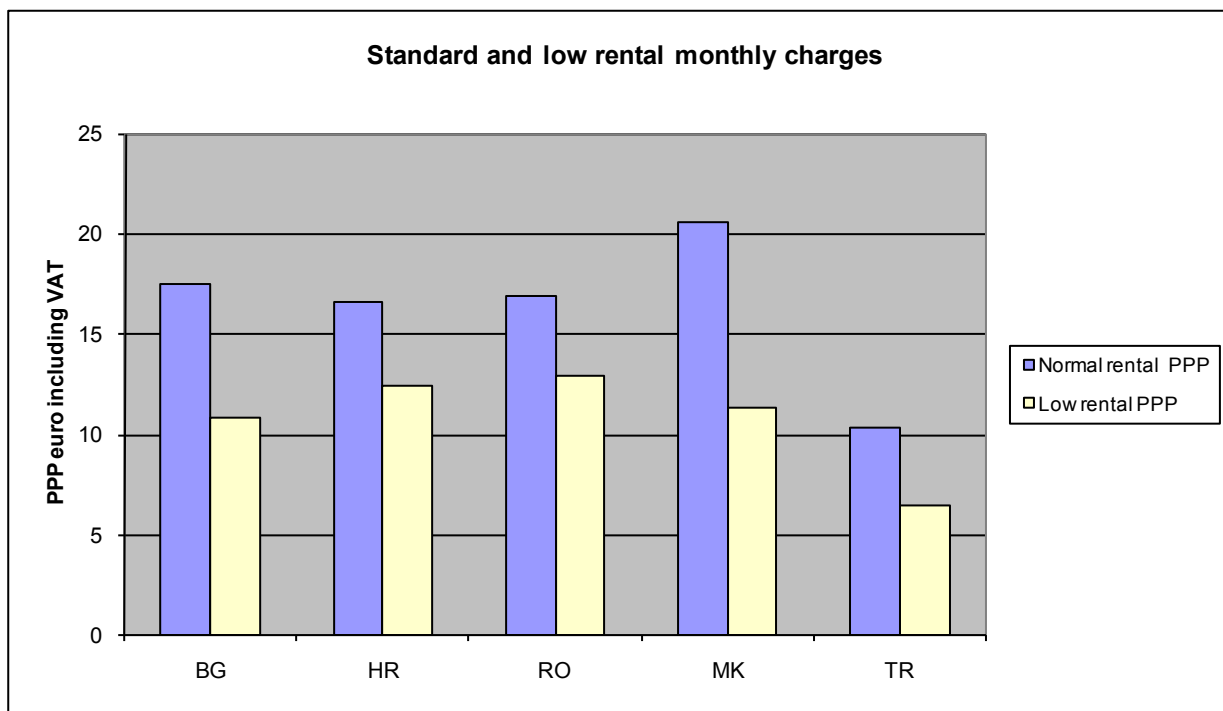


Figure 26 - Standard and low-level monthly line rental charge of fixed incumbent operator for residential users in PPP euro

Figure 27 provides similar information for business subscribers as Figure 23 shows for residential subscribers. The difference is that the prices for business subscribers are without value added tax and, except for Montenegro, which has a low tariff option for party lines, there are no low tariff schemes.

The graph should be interpreted in the same way as the graph for residential subscription costs. For each country, there can be two cost elements, one for the net monthly cost (after deduction of the value of free call units), and the free call units. The total height of the column then represents the nominal monthly charge.

The graph demonstrates that the gap between the EU average and the charges in the geographic units being studied is considerably less for business subscriptions than for residential subscriptions. Nevertheless, the countries with the relatively highest rates, such as the three operators in Bosnia & Herzegovina, and the incumbent operators in Bulgaria, Croatia, Romania, and the former Yugoslav Republic of Macedonia have charges at the level of about two thirds of the EU average. The other geographic units, Albania, Montenegro, Serbia, Kosovo and Turkey, have charges that are less than half the EU average. Serbia's charges are particularly low and are less than 4% of the EU average.

Country	Monthly rental	Value of call units
Albania	6.49	0.00
Bosnia & Herzegovina		
<i>BH Telecom d.d. Sarajevo</i>	8.36	1.33
<i>Telekom Srpske a.d. Banja Luka</i>	7.67	1.02
<i>Hrvatske Telekomunikacije d.o.o. Mostar</i>	8.36	0.37
Bulgaria	8.44	0.00
Croatia	9.66	0.00
Montenegro	4.09	0.00
Romania	8.00	0.00
Serbia, including Kosovo ¹		
Serbia	0.45	0.00
Kosovo	5.50	1.60
The former Yugoslav Republic of Macedonia	11.44	0.00
Turkey	4.93	0.00
1) under UNSCR 1244		

Table 65 - Standard line rental charge of fixed incumbent operator for business users in nominal euro

Note:

Bulgaria has higher monthly rentals for lines that are connected to a PABX.

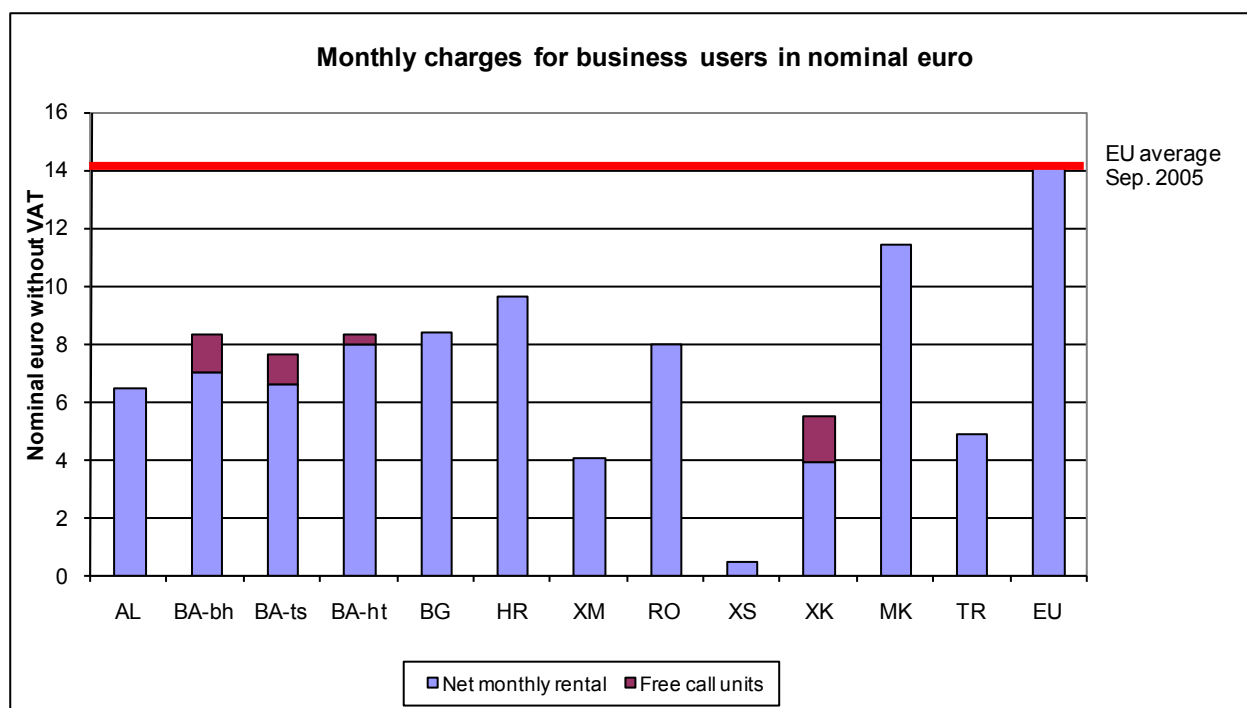


Figure 27 - Standard line rental charge of fixed incumbent operator for business users in nominal euro

Note:

The monthly charge for Turkey includes a special 15% communications tax

The EU average is taken from the 11th Implementation Report from the European Commission, February 2006.

3. One time installation costs

Figure 28 below shows the one-time costs for installation and connection of residential as well as business subscriptions. The installation costs represent the cost of a new installation in a location that has not been connected before. The connection cost is the cost for the connection of an existing subscriber line to a new subscriber, for example, when a new family takes over an apartment where the previous occupant was already connected.

Some countries also provide special reconnection tariffs that apply when a subscriber is disconnected for failure to pay the subscription fee. These types of reconnection tariffs are not reflected here.

The geographic units fall into three cost categories:

1. Albania, Serbia and Kosovo have installation prices above 100 euro. In the case of Serbia, this high rate is only paid by business users.
2. Bosnia & Herzegovina, Bulgaria, Croatia, Montenegro and residential subscribers in Serbia have installation costs between 35 and 100 euro.
3. Romania, the former Yugoslav Republic of Macedonia and Turkey have installation costs below 25 euro. Turkey's installation cost is particularly low at only €3.21 without VAT.

In Figure 28 below, both residential rates and business rates are provided without value added tax in order to enable a fair comparison. In most countries and geographic units, the one-time installation costs are nominally the same for residential and business subscribers.

The variations seen for Croatia, Serbia, and Turkey are the result of fluctuations in the exchange rate to the euro (the prices have not changed).

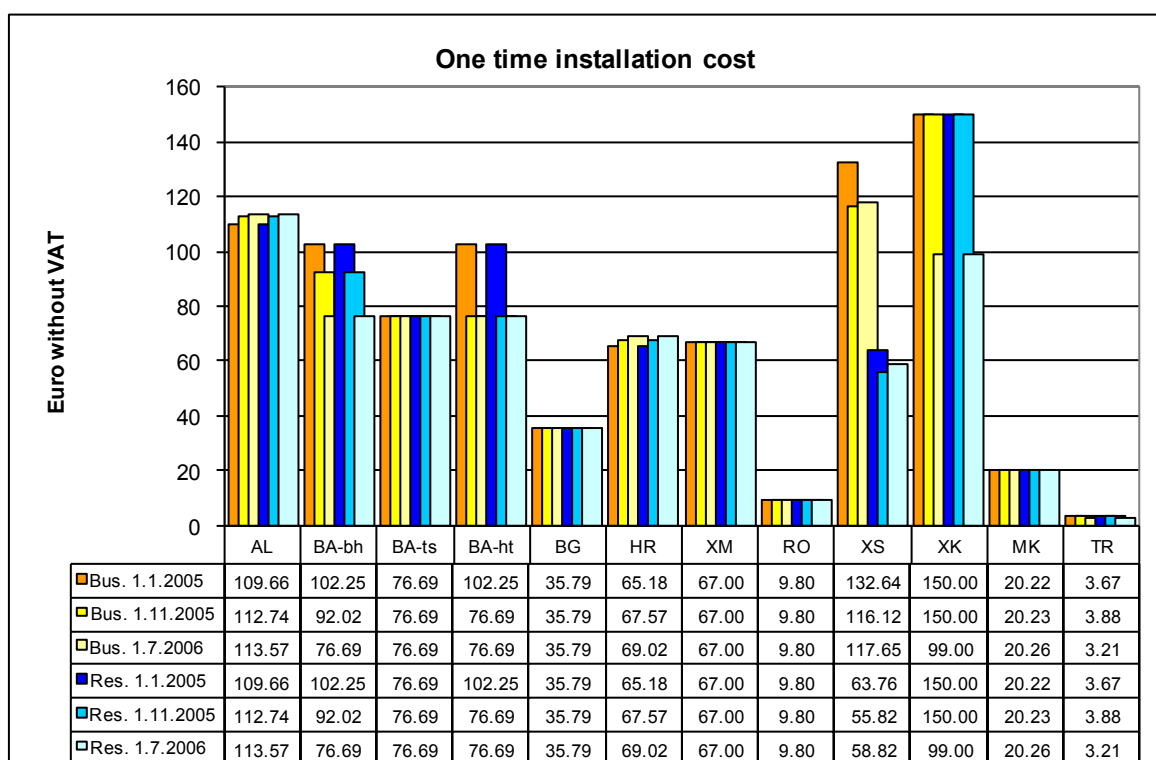


Figure 28 - One time installation cost for residential and business users without VAT

Notes:

Bosnia & Herzegovina: The installation fee includes a connection fee.

The former Yugoslav Republic of Macedonia: Normal installation fees assume that the new installation is within 250 metres of the existing network. For greater distances, the new subscriber is obliged to pay the additional cost.

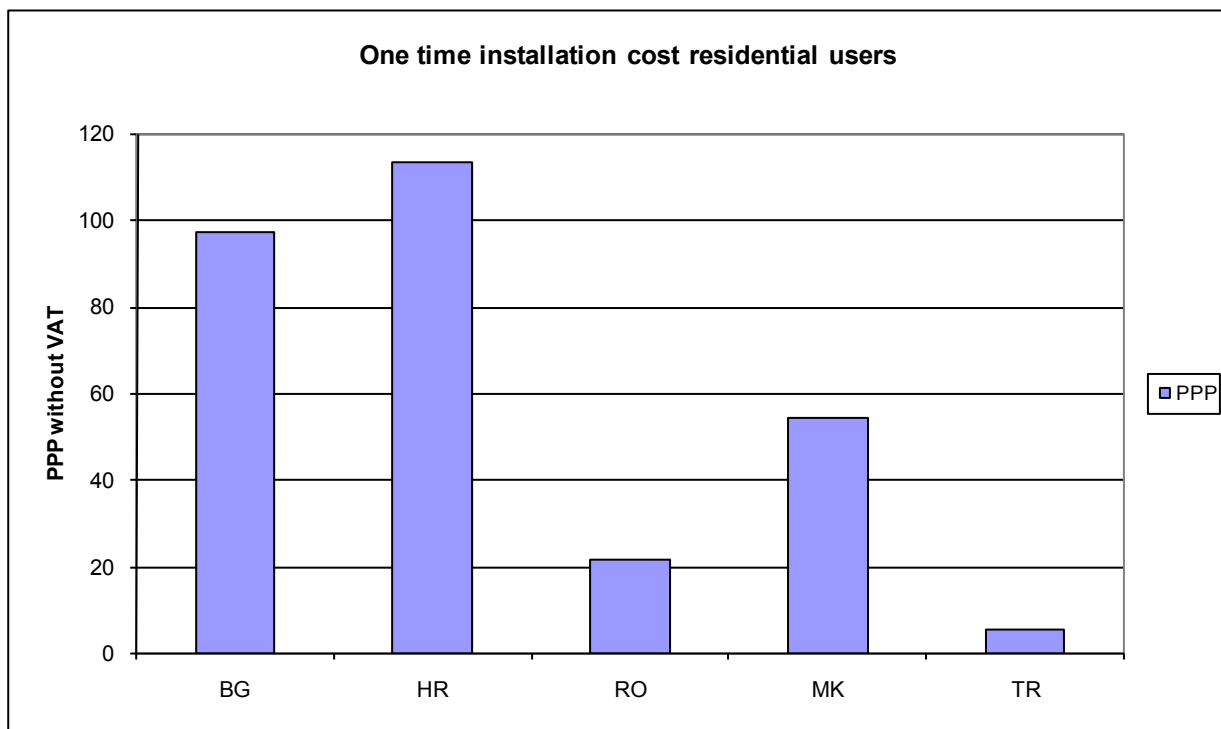


Figure 29 - One time installation cost for residential users without VAT in PPP euro

4. Access cost

Figure 30 below requires some special explanation. It is intended to demonstrate the status of tariff rebalancing and to give an indication of the degree to which the tariff scheme creates a tariff deficit.

The cost of connecting to the local network of an operator is normally paid for by a combination of the one-time installation costs and the fixed monthly charges. In order to combine these two revenue elements into a single indicator, the monthly charges (without VAT) have been discounted and added to the one time installation charge.

This discounted sum of installation cost and monthly charges can also be represented by a single monthly charge that when discounted produces the same amount. This “fictitious” monthly access charge would then include the one-time installation elements.

Such a calculation has to make certain assumptions. For the calculations in this report, it has been assumed that:

- the discount factor is 8% per year;
- the revenue stream for monthly subscription fees includes 18 years;
- the one-time installation cost is collected in year zero;
- the subscriber line is reconnected so that a reconnection fee is collected in year seven and year fourteen.

In the figure below, the “fictitious” monthly access charge representing one-time installation costs has been added to the normal monthly subscription cost.

These indicators are compared with the European average for monthly access charges for residential users. The corresponding indicator for one-time cost is not available from the 11th Implementation Report from the European Commission.

The result shows that all geographic units are below the EU average. In particular, Serbia has extremely low values for both residential and business tariffs.

In Kosovo and Turkey, there is no difference between the prices paid by residential subscribers and business subscribers, except for VAT.

In Albania and Bosnia & Herzegovina, business subscribers pay more than double the price than residential subscribers do. In the other countries and geographic units, business subscribers pay 15% to 70% more.

The business subscriptions in most countries and geographic units pay monthly charges that are 50% to 80% of the EU average in nominal euro. Business subscribers in Montenegro and Turkey pay only about 35% of the EU average. Serbia is an extreme case as business subscribers pay only around 10% of the EU average.

It is difficult to draw any firm conclusion on the existence of access deficits from these indicators. In the EU Member States, there are countries with monthly rentals at the EU average and above where there is still a debate over access deficits³⁶, but at the same time, there are new Member States with monthly rentals that are less than half the EU average and claim that the rebalancing has been completed³⁷.

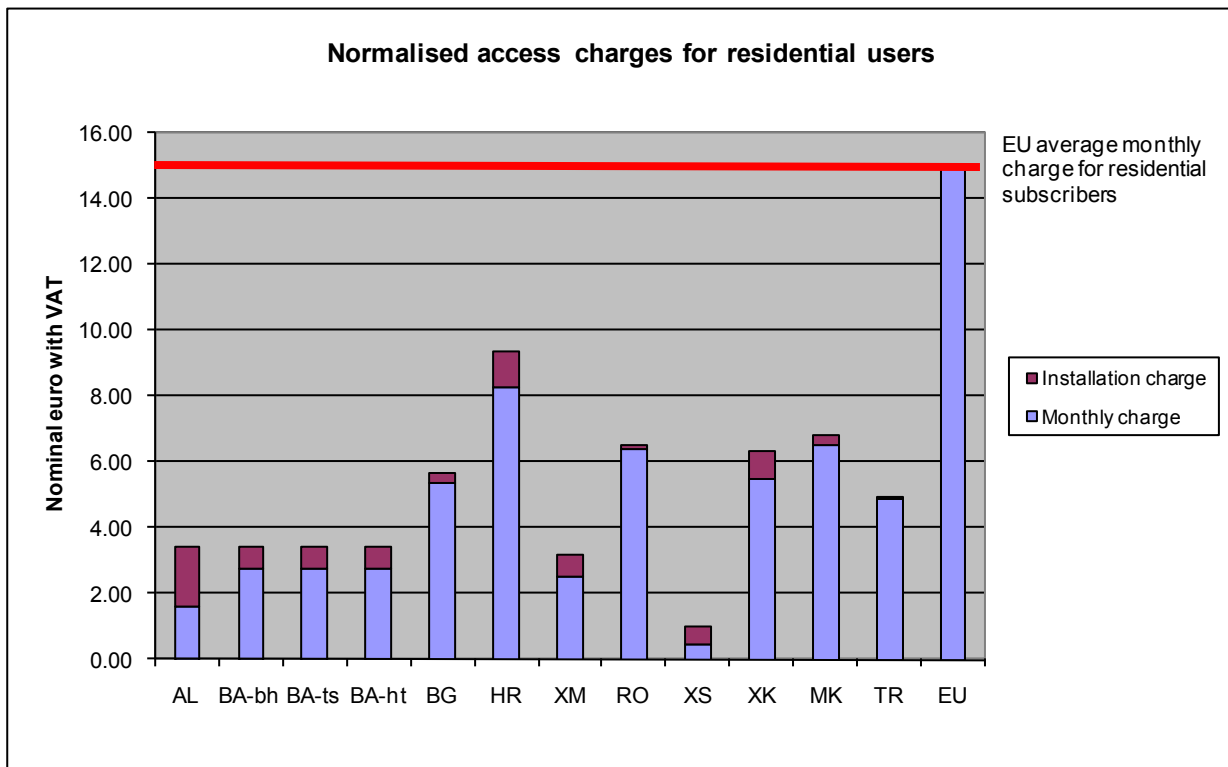


Figure 30 – Normalised access charges for residential users – nominal euro

³⁶ Ninth EU Implementation Report.

³⁷ 4th Report on monitoring of EU Candidate Countries (Telecommunication Services Sector) prepared by IBM for the EU.

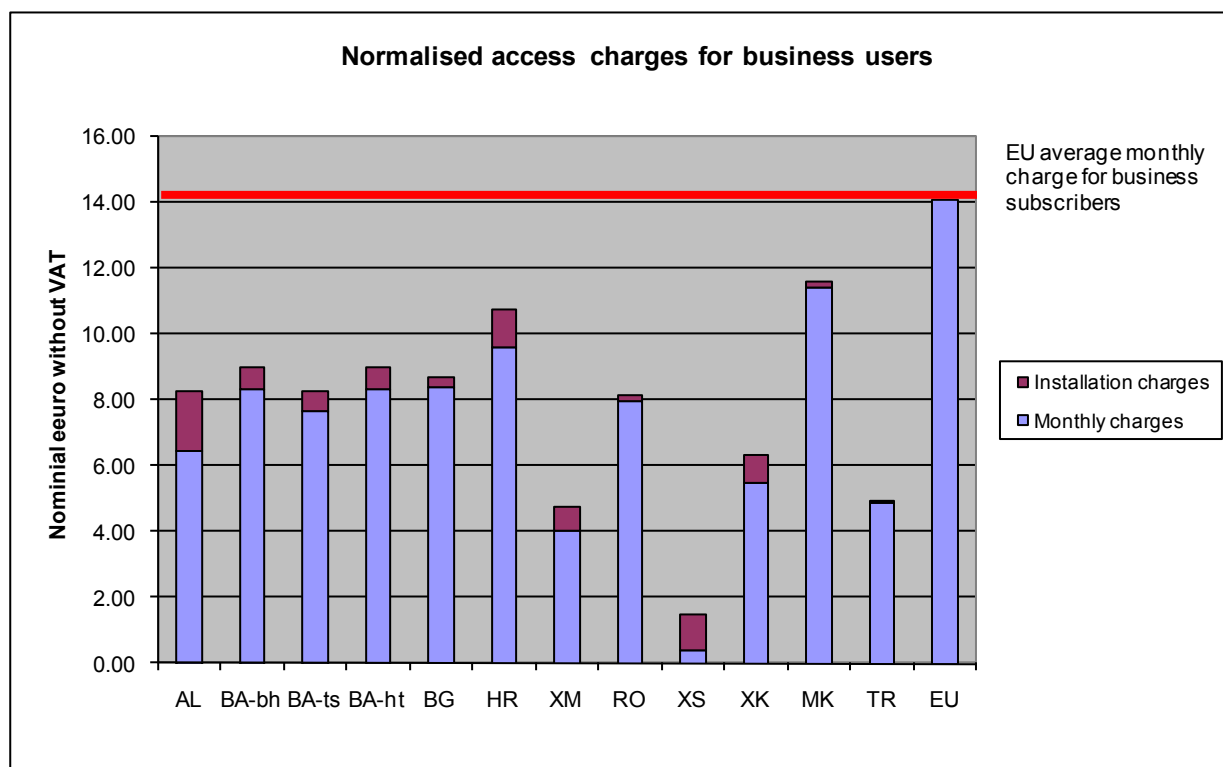


Figure 31 - Normalised access charges for business users – nominal euro

5. Local fixed telephony tariffs

The next table provides price information for local calls including value added tax for the incumbent operator, and where competition exists, from a typical alternative operator, in peak time periods.

Some assumptions have to be made in order to produce price information that allows international comparisons:

- Where the tariff scheme includes an initial price for the establishment of the call (call-setup charge), this value is included in the price of the call.
- Where the length of a call unit is such that a three-minute call cannot be accurately priced, the time based price element is calculated based on a theoretical three-minute price. For example, where a call unit has a duration of four minutes, the price for three minutes is calculated as $\frac{3}{4}$ of the price for four minutes.
- The price calculation does not take into account the additional cost element represented by the fact that on average each call includes the cost of an additional half call unit.

The information in the table and the corresponding graph show that short local calls in Bulgaria, Croatia, Romania, Kosovo and Turkey are at a level that is only slightly below the European average.

Serbia, on the other hand, has an extremely low price for local calls at a level of about 10% of the European average. A three-minute local call in Serbia cost about 1/9 of the cost in neighbouring Croatia.

The other geographic units have tariffs that are significantly lower than the EU average.

Only Albania, Bulgaria, Croatia and Romania have provided tariff information from alternative operators.

In Albania, however, the alternative operators only provide telephony in specific rural areas rather than as a national competitive alternative to the incumbent operator and so these tariffs are not shown in the figures that follow.

In Bulgaria and Romania, the incumbents as well as the alternative operators offer on-net calls at lower prices than off-net calls. Taking into account the difference in the market shares of the incumbents and

those of the alternative operators, most of the fixed calls still are terminating in the incumbents' networks: i.e. most of the calls originating in the incumbents' networks are on-net calls and the calls originating in the alternative operators' networks are off-net calls. The figures that follow are therefore showing the tariffs for on-net calls of the incumbent operators and off-net calls of the alternative operators.

