

REPORT III

ANNEX CROSS-COUNTRY TABLES

Supply of services in monitoring regulatory and market developments for electronic communications and information society services in Enlargement Countries

March 2010

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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A. Electronic communications market overview

1. General economic background

Any assessment of telecommunications markets has to be seen against the general performance of the economy, its level compared to other economies and the relative growth rates. This requires data on the size and growth of the economy and of the population. Additionally, it helps to consider the distribution of income within an economy, together with (un)employment, poverty and literacy rates which might all be expected to be correlated with the adoption of ICTs.

2. Currencies, inflation, exchange rates and VAT

In order to compare the economies, markets prices and other indicators between the eight entities and with the EU-27 it is necessary to make adjustments for the different exchange rates (see Table A.1).

			Ave	Ostahan (0000		
Country	Currency	Code	2006	2007	2008	October 1, 2009
Croatia	Croatian Kuna	HRK	7.3229	7.3362	7.2230	7.26
FYROM	Macedonian Denar	MKD	61.19	61.17	61.2654	61.17
Turkey	New Turkish Lira	TRY	1.809	1.7865	1.9064	2.18
Albania	Albanian Leke	ALL	123.27	122.20	122.8029	134.56
Bosnia & Herzegovina	Bosnian Marka	BAM	1.96	1.96	1.96	1.96
Montenegro	Euro	EUR	1.00	1.00	1.00	1.00
Serbia	Serbian Dinar	RSD	85.00	78.67	81.9092	93.09
Kosovo (UNSCR 1244)	Euro	EUR	1.00	1.00	1.00	1.00

Table A.1 - Exchange rates¹

¹ MB-Ch.8-Exchange rates at http://www.ecb.int/stats/services/downloads/html/index.en.html

http://www.nbs.yu/export/internet/english/80/80_2/foreign_exchange_rates.pdf

http://www.bankofalbania.org/web/pub/kursi_2008_2349_1.xls

http://www.nbrm.gov.mk/default-en.asp?pmenu=kurslistENIKL

Currency fluctuations can have significant effects when comparing prices, spending patterns and operator revenues. The economic crisis and recession of 2008-09 has caused significant and unanticipated variations in exchange rates. As noted in previous reports, these can cause the apparent decline in the value of specific telecommunications markets when expressed in Euros.

In addition to converting other currencies into Euros, in order to facilitate comparisons, it is helpful to adjust prices using Purchasing Power Parities (PPPs). These are an indicator of the differences in price levels between countries, measuring how many currency units a given quantity of goods and services will cost in different countries. It has been popularised by *The Economist* as the Big Mac Index, measuring the relative cost of a hamburger in a range of countries.²

PPPs are derived by relatively complex processes and are subject to revision as better and more complete data become available. Work on determining PPPs in the Western Balkans has been supported by international collaboration involving UNECE, OECD and Eurostat.³

The PPPs for candidate and potential candidates are published by Eurostat, these are changed from the last report (see Table A.2). As yet, there are no plausible values or estimates of PPPs for Kosovo. PPPs for 2009 are not yet available.

	2005	2006	2007	2008
Croatia	4.6745	4.78613	4.7223	4.98379
FYROM	21.9546	21.9302	22.5132	23.8603
Turkey	0.9917	1.0403	1.0804	1.1711
Albania	52.1014	51.212	52.6818	52.9449
Bosnia & Herzegovina	0.857415	0.875195	0.898054	0.923174
Montenegro	0.419674	0.407644	0.428366	0.45729
Serbia	31.7152	34.4207	37.6563	41.0417
Kosovo (UNSCR 1244)				
EU-27	1.0000	1.0000	1.0000	1.0000

Table A.2 - Purchasing Power Parities (PPPs)⁴

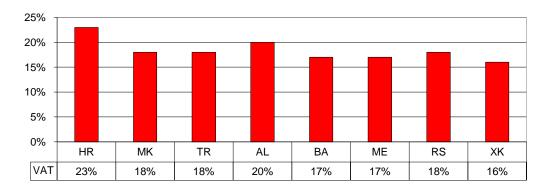
² http://www.economist.com/markets/bigmac/index.cfm

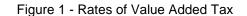
³ http://www.stat.si/radenci/program_2004/roberts-1.doc

⁴ European Commission > Eurostat home page > Economy and finance > Prices http://nui.epp.eurostat.ec.europa.eu/nui/show.do?dataset=prc_ppp_ind&lang=en

Prices can vary because of the different levels of taxation. It is therefore important to be able to identify, compare and, where appropriate, remove this element from any charges. Operators, service providers and business customers can usually reclaim VAT, so that this can be discounted from any charges.

The rates of Value Added Tax (VAT) in South-East Europe range from 16% to 23% (see Figure 1). These are close to the general range of the EU-27.





There are some additional retail taxes, notably in Turkey the Special Communications Tax (SCT) of 25% on mobile network services, 15% on fixed voice telephony services and 5% on Internet services. These cannot be reclaimed by businesses and so must be included in charges. From June 1, 2009, a temporary additional 10% tax on mobile communications services was introduced by the Serbian government as part of emergency economic measures to address the consequences of the economic crisis and the growing budget deficit. On August 1, 2009, a set of anti-recession measures also took effect in Croatia that included the increase in VAT rate from 22% to 23% and an additional 6% tax on mobile communications services.

3. Population and households

The three candidates and five potential candidates together represent 94 million people or almost twenty per cent of the EU-27 population (see Table A.3). The greatest part of that population is represented by Turkey, nearly ten times the size of Serbia, the next largest. Montenegro has much the smallest population, only 35 per cent larger than Luxembourg. Consequently, it is necessary to be careful when comparing the seven much smaller markets with Turkey. There was a substantial downward adjustment in the population of Turkey for 2006, based on new survey data.

	Population		Inhabitants per sq km		Percentage of EU-27 total	Households		Persons per	
	2006	2007	2008	2006	2007	2007	2006	2007	household
Croatia	4.443	4.441	4.432	78.5	78.5	0.89%	1.477		3.0
FYROM	2.039	2.042	2.048	79.3	79.4	0.41%	0.564		3.6
Turkey	72.520	69.689	70.586	89.9	90.1	14.07%	18.492		3.8
Albania	3.149	3.153	3.170	109.5	109.7	0.63%	0.753		4.2
Bosnia & Herzegovina	3.843	3.844	3.843	75.0	75.1	0.77%	1.034		3.7
Montenegro	0.624	0.625	0.634	45.1	45.2	0.12%	0.180	0.183	3.5
Serbia	7.425	7.382	7.365	95.8	95.3	1.49%	2.521	2.537	2.9
Kosovo (UNSCR 1244)	2.100	2.127	2.070	192.9	195.3	0.42%	0.311		6.6
Total	96.143	93.303	94.148	-	-	18.84%	25.343		3.7
EU-27	492.965	495.090	497.455	114.8	-	-	-		2.4

Table A.3 - Populations and households (millions)

Notes:	
Source:	Eurostat Pocketbook on candidate and potential candidate countries 2009 edition. KS-PF-09-001-EN (Table 1.1).
	2007 and 2008 data from Eurostat population data.
EU-27:	Household composition is for the EU-25 in 2003. ⁵
Montenegro:	Population density is for 2005.
Kosovo:	Population density is for 2005.

The population in the EU-27, as well as Turkey, Montenegro and FYROM have been increasing since 1996 as, since 2000, has Albania. While the EU-27 population grew by almost 3.3%, the growth of Turkey was 16.3%. Montenegro and FYROM grew slightly faster than the EU-27, while Albania was slightly slower. However, Serbia has seen a reduction in its population.

There has been considerable migration in recent years both within and beyond the region. These movements may not be fully reflected in the figures and the patterns may not yet be fully documented and understood.

The household composition is quite different from the existing EU member states, which have an average of 2.4 members per household. In South-East Europe, households are significantly larger, notably in Turkey and Albania respectively 3.8 and 4.2. The figure for Kosovo is extremely high, being 2.8 times

⁵ http://epp.eurostat.ec.europa.eu/tgm/printTable.do?tab=table&plugin=1&language=en&pcode=cdb10000&printPreview=true

the EU average, a level normally associated with some of the least developed countries. According to *Kosovo in figures in 2006* the average number of household members in rural areas was 7.8.⁶ Higher numbers of persons in a household would suggest that, cultural factors being equal, fixed telephone and broadband lines would be available to a larger number of people than in the EU-27.

4. Gross Domestic Product

The Gross Domestic Product (GDP) is defined as the total market value of all final goods and services produced within a country in a year.⁷ There is long-standing evidence that GDP and GDP growth correlate with telecommunications and telecommunications network growth.⁸

There are problems of determining the value of GDP accurately in some economies, given the existence of "informal" sectors that must be estimated.

	2001	2002	2003	2004	2005	2006	2007	2008
Croatia	25,538	28,112	30,011	32,759	35,725	39,102	42,833	47,370
FYROM	3,893	3,839	4,001	4,105	4,325	4,676	5,081	6,504 ^p
Turkey	289,446	219,816	243,570	269,322	314,304	387,655	419,013	472,879
Albania	3,945	4,541	4,705	5,048	5,881	6,561	7,168	8,772 ^p
Bosnia & Herzegovina	5,977	6,424	7,067	7,416	8,757	9,843	11,126	12,630
Montenegro	1,295	1,360	1,510	1,670	1,815	2,149 ^p	2,808 ^p	3,086 ^p
Serbia	12,821	16,034	17,416	19,075	20,358	23,521	29,543	34,259
Kosovo	1,624	1,735 ^p	1,797 ^p	3,007 ^p	3,068 ^p	3,192 ^p	3,434 ^p	3,841
EU-27	9,580,843	9,942,614	10,110,180	10,607,864	11,061,969	11,683,833	12,362,879	12,506,779

The values shown in Table A.4 indicate the very different sizes of the economies of the region.

Table A.4 - Gross domestic product (Euro million)9

Notes: 2008 figures in EUR are mostly preliminary estimates (indicated as 'P') based on national statistics.

FYROM: State Statistical office, http://www.stat.gov.mk/english/glavna_eng.asp

Bosnia & Herzegovina: Bulletin of Agency for statistics of BiH (Thematic Bulletin - TB 10, Gross Domestics Product 2005-2008, http://bhas.ba/new/tb.asp?Test=a324r5&Pripadnost=6) Montenegro: Statistical Office of Montenegro, http://www.monstat.org/EngMeniGodisnjiPodaci.htm

Kosovo: Statistical Office of Kosovo (SOK), http://www.ks-gov.net/ESK/eng/dmdocuments/GROSS%20DOMESTIC%20PRODUCT%20IN%20KOSOVO%202004%20-%202008.pdf

⁶ http://www.ks-gov.net/ESK/esk/pdf/english/general/kosovo_figures_06.pdf

⁷ http://circa.europa.eu/irc/dsis/nfaccount/info/data/ESA95/ESA95-new.htm

⁸ Lars-Hendrik Röller & Leonard Waverman (2001) "Telecommunications infrastructure and economic development: a simultaneous approach" The American Economic Review 91 (4) 909-923.

⁹ http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&language=en&pcode=tgs00028&plugin=0

The economic crisis of 2008-09 has caused the European Commission, the European Central Bank and the International Monetary Fund (IMF) to reduce their forecasts for growth of GDP, often by significant amounts. Indeed, they have made progressively more pessimistic forecasts for the global economy and especially for certain countries.

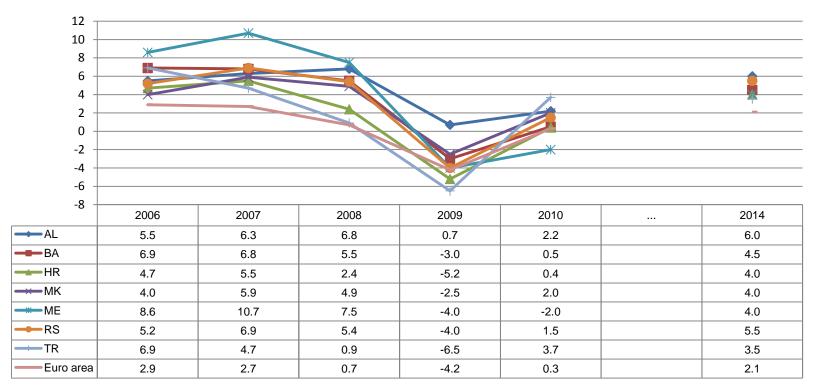


Figure 2 – GDP growth in 2006 – 2008 and IMF forecasts for 2009 – 2010 (October 2009)¹⁰

Euro area covers the following 16 EU Member States: Germany, France, Italy, Spain, Netherlands, Belgium, Greece, Austria, Portugal, Finland, Ireland, Slovak Republic, Slovenia, Luxembourg, Cyprus, and Malta.

¹⁰ http://www.imf.org/external/pubs/ft/weo/2009/02/pdf/text.pdf

The slowdown in economic growth in the Enlargement countries only began to be really noticeable in the fourth quarter of 2008. Since then forecasts for growth in 2009, initially suggesting that the region would avoid the most serious consequences of the crisis, continue to be revised downwards. Revised forecasts by the IMF, released in October 2009, suggest a shrinking in GDP for the whole region by at least 2.5%, except for Albania, which is forecast to grow by only 0.7% (see Figure 2). Kosovo, not included in the forecasts, may have growth higher than this, perhaps as high as 3%, but still down on recent years. Turkey is forecast to be worst hit in 2009 with a GDP fall of -6.5%, followed by Croatia with -5.2%. After relatively high growth in 2007, the crisis will impact seriously, over at least a three-year period, with significant implications in terms of poverty and vulnerability and in terms of labour markets.

In the period from 2000 to 2007 GDP growth in constant prices was considerably higher in most of the Enlargement countries than in the EU (see Figure 3). The average growth in the EU-27 was 2.2%, less than half that achieved by Croatia. Other economies managed 5% or even 6%.

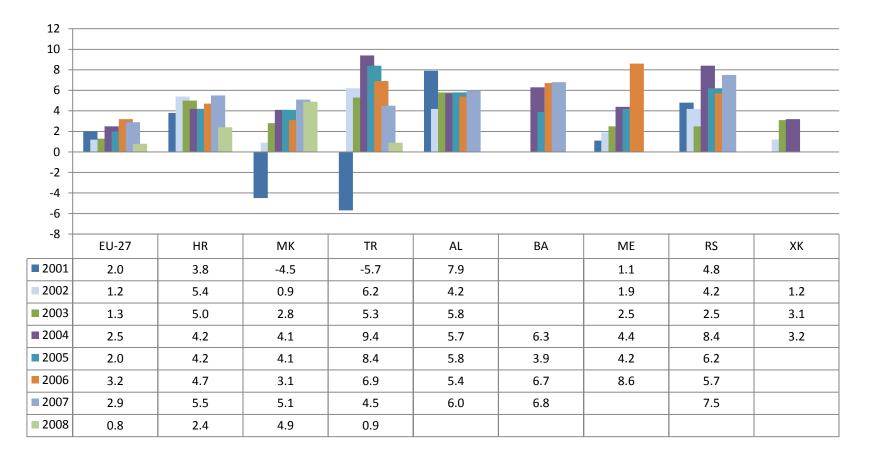


Figure 3 - GDP growth rates¹¹

In the absence of data from Eurostat, IMF data were used for Albania for 2006 and 2007 and for FYROM for 2007 http://www.imf.org/external/datamapper/index.php

¹¹ Source: Table 5.1 in Eurostat Pocketbook on candidate and potential candidate countries 2009 edition. KS-PF-09-001-EN.Eurostat http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&plugin=0&language=en&pcode=tsieb020.

Figure 4 shows the volume indices of GDP per capita in the monitored countries, expressed in relation to EU-27=100. With the exception of Croatia and Turkey that had a GDP per capita similar to that of some of the new EU member states, the remaining countries came out at a level substantially below the average level of the EU-27. Some are around one quarter of that level and making only modest rates of improvement.

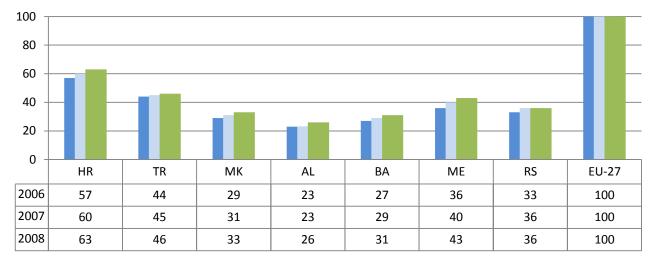


Figure 4 - Volume index of GDP per capita in PPPs¹²

The candidates and potential candidates all have significantly lower employment rates than the EU-27 (see Figure 5). Kosovo has consistently had the lowest level of employment, at less than half that of the EU-27, though it has shown some improvement. Part of the explanation for the low levels of employment is due to involvement with the 'grey' or 'unofficial' economy, which is expected to decline with the growth of the official economy and with the continuing fight against corruption.

¹² Table 1 in Eurostat, Large differences in GDP and consumption per inhabitant across Europe - Issue number 95/2009

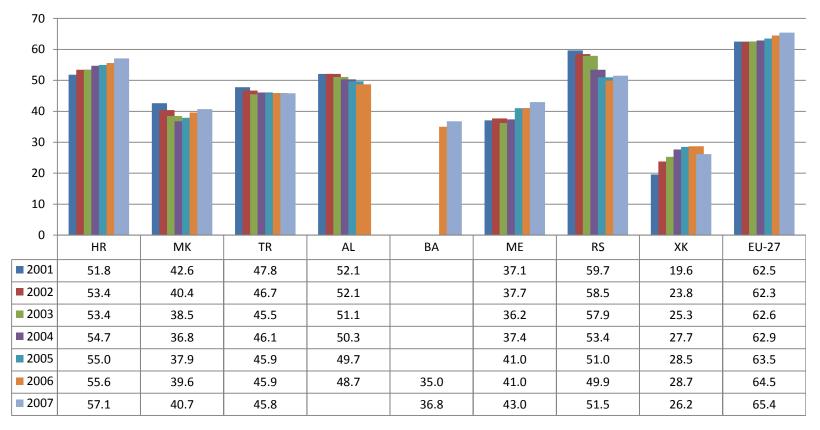


Figure 5 - Percentage of the population aged 15-64 in employment¹³

The unemployment rate in the EU-27 in 2006 was 7.9%. In the candidates and potential candidates, unemployment rates were relatively high, with values of 45% in Kosovo, 36% in FYROM and 31% in Bosnia & Herzegovina in 2006, while in Croatia and Turkey the rates were closer to the EU at 11% and 10% respectively. In the EU-27, the youth unemployment rate was more than double the general unemployment rate, while a range of similar multipliers, from 1.7 in FYROM and Kosovo to 2.6 in Croatia, was observed in the region.

¹³ Source: Table 4.1 in Eurostat Pocketbook on candidate and potential candidate countries 2009 edition. KS-PF-09-001-EN.

The Gini index is a measure of dispersion used to represent inequality of income distribution. A low Gini index indicates more equal income distribution, while a high index indicates more unequal distribution. 0 corresponds to perfect equality and 100 corresponds to perfect inequality. For the EU-15, Eurostat has reported relatively constant values of the Gini Index at around 29 and 30 over the first half of this decade, while for the ten new Member States the figure has risen from 29 to 32. There is only limited evaluation of the Gini index in South-East Europe, in part because of the complex processes involved. Eurostat reported Croatia in 2003 having 29, while Turkey had 46 and 45 in 2002 and 2003 respectively.

The UNDP for 2007-08 reported data for five entities, confirming the high value for Turkey, but also suggesting a relatively high value for FYROM (see Table A.5). With the exception of Turkey, the literacy rates are quite high.

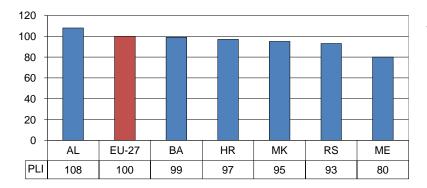
	Gini Index	Adult literacy rate
Croatia	29.0	98.1
FYROM	39.0	96.1
Turkey	43.6	87.4
Albania	31.1	98.7
Bosnia & Herzegovina	26.2	96.7
Montenegro		
Serbia		96.55
Kosovo		

Table A.5 - Gini and literacy rates¹⁴

The price levels of consumer electronic goods within Europe are very closely grouped, with the index numbers for 27 of 37 countries in the range 90 to 110, reflecting the easy tradability of such goods across borders. South-East Europe is mostly within the same range, though Montenegro has a significantly lower price level (see Figure 6).

However, the price level indices in 2006 for communications show much greater variation than for goods (see Figure 6 and Figure 6). The countries of the Western Balkans show some substantially lower prices than the EU-27 average.

¹⁴ http://hdrstats.undp.org/indicators/147.html



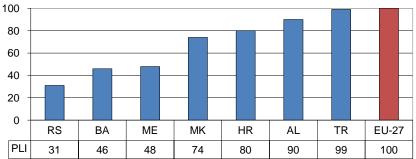


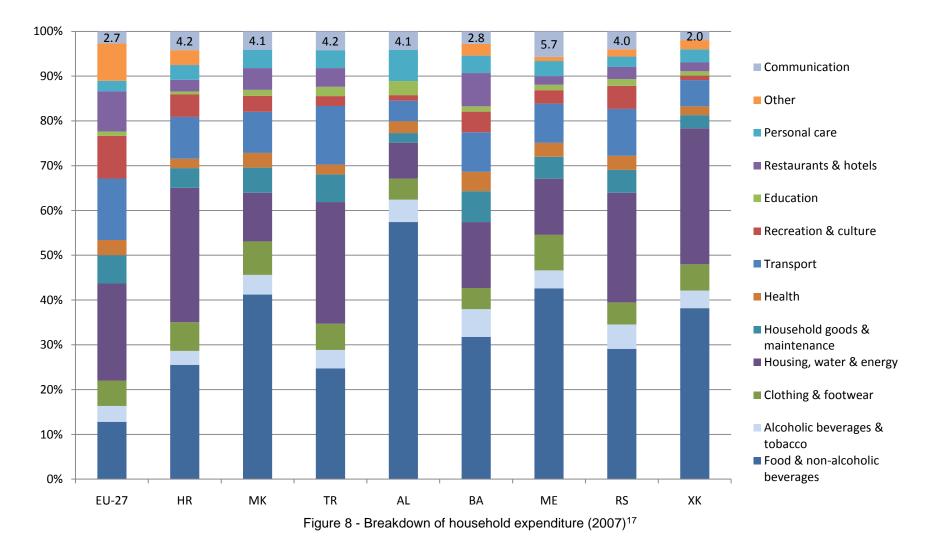
Figure 6 - Price level index for consumer electronic goods (2007)¹⁵

Figure 7 - Price level index for communications (2006)¹⁶

Cultural and economic factors lead to considerable variations in household spending patterns (see Figure 8). Communications in 2006 (the topmost segment) accounted for anywhere from 2.3% of household spending in Kosovo to 5.7% in Montenegro.

¹⁵ Eurostat Statistics in focus 63/2008.

¹⁶ Eurostat Statistics in focus 36/2008.



¹⁷ Table 3.3 of Eurostat Pocketbook on candidate and potential candidate countries 2009 edition. KS-PF-09-001-EN.

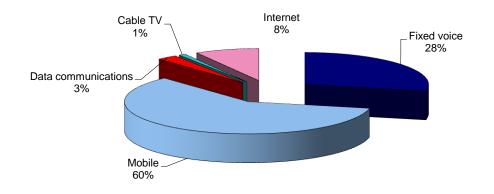
5. Electronic communications market value

The total value of the electronic communications market in the Enlargement countries was estimated at €16.43bn in 2008, an average 4% increase from the previous year. A particularly strong growth was demonstrated by Internet, cable TV and mobile services. The table below shows the sector revenue in 2007 and 2008 for all countries. The complete 2009 data is not yet available for all countries (see Table A.6).

	2007	2008	2007-08 growth
Fixed voice telephony	5,411,329,183	4,709,815,446	-13%
Internet services	965,443,338	1,390,673,088	44%
Mobile telecommunications	9,013,465,423	9,950,739,378	10%
Data communications	384,632,703	437,568,897	14%
Cable TV (excl. Internet)	113,333,302	144,899,460	28%
Total	15,888,203,949	16,429,656,268	4%

Table A.6 - Electronic communications markets revenue in Euro

The greatest share of the market is represented by mobile telecommunications (see Figure 9). The next largest part is fixed voice, with much smaller shares for the Internet, data communications and cable television. Internet and cable television services, however, were the fastest growing segments in 2008. Cable television revenue figures are not complete as no data was available for Albania and Montenegro at the time of data collection.





Looking at the electronic communications revenue growth in 2008 by individual segments in each country (see Figure 10 – Sector revenue growth by country in 2008) gives yet another view of the markets. Particularly strong growth was demonstrated by Internet services in Serbia (over 80%), the FYROM (56%), and Turkey (47.9%); by data communications services in Kosovo (89.3%), Serbia (62.2%) and Croatia (57.1%); and by cable television services in

Serbia (56.3%). At the same time, fixed voice telephony revenues continued to decline at an ever increasing pace in all countries, with exception of Bosnia and Herzegovina and Albania. In Turkey and Montenegro, the decline in fixed voice telephony segment was close to 20%.

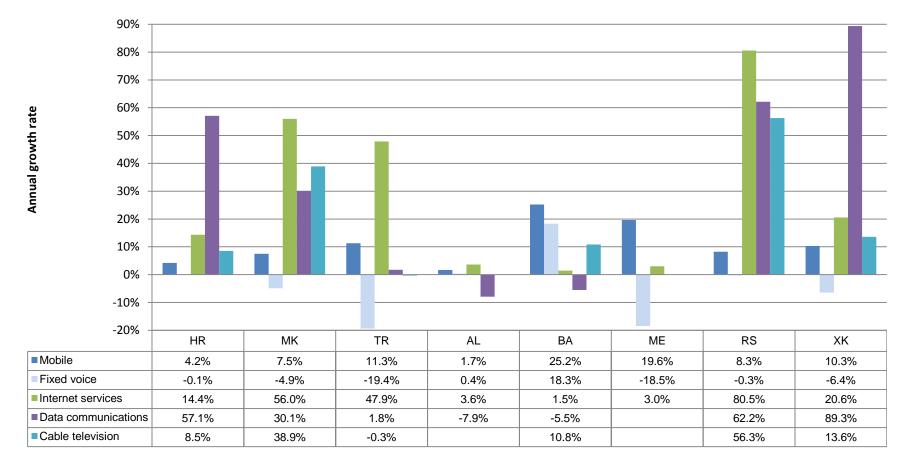


Figure 10 – Sector revenue growth by country in 2008

Electronic communications represents quite different proportions of the various economies (see Figure 11). While this reflects different levels and patterns of spending and of production and supply within an economy it may also be affected by the accuracy of the GDP measurements.

The high values for Montenegro and Kosovo may indicate underestimation of the GDP though it is does match the high household spending on communications in Montenegro (see Figure 8).

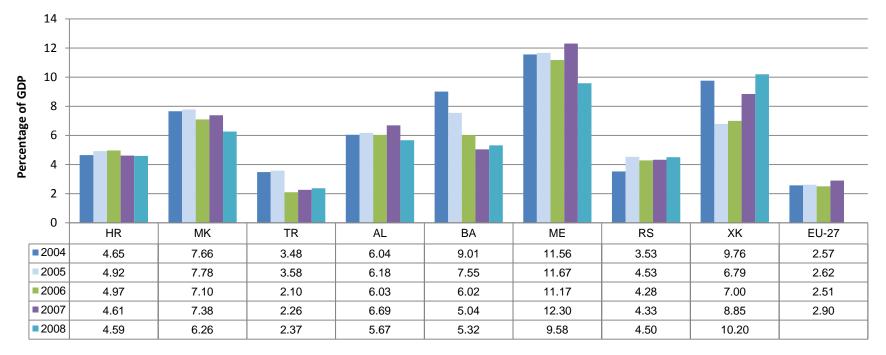


Figure 11 - Electronic communications as a percentage of GDP¹⁸

Breaking down the markets by economies and sectors, the patterns are inevitably dominated by the size of the Turkish markets (see Figure 12). To remove the effect of the different sizes, the same data are presented as percentages in Figure 13.

¹⁸ 2007 data refer to EU27 instead of EU25, taking into account the EU accession of Bulgaria and Romania.

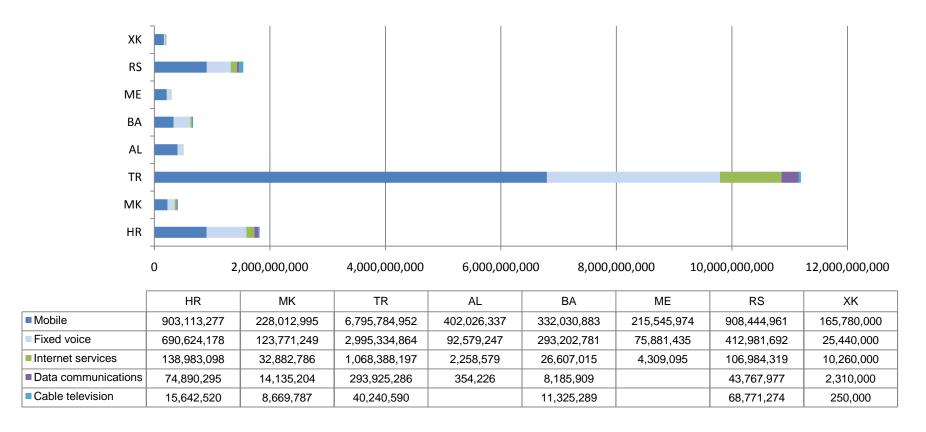


Figure 12 – Electronic communications markets in 2008

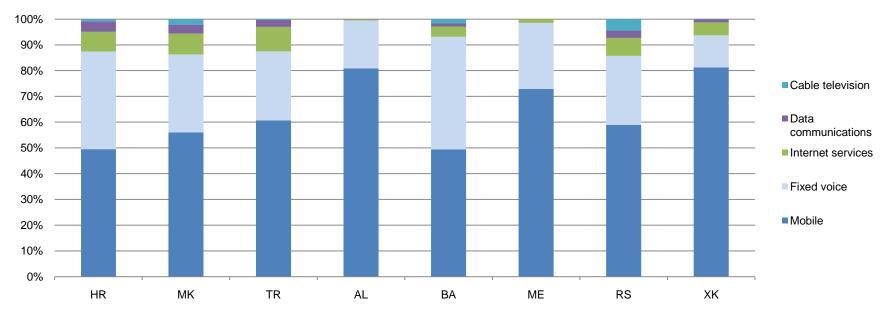


Figure 13 - Composition of electronic communications markets in 2008

6. Fixed telephony market

a) Fixed network penetration and digitalisation rate

The numbers of active subscriber fixed lines are given in Table A.7, by technology and by type of customer. These are shown as penetration rates, i.e., as lines per 100 population, in Figure 14. Several fixed networks have shown declines in penetration rate as customers express a preference for mobile services, which are more personal and offer more flexible use and payment schemes. There are considerable differences in the levels of penetration of the fixed network, with Albania and Kosovo at relatively low levels, while Croatia and Serbia have higher levels, but still substantially below the EU-27 average and well below those of the EU-15.

Country	Total number of fixed lines	By technology		By user	category
		PSTN	ISDN	Residential	Business
Croatia	1,706,057	1,601,500	104,557	1,317,416	388,641
FYROM	448,764	385,688	14,747	386,184	57,518
Turkey	17,519,272	17,502,205	17,067	N/A	N/A
Albania	360,000	359,100	929	338,300	21,700
Bosnia & Herzegovina	1,001,368	967,645	34,307	894,536	120,860
Montenegro	178,809	160,037	6,393	149,099	29,710
Serbia	3,084,872	3,000,937	83,935	2,766,085	318,787
Kosovo	99,696	90,600	303	84,118	15,578
Total	24,324,200	24,062,265	261,935	-	-

Table A.7 - Fixed network lines by technology and by user category

Notes: ISDN:

SDN: ISDN is offered in two forms: Basic Rate Access (BRA) and Primary Rate Access (PRA). BRA lines allow two telephone numbers and two simultaneous calls, being used by households and smaller organisations. PRA lines enable 30 simultaneous calls and are normally used for larger organisations. The number of ISDN lines is weighted for BRA and PRA.

FYROM: The total includes 5,062 other lines representing public payphones, internal and test lines of the incumbent operator.

Kosovo: Data for PTK are as of May 2009 and for Ipko of October 2009. From total 99,696 of fixed lines, 8,696 are VoIP lines belonging to Ipko.

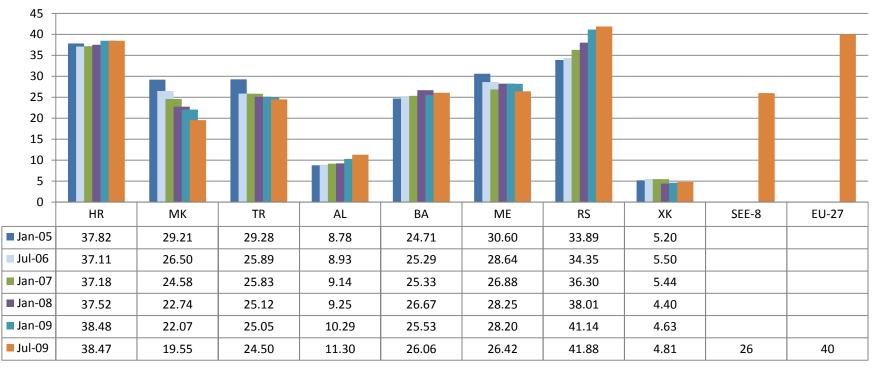


Figure 14 - Fixed lines per 100 population

The process of converting analogue networks to digital has been relatively slow, but should be completed within the period of the present monitoring project. Table A.8 shows the levels in 2006, 2007 and 2008. Croatia, Montenegro, FYROM and Kosovo have achieved full digitalisation. Turkey has achieved full digitalisation in 2008, and Albania and Bosnia & Herzegovina have almost reached the target. Serbia, which had less than 70% in 2005, has made significant progress and should reach 100% by 2010.

Country	January 2007	January 2008	January 2009
Croatia	100.0	100.0	100.0
FYROM	100.0	100.0	100.0
Turkey	98.3	99.0	100.0
Albania	99.86	99.87	99.92
Bosnia & Herzegovina	98.4	99.0	99.5
Montenegro	100.0	100.0	100.0
Serbia	88.6	93.3	95.5
Kosovo	49.0	100.0	100.0



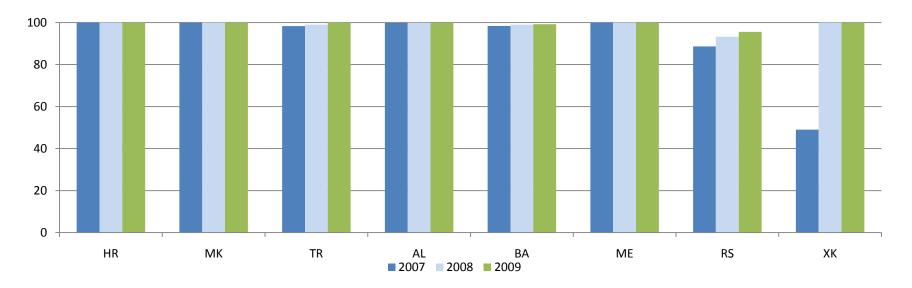


Figure 15 - Fixed network digitalisation rate (%) – growth 2007-2009

Party or group lines serve two or more subscribers and remain a significant factor in the region (see Table A.9). These lines are a potential barrier to any intensive use of the telephone service, such as dial-up Internet access and value added services. They are also an obstacle to local loop unbundling and thus to broadband Internet access. Croatia, FYROM, Kosovo and Turkey have no party lines. Small but significant percentages are still found in Albania, Bosnia & Herzegovina, Montenegro and Serbia.

Country	Multiple party lines			
	Total number	As percentage of total fixed lines		
Croatia	0	0		
FYROM	0	0		
Turkey	0	0		
Albania	19,476	5.4%		
Bosnia & Herzegovina	31,382	3.1%		
Montenegro	2,562	1.4%		
Serbia	177,415	5.75%		
Kosovo	0	0		

Table A.9 - Multiple party lines in 2008

b) Competition

The development of competition in fixed networks and services in each country has been determined by individual liberalisation processes. In some cases, it has been gradual, with local and domestic long distance services being opened to competition at different times. Albania and Turkey are examples where competition at the local and the national level was not introduced at the same time.

Table A.10 shows authorised public network operators and public fixed voice telephony service providers and highlights those which are operational in the market. Public network operators are defined as those installing, managing and operating a telecommunications transmission network to provide public telephony services or public network services. Public fixed voice telephony service providers include cable operators providing public voice telephony are also included as well as managed VoIP operators.

Country	Public fixed teleph	ony network operators	Public fixed voice telephony service providers	
	Authorised operators	Operators active in the market	Authorised providers	Providers active in the market
Croatia	13	9	54	39
FYROM	51	8	93	35
Turkey	1	1	74	N/A
Albania	74	74	82	82
Bosnia & Herzegovina	71	71	12	11
Montenegro	2	2	10	5
Serbia	3	2	3	2
Kosovo	3	2	3	2

Table A.10 - Competition in fixed telephony - public network operators and service providers

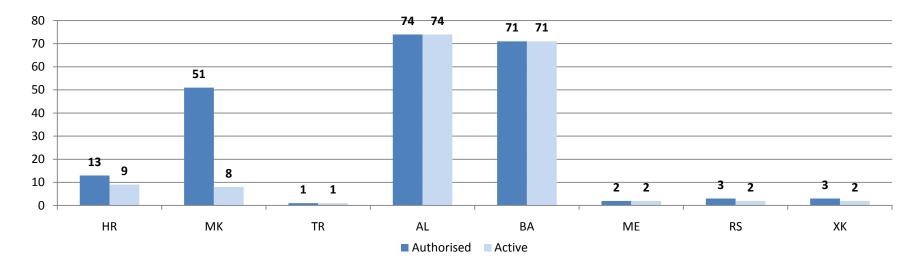


Figure 16 - Public fixed telephone network operators

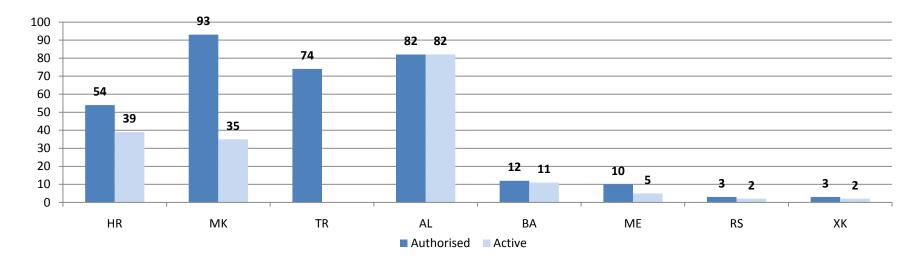


Figure 17 - Public fixed voice telephony service providers

Notes:	
Montenegro:	There are only two licensed fixed telephony network operators: T-Com Montenegro (formerly Telecom Montenegro), the incumbent, and M:Tel, a mobile
	operator that also provides fixed wireless access using WiMAX. The number of authorised public voice telephony service provides includes eight licensed VoIP
	providers. The NRA granted five licences for VoIP in September 2007 and a further three in February 2008.
Serbia:	Between December 22, 2008 and January 1, 2010 RATEL issued 31 authorisations for public telecommunications networks and 40 authorisations for voice
	transmission service over the Internet (without the right to use numbering resources). In June 2009 two FWA licences were issued to Telekom Srbija and
	Media Works. Media Works now provides public fixed telephony services based on wireless CDMA2000 technology in the 450 MHz band. In February 2010,
	the second licence for provision of public fixed telephony services over fixed telephone network was issued to Telenor.
Kosovo:	Ipko Telecommunications is the second authorised fixed telephony network operator. Konet is the third operator, licensed in January 2009, not yet operational.

Table A.11 shows the proportion of fixed subscriber numbers allocated to incumbent and alternative operators. It is an important indicator of the state of competition in the fixed market, though it is not to suggest that all of the allocated numbers are in immediate use.

Country	Fixed incumbent operator (%)	Alternative operators (%)
Croatia	90.42%	9.57%
FYROM	76.32%	23.68%
Turkey	100.00%	0.00%
Albania	60.30%	39.70%
Bosnia & Herzegovina	99.00%	1.00%
Montenegro	96.10%	3.90%
Serbia	99.87%	0.13%
Kosovo	90.90%	9.10%

Table A.11 - Competition in fixed telephony - numbers allocated by NRA

Notes:

Turkey: Geographic and non-geographic number assignment made by the ICTA to alternative operators based on their application and requirement. As it is not in the amount comparable to the assignment made to Turk Telekom, proportion as a percentage cannot be provided.

Figure 18 shows the trends over time of the numbers allocated to alternative providers.

The overall percentage of numbers given to alternative operators is still very small. In Turkey, the assignment of subscriber numbers to alternative fixed network operators became possible only with the introduction of general authorisation regime and opening to competition of the local services. By contrast, Albania has assigned almost half of its fixed numbers, indicating a very strong basis for competition.

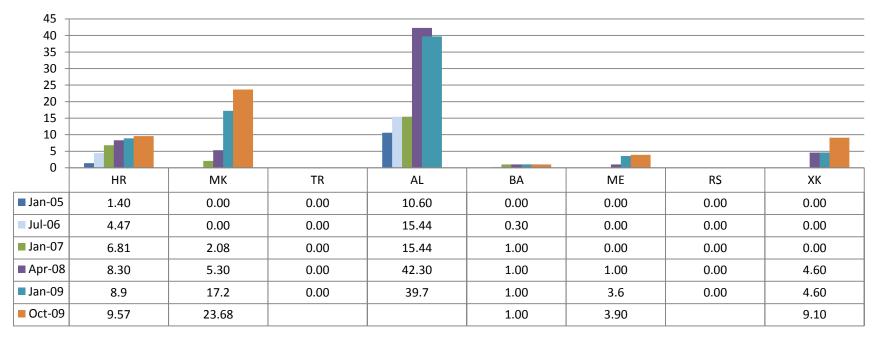


Figure 18 - Percentage of fixed numbers allocated to alternative operators

Market shares can be measured in many different ways, by numbers of lines, customers, minutes of traffic and revenues. Table A.12 shows the market share of the respective incumbent operators by revenues and by minutes of traffic. It is given for both national calls and international calls, then as the overall figure, the sum of the two other markets.

The continued dominance of the incumbent operators is very clear in every case for which there are data. The high market shares for international traffic suggest that the basic measures to introduce competition, by opening international gateways have not been taken or have not been effective. Alternative operators using carrier selection or VoIP ought to be able to claim significant market shares with limited investment.

Country	Overall n	narket share	Natio	onal calls	Internat	ional calls
	By retail revenue	By minutes of traffic	By retail revenue	By minutes of traffic	By retail revenue	By minutes of traffic
Croatia	77.98%	73.72%	78.04%	69.80%	77.74%	79.59%
FYROM	90.36%	95.56%	92.38%	92.64%	81.92%	77.33%
Turkey	70%	96.14%	N/A	87%	N/A	82%
Albania	95.36%	92.9%	N/A	72.4%	N/A	86.2%

Country	Overall market share		National calls		International calls	
	By retail revenue	By minutes of traffic	By retail revenue	By minutes of traffic	By retail revenue	By minutes of traffic
Bosnia & Herzegovina	97.90%	99.59%	99.95%	99.85%	94.8%	95%
Montenegro	93.35%	99.00%	N/A	98.23%	N/A	N/A
Serbia	100%	100%	100%	100%	100%	100%
Kosovo	97.70%	97.72%	97.2%	97.05%	98.28%	98.69%

Table A.12 - Competition in fixed telephony - Incumbent operator's market share (%)

Notes:

Bosnia & Herzegovina: The table shows combined market shares of the three incumbent operators.

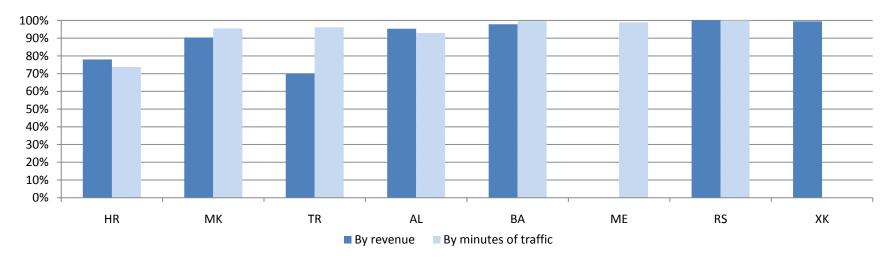


Figure 19 - Incumbent operators' overall market share in fixed voice telephony

Voice over Internet Protocol (VoIP) is now a well established service in the EU-27 and one frequently advertised in South-East Europe. Yet the market shares for operators using VoIP appear to be relatively small (see Table A.13). The differences between the columns reflect the unit prices, so that cheaper VoIP calls will show as a lower percentage of revenues than minutes of traffic.

Country By retail revenue		By minutes of traffic
Croatia 2.26		5.75
FYROM	10.66	15.79
Turkey	N/A	N/A

Country	By retail revenue	By minutes of traffic
Albania	N/A	N/A
Bosnia & Herzegovina	N/A	N/A
Montenegro	N/A	0.21
Serbia	0.0	0.0
Kosovo	2.29	2.27

Table A.13 - Market share of VoIP operators (%) in 2008

Notes:

Bosnia & Herzegovina: According to the licence for provision of public fixed telephone services, fixed voice telephony services can be deployed based on the technology neutrality principle. There are no separate data for VoIP providers.

Turkey: The authorisation policy is completely technology neutral for voice telephony services. Therefore an alternative operator can use any kind of technology (including VoIP) as long as it is authorised to supply the services. Consequently, there is no distinction between alternative operators according to their usage of technology.

A cost-effective way for alternative carriers to take market share from incumbent operators is using carrier selection (CS) and carrier pre-selection (CPS). Table A.14 shows the total number of subscribers using alternative carriers for voice telephony services through CS/CPS, VoIP and direct access. Croatia, FYROM, Turkey, Montenegro and Kosovo provided an update as of June 2009, with Turkey and Montenegro showing some decline in the subscriber numbers of alternative providers between December 2008 and June 2009. Particularly strong growth, by 275%, was observed in FYROM.

Country	December 2008	June 2009
Croatia	445,190	468,320
FYROM	11,633	43,720
Turkey	1,096,414	906,749
Albania	49,690	N/A
Bosnia & Herzegovina	7,405	N/A
Montenegro	6,592	3,755
Serbia		
Kosovo	4,862	8,696

Table A.14 - Subscribers using alternative providers for voice telephony services

Notes:

Albania, Serbia and Kosovo: CS/CPS not available. In Albania, around 14% of Albtelecom's subscribers use VoIP services of alternative providers based on prepaid calling cards.

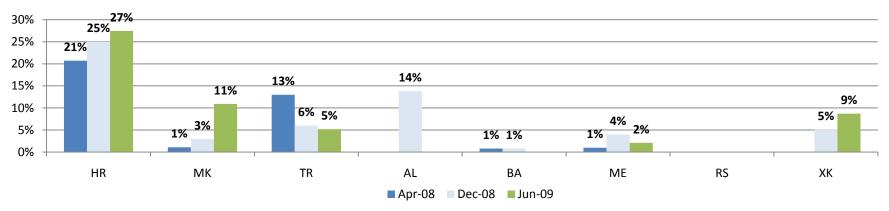


Figure 20 - Subscribers using alternative providers as percentage of total number of fixed lines

7. Mobile market

a) Mobile subscribers

At the end of 2008 there were over 91 million subscribers of mobile services (see Table A.15). The rise in the levels of mobile penetration rates has been rapid and sometimes dramatic (see Figure 21). Croatia and Montenegro have already reached mobile penetration rates above the EU-27 average and Serbia is very close.

However, these numbers are not to be taken to mean that everyone in South-East Europe has a mobile phone. There appear to be significant numbers of plastic roamers that is people with multiple SIM cards who switch to a local operator on moving between the entities or on moving into South-East Europe from the rest of the Europe. Some others may have multiple domestic SIM cards in order to exploit particularly attractive tariffs or to ensure network coverage. Discrepancies also arise from different practices in defining an 'active' pre-paid customer, ranging from three to 12 months, depending on the mobile operator.

Country	Total number of active subscribers	Penetration rate (%)
Croatia	6,249,752	140.92%
FYROM	1,878,553	92%
Turkey	63,691,495	89%
Albania	3,522,251	110%
Bosnia & Herzegovina	3,132,879	81.52%
Montenegro	1,404,132	226.42%

Country	Total number of active subscribers	Penetration rate (%)
Serbia	8,882,592	118.5%
Kosovo	1,436,498	70%
SEE-8	90,198,152	94.73%

Table A.15 - Mobile subscribers in 2009

	Notes: Croatia:	As of 2 Q 2009.
	FYROM	As of 2 Q 2009. As of 2 Q 2009. T-Mobile applies 6 months period for the definition of the active subscriber, VIP and Cosmofon use 12 months period.
	Turkey	As of August 31, 2009.
	Albania:	The definition of active subscribers is given based on the terms of use of recharging cards for pre-paid users.
		AMC: The ALBAKARTA service can be used for 12 months from activation. If the credit is used up before this period then a customer continues to receive calls for another 6 months.
		Vodafone Albania: The subscriber can make as many phone calls as are allowed by the value of its credit, until 6 months after the activation of the SIM card. Airtime duration is for 6 months and cannot be transferred to another SIM card. If the credit of the SIM card has finished, the subscriber can still receive phone calls within 6 months from the card activation. If the SIM card credit has not been consumed within 6 months, the subscriber loses its right to use the remaining credit.
Roc	Bosnia & Herzegovina	Eagle Mobile: All Eagle Mobile Card services can be used for 12 months since the moment of activation (i.e. since the moment you will make the first call). If credit ends before the above period, then calls can still be received within 6 months from the card activation. As of October 1, 2009. The 'active' periods are 90 days for BH Telecom and 150 days for m:tel.
	Montenegro:	As of October 1, 2009. Pre-paid card subscribers are dropped after 12 months of inactivity. The main tourist season is June to August when large numbers of pre-paid cards are sold. The penetration is calculated using the most recent official data on population: 620,145 at the end of 2003.
	Serbia: Kosovo:	Data as of June 30, 2009. mt:s applies a four months 'active' period. 'Active' period is three months.

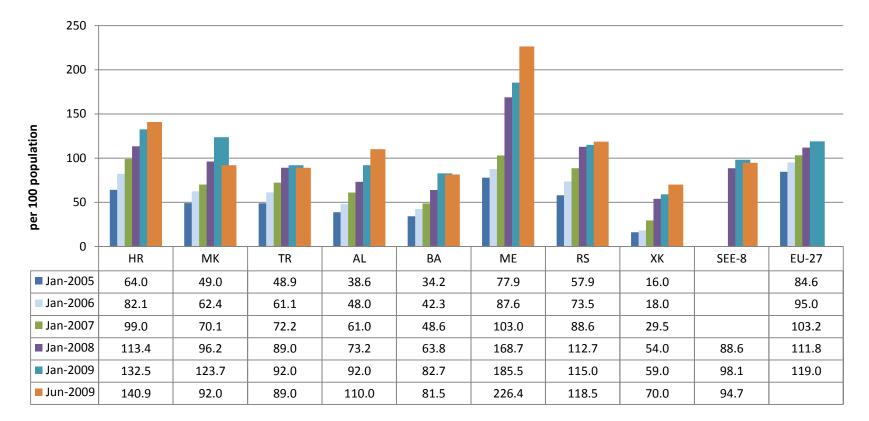


Figure 21 - Growth in mobile penetration (2005-2009)

Note:

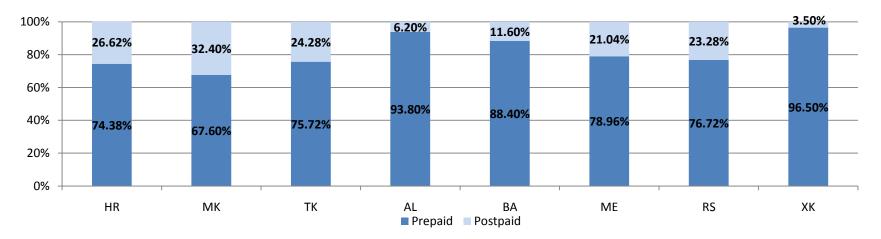
EU-27: The values are for October of the previous year, as reported in the annual EC implementation reports.

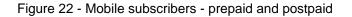
The great majority of customers use the prepaid service, rather than the subscription or postpaid service (see Table A.16). In Kosovo nearly all the customers are prepaid, with the second operator only recently launching a postpaid option. Albania has a slightly lower level at almost 94 percent.

The very high levels of pre-paid customers raises questions about the move to broadband and mobile value added services, where a different business model may be necessary.