In Romania, the alternative operators' tariffs were in fact significantly lower than those of the incumbent operators, as expected in a competitive environment but have doubled in the period November 2005-July 2006.

In the other geographic units, there is not yet a competitive alternative for local calls.

In some countries, the incumbent operator has different tariffs for residential and business users. The figure presents the tariffs for the residential users.

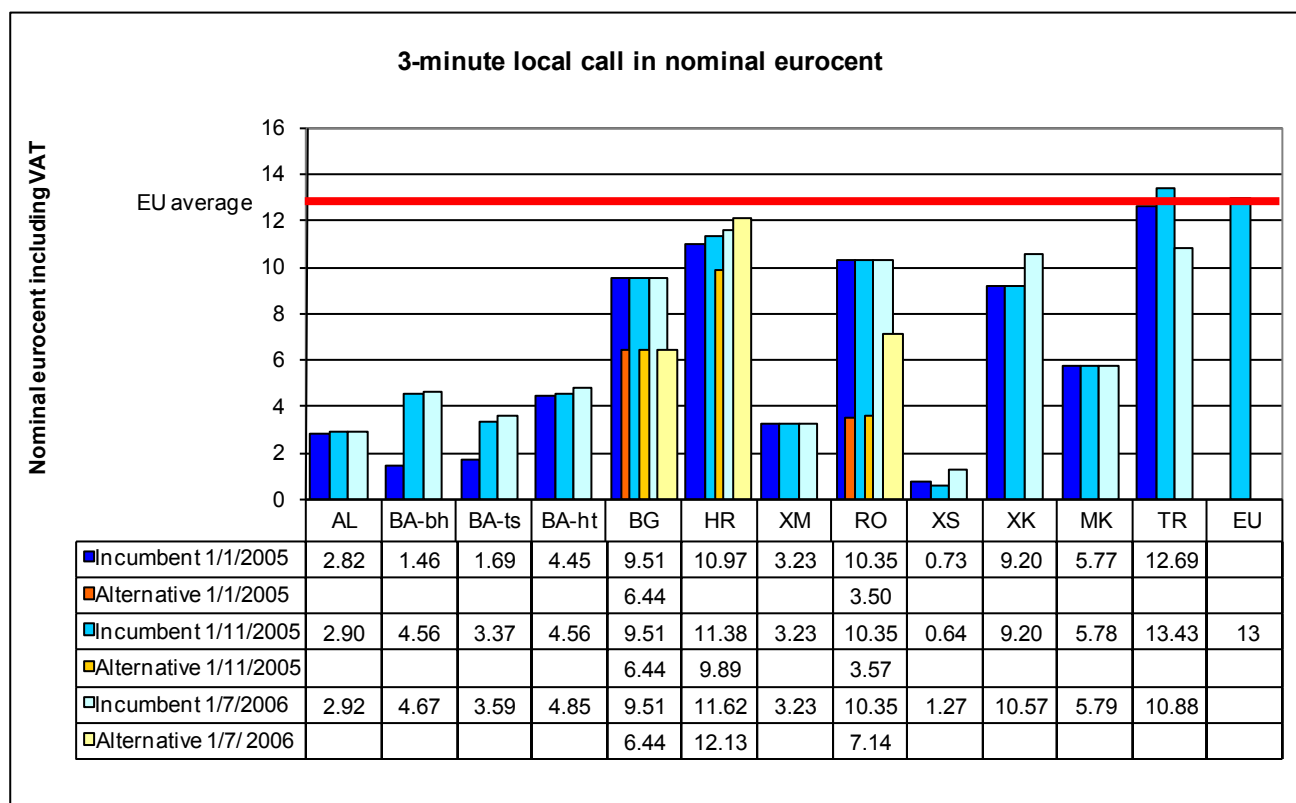


Figure 32 - Price of fixed incumbent and alternative fixed operator for a 3-minute local call in nominal eurocents

Notes:

Albania: The actual cost is 3 lek for the first two minutes and then 1 lek for the next two minutes, giving a cost of 4 lek for a 4-minute call. The tariff is represented here as 3 lek for a three minute call. The tariffs for previous periods have been recalculated according to this method. This tariff is for residential subscribers. The corresponding tariffs for business subscribers are 50% higher.

Bulgaria: The prices shown for the incumbent are for calls made on digital exchanges. Local calls made on analogue exchanges are priced differently (6.75 eurocents per call). The alternative operator, Orbitel, does not charge for on-net local calls.

Croatia: The alternative operator is Optima Telekom.'s OptiMax peak-time rates at full tariff. This tariff scheme includes a fixed monthly fee of 200 HRK (€27.60) which can be used for calls. The first 100 minutes per month is charged at about 1/3 of the cost of additional minutes.

The EU average is taken from the 11th Implementation Report from the European Commission, February 2006.

Romania: The tariffs for alternative operators, which in previous reports were incorrectly reflecting on-net tariffs, have been corrected to off-net tariffs.

When considering the levels of local tariffs in purchase power values for the countries where this indicator is available, the local tariffs exceed the EU average in all countries as shown below in Figure 33.

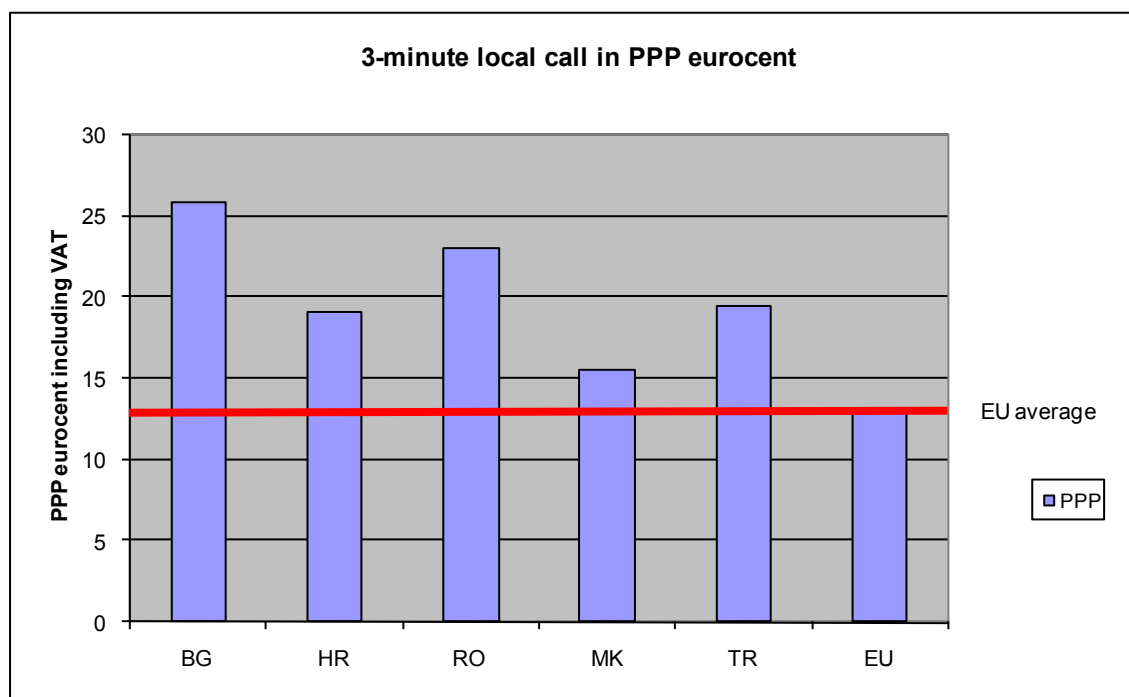


Figure 33 - Price of fixed incumbent operator for a 3-minute local call in PPP eurocents

Note:

The EU average is taken from the 11th Implementation Report from the European Commission, February 2006.

The next table shows the prices for a 10-minute local call in the fixed network. This information will be different from that of a three-minute local call only to the extent that there are call set-up charges that become less significant in a longer call. Since only the incumbent operators in Bulgaria and Kosovo have tariff schemes with call set-up charges, these countries are presented with relatively lower prices for calls with 10-minute duration.

For both Bulgaria and Kosovo the call set-up cost is rather high relative to the cost per minute. In Bulgaria, the set-up cost corresponds to the per minute cost for over seven minutes and in Kosovo it corresponds to a little less than 2 ½ minutes.

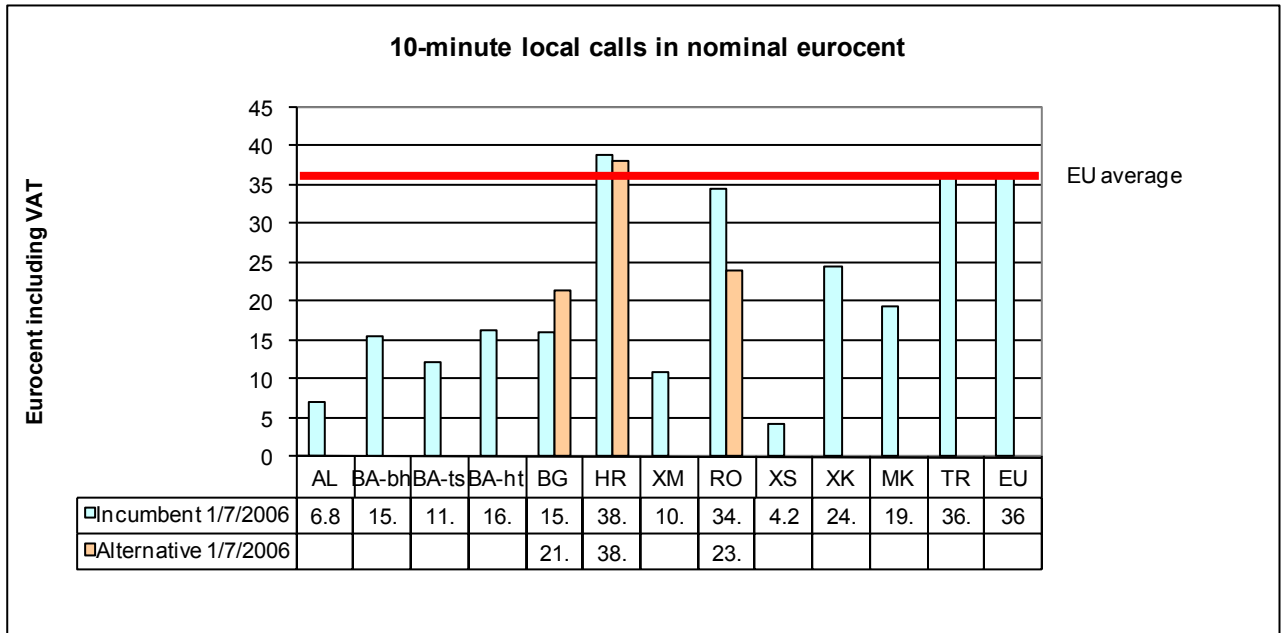


Figure 34 - Price of fixed incumbent and alternative fixed operator for a 10-minute local call in nominal Eurocents

Notes:

Bulgaria: The prices shown for the incumbent are for calls made on digital exchanges. Local calls made on analogue exchanges are priced differently (6.75 eurocents per call). The alternative operator, Orbitel, does not charge for on-net local calls.

Croatia: The alternative operator is Optima Telekom's OptiMax peak-time rates at full tariff. This tariff scheme includes a fixed monthly fee of 200 HRK (€27.60) which can be used for calls. The first 100 minutes per month is charged at about 1/3 of the cost of additional minutes.

The EU average is taken from the 11th Implementation Report from the European Commission, February 2006.

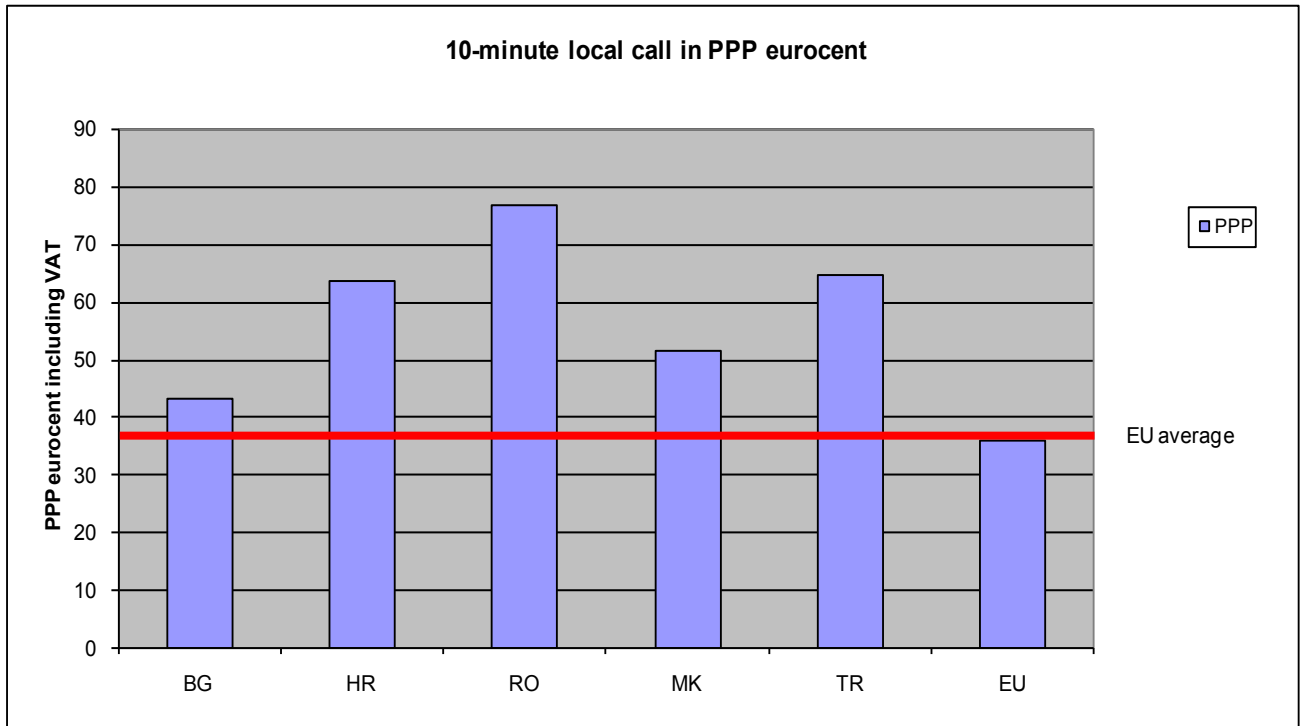


Figure 35 - Price of fixed incumbent fixed operator for a 10-minute local call in PPP Eurocents

Note:

The EU average is taken from the 11th Implementation Report from the European Commission, February 2006.

6. Long distance fixed telephony tariffs

The Croatian incumbent operator has a tariff scheme whereby all national calls are charged at the same rate. In other words, all national calls are charged at the rate as a local call. This means that while a three-minute local call in Croatia has a relatively high price, the price for a 3-minute long distance call is relatively low compared with the other geographic units and less than half of the European average.

Only Serbia has tariffs for national long distance calls that are lower than those in Croatia. However, this only applies to the Serbian tariffs for residential users, which are lower than for business users.

A three-minute long distance call with the incumbent operator in Albania and Turkey costs more than the EU average. In Bosnia & Herzegovina, Bulgaria, Romania, Kosovo and the former Yugoslav Republic of Macedonia the tariffs are lower than the EU average.

The incumbent operator in Serbia has tariffs that are significantly lower than the EU average.

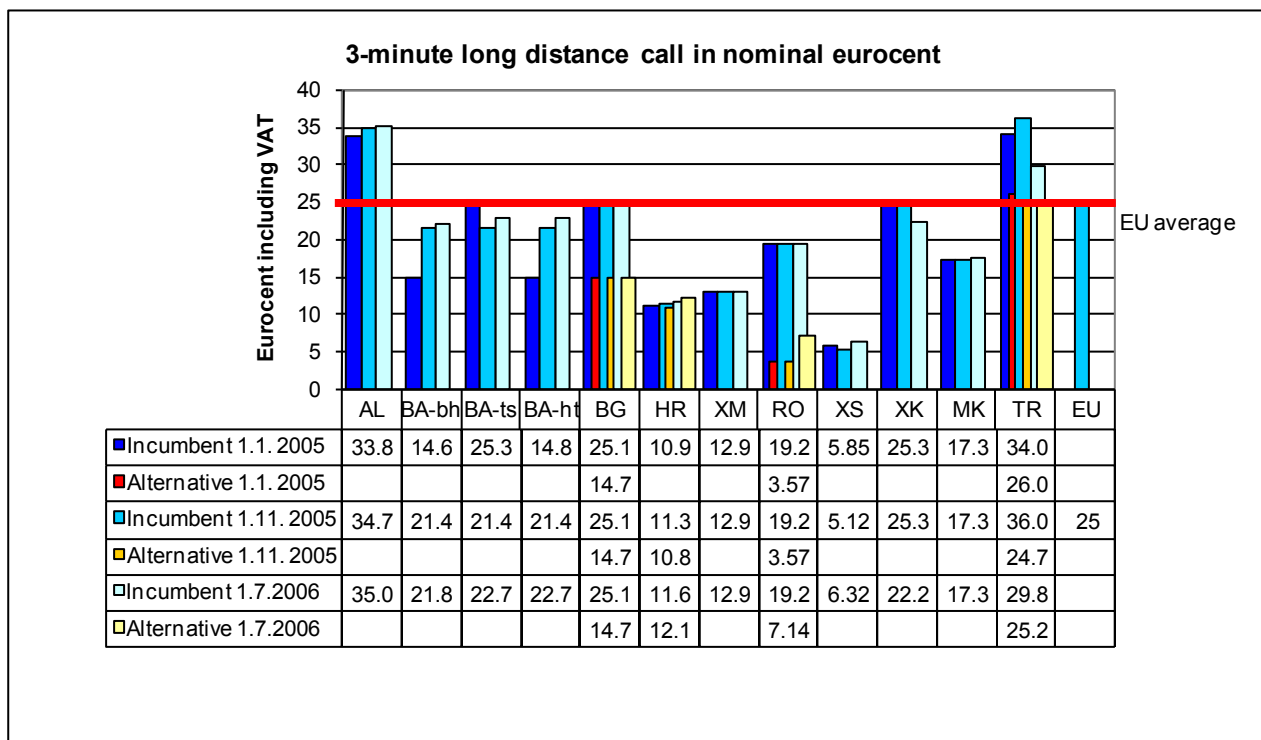


Figure 36 - Price of fixed incumbent and alternative fixed operator for a 3-minute long distance call in nominal Eurocents

Notes:

Bulgaria: The prices shown for the incumbent are for calls made on digital exchanges. Long distance calls made on analogue exchanges are priced differently (a 3-minute long distance call would cost 27.00 eurocents). The alternative operator, Orbitel, does not charge for on-net long distance calls.

Romania: The tariffs for alternative operators, which in previous reports were incorrectly reflecting on-net tariffs, have been corrected to off-net tariffs.

The EU average is taken from the 11th Implementation Report from the European Commission, February 2006.

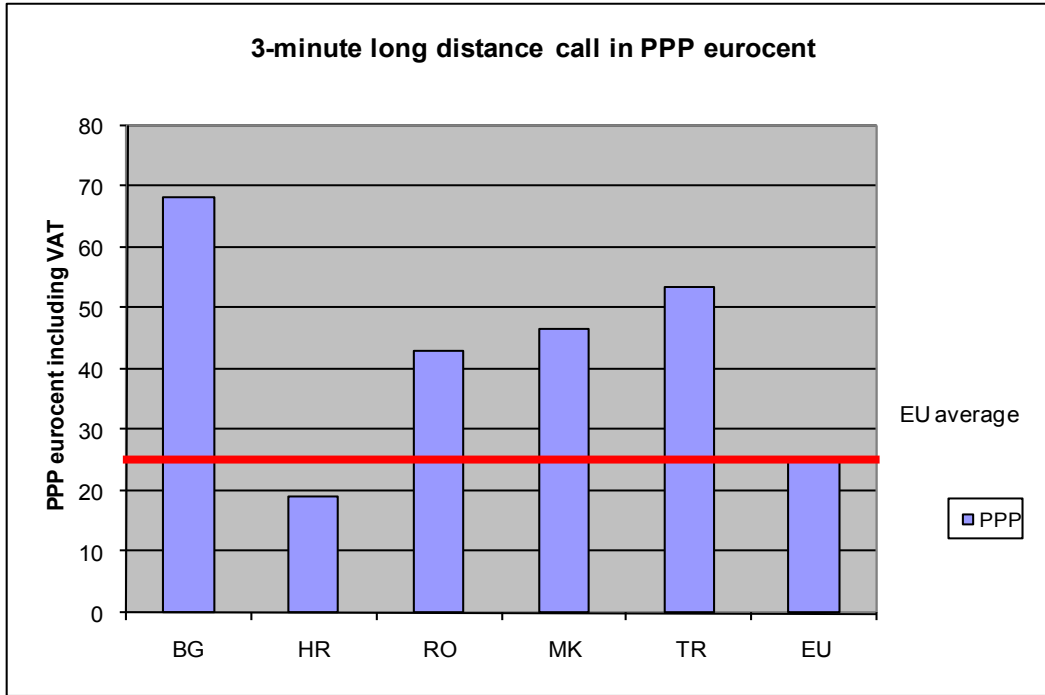


Figure 37 - Price of fixed incumbent operator for a 3-minute long distance call in PPP Eurocents

Note:

The EU average is taken from the 11th Implementation Report from the European Commission, February 2006.

The next figure shows the prices for 10-minute long distance calls. It presents a picture that is quite similar to the previous figure for a three-minute call with some variations due to the reduced impact of call set-up charges for Bulgaria and Kosovo.

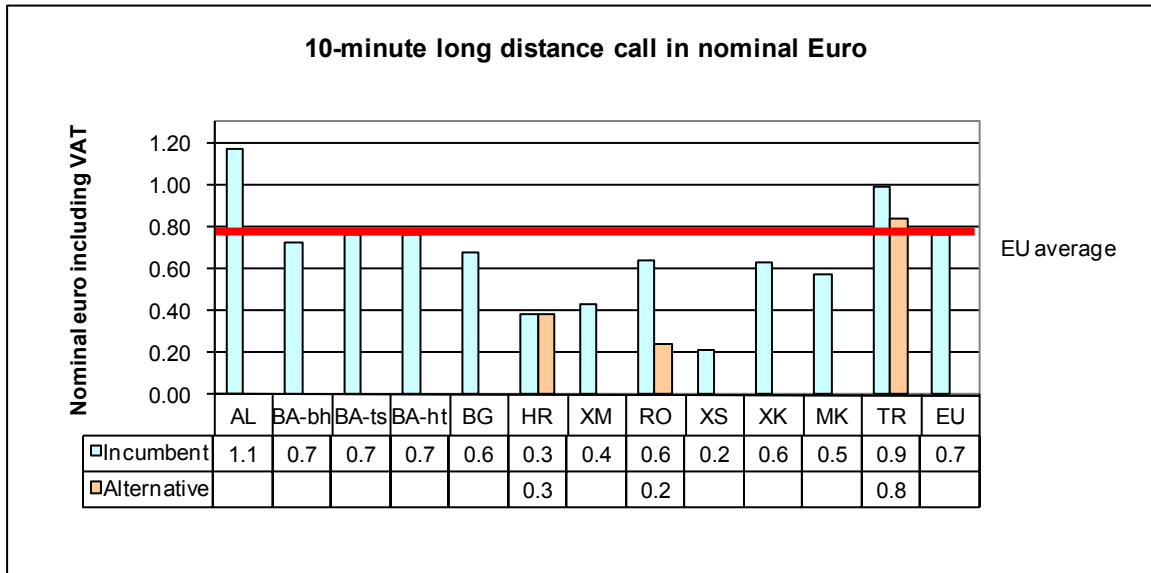


Figure 38 - Price of fixed incumbent and alternative fixed operator for a 10-minute long distance call in nominal Eurocents

Notes:

Bulgaria: The prices shown for the incumbent are for calls made on digital exchanges. Long distance calls made on analogue exchanges are priced differently (a 10-minute long distance call would cost 0.675 euros). The alternative operator, Orbitel, does not charge for on-net long distance calls.

The EU average is taken from the 11th Implementation Report from the European Commission, February 2006.