Country Prepaid mobile subscribers (%)		Postpaid (monthly paid) mobile subscribers (%)
Croatia	74.38%	26.62%
FYROM	67.60%	32.40%
Turkey	75.72%	24.28%
Albania	93.80%	6.20%
Bosnia & Herzegovina	88.40%	11.60%
Montenegro	78.96%	21.04%
Serbia	76.72%	23.28%
Kosovo	96.50%	3.50%







b) Licensed mobile operators

There are now three network operators licensed to serve each market, with the exception of Kosovo with two mobile operators and Albania with four (see Table A.17). In Croatia, FYROM, Turkey, Bosnia & Herzegovina, Montenegro and Serbia the operators have also been assigned 1900 and 2100 MHz bands for the use for 3G services. In 2009 the Croatian NRA amended the existing spectrum licences in 900 MHz, 1800 MHz and 2100 MHz extending them until 2024 on technology neutral basis: on June 19, 2009 for VIPnet and Tele2, and on August 31, 2009 for T-Mobile. In accordance with the national frequency plan, mobile operators are now allowed to deploy UMTS services in the 900 MHz and 1800 MHz bands.

Country	Operators licensed for provision of public mobile communications services						
	Operator	System/Technology	Spectrum (MHz)	Licence (date of issue)	Date of expiry		
Croatia	T-Mobile Hrvatska	GSM & UMTS	900 & 1800	September 16,1999	2024		
		GSM & UMTS	1900 & 2100	October 18, 2004	2024		
	VIPnet	GSM & UMTS	900	July 1, 1999	2024		
		GSM & UMTS	1900 & 2100	October 18, 2004	2024		
	Tele2	GSM & UMTS	900 & 1800	December 22, 2004	2024		
		GSM & UMTS	1900 & 2100	December 22, 2004	2024		
FYROM	T-Mobile	GSM	900	June 5, 2001	2018		
		GSM	1800	June 9, 2009	2019		
		UMTS	1900 & 2100	December 17, 2008	2018		
	Cosmofon (ONE)	GSM	900	November 22, 2001	2023		
		UMTS	1900 & 2100	February 11, 2008	2018		
	VIP	GSM	900 & 1800	March 26, 2007	2017		
Turkey	Turkcell Communications Services	GSM	900	April 27, 1998	2023		
		UMTS	1900 & 2100	April 30, 2009	2029		
	Vodafone Communications Services	GSM	900	April 27, 1998	2023		
		UMTS	1900 & 2100	April 30, 2009	2029		
	Avea Communications Services	GSM	1800	January 11, 2001	2026		
		UMTS	1900 & 2100	April 30, 2009	2029		
Albania	Albanian Mobile Communications	GSM	900 & 1800	August 19,1999	2014		
	Vodafone Albania	GSM	900 & 1800	June 9, 2001	2016		
	Eagle Mobile	GSM	900 & 1800	March 1, 2004	2019		
	Mobile 4 AL	GSM	900 & 1800	June 26, 2009	2024		
Bosnia &	BH Telecom (BH Mobile)	GSM	900 & 1800	October 12, 2004	2019		
Herzegovina		UMTS	1900 & 2100	March 26, 2009	2024		
	Telekom Srpske (M:Tel)	GSM	900 & 1800	October 12, 2004	2019		
		UMTS	1900 & 2100	March 26, 2009	2024		
	HT Mostar (HT Eronet)	GSM	900 &1800	October 12, 2004	2019		
		UMTS	1900 & 2100	March 26, 2009	2024		

Country	Operators licensed for provision of public mobile communications services						
	Operator	System/Technology	Spectrum (MHz)	Licence (date of issue)	Date of expiry		
Montenegro	T-Mobile Montenegro	GSM	900 & 1800	January 1, 2002	2017		
		UMTS	1900 & 2100	April 11, 2007	2022		
	m:tel	GSM	900 & 1800	April 21, 2007	2022		
		UMTS	1900 & 2100	April 21, 2007	2022		
	ProMonte	GSM	900 & 1800	January 1, 2002	2017		
		UMTS	1900 & 2100	April 13, 2007	2022		
Serbia	m:ts – Mobilna Telefonija Srbije	GSM, UMTS	900 & 1800, 1900 & 2100	July 28, 2006	July 28, 2016		
	Telenor	GSM, UMTS	900 & 1800, 1900 & 2100	August 31, 2006	August 31, 2016		
	VIP mobile	GSM, UMTS	900 & 1800, 1900 & 2100	December 1, 2007	December 1, 2017		
Kosovo	Vala	GSM	900	July 30, 2004	2019		
	ІРКО	GSM	900 & 1800	March 6, 2007	2022		

Table A.17 - Licensed mobile operators

Notes:	
Croatia:	HAKOM amended the existing spectrum licences in 900 MHz, 1800 MHz and 2100 MHz extending them until 2024 on technology neutral basis: on June 19, 2009 for VIPnet and Tele2, and on August 31, 2009 for T-Mobile.
FYROM:	Frequency authorizations can be extended for another 10 years period upon request. Following a tender procedure for two GSM spectrum licences in the 1800 MHz band held by AEC in March 2009, on May 5, 2009 AEC announced T-Mobile the winner. Following the payment by T-Mobile of the offered amount of €2,000,100, the licence for 1730-1740 MHz/1825-1835 MHz was issued on June 9, 2009, with 10 years validity period. In January 2010 the Ministry of Transport announced plans to launch a new tender for the fourth mobile operator and two new 3G licences.
Albania:	In February 2009 the tender for 4th GSM mobile operator was held by AKEP. In this tender participated Kosovo-based PTK consortium and Universal PG. PTK consortium offered €7.2 million for the licence compared to €5 million offered by Universal PG. Albanian parliament through Law No.10118, dated 23/04/2009 gave the right for using GSM frequencies for 15 years to PTK consortium (Mobile 4 AL). This new GSM operator will launch its services within 6 months. Mobile 4 AI is not active yet in the market. Individual authorisation contains the obligation to launch services by end of December 2009.
Serbia:	All three operators can automatically extend the period of the validity of the licences for additional 10 years.

c) Market shares of mobile operators, by revenue and by subscribers

Measuring market shares for mobile networks is more difficult than for fixed, given the problems with finding accurate and comparable customer data. Table A.18 shows the market shares, based on the latest available subscriber numbers and on revenues. For most countries, the data refer to end 2008, with the exception of Turkey, Albania and Montenegro that have provided more recent subscriber figures from 2009.

There are considerable variations between the two columns, reflecting different types of customers, for example, high spending business customers and the rural poor. Operators later in entering the market struggle to get a proportionate share of higher spending customers.

Country	Operator	Mobile operators m	arket shares (%)
		Based on subscribers	Based on revenues
Croatia	T-Mobile Hrvatska	45.75%	51.75%
	VIPnet	42.29%	41.23%
	Tele2	11.96%	7.01%
FYROM	T-mobile	64.68%	71.37%
	Cosmofon (ONE)	23.37%	21.45%
	VIP	11.95%	7.18%
Turkey	Turkcell	57.12%	65.74%
	Vodafone	23.38%	17.60%
	Avea	19.50%	16.66%
Albania	Albanian Mobile Communications	43.30%	47.70%
	Vodafone Albania	43.00%	51.10%
	Eagle Mobile	13.70%	1.20%
Bosnia & Herzegovina	BH Telecom (BH Mobile)	40.77%	38.87%
	Telekom Srpske (m:tel)	37.51%	35.73%
	HT Mostar (HT Eronet)	21.72%	25.40%
Montenegro	T-Mobile Montenegro	36.13%	33.58%
	m:tel	25.66%	22.64%
	ProMonte	38.21%	43.77%
Serbia	m:ts – Mobilna Telefonija Srbije	58.93%	52.15%
	Telenor	31.94%	41.83%
	VIP mobile	9.13%	6.02%
Kosovo	Vala	69.61%	79.53%
	ІРКО	28.05%	20.47%
	D3 Mobile (MVNO)	2.33%	-

Table A.18 - Market shares of mobile operators

The level of concentration of a market can be measured in a number of different ways. The Herfindahl-Hirschmann Index (HHI), the sum of the squares of the market shares, is commonly used in assessing concentration in competition law. In any mobile market the value of the HHI will depend on the number of players licensed and operational, thereafter the value reflects to the degree of concentration or market power. In a market with three players with equal market shares the HHI would be $33.33^2 + 33.33^2 = 3333$, which is the lowest value possible for all the entities.

Figure 23 shows the HHIs for the South East Europe using the operator revenues, where these are available. Only Bosnia & Herzegovina and Montenegro come close to an even distribution of market shares, with some of the other values relatively high. If, in the medium term, the HHIs do not decline, it would suggest the need to consider measures to increase competition.

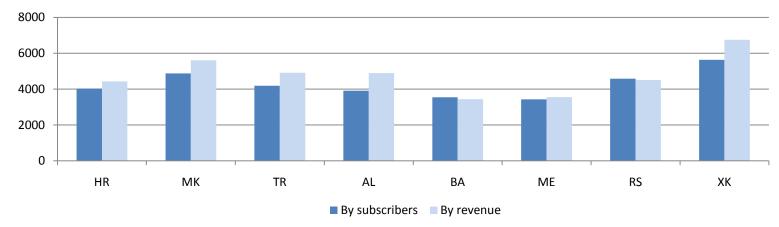


Figure 23 - Mobile market concentration levels, HHI

Table A.19 shows the fees and charges for the 3G/UMTS mobile network licences (that have been granted in all countries, except Albania and Kosovo), including one-off fees, usually decided by auction, and annual fees, typically set as percentages of revenues.

Country	Licensees	One-off fees	Annual fees	Deadline for service launch	Coverage	e and roll-out	obligations	
Croatia	Oct. 2004: • T- Mobile Hrvatska • VIPnet	HRK 132m (€17.6m)	Spectrum fee of HRK 5m (€689,180) for 5 MHz frequency block 1% of UMTS service revenue	June 2005	-	oopulation withi	-	
	Dec. 2004:	HRK 172m (€22.9m)	Spectrum fee of HRK 5m	August 2005	year	population	territory	
	Tele2	for a combined 2G/3G concession	(€689,180) for 5 MHz frequency block		1	14%	1%	
			1% revenue from UMTS service			2	33%	7%
						3	50%	19%
					4	65%	36%	
					5	71%	51%	

Enlargement (Countries	Monitoring	Report II	I – March 2010
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Country	Licensees	One-off fees	Annual fees	Deadline for service launch	Coverage and roll-out obligations	
FYROM	 Feb. 2008: Cosmofon Dec. 2008: T-Mobile 	 €10,050,000 €10,000,100 	€21,000 per 1 MHz + VAT	August 2008June 2009	• 50%	both operators: of population within one year of population within three years
Turkey	April 30, 2009: • Turkcell (40 MHz) • Vodafone (35 MHz) • Avea (30 MHz)	Offered in auction procedure: • €358m +VAT • €250m +VAT • €214m +VAT	0.35% of net sales for previous year	July 30, 2009	year 3 6 8 10	population coveragemetropolitan citiesall cities and countiesall residential areas of over 5000 inhabitantsall residential areas of over 1000 inhabitants
Albania Bosnia & Herzegovina	No UMTS licences March 26, 2009: • BH Mobile • M:tel • HT Eronet	- €15m to be paid over 7 years after 2 years of grace period, i.e. €3m per year within 5 years	- BAM 10,000 (€5,113) per one 200 kHz channel Each operator granted 35 MHz block (2x15 MHz + 5 MHz)	- None	 25% of population within 3 years (by April 1, 2012) 50% of population within 5 years (by April 1, 2014) Coverage obligations apply to voice and data services, with min speed (indoors) 128 kbps downlink and 64 kbps uplink. 	
Montenegro	April 13, 2007: Promonte April 11, 2007: T-Mobile Montenegro	 €4.01m (offered in public tender procedure) €2.4m (offered in public tender procedure) 	€20,125 €20,125	July 1, 2007 November 1, 2007	By the end of each successive year: 40.0%, 60.0%, 75.0%, 87.0% and 97.0% of the population. By the end of each successive year: 11.0%, 20.0%, 28.0%, 37.0%, 53.0% of the	
	April 21, 2007: M:tel	€16m for combined GSM 900/1800 and UMTS licence (offered in public tender procedure)	€20,125	July 1, 2007	population. GSM - by the end of each successive year: 95.9%, 98.8%, 99.2%, 99.4% and 99.5% of the population. UMTS - by the end of each successive year: 75.2%, 80.5%, 83.9%, 86.3% and 89.1% of the population.	
Serbia	July 2006: MTS	MTS: €0 (replacement of the previously issued licence)	€1,990,937 €2,500,862,2	January 2007	 25% of population within 24 months 60% of population within 36 months 	
	Aug. 2006: Telenor	€1.54bn for a combined 2G/3G licence (with operations of former Mobi 063)	€2,509,862.3	February 2007		of population within 24 months of population within 36 months

Country	Licensees	One-off fees	Annual fees	Deadline for service launch	Coverage and roll-out obligations
	Dec. 2007: VIP mobile	€320m for a combined 2G/3G licence	€185,733.2	May 2008	25% of population within 24 months60% of population within 36 months
Kosovo	No UMTS licences	-	-	-	-

Table A.19 - Mobile operators licensed to offer 3G/UMTS services

Notes:

- FYROM: T-Mobile was the only bidder in the tender procedure for 3 licences launched by AEC on Sep. 15, 2008. On Dec. 17, 2008 one licence was issued to T-Mobile after it paid the offered one-off fee. In 2009 AEC twice re-launched the tender procedure for the two remaining licences, but no bids were submitted. In January 2010 the Ministry of Transport announced plans to launch a new tender for the fourth mobile operator and two new 3G licences.
- Turkey: The auction procedure for three 3G/UMTS licences was completed on November 28, 2008, but the licences were awarded on April 30, 2009.

Bosnia & Herzegovina: On March 26, 2009 RAK issued three 3G/UMTS licences to the three existing mobile operators without any tender procedure.

Montenegro: The first year of the coverage commitments started on the date of the licence entry into force. One-off fees were determined by public tender procedure, minimum set by the Ministry of Maritime affairs, Transportation and Telecommunications was $\in 2,000,000$ for 3G and $\in 6,000,000$ for 2G/3G. According to the NRA financial plan, approved by the Parliament, annual spectrum fees are calculated in the following way: Annual spectrum fees = 8750 points x $\in 2.3 = \notin 20,125$ for each operator. Value of one point is $\notin 2.3$ for 2009.

8. Internet and broadband

a) Fixed broadband access

The division between broadband and narrowband fixed Internet connections is shown in Table A.20. In line with EC practice in recent Implementation Reports and statistics, broadband capacity is defined as equal to, or more than, 144 kbps.

Dial-up is still predominant in Croatia and Montenegro. Bosnia & Herzegovina and Serbia have a majority of broadband, but also retain significant numbers of dial-up lines. FYROM and Turkey have very few dial-up customers, possibly in areas where broadband is not accessible.

Country	Total number of fixed Internet connections				
	Narrowband (dial-up) connections	Broadband connections (all technologies)			
Croatia	774,021	595,929			
FYROM	3,143	210,015			
Turkey	9,941	6,190,712			
Albania	28,512	80,000			
Bosnia & Herzegovina	147,703	188,460			

Country	Total number of fixed Internet connections					
	Narrowband (dial-up) connections	Broadband connections (all technologies)				
Montenegro	123,026	41,869				
Serbia	397,202	468,702				
Kosovo	-	125,949				

Table A.20 - Total number of fixed Internet connections

Notes: Croatia, FYROM, Turkey, Montenegro: Bosnia & Herzegovina, Serbia, Kosovo:

The reference date is July 1, 2009. The reference date is January 1, 2009.

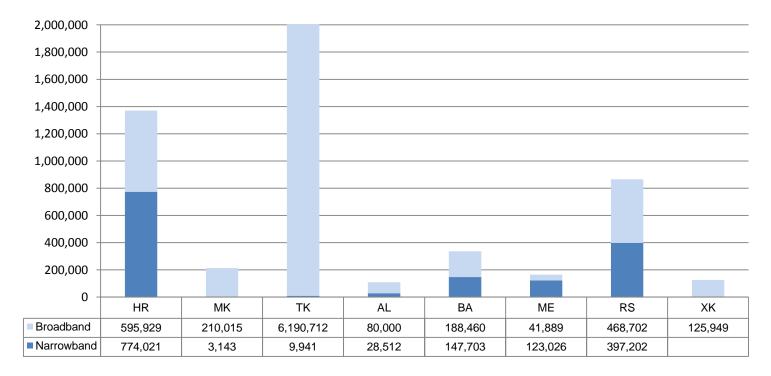


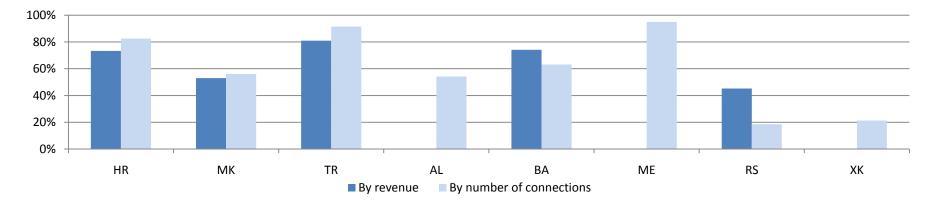
Figure 24 - Number of fixed Internet connections

Table A.21 shows the number of ISPs active on the market. Although some of these numbers appear impressive, the market shares held by the incumbent operator, where available, suggest that these ISPs are not having an easy time. However, in several countries the majority of the market is controlled by the incumbent operators or (in particular in FYROM) the incumbent holds the higher spending customers.

Country	Total number of ISPs	Incumbent ISP's	s retail market share
		By revenue	By number of connections
Croatia	50	73.37%	82.5%
FYROM	54	52.98%	56.10%
Turkey	100	81.01%	91.53%
Albania	36	N/A	54.20%
Bosnia & Herzegovina	66	74.17%	63.16%
Montenegro	6	N/A	95.00%
Serbia	197	45.2%	18.6%
Kosovo	11	1.41%	21.28%

Table A.21 - Internet users and connections - ISPs

Notes:CroatiaThe number of ISPs and connections is as of 2Q 2009; the revenue is as of end 2008.FYROM:Data as of 2Q 2009Bosnia & Herzegovina:Data as of end 2008





The following section provides information on the deployment of fixed broadband access lines by incumbent operators and their subsidiaries or partners and by new entrants (alternative operators or ISPs) to end-users (see Table A.22). Mobile broadband connections, including UMTS and HSDPA cellular wireless data communications, are covered in a separate section.

Country	Operator	Total number of broadband connections (all technologies)	xDSL connections	Cable modem	Leased lines	FTTx	FWA	Other
Croatia	Incumbent	473,014	472,399	-	579	-	36	-
	Alternative operators	122,915	83,599	28,970	595	4,377	5,374	-
FYROM	Incumbent	118,858	117,821	-	1,037	-	-	-
	Alternative operators	91,157	22,137	56,944	129	-	11,947	-
Turkey	Incumbent	5,666,514	5,659,303	-	7,211	-	-	-
	Alternative operators	524,198	418,413	98,792	-	-	-	6,993
Albania	Incumbent	52,000	52,000	-	-	-	-	-
	Alternative operators	28,000	28,000	-	-	-	-	-
Bosnia &	Incumbent	97,825	97,225	-	588	12	-	-
Herzegovina	Alternative operators	90,635	6,998	46,223	502	43	36,869	-
Montenegro	Incumbent	34,915	34,682	-	188	-	45	-
	Alternative operators	6,954	-	367	204	-	6,383	-
Serbia	Incumbent	166,139	164,175	-	407	-	970	587
	Alternative operators	302,563	103,701	151,154		-	47,160	548
Kosovo	Incumbent	26,802	26,802	-	-	-	-	-
	Alternative operators	99,147	-	91,050	-	230	2,940	4,927

Table A.22 - Number of fixed broadband connections with breakdown by operator and technology

Note:

FTTx: This includes Fibre To The Curb (FTTC), Fibre To The Home (FTTH), Fibre To The Premises (FTTP), etc.

Croatia, FYROM, Montenegro: Reference data as of July 1, 2009

Turkey: Reference data as of September 30, 2009

Bosnia & Herzegovina, Serbia, Kosovo: Reference data as of January 1, 2009

Turkey: 6,993 connections refer to connections provided by Global Mobile Personal Communications by Satellite (GMPCS).

Broadband penetration rate, measured as the overall number of broadband lines divided by the national population, is significantly below the EU-27 average rate that in July 2009 was 23.90%. The weighted average broadband penetration rate for eight countries was 8.01%. The highest broadband penetration level was observed in Croatia (13.44%), above the level of Romania and Bulgaria that joined the EU in 2007.

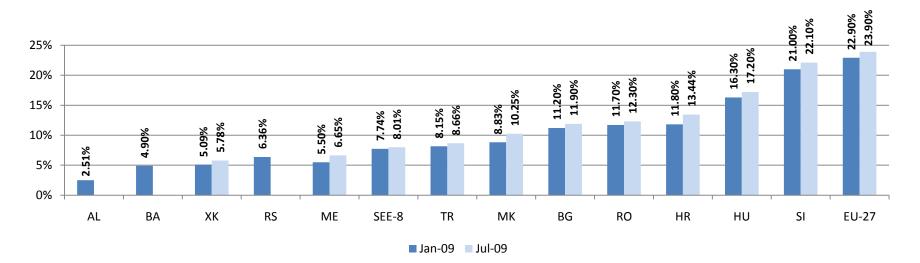
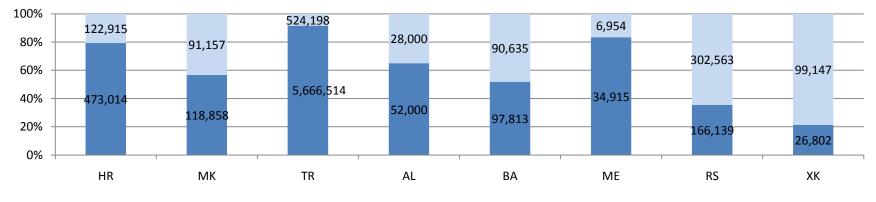


Figure 26 - Broadband penetration rate, January – July 2009





Incumbent Alternative

Figure 27 - Fixed retail broadband connections by incumbent and alternative operators

Broadband retail markets are dominated by fixed incumbent operators in most of the countries, where xDSL is the main access technology. Exceptions are Serbia and Kosovo. In Serbia, competitors are mainly using wholesale xDSL broadband access from the incumbent operator and cable infrastructure. In Kosovo, broadband connections provided over cable infrastructures of alternative operators by far exceed the number of xDSL connections from the incumbent operator. Cable broadband also presents a strong competitive alternative in Bosnia & Herzegovina and in FYROM.

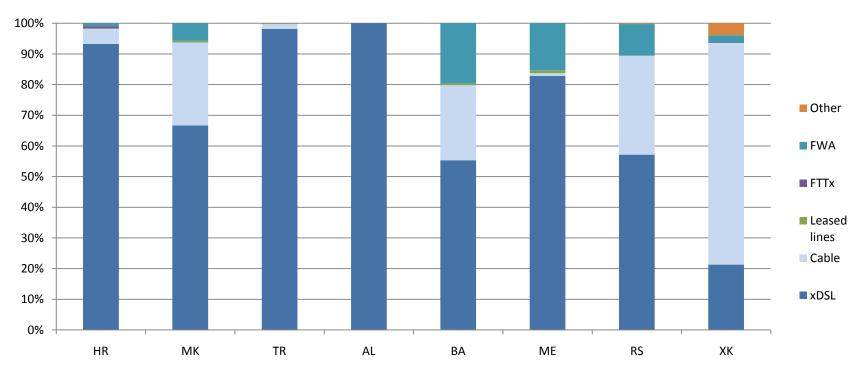
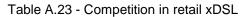


Figure 28 - Fixed retail broadband connections by technology

Table A.23 shows the retail DSL lines supplied by the incumbent operator and by alternative operators. The lines from alternative operators are broken down by those supplied using one of three types of wholesale offer from the incumbent operator and those delivered on their own networks.

In most of the countries, the position of the incumbent operator in the retail xDSL broadband is extremely strong, with alternative operators having less than 20% of the market. The position in Serbia is more equitable, with the incumbent having 61% of the retail market, but even then it supplies 100% of the bitstream access connections to alternative operators in the wholesale market. An exception is Albania, with alternative operators controlling 35% of the retail xDSL broadband connections supplied over their own infrastructures.

Country	Incumbent operator's	Retail xDSL lines by	Breakdown of alternative operators' xDSL lines by the type of access						
	retail xDSL lines	alternative operators	Full LLU access	Shared access	Bitstream access	Resale	Own network		
Croatia	472,399	83,599	63,072	1,863	17,407		1,257		
FYROM	117,821	22,137	3,974			18,163			
Turkey	5,659,303	418,413	53	14,206	397,971	6,183			
Albania	52,000	28,000					28,000		
Bosnia & Herzegovina	97,225	6,998					6,998		
Montenegro	34,682	-							
Serbia	164,175	103,701	-	-	103,701	-	-		
Kosovo	26,802	-							



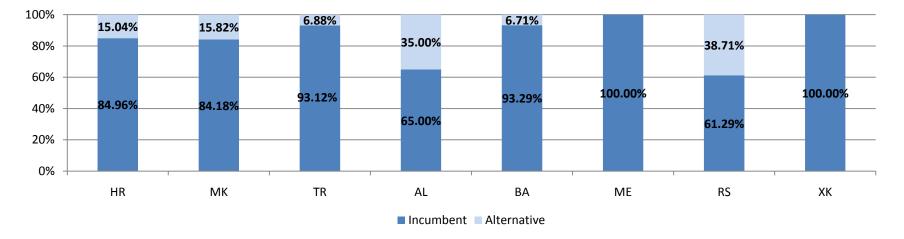
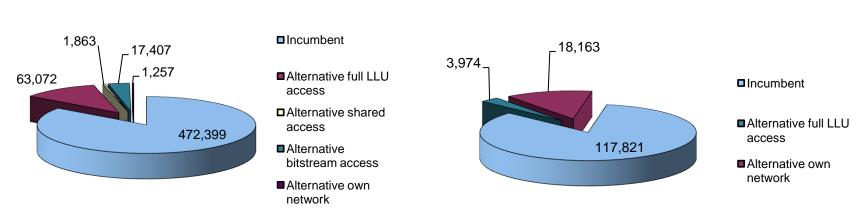


Figure 29 - Competition in retail xDSL

The figure below shows the level of competition in xDSL broadband in Croatia, FYROM, Serbia and Turkey with the type of wholesale access offers used by the alternative operators. These are the four countries where there is an emerging competition in the provision of retail xDSL services on the basis of wholesale offers from the incumbent operators.



Retail xDSL lines - Croatia

Retail xDSL lines – FYROM

Retail xDSL lines - Turkey



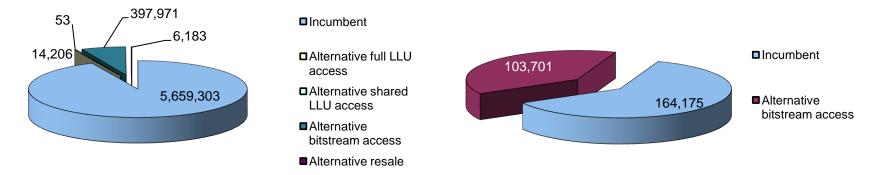
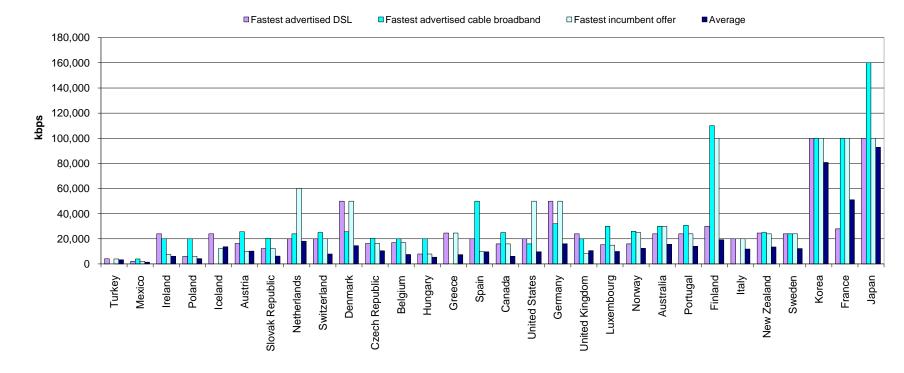


Figure 30 - Competition in retail xDSL in Croatia, FYROM, Serbia and Turkey

Table A.24 shows the lowest and highest download speeds available for broadband Internet access. The fastest broadband connection of up to 60 Mbps download speed is offered by a SBB, a cable TV operator in Serbia.

Country			Incumbent operator over DSL		ernative ver DSL	Cable op	erator	FWA op	erator	FTTH op	erator
		downstream	upstream	downstream	upstream	downstream	upstream	downstream	upstream	downstream	upstream
Croatia	Operator	HT-Hrvatske te	lekomunikacije	OT-Optima	Telekom	B.net Hr	vatska	NOVI-	NET		
	max	20 Mbps	768 kbps	6 Mbps	640 kbps	16 Mbps	1 Mbps	3 Mbps	512 kbps	N/A	N/A
	min	4 Mbps	256 kbps	2 Mbps	256 kbps	2 Mbps	256 kbps	2 Mbps	256 kbps		
FYROM	Operator	Makedonsl	ki Telekom	ONI	E	Teleka	abel	Neot	tel		
	max	16 Mbps	1 Mbps	16 Mbps	1 Mbps	10 Mbps	1 Mbps	1.5 Mbps	384 kbps	N/A	N/A
	min	6 Mbps	768 kbps	6 Mbps	768 kbps	4 Mbps	512 kbps	2 Mbps	512 kbps		
Turkey	Operator	ITT	Net	Doğan Te	elekom	Turks	sat	-		-	
	max	32 Mbps	1 Mbps	8 Mbps	1 Mbps	20 Mbps	1 Mbps	N/A	N/A	N/A	N/A
	min	512 kbps	128 kbps	512 kbps	128 kbps	512 kbps	256 kbps				
Albania	Operator	Albtel	Albtelecom		Abissnet						
	max	4 Mbps	796 kbps	3 Mbps	512 kbps	N/A	N/A	N/A	N/A	N/A	N/A
	min	512 kbps	128 kbps	1 Mbps	512 kbps						
Bosnia & Herzegovina	Operator	BH Telecom – E Srpske – Tec		Anel	KS	Europr	onet	Logos	soft	-	
	max	4 Mbps	384 kbps	8 Mbps	512 kbps	4 Mbps	384 kbps	4 Mbps	384 kbps	N/A	N/A
	min	1 Mbps	128 kbps	2 Mbps	256 kbps	1 Mbps	128 kbps	1 Mbps	128 kbps		
Montenegro	Operator	Crnogorsk	i Telekom			M-Ka	abl	Mtel			
	max	8 Mbps	512 kbps	N/A	N/A	2 Mbps	256 kbps	2 Mbps	512 kbps	N/A	N/A
	min	1 Mbps	256 kbps			512 kbps	64 kbps	256 kbps	256 kbps		
Serbia	Operator	Telekon	n Srbije	INT C	CS	SBI	3				
	max	16 Mbps	768 kbps	16 Mbps	768 kbps	60 Mbps	2 Mbps	N/A	N/A	N/A	N/A
	min	256 kbps	64 kbps	1 Mbps	128 kbps	1 Mbps	128 kbps				
Kosovo	Operator	PT	ГК			Kujte	sa				
	max	4 Mbps	256 kbps	N/A	N/A	5 Mbps	256 kbps	N/A	N/A	N/A	N/A
	min	256 kbps	256 kbps			256 kbps	256 kbps				

Table A.24 - Fastest advertised retail broadband connection



The OECD published data on speeds available from operators across its thirty members for September 2008 (see Figure 31).¹⁹

Figure 31 - Average and fastest broadband speeds in the OECD

Turkey has the slowest average speed in the OECD. By comparison, Croatia would be in the middle of the OECD range for DSL, while Serbia would be at the bottom, alongside Slovakia. However, the cable modem speeds are all at the slower end of the range, with 20-30 Megabits per second being typical top speeds.

b) Mobile broadband

As noted in Table A.17 most of the monitored countries, with the exception of Albania and Kosovo, have awarded 3G spectrum licences. According to the reported data by the second half of 2009, the penetration of mobile broadband measured as the number of dedicated data card users had reached 4.5% in

¹⁹ http://www.oecd.org/sti/ict/broadbandIn

Croatia, 2.7% in Montenegro, 0.2% in FYROM and 0.1% in Turkey. In Bosnia and Herzegovina, the first 3G commercial services were launched in June 2009, so there are no subscriber figures available yet.

Country	UMTS (W-CDMA) subscribers	Dedicated data cards users	Penetration (as % of population)
Croatia	1,618,700	198,600	4.5%
FYROM	N/A	3,282	0.2%
Turkey	6,418,771	58,200	0.1%
Montenegro	77,970	16,962	2.7%
Serbia	770,000	25,000	0.3%

Table A.25 - Number of subscribers to 3G high-speed mobile networks

Notes:

Albania: UMTS is not available in Albania. With regard to mobile Internet access based on GPRS, as of December 31, 2009 the total number of 784,834 mobile GPRS handset users were reported and 4,318 mobile data card users. Serbia: Data as of January 1, 2009

c) Broadband wireless access (BWA) – licences

Table A.26 shows the status of BWA spectrum licensing (also referred to as wireless local loop). The table does not include Wi-Fi networks operated in the 2.4 GHz and 5 GHz frequency bands.

Country	Frequency bands	Status and number of licences National/Regional	Size of the spectrum block	Licence duration period	Restrictions on operators applying for BWA licences
Croatia	3.4-3.6 GHz	Till Oct. 2009, the HAKOM had issued 56 licences for BWA spectrum in 20 Croatian counties and the District of Zagreb. Several licences have been returned or withdrawn by the NRA. Three operators, Novi Net, WiMAX Telecom, Odašiljači i veze have launched commercial WiMAX services. Radio frequency spectrum is available in 8 different counties.	2 x 21 MHz or 2 x 14 MH There are 3 blocks of 2x21 MHz and 1 block of 2x14 MHz	National – 10 years Regional – 8 years County – 8 years	No
FYROM	3.4-3.6 GHz	20 frequency authorisations for BWA spectrum: 2 national and 18 regional (3 authorisations per each of 6 regions) Several authorisations have been returned or withdrawn by the NRA.	2 x 14 MHz per each frequency authorisation	10 years	Restricted to fixed services (FWA)
Turkey	3.4-3.6 GHz	No FWA license issued.	-	15 years	-
Albania	-	No FWA license issued. Some preparatory work has been carried out by AKEP, but no decision on licensing has been taken.	-	-	-
Bosnia & Herzegovina	-	Spectrum in the 3.5 GHz band is currently occupied by broadcasting services. RAK is considering to issue BWA licences in the 2.6 GHz band.	-	-	-

Country	Frequency bands	Status and number of licences National/Regional	Size of the spectrum block	Licence duration period	Restrictions on operators applying for BWA licences
Montenegro	3.4-3.8 GHz	3 national licences in the 3.4-3.6 GHz issued in April 2007 and one licence for two blocks of 2 x 14 MHz issued in Dec. 2009. 1 national licence in the 3.6-3.8 GHz issued in Oct. 2007.	2 blocks of 2 x 21 MHz and 3 blocks of 2 x 14 MHz (in the 3.4-3.6 GHz) 2 x 21 MHz (in the 3.6-3.8 GHz)	5 years	No
Serbia	3.4-3.8 GHz	No FWA license issued. Licensing process has been postponed. The available spectrum blocks are defined in Official Gazette No. 17 of Feb. 13, 2008.	Proposed: 3 blocks of 2 x 21 MHz and 1 block of 2 x 24.5 MHz (in the 3.4-3.6 GHz) 4 blocks of 2 x 21 MHz and 1 block of 2 x 14 MHz (in the 3.6-3.8 GHz)	-	-
	450 MHz	On March 31, 2009 RATEL announced an auction procedure for two national FWA licences in the 411.875-418.125/421.875- 428.125 MHz band. The one-off fee is set at €540,000. On May 19, 2009 RATEL announced Telekom Srbija and Media Works the winners who offered to pay €540,000 per licence.	2 blocks of 2 x 3.5 MHz Available spectrum covers 411.875- 418.125 MHz/421.875-428.125 MHz	10 years	Restricted to fixed services (FWA) including voice and data transmission
Kosovo	3.4-3.6 GHz	No FWA license issued. Between March 5 and April 5, 2008, TRA consulted on a national strategy for implementing FWA.	Proposed: 4 blocks of 2 x 21 MHz	-	-

Table A.26 - Broadband wireless access (BWA) - licences

d) Public Wireless Local Area Networks (WLAN)

Country	Full frequency bands available		Licensing requirements for provision of access to public network
	2.4 GHz	5 GHz	
Croatia	Yes	Yes	General authorisation with notification to the NRA
FYROM	Yes	Yes	General authorisation with notification to the NRA
Turkey	Yes	Yes	General authorisation for provision of Internet services
Albania	Yes	Yes	General authorisation with notification to the NRA
Bosnia & Herzegovina	Yes	No	General (class) licence for provision of Internet services
Montenegro	Yes	Yes	General authorisation without notification
Serbia	Yes	Yes	General authorisation with notification
Kosovo	Yes	No	Individual licence

Table A.27 - Public Wireless Local Area Networks (WLAN/WiFi)

e) Internet backbone infrastructure

Table A.28 provides data on the Internet backbone infrastructure in the monitored countries.

- An Internet exchange point (IXP) is a node where different Internet service providers (ISPs) exchange Internet traffic. An IXP typically consists of several network switches to which all participating ISPs connect. Often, the provider of the IXP is not an ISP itself, but a commercial data centre or a non-profit organisation like a university data centre. Many European IXPs are organised in the European Internet Exchange Association (Euro-IX). The table shows the IXPs in the monitored countries.
- The second column shows the total capacity of international Internet bandwidth in Mbps. If the capacity is asymmetric (more incoming than outgoing), the incoming capacity is provided.

Country	Internet exchange points (name, URL)	International Internet bandwidth (Gbps)
Croatia	CIX (Croatian Internet eXchange) http://www.cix.hr/	55.1 Gbps (June 2009)
FYROM	The Macedonian Academic Research Network (MARNet) intends to become a Macedonian IXP in the near future. Several local ISPs are already connected. http://anal.marnet.net.mk/mrtgwebcfg/index.php?gid=9&mode=view&page	14.2 Gbps (Feb.2009)
Turkey	No	263.73 Gbps (June 2009)
Albania	No	5.5 Gbps (Oct. 2009)
Bosnia & Herzegovina	No	Not available
Montenegro	No	1.9 Gbps (2007)
Serbia	No	33.122 Gbps(Oct. 2009)
Kosovo	No	4 Gbps (Nov. 2009)

Table A.28 - Internet backbone infrastructure

9. Control of major operators by foreign investors

This table shows which key foreign strategic investors have a controlling interest in fixed and mobile operators, and ISPs.

Country	Investor	Operators					
		Fixed	Mobile	ISP			
Croatia	Deutsche Telekom	HT- Hrvatske Telekomunikacije – 51%	T-Mobile Hrvatska – 51% (100% owned by HT)	HT- Hrvatske Telekomunikacije – 51% Iskon – 51% (100% owned by HT)			
	Tele2 Sweden	-	Tele2 – 100%	-			
	Telekom Austria/Mobilkom	VIPNet – 100%	VIPNet – 100%	VIPNet – 100%			
FYROM	Deutsche Telekom	Makedonski Telekom – 33.60% (56.67% owned by Magyar Telekom)	T-Mobile – 33.60% (100% owned by Makedonski Telekom)	Makedonski Telekom – 33.60%			
	Telekom Austria/Mobilkom		VIP – 100%				
	Telekom Slovenije	On.Net - 83.38%	Cosmofon – 100%	On.Net - 83.38%			
	Akton Slovenia	Akton – 100%					
Turkey	Oger Telecom	Türk Telekomünikasyon - 55%	Avea – 44.55% (81% owned by Türk Telekom)	TT Net - 55% (100% owned by Türk Telekom)			
	TeliaSonera		Türkcell – 13.07%				
	Vodafone Group		Vodafone – 100%				
Albania	Cosmote (OTE)		AMC – 97%				
	Vodafone Group		Vodafone Albania - 100%				
	Calik Enerji Telecommunications (consortium of Calik Enerji and Turk Telecom)	Albtelecom – 76%	Eagle Mobile - 76%				
	Telecom Slovenije	PRIMO – 75%		PRIMO – 75%			
Bosnia & Herzegovina	Telekom Srbije	Telekom Srpske - 65%	m:tel – 65% (100% owned by Telekom Srpske)	Teol – 65% (100% owned by Telekom Srpske)			
	HT- Hrvatske Telekomunikacije (Croatia)	HT Mostar - 39.1%	HT Eronet - 49% (51% owned by HT Mostar)	HT Net (100% owned by HT Mostar)			
	Telecom Slovenije			Aneks – 100%			
Montenegro	Deutsche Telekom	T-Com Montenegro – 45.53% (76.53% owned by Magyar Telecom)	T-Mobile Montenegro – 45.53% (76.53% owned by Magyar Telecom)	T-Com Montenegro – 45.53% (76.53% owned by Magyar Telecom)			
	Telenor		ProMonte - 100%				
	Telekom Srbije		m:tel - 51%				

Country	Investor	Operators					
		Fixed	Mobile	ISP			
Serbia	OTE	Telekom Srbija - 20%	m:ts - 20% (100% owned by Telekom Srbija)	Telekom Srbija - 20%			
	Telenor		Telenor - 100%				
	Telekom Austria/Mobilkom		VIPmobile - 100%				
Kosovo	Telekom Slovenije/Mobitel	IPKO – 93.11%	IPKO – 93.11%	IPKO – 93.11%			

Table A.29 - Control of major undertakings by foreign investors

Notes:

FYROM: On October 16, 2008 the Macedonian Commission for Protection of Competition approved the acquisition of the controlling stake in the Greek incumbent operator, OTE, by Deutsche Telekom subject to the condition that OTE would have to sell its Macedonian subsidiary, Cosmofon. The condition was imposed to prevent the distortion of the effective competition on the market, because after the transaction Deutsche Telekom group would control the two largest mobile operators in Macedonia, T-Mobile and Cosmofon. The deadline set by OTE for Cosmofon offers is March 15, 2009. Three companies - Telekom Slovenije, Turk Telekom and Turkcell submitted their offers. On March 30, 2009 OTE agreed to sell Cosmofon to Telekom Slovenije for €190 million. In April 2009 the Commission for Protection of Competition officially approved the sale.

10. Key financial ratios of the fixed incumbent operators

The most commonly used financial ratios in the assessment of the performance of telecommunications operators are:

- Return on Capital Employed (ROCE) the net profit before interest and taxes divided by the total capital employed;
- Earnings Before Interest, Taxes, Depreciation and Amortization (EBITDA) margin EBITDA divided by operating revenues; and
- Earnings Before Interest and Taxes (EBIT) margin the EBIT divided by operating revenues.

Return on Capital Employed (ROCE) is a measure of the returns that an operator realises from the capital it uses. The ratio can represents the efficiency with which capital is being used to produce revenue. ROCE is used both to compare the performance of different businesses and to assess whether a business generates sufficient returns to pay for its cost of capital.

ROCE compares earnings with capital invested in the company, taking into account sources of financing. Net assets or capital employed are examined rather than total assets. Capital employed can have many definitions, though, in general, it is the capital investment necessary for a business to function. It is commonly represented as the total assets less the current liabilities or fixed assets plus working capital. The main drawback is that it measures return against the book value of assets. As these are depreciated, 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).

The net income of a company is affected by decisions that the company made in previous years. This is because of the differences between accrual accounting and cash-based 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 use of Earnings Before Interest, Taxes, Depreciation, and Amortization (EBITDA) does not suffer from this distortion, allowing investors a better understanding of the profitability of the company. Depreciation and amortization are non-cash charges, so that EBITDA is seen as a better proxy than earnings from the cash that flows through a company. Essentially, EBITDA measures the core income that a company earns before it covers its debt payments and pays its income taxes. Investors can also use this measure to compare the profit growth of companies that operate in different tax regimes. EBITDA can also assist lenders when estimating the cash flows that a company will have available to service its debt as it measures the amount of cash that a company has available for interest payments. Finally, EBITDA can provide a more accurate cash flow picture in industries where substantial non-cash depreciation and amortisation expenses might otherwise distort earnings.

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.

Country	Fixed	Key financial ratios and performance indicators					
	incumbent operator	ROCE	EBITDA margin in %	EBIT margin in %	Average number of employees	Number of fixed lines per employee	
Croatia	HT- Hrvatske Telekomunikacije	9.30%	39.75%	20.30%	5,209	295	
FYROM	Makedonski Telekom	10.45%	39%	22%	1,294	310	
Turkey	Türk Telekomünikasyon	34%	46%	42%	33,485	587	
Albania	Albtelecom	3.9%	49.42%	10.67%	2,222	130	
Bosnia &	BH Telecom	6.1%	39.75%	22.99%	1,107	496	
Herzegovina	Telekom Srpske	4.63	30.58%	10.86%	1,891	141	
	HT Mostar	-11.81%	-3.36%	-25.92%	1,204	105	
Montenegro	T-Com Montenegro	7%	26%	11%	697	250	
Serbia	Telekom Srbija	17.54%	53.15%	33.95%	8,955	345	
Kosovo	РТК	10.41%	32.62%	16.86%	477	191	

Table A.30 - Key financial ratios of the fixed incumbent operators

The number of fixed lines per employee has long been used as an indicator by the ITU and OECD, as a proxy for the efficiency of a telecommunications operator, on the assumption that the more fixed lines per employee the more efficient the operator. The problem of calculation and interpretation of these numbers has grown in recent years, where it is important to understand how employees are attributed across different parts of the business. Equally, with activities devolved to or purchased from manufacturers, business process outsourcers, call centres and the like, many of those performing roles for the operator may not be employees. Consequently, great care has to be taken in comparing operators or examining historical trends.

B. National regulatory authorities

This section examines the effectiveness of the institutional framework and environment. The specific issues covered are not only concerned with the NRA, but also address other relevant institutional actors such as the legislative and policy-making bodies, national competition and broadcasting authorities (if different from the NRA) and the national appeal systems. In relation to the NRA, this section seeks to cover the issues associated with the standards of good governance such as independence, accountability, transparency, participation and effectiveness. Additionally, this section also addresses other relevant institutional actors such as the legislative and policy making bodies, national competition and broadcasting authorities.

1. NRA independence

The establishment of an independent regulatory authority is a cornerstone of the EU regulatory framework for electronic communications. Independence remains a critical issue in ensuring predictability and stability in the regulatory environment. Independence involves two elements:

- separation of the NRA from the regulated firms; and
- isolation of the NRA from political intervention.

The first aspect of independence (from industry) is generally less contentious and more straightforward to assess than the second (independence from political influence). Both issues are addressed in the three following tables.

Article 3 of the Framework Directive requires that regulatory tasks must be carried out by competent bodies that are legally distinct and functionally independent from any organisations providing electronic communications networks and services. Furthermore, where the state retains control of undertakings providing electronic communications networks and services, the activities associated with the state ownership and control must be structurally separate from regulatory functions.

Under the EU regulatory framework, there has been no requirement for privatisation and the rules on institutional separation are set out in recognition of the legitimacy of the state ownership. Nevertheless, in countries where the state is no longer the owner of any electronic communications undertakings, the subject of regulatory independence is usually a lesser concern.

a) State ownership of telecommunications operators

Table B.1 provides information about state ownership and the control of fixed and mobile telecommunications operators. This includes any 'golden shares', i.e., special powers granted to the state by law or by the articles of association of a company that allow it to maintain a special influence in privatised companies. Figure 32 shows the state ownership for those operators present in the region, including parent firms such as the Austrian, German and Saudi incumbent operators.

In Croatia, following an IPO of 32% of the stock of T-Hrvatski Telekom (T-HT) in the autumn of 2007 and further sale of shares during 2008, the state's shareholding in the incumbent operator was further reduced to 3.6%. The Croatian War Veteran's Fund owns a further 7%, transferred from government holdings in 2005. Deutsche Telekom remains the majority owner of T-HT with 51% which is acquired in two tranches in 1999 and 2001. The remaining 38.4% is held by private and institutional investors.

In FYROM, the government controls 34.81% in the incumbent Makedonski Telekom plus one "golden share". The majority 51% stake is held by Magyar Telekom, a subsidiary of Deutsche Telekom. The remaining 12.1% is held by private investors.

In Turkey, following the sale of 55% of the stock of Türk Telecom to Saudi Oger in 2005, the government conducted an IPO of further 15% in April 2008, retaining 30% shareholding plus one golden share. (35% of Saudi Oger is controlled by Saudi Telecom Company (STC) which is 70% owned by the Kingdom of Saudi Arabia). The Turkish Treasury performs the ownership function of the state's shareholding in Türk Telekom, while the Ministry of Transport and Communications is responsible for its operational activities ('golden share' function). Indirectly, the Turkish government also holds 24.3% in Avea Telecommunications, a mobile operator that is 81% owned by Türk Telekom. Turksat Satellite Communication and Cable TV Operation AS (Turksat) is wholly owned by the government. In January 2010, the Ministry of Transport and Communications announced plans to sell part of its stake in Türk Telekom

In Albania, in June 2007, after a two-year period of negotiations Calik Enerji, a Turkish group, and the Albanian Ministry of Economy, Trade and Energy, signed an agreement for the sale of a 76% state's shareholding in the incumbent operator, Albtelecom. The deal also included Eagle Mobile, the third mobile telephony licensee that was not then operational. The purchaser is a joint venture owned by Calik Energi (80%) and Türk Telekom (20%). The agreement was ratified by the Albanian Parliament on July 19, 2007. In February 2009, the Albanian government agreed to sell its 12.6% stake in Albanian Mobile Communications (AMC), a major mobile operator, to Cosmote, a mobile subsidiary of the Greek incumbent operator, who following the transaction controls 95% of AMC.

In Bosnia & Herzegovina, there are incumbent operators in each of the three territories. The Federation government of Bosnia & Herzegovina retains 90% of BH Telecom (Sarajevo) and 50.10% of Hrvatske Telekomunikacije (Mostar), with the ownership functions performed by the Federal Ministry of Transport and Communications. The third incumbent operator, Telekom Srpske in the Republika Srbska is fully privatised. In December 2006, the Serbian incumbent operator, Telekom Srbija, won the tender for the privatisation of the 65% holding of Republika Srpska in Telekom Srpske. This was completed in July 2007, following the approval of the Competition Council of Bosnia & Herzegovina. Of the remaining shares, 20% float on the national stock exchange, 10% are held by a pension fund and 5% are held by a restitution fund.

In Montenegro, there is no longer state ownership of any operator. In March 2005, the government sold its 76.53% shareholding in Crnogorski Telekom to Magyar Telecom, a subsidiary of Deutsche Telekom. Private investors now hold 23.47% of the shares which are quoted on the stock exchange. In 2001, the former PTT of Montenegro (a state-owned enterprise) sold its 9% share in ProMonte, a mobile operator, to the majority shareholders.

In Serbia, the government owns 80% of Telekom Srbija through the Public Enterprise of PTT Traffic "Srbija", commonly known as PTT, or the Post Office. The government also retains a 'golden share' that gives the veto power over all strategic decisions of the company. Since 2003, the Greek incumbent operator OTE controls the remaining 20% of the capital in Telekom Srbija, itself partly owned by the Greek state (25%) and by Deutsche Telekom (25%).

In Kosovo, UNMIK was responsible for the 100% state ownership of PTK, the incumbent operator, through the Kosovo Trust Agency (KTA), a provisional body established by UNMIK regulation 2002/12. Following the unilateral declaration of independence by Kosovo in February 2008 and entry into force of the Constitution of Kosovo on June 15, 2008, the Kosovar government took over the UNMIK roles. The government ownership and control functions in PTK are exercised by the Ministry of Transport and Communications.

	Name of operator	State shareholding	Golden share	Government unit responsible for ownership functions
Croatia	HT - Hrvatske Telekomunikacije d.d.	3.60%	-	Not defined
FYROM	Makedonski Telekom A.D.	34.81%	Yes	Ministry of Finance
Turkey	Türk Telekomünikasyon A.Ş. Avea	30.00% 24.30%	Yes -	Undersecretariat of Treasury
	Turksat	100.00%	-	
Albania	Albtelecom sh.a. Eagle Mobile	24.00% 24.00%	-	Ministry of Economy, Trade and Energy
Bosnia &	BH Telecom d.d. Sarajevo	90.00%	-	Entity government in Federation of BiH
Herzegovina	Hrvatske Telekomunikacije d.o.o. Mostar	50.10%	-	Entity government in Federation of BiH
Montenegro	-	-	-	-
Serbia	Telekom Srbija a.d.	80.00%	Yes	Not defined
Kosovo	PTK (Post and Telecommunications Enterprise of Kosovo)	100.00%	-	Ministry of Transport and Communications

Table B.1 - State ownership and control of telecommunications operators

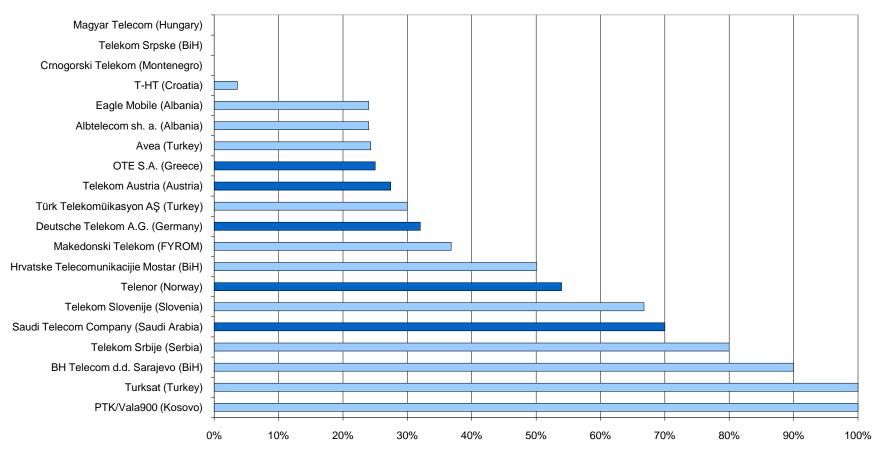


Figure 32 - State ownership of telecommunications operators

b) Responsibilities of the NRA and policy-making bodies

Political influence is the most direct means of influencing the NRA. The mere possibility of political intervention may put the regulator under pressure. The importance of greater political independence has been explicitly addressed in the review of the EU regulatory framework for electronic communications. The new telecoms rules that entered into force on December 19, 2010 reinforce national telecoms regulators' independence by eliminating political interference in their day-to-day duties and by adding protection against arbitrary dismissal for the heads of national regulators.