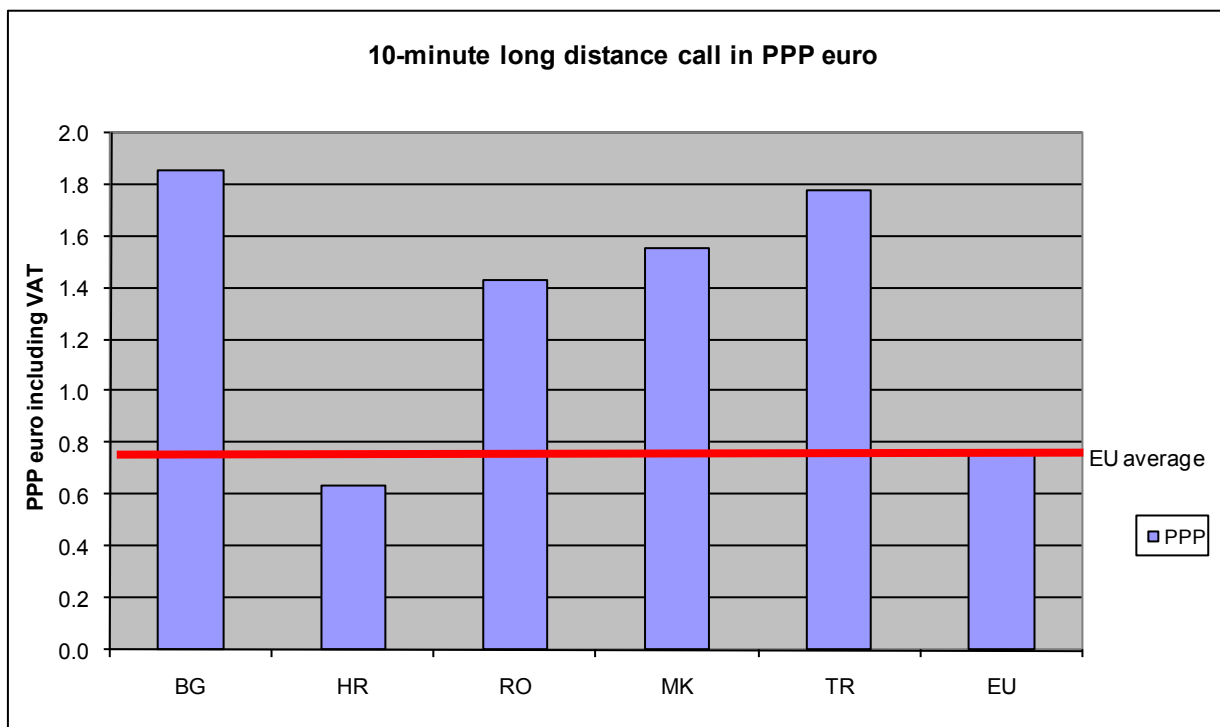


Figure 39 - Price of fixed incumbent operator for a 10-minute long distance call in PPP Eurocents

7. Fixed to mobile calls

In almost all the countries and geographic units in this report there are more mobile than fixed subscriptions. It is therefore interesting to look at the rates for mobile telephony. This section deals with the cost of calls from fixed telephony subscribers to mobile subscribers.

Since rates for fixed to mobile calls provide connection to mobile users wherever they are in the country or geographic unit, the rates could be compared with fixed national long distance calls rather than local calls.

Figure 40 below indicates particularly low tariffs for all three incumbent operators in Bosnia & Herzegovina. Serbia and Romania also have rather low tariffs, although they are twice the level of Bosnia & Herzegovina.

Albania has the highest rates. The other countries and geographic units have mid-range tariffs.

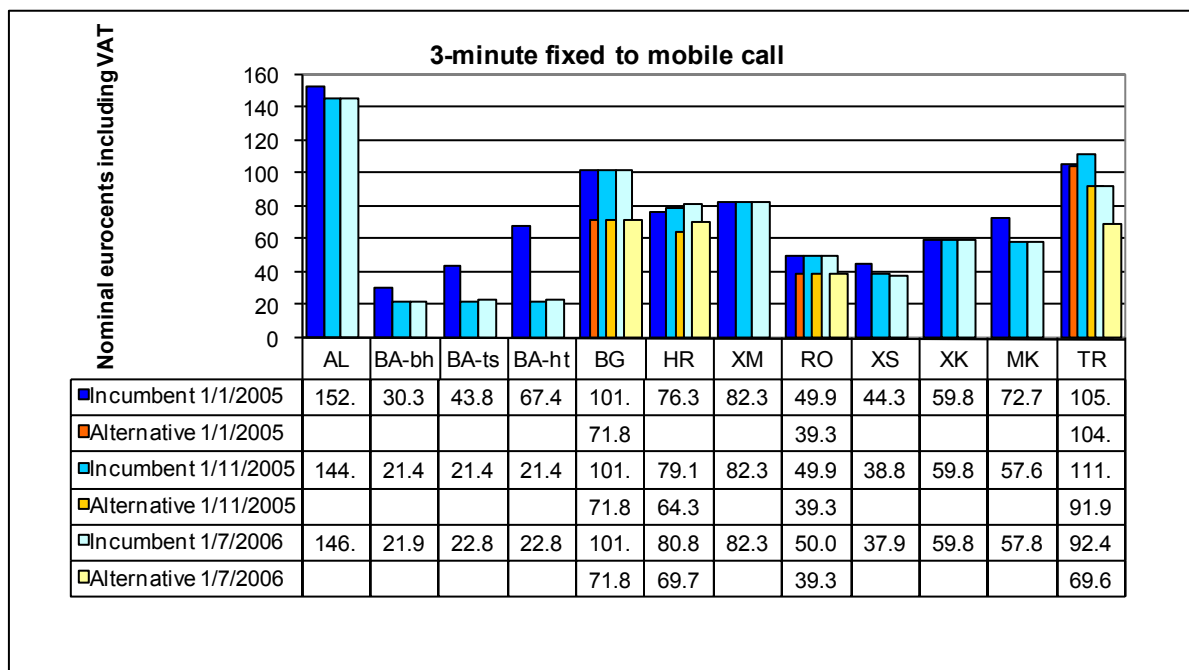


Figure 40 - Price of fixed incumbent and alternative fixed operator for a 3-minute long fixed to mobile call in nominal Eurocents

Notes:

Bosnia & Herzegovina: All three incumbent operators have both fixed and mobile operations. The graph shows the tariffs from a fixed operator to a mobile operator that is not a subsidiary. Tariffs for calls to its mobile subsidiary are lower.

Bulgaria: The alternative operator is Orbitel.

Serbia: The prices are for residential users. Business users pay 65% more.

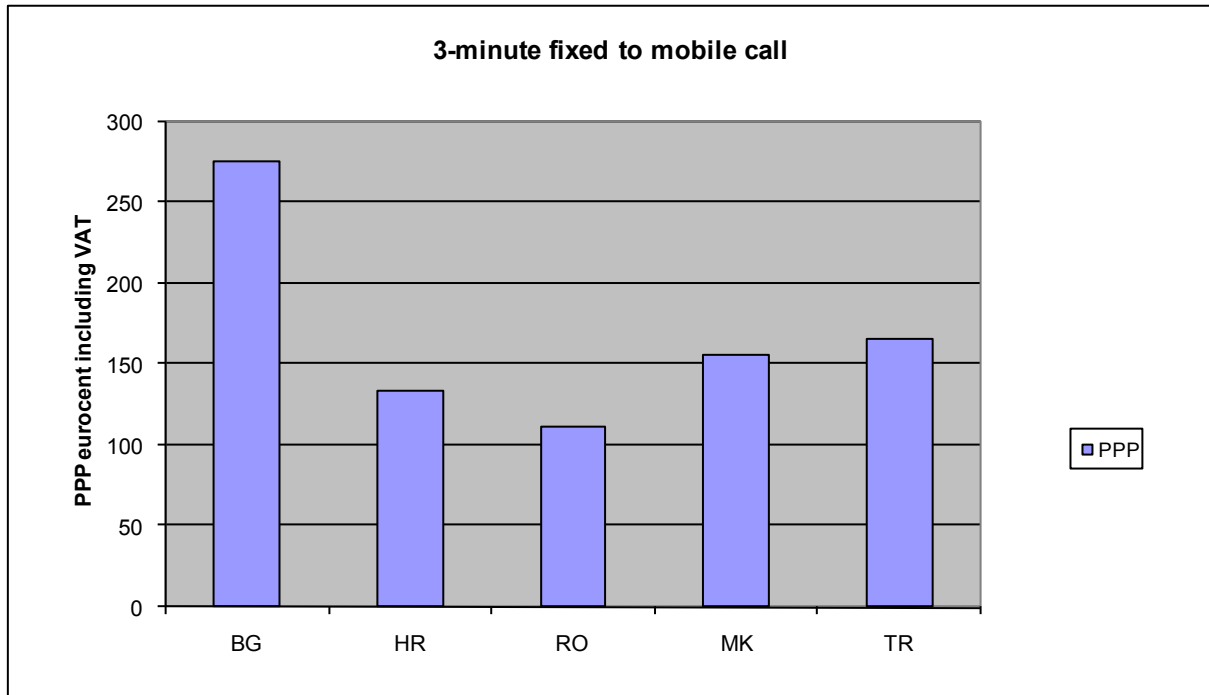


Figure 41 - Price of fixed incumbent operator for a 3-minute long fixed to mobile call in PPP Eurocents

8. National mobile tariffs

Mobile operators normally provide a range of tariff options that can be quite complex and difficult to compare without taking into account a long list of parameters, such as subscription activation charges, monthly subscription charges, peak- and off-peak tariffs, free call units included in the package, volume dependent tariffs, normal call tariffs, SMS tariffs, tariffs for calls within the same network (on-net calls), tariffs for calls to other mobile networks or to fixed networks (off-net calls), etc.

Nevertheless, in order to be able to make valid comparisons between different offerings, the OECD constructed a set of mobile tariff baskets in 2000 that allow all these parameters to be taken into account for each of three usage profiles representing low usage, medium usage and high usage. A definition of these tariff baskets is found at the end of this report.

The OECD baskets were revised in 2006 in order to reflect more accurately the current call patterns. In this report, we use the old baskets in order to enable comparisons and to show price movements from the previous report.

The figures below present the lowest cost alternative within each country and geographic unit for each usage basket taking into account both post-paid and pre-paid offerings. These values are compared against the corresponding yardstick values for the 25 EU Member States.

NB. The values from the 25 EU Member States are found in the 11th Implementation Report of the European Commission, which was published in February 2006. The data come from June or October 2005 and include only post-paid offerings.

The yardstick values used for comparisons in this report are the highest and lowest cost found in the EU, as well as the median value. The median value represents the point where half of the EU values are higher and the other half lower.

NB. The OECD country baskets are not available from all countries and geographic units.

The figures suggest that the prices for the low usage basket compare favourably with those of the EU. Tariffs for all countries and geographic units except Albania and Bulgaria are below the EU median.

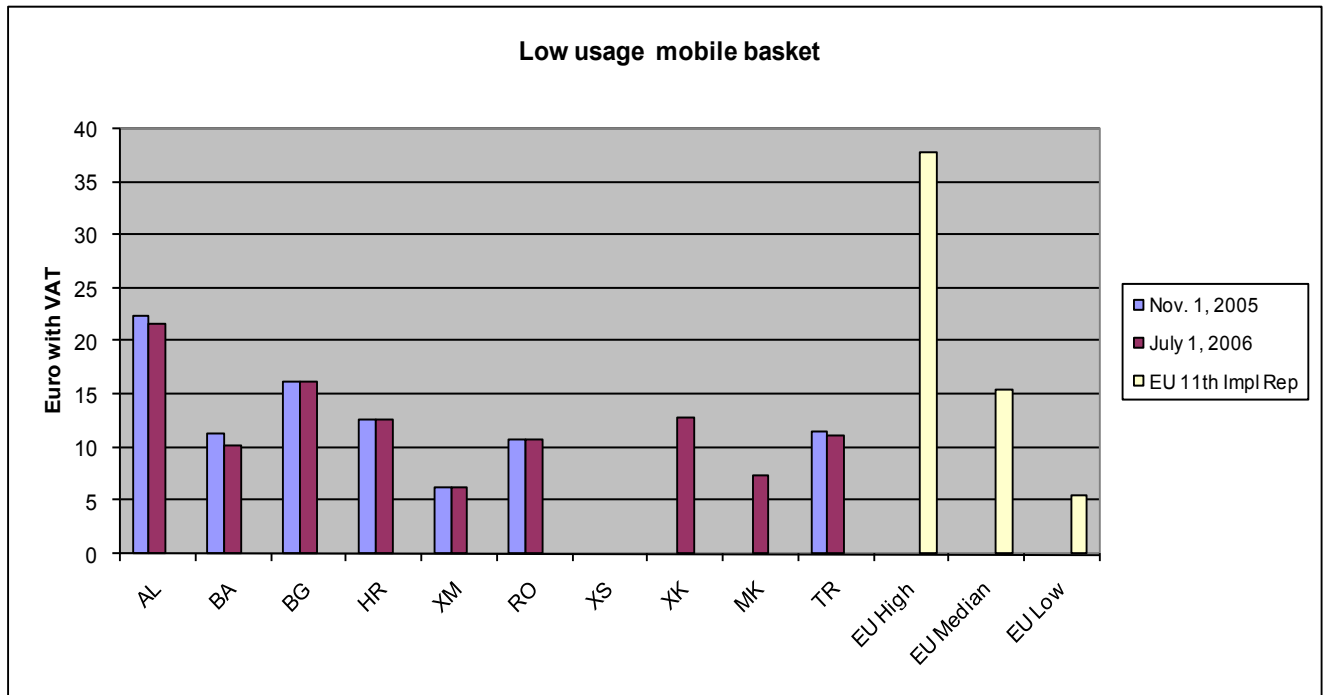


Figure 42 – Low usage mobile basket

Note:

The EU average is taken from the 11th Implementation Report from the European Commission, February 2006.

For the medium and high usage baskets the tariffs in South East Europe appear to be relatively higher when comparing with the EU. Albania has tariffs which are close to the highest found in the EU and also Bulgaria and Kosovo have tariffs above the EU median.

Turkey has tariffs above the EU median for the high usage basket, but can show a small price reduction since November 1, 2005. Also its low usage basket tariff has been reduced. The medium usage basket tariff, on the other hand, has gone up, but is still at a level below the EU median.

Croatia has had price increase for the low and median usage baskets and price reductions for the high usage baskets. Croatia's prices remain, however, below the EU median.

Albania and Bosnia & Herzegovina has had price reductions for all baskets. The reductions are fairly modest, except for the Bosnia & Herzegovina's high usage basket where the price reduction is almost 20%.

In Bulgaria, Montenegro and Romania there have been no significant movement in the prices for any of the baskets.

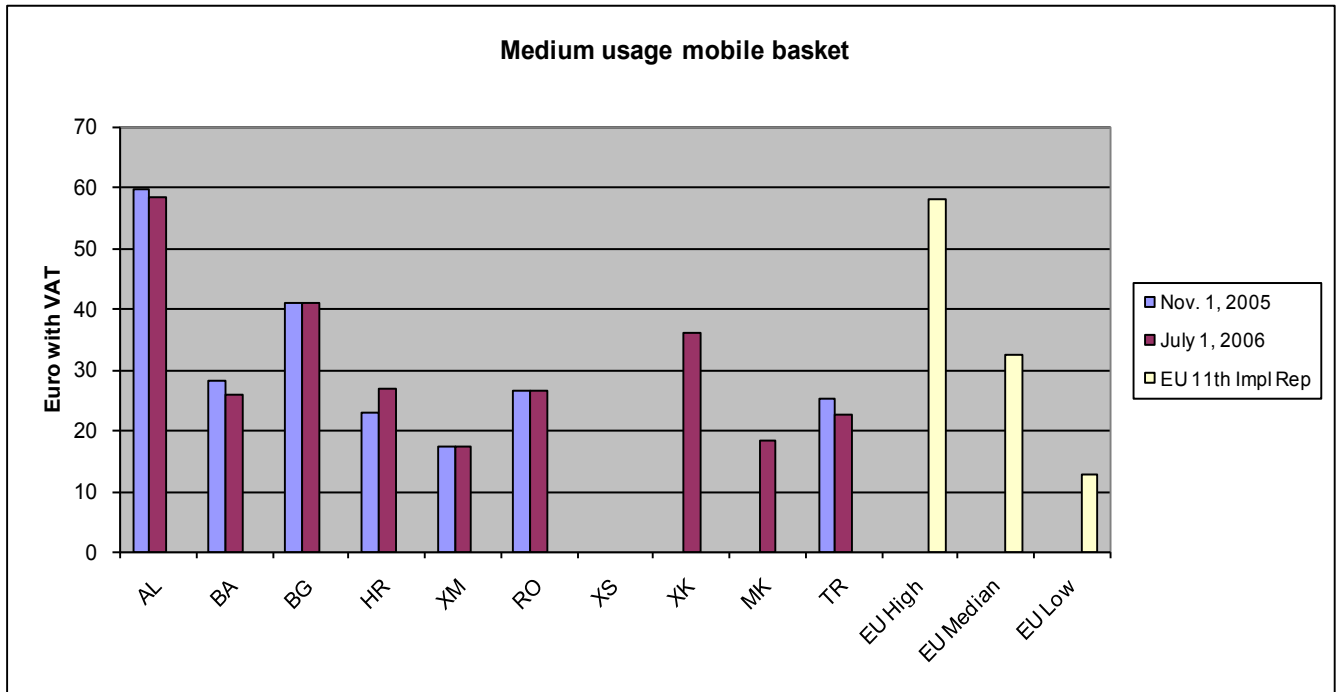


Figure 43 – Medium usage mobile basket

Note:
The EU average is taken from the 11th Implementation Report from the European Commission, February 2006.

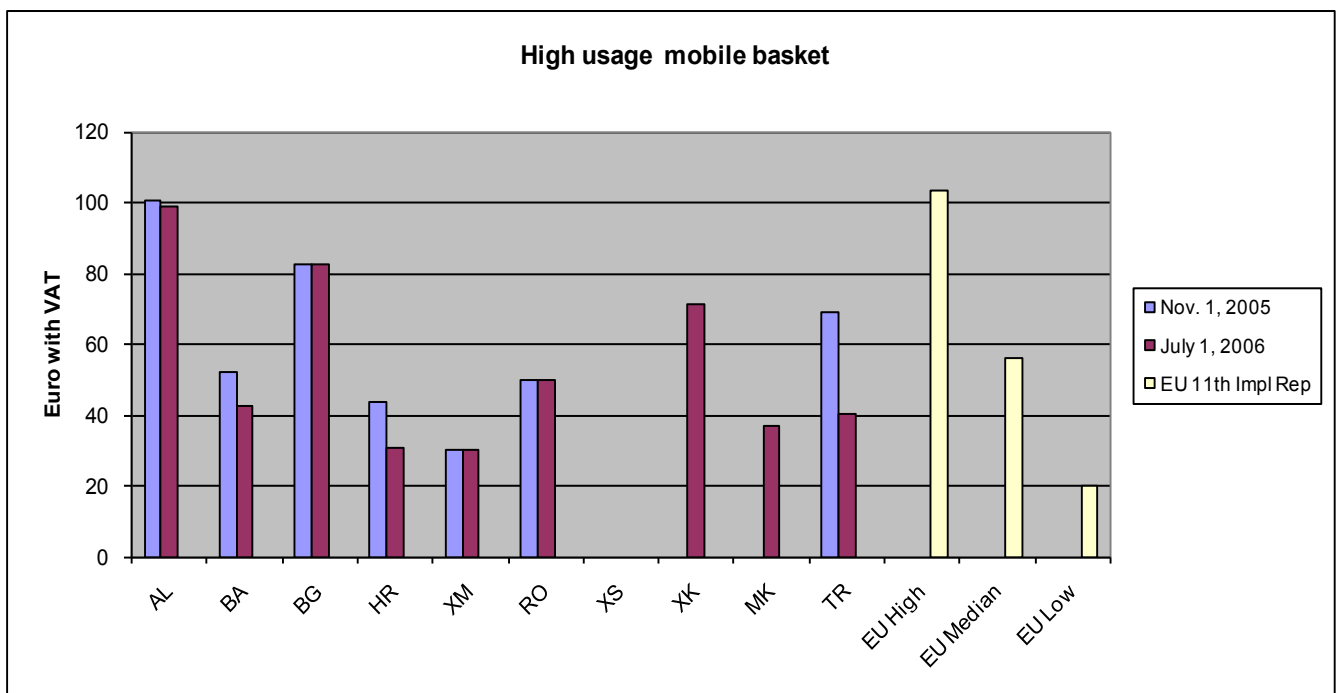


Figure 44 – High usage mobile basket

Note:
The EU average is taken from the 11th Implementation Report from the European Commission, February 2006.

9. Special cross-border tariff arrangements

The political, economical and social events in the last fifteen years in Southern and Eastern Europe, in particular in the territory of former Yugoslavia, created specific entities and territories some of which still have a provisional status.

This has created many special tariff arrangements across territories and country boundaries. For example, there have been preferential rates between the Serb population in Bosnia & Herzegovina and Serbia. Similarly, there have been preferential rates between the Croatian population in Bosnia & Herzegovina and Croatia. Such arrangements still exist, but are gradually being phased out and replaced by normal neighbourhood country tariffs.

This current status is explained below.

a) Bosnia & Herzegovina

Federation of Bosnia & Herzegovina

One of the incumbent operators in the Federation of Bosnia & Herzegovina, BH Telecom, has now the same tariffs³⁸ to both of its neighbouring countries: Croatia and Serbia. This price is about 43% of the price for calls to other European countries.

The other operator, Hrvatska Telecom, still maintains preferential rates to Croatia but the price differential has been significantly reduced. Such calls now cost a little less than 60% of calls to Montenegro and Serbia. A similar price advantage applies for calls to mobile users. Calls to Montenegro and Serbia also benefit from preferential rates when compared other European countries.

Republika Srpska

Users in Republika Srpska still have lower tariffs for calls to Montenegro and Serbia than for calls to other neighbouring countries such as Croatia, Slovenia and the former Yugoslav Republic of Macedonia. The prices of such calls are about 40% of what a call to Croatia costs.

A similar price advantage applies for calls to mobile users.

b) Montenegro

For a fixed telephone user, calls to Serbia and Kosovo have the status of being a special category of calls. The tariff is about 2.7 times that of a national long distance call in Montenegro, but only 1/3 of the cost of an international call to a neighbouring country.

For a mobile user, calls to Serbia and Kosovo have the same price as a call within Montenegro.

c) Serbia

For a fixed telephone user, calls to Montenegro follow the same pattern as calls in the opposite direction, i.e. it is a special category of national long distance call and priced 3.4 times higher than other domestic long distance calls.

Republika Srpska in Bosnia & Herzegovina enjoys a special status. For Serbian users, the cost is 2/3 of the tariff for calls to other neighbouring countries. This price advantage is the same for residential and business users, but the business users pay 65% more than residential users.

For a mobile user, the tariffs to:

- Kosovo vary with the operator.
- Montenegro are the same as for Serbian networks.

Mobile operators have no special arrangements for calls to Republika Srpska. These calls are in the tariff zone 1 just as calls to Croatia, Bulgaria and other neighbouring countries.

³⁸ On August 15, 2006 BH Telecom introduced further price reductions for international calls. The new tariff scheme includes several options with different fixed monthly subscription fees in combination with different discount levels for neighbouring countries.

d) Kosovo

A fixed telephone user in Kosovo pays a price for calls to Montenegro and Serbia, which is about 3.5 times higher than long distance calls within Kosovo, but nevertheless only half of what is paid for calls from Kosovo to other neighbouring countries. Calls to other neighbouring countries cost about seven times more than long distance calls within Kosovo.

e) Romania

Romania has particularly low tariffs for traffic to Moldova, which are priced at 50% of the price to the next tariff zone for other neighbouring countries.

The price per minute of fixed incumbent for an international call³⁹ to Republic of Moldavia (the only country in Zone 0) is euro 0.11 in peak and euro 0.09 in off-peak; no VAT included.

10. International tariffs

As explained above, there are some special near country relationships between Bosnia & Herzegovina, Croatia, Serbia and Montenegro. These special arrangements are not reflected in the figure below, which deals with “normal” near country long distance rates.

The international call tariffs have traditionally been expensive, but with competition and new technologies, the price has been dramatically reduced in countries with a liberal telecommunications environment.

The charts on international tariffs in this section also include the cost of incoming calls. This cost is a reflection of the old problem with international accounting rates where many countries have maintained high international accounting rates as a means to generate “export revenues”. This is not so much apparent for calls to and from neighbouring countries, but is quite evident for the examples shown for incoming calls from the UK and the US. For example, while Bulgaria, Romania and Turkey have outgoing tariffs to the UK and the US which are at or below the EU average, the corresponding incoming calls are three to four times more expensive. Of course, for the countries and geographic units that have rather high tariffs for international calls, such as Bosnia & Herzegovina and Kosovo, the incoming calls are also high so that there is little difference in the price of outgoing and incoming calls.

Figure 45 below shows that Bosnia & Herzegovina and Kosovo have tariffs that are significantly higher than the EU average. Only Serbia and Turkey have tariffs below the EU average. The other countries and geographic units have tariffs that are moderately higher than the EU average.

³⁹ PSTN businesses and all ISDN customers (businesses and residential) have 10% discount for international calls

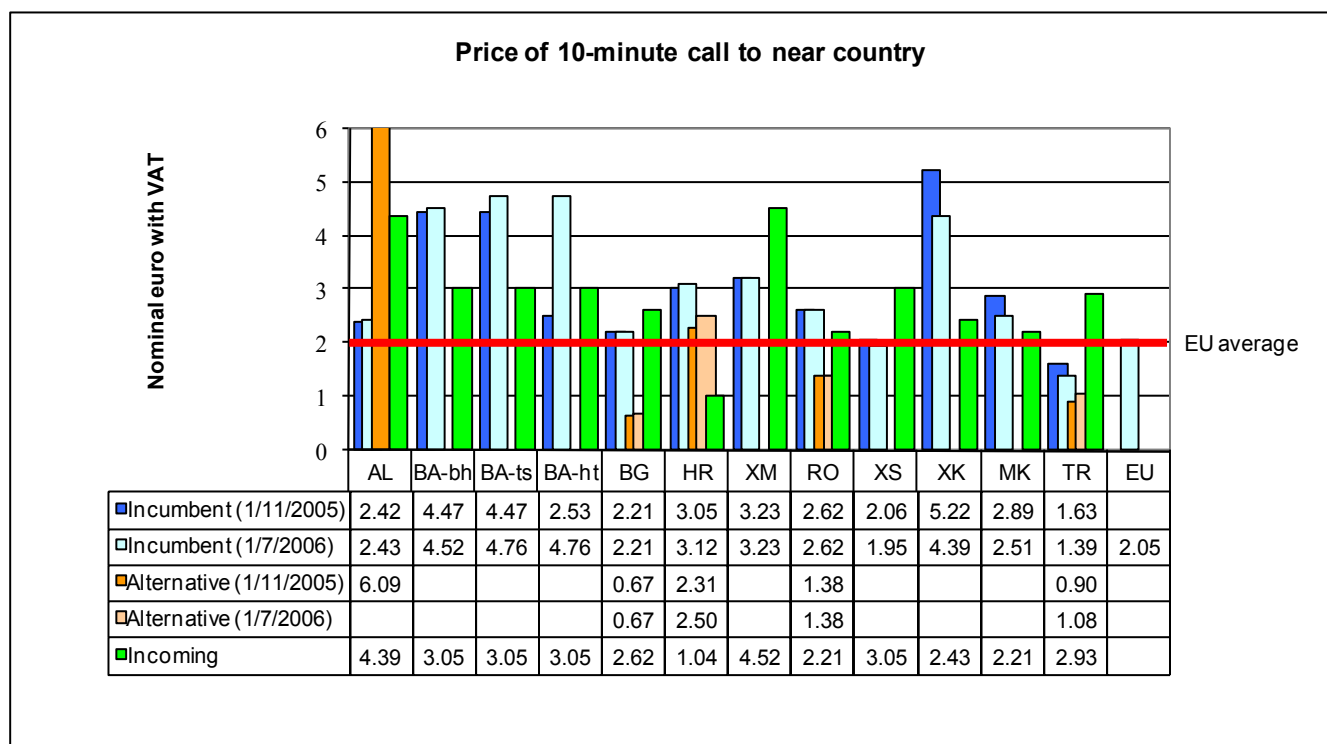


Figure 45 – Price of 10-minute call to near country in nominal euro

Notes:

The tariffs in the table above are for calls to and from: AL<->Kos, BA-bh<->HR, BA-ts<->HR, BA-ht<->HR, BG<->RO, HR<->SI (Slovenia), RO<->BG, Mon<->BA, Ser<->HR, Kos<->AL, MK<->BG, and TR<->Greece.

Albania: The incumbent fixed operator's tariffs apply for calls to Greece, Italy, Kosovo, Croatia, Montenegro and the former Yugoslav Republic of Macedonia.

Bosnia & Herzegovina: As explained above in IV.G.8 on cross-border tariffs, each operator has special tariffs to some countries. The tariffs to neighbouring countries that do not benefit from these special tariffs are higher by a factor of three or more. The tariff reflected in the figure represents an arithmetic average of the two near country tariffs.

Bulgaria: The prices in the table above apply to calls to Albania, The former Yugoslav Republic of Macedonia, Montenegro, Romania, Slovenia, Serbia and Turkey (group II of the incumbent) and to Greece, Croatia, Albania, Slovenia (price of the alternative operator).

Romania: The prices apply to calls to Hungary, Bulgaria, and Ukraine.

The EU average is taken from the 11th Implementation Report from the European Commission, February 2006

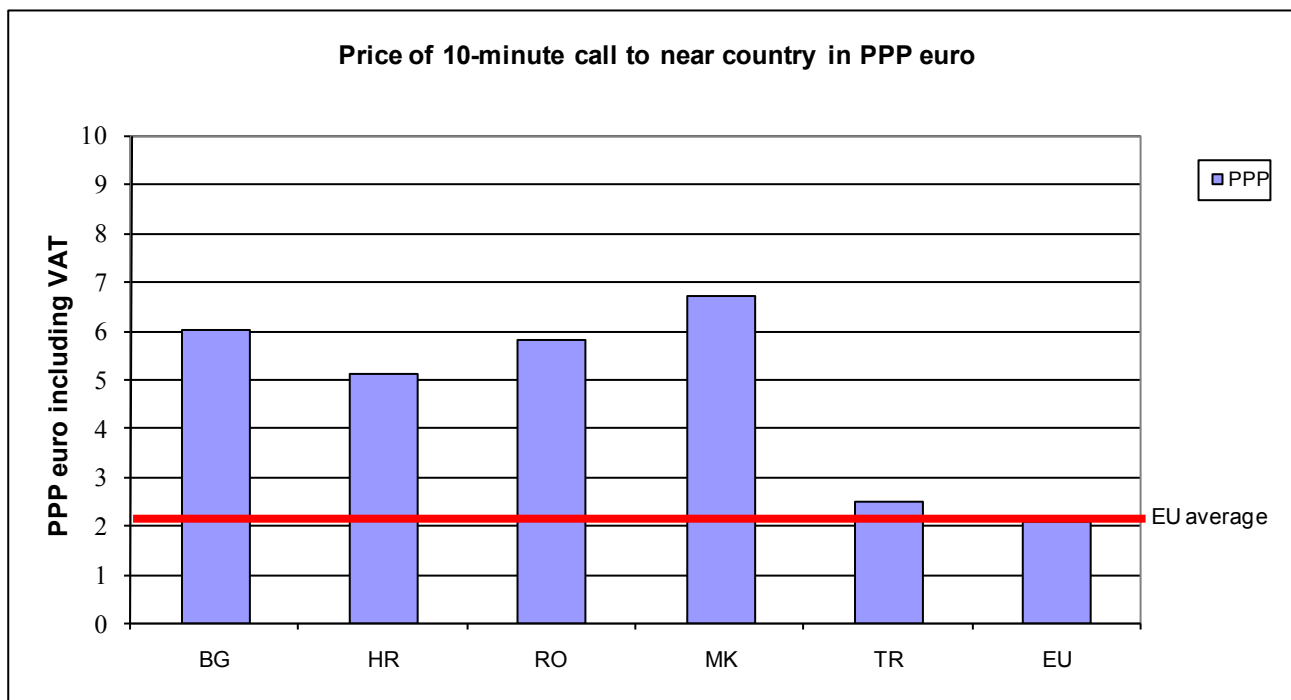


Figure 46 - Price of 10-minute call with incumbent operator to near country in PPP euro

Note:

The EU average is taken from the 11th Implementation Report from the European Commission, February 2006.

Figure 47 presents the corresponding information for calls to a distant European country. In this case, the UK has been chosen to represent such a country. Again, the results indicate that the tariffs for Bosnia & Herzegovina, as well as Kosovo, are significantly above the EU average. The former Yugoslav Republic of Macedonia has also had significantly higher tariffs, but their tariffs have had a fairly strong downward trend. While still being higher than the EU average, they are in the same range as most of the other countries in the region.

Albania, Bulgaria, Romania and Turkey have tariffs at or below the EU average. The other countries and geographic units have tariffs that are moderately above the EU average.

Prices for incoming calls are well above the EU average by more than 100% for all countries and geographic units except Turkey. For Bulgaria, Croatia, Romania, Montenegro and the former Yugoslav Republic of Macedonia, the price of incoming calls are also higher than the price of outgoing calls. This suggests that the accounting rates demanded by the incumbent operators of these countries have not yet been subject to competitive pressures or regulatory requirements for cost orientation.

Another consequence of the application of the international accounting rate to incoming calls is that their costs are the same for Montenegro, Serbia, and Kosovo because these all used to be geographic units in the same country of Serbia & Montenegro.

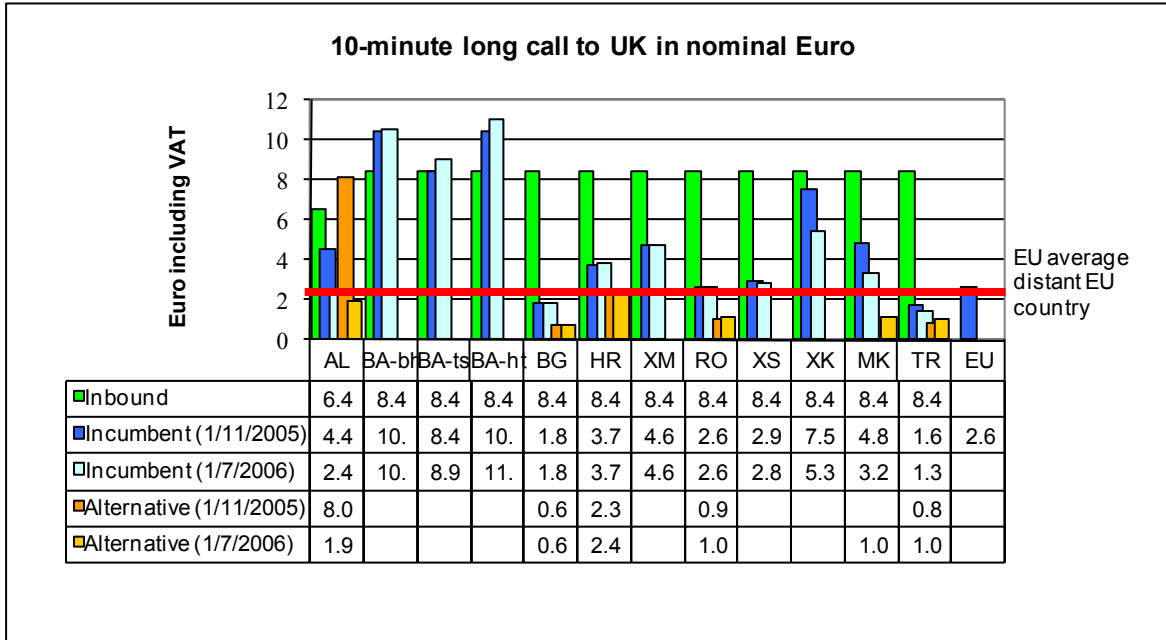


Figure 47 - Price of fixed incumbent and alternative fixed operator for a 10-minute long call to UK in nominal euro

Notes:

The prices shown for the outbound tariffs are to a fixed network in the UK and the inbound tariffs are those of the UK operator BT during peak time.

Albania: The prices shown are for residential users. Prices for business users are 50% higher.

Bulgaria: Calls from the incumbent's fixed network to mobiles in UK are twice as expensive as calls to fixed networks. For a typical alternative operator such as Orbitel, the price to a mobile user is almost four times the price of the call to a fixed network, but even so, it is 30% less than the corresponding price of the incumbent operator.

Serbia: There are different tariffs for residential and business users. The price shown is for residential users.

The EU average is taken from the 11th Implementation Report from the European Commission, February 2006.

Figure 48 below presents the current tariffs in purchase power parities.

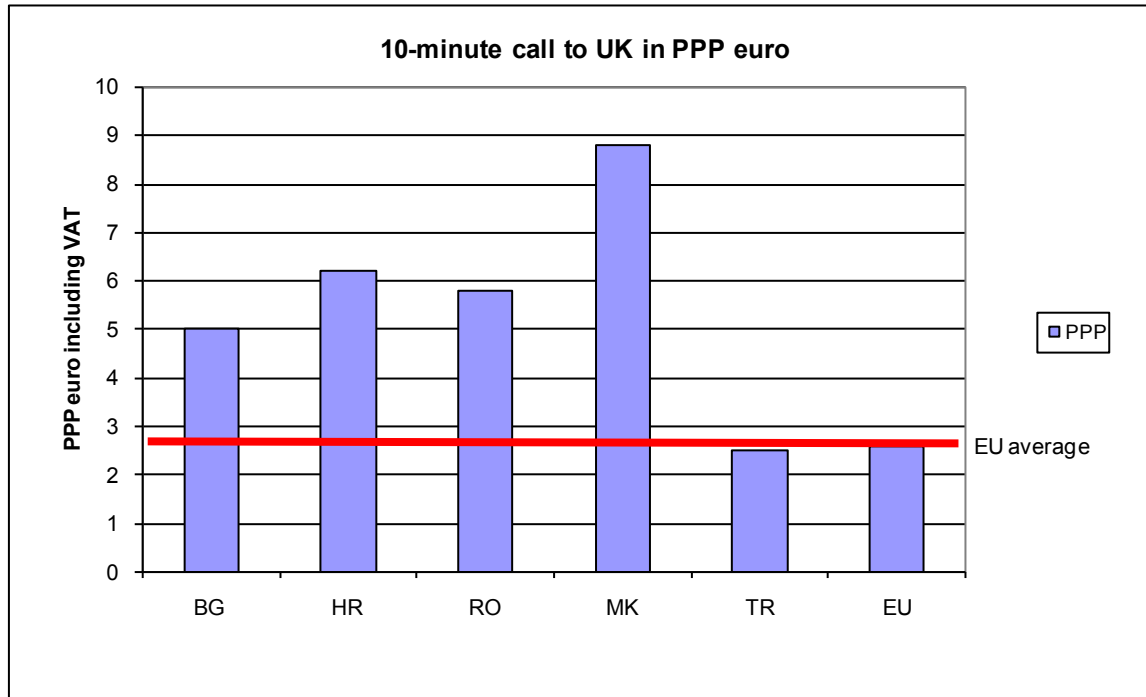


Figure 48 - Price of fixed incumbent operator for a 10-minute long call to UK in PPP euro

Note:

The EU average is taken from the 11th Implementation Report from the European Commission, February 2006.

Figure 49 presents the corresponding tariffs for calls to the United States. This is a particularly interesting indicator because such calls used to be very expensive, but the combination of a high level of competition and new technologies has brought down the prices in most EU Member States so that such calls are no longer more expensive than calls within Europe.

Bosnia & Herzegovina, Montenegro and Kosovo have tariffs that are significantly higher than the EU average. Also Croatia and Serbia also have prices that quite high at the level of twice the EU average.

Bulgaria and Turkey, on the other hand, have tariffs below the EU average, while Albania, Romania and the former Yugoslav Republic of Macedonia have tariffs that are slightly above.

The inbound tariffs for all countries and geographic units are almost without exception significantly higher than the tariffs for outgoing calls. In most cases, the price is more than double.

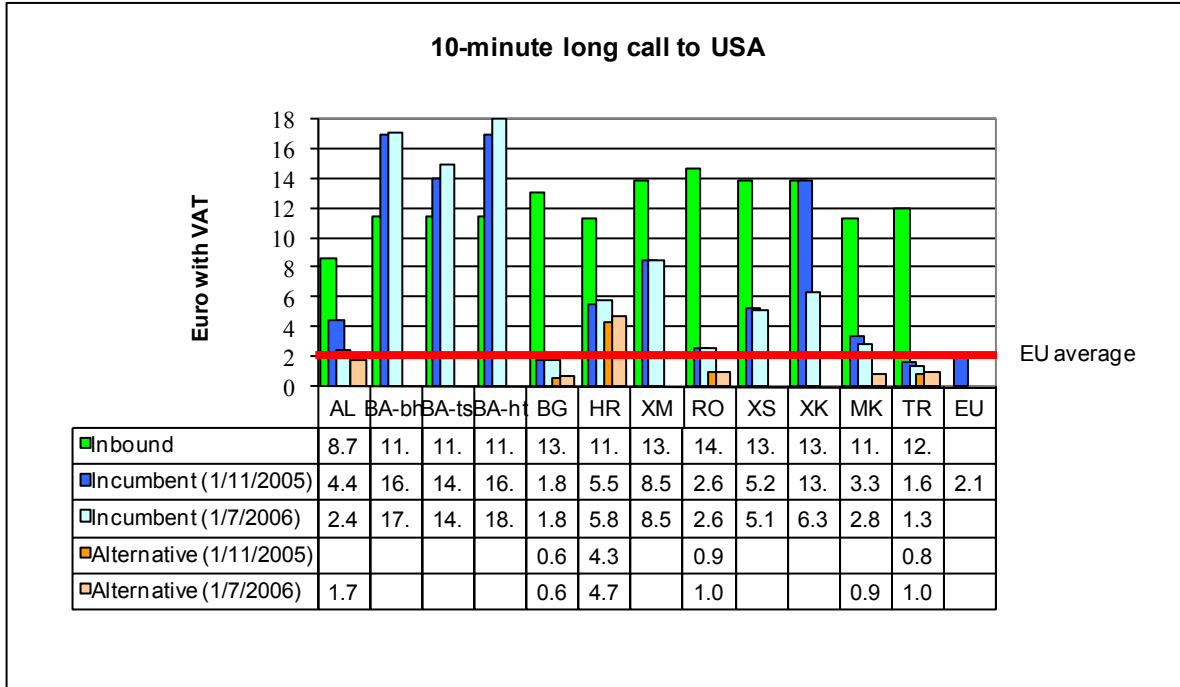


Figure 49 - Price of fixed incumbent and alternative fixed operator for a 10-minute long call to USA in nominal Euro

Notes:

Albania: The price shown is the residential tariff applied by Albtelecom. The business tariffs are 50% higher. The tariffs for calls to fixed and mobile networks (operators) are the same.

Serbia: The price shown is the residential tariff. The business tariff is 65% higher.

The EU average is taken from the 11th Implementation Report from the European Commission, February 2006.

Figure 50 below presents the current tariffs in purchase power parities.

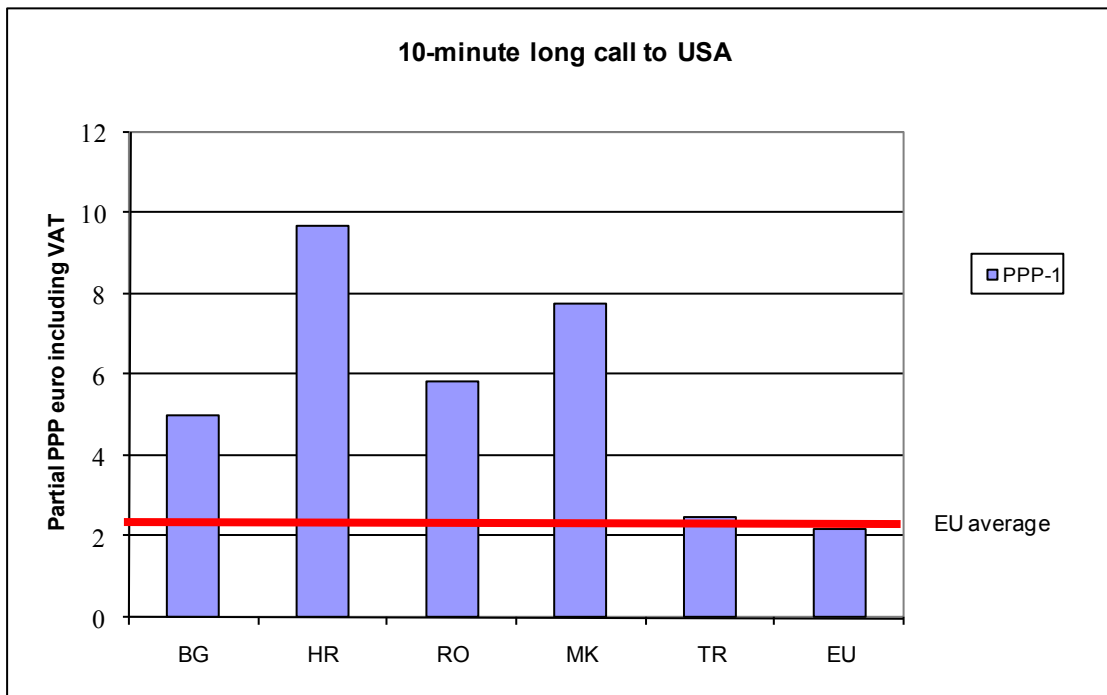


Figure 50 - Price of fixed incumbent operator for a 10-minute long call to USA in PPP Euro

Note:

The EU average is taken from the 11th Implementation Report from the European Commission, February 2006.

11. Leased lines

Leased lines are the building blocks for alternative networks that compete, directly or indirectly, with the networks of incumbent operators. The prices are typically quite high prior to the start of network competition. When competition is introduced, there will often be competitive alternatives from other networks, such as networks belonging to energy companies, which provide price pressure. In the past, such competition has probably had more effect on prices than cost orientation requirements.

In a series of figures below, the tariffs for national leased lines are presented for:

- 2 km 64 Kbit/s
- 200 km 64 Kbit/s
- 2 km 2 Mbit/s
- 200 km 2 Mbit/s
- 2 km 34 Mbit/s
- 200 km 34 Mbit/s.

Not all operators have tariffs that correspond exactly to these categories. In that case, the closest alternative has been chosen.

All the prices are monthly retail prices without value added tax. One time charges are not included. Some of the operators also provide wholesale alternatives. The prices are for simple unstructured lines. However, for the case of the former Yugoslav Republic of Macedonia only managed lines are available and it is the price for such lines that are shown.

Albtelecom in Albania offers two types of leased lines:

- a “digital leased circuit” used by small private and public operators;
- “LAN-to-LAN” connections used to interconnect user networks. These offerings are available in 64 Kbit/s and 2 Mbit/s.

The prices of “digital leased circuit” types of leased lines are shown in the figures below. The prices for “LAN-to-LAN” connections are quite different and depending on the choice, the price could be significantly above or significantly below the EU average.

The other countries and geographic units do not present a consistent relationship using the EU average as an indicator. For the short 64 Kbit/s lines, all countries and geographic units have prices below the EU average, while for the longer distance they are only slightly above or below. In the case of Montenegro and Serbia, they are significantly lower.

For the higher speeds of 2 Mbit/s lines, the picture is more mixed. In particular, for the longer lines, there are great variations with Montenegro and Serbia having particularly low rates, and the former Yugoslav Republic of Macedonia having particularly high rates.

The 34 Mbit/s lines are not offered in all the countries and geographic units. The former Yugoslav Republic of Macedonia has particularly high rates both for short and long lines, which are only available as radio links.

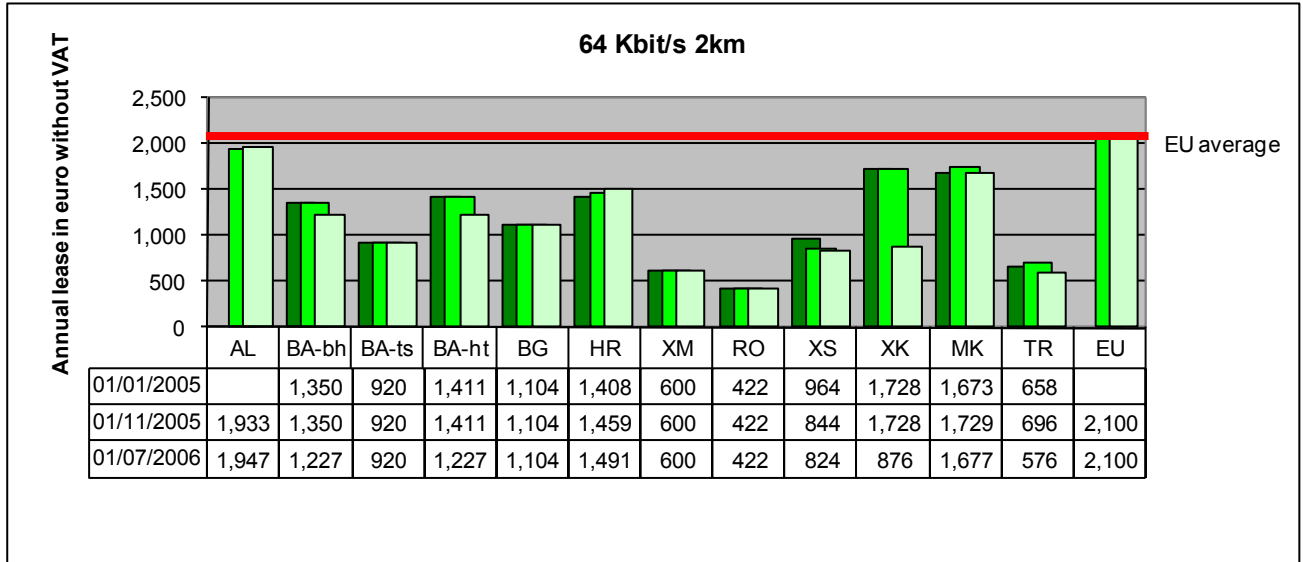


Figure 51 – Prices for national 64 Kbit/s 2 km leased lines in nominal euro without VAT

Notes:

Albania: The tariffs shown are for “digital leased circuits” used for user-to-central type links, i.e. used by small private or public operators. There is another category of leased lines called "LAN-to-LAN" with which two users may interconnect between themselves. Tariffs for the latter are 118 euro a month (15,000 Lek) for 64 Kbit/s and there is no differentiation due to distance (it is supposed to be national).