The issue of political independence can be assessed, *inter alia*, on the basis of: the extent to which the NRA discretion has been limited by law, the potential and actual extent of political intervention, the rules for appointment and dismissal of the NRA management and duration of its term of office.

The table below addresses:

- the division of the key responsibilities between the NRA and the ministry (or other government body) responsible for the electronic communications policy;
- powers of the Ministry or the government to give binding directions to the NRA; and
- whether certain NRA decisions are subject to prior or subsequent approval by the ministry or by another governmental institution.

Country	NRA and its responsibilities	Ministry (government) and its responsibilities	Ministry (government) powers to give instructions to NRA? Government intervention required for adopting certain decisions?
Croatia	 Article 12, Electronic Communications Act of June 19, 2008 The Croatian Post and Electronic Communications Agency responsibilities include: Adoption of implementing legislation Monitoring and regulation of prices and general business terms and conditions of operators Market analysis, designation of undertakings with SMP an imposition of regulatory obligations Designation of universal service providers Adoption of the Numbering Plan, Addressing Plan and drafting the Frequency Allocation Table Issuing individual spectrum licences Dispute resolution involving operators, service providers, end users <i>Expert</i> supervision over application of the Act and regulations adopted under the Act (<i>performed</i> by the NRA's supervisors) 	 Article 4, Electronic Communications Act of June 19, 2008 Government: Adopts strategies, studies, guidelines and programmes establishing general principles and policy objectives for the development of electronic communications The Ministry of the Sea, Transport and Infrastructure: Drafts proposals for strategies, studies, guidelines and policy objectives Coordinates and supervises the work of all authorities responsible for implementation of the policy objectives Prepares and adopts implementing legislation, including the ordinance on the allocation of spectrum and the Frequency Allocation Table Carries out <i>inspection</i> supervision in electronic communications (performed by the Ministry inspectors) 	 Article 4, Electronic Communications Act of June 19, 2008 The Ministry may give guidelines and instructions to the NRA concerning the implementation of the established principles and policy objectives for the development of electronic communications; may not influence the adoption of the NRA decisions in individual cases The administrative supervision of the NRA by the Ministry established under Article 3(6) of the previous Telecommunications Act of 2003 was removed from the new Electronic Communications Act of 2008. Article 18(4) of the new Act states that final decisions and other administrative acts of the NRA may not be annulled or repealed on the basis of supervision rights, or repealed under emergency procedures, or be made null and void by a competent body.

Country	NRA and its responsibilities	Ministry (government) and its responsibilities	Ministry (government) powers to give instructions to NRA? Government intervention required for adopting certain decisions?
FYROM	 Article 9, Law on Electronic Communications of 2005 Agency for Electronic Communications (AEC) is responsible for: adoption and implementation of the secondary legislation spectrum management, including allocation and assignment of frequencies number management market analysis; designation of undertakings with SMP and imposition of regulatory obligations approval of reference interconnection and unbundling offers regulation of wholesale and retail prices universal service: designation of providers and management of the US fund dispute resolution in commercial disputes consumer complaints 	 Article 6, Law on Electronic Communications of 2005 The Ministry of Transport and Communications: prepares the National Strategy for development of electronic communications and information technology prepares legislation for electronic communications Article 5 of the Law, however, defines both, the Ministry and AEC, as "competent bodies for regulating issues in the field of electronic communications". In 2009 the Ministry drafted a set of amendments to the Law that would make the division of tasks between two bodies more clear. The amendments are expected to be adopted in the first half of 2010. 	Article 7, Law on Electronic Communications of 2005 The NRA, "in its work and in taking the decisions within the scope of its competencies is independent and not subordinated to any state body or other public legal person or trade company engaged in operating in the field of electronic communications and is impartial towards them." Under Article 63, Law on Electronic Communications of 2005, the government approves the minimum one-off fee for frequency authorisations issued subject to tender procedures Under Article 35, the Ministry approves the universal service provider selected by the NRA in a public tender procedure.
Turkey	 Electronic Communications Law No. 5809 of November 5, 2008 Information Technologies and Communications Authority (ICTA) is responsible for: ensuring competition through regulations aiming at the elimination of anti-competitive practices adopting regulations and performing supervisory activities to protect the rights of the end users conducting market analyses adopting regulations and performing supervisory activities in the field of authorisations, tariffs, access, rights of way, numbering, spectrum management and market surveillance by taking into consideration the strategies and policies of the Ministry ensuring the implementation of the harmonized standards prepared by the national standards bodies market surveillance and supervision 	 Ministry of Transport and Communications is responsible for: strategies and policies for electronic communications sector, promoting development of competitive environment and transition to information society policies for the construction and development of electronic communications networks and services in accordance with the technical, economical and social needs, national security objectives and public interest. contributing to the policies for the development of the electronic communications equipment industry encouraging domestic design and production of electronic communications systems, promoting research and development activities by technical and financial means 	ICTA has been established as a financially and administratively independent regulatory body which acts as public legal entity with a view to exercise the authority and to perform tasks assigned by the laws. According to Article 5 of Law on Establishment of Information Technologies and Communications Authority No. 2813 amended by Electronic Communications Law No. 5809, <i>'ICTA is independent in performing its tasks. Not any body, office, authority or person could direct or instruct the Authority.'</i> However, minimum values for individual rights of use are determined by the Council of Ministers.

Country	NRA and its responsibilities	Ministry (government) and its responsibilities	Ministry (government) powers to give instructions to NRA? Government intervention required for adopting certain decisions?
		 taking measures to ensure the continuity of communication in the case of natural disasters and emergencies 	
Albania	 Article 8, Law on Electronic Communications (Law No. 9918 of May 19, 2008) Authority of Electronic and Postal Communications (AKEP) is responsible for: regulation of access and interconnection approval of reference offers for access and interconnection market analysis, designation of undertakings with SMP and imposition of regulatory obligations registration of notified undertakings assignment of frequencies for electronic communications services preparing the National Numbering Plan and assignment of numbers price control of wholesale and retail tariffs management of the universal service fund and carrying out of the designation procedures of the universal service providers management of national top level domain names 	 Article 5, Law No. 9918 of May 19, 2008 The Minister in charge of the electronic communications sector is primarily responsible for: preparing and presenting for the approval by the Council of Ministers the proposal for the policy in the electronic communications field and following its implementation issues orders and instructions for completing the regulatory framework defined by the Law and government's policies drafting relevant primary and secondary legislation preparing the National Radio Frequency Plan approval of tender procedures for frequency assignment and the designation of universal service providers, based on proposals by AKEP On Sep. 30, 2009 the Prime Minister signed Decision No. 1057 which transferred the competencies for electronic communications, as defined in Law No. 9918 on electronic communications to the Minister of State for Reform and Parliamentary Relations. 	 Article 6, Law No. 9918 of May 19, 2008 'AKEP is a public, independent, non-budgetary, legal entity, which exercises its activity in compliance with legislation in force. AKEP in its work and decision-making within its competencies is independent'. However, according to Article 5, the Minister: can issue orders and instructions for completing the regulatory framework defined by the Law and government policies approves allocation of frequencies and respective tender procedures for their assignment US providers designation
Bosnia & Herzegovina	 Article 3, Law on Communications of 2002 Regulatory Authority for Communications (RAK) is responsible for: regulating radio and TV broadcasting and public telecommunications networks and services licensing tariffs regulations 	 The Council of Ministers is responsible for: developing and adopting policy in line with the existing legislation defining the scope of the universal service, designating the providers and establishing the funding mechanism, based on proposals of the NRA 	In order to carry out the constitutional provisions in respect of communications the Council of Ministers is responsible for policy-making, and RAK is responsible for the regulation. As policy maker, the Council of Ministers issues obligatory political guidelines (sector policy). The sector policy defines the regulatory priorities and the action plan for the NRA, although it does not influence individual RAK

Country	NRA and its responsibilities	Ministry (government) and its responsibilities	Ministry (government) powers to give instructions to NRA? Government intervention required for adopting certain decisions?
	 interconnection defining the basic conditions for the provision of common national and international communications facilities planning, co-coordinating, allocating and assigning the use of the radio frequency spectrum management of the numbering plan and assignment of numbering resources to telecommunications operators. 	 determining the representation of BiH in international forums concerned with communications RAK cooperates with the Ministry of Transport and Communications which practically performs the coordination of functions which are the Council of Ministers responsibility. 	decisions. The Council of Ministers also decides on the scope of the universal service, designation of the providers and establishing the funding mechanism, based on proposals of the NRA. The Council of Ministers also approves, based on proposals of the NRA applicable fees and terms and conditions for spectrum licences.
Montenegro	 Article 8, Law on Electronic Communications of July 29, 2008 Agency for Electronic Communications and Postal services: prepares draft bylaws and regulations that are adopted by the Ministry adopts rules and procedures for the implementation of the Law and bylaws prepares draft national radio frequency bands allocation plan that is adopted by the Government adopts the national addressing and numbering plans organises tender procedures and issues authorisations to use frequencies, numbers and addresses presents for the government approval the amount of fees to be paid by authorised operators and service providers, calculated based on the methodology developed by the Ministry performs market analyses, designation of providers with SMP and imposition of regulatory obligations dispute settlement designation of the universal service provider and management of the universal service fund <i>expert supervision</i> of activities of registered operators 	 Article 4, Law on Electronic Communications of July 29, 2008 Government: adopts development strategy on decade bases adopts the national radio frequency bands allocation plan adopts the NRA statute, approves its annual action plan and financial plan adopts yearly activity report by the NRA, including the financial report periodically determines the scope of universal service determines conditions for utilizing networks for electronic communications in state of emergency. Article 5, Law on Electronic Communications of July 29, 2008 Ministry of Maritime affairs, Transport and Telecommunications: develops legislation and adopts bylaws and regulations under the Law on Electronic Communications drafts sector development strategy approves QoS requirements for the universal service on the NRA proposal determines methodology to be applied by the NRA when setting authorization fees and fees for use of limited resources 	Article 130, Law on Electronic Communications of July 29, 2008 authorises the Ministry to perform "supervision of legality and purposefulness" of the NRA activities. This supervisory function, however, should not be applied to the regulatory decisions and regulatory rules adopted by the NRA, where the NRA must be independent. The new Law on Electronic Communications provides for the separation of legislative functions of the Ministry from strictly regulatory activities performed by the NRA.

Country	NRA and its responsibilities	Ministry (government) and its responsibilities	Ministry (government) powers to give instructions to NRA? Government intervention required for adopting certain decisions?
Serbia	 authorises institutions responsible for certification of R&TTE equipment performs <i>inspection</i> of the implementation of the Law and secondary legislation adopted under the Law Article 9, Telecommunication Law Article 5, Telecommunication Law Article 5, Telecommunication Law Government: adoption of technical regulations market analysis and designation of operators with SMP licensing and authorisation of telecommunications network operators and service providers, including the conducting of public tenders for individual licensers in accordance with the Ministry adoption of public tenders for individual the conducting of public tenders for individual the conducting of public tenders or individual the conducting of public tenders or individual the tenders or individual 	Under Article 7, Telecommunication Law, the NRA is defined as "an autonomous legal entity, functionally independent of and not subordinated to any government authority, as well as of any organization and person engaged in operating telecommunications networks and equipment or providing services." The Ministry, however, performs a supervisory function over the activities of the NRA. Article 56, par 2 of the Law on State Administration provides that if the NRA fails, despite multiple warnings, to	
	 resolution on the number, timing and minimum conditions for granting such licenses settlement of disputes between telecommunications operators and between operators and end users drafting proposals for the Radio Frequency Allocation Plan and the Radio Frequency Assignment Plan price control of undertakings with SMP assignment of radio frequencies adopting the Numbering Plan and assigning numbers managing the universal service fund. 	 information society is authorized to: supervise the implementation of the Law and regulations adopted on the basis of this Law prepare a proposal of the strategy for telecommunications development prepare a proposal of the Radio Frequency Bands Allocation Plan and adopt the Radio Frequency Assignment Plan based on the NRA's proposal decide on the number and timing of individual licenses to be granted for public telecommunications networks or services through a public tender procedure, including the minimum amount of a one-off licence fee define the scope of universal services based on the proposal made by RATEL 	start performing business or start performing it properly or timely, the Ministry as a supervisory body of the state administration may take over its competencies but for a period no longer than 120 days. Under Article 57, par 1 of the Law on State Administration, the NRA is obliged, before publication of its proposed regulation, to get the opinion from the Ministry on the compliance of the proposed regulation with the constitution and relevant laws. The Ministry shall present an argumented proposal on how to bring the regulation in compliance. According to a clarification provided by the government in June 2008, the NRA is, however, <i>"under no obligation to act along the proposal of the Ministry."</i> The Ministry approval is required in the tender procedures for issuing individual licences and defining the scope of universal service.

Country	NRA and its responsibilities	Ministry (government) and its responsibilities	Ministry (government) powers to give instructions to NRA? Government intervention required for adopting certain decisions?
Kosovo	 Under Telecommunications Law No. 2003/16, TRA is authorised to: issue licenses and authorizations for provision of telecommunications services implement the policies of the Ministry pursuant to the Law on Telecommunications, and other implementing legislation issue regulations and instruction for the implementation of the present Law assign rights to use spectrum resources and numbers issue price regulations adopt a numbering plan and assign numbers prepare a spectrum resource plan subject to Assembly review and approval perform market analysis and designate operators with SMP define the scope, requirements and funding mechanisms of the universal service on recommendation by the Ministry. 	 Ministry of Transport and Communications develops policies for the Telecommunication sector, including the development of legislation supervises the work of PTK Assembly is responsible for: review and approval of the spectrum resource plan approval of the NRA budget. 	The Law No. 03/L-085 of June 13, 2008 amending the Law on Telecommunications No 2003/16 establishes TRA as the sole authority to allocate radio frequency spectrum, subject to "Assembly review and approval in written" of the TRA spectrum resource plan. The Law also deletes references to UNMIK, its Frequency Management Office (FMO) and SRSG (Special Representative of the Secretary General). The new law further ensures the NRA administrative independence by removing the provisions in the Telecommunications Law that enabled the Ministry to issue instructions to the NRA to amend a licence.

Table B.2 - The division of responsibilities between the Ministry and the NRA

2. Appointment and dismissal of the directors of the NRA

The rules and procedures for appointment and dismissal of the NRA management are covered in the table below, addressing:

- eligibility criteria for the NRA management (e.g. professional background, restrictions on interest in any of the market participants);
- government bodies involved in the appointment of the NRA management and specific procedures;
- duration in office of the NRA directors; and
- grounds and procedures for removal of the NRA management.

Country	Rules and procedures for appointment and dismissal	Eligibility criteria for appointment
Croatia	 Croatia The NRA is governed by the Council consisting of seven members, including a Chairman and a Deputy Chairman, who are full-time employees of the NRA during their term of office. The Council members are appointed and dismissed by Parliament upon proposal of the Government. The appointment is for a period of five years with the possibility of reappointment. Parliament shall dismiss the Chairman, Deputy Chairman or a member of the NRA Council before the expiry of his term of office, upon proposal of the government in the cases of: resignation, provision of false information at the time of the appointment, serious professional misconduct, inability to perform professional duties for more than six months in a row, permanent loss of ability to perform professional duties, conviction of criminal offence, failure to fulfil objectives and tasks defined in the NRA annual work programme, conflict of interest. The NRA's administrative service performing expert, administrative and technical tasks is managed by the Director appointment. 	 The members of the NRA Council must fulfil the following criteria: to be Croatian citizen domiciled in the Republic of Croatia with university education or specialised university education in electronic communications, postal services, law or economics adequate work experience active knowledge of at least one foreign language (English, French or German) at least two members must have a completed an undergraduate course or a specialised undergraduate course in law, and two in economics five members must have at least five years of work experience in the electronic communications sector, and two members of must have at least five years of work experience in the postal services sector may not be state officials, persons on positions in bodies of political parties, units of local and regional self-government or unions or persons employed, having influence or performing other tasks in electronic communications and postal undertakings may not be owners, stockholders or shareholders in regulated entities or perform other tasks that may result in conflict of interest.
FYROM	 The NRA is governed by a Commission that consists of five members, including the President and Vice President. The President and the members of the Commission are appointed and dismissed by Parliament. Dismissal of the Commission members prior to the expiration of the term of office in the cases of: own request, sentence of longer than six months for a criminal act, absence from three consecutive meetings or five meetings during any 12 months period during the term of office, failure to submit annual reports of the NRA to the Assembly. The NRA's day-to-day activities are managed by the Director, engaged as a professional full-time employee. The Director is appointed by the Commission following a public competition procedure. The Director can be dismissed by the Commission in the cases of: own request, inability to perform professional duties due to illness for more than 6 months, acceptance of an incompatible position or practice, sentence of longer than six months for a criminal act, violation of the law and abuse of the position. The term of office of the Commission members and its Director is five years, with a possible reappointment for an additional consecutive term of office. 	 The President and members of the NRA Commission may not be: deputies of the Assembly, members of the Government, perform duties in bodies of the political parties, members of managing and supervisory bodies in public companies, or members of any other form of association of legal and natural persons that might lead to a conflict of interests and may not hold equity directly or indirectly in any undertaking performing activities in electronic communications sector. The Director appointed through a public competition procedure must be: a citizen of the Republic of Macedonia and a holder of university degree with professional experience of more than five years. Professional and managerial experience in electronic communications sector is taken into account in the appointment procedure.
Turkey	The decision making body of ICTA is the ICTA Board that consists of seven members, including a Chairman and a Vice Chairman. The Chairman is also responsible for the general management and representation of ICTA.	 University degree in relevant fields Ten years of experience in public or private sector Eligibility for public service No connections to political parties

Country	Rules and procedures for appointment and dismissal	Eligibility criteria for appointment
	 Board members are appointed for a period of five years by the Council of Ministers. Two of them are nominated by operators having at least 10% market share, one member – by the Ministry of Industry, one – by Trade and the Union of Chambers and Industry, and three members – by the Ministry of Transport. Appointments require approval by the President of the Republic. The Board members can only be dismissed before expiration of a term by the Council of Ministers for inability to work due to serious illness, professional misconduct or criminal offences. 	No conflict of interest
Albania	 The NRA is governed by the Governing Council composed of five members appointed for a 5 year office term, by the Assembly of the Republic of Albania, on the proposal of the Council of Ministers, with the right for no more than one re-appointment. The Assembly appoints one of the members of the Governing Council as the Chairman, who also acts as the Executive Director of the NRA. Dismissal in the case of physical or mental incapability, conviction for a criminal act, appointment as a Member of Parliament or a local government body, inability to exercise professional duties for more than 6 months. A dismissed Board member shall not have the right to be re-appointed in the Governing Council. 	 Member of the Governing Council shall be graduates and qualified experts, with a minimum of 7 years experience and shall represent the sector of the electronic communications, postal, economic, and juridical. Upon appointment shall resign from any official positions or functions, give up any for-profit activity, as well as to sell and liquidate any financial interest in undertakings active in electronic communications or postal sectors. May not have family ties to the Council of Ministers, have been convicted for a criminal act or excluded by law from holding public positions.
Bosnia & Herzegovina	 Strategic and policy issues at the NRA are decided by the Council of seven (7) members nominated by the Council of Ministers and appointed by Parliament. Parliament shall accept or reject these nominations within thirty (30) days after submission of the nominations. The NRA is headed by the Director General, who is elected by the Council of the Agency and approved by the Council of Ministers. He is responsible for all regulatory and administrative functions and manages day to day operations. The Parliament has the sole authority to dismiss the members of the Council before completion of their mandate. The Council of Ministers has the sole authority to dismiss the Director General before completion of the mandate. Both, members of the RAK Council and the Director General have a term of 4 years and can be re-appointed only once. Dismissal before the end of the mandate due to serious illness, conviction of a serious crime, a conflict of interest, resignation, failure to participate in three or more consecutive meetings. 	 Members of the Council of the NRA must demonstrate exceptional legal, economic, technical or other relevant expertise and experience for the fields of telecommunications and/or broadcasting. The Director General must have relevant experience in the fields of telecommunications and/or broadcasting and proven management skills. No conflict of interest.

Country	Rules and procedures for appointment and dismissal	Eligibility criteria for appointment	
Montenegro	 Under the Law on Electronic Communications of July 29, 2008 the NRA management structure consists of the Council and the Executive Director. The Council of the NRA shall have the President, engaged as professional employee of the NRA, and 4 members of the Council who could be part time or professionally engaged employees of the NRA. The Executive Director shall be engaged as professional full-time employee. President of the Council and members of the Council shall be appointed by the Government upon the Ministry proposal to a term of office of 5 years. The Executive Director shall be appointed by the Council, for a term of office of 4 years. They shall not hold office for more than two consecutive terms. Dismissal before the expiration of the term of office due to resignation, conviction of a crime, permanent loss of ability to perform duties, conduct damaging to the reputation of the independence of the NRA. 	 President of the Council, its members and the Executive Director shall hold Montenegrin citizenship and have permanent residence in Montenegro, and have higher education in telecommunications, electronics, economy or law, at least 5 years of experience, covering positions in the field of electronic communications. They may not hold equity nor have other interests in any organisation active in the field of electronic communications. They may not be Members of Parliament or Deputies, officials or members of political parties' bodies. 	
Serbia	 The NRA is managed by the Managing Board that consists of a Chairman and four Members who are appointed and relieved from office by the National Assembly, at the proposal of the Government. Their term of office is five years with a possibility of a reappointment for one more consecutive term. For the first term, the Chairman is appointed for five years, two members of the Board for four years and two members for three years. The Managing Board appoints the Executive Director of the Agency who is responsible for the administration and operational issues. Dismissal before the expiration of the term of office due to resignation, illness causing the loss of the ability to perform professional duties for longer than 6 months, conviction of a crime or corruption, provision of incorrect data at the time of appointment, conflict of interest. 	 Managing Board members must demonstrate professional knowledge and experience relevant to the activities falling within the responsibility of the NRA, in particular in the field of engineering, economics and law. The proposal must include at least two candidates from the field of engineering and at least one candidate from the field of economics and one from the field of law. 	
Kosovo	 The NRA is managed by the Board that consists of five Members who are appointed and relieved from office by the National Assembly, at the proposal of the Government with the recommendation from the Minister of Transport and Communications. Their term of office is five years with a possibility of a reappointment for one more consecutive term. The Minister of Transport and Communications, acting in consultation with the Prime Minister designates one member of the Board to be the Chairman, who is also responsible for the administration and operational issues. 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. Dismissal is subject to approval by the Assembly. 	 Members of the Board shall be university graduates with specialized knowledge in the area of politics, frequencies, interconnections, tariffs, law, economics, standardizations, or have at least ten (10) years experience in the telecommunications sector. A member shall, if applicable, resign from public or elected office or other employment and shall not engage in any other commercial activity regardless of whether the Member receives compensation for such activity. In addition, a Member shall be required to terminate any business activities and financial interests in enterprises that are under the jurisdiction of the Board, and otherwise comply with the provisions of the NRA's standards of conduct. 	

Table B.3 - Appointment and dismissal of the directors of the NRA

3. NRA budget and sources of financing

The NRA financial and operational means play an important role in ensuring a stable and predictable regulatory environment. Therefore, the financial resources available to the NRA, the number of employees and its ability to attract and retain suitably qualified staff are particularly important aspects in assessing the capacity of the NRA to operate effectively.

The EU regulatory framework requires that the NRAs are self-financing and that their fees only cover their administrative costs, except when allocating limited resources. Furthermore, under the current EU framework, the general authorisation regime applies to all activities in the electronic communications sector with the exception of those requiring the use of limited resources. Therefore, the NRA fees associated with authorisations, such as registration fees, are set a modest level.

Table B.4 presents information on the operational budgets of the NRAs in 2007 – 2009, as well as the sources of their financing. In this table, the term "authorisation fees" is used to describe one-off fees related to the issue of all types of authorisations, including individual licences.

Country	Operational budget € (000s)			Sources of financing				
	2007	2008	2009	Annual revenue- based fees	One-off authorisation/ notification fees	Spectrum	Numbers	Other
Croatia	9,376	11,141	12,727	40.14%	-	50.41%	5.40%	4.05%
FYROM	7,420	7,213	7,375	11.53%		70.04%	11.30%	7.13%
Turkey	46,827	41,194	117,522	7.00%	-	89.00%	-	4.00%
Albania	1,219	1,620	1,486	-	-	96%	0.5	3.5%
Bosnia & Herzegovina	3,706	4,218	4,467	58.87%	-	5.18%	35.95%	-
Montenegro	2,800	3,500	5,182	52.54%	0.29%	36.34%	7.72%	3.11%
Serbia	9,020	15,058	9,435	36.95%	7.30%	38.92%	13.52%	3.31%
Kosovo	519	2,242	N/A	-	99.14%	-	-	0.86%

Table B.4 - Operational budget of the NRA and its sources of financing

Notes: Croatia:

Sources of financing are based on 2008 revenues.

FYROM: Operational budget figures for 2007 and 2008 refer to the actually realised budget in the stated years. The figure for 2009 refers to the planned budget of AEC with the planned percentages for sources of financing.

Turkey Out of 89% spectrum-related fees, 14% refers to spectrum licence fees and 75% to spectrum usage fees.

Montenegro: The figure for 2009 refers to the planned budget of EKIP for 2009 according to its financial plan. Part of this amount will be used to cover the loss related to provision of universal postal services.

4. NRA staffing

Table B.5 below shows:

- the total NRA staff in 2009;
- sub-divided into the number of qualified employees dealing with
 - general regulatory issues;
 - frequency monitoring tasks; and
- legal or financial restrictions on the NRA's ability to set the level of remuneration of its staff (e.g., salaries tied to civil service rates).