Bosnia & Herzegovina: One time cost not included.

The former Yugoslav Republic of Macedonia: The price does not include one time costs. The former Yugoslav Republic of Macedonia: The price does not include one time costs. There are discounts for long term contracts.

The EU average is taken from the 11th Implementation Report from the European Commission, February 2006.

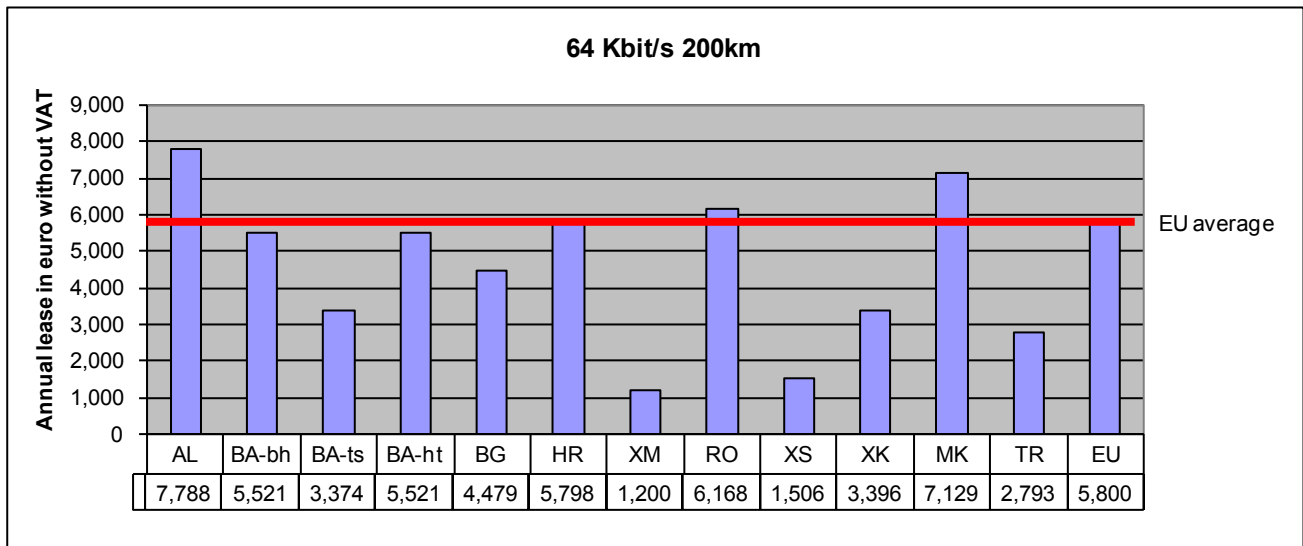


Figure 52 - Prices for national 64 Kbit/s 200 km leased lines in nominal euro without VAT

Notes:

Albania: The tariffs shown are for “digital leased circuits” used for user-to-central type links, i.e. used by small private or public operators. There is another category of leased lines called "LAN-to-LAN" with which two users may interconnect between themselves. Tariffs for the latter are 118 euro a month (15,000 Lek) for 64 Kbit/s and there is no differentiation due to distance (it is supposed to be national).

Bosnia & Herzegovina: One time cost not included.

Serbia: The price assumes that different transit areas are involved. Price is lower if the line is within the same transit area.

The former Yugoslav Republic of Macedonia: 64 Kbit/s 200 km long leased lines are not used because of its size.

The EU average is taken from the 11th Implementation Report from the European Commission, February 2006.

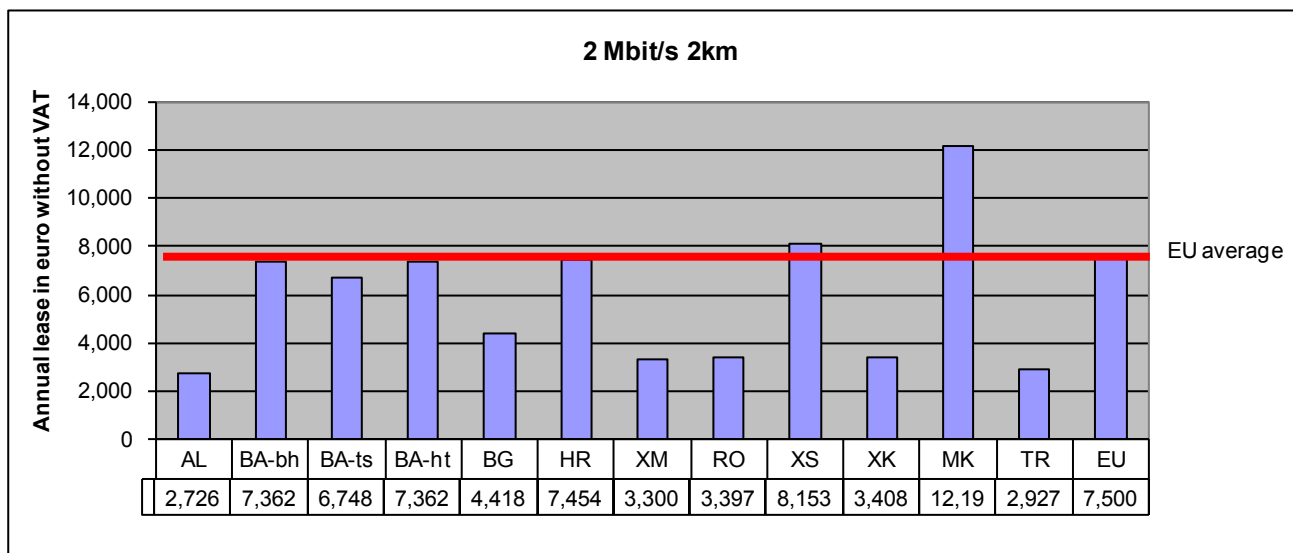


Figure 53 - Prices for national 2 Mbit/s 2 km leased lines in nominal euro without VAT

Notes:

Albania: The tariffs shown are for “digital leased circuits” used for user-to-central type links, i.e. used by small private or public operators. There is another category of leased lines called "LAN-to-LAN" with which two users may interconnect between themselves. Tariffs for the latter are 315 euro a month (40,000 Lek) for 2 Mbit/s and there is no differentiation due to distance (it is supposed to be national).

Bosnia & Herzegovina: One time cost not included.

The former Yugoslav Republic of Macedonia: The price does not include one time costs. There are discounts for long term contracts.

The EU average is taken from the 11th Implementation Report, February 2006.

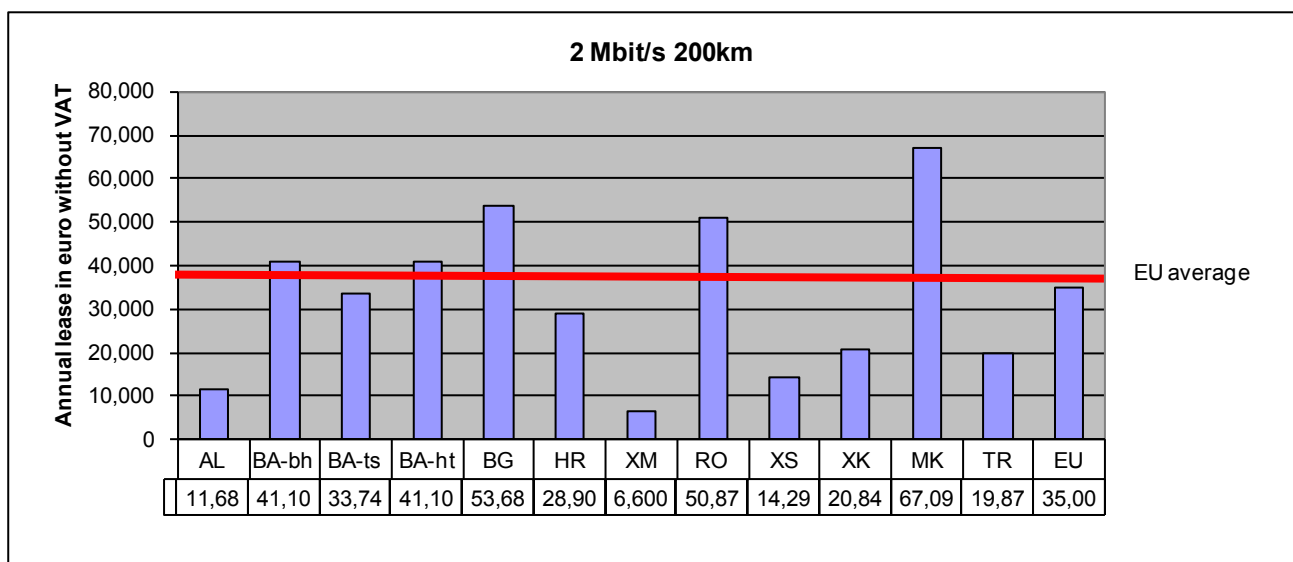


Figure 54 - Prices for national 2 Mbit/s 200 km leased lines in nominal euro without VAT

Notes:

Albania: The tariffs shown are for “digital leased circuits” used for user-to-central type links, i.e. used by small private or public operators. There is another category of leased lines called "LAN-to-LAN" with which two users may interconnect between themselves. Tariffs for the latter are 315 euro a month (40,000 Lek) for 2 Mbit/s and there is no differentiation due to distance (it is supposed to be national).

Bosnia & Herzegovina: One time cost not included.

Serbia: The price assumes that different transit areas are involved. Price is lower if the line is within the same transit area.

The former Yugoslav Republic of Macedonia: 2 Mb 200 km long leased lines are not used.

The EU average is taken from the 11th Implementation Report from the European Commission, February 2006.

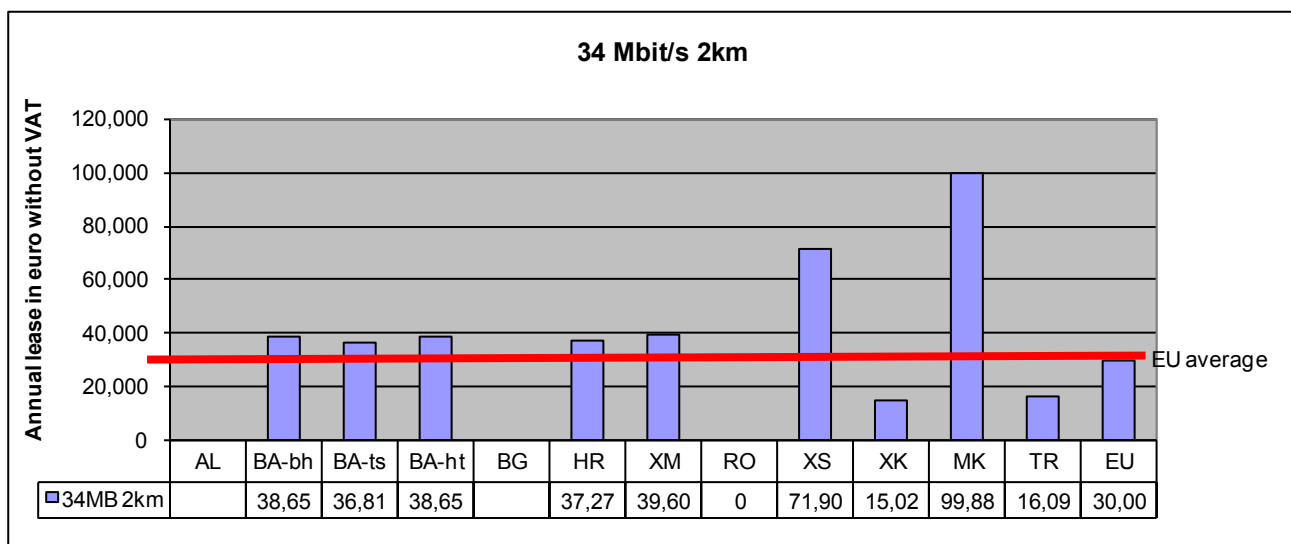


Figure 55 - Prices for national 34 Mbit/s 2 km leased lines in nominal euro without VAT

Notes:

Bosnia & Herzegovina: One time cost not included.

Romania: The price is negotiable.

The former Yugoslav Republic of Macedonia: 34 Mbit/s 2 km long leased lines are radio links only.

The EU average is taken from the 11th Implementation Report from the European Commission, February 2006.

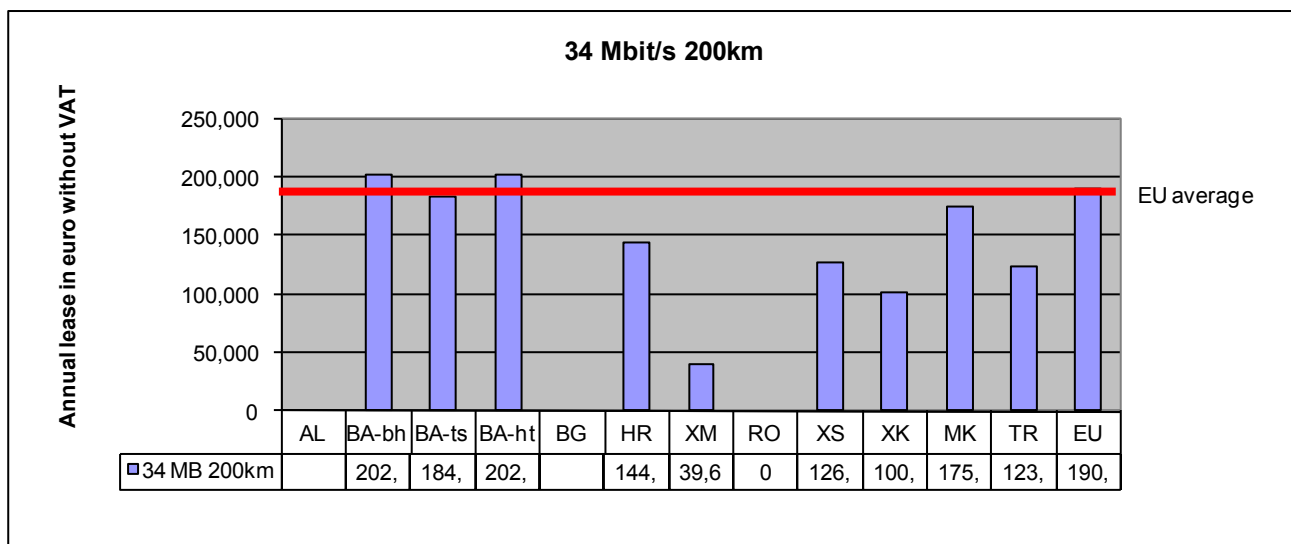


Figure 56 - Prices for national 34 Mbit/s 200 km leased lines in nominal euro without VAT

Notes:

Bosnia & Herzegovina: One time cost not included.

Romania: The price is negotiable.

Serbia: The price assumes that different transit areas are involved. Price is lower if the line is within the same transit area.

The former Yugoslav Republic of Macedonia: 34 Mb 200 km long leased lines are radio links only.

The EU average is taken from the 11th Implementation Report from the European Commission, February 2006.

12. International leased lines

International leased lines are provided in the form of half-circuits, which are connected to another half-circuit or a transit circuit near the border. For a complete leased line, it is necessary to have at least two half-circuits, one from each of two neighbouring countries.

International circuits can be provided in the form of double routing or single routing. Double routing includes an additional element of redundancy and such lines cost more than single routing lines.

Single routing lines are only available in Bulgaria, Romania, and the former Yugoslav Republic of Macedonia. The information provided in this section is therefore tariffs for double routing half-circuits for all the other countries and geographic units.

Below are four figures presenting information on monthly tariffs for international half circuits:

- 64 Kbit/s to near country
- 64 Kbit/s to the UK
- 2 Mbit/s to near country
- 2 Mbit/s to the UK.

The tariffs for Montenegro are consistently extremely low when compared to the other countries and geographic units and to the EU average.

At the other end of the scale, one of the incumbent operators in Bosnia & Herzegovina has consistently very high tariffs. Albania and the former Yugoslav Republic of Macedonia also have consistently high tariffs for all the types international leased lines we have investigated.

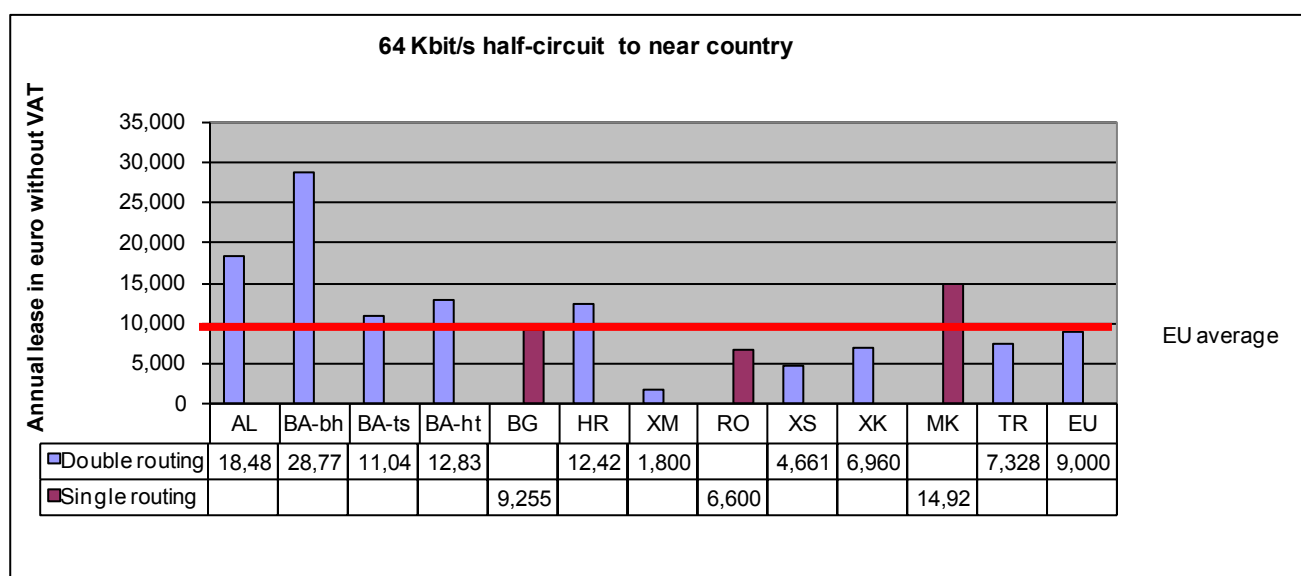


Figure 57 – Prices for international 64 Kbit/s leased lines to near country in nominal euro without VAT

Notes:

Bulgaria provides prices for international leased lines in Special Drawing Rights (SDR). These values are converted to US dollars (USD) according to data in the International Monetary Funds (IMF) special bulletins. The USD value is converted to BGN according to the exchange rate announced by the Bulgarian National Bank on the starting date of the month when the service is provided.

The EU average is taken from the 11th Implementation Report from the European Commission, February 2006.

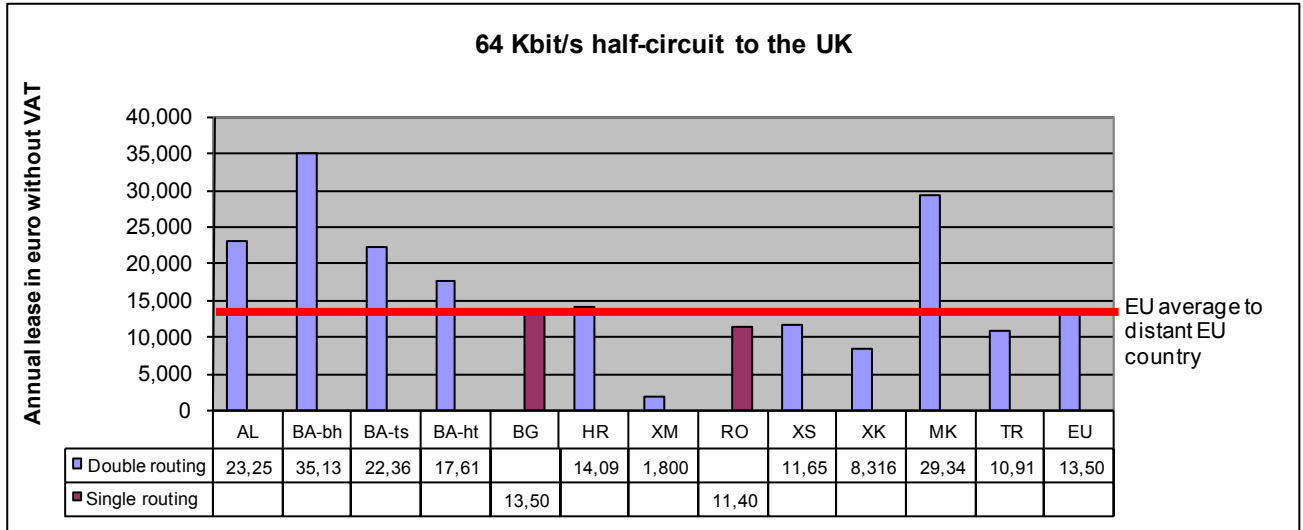


Figure 58 - Prices for international 64 Kbit/s leased lines to the UK in nominal euro without VAT

Notes:

Bulgaria provides prices for international leased lines in Special Drawing Rights (SDR). These values are converted to US dollars (USD) according to data in the International Monetary Funds (IMF) special bulletins. The USD value is converted to BGN according to the exchange rate announced by the Bulgarian National Bank on the starting date of the month when the service is provided.

The EU average is taken from the 11th Implementation Report from the European Commission, February 2006.

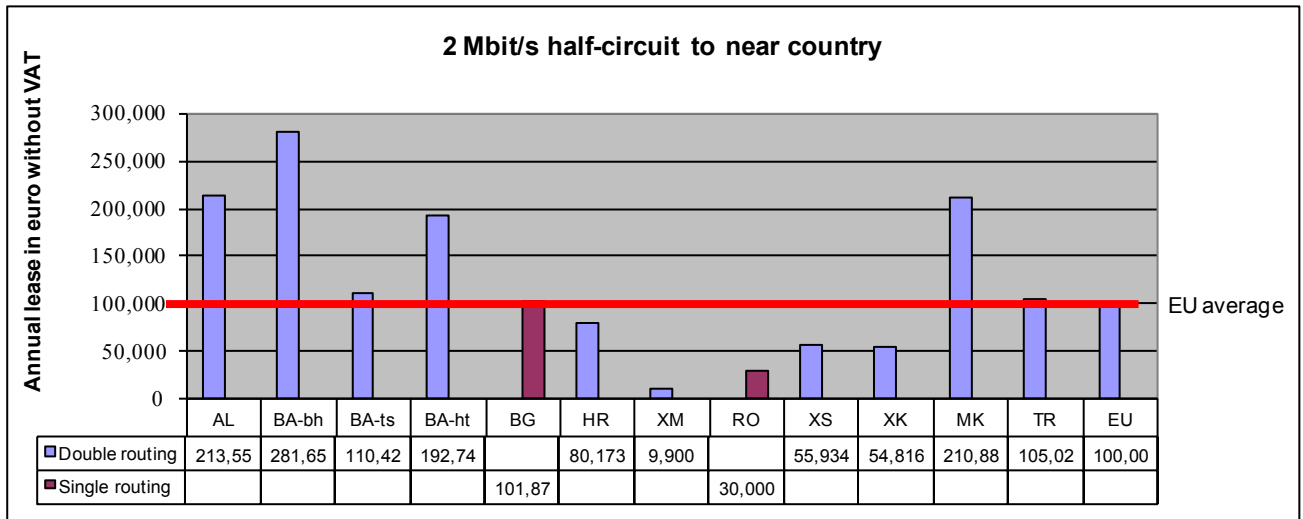


Figure 59 - Prices for international 2 Mbit/s leased lines to near country in nominal euro without VAT

Notes:

Bulgaria provides prices for international leased lines in Special Drawing Rights (SDR). These values are converted to euro according to data in the International Monetary Funds (IMF) special bulletins. The USD value is converted to BGN according to the exchange rate announced by the Bulgarian National Bank on the starting date of the month when the service is provided.

Croatia: The prices refer to the Croatian half of the line.

The EU average is taken from the 11th Implementation Report from the European Commission, February 2006.

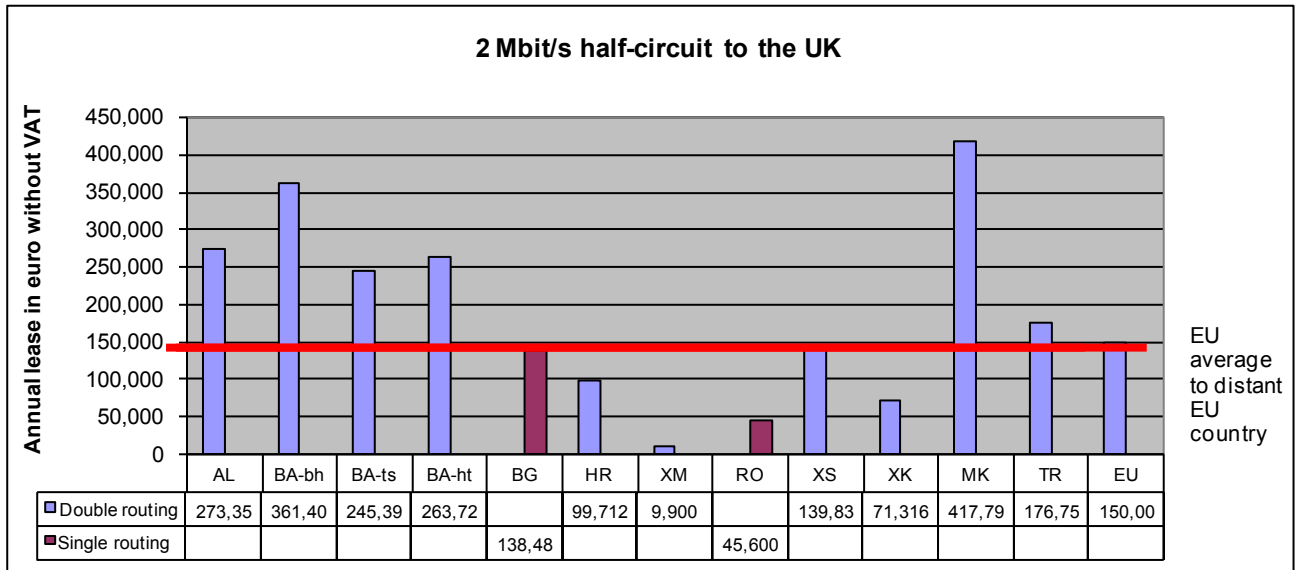


Figure 60 - Prices for international 2 Mbit/s leased lines to the UK in nominal euro without VAT

Notes:

Bulgaria provides prices for international leased lines in Special Drawing Rights (SDR). These values are converted to US dollars (USD) according to data in the International Monetary Funds (IMF) special bulletins. The USD value is converted to BGN according to the exchange rate announced by the Bulgarian National Bank on the starting date of the month when the service is provided.

The EU average is taken from the 11th Implementation Report from the European Commission, February 2006.

H. Telephony tariffs – wholesale

The information in this section has July 1, 2006 as its reference date.

In the EU regulatory framework the incumbent operators are normally defined as having significant market power and as a consequence they are normally obliged to offer cost oriented interconnection tariffs to other operators through a reference interconnection offer (RIO). The regulatory situation in each country and geographic unit is presented in IV.D on Regulations – Competitive safeguards.

In particular, the interconnection tariffs determine how the retail price for a call is shared between an incumbent operator and a new entrant. In a situation where the tariffs are rebalanced, there is typically a strong regulatory pressure for the incumbent operator to reduce the interconnection rates in order to provide both better conditions for competitive alternatives as well as to enable lower retail prices for the users.

In the EU Member States, benchmarking “best practices” rates played an important role in creating a downward pressure on prices. Today, interconnection rates in the EU are fairly consistent with relatively small variations around the EU average. The exceptions are four of the new Member States, where the interconnection rates are twice or more than the EU average.

The EU average therefore presents a quite meaningful comparative indicator.

1. Call termination on fixed networks

Country	Peak		Off peak	
	Setup (eurocent)	Minute (eurocent)	Setup (eurocent)	Minute (eurocent)
Albania	0.00	1.22	0.00	1.22
Bosnia & Herzegovina				
<i>BH Telecom d.d. Sarajevo</i>	0.00	1.00	0.00	0.50
<i>Telekom Srpske a.d. Banja Luka</i>	0.00	1.00	0.00	0.75
<i>Hrvatske Telekomunikacije d.o.o. Mostar</i>	0.00	1.00	0.00	0.75
Bulgaria	0.00	0.84	0.00	0.79
Croatia	0.21	0.86	0.10	0.43
Montenegro	0.00	7.50	0.00	7.50
Romania	0.00	1.14	0.00	0.63
Serbia, including Kosovo ¹				
Serbia	0.00	na	na	na
Kosovo		na	na	na
The former Yugoslav Republic of Macedonia	0.21	2.12	0.13	1.23
Turkey	0.00	0.99	0.00	0.99
1) under UNSCR 1244				

Table 66 - Fixed-to-fixed interconnection charges for call termination on fixed network of incumbent operator – local level

Notes:

Albania: There is no difference between peak and off-peak tariffs.

Montenegro: There is no difference between peak and off-peak tariffs. Neither is there any difference between local, single transit and double transit tariffs.

Serbia: There is no RIO yet.

Kosovo: Interconnection charges have not been established.

Turkey: Call termination service on the incumbent's network is charged at two levels, in-zone and out-zone. While out-zone corresponds to double tandem call termination, in-zone can be said to contain local and single transit call termination. This charge was determined by Telecommunications Authority as the standard interconnection reference rate and applied for the disputes between operators. There is no set up charge applied and no peak / off peak differentiation.

Country	Peak		Off peak	
	Setup (eurocent)	Minute (eurocent)	Setup (eurocent)	Minute (eurocent)
Albania	0.00	2.43	0.00	2.43
Bosnia & Herzegovina				
<i>BH Telecom d.d. Sarajevo</i>	0.00	1.00	0.00	0.50
<i>Telekom Srpske a.d. Banja Luka</i>	0.00	1.00	0.00	0.75
<i>Hrvatske Telekomunikacije d.o.o. Mostar</i>	0.00	1.00	0.00	0.75
Bulgaria	0.00	3.64	0.00	3.03
Croatia	0.00	3.17	0.00	1.66
Montenegro	0.00	6.10	0.00	6.10
Romania	0.00	1.14	0.00	0.63
Serbia, including Kosovo ¹				
Serbia	0.00	10.59	0.00	5.88
Kosovo	na	na	na	na
The former Yugoslav Republic of Macedonia	0.00	1.96	0.00	1.96
Turkey	0.00	0.99	0.00	0.99
1) under UNSCR 1244				

Table 67 - Mobile-to-fixed interconnection charges for call termination on fixed network of incumbent operator – local level

Notes:

Albania: Mobile-to-fixed call termination charges are the same for local, single transit and double transit termination.

Bulgaria: Mobile-to-fixed interconnection is only offered on the double transit level.

Montenegro: Mobile-to-fixed call termination charges are the same for local, single transit and double transit termination.

Serbia: Mobile-to-fixed call termination charges are the same for local, single transit and double transit termination.

Kosovo: There is no interconnection charge between the fixed incumbent and the mobile operator.

Turkey: Call termination service on the incumbent's network is charged at two levels, in-zone and out-zone. While out-zone corresponds to double tandem call termination, in-zone can be said to contain local and single transit call termination. This charge was determined by the Telecommunications Authority as the standard interconnection reference rate from 1/10/2005 onward. There is no set up charge applied and no peak / off peak differentiation.

The figure below illustrates the charge per minute for local fixed-to-fixed and mobile-to-fixed termination in peak time compared to the EU average.

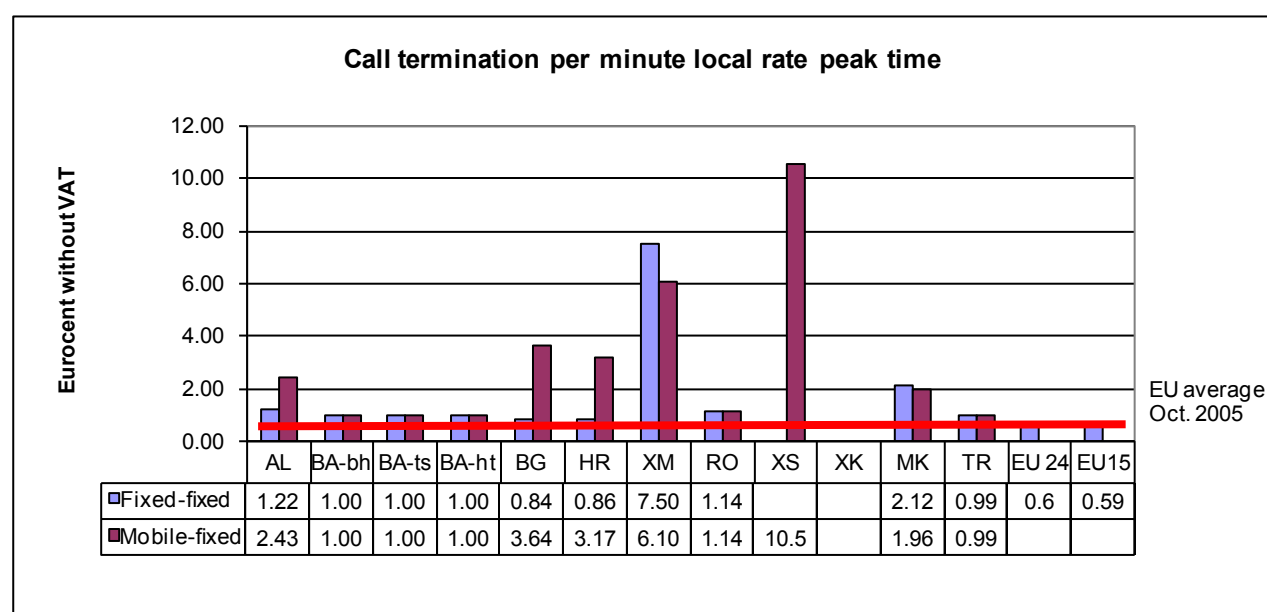


Figure 61 - Interconnection charges for call termination on fixed network of incumbent operator – local level

Notes:

Bulgaria: the mobile-to-fixed call termination charge is the double transit rate, which is the only rate available.

Turkey: This charge was determined by the Telecommunications Authority as the standard interconnection reference rate from 01/10/2005 onward. There is no set up charge applied and peak / off peak differentiation. The EU average is taken from the 11th Implementation Report, February 2006.

The local level interconnection tariffs are reasonably aligned with the EU average for most countries and geographic units where the rates have been established, although they are all higher than the EU average.

The exceptions are Montenegro and Serbia, which have rates that are respectively 10 and 18 times higher than the EU average. In both countries, this is partly explained by the fact that the incumbent operator has a single rate for all national termination services. Similarly, the Former Yugoslav Republic of Macedonia and Turkey also have relatively high local interconnection rates. In Turkey, this is partly explained by the fact that the corresponding in-zone tariff covers a larger geographic area than a normal local area.

The expectation is that fixed-to-fixed and mobile-to-fixed termination rates would be the same and indeed, this is the case for Bosnia & Herzegovina, Romania and Turkey, while in the Former Yugoslav Republic of Macedonia the incumbent's fixed-to-fixed termination rate is slightly above its the mobile-to-fixed rate. It is also important to note that in Albania, Bulgaria, Montenegro, Serbia and the Former Yugoslav Republic of Macedonia, there is only a single termination rate for all mobile calls to fixed networks.

The next two tables present the tariffs for single transit termination. These tariffs represent a similar situation to that of local termination. Serbia is still higher than the EU average by a factor of 10, Montenegro by a factor of 7.5, and Romania is about twice the EU average.

Country	Peak		Off peak	
	Setup (eurocent)	Minute (eurocent)	Setup (eurocent)	Minute (eurocent)
Albania	0.00	2.03	0.00	2.03
Bosnia & Herzegovina				
<i>BH Telecom d.d. Sarajevo</i>	0.00	1.50	0.00	0.75
<i>Telekom Srpske a.d. Banja Luka</i>	0.00	1.50	0.00	0.75
<i>Hrvatske Telekomunikacije d.o.o. Mostar</i>	0.00	1.50	0.00	1.12
Bulgaria	0.00	1.56	0.00	1.47
Croatia	0.21	1.31	0.10	0.66
Montenegro	0.00	7.50	0.00	7.50
Romania	0.00	1.94	0.00	1.06
Serbia, including Kosovo ¹				
Serbia	na	na	na	na
Kosovo	na	na	na	na
The former Yugoslav Republic of Macedonia	0.26	2.55	0.15	1.45
Turkey	0.00	0.99	0.00	0.99
1) under UNSCR 1244				

Table 68 - Fixed-to-fixed interconnection charges for call termination on fixed network of incumbent operator – single transit

Country	Peak		Off-peak	
	Setup (eurocent)	Minute (eurocent)	Setup (eurocent)	Minute (eurocent)
Albania	0.00	2.43	0.00	2.43
Bosnia & Herzegovina				
<i>BH Telecom d.d. Sarajevo</i>	0.00	1.50	0.00	0.75
<i>Telekom Srpske a.d. Banja Luka</i>	0.00	1.50	0.00	0.75
<i>Hrvatske Telekomunikacije d.o.o. Mostar</i>	0.00	1.50	0.00	1.12
Bulgaria	0.00	3.64	0.00	3.03
Croatia	0.00	3.17	0.00	1.66
Montenegro	0.00	6.10	0.00	6.10
Romania	0.00	1.94	0.00	1.06
Serbia, including Kosovo ¹				
Serbia	0.00	10.59	0.00	10.59
Kosovo	na	na	na	na
The former Yugoslav Republic of Macedonia	0.00	1.96	0.00	1.96
Turkey	0.00	0.99	0.00	0.99
1) under UNSCR 1244				

Table 69 - Mobile-to-fixed interconnection charges for call termination on fixed network of incumbent operator – single transit

Notes:

Bulgaria: Mobile-to-fixed interconnection is only offered on the double transit level.

The figure below illustrates the charge per minute for single transit fixed-to-fixed and mobile-to-fixed termination in peak time. Both rates are the same in Bosnia & Herzegovina, Romania and Turkey. However, in Albania, Bulgaria and Croatia, the mobile-to-fixed rates are higher, but in Montenegro and the Former Yugoslav Republic of Macedonia they are lower than the corresponding fixed-to-fixed rates.

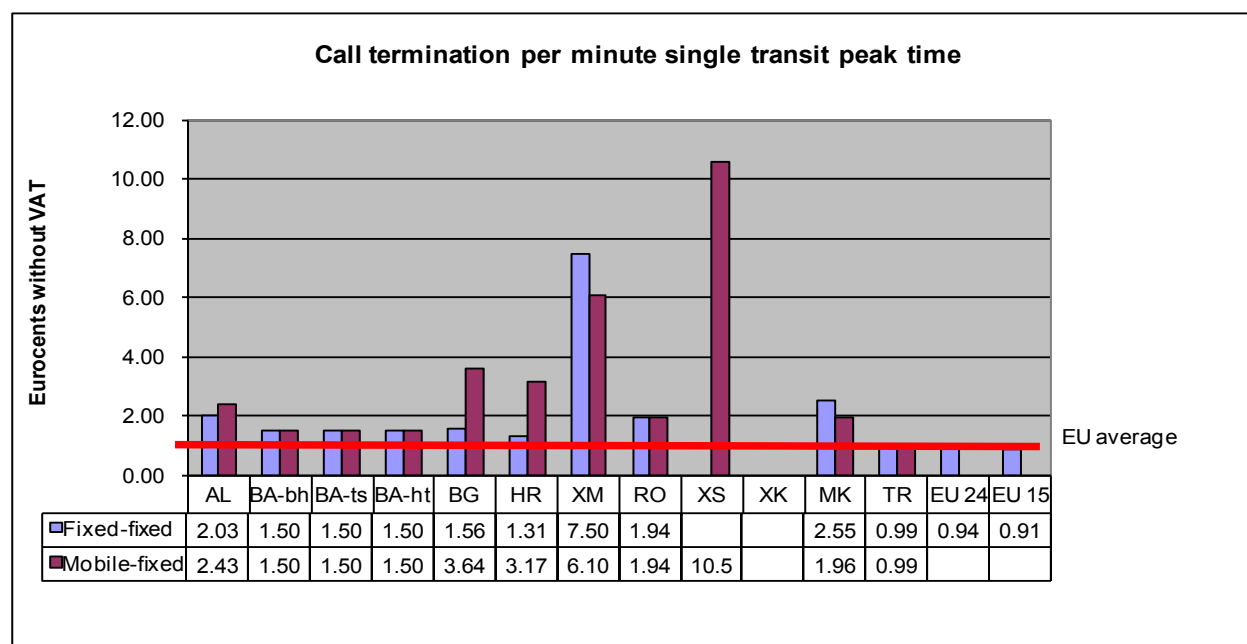


Figure 62 - Interconnection charges for call termination on fixed network of incumbent operator – single transit

Notes:

Bulgaria: the mobile-to-fixed call termination charge is the double transit rate, which is the only rate available.

Turkey: This charge was determined by the Telecommunications Authority as the standard interconnection reference rate from 1/10/2005 onward. There is no set up charge applied and no peak / off peak differentiation.

The EU average is taken from the 11th Implementation Report, February 2006.

The next two tables show the corresponding information for double transit interconnection.

Country	Peak		Off peak	
	Setup (eurocent)	Minute (eurocent)	Setup (eurocent)	Minute (eurocent)
Albania	0.00	2.43	0.00	2.43
Bosnia & Herzegovina				
<i>BH Telecom d.d. Sarajevo</i>	0.00	2.04	0.00	1.02
<i>Telekom Srpske a.d. Banja Luka</i>	0.00	2.04	0.00	2.04
<i>Hrvatske Telekomunikacije d.o.o. Mostar</i>	0.00	2.04	0.00	1.53
Bulgaria	0.00	3.64	0.00	3.03
Croatia	0.21	1.71	0.10	0.86
Montenegro	0.00	7.50	0.00	7.50
Romania	0.00	2.27	0.00	1.25
Serbia, including Kosovo¹				
Serbia	na	na	na	na
Kosovo	na	na	na	na
The former Yugoslav Republic of Macedonia	0.36	3.46	0.21	1.98
Turkey	0.00	1.83	0.00	1.83
1) under UNSCR 1244				

Table 70 - Fixed-to-fixed interconnection charges for call termination on fixed network of incumbent operator – double transit

Note:

Turkey: This charge was determined by the Telecommunications Authority as the standard interconnection reference rate from 1/10/2005 onward. There is no set up charge applied and no peak / off peak differentiation.

Country	Peak		Off-peak	
	Setup (eurocent)	Minute (eurocent)	Setup (eurocent)	Minute (eurocent)
Albania	0.00	2.43	0.00	2.43
Bosnia & Herzegovina				
<i>BH Telecom d.d. Sarajevo</i>	0.00	2.04	0.00	1.02
<i>Telekom Srpske a.d. Banja Luka</i>	0.00	2.04	0.00	2.04
<i>Hrvatske Telekomunikacije d.o.o. Mostar</i>	0.00	2.04	0.00	1.53
Bulgaria	0.00	3.64	0.00	3.03
Croatia	0.00	3.17	0.00	1.66
Montenegro	0.00	6.10	0.00	6.10
Romania	0.00	2.27	0.00	1.25
Serbia, including Kosovo¹				
Serbia	0.00	na	0.00	na
Kosovo	na	na	na	na
The former Yugoslav Republic of Macedonia	0.00	1.96	0.00	1.96
Turkey	0.00	0.99	0.00	0.99
1) under UNSCR 1244				

Table 71 - Mobile-to-fixed interconnection charges for call termination on fixed network of incumbent operator – double transit

Note:

Turkey: This charge was determined by the Telecommunications Authority as the standard interconnection reference rate from 1/10/2005 onward. There is no set up charge applied and no peak / off peak differentiation.

The figure below illustrates the charge per minute for double transit fixed-to-fixed termination in peak time, and the corresponding mobile-to-fixed termination rates.

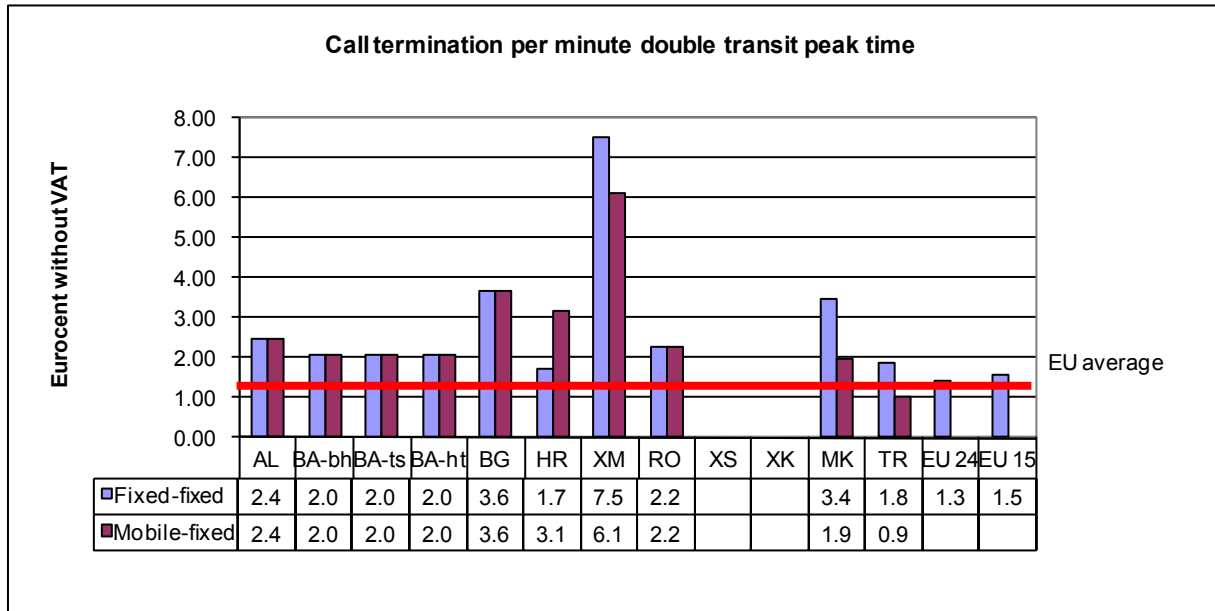


Figure 63 - Fixed-to-fixed interconnection charges for call termination on fixed network of incumbent operator – double transit

Note:

The EU average is taken from the 11th Implementation Report, February 2006.

Again, the tariffs in Montenegro are significantly higher than the EU average, this time by a factor of five. Also Bulgaria, and to a less extent Romania and the Former Yugoslav Republic of Macedonia, have tariffs that are quite high compared with the EU average.

As explained above, the expectation is that both tariffs should be the same, but this is only the case for Albania, Bosnia & Herzegovina, Bulgaria and Romania. In Croatia, the mobile-to-fixed tariffs are higher, while in Montenegro, the Former Yugoslav Republic of Macedonia and Turkey they are lower.

2. Call termination on mobile networks

Table 72 below presents the interconnection rates applied to fixed-to-mobile termination. These rates apply to national termination and there is no distinction between local, single and double transit as for fixed network termination.

Most of the countries and geographic units have termination rates that are in the range of the EU average, with exception of Romania and Turkey that have rates, which are about half the EU average.

Country	Peak		Off-peak	
	Setup (eurocent)	Minute (eurocent)	Setup (eurocent)	Minute (eurocent)
Albania	0.00	22.71	0.00	22.71
Bosnia & Herzegovina	-	-	-	-
Bulgaria	0.00	19.48	0.00	18.71
Croatia	0.00	12.42	0.00	7.95
Montenegro	0.00	16.50	0.00	16.50
Romania	0.00	7.21	0.00	7.21
Serbia, including Kosovo ¹				
Serbia	0.00	10.72	0.00	10.72
Kosovo	0.00	12.50	0.00	6.25
The former Yugoslav Republic of Macedonia	0.00	12.32	0.00	4.92
Turkey	0.00	6.94	0.00	6.94
1) under UNSCR 1244				

Table 72 - Fixed-to-mobile interconnection charges for call termination on mobile network

Notes:

Albania: From August 1, 2006, mobile operators reduced mobile termination rates almost by half, introducing call setup charge of 0.39 eurocent and per minute charge of 12.98 eurocent (no peak/off peak differentiation).

Bosnia & Herzegovina: The price of national call transit toward mobile networks, including the price of call termination in mobile networks, represents the price applied to other networks and has to be at least 25% lower in comparison to the price stated in the valid pricelist of the incumbent operator.

Bulgaria: These are charges for termination on all mobile networks of traffic originating from the fixed networks of the incumbent and the alternative fixed operators (some of them have already interconnection agreements with the mobile operators). There are also new interconnection charges for calls originating from the network of the incumbent operator BTC and terminating onto the network of its subsidiary Vivatel.

Turkey: This charge was determined by the Telecommunications Authority as the standard interconnection reference rate from 1/10/2005 onward. There is no set up charge applied and no peak / off peak differentiation.

Figure 61 below presents the per minute rates for fixed to mobile termination.