Country	Total	Handling electronic communications regulatory tasks	Handling frequency monitoring tasks	Restrictions on the NRA's ability to set salary levels	
Croatia	159	51	18	The annual financial plan and the annual financial statement of the Agency must be approved by the government.	
FYROM	105	21	19	No legal restriction	
Turkey	656	340	20	The salary of the President of the ICTA Board may not exceed that of the Undersecretary of the Prime Minister cabinet. Salaries of the other Board members may not exceed that of the President.	
				Total amount of the payments made to the ICTA personnel shall not exceed the total amount of payments made to Board members. Salary levels of the personnel are set according to an internal system of grades.	
Albania	60	32	8	The structure and the level of salaries are stipulated as part of the Law No. 9584, dated July 17, 2006.	
Bosnia & Herzegovina	100	32	24	The Law on Salaries and Allowances for Civil Servants of June 23, 2008 brings the salary level of the NRA staff within the pay scales for civil servants. The NRA has to follow the established scales for the basic salary levels and is only be able to increase salaries of its staff through an additional "regulatory" bonus scheme.	
Montenegro	60	15	13	Amendments to the Budget Law modified the provisions of the Law on Electronic Communications (LEC) so that the EKIP Financial Plan instead of being submitted to the government now is to be submitted to the Parliament. In December 2009, the Parliament, by its decision on adopting the Financial Plan, reduced by 40% the salaries of the Council Members and of the Executive Director, and obliged the Agency to decrease subsequently their salaries, thus bringing them down to the pay level of government officials.	

Country	Total	Handling electronic communications regulatory tasks	Handling frequency monitoring tasks	Restrictions on the NRA's ability to set salary levels
Serbia	98	46	13	Due to the financial crisis the government issued a decree which defines the salary cap and additional salary tax for all state institutions the end of 2009. The maximum salary is set at 3 times the average salary in state, and additional tax is in range from 0% to 15%, depending on the amount of the salary.
Kosovo	33	12	2	Salary levels are regulated subject to pay scales and a system of grades that applies to all civil servants in Kosovo and are set based on the TRA budget approved by Parliament.

Table B.5 - Staffing and salary levels of NRAs

Notes:

Albania: Electronic communications tasks include the following: market regulation, licensing, technical (excl. frequencies), legal department, inspection and decisionmaking, the board of the NRA.

Bosnia & Herzegovina: There are 12 regulatory experts in the telecommunications sectors and 20in the broadcasting sector, frequency monitoring tasks are handled by13 experts in the frequency department and 11 in the monitoring department.

5. NRA enforcement powers

The NRA bears the primary responsibility of ensuring compliance with the obligations imposed on operators either directly by the law, or by the NRA after carrying out a market analysis procedure. To that effect, the NRA should have specific investigatory and sanctioning powers.

In order to ensure effective compliance with SMP-obligations, the NRA sanctioning powers should, in particular, allow it to impose fines with a sufficient deterrent effect and to order the suspension of non-compliant commercial offers. Sanctions should be sufficiently stringent, taking into account the substantial commercial benefits from the illegal practice. Moreover, the threat of sanctions should also be sufficiently real to ensure SMP operators conform to their regulatory obligations.

Table B.6 itemises the:

- powers of the NRA to impose fines, specific instances when a fine can be imposed and the level;
- powers of the NRA to suspend non-compliant commercial offers (in particular, this refers to the regulated offers of operators with SMP); and
- examples of fines imposed by NRAs.

Country	NRA powers to impose fines	NRA powers to suspend commercial offers	Applied in practice
Croatia	No power to impose fines directly. The NRA has a power to start misdemeanour proceedings before the Misdemeanour Court. The fine may be set in the range from 1% to 5% of the total annual gross income generated by the provision of electronic communications services and activities, in the fiscal year preceding the year in which the violation was committed.	Yes, in cases of especially material breaches of the law Article 118, Electronic Communications Act of June 19, 2008	 The NRA has initiated several misdemeanour proceedings before the Misdemeanour Court against operators that have breached the provisions of the Telecommunications Act and Electronic Communications Act, all cases are pending. Suspension of commercial offers has been regularly applied by the NRA: On Nov. 27, 2006 the NRA requested the mobile operator VIPnet to modify the tariffs of its 'Option Fixed' prepaid package that according to the NRA constituted predatory pricing, suspending the launch of the offer. On Feb. 12, 2007 the NRA requested T-Com, the incumbent operator, to modify its fixed tariff plan called 'Non stop'. According to the NRA, the incumbent operator had practiced a price squeeze by offering fixed voice services at retail tariffs set below its wholesale charges.
FYROM	 No power to impose fines directly. The NRA may initiate a procedure under the Law on Misdemeanours or the Law on Criminal Procedures. According to the Law on Electronic Communications, the maximum fine may be up to 7 to 10% of the total annual revenues in the year preceding the year when the misdemeanour was committed or of the total revenue for a shorter period of the year preceding the misdemeanour, provided that the legal entity commenced its operations during that year. In 2009, a set of amendments to the Law on Electronic Communications was proposed that would harmonise it with the Law on Misdemeanours, after which the NRA would get powers to impose fines. The amendments are expected to be adopted in the first half of 2010. 	Yes Under Article 49 of the Law on Electronic Communications, the NRA may suspend commercial offers of the operator that has been designated as having SMP in a specific retail market and imposed obligations relating to provision of retail services.	In April 2007, the NRA submitted an application for a misdemeanour procedure to the court against Makedonski Telekom for failure to implement an amended RUO.
Turkey	According to article 60 of the Law on Electronic Communications, ICTA may impose fines of up to 3% of the previous calendar year net sales.	Yes According to Bylaw on Tariffs and Bylaw on Access and Interconnection, if the proposed tariff of the SMP operator is not approved by the NRA, the offer is suspended and the SMP operator must propose a new tariff in accordance with the NRA	During the approval process of TT's ADSL wholesale resale tariffs in spring 2008 the NRA had suspended the proposed TTNet's retail ADSL prices.

Country	NRA powers to impose fines	NRA powers to suspend commercial offers	Applied in practice
		requirements. This is also valid for reference offers for wholesale broadband and LLU.	
Albania	According to article 137 of the Law on Electronic Communications, maximum fine is 10% of annual turnover of the operator during the previous calendar year. The fine is imposed mostly in cases of non-compliance with SMP obligations. Chapter XVI of the law stipulates the inspection procedures and frequency monitoring. Article 135 elaborates on the cases where the NRA may impose fines and administrative measures if and electronic communications network service providers do not abide by the rules and regulations.	Under articles 55-57 of the Law on Electronic Communications, AKEP has powers to regulate retail tariffs of the SMP operators and universal service providers. Based on article 52 of the Law, AKEP has powers to impose changes in the reference offers proposed by the operators with SMP. Reference offers must be approved by AKEP.	No financial penalty has been imposed in practice. Suspension of retail offers has not been applied in practice. On Feb. 10, 2009 AKEP imposed changes in the RIOs of three SMP operators in Albania.
Bosnia & Herzegovina	The maximum fine is BAM 150,000 (ca. €75,000) for the first violation, with a maximum of BAM 300,000 (ca. €150,000) for a repeated violation.	Yes Article 20 of the Law on Communications.	The NRA regularly uses its right to impose fines.
Montenegro	Amounts of fines are defined in articles 137, 138, 139 and 140 of the Law on Electronic Communications. Maximum fine is three hundred times the minimum salary in Montenegro (about €16,500).	Yes Under Article 134 of the Law on Electronic Communications, expert supervisors of the NRA have the powers to monitor the compliance with tariff regulations and to suspend non-compliant offers.	No
Serbia	No power to impose fines directly. According to the Telecommunications Law, the Board of the NRA can initiate a court proceeding containing a proposal for fining the operators, but final decision is made by the Court. According to Article 96 of the Telecommunication Law: a fine in the range of RSD 300,000 (\in 3,674) to RSD 3,000,000 (\in 36,740) can be imposed on a public telecommunications operator if it sets tariffs contrary to those defined the NRA for the services subject to a price control.	Yes The NRA has a power to suspend the commercial offer only for the SMP operator and a cost-based analysis of the proposed tariffs.	No financial penalty has been imposed in practice. Any proposal of an operator with SMP to modify regulated prices is subject to approval by RATEL. The NRA refused to accept the proposal of Telekom Srbije to raise the fixed telephone tariffs by its decision from April 17, 2006. The offer was suspended by the NRA.
Kosovo	The Ministry's Administrative Instruction No. 2004/3 on telecommunications fees and fines authorised the NRA to impose fines to a maximum of €250,000. It may also issue written orders requiring operators to correct defective actions within a specified time period (Law on Telecommunications, section 15 (5) a).	Yes PTK's fixed telephony licence contains provision stating that 'the Licensee may not increase the tariffs of any existing licensed Regulated Service or set a price for any new licensed Regulated Service in Kosovo without the prior written approval of the NRA'.	No

Table B.6 - Enforcement powers of the NRA

6. Dispute resolution

Article 20 of the Framework Directive establishes a requirement for the NRAs to be able to issue binding decisions to resolve commercial disputes between undertakings arising from obligations under the regulatory framework. The maximum timeframe for resolving a dispute may not exceed four months. Table B.7 shows whether the NRAs are authorised to resolve commercial disputes. It also describes the applicable procedures and the timeframe.

Country	Type of commercial disputes that can be resolved by NRAs	Dispute resolution procedures and deadlines	Publication of disputes by NRAs
Croatia	 Disputes between electronic communications network operators. Disputes between electronic communications network operators and providers of value added services. Disputes between providers and endusers concerning payment of debts and quality of services provided. 	 HAKOM intervention after 45 days of unsuccessful negotiations on request of the involved operators HAKOM issues binding decision within shortest time possible or maximum 120 days from receiving the request HAKOM decision must be implemented within 15 days from the day of its issue to the parties unless a different term is determined by decision. 	HAKOM decisions must be published in the Official Gazette and on its website, taking into account the confidentiality of business information.
FYROM	According to Article 122 of the Law on Electronic Communications, the NRA shall resolve disputes involving operators of communications networks and providers of communications services. The Agency shall initiate a dispute resolution procedure ex officio or at the request by a party to the dispute.	 AEC shall apply the provisions of the Law on General Administrative Procedure to its dispute resolution procedures. AEC is obliged to resolve the dispute within 42 days from the date of receiving the proposal for initiation of a dispute resolution procedure. The deadline for resolution of the dispute may be extended if it is necessary due to the complexity of the procedure, by in no case shall exceed four months. Disputes can be settled applying mediation or arbitration procedure. Mediator chosen by the parties or by NRA within 7 days. Arbitrators appointed by NRA Commission, the Minister and other interested parties for 5 years. Result of arbitration is binding, final and enforceable. AEC, during resolution of disputes, is obliged to take into consideration the objectives of ensuring effective competition and protection of users' interests in the market. 	Article 122 of the Law on Electronic Communications requires the NRA to publish decisions, taking into account the confidentiality of the business secrets of the parties.
Turkey	Under Article 18 of Law on Electronic Communications No. 5809, ICTA may resolve on a request from the one of the parties, disputes involving providers of telecommunications services and network operators regarding network access and interconnection.	 Article 18, Law on Electronic Communications No. 5809: The parties can apply to ICTA after two months of failed negotiations (in the case of denial of access and negotiation request, the application can be submitted to ICTA earlier). ICTA can issue a binding decision in order to resolve the interconnection/access disputes within two months, except for special circumstances. ICTA can determine the fees and conditions that will apply to access/interconnection agreements, including temporary fees. 	Published on the NRA website only if deemed necessary by the NRA. As a rule, only the relevant parties to the dispute are informed about the decision.

Country	Type of commercial disputes that can be resolved by NRAs	Dispute resolution procedures and deadlines	Publication of disputes by NRAs
Albania	 According to Articles 22, 50, 60 and 120 of the Law on Electronic Communications: AKEP shall resolve disputes between undertakings providing electronic communications networks and services. Dispute resolution procedures can be initiated by AKEP, at requests of either party if the undertakings fail to reach an agreement on access and interconnection or joint use of facilities and assets within 45 days from receipt of the request. 	Procedures and deadlines are based on Code of Administrative Procedures that allows a maximum of 3 months for dispute resolution. For access and interconnection disputes, AKEP issues a binding order that has to be implemented by parties within 1 month of the date of the Order. In cases where the undertakings cannot reach an agreement related to the payment/fee for the joint use of the infrastructure and equipments, AKEP, within 30 days from the date of request submission by any either concerned party, shall decide the amount of payment/fee in compliance with the respective regulation approved for this purpose.	All decisions of AKEP shall be published on its website.
Bosnia & Herzegovina	 Disputes between electronic communications network operators and/or providers of services. Notwithstanding the jurisdiction of civil courts, users or interested parties may refer to the NRA complaints that have not been satisfactorily resolved with the telecommunications operator, in particular complaints about the quality of service. The NRA may further specify the types of complaints it will handle and the method used. 	 Law on Communications, Article 16: NRA intervention after 6 weeks of failed negotiations on request of one of the parties NRA issues binding decision within 6 (in exceptional cases 10) weeks from receiving the request However, in practice the NRA tries to use mediation in order to avoid the direct imposition of contractual terms and conditions. 	No There is no obligation in Law on communications for publication of disputes by the NRA.
Montenegro	 Under Article 8 (paragraph 15) of the Law on Electronic Communications, the NRA resolves, in cooperation with institutions in charge of protection of competition and users, disputes arising among the participants in the electronic communications market, i.e.: electronic communications network operators and/or service providers service providers and end users. 	 Articles 20, 33 and 34 of the Law on Electronic Communications: NRA may resolve disputes between electronic communications network operators and service providers applying either mediation or arbitration rules. NRA shall resolve the disputes on access and interconnection and on joint use of infrastructure and facilities, upon the request from one of the parties. NRA must decide on a dispute within 30 days from the day of receiving the request. 	Article 19 (paragraph 5) of the Law on Electronic Communications requires the NRA to publish decisions, taking into account the confidentiality of the business secrets of the parties. Parties in the procedure shall be supplied with the full report on the reasons on which the decision is based.

Country	Type of commercial disputes that can be resolved by NRAs	Dispute resolution procedures and deadlines	Publication of disputes by NRAs
Serbia	 Telecommunications Law, article 9: Disputes between telecommunications operators about interconnection, special access and provision of leased lines. Disputes between operators and end users. 	 Telecommunications Law, article 47: NRA intervention after 3 months of unsuccessful negotiations on request of the parties NRA issues binding decision within 60 days from receiving the request. 	Under Article 47 of the Telecommunications Law, the NRA is required to maintain a database of all its decisions, including complaints relating to those decisions, as well as any other information of importance for the telecommunications sector. This database is available on the NRA website, including dispute resolutions, except confidential parts.
Kosovo	 Law on Telecommunications 2003/16, section 11(2): Disputes involving service providers, end users, owners of land and facilities. Failure to reach an interconnection agreement (Law on Telecommunications, section 56, paragraph 7). 	 Law on Telecommunications 2003/16, section 11(2): 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 providers must comply with the NRA decision within 30 days. NRA issued Regulation on Dispute Resolution in June 2007 (TRA Regulation No183/07 of June 11, 2007. 	No

Table B.7 - Dispute resolution powers of the NRA

7. NRA accountability

Independence needs to be reconciled with measures to ensure that the regulator is accountable for its actions. Such measures may include establishing procedures whereby the NRA performance is reviewed against specific objectives, ensuring that the regulator provides a report of its activities and its use of financial resources.

Table B.8 shows the requirements for:

- publication by the NRA of an action plan setting specific targets and deliverables;
- reporting by the NRA of its activities and the use of financial resources (e.g., annual report); and
- review of the NRA performance by an independent body.

Country	Publication of an action plan	Financial and regulatory reporting requirements	Review of the NRA performance
Croatia	Yes According to Article 14 of the Electronic Communications Act, the NRA's annual work programme along with its annual activity report, annual financial plan and financial statement must be published on the NRA's website.	 According to Article 7 of the Electronic Communications Act, the NRA is accountable to the Parliament for its work. According to Article 13 of the Electronic Communications Act, the NRA is obliged to submit its annual activity report not later than April 30 in the current year on its work during the previous year to the Parliament and to the government. The annual report shall in particular contain: information about fulfilment of objectives and tasks established in the NRA's annual work programme information about the development of the electronic communications and postal services markets 	According to Article 16 of the Electronic Communications Act, the NRA's financial reports shall be subject to annual audit performed by an independent authorized auditor. The NRA shall decide on the selection of the auditor in accordance with special audit regulations.
FYROM	Yes The annual report of the NRA, after its approval by Parliament, shall be available to the public. The report also contains the annual work program for the coming period.	 According to Article 10 of the Law on Electronic Communications, the NRA is responsible for its work before Parliament. The annual report shall in particular contain: Report on the NRA's work during the previous period Annual work program for the coming period Report on the status of assets in the universal service fund and Report on executing the annual financial plan of the NRA. 	The NRA Commission adopts an Annual Financial Plan and submits it to the Parliament for approval. The Annual Financial Plan contains information on the revenues and costs, as well as audits and financial reports for the previous year and the anticipated capital and operational costs for the coming year. The audit is performed by an independent external auditor.
Turkey	Yes According to 'Bylaw on Organizational Structure, Duties and Working Rules and Procedures' and 'Rules and Procedures on Preparation of Work Plans' adopted by the NRA Board, annual work plan for 2009 has been prepared and published as of January 2009 by the NRA (ICTA). The NRA's annual report also sets out activities completed and plans for future activities.	 According to Article 7 of Public Financial Management And Control Law No. 5018, in order to ensure supervision in the acquisition and utilization of all types of public resources, the public shall be informed timely. Accordingly, the following are compulsory: to clearly define the duties, authorities and responsibilities to prepare government policies, development plans, annual programs, strategic plans and budgets; to negotiate them with the authorized bodies; to carry out their implementation and to make the implementation results and the relevant reports available and accessible to the public administrations within the scope of general government, in periods not exceeding one year to establish public accounts in line with a standard accounting system and an accounting order in accordance with generally accepted accounting principles. 	 There are three types of review imposed over the NRA: Judicial Review by Council of State and reporting to the Commission of Planning and Budget under the National Assembly of Turkey. Public (including public, consultations, annual work plans and annual reports) Auditing: Court of Accounts, Inspection Council of Prime Ministry and the State Inspection Council of Presidency of Turkish Republic

Country	Publication of an action plan	Financial and regulatory reporting requirements	Review of the NRA performance	
Albania	Yes The NRA, AKEP, annual report that must be made available to the general public should contain a detailed work programme for the coming year. Under Article 9 of the Law on Electronic Communications (Law No. 9918 of May 19, 2008) AKEP is accountable for its work before the Assembly. At the end of each year the NRA must submit to the Assembly a report on its activities during the year, its financial performance, a work programme for the coming year. According to article 117, of the Law, not later than six months before a financial year starts, AKEP must prepare a forecast of its operational expenses and submit it to the Council of Ministers for approval. AKEP must keep full and accurate accounts of actual expenses, in compliance with the Albanian legislation on accounting. Any amount exceeding the expenses shall go to the state budget.			
Bosnia & Herzegovina	The NRA, RAK, publishes the Telecommunications Sector Policy adopted by the Council of Ministers that contains a detailed action plan on its web site. There are no requirements for publication of an action plan setting specific targets and deliverables for the NRA.	Law on Communications, Article 44 (4), (5): The NRA shall prepare an annual report of its finances and activities, and shall submit it to the Council of Ministers. The Council of Ministers shall consider the Agency's annual report and publish it not later than four months after the end of each financial year.	The use of funds by the NRA shall be subject to review by the Supreme Audit Institution and in addition audited by an independent auditor every year.	
Montenegro	Yes Article 13 of the Law on Electronic Communications requires the NRA to submit for the government approval before November 1 of each year its financial plan and a work programme for the next calendar year. The financial plan must be also submitted for the Assembly approval before Dec. 1 of each year. The financial plan and the work programme must be made public.	Article 16 of the Law on Electronic Communications requires the NRA to prepare an annual report on its activities together with its financial report. The reports must be approved by the government and published on the NRA's website.	Annual audit procedure of the NRA financial statements by an independent authorised auditor, appointed by the government, is defined in Article 14 of the Law on Electronic Communications.	
Serbia	Yes The NRA publishes an action plan on its web site at the beginning of each year. On Jan. 15, 2009 the government adopted the Action Plan for implementation of the National Strategy for Development of Telecommunications. The Action plan defines priorities for liberalisation of Serbian	 Article 20 of the Telecommunication Law requires the NRA to prepare and to submit to the Government and to the National Assembly an annual report (including financial statements) on its activities, and in particular: the development of telecommunications the implementation of tariff policy principles pertaining to regulated services the progress in realization of universal service, including an assessment of the degree to which users' needs have been satisfied; and the allocation and assignment of radio frequencies for civil use. 	According to the Article 18 of the Telecommunication Law the financial plan of the NRA shall be approved by the Government. The financial plan shall be published in the manner stipulated by the Statutes of the Agency. The Agency shall have all of its revenue and expenditure accounts audited annually by an authorized independent auditor. The audited accounts shall be published not later than	

Country	Publication of an action plan	Financial and regulatory reporting requirements	Review of the NRA performance
	telecommunications until 2010 and the responsibilities of mainly the Ministry of Telecommunications and Information Society and RATEL, the NRA.	 The NRA must also make public, in the manner stipulated in the statutes, the following: annual report (including financial statements) for each year financial plan for each year information on the allocation and assignment of radio frequencies information on public tenders for licenses, including the main terms and conditions information about licences granted decisions taken on licenses and concluded interconnection contracts information and/or decisions pertaining to special tariff regimes and/or tariff policy, including changes in tariffs for regulated services; and decisions on the numbering plan. 	three months after the end of the relevant fiscal year. The NRA (RATEL) is established under the Telecommunications Law. The Ministry for Telecommunications and Information Society supervises the implementation of the Law and regulations adopted on the basis of this Law (Article 6 of Telecommunications Law).
Kosovo	In June 2007, Telecommunications Sector Policy, proposed by the Ministry of Transport and Communications was approved by the government. This document provides a provisional timetable for the implementation of the various telecommunications tasks, mostly for 2007-2008. In the government of Kosovo's Telecommunications Sector Policy, Section 3.5.d1, " the TRA is directed to develop a realistic Action Plan to address the instances where previously mandated timelines and milestones have not been met and to revise associated timelines and milestones."	Article 5 of the Law on Telecommunications requires the NRA, TRA, to submit its budget proposal for review and approval by the Assembly not less than two months prior to the commencement of each fiscal year. Not later than six months after the close of each fiscal year, TRA shall prepare and deliver to the Assembly an annual report containing financial details pertaining to the activities of TRA for the preceding year. An electronic version of such report shall be posted on TRA's official website. Under articles 16 and 17 of the Law on Telecommunications, TRA is required to submit on annual basis to the Assembly a report, covering the market entry barriers and competition conditions in the telecommunications sector and technical barriers to full conformity with the EU standards (mainly addressing spectrum and numbering aspects).	Review of the NRA accounts by the Supreme Audit Institution and in addition by an independent auditor, every year.

Table B.8 - NRA regulatory and financial reporting requirements and review procedures

Notes: Serbia

The financial plan for 2009 has not been approved by the government. It was the same situation with the financial plan for 2008 and RATEL was operating without formal approval of the financial plan by the government.

8. Appeal procedures

Article 4 of the Framework Directive sets out a requirement for effective mechanisms enabling any party affected by an NRA decision to submit an appeal against the decision to a body that is independent of the parties involved. It sets out a similar requirement of independence for the appellate body as exists for the NRA itself. The Article also establishes requirements for the appeal mechanism:

- The appellate body may be a court or a non-judicial body. In the latter case, the second appeal instance must be a court or a tribunal.
- An appeal of the NRA decision shall not automatically suspend the application of the appealed decision.
- The appeal body must be able to consider the merits of the case and not only procedural matters.

The timeframe for an appeal is important given the uncertainty and potentially retroactive effects.

Table B.9 provides an overview of the national appeal mechanisms against NRA decisions.

Country	Appellate body	Automatic suspension of the NRA decision on appeal?	Can the appellate body rule on merits of a case?	Third party rights of appeal?	Average duration of an appeal procedure
Croatia	Administrative Court	No	Yes	Yes, if it can prove that it has a legal interest in the case	5 years A party can appeal the NRA's decision within 30 days from the date of receipt of the decision. There is no time limit for appeal procedure set by law.
FYROM	Administrative Court Following amendments to the Law on Electronic Communications of August 19, 2008, the Commission of the AEC is no longer the first instance appeal body for decisions of the Director of the AEC. The decisions of the Director are now final in the administrative procedure and can only be appealed to the Administrative Court.	No Upon complainant's request, AEC may suspend the appealed decision pending a court final decision, in particular, if irreparable harm could be caused to the complainant by its enforcement. Suspension must be issued not later than within 3 days from the receipt of the request.	No, the appeal body can only judge the correct application of the laws and applicable bylaws and the procedure.	Yes, if it can prove that it may be directly harmed by an annulment of the disputed decision.	According to article 20 of the Law on Administrative Disputes of May 19, 2006, a party can appeal the NRA decision within 30 days from the date of receipt of the decision. There is no time limit for appeal procedure set by law.

Country	Appellate body	Automatic suspension of the NRA decision on appeal?	Can the appellate body rule on merits of a case?	Third party rights of appeal?	Average duration of an appeal procedure
Turkey	 Council of State: According to Article 62of the Electronic Communications Law, appeals against ICTA decisions related to the sector can be brought to the Council of State within 60 days from the announcement of the decisions. Administrative Court: According to Article 61 of the Electronic Communications Law, appeals against the decisions of ICTA on the administrative fines can be brought to the Administrative fines can be brought to the Administrative court within 60 days from the announcement of decisions Licence Coordination Board: Disputes on concession agreements could be brought before the Licence Coordination Board, which is established separately for each agreement and composed of the representatives of the NRA and the operator concerned. The decisions of the Licence Coordination Board are not binding but advisory. 	No Only upon complainant's request, the court may suspend the appealed ICTA decision	Yes	Yes, if it can prove that it has a legal interest in the case.	According to article 7 of the Law on Administrative Justice Procedure, a party can appeal the NRA's decision within 60 days from the date of receipt of the decision. There is no time limit for appeal procedure for decisions of Licence Coordination Board.
Albania	 Article 136 of the Law on Electronic Communications (Law No. 9918 of May 19, 2008): An administrative appeal, e.g. against the fine imposed by the NRA inspectors, may be filed to AKEP Governing Council within 10 days from the date of its imposition AKEP Governing Council decisions may be appealed to Albanian Court of First Instance (Tirana District Court) 	 Yes – when an administrative appeal is made to AKEP Governing Council, the decision is suspended for 30 days within which AKEP must take a definitive decision No – when the appeal is submitted to the Court 	Yes	Yes	 AKEP Governing Council must decide on an appeal within 30 days from the appeal date. AKEP Governing Council decisions must be appealed to the Court within 30 days from the decision date. There is no deadline defined for the appeals to the First instance Albanian Courts. In practice, the procedures in the Court can take several years.

Country	Appellate body	Automatic suspension of the NRA decision on appeal?	Can the appellate body rule on merits of a case?	Third party rights of appeal?	Average duration of an appeal procedure
Bosnia & Herzegovina	 Article 47 of the Law on Communications: An administrative appeal against decisions of the Director General may be filed to the Council of RAK Decisions of the Council of RAK may be appealed to the State Court of Bosnia & Herzegovina 	 No Appeals against decisions of the Director General shall not suspend their effect. RAK decision stands pending the Court's final decision unless suspension is granted by RAK upon complainant's request. If no suspension is issued by RAK, the complainant may appeal for suspension to the court. 	Yes	Yes, if it can prove that it may be directly harmed by an annulment of the disputed decision.	 Council of RAK decides on an appeal within 30-60 days, depending on its scheduled sessions. According to article 19 of the Law on Administrative Disputes, RAK decisions must be appealed to the Court within 60 days from the decision date. There is no deadline defined for the appeals to the Court. In practice, the procedures in the Court can take several years.
Montenegro	 Article 19 of the Law on Electronic Communications of July 29, 2008: An administrative appeal against decisions of the NRA may be filed to the Ministry of maritime affairs, transportation and telecommunications Decisions of the Ministry can be appealed to the Supreme Administrative Court 	No Appeals against decisions of the NRA shall not suspend their effect.	Yes	Yes, if it can prove that it has a legal interest in the case.	 According to the Law on General Administrative procedure, an appeal against the f the NRA decision may be filed with the Ministry not later than within 15 days from the date of receipt of the decision. The Ministry must decide on an appeal within 2 months from the appeal date. There is no deadline defined for the appeals to the Court. In practice, the procedures in the Court can take several years.
Serbia	 Article 7 of the Law on Telecommunications: An administrative appeal against the NRA decisions may be filed to the Managing Board of RATEL Decision of the Managing Board of RATEL may be appealed to the Supreme Court 	No Upon complainant's request, a suspension can be granted either by RATEL or by the Court.	Yes	Yes, if it can prove that it has a legal interest in the case.	On average, more than one year.

Country	Appellate body	Automatic suspension of the NRA decision on appeal?	Can the appellate body rule on merits of a case?	Third party rights of appeal?	Average duration of an appeal procedure
Kosovo	 Article 11 of the Law on Telecommunications: An administrative appeal against the NRA decisions may be submitted to the Managing Board of TRA for reconsideration Decision of the Managing Board of TRA may be appealed to the Administrative Court 	Yes	Yes The appeals body can rule both on the merits of the case and on the correct application of the law.	Yes, if it can prove that it has a legal interest in the case.	More than one year.

Table B.9 - Appeal procedures against NRA decisions

9. NRA transparency and participation

Article 3 of the Framework Directive requires NRAs to exercise their powers impartially and transparently. Lack of transparency undermines legal certainty and increases the potential for political interference. Furthermore, according to the commitment to participation, regulatory processes should allow formal consultation of the stakeholders before decisions are made.

Table B.10 examines the transparency of the NRA decision-making process and the ability of all stakeholders to contribute to decision-making. The criteria for assessing the NRA transparency include:

- the existence of a consultation process and the scope of the covered decisions or issues of general interest;
- the time given for comments;
- the existence of a period for reply comments; and
- the obligation to publish adopted decisions with a reasoned opinion.

Country	NRA policies for public consultations on specific decisions	Time period for comments	Publication of the NRA decisions
Croatia	Article 22, Electronic Communications Act of June 19, 2008 (Official Gazette 73/2008) Public consultation procedure is foreseen before adopting implementing legislation, NRA decisions and other administrative acts with significant influence on the relevant market, as well as the NRA Statute, the annual financial plan and work programme.	Not less than 30 days	Yes, on the NRA website
FYROM	Article 105, Law for Electronic Communications requires the NRA prior to recommending regulations or adopting regulations to publish the proposed instrument and seek the submission in writing of opinions from all interested parties. These must be published prior to adoption of the measure.	Not less than 30 days	Yes, on the NRA website
	AEC may also hold public hearings on proposed regulations, at which representatives of interested parties may be invited to present their views and opinions.		

Country	NRA policies for public consultations on specific decisions	Time period for comments	Publication of the NRA decisions	
Turkey	During preparation of legislation, public consultation process is completed through publishing drafts on the web site of ICTA and arranging discussions with relevant parties. * The responses are published and taken into consideration by the NRA. Draft legislation is also published on the website.	Usually 30 days	In accordance with the Article 6(ç) of the Electronic Communications Law no: 5809, Information and Communications Board's decisions those concern the operators and consumers are publicly available on the website of ICTA	
Albania	Inia Article 35, Law on Electronic Communications (Law No. 9918 of May 19, 2008 requires AKEP to conduct the public consultation with the interested parties regarding the conclusions reached on market designation and market analysis. Article 110 contains a general requirement for AKEP to consult on regulatory documents and decisions that will significantly influence electronic communications market. If necessary, AKEP may also hold a public hearing inviting representatives of the interested parties to present their opinions on the proposed regulatory documents. After the expiry of the consultation period, AKEP shall make publicly available the obtained opinions, keeping the confidentiality of information.		All decisions of AKEP shall be published on AKEP website. Currently only AKEP decisions related to internal issues/procedures of AKEP are not published.	
Bosnia & Herzegovina	Article 38 of the Law on Communications requires RAK to publish its draft regulations (rules) for consultation.	At least 14 days	Official Gazette and the NRA's website	
Montenegro	Article 8 of the Law on Electronic Communications requires the NRA to carry out open consultative procedures allowing all interested parties to comment on the initiatives, measures, decisions and the acts prepared, proposed or adopted.	Usually 3 months	Yes, on the NRA website	
Serbia	On Aug. 28, 2007 the Managing Board of RATEL adopted guidelines for public consultation procedures for adoption of its regulations.	15 to 30 days	All regulations are published in the Official Gazette, and all other decisions are published on the NRA's web site.	
Kosovo	The NRA may initiate public consultation on all substantive telecommunications matters, either on its own initiative or upon the written request from the Ministry (Law on Telecommunications, section 10(1)).	30 days	Yes, on the NRA website	

Table B.10 - Transparency and participation in the NRA decision-making

10. Frequency management

Table B.11 provides information on the bodies which are responsible for:

- frequency allocation, including the decision on the national frequency plan; and
- frequency assignments, covering individual authorisations to use frequencies in the national frequency plan. Frequencies for the military sector are normally decided outside this framework.

Country	Frequency allocation	Frequency assignment	Legal basis
Croatia	Ministry of the Sea, Transport and Infrastructure (on the basis of a proposal by the NRA)	Croatian Post and Electronic Communications Agency (HAKOM, the NRA)	Articles 81-82, Electronic Communications Act of June 19, 2008 (Official Gazette 73/2008)
FYROM	Agency for Electronic Communications (AEC, the NRA)	Agency for Electronic Communications (AEC, the NRA)	Law on Electronic Communications, Chapter 6 Plan of radio frequency band allocations (No.13/70, December 28, 2005) Plan of radio frequency assignments and utilisation (No. 11-123/1, 09.10.2007)
Turkey	Information Technologies and Communications Authority (ICTA, the NRA)	 Information Technologies and Communications Authority (ICTA) assigns spectrum for telecommunications. ICTA allocates frequency blocks for broadcasting to the Radio and Television Supreme Council (RTUK). RTUK assigns spectrum to individual broadcasters 	Law on Electronic Communications No. 5809 of November 5, 2008
Albania	National Frequency Plan is adopted by the Council of Ministers, upon the proposal of the Minister in charge for the sector. Development of the National Frequency Plan is done by the Minister in charge for the sector in cooperation with other institutions in charge stipulated in point 3, Article 62 of the law.	 Albanian Authority of Electronic and Postal Communications (AKEP, the NRA) – for frequencies allocated to civil purposes, with the exception of broadcasting. AKEP develops the frequencies utilization plan, for the frequencies under its administration, prepared in compliance with the National frequency plan. National Radio and Television Council (KKRT) – for frequencies allocated to broadcasting. 	Article 62-64 of Law on Electronic Communications (Law No. 9918 of May 19, 2008)
Bosnia & Herzegovina	Communications Regulatory Agency (the NRA)	Communications Regulatory Agency (the NRA)	Articles 30-32of Law on Communications, Official Gazette of Bosnia & Herzegovina No 31/03 of October 21, 2003,
Montenegro	Government of Montenegro (on the basis of a proposal of the NRA to the Ministry)	Agency for electronic communications and postal services (the NRA) Under the new Law on Electronic Communications of July 29, 2008 the Agency for electronic communications and postal services, the NRA was made the sole authority responsible for spectrum assignment, including electronic communications and broadcasting.	Articles 4 and 8 of Law on Electronic Communications of July 29, 2008 (Official Gazette No. 50/2008)
Serbia	Ministry of Telecommunications and Information Society decides on the frequency allocation plan and adopts frequency assignment plan (on the proposal of the Republic Telecommunication Agency, the NRA)	Republic Telecommunications Agency (RATEL, the NRA)	Telecommunication Law (Official Gazette of Republic of Serbia, No 44/03 and 36/06) and Frequency Allocation Plan (Official Gazette of Republic of Serbia, No 112/04)

Country	Frequency allocation	Frequency assignment	Legal basis
Kosovo	TRA, subject to review and approval by Kosovo Assembly	 TRA for telecommunications TRA in coordination with Independent Media Commission (IMC) for broadcasting 	Articles 22 and 36 of Law on Telecommunications Law No. 03/L-085 of June 13, 2008 amending UNMIK Regulation No 2003/16 on the promulgation of the Law on Telecommunications deletes references to UNMIK and its Frequency Management Office (FMO) and SRSG (Special Representative of the Secretary General).

Table B.11 - Frequency allocation and assignment

11. Regulatory framework for broadcasting networks

The EU 2002 *acquis communautaire* brought all forms of electronic communications networks under the same regulatory framework. This was driven by the convergence of new digital technologies so that all forms of networks, including broadcasting networks, can compete for the delivery of voice, data, and Internet services, as well as radio, and television broadcasting content. 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.

Table B.12 shows whether the spectrum assignments for broadcasting networks are covered by the same regulatory framework as electronic communications, listing:

- the authorities involved in regulating broadcasting content;
- the legal basis for broadcasting regulations; and
- whether frequency assignments for broadcasting are carried out by the same authority as for electronic communications.

Country	Broadcasting authority responsible for content issues	Legal basis	Which authority responsible for frequency assignments to broadcasting	Cooperation agreement between NRA and broadcasting authority? (e.g. on spectrum issues, licensing, etc.)
Croatia	Council for Electronic Media	Law on Electronic Media, Official Gazette No. 122, July 30, 2003	HAKOM, the NRA	No
FYROM	National Broadcasting Council	Law on broadcasting activity of November 29, 2005 Law amending and supplementing the Law on broadcasting activity of February 12, 2007	AEC, the NRA	Yes Memorandum for cooperation signed in Oct. 2007
Turkey	Radio and Television Supreme Council (RTUK)	Law on the Establishment of Radio and Television Enterprises and Their Broadcasts No.3984 of April 20, 1994 (with amendments)	ICTA, the NRA, allocates frequency blocks for broadcasting to RTUK. RTUK assigns spectrum to individual broadcasters	Yes Protocol on determination of the areas of competencies, responsibilities and co- operation signed on March 24, 2006

Country	Broadcasting authority responsible for content issues	Legal basis	Which authority responsible for frequency assignments to broadcasting	Cooperation agreement between NRA and broadcasting authority? (e.g. on spectrum issues, licensing, etc.)
Albania	National Radio and Television Council (KKRT)	Law on Radio and Television No. 8410 of September 30, 1998 (with amendments)	AKEP, the NRA allocates the block of broadcasting frequencies to National Radio and Television Council (KKRT). KKRT assigns broadcasting spectrum to individual broadcasters, although they must apply to AKEP for spectrum for transmission links between sites.	Νο
Bosnia & Herzegovina	Communications Regulatory Agency (RAK)	Law on Communications (Official Gazette No. 33/02, November 12, 2002)	RAK, the NRA	RAK is a converged regulator, responsible for telecommunications and broadcasting
Montenegro	Broadcasting Agency (ARD)	Broadcasting Law of April 2004	Broadcasting Law of April 2004 Under the Law on Electronic Communications of July 29, 2008, the Agency for electronic communications and postal services, the NRA is the sole authority responsible for spectrum assignment.	
Serbia	Republic Broadcasting Agency (RRA)	Broadcasting Law of July 2002 (with amendments)	RATEL, the NRA	There is a protocol between the two agencies which defines the process of issuing the permits for broadcasters, and the process for their subsequent control.
Kosovo	Independent Media Commission (IMC)	Law on Independent Media Commission and Broadcasting of 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.	No

Table B.12 - Regulatory treatment of broadcasting networks

Notes: FYROM:

The Broadcasting Council grants a licence to broadcast on the basis of a public competition. The licence is an authorization providing the right to transmit and to distribute a radio or television programme service intended for public reception, regardless of the technical means of transmission. The NRA, on the basis of the decision to grant a broadcasting licence issues a licence for the use of the radio frequency.

12. Digital switchover plans

After the switching off of terrestrial analogue television services, the frequencies will be released and allocated to other applications. Table B.13 shows:

- the planned date for the analogue switch-off;
- whether the review/consultation on the digital dividend (DD) has been launched;

- what, if any, are the applications "officially" intended to be allocated DD frequencies; and
- comments on national debate and on spectrum refarming costs and complexity.

Country	Date for analogue switch-off	Review underway	Applications to benefit from DD	Comments
Croatia	Oct. 31, 2010	No	 UHF band: DVB-T (more SDTV content, introduction of HDTV content), DVB-H, and electronic communications services in upper UHF band VHF band: DVB-T, DVB-H, T- DAB or DMB 	On July 31, 2008 the Government adopted the Strategy for switchover from analogue to digital TV broadcasting.
FYROM	2012	No	Frequencies in the 790-860 MHz band are allocated to fixed broadcasting and land mobile service.	The Broadcasting Council on Nov. 27, 2007 adopted the Strategy for the Development of the Broadcasting in the Republic of Macedonia for the period 2007- 2012. The switchover from analogue to digital TV broadcasting was to begin in 2008 and to be completed by 2012. The Council and AEC created a joint body and developed the procedure for awarding the first multiplexes. After the public tender procedure, in June 2009, 3 MUXs are assigned to Cosmofon (now owned by Telekom Slovenije). The commercial start of DVB-T is Nov. 15, 2009. The switchover from analogue to digital TV broadcasting has to be finished in 2012,
				but it is still not confirmed in the Law (it is possible to be 2015).
Turkey	2014	No	In the beginning, most likely DVB-T; in the future, mobile services, mobile DVB-H and interactive services.	On March 2005, the Radio and Television Supreme Council adopted the Strategy and Application Schedule for switchover from analogue to digital TV broadcasting. Final decision will be taken after ITU WRC-2011. Currently, trials for DVB-T broadcasting have been launched in the big cities.
Albania	No decision 2012 (proposed)	No	-	The draft strategy for digital switchover prepared by National Council of Radio Television is under public consultation.
Bosnia & Herzegovina	Dec. 31, 2011	No	-	DTT Forum was established in May 2006 for drafting the strategy. Following a public consultation completed in February 2009, the draft Strategy for analogue to digital switchover was submitted to the Council of Ministers for approval on March 17, 2009.
Montenegro	Dec. 31, 2012	No	DVB-T, interactive services	On April 10, 2008 the Council of the Broadcasting Agency adopted a strategy for switchover from analogue to digital broadcasting systems.
Serbia	April 4, 2012	No	The decision will be made after the digital switchover.	In July 2009 the government adopted Strategy for switchover from analogue to digital TV broadcasting
Kosovo	2012	No	Most likely DVB-T, mobile DVB-H and interactive services	No information has been released. It is under discussion at the Parliamentary Commission on Media in association with the new draft law on Digital Transmission.

Table B.13 - Digital switchover plans

13. Cooperation between NRA and the national competition authority

The EU 2002 *acquis communautaire* for electronic communications was intended to apply during the transition from a regulated monopoly to normal competition, governed only by general competition law. Sector specific ex ante regulation and competition law serve as complementary instruments to achieve their respective policy objectives in the electronic communications sector and to address the lack of effective competition. At the same time, a principle underlying the regulatory framework is that ex ante regulation should only be imposed where competition law remedies would be insufficient and rolled back when they are no longer required.

Furthermore, the use of sector specific regulation, when it is found to be justified, relies extensively on the competition law principles in defining relevant markets that are susceptible to ex ante regulation, in assessing market dominance and in formulating remedies to address anticipated competition law breaches.

NRAs are advised to consult with their national competition authorities (NCAs) when deciding whether the use of both complementary regulatory tools is suitable to deal with a specific topic, or whether competition law instruments are sufficient. NRAs are also required to carry out analysis of the relevant markets in close collaboration with NCAs. In a practical application, it is considered advisable for both authorities to conclude an agreement covering the scope of their cooperation in the electronic communications sector and the division of specific responsibilities.

Country	Competition authority	Formal agreement between NRA and Competition Authority
Croatia	Croatian Competition Agency (CCA)	On July 14, 2006 CCA and the NRA concluded an agreement on co-operation in the area of competition law in telecommunications markets. Under the 2003 Telecommunications Law, certain activities were excluded from the jurisdiction of the CCA. Determining the existence of a dominant position and any abuse of dominance in telecommunications markets is the exclusive responsibility of the NRA. However, CCA remains responsible for anti-competitive agreements between undertakings and merger control in telecommunications markets. In order to eliminate any possible conflict of jurisdiction, the agreement specifies the methods of communication and coordination between the two authorities. According to the Electronic Communications Act of 2008, HAKOM and CCA cooperate in the assessment of mergers and anti-competitive agreements between operators under article 68 and in the market analysis procedure under article 52.
FYROM	Commission for Protection of Competition	The NRA and the Commission for Protection of Competition signed a Memorandum of Cooperation in February 2007. The Commission for Protection of Competition is responsible for enforcing the Law on Protection of Competition (Official Gazette No. 04/05) in general, including the electronic communications sector. Makedonski Telekom, however, expressed concerns over the lack of coordination between ex ante measures imposed by the NRA and ex post regulation of the same wholesale products by the NCA, in particular regarding its reference wholesale offer for leased lines.
Turkey	Competition Authority	There is no formal agreement, but article 6 of the Electronic Communications Law of November 5, 2008 contains provisions clarifying the cooperation between the two authorities. In particular, ICTA, the NRA is required to take the opinion of the Competition Authority on the issues regarding the breach of competition in electronic communications sector. Besides, the law also states that the Board of the Competition Authority while performing examinations and studies and making any decisions on electronic communications sector, including decisions about mergers and takeovers, must take into consideration the ICTA's view and the regulatory procedures of the ICTA.
Albania	Competition Authority (established in February 2004, under the Law No. 9121 of July 28, 2003 on Protection of Competition)	Memorandum of Understanding was signed between the NRA and the Competition Authority under the previous Telecommunications Law. Cooperation is also foreseen under the provisions of Articles 12 and 38 of the new Electronic Communications Law. A new memorandum is now being prepared.

Table B.14 examines the degree of cooperation established between NRAs and NCAs.

Enlargement	Countries	Monitoring	Report	III – March 2010

Country	Competition authority	Formal agreement between NRA and Competition Authority
Bosnia & Herzegovina	Competition Council of Bosnia & Herzegovina	No
Montenegro	Department for the Protection of Competition (established in November 2007)	No Cooperation between the NRA and the Competition Authority is foreseen under article 8 (15) of the Law on Electronic Communications.
Serbia	Competition Commission	No The Competition Commission was created by the Law on the Protection of Competition (Official Gazette, No. 79/05). Article 10 of the Telecommunications Law states that the NRA is authorized to prevent anti-competitive or monopolistic activities and behaviour of public telecommunications operators, unless they are subject to procedures conducted by the Competition Commission.
Kosovo	Kosovo Competition Commission (established on November 7, 2008)	No

Table B.14 - Cooperation between the NRA and the competition authority

C. Market access conditions in electronic communications

The information in this section reflects the situation as at May 1, 2008, except where otherwise stated.

This section provides information on the status of liberalisation and on the frameworks for authorisations for:

- public fixed telecommunications networks;
- voice telephony services;
- data services.

It also provides an overview of competition in the fixed and mobile markets.

1. Liberalisation of public fixed telecommunications networks and services

Table C.1 summarises the legal framework for the liberalisation of public fixed telecommunications networks and services in three markets:

- local;
- domestic long distance; and
- international services.

Practical implementation can be assessed, for example, by the number of licensed operators and by the distribution of numbering resources shown in Table A.10, Figure 18 and Table A.11.

Country	Liberalisation of public fixed voice telephony networks and services			Legal basis/comment
	Local	Local Domestic long distance International		
Croatia	Liberalised from January 1, 2003	Liberalised from January 1, 2003	Liberalised from January 1, 2003	Telecommunications Act of 2003 Electronic Communications Act of June 19, 2008 introduced a general authorisation regime for all types of service.
FYROM	Liberalised from March 2005	Liberalised from March 2005	Liberalised from March 2005	Law for Electronic Communications of March 2005 (with amendments) introduced full liberalisation and general authorisation regime for all types of service.
Turkey	Liberalised from May 2009	Liberalised from January 2004	Liberalised from January 2004	Law No. 4502 of January 29, 2000, abolished and replaced by the new Electronic Communications Law No. 5809 of November 10, 2008. Provisions on the new authorisation regime with full liberalisation of local services entered into force on May 10, 2009.

Country	Liberalisation of public fixed voice telephony networks and services			Legal basis/comment
	Local	Domestic long distance	International	
Albania	Rural areas: liberalised from	Liberalised from July 2003	Liberalised from January 2005	Law No. 8287 of February 18, 1998 liberalised rural local network provision. This was replaced by Law No. 8618 of June 14, 2000.
	February 1998.			Council of Ministers Decision No. 464 of July 3, 2003 liberalised domestic long-distance and international services.
	Urban areas: liberalised from April 2007, through regional			Law No. 9637 of November 6, 2006 introduced the concept of regional licensing for rural and urban areas, for both local and domestic long-distance services, in effect completing liberalisation. The NRA adopted the implementing rules on April 2, 2007.
	licences			In practice, no alternative operators were licensed to provide either international or local urban services.
				Law No. 9918 of May 19, 2008 on Electronic Communications in the Republic of Albania introduced a general authorisation regime for all types of service.
Bosnia & Herzegovina	Liberalised from July 1, 2002	Liberalised from July 1, 2002	Liberalised from January 1, 2006	Telecommunications Sector Policy approved by Council of Ministers in March 2002.
Montenegro	Liberalised from January 1, 2004	Liberalised from January 1, 2004	Liberalised from January 1, 2004	Telecommunications Law of 2000 (Official Gazette No. 59/2000).
Serbia	Formally liberalised from June 9, 2005	Formally liberalised from June 9, 2005	Formally liberalised from June 9, 2005	Articles 32 and 109 of Telecommunication Law of April 2003 granted Telekom Srbija exclusive rights for all fixed services until June 9, 2005. A public tender for the award of one licence for public fixed telecommunications networks and services for the territory of the Republic of Serbia was launched in November 2009.
Kosovo	Liberalised from May 2003	Liberalised from May 2003	Liberalised from January 2008	Liberalisation formally introduced by Law on Telecommunications (UNMIK Regulation 2003/16) of May 2003. The licensing framework was implemented in 2006, following the approval of Regulation on Licensing and Authorisations by TRA Board decision of September 7, 2005.

Table C.1 - Liberalisation of public fixed telecommunications networks and services

2. Liberalisation of data networks and services

Table C.2 shows the status of liberalisation of data networks and services.

Country	Liberalisation status for data networks and services		Legal basis
	National International		
Croatia	Liberalised from 1999	Liberalised from 1999	Law on Telecommunications of 1999 (Official Gazette No. 76/99)
FYROM	Liberalised from February 1998	Services – Liberalised from February 1998	Articles 23, 24 and 25 of the Telecommunications Law of 1996 (Official Gazette Nos. 33/96, 17/98, 28/2000, 4/2002 and 37/2004).
		Networks – Liberalised from April 2000	Until April 2000 there was a requirement to use international leased lines from the incumbent operator.

Country	Liberalisation status for	data networks and services	Legal basis
	National	International	
Turkey	Services – Liberalised from June 1994	Services – Liberalised from June 1994	Article 2/c, Telegram and Telephone Law No. 406 of February 4, 1924, abolished and replaced by the new Electronic Communications Law no 5809 of November 10,2008
	Networks – Liberalised from January 2004	Networks – Liberalised from January 2004	
Albania	Liberalised from 1998	Liberalised from 1998	Article 4, Law No. 8287 of February 18, 1998
Bosnia & Herzegovina	Liberalised from July 1, 2002	Liberalised from July 1, 2002	Telecommunications Sector Policy approved by Council of Ministers in March 2002
Montenegro	Liberalised from January 1, 2004	Liberalised from January 1, 2004	Article 27 of the Telecommunications Law of 2000 (Official Gazette No. 59/2000)
Serbia	Services – April 2003 Networks – June 2005	June 2005	Articles 32 and 109 of Telecommunication Law of April 2003 granted Telekom Srbija exclusive rights for all fixed services until June 9, 2005, except for Internet and Cable TV services. Until June 9, 2005 there was a requirement to use international leased lines from the incumbent operator.
Kosovo	Liberalised from May 2003	Services - May 2003 Networks – January 2008	First ISP authorisations issued to Dardanet (PTK subsidiary), IPKOnet and Kujtesa on May 18, 2005 at one-off fees of €150,000.
			The present authorisation framework (with a €5,000 one-off licence fee) implemented in 2006 following the approval of Regulation on Licensing and Authorisations by a TRA Board decision of September 7, 2005.

Table C.2 - Liberalisation of data networks and services

3. Authorisation regime for electronic communications services

Article 3 of the Authorisation Directive establishes a general authorisation regime for the provision of electronic communications networks and services. Undertakings may only be required to notify the intention to commence the provision of electronic communication networks or services and to submit information required to allow the NRA to keep a register or list of providers. There is no requirement to obtain an explicit decision by the NRA before starting activities. Individual rights of use may be required, however, for the use of radio frequencies and numbers. Article 5 of the Authorisation Directive establishes that EC member states should grant such rights upon request, also ensuring an efficient use of those resources.

The provision of electronic communications networks and services, under either a general authorisation or an individual licence, may be subject to authorisation fees. In many countries, such fees were often quite high in the period immediately after the ending of monopoly rights. This level of fees may have been triggered by the perception that the telecommunications sector represented an easy source of revenues for the state, as much as protection of the state-owned incumbent operator. Regardless of the purpose, high authorisation fees are a barrier to market entry and send a signal that the market is not yet fully liberalised.