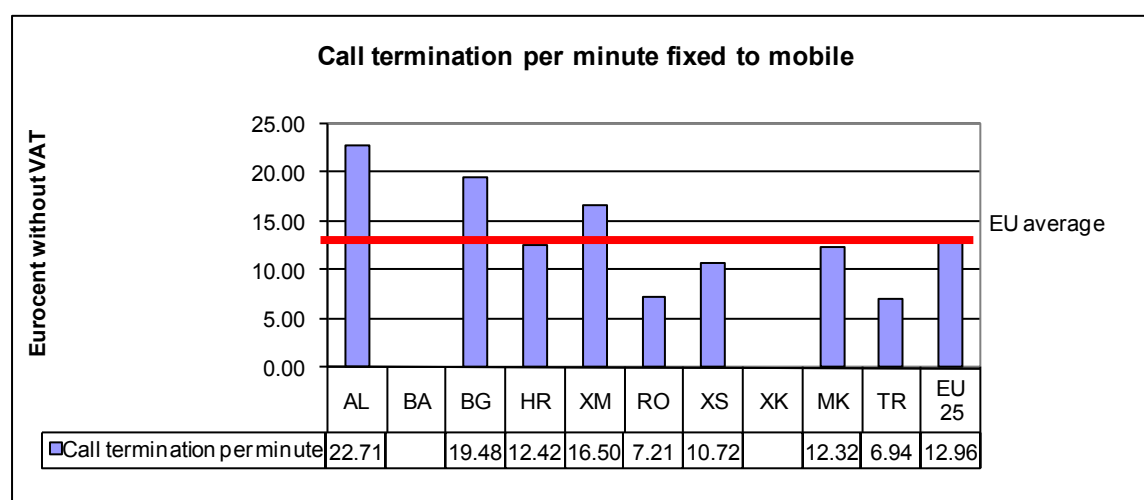


Figure 64 - Fixed-to-mobile interconnection charges for call termination on mobile network

Note:

Albania: From August 1, 2006 mobile operators reduced mobile termination rates almost by half, introducing call setup charge of 0.39 eurocent and per minute charge of 12.98 eurocent (no peak/off peak differentiation).

The EU average is taken from the 11th Implementation Report from the European Commission, February 2006. It represents an average termination rate of operators with significant market power (SMP) and non-SMP operators.

I. Internet and broadband

1. Internet user penetration

The statistics provided for Internet user penetration are based on estimates or on sample surveys. As there are differences in the age ranges, the duration since a user last accessed the Internet and different sampling techniques, i.e. some figures represent 'users' whereas others represent 'subscribers', direct comparisons of the figures in Table 65 are not possible. Therefore, the penetration rates should be considered as indicative only.

A report published by the European Commission in September 2004⁴⁰, providing information on internet users in the CEE countries at the end of 2003 indicated that on average 21% of the population had accessed the internet at least once a week in the previous three months compared to an EU average of 38%. With these figures in mind, the usage of Internet in the SEE countries can be considered as being significantly lower than the EU average. As no distinction is made in these statistics between the frequency, or recency, of internet usage it can be assumed that the number of people that use the Internet on a regular basis, i.e. at least once a week in the previous three months, will be much lower than the figures given here.

Country	Total number of Internet users	Internet users per 100 population	Internet users per 100 households
Albania	40,000	1.27%	5.36%
Bosnia & Herzegovina	900,000	23.25%	74.95%
Bulgaria	1,721,298	22.30%	58.91%
Croatia	1,537,220	34.61%	104.05%
Montenegro	140,000	22.40%	73.28%
Romania	n/a	n/a	n/a
Serbia, including Kosovo ¹			
Serbia	756,675	10.09%	30.01%
Kosovo	299,850	15.26%	96.38%
The former Yugoslav Republic of Macedonia	201,924	9.92%	35.56%
Turkey	13,150,000	18.13%	75.20%
1) under UNSCR 1244			

Table 73 - Internet user penetration

Notes:

Albania: The figure is based on an estimate from a survey performed in 2004.

Bosnia & Herzegovina: The number of Internet users is estimated according to the ITU definition. There are 183,367 residential subscribers and 24,876 business subscribers.

Bulgaria: According to data supplied by Vitosha Research Agency, 25.8% of the population over the age of 15 uses the Internet in mid-2006.

Croatia: The figure for Croatia is calculated on the assumption that there are one and a half users for every dial-up and broadband Internet subscription (971,480 subscriptions) x + free of charge university users (80,000).

Montenegro: Estimated number based on 73,967 registered subscribers.

Romania: No information available on the number of users (except that there were 2,536,675 internet access connections on June 30, 2006).

Turkey: The figure for Turkey is an estimate based on a study performed by the Turkish Statistical Institute in 2005.

Figure 65 below shows the growth in Internet user penetration over the period January 2005 to July 2006 and Figure 66 shows the change in costs of 40 hours dial-up Internet access during the same period. There has been very little change in the cost of access so there is no visible correlation between lower costs and increased Internet penetration rates. In fact, Croatia has one of the highest access costs (behind the former Yugoslav Republic of Macedonia) but has the highest Internet penetration rate. Albania's access costs are in-line with the other countries and territories but has the lowest Internet penetration rate. Given that GDP per-capita income for Albania is on a par with other countries, the low Internet penetration rate is probably the result of Albania having a low fixed-line penetration rate.

⁴⁰ Central and Eastern Europe Information Society Benchmarks, September 2004

Figure 68 shows the PPP cost of Internet access and indicates that the former Yugoslav Republic of Macedonia has the highest Internet access cost and in Figure 65 below has one of the lowest Internet penetration rates.

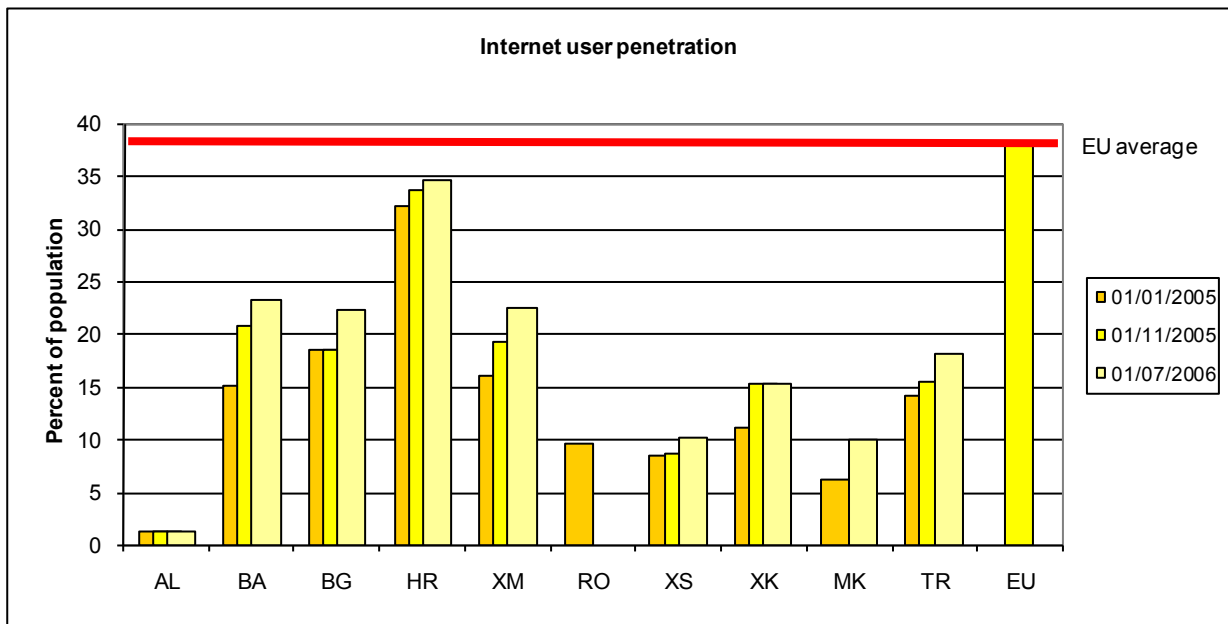


Figure 65 - Internet user penetration

Notes:

Romania: The Internet user penetration data given in the figure above (January 1, 2005) is based on a study conducted by the ANRC with the support of a research company during February 8 – 18, 2004. The target population of the research were people aged between 15 and 50 years old, from the urban area, Internet users (at home or outside the household) at least once a week in the past 4 weeks, which gives the result of 2,060,464 Internet users in urban areas. The data available at the national level refers to Internet penetration (and not Internet user penetration), which was about 5% on December 31, 2004. Data that is more recent than January 1, 2005 is not available.

The EU average is taken from Eurostat's indicator on "Share of individuals regularly using the Internet for 2004. This indicator includes all individuals aged 16 to 74 who access the Internet, on average, at least once a week, in the last three months before the survey. Use includes all locations and methods of access.

2. Internet Dial-up access cost

Access to the Internet for household users in the SEE countries is primarily via dial-up fixed lines (see the section on 'Broadband Access') so the dial-up Internet access costs have a direct influence on the number of users and usage duration. Even though the PPP adjusted figures cannot be calculated for all countries because of a lack of data on PPPs it can be seen for a few countries that dial-up access is relatively expensive. For example, in June 2003, the cost of 40 hours peak time access in France was 5.9 euro, it is currently 74 euro in the former Yugoslav Republic of Macedonia and 40 euros in Croatia.

Country	Nominal euro with VAT	
	ISP	PSTN usage
Albania	11.81	23.36
Bosnia & Herzegovina		
<i>BH Telecom d.d. Sarajevo</i>	7.36	14.36
<i>Telekom Srpske a.d. Banja Luka</i>	11.96	21.53
<i>Hrvatske Telekomunikacije d.o.o. Mostar</i>	5.98	31.58
Bulgaria	0.00	44.24
Croatia	40.42	20.21
Montenegro	13.00	5.17
Romania	4.37	27.13
Serbia, including Kosovo¹		
Serbia	12.22	5.00
Kosovo	17.91	17.91
The former Yugoslav Republic of Macedonia	74.05	0.00
Turkey	4.81	21.51
1) under UNSCR 1244		

Table 74 - Dial-up Internet access cost – 40 hours at peak time

In Albania, the dial-up service offered by Albtelcom is simple connectivity, the user dials a defined number and uses a public user-name and password. With this service, Albtelcom does not offer email accounts or web hosting. Other "traditional" ISPs offer packages with email accounts and web hosting capacities (sometimes ISPs apply limited downloading, with extra tariffs for data downloaded over this limit). Albtelcom also offers web hosting as separate service. The ISPs charge shown is the one of the biggest ISP in the country, ABCOM.

Mathematically, the cost for 40 hours of Internet connectivity for Albtelcom is 2400 Lek, while for ISPs it is given in Euro - in many cases ISPs apply tariffs in euros or USD instead of Lek to avoid complications with bank exchange procedures. The cost of access via an ISP does not include the cost of local PSTN lines, which is the same as applied by Albtelcom for its dial-up Internet access. The public prices of ABCOM include:

- Several programmes for limited/unlimited personal and business differentiated for 4, 6, or 12-month contracts. Personal limited tariffs are for 30 hours/month for 15, 17, or 20 USD a month (depending on the duration of the contract). For unlimited access, it is 35, 40, or 50 USD a month. For businesses, the tariffs vary from 27 to 105 USD a month. For access limited to 40 hours a month for businesses, the tariffs vary from 18 to 20 to 25 USD a month. Except limited personal contracts, for others 5 Mb disk space is given for web hosting.
- There are packages for unlimited email service only that cost 3.6, 5.8, or 7.29 USD a month, depending on the contract duration (4, 6, or 12 months).

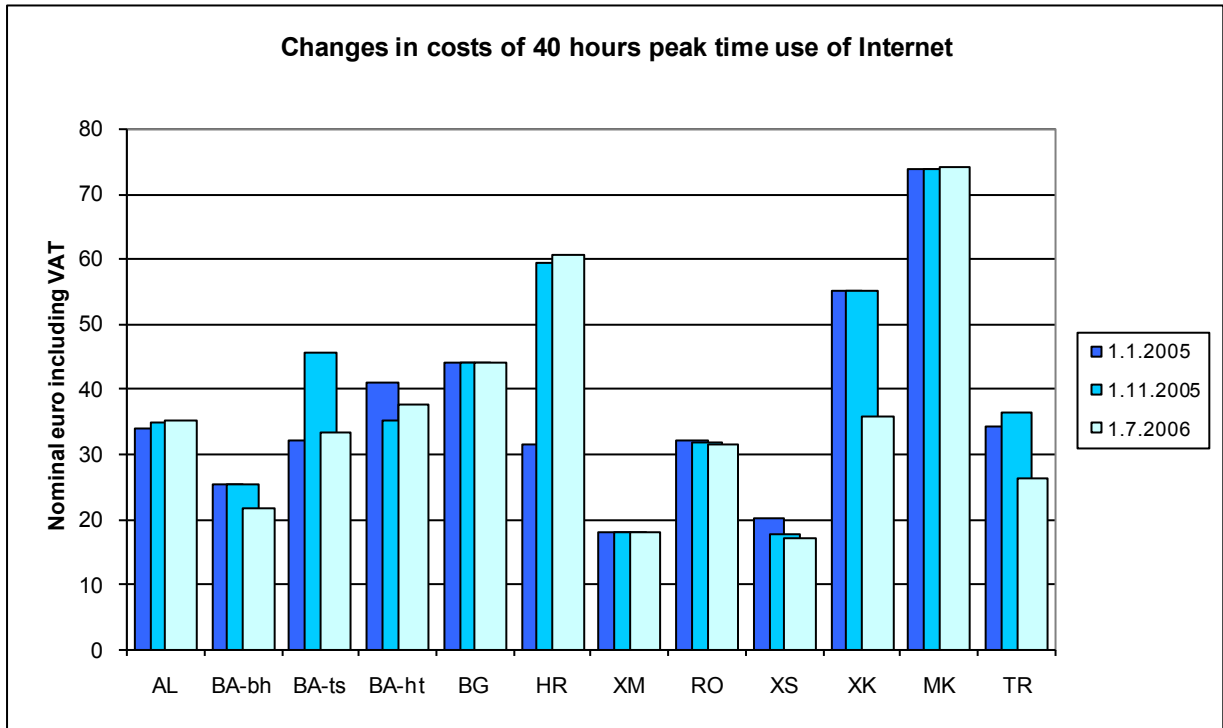


Figure 66 – Changes in costs of dial-up Internet access

The figure above shows that there has been very little change in the costs of 40 hours peak time dial-up Internet access between January 2005 and July 2006. Some of the minor fluctuations are the result of exchange rate differences rather than changes in the costs of the packages offered. The next figure shows how the costs are split between the telephone company and the Internet Service Provider.

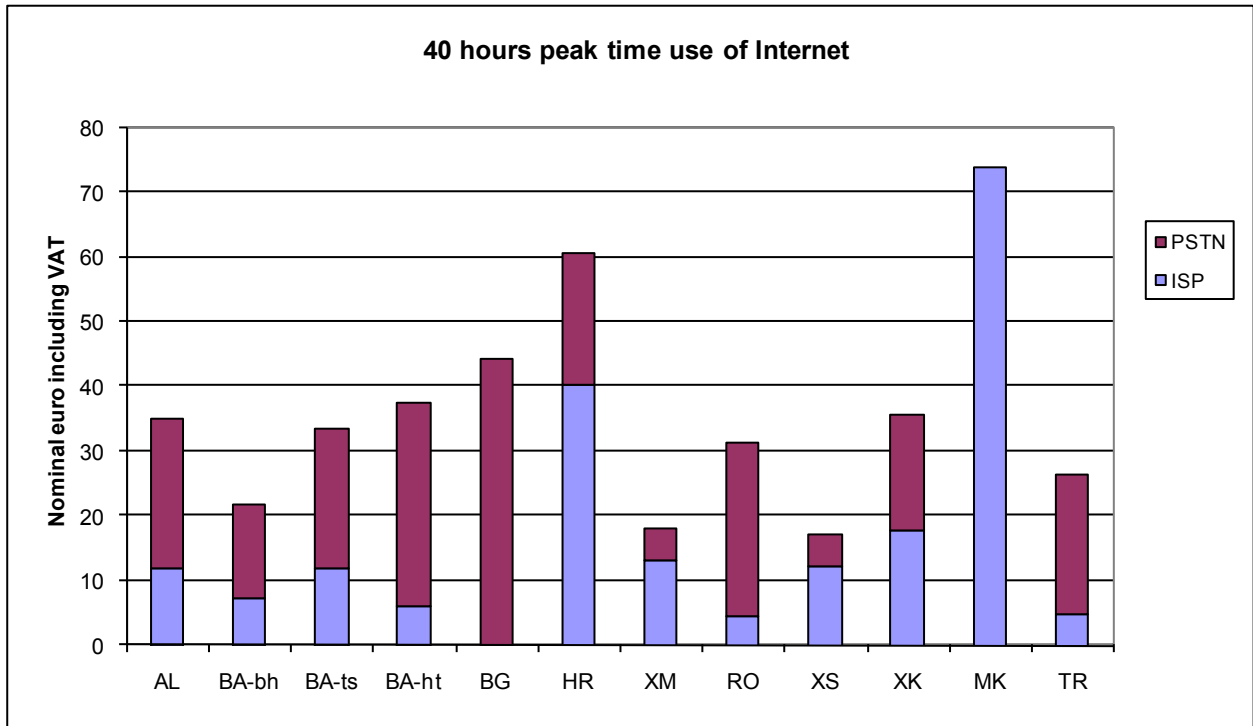


Figure 67 - Dial-up Internet access cost – 40 hours at peak time in nominal Euro

Notes:

Albania: For the payment to the PSTN, standard tariffs are not applied. Special tariffs are applied, as shown above.

Croatia: The PSTN part of the full price is 0.05 HRK/min. The rest goes to the ISP.

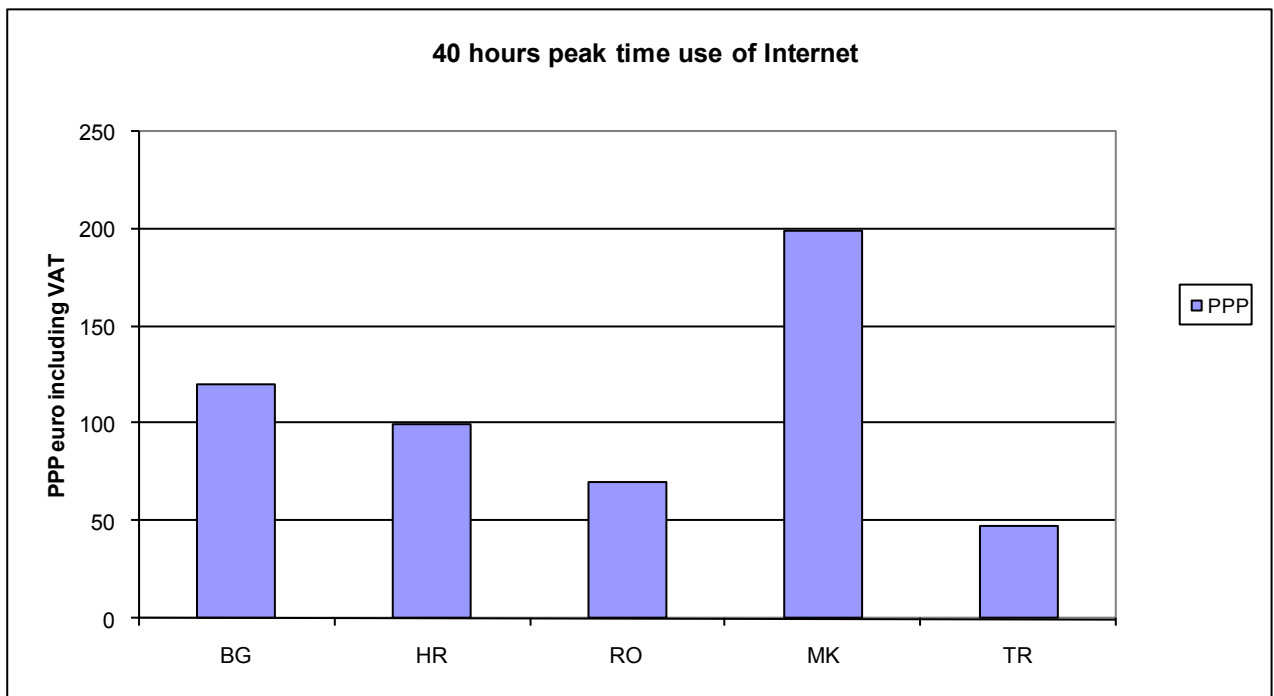


Figure 68 – Total dial-up Internet access cost – 40 hours at peak time in PPP

The ISP charge in Albania is the price per month for an ISP operator, which is one of the biggest in the country, ABCom. There is a one-off payment set up fee of 20 euro for installation and support. If there is a subscription for three months, the monthly payment to the ISP is 9.5 euro, if the subscription is for six

months the monthly payment is 7.5 euro, and if the subscription is for a year then the monthly payment is reduced to 5.5 euro.

The table above shows the case when the user uses another ISP operator other than Albtelecom. Albtelecom also operates in the market as an ISP. Albtelecom's tariffs (PSTN usage) are the same as shown above, if Albtelecom is used as an ISP. The difference between Albtelecom and other ISPs is that the user does not have to pay for the set up fee (installation) and the monthly payment. Albtelecom also applies peak and off-peak tariffs for dial-up internet access for users that use Albtelecom as an ISP. Peak tariffs are the same as shown above, while off-peak tariffs are 0.80 Lek (0.6 eurocent per minute for residential users) and 1.20 Lek (0.9 eurocent per minute for business users). For the payment to the PSTN, the standard tariffs are not applied but special tariffs, as indicated, are applied.

In Bulgaria, Orbitel offers connection through local points in 27 cities and towns. The pricing for Orbitel's dial-up access is shown above. Orbitel is one of the largest national ISPs.

In Montenegro, the price is for residential users, in peak-time and the ISP price is dependent only on the user's category (residential or business). The prices are those charged by Internet Crne Gore (Internet Montenegro), a subsidiary of Telecom Montenegro, which is the largest ISP in Montenegro. Both residential and business users have several tariff packages at their disposal (10, 20, 40 or 100 hours, and unlimited monthly access), with different prices.

The figures for PSTN usage in Romania are those for Internet Special Access offered by RomTelecom (the fixed incumbent). RomTelecom recently launched a dial-up internet service available to all its subscribers with the same tariffs all over the country, including the phone line usage and Internet access tariff.

The figure for Turkey is that of the monthly payment to the ISP.

Dial-up Internet access costs during off-peak periods are those that residential users are most likely to incur. Although, as with the information concerning peak time costs, PPP information is missing for most countries it would seem that the off-peak costs could also be considered expensive and, because the costs could represent a significant proportion of net monthly income represent an inhibiting factor to widespread Internet usage.

Country	Nominal euro	
	ISP	PSTN usage
Albania	11.81	9.35
Bosnia & Herzegovina		
<i>BH Telecom d.d. Sarajevo</i>	7.36	3.59
<i>Telekom Srpske a.d. Banja Luka</i>	2.99	7.18
<i>Hrvatske Telekomunikacije d.o.o. Mostar</i>	5.98	9.33
Bulgaria	0.00	19.95
Croatia	10.10	5.05
Montenegro	7.00	1.29
Romania	2.91	6.43
Serbia, including Kosovo¹		
Serbia	3.05	1.27
Kosovo	4.47	4.47
The former Yugoslav Republic of Macedonia	18.51	
Turkey	4.81	5.38
1) under UNSCR 1244		

Table 75 - Dial-up Internet access cost – 20 hours at off-peak time

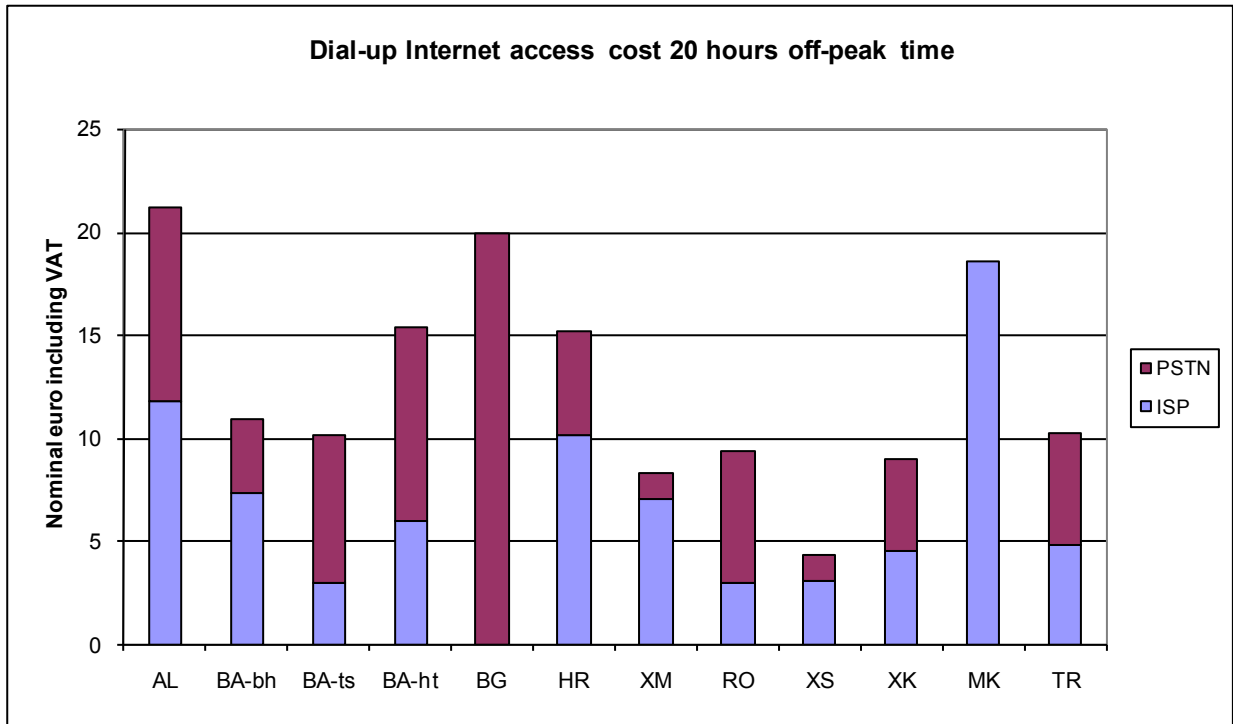


Figure 69 - Dial-up Internet access cost – 20 hours at off-peak time nominal euro

Notes:

Albania: The subscription fee is for 40 hours internet access, which means that there is no specific package for 20 hours dial-up internet access. There is a set up fee of 20 euro for the installation and the support. The tariffs that the user has to pay to the PSTN for off-peak hours are the same as for peak hours. The table above shows the case when the user uses another ISP operator other than Albtelcom, which in this case is referred to as PSTN. Albtelcom has introduced itself in the market as an ISP operator. Albtelcom's tariffs (PSTN usage) are the same as shown above, if subscribers use Albtelcom as an ISP. The difference between Albtelcom and other ISPs is that the user does not have to pay for the set up fee (installation) and the monthly payment. Albtelcom also applies peak and off-peak tariffs for dial-up internet access for users that use Albtelcom as an ISP. Peak tariffs are the same as shown above, while off-peak tariffs are 0.80 ALL/min for Residential users (0.6 eurocent per minute for residential users) and 1.20 ALL/min for business users (0.9 eurocent per minute for Business users).

Croatia: The PSTN part of the full price is 0.025 HRK/min. The rest goes to the ISP.

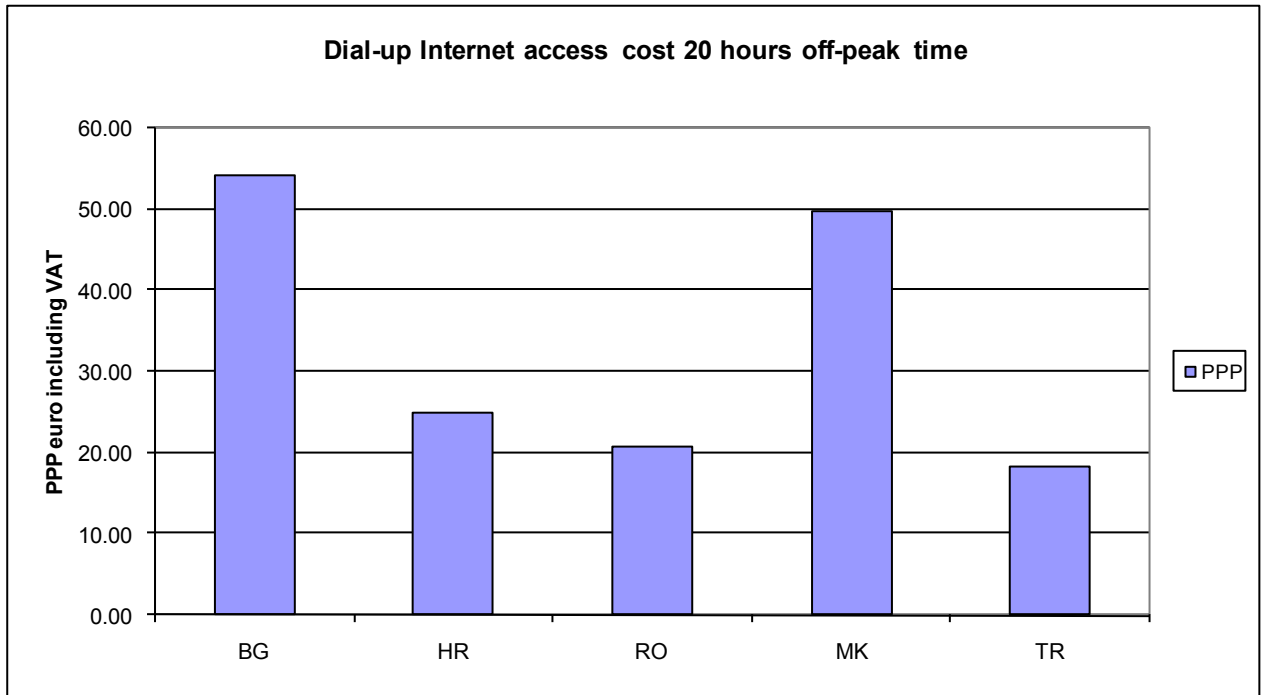


Figure 70 – Total dial-up Internet access cost – 20 hours at off-peak time PPP euro

3. Broadband access

In January 2004, xDSL broadband access was only possible in half of the countries (see Table 76 below). By July 2006, xDSL services were available in all the countries, but have only recently been introduced in Albania, Montenegro, and Serbia. Provision of xDSL services by alternative operators has also become a commercial reality in five of the countries.

Apart from Croatia and Turkey, where the xDSL lines represent 11% and 10% of the total fixed network, the rollout of xDSL services to customers is still at a very early stage. In most countries, the xDSL penetration rates are in the range of 1% to 2% of the total networks.

Country	All xDSL lines		All xDSL lines - July 1, 2006		
	01/01/2004	01/01/2005	Total	Incumbent	Alternative
Albania			361	361	0
Bosnia & Herzegovina	93	910	13,945	13,945	0
Bulgaria		6,651	62,013	62,000	13
Croatia	2,556	23,423	166,041	154,525	11,516
Montenegro			3,253	3,253	0
Romania	3,933	2,182	44,239	43,591	648
Serbia, including Kosovo ¹					
Serbia			9,830	0	9,830
Kosovo	135	135	144	144	0
The former Yugoslav Republic of Macedonia		2,447	12,058	12,058	0
Turkey	52,624	452,398	2,098,677	2,080,458	18,219
1) under UNSCR 1244					

Table 76 - Number of xDSL lines

Notes:

Albania: xDSL services have only recently been introduced.

Montenegro: xDSL services have only recently been introduced.

Serbia: xDSL services have only recently been introduced.

The following table gives a breakdown of how the new entrant's xDSL lines are provided. The breakdown gives the number xDSL lines provided via full ULL, shared access, bitstream, and resale.

Country	Incumbent's DSL Lines	New Entrant			
		Full ULL	Shared access	Bitstream	Resale
Albania	361	0	0	0	0
Bosnia & Herzegovina	13,945	0	0	0	0
Bulgaria	62,000	0	0	0	13
Croatia	154,525	0	0	0	11,516
Montenegro	3,253	0	0	0	0
Romania	43,591	648	0	0	0
Serbia, including Kosovo ¹					
Serbia	0	0	0	9,830	0
Kosovo	144	0	0	0	0
The former Yugoslav Republic of Macedonia	12,058	0	0	0	0
Turkey	2,080,458	0	0	0	18,219
1) under UNSCR 1244					

Table 77 - Breakdown of xDSL lines

The following table gives a breakdown of the alternative broadband technologies and the extent to which they are currently used.

Country		New Entrants	FWA	Cable modem	Leased line	3G	Fibre to home	Satellite	PLC	Other	Total
Albania	Incumbent		0	0	0	0	0	0	0	0	0
	Alternative	0	0	0	0	0	0	0	0	0	0
Bosnia & Herzegovina	Incumbent		0	0	911	0	0	0	0	0	911
	Alternative	0	2,742	8,096	266	0	0	0	0	10,562	21,666
Bulgaria	Incumbent		0	n/a	0	0	0	0	0	0	0
	Alternative	0	1,271	239,583	0	na	12,832	0	0	8,786	262,472
Croatia	Incumbent		0	0	272	0	0	0	0	0	272
	Alternative	6	362	5,533	857	21,944	0	600	0	0	29,296
Montenegro	Incumbent		0	0	na	0	0	0	0	0	0
	Alternative	0	0	0	0	0	0	0	0	0	0
Romania	Incumbent		0	0	0	0	15	0	0	722	737
	Alternative	600	11,189	328,426	0	28,219	39,897	54	0	730,892	1,138,677
Serbia, including Kosovo ¹											
Serbia	Incumbent		0	0	0	0	0	0	0	0	0
	Alternative	0	0	23,956	7,941	-	-	-	-	-	31,897
Kosovo	Incumbent		0	4,000	31	0	0	0	0	0	4,031
	Alternative	0	4,140	2,100	0	0	30	0	0	0	6,270
The former Yugoslav Republic of Macedonia	Incumbent		0	0	155	0	0	38	0	0	193
	Alternative	0	1,548	991	0	0	0	0	0	0	2,539
Turkey	Incumbent		0	28,567	5,803	0	0	0	0	0	34,370
	Alternative	70	0	0	0	0	0	0	0	0	0
1) under UNSCR 1244											

Table 78 - Breakdown of other means of broadband access

Notes:

Bosnia & Herzegovina: Normal speed ranges are 256/128 Kbps, 1024/256 Kbps, 1024/1024 Kbps, 1536/512 Kbps, and 2048/256 Kbps. The number of Cable TV subscriptions to the Internet should not be taken as 100% accurate since not all licensed network operators (there are 65 of them in Bosnia & Herzegovina) offer internet connectivity through their networks, while at the same time those that do offer internet connectivity often have special discounts that attract customers. Due to the lack of response from network operators to provide data on subscriptions, it is difficult to estimate actual number of subscriptions. However, the actual number of subscriptions countrywide could be tenfold.

WiFi subscriptions to the Internet are increasing throughout the country since they provide internet connectivity to remote areas and other areas where other types of broadband connectivity are not available. The normal speed ranges for WIFI subscriptions are: 64 Kbps-2048 Kbps download, 64 Kbps-1024 Kbps upload.

Bulgaria: The data given above is based on a study by CRC among 173 ISPs of which 118 have answered and 97 have provided data (figures above are totals of those who have answered). This is not the total number of ISPs in Bulgaria. Due to the free licensing regime for Internet service provision, it is not possible to identify the exact number of ISPs in the country. In this study, the biggest ISPs and ISPs with licensed data transfer networks with national coverage were requested to provide information.

For 3G services, the two largest GSM operators in Bulgaria (that also have UMTS licences) have launched 3G services this year. Even though CRC has requested data for the number of 3G subscribers from them, they have not provided any figures. The operators have answered that it is not possible for them to give us the number of subscribers using UMTS services as usage of 3G services is a functionality of the handset and it is up to the will of the subscriber to use them or not. Therefore, it is not possible to provide any data at the moment.

The figure for 'other' includes satellite. It also includes access that have been incorrectly classified and which could belong to other categories if correctly classified.

Montenegro: WiFi access is possible but there is no data about the number of users.

The preceding table, especially when compared to the information contained in the previous report, confirms that the use of alternative broadband technologies remains limited in most countries (and obtaining reliable statistics from all ISPs is not always possible). However, some of the figures in the table above have increased significantly since the previous report but this is probably due to an improvement in the data collection process rather than real increases in the use of the technologies.

The following figure shows the number of xDSL lines per capita. Since the xDSL penetration for most countries is below 1% of population, the available data are shown as xDSL lines per million population in order not to be confused with the more normal indicator of xDSL lines per 100 population.

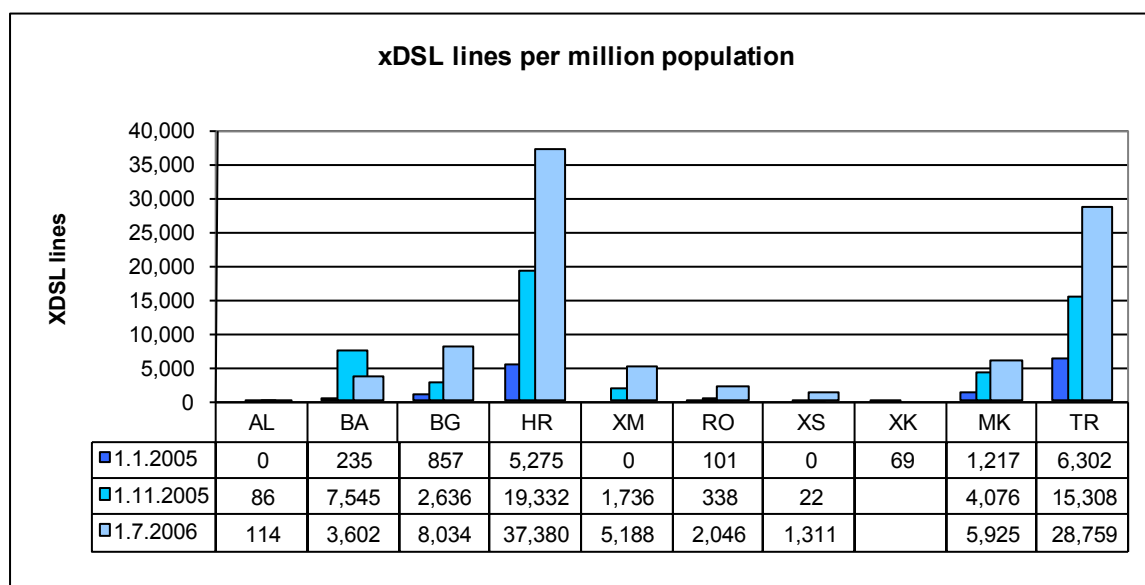


Figure 71 – xDSL lines per million population

The following chart presents the number of broadband Internet connections per capita. This chart is presented in terms of connections per million population. As indicated above, the major increases in availability of broadband access are attributable to improved data collection methods rather than increases since the previous report.

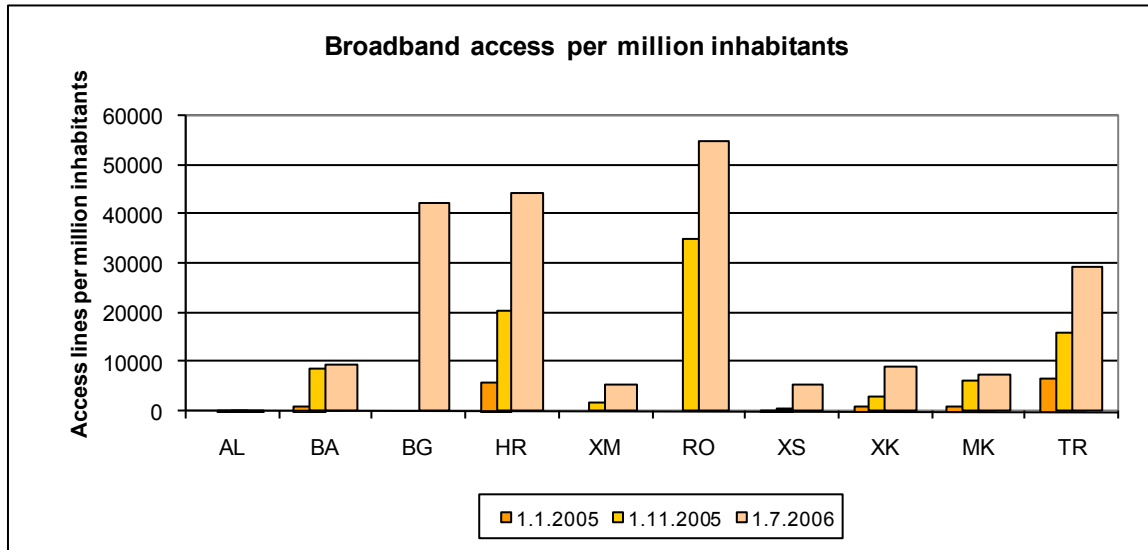


Figure 72 – Broadband access per million inhabitants

Notes:

Albania: The statistics are too small to be shown on the figure above (361 xDSL lines represents 114 lines per million inhabitants).

Bulgaria: The previous reports indicated that the figures for broadband access were known to be too low but no reliable information was available and for this reason, the data from the previous reports is not shown in the figure above. The figure now includes information about cable modem connections that was previously unavailable.

Romania: The data for 1.1.2005 is not shown in the figure above because it did not include the CDMA mobile dial-up connections.

4. Competitive alternatives

Out of eight countries where information is available, the ISP of the fixed incumbent only has a significant majority market share in four countries or geographic units (Albania – 88%, Croatia – 78%, Montenegro – 90% and Turkey – 82%). In Turkey, the incumbent's market share increased from 52% to 82% between January 2005 and July 2006.

In general, it can be said that Internet subscribers have a choice of ISP and that competition is in place. This is especially true in the larger countries (Bulgaria, Romania and Turkey).

Country	Number of ISPs		Estimate of market share of ISP of fixed incumbent operator
	National	Local	
Albania	16	11	88.00%
Bosnia & Herzegovina	40		35.00%
Bulgaria	44	227	12.00%
Croatia	35	-	78.19%
Montenegro	2	3	90.00%
Romania	1,154		4.00%
Serbia, including Kosovo ¹			
Serbia	10	30	1.00%
Kosovo	3		
The former Yugoslav Republic of Macedonia	5		
Turkey	70	-	82.00%
1) under UNSCR 1244			

Table 79 - Number of ISPs and estimate of market share of ISP of fixed incumbent operator

Notes:

Albania: Market share is estimated as being the ratio of the number of Internet dial-up users of incumbent operator (using the ISP owned by incumbent) with total number of Internet dial-up users (using the incumbent ISP + other ISPs. Users refers to Internet dial up users of incumbent fixed network).

Bosnia & Herzegovina: 3 incumbent operators are not included. There are only one licence for ISP, but almost all providers are local.

Bulgaria: Data for 31.12.2005. There are 44 operators with national coverage that have declared to CRC to have provided Internet access at the end of 2005 and 227 operators with local coverage that have declared to CRC to have provided Internet access at the end of 2005. The market share of the incumbent is the total revenues from ISP services.

Croatia: Only 25 ISPs are commercially active.

Montenegro: There are two national ISPs: Internet Montenegro and MontSky (with approximately 67,000 and 7,000 subscribers respectively). There are also 3 new WiFi operators with licences that were issued in 2005.

Romania: The number of ISPs is the number of active ISPs that provided statistical data as at June 30, 2006.

Serbia: Rough estimates. Precise information is not available.

Turkey: The ISP's market shares according to sales revenues cannot be calculated before the end of the fiscal year. Data about the sales revenues will be available in April 2007. So the market share given is calculated according to the subscriber numbers.

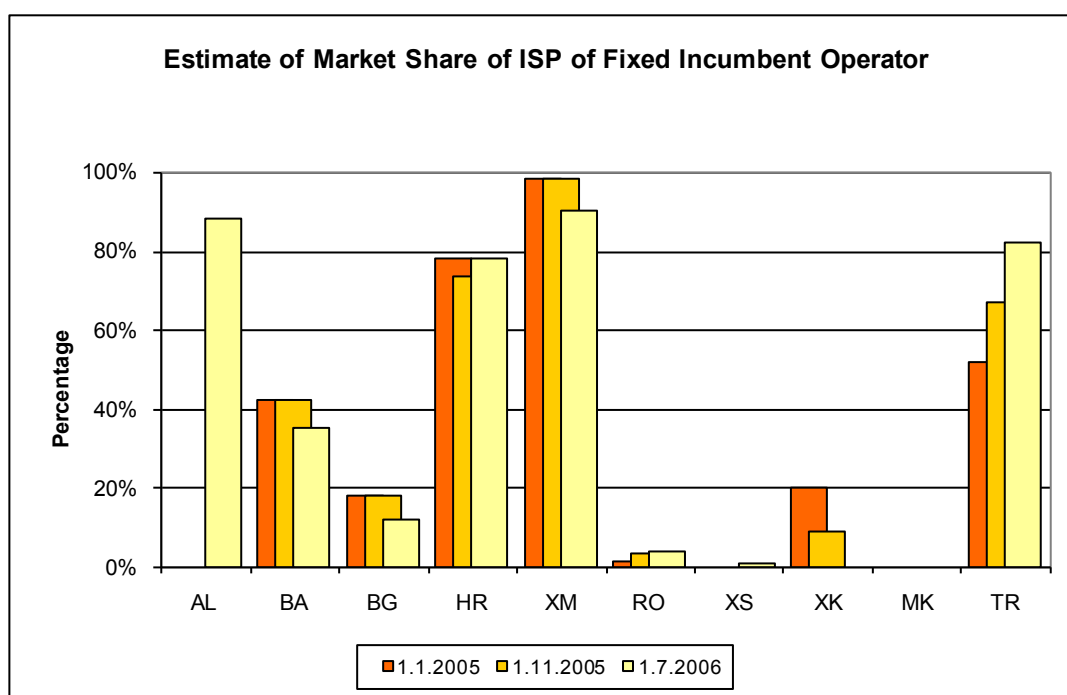


Figure 73 – Estimate of Market Share of ISP of Fixed Incumbent Operator

Figure 73 shows how the market shares of the ISPs of the fixed incumbent operators have developed during the period January 1, 2005 to July 1, 2006. There is no consistent pattern emerging from the information that is available.

The incumbent ISP's market share has fallen in Bosnia & Herzegovina, Bulgaria, Montenegro, and Kosovo, where the incumbent ISP apparently lost 50% of its market share during 2005 (but information that is more recent is unavailable).

The incumbent ISP's market share has increased slightly in Romania but its market share is still insignificant. In Turkey, the incumbent ISP's market share has increased significantly and now accounts for over 80% of the market.

Annex - New OECD Mobile Baskets

All baskets⁴¹ will include:

- Registration or installation charges with 1/3 of the charges, i.e. distributed over 3 years.
- Monthly rental charges, and any option charges that may apply to the package, or package combination.

The three new baskets are:

- Low user basket. The usage level of this basket is low, with a call volume less than half of that in the Medium user basket.
- Medium user basket. This basket will have 75 outgoing calls per month.
- High user basket. The usage level is about twice the Medium user basket.

The usage profiles will also include a number of SMS messages per month.

Call and message volumes for each basket are:

Category	Outgoing calls per month	SMS per month
Low user	25	30
Medium user	75	35
High user	150	42

The information received showed that there is little difference between the average pre-paid usage and the low user post-paid usage. The low user basket can therefore be used for both pre- and post-paid tariffs, allowing a simple comparison also between the two types.

Only national calls are included in the profiles, with four different destinations:

- Local area fixed line calls. This is used to accommodate the tariffs that have separate charges for the local area. When such charges are not available, this proportion of calls is included in the National.
- National fixed line calls. This covers all fixed line calls outside the local area, except in cases as noted above.
- Same network mobile calls (On-net). This includes all calls made to mobiles in the same mobile network as the caller.
- Other network mobile calls (Off-net). This includes calls to all other mobile networks in the caller's country. When the charges are different depending on destination network, the market shares based on subscriber numbers are used for weighting the charges. Up to 3 other networks will be considered in each country.

Distributions per destination for each **basket** are:

% of total number of calls	Fixed local area	Fixed national area	On-net mobile	Off-net mobile
Low user	28%	14%	40%	18%
Medium user	24%	12%	43%	21%
High user	26%	14%	42%	18%

As the information received produced little evidence on the split between local and national fixed line calls, the assumption has been used that the ratio would be 2:1 for local national, i.e. 67% local and 33% national. This assumption is taken from the averages in fixed baskets, and the scarce information received.

⁴¹ Source: Annex to the European Electronic Regulation and markets 2005 (11th report)

Instead of splitting time and day into distinct times and days the following approach will be used:

- Peak time calls at weekdays, most expensive time during daytime.
- Off-peak time calls at weekdays, cheapest time before midnight.
- Weekend time calls, at daytime Sundays.

Distributions over time and day for each **basket** are:

% of total number of calls	ToD Peak	ToD Off-peak	ToD Weekend
Low user	38%	35%	27%
Medium user	47%	30%	23%
High user	63%	22%	15%

There will be 3 separate call durations:

- Local and national fixed line calls.
- Same network mobile calls (On-net).
- Other network mobile calls (Off-net).

Call durations for each basket are:

Minutes per call	Dur Fixed National	Dur Mobile On-net	Dur Mobile Off-net
Low user	1.6	1.4	1.4
Medium user	2.1	1.9	1.9
High user	2.2	2.0	2.1

Any call allowance value included in the monthly rental will be deducted from the usage value once the basket is calculated. The deduction cannot be larger than the actual usage value, i.e. negative usage is not allowed. No transfer of unused value to next month is taken into account.

Any inclusive minutes will be deducted from the basket usage before starting the calculation of usage cost. The inclusive minutes are assumed to be used up with the same calling pattern that is described in the basket, i.e. the same peak/off-peak ratio and the same distribution across destinations. Where the inclusive minutes are clearly limited to specific destinations or times of day this will be taken into account. No transfer of unused minutes is taken into account.

Any inclusive SMS-messages will be deducted from the basket before starting the calculation of the SMS message cost, up to the number of messages in the basket.

For each of the operators covered a set of packages shall be included so that the cheapest package offered by that operator can be calculated for each of the 3 baskets.

Multiple operators in each country shall be included, with at least the two operators with highest number of subscribers in each country. The operators included shall have a total market share of at least 50% based on subscriber numbers.

Basket results are calculated for a period of one year.