The EU regulatory framework requires authorisation fees to be limited to a level necessary to cover the administrative costs of the regulatory authority. Only those fees that are paid for access to limited resources may deviate from this criterion. In practice, the exceptions are for:

- radio frequencies, where demand exceeds supply;
- numbers. Normally, the national numbering plan must be managed so that there are enough numbers for all operators. Since the potential numbering
 space available is unlimited, the only limited resource in the longer term is special short numbers represented by a limited number of digits. The other
 constraint is the disruption caused by the need to change existing numbers;
- rights of way. In theory, these can be a limited resource under certain circumstances but normally, the availability of land and rights of way does not represent a limited resource.

Table C.3 describes the authorisation regimes, including:

- authorisation types defined in the national legislation: individual authorisation/licence; class licence, general authorisation with/without notification to the NRA;
- networks and services covered by the specific authorisation type;
- authorisation charges or other administrative fees paid by authorised undertakings (one-off and annual fees);
- authorisations to use limited resources such as spectrum and numbers are not covered in this table. However, where mobile networks are subject to specific authorisation requirements (e.g., spectrum licence plus individual authorisation to offer public services), they are listed as a separate authorisation type.

Five countries, including Croatia, FYROM, Montenegro, Albania, and Turkey have adopted a general authorisation regime for provision of electronic communications networks and services with a notification to the NRA, and only issue individual rights of use for limited resources, such as frequencies and numbers. In Turkey, the adoption of the new Electronic Communications Law introduced a new framework, based on a general authorisation regime, which formally entered into force on May 10, 2009. However the concession and authorisation agreements awarded before the adoption of the new Law will be valid until their expiration or termination.

The remaining countries still require the granting of individual or class licences for the provision of most types of electronic communications services and networks.

Country	Authorisation type:	Networks/services	Authorisation charges and administrative fees	
			One-off fees	Annual fees
Croatia	General authorisation with notification to the NRA	All electronic communications services and networks, including public telecommunications services in fixed and mobile networks, leased lines, cable TV services and PMR services, Internet access, VoIP, value added services and wireless access.	None	0.32% of annual revenue

Country	Authorisation type:	Networks/services	Authorisation charges and administrative fees		
			One-off fees	Annual fees	
FYROM	General authorisation with notification to the NRA	Public electronic communications services without use of spectrum	None	 Annual market supervision fees are up to 0.5% of annual gross revenues earned from the provision of public electronic communications networks and services. However, the fee may not exceed €250,000. Based on the total annual revenue, providers are divided into 5 categories: Up to MKD 1m (€16,348) - 0.07% MKD 1m - MKD 10m (€16,348 - €163,477) - 0.14% MKD 10m - MKD 100m (€163,477 - €1.63m) - 0.21% MKD 100m - MKD 500m (€1.63m - €8.17m) - 0.28% Above MKD 500m (€8.17m) - 0.35% 	
Turkey	General authorisation with notification to the NRA	All electronic communications services and networks, including satellite communications and satellite platform services, infrastructure operating services, internet service provision, fixed telephony services, wired broadcasting services, GMPCS mobile telephony services, MVNO services, GSM 1800 services for air vehicles, PMR/PAMR services, directory information services, GSM and IMT-2000/UMTS services, broadband wireless access services.	None	Administrative fee: 0.35% of annual net sales	
	Authorisation agreements	Operators with more than 50% state ownership: One authorisation agreement in force: Turksat (satellite operator)	None	Administrative fee: 0.35% of annual net sales	
	Concession agreements	Public telecommunications services and infrastructure using spectrum and numbers and which are national in scope Seven concession agreements in force: Turk Telekom, three for GSM services and three for UMTS/IMT-2000 services	Determined through a public tender procedure	Administrative fee: 0.35% of annual net sales	
	Operators who were aut and assigned the rights	isation regime was introduced on May 10, 2009 under horised under the previous regime through an individu of use when required. On the other hand, authorisation until their termination due to expiry (i.e. until 2029), an	al licence or a general authorisation will b n and concession agreements, which were	e regarded as having been notified to ICTA	

Country	Authorisation type:	ype: Networks/services	Authorisation charges	s and administrative fees
			One-off fees	Annual fees
Albania	General authorisation with notification to the NRA	All electronic communications networks and services, including internet access, VoIP and value added services.	None	Annual fees may not exceed 0.5% of annual gross revenue of the previous year.
Bosnia & Herzegovina	Individual licence	Fixed and mobile public telephony networks and services (licences issued to the three incumbent operators)	BAM 1,000 (€511)	Public fixed telephony network and services: BAM 450,000 (€230,080) Public mobile GSM networks and services: BAM 550,000 (€281,200)
	General (class) licence	Public fixed telephony services	BAM 1,000 (€511)	BAM 55,000 (€28,121)
		Public fixed telecommunication networks	BAM 1,000 (€511)	 local: BAM 5,000 (€2,600) regional: BAM 10,000 (€5,200) national: BAM 50,000 (€26,000)
1		Provision of Internet services	BAM 500 (€255)	BAM 4,000 (€2,100)
Montenegro	General authorisation, with notification to the NRA	All publicly available electronic communications and services	€1,000	Around 1% of annual revenue for 2009. To be approved after EKIP receives financial statements from the registered operators for 2008. Under Article 32 of the Law on Electronic Communications (Official Gazette of Montenegro, No.50/2008) annual fees may not exceed 1.5% of annual gross revenue of the previous year
Serbia	Individual licence (issued for services that require use of numbers or frequency resources)	Public mobile telecommunications network services using spectrum	RSD 25,000 (€268) licence application processing fee One-off fee determined through a public tender procedure Minimum is set by the Ministry	 RSD 70,000,000 (€752,000) in the first year of operations 0.9% of annual revenues thereafter
		Public voice services offered on a commercial basis as real time voice transfer between network termination points	RSD 25,000 (€268) licence application processing fee One-off fee determined through a public tender procedure Minimum is set by the Ministry	 RSD 20,000 (€215) for every 1000 subscribers in the first year 0.1% of annual revenues thereafter
		Public data transmission services provided through a public data transmission network	RSD 25,000 (€268) licence application processing fee One-off fee determined through a public tender procedure Minimum is set by the Ministry	 RSD 25,000 (€268) for every 100 subscribers in the first year 0.5% of annual revenues thereafter

Country	Authorisation type:	Networks/services	Authorisation charges and administrative fees	
			One-off fees	Annual fees
		Cable distribution network services for distribution of radio and television programs, or any other telecommunications services, based on wireless access	RSD 25,000 (€268) licence application processing fee One-off fee determined through a public tender procedure Minimum is set by the Ministry	 RSD 30,000 (€322) for every 500 subscribers in the first year 0.2% of annual revenues thereafter
		Paging services	RSD 25,000 (€268) licence application processing fee One-off fee determined through a public tender procedure Minimum is set by the Ministry	 RSD 10,000 (€107) for every 1000 subscribers in the first year 0.1% of annual revenues thereafter
		Internet services based on own fixed wireless access infrastructure	RSD 25,000 (€268) licence application processing fee One-off fee determined through a public tender procedure Minimum is set by the Ministry	 RSD 50,000 (€537) for every 1000 subscribers in the first year 0.1% of annual revenues thereafter
		Other services using numbers from the National Numbering Plan	RSD 25,000 (€268) licence application processing fee One-off fee determined through a public tender procedure Minimum is set by the Ministry	 RSD 50,000 (€537) in the first year 0.1% of annual revenues thereafter
	Authorisation (class licence) issued on the application to the NRA	Access and transport networks for which an individual licence is not required, provision of Internet services; value added services; closed user group services, call back services, cable TV network services, VoIP services without use of numbers	RSD 10,000 (€107) notification processing fee	0.1% of annual revenues and not less than RSD 50,000 (€537)
Kosovo	Individual licence	Public telecommunications services using fixed network, VoIP	National fixed telephone services licence: €87,500 International telecommunications facilities licence: €50,000 International telecommunications services licence: €35,000 Internet services: €5,000	0.3% of gross annual turnover attributable to the licensed activity

Table C.3 - Authorisation regimes for electronic communications networks and services

 Notes:

 Turkey:
 Mobile communications are subject to a further set of taxes, which include the Special Communication Tax, a Handset License Fee and a Handset Usage Fee (paid by the end user) and the Treasury Share Premium (paid by the operator) – a total of over 60% of end user annual revenue.

 Bosnia & Herzegovina:
 On June 18, 2009 the Council of Communication Regulatory Agency (RAK) adopted amendments on the Rules on fees (Official Gazette of BiH No. 52/09 from 06.07.2009), which were reduced, respectively by 10% (fixed networks and services); 8.3% (GSM networks and services) and 21% (fixed services only).

 Serbia:
 For more details, see Rules on fees and costs for licence and authorisation issuance of May 2006

Authorisation for cable television networks and services are sometimes more complex than for other electronic communications services as they can involve two regulatory authorities: the NRA and the broadcasting regulator. Table C.4 summarises the authorisation requirements for cable television networks in South-East Europe.

In Albania and Serbia an authorisation from both national authorities is required: one each from the national broadcasting authority for the provision of content over the cable TV network, and one from the NRA for the construction of cable infrastructure. The latter in Albania is now subject to a general authorisation with a notification to the NRA).

In Kosovo, cable TV networks are outside the scope of the telecommunications legislation. They are subject to an individual licence issued by the broadcasting authority. In Montenegro, under the new Law on Electronic Communications, the previous regime with the broadcasting authority solely responsible for licensing of cable operators has been replaced with the general authorisation framework with notification to the NRA, similar to any other electronic communications networks.

In Turkey, with the enforcement of the new authorisation regime under the new Electronic Communications Law, in force since May 2009, authorisation requirements consist of a general authorisation with notification to the NRA.

Country	Authorisation requirements	Additional authorisation required to offer other electronic communications services (e.g. Internet access)
Croatia	General authorisation with notification to the NRA	General authorisation with notification to NRA for additional services
FYROM	General authorization with notification to the NRA <i>plus</i> programming permission from the Broadcasting Council, according to the Broadcasting Law (Official Gazette No. 100/2005)	General authorisation with notification to NRA for additional services such as data communications and telephony
Turkey	Notification to the NRA (new regime under the Electronic Communications Law, numbered 5809)	Additional notification is required for internet and telephony services
Albania	 According to Law On Private and Public Radio and Television No. 8410 of August 30, 1998, Articles 123 and 127: License for broadcasting cable radio-television programs is issued by the National Council of Radio-Television A permission to build and operate a cable network for radio-television broadcasting is issued by the NRA in two stages: A preliminary permission issued by the NRA within 15 days from the date of application, based on a broadcast license issued by the National Council of Radio-Television, as well as on the plan for the 	General authorisation with notification to the NRA for provision of Internet services

Country	Authorisation requirements	Additional authorisation required to offer other electronic communications services (e.g. Internet access)
	 broadcasting cable network. The preliminary permission specifies the deadline for completing the network. 2. Final permission issued by the NRA within 30 days from the date the network is completed and after the implementation of the technical project and equipment installed has been checked by the NRA. 	
	According to article 13 of the new law on Electronic Communications that entered into force on June 26, 2008, a permission from the NRA is now replaced by general authorisation with notification.	
Bosnia &	Individual licences:	Additional service licences:
Herzegovina	General licence for public network operator (network licence)	General licence for provision of fixed public telephone services or
	Licence for provision of services of cable distribution of radio and TV programmes (service licence).	General licence for provision of Internet services.
Montenegro	General authorisation with notification to the NRA	General authorization with notification to the NRA for additional services
Serbia	General authorisation from the NRA for services and networks <i>plus</i> an individual licence from the Republic Broadcasting Agency (RRA) for content.	General authorisation from the NRA
Kosovo	Individual licence from the Independent Media Commission (IMC) under the Regulation on Cable Distribution of Radio and TV in Kosovo (CIMC 2007/04) of July 6, 2007.	If the cable TV operator wants to provide other electronic communications services then the NRA has the authority to issue the required licences.

Table C.4 - Authorisation requirements for Cable TV networks and services

4. Rights of way

Rights of way are necessary to establish electronic communications infrastructure, in particular, for new fixed network infrastructure access to install cables and ducts, across public and private land. Construction permits for mobile network infrastructure can also present a problem. Article 11 of the Framework Directive requires that applications for the development of infrastructure shall be handled by the relevant authorities in a transparent, non-discriminatory manner and without delay. The Framework Directive also requires that the authorities issuing building permits must be structurally separated from the network operators that apply for them. Expropriation procedures must be available – justified as a safeguard mechanism for access to private as well as to public land.

There are steps that can be taken to streamline application procedures, for example, in defining the maximum time periods for dealing with applications and making rules for the free use of or easy access to public domains.

Table C.5 below sets outs the regime for rights of way. It shows:

- the legal basis for granting rights of way and construction permits;
- procedures for access to public land, including responsible authorities dealing with applications; and
- timescales for granting permits.

Country	Legal basis for granting rights of way and construction permits	Relevant authorities and their role	Timescales for granting permits
Croatia	Electronic Communications Act (2008), Article 27, 28 Building and physical planning Act (2007)	Depending on the administration of property for which right of way is requested: HAKOM (the NRA), Municipality, Ministry of environmental protection, physical planning and construction, Institution for protection of historical monuments, Institution for protection of natural resources. As regards private property, the operator must have permission from the land owner. A request for approval can be made under article 27 of the Electronic Communications Law, or an expropriation procedure under the General Expropriation Law, according to article 21(2). In accordance with the provisions of the General Expropriation Law, operators can acquire ownership or <i>usufruct</i> (right of use), when it is of interest of the Republic of Croatia.	Article 27(4) of the Electronic Communications Act of 2008 prescribes 30 days time limit for issuing building permits by the manager of the public property or the private property owner, and 30 days time limit for issuing location permits by planning authorities.
FYROM	 Electronic Communications Law, articles 29, 88-93 Electronic communication networks and associated infrastructure are considered as works of public interest and must be constructed and operated in accordance with the Law on Electronic Communications and relevant regulations, as well as: the regulations on spatial planning and construction, the regulations on protection of the environment and in accordance with the valid technical regulations and standards. Other relevant legislation: Law on Expropriation (Official Gazette No.33/95, 20/98, 40/99, 31/03, 46/05and 10/08) Law on Ownership and other Rail Rights (Official Gazette No.18/2001) Law on Construction (Official Gazette No.51/05 and 82/08) 	 Prior to executing works on the real estate in private property, operators of the public communication networks shall submit a proposal to the Property And Legal Affairs Department within the Ministry of Finance for the purpose of implementing the expropriation or for establishing the right of use or servitude The Ministry of Transport and Communications issues an approval for construction of an object on a land which is owned by a third party All legal and natural persons may use the urban land in ownership of the Republic of Macedonia intended for common use and on behalf of the Republic of Macedonia it shall be governed by the Government of the Republic of Macedonia. The prepared urban project and competent revision shall be submitted to the Ministry of Transport and Communications and it shall send it for an opinion to the Agency for Electronic Communications if the urban project refers to construction of electronic communication networks and facilities. 	 The following deadlines are explicitly defined in the law: The approval for construction of an object on a land which is owned by a third party shall be issued by Ministry of Transport and Communications within seven days of the date of collection of the complete documentation The opinion on the urban project for construction of electronic communications networks and facilities has to be issued within ten days of receipt and if there is no response in determined period, the Ministry of Transport and Communications shall continue the procedure as a positive opinion has been given

 Law on urban land (Official Gazette No.82/08 и 143/08)

Country	Legal basis for granting rights of way and construction permits	Relevant authorities and their role	Timescales for granting permits
	Law on Spatial and Urban Planning (Official Gazette No.24/88)		
Turkey	Articles 22 to 30 of the Electronic Communications Law of 2008 state that all infrastructure operators have a right for public and private proprietary areas and the use of such properties for the purpose of installation, altering, disassembling, controlling, maintaining, repairing etc. with a view to provide electronic communications services.	Depending on the public property for which right of way is requested: metropolitan municipalities and municipalities, Infrastructure Coordination Centre, Ministry of Finance-General Directorate of the National Real Estate, General Directorate of Railways, General Directorate of Highways, Turkish Electricity Transmission Corporation, Undersecretariat for Maritime Affairs, Ministry of Culture and Tourism, Ministry of Defence, Petroleum Pipeline Corporation etc. As regards private property, the operator must have permission from the land owner.	Article 23/2 of the Electronic Communications Law of 2008 prescribes 60 days time limit for public corporations and institutions to evaluate the references for the demand of rights of way by giving priority and without any delays and conclude such procedure.
Albania	Article 93 of Law No. 9918 of 2008 on Electronic Communications (right of using public and private properties)	 Depending on the areas under the public property, notifications have to be submitted to the respective Council of Territorial Regulation (KRRT) regional/local authorities: for cities: municipal KRRT for communes: district KRRT 	According to the Law No. 8405 of September 17, 1998 on Urban Planning, as amended, article 50, the deadline for approval or refusal of construction permit is 45 days from the date of the request. In practice, considerable delays are still reported (up to 12 months for digging permits)
Bosnia & Herzegovina	Articles 9, 14, 22, 34, 36 and 49 of the Law on Country Planning and Use of Land in Federation of Bosnia & Herzegovina (Official gazettes FBiH No. 52/02).	Municipal authorities are relevant authorities where the applicant will be advised on further procedure.	The general timeframe is 30 to 60 days, but usually the applicant needs more time to collect the requested documentation and obtain approval.
	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).		
Montenegro	Law on Electronic Communications, article 23: Construction, maintenance, development and utilization of electronic communications networks, and equipment with associated infrastructure, as well as provision of electronic communication services and management and use of radio	Public land may be used by public operators upon application to an appropriate state or municipality administration. Government of Montenegro only has the authority to determine public interest, by passing relevant act (decision). Disputes (if any) between a public operator and relevant authorities are resolved at courts. A public telecommunications operator, may, in conformity with the legislation in force, enter into agreements with private people to use their land and facilities for the installation and maintenance of	All authorities in process should respond within 15 days period after submitting the application (for each separate request), but usually it is much longer than that. Typical timescale for complete process is about 6 months.

Country	Legal basis for granting rights of way and construction permits	Relevant authorities and their role	Timescales for granting permits
	frequency spectrum, numeration and addresses shall be the activities of public interest for Montenegro.	any telecommunication equipment. If such agreement fails, operator has right to start the expropriation procedure, according to the Expropriation Law.	
Serbia	Telecommunication Law (article 87) specifies that all public network operators have non-discriminatory rights of way. Law on Country planning and Construction (Official Gazette No.47/03) – articles 88-89. Law on spatial planning and construction prepared by the Ministry of Environment and Spatial Planning was adopted on August 31, 2009. The new law simplifies the construction procedures.	Relevant authorities include: Ministry of Environment and Spatial Planning, municipalities, RATEL	The new Law on spatial planning and construction sets deadlines for authorities to issue permits. These deadlines are between 8 and 15 days from the day when complete documentations is submitted. If the required documents are not submitted, the authority in 8 days has to answer to the applicant and require clarification, which should be submitted in due time (usually in 30 days). For simpler installations like new antennas on tower, new container or new base station it is not required to have any permit.
Kosovo	Article 27 of the Law on Telecommunications All licensed operators have non- discriminatory rights of way	Public land may be used by operators upon application to municipal authorities.	No information available. The regulation on Rights of way is drafted and as such needs to be approved by the TRA Board. -

Table C.5 - Rights of way

D. Regulatory framework for market analyses

1. Market analysis procedures and regulations

The concept of significant market power (SMP) is one of the central elements of the EU regulatory framework for electronic communications. Following a market analysis by the NRA, an operator can be designated as having SMP in a specified electronic communications market. It may subsequently be subject to specific *ex ante* regulatory obligations or remedies.

Table D.1 below examines the national frameworks used by NRAs for market analyses. It specifies the discretion an NRA has in exercising the functions foreseen under the EU 2003 regulatory framework, including the powers to:

- collect relevant information and any restrictions on this power;
- define relevant markets applying competition law principles;
- designate operators with SMP;

- impose regulatory obligations on operators with SMP, i.e.
 - remedies are pre-defined by law; or
 - the NRA has discretion to impose remedies according to the identified competition problems; and
- how often the NRA is required to carry out market analysis.

The use of the old and rigid rule of 25% market share together with equally rigid lists of remedies or obligations has been common practice in recent years under most regimes. In the case of FYROM, the level is 40% taken from its domestic competition law, while in Serbia it is 20%, though with the option for the NRA to use 25%.

The timing of this report finds legal changes coming into effect, which should bring the approaches being applied much closer to that of the EU regulatory framework.

Country	Restrictions on NRA powers to collect information	Definition of relevant markets: by law or by NRA.	Basis for SMP designation: Competition law or 25% market share threshold?	Imposition of remedies: Pre-defined or by NRA discretion	Timeframe for market analysis
Croatia	No restrictions (Articles 53 (3), 54(2) of the Electronic Communications Act of 2008)	The NRA has discretion to define relevant markets taking into account the European commission recommendation on relevant markets and applying the three criteria test (Article 53 of the Electronic Communications Act of 2008). The NRA may also identify any relevant market which is not part of EC Recommendation on relevant markets, but the three criteria test firstly has to be applied (Article 53 (2) (3) of the Electronic Communications Act of 2008).	Competition law principles, taking into account market shares and other relevant criteria, and EC guidelines (Article 55 of the Electronic Communications Act of 2008)	Discretionary remedies can be imposed by the NRA (listed in Articles 58 to 65 of the Electronic Communications Act of 2008).	At least once every three years (Article 52 of the Electronic Communications Act of 2008)

Country	Restrictions on NRA powers to collect information	Definition of relevant markets: by law or by NRA.	Basis for SMP designation: Competition law or 25% market share threshold?	Imposition of remedies: Pre-defined or by NRA discretion	Timeframe for market analysis
FYROM	No restrictions Operators of electronic communications networks and service providers are required to submit at the request of the NRA all information related to their activities. Such a request has to be justified, based on reasonable grounds and proportionate to its purpose (Article 23 of Law on Electronic Communications).	Under Article 41 of the Law on Electronic Communications, the NRA defines relevant product, service and geographic markets in accordance with the Law on Protection of Competition and in cooperation with the NCA. In August 2005, the NRA adopted a Decision on the determination of relevant markets that sets out 18 relevant product markets according to the EC Recommendation of 2003; all are national in their geographic scope.	According to the provisions of the Law on Protection of Competition, a company has a dominant position on a relevant market if it has market share of over 40%. The NRA in its assessment of SMP in a relevant market takes into account this provision of the Law on Protection of Competition, combined with other criteria defined in Article 40 of Law on Electronic Communications.	Discretionary remedies can be imposed by the NRA, (listed in articles 44 to 52 of the Law on Electronic Communications).	Once a year (Article 42 of Law on Electronic Communications). Draft amendments in the Law on Electronic Communications currently under discussion would eliminate the explicit reference to review markets on a yearly basis.
Turkey	According to the Bylaw on Principles and Procedures in the Electronic Communications Sector for the Determination of the Undertakings with Significant Market Power and the Remedies which is to be Imposed for Those Undertakings, the NRA can demand any information without restrictions during the market analysis. NRA can use public surveys, studies by third parties and international benchmarks.	The NRA has discretion to define relevant markets applying competition law principles. According to article 8 (1) of the SMP bylaw; for all markets to be analyzed three criteria test is held in order to satisfy the need for ex ante regulation.	The Bylaw on Principles and Procedures in the Electronic Communications Sector for the Determination of the Undertakings with Significant Market Power and the Remedies which is to be Imposed for Those Undertakings, market shares of the operators are considered as the primary criterion. The determination of the market shares of the operators can be made based on revenue, subscriber or user numbers, traffic volume, transmission capacity and transmission line number, as long as they are appropriate and available. In addition to market shares, SMP assessment can be based on a number of other criteria defined in Article 9 of this bylaw.	 Under Article 11 of the Bylaw on Principles and Procedures in the Electronic Communications Sector for the Determination of the Undertakings with Significant Market Power and the Remedies which is to be Imposed for Those Undertakings, the NRA may impose on operators with SMP the following remedies: transparency publication of reference access and interconnection offers non discrimination accounting separation tariff regulation cost accounting. Under article 7 (3) of the Law on Electronic Communications, the NRA may impose discretionary remedies, allowing differentiation among operators with SMP on the same market and among different markets. 	At least once every three years (Article 6 (1) of the Bylaw on Principles and Procedures in the Electronic Communications Sector for the Determination of the Undertakings with Significant Market Power and the Remedies which is to be Imposed for Those Undertakings)

Country	Restrictions on NRA powers to collect information	Definition of relevant markets: by law or by NRA.	Basis for SMP designation: Competition law or 25% market share threshold?	Imposition of remedies: Pre-defined or by NRA discretion	Timeframe for market analysis
Albania	No restrictions. Under article 16 of the Law on Electronic Communications, undertakings are obliged to provide data and any other information as requested by the NRA.	The NRA has discretion to define relevant markets applying competition law principles (Article 32 of the Law on Electronic Communications of May 19, 2008) AKEP has approved the market analysis regulation on July 17, 2009, where it has defined the relevant markets subject to regulation. The list comprises 17 markets of EC recommendation 2003 (all except for broadcasting market) plus retail mobile. Other markets might be identified by applying the three criteria test.	Competition law principles, taking into account market shares and other relevant criteria (Article 33 of the Law on Electronic Communications of May 19, 2008) Draft market analysis regulation published by the NRA for consultation in December 2008 makes reference to the EC guidelines on market analysis	Remedies are discretionary imposed by the NRA (listed in Articles 39-45, 56 of the Law on Electronic Communications).	On regular basis, but no less than once every two years (Law on Electronic Communications, art. 34)
Bosnia & Herzegovina	Licence conditions of all licensed operators and service providers contain an obligation to provide to the NRA any requested information in a timely fashion.	Discretionary definition by the NRA (Article 14 of the Law on Communications)	25% market share as threshold in a relevant market combined with an assessment of other criteria	Basic regulatory obligations are defined in the law and licenses of the three incumbent operators. Further discretionary remedies can be imposed by the NRA (Article 14 of the Law on Communications).	Once every year (Article 14 of the Law on Communications)
Montenegro	No restrictions (Article 18 of the Law on Electronic Communications of July 29, 2008) The information request, however, must be justified and proportionate.	Discretionary definition by the NRA, in cooperation with the NCA and taking into account the EU practices (Article 41 of the Law on Electronic Communications of July 29, 2008)	Competition law principles, taking into account market shares and other relevant criteria (Article 47 of the Law on Electronic Communications of July 29, 2008)	Remedies are discretionary imposed by the NRA (listed in Articles 48-51, 56 of the Law on Electronic Communications of July 29, 2008).	Not defined Under Article 143, Transitional provisions of the Law on Electronic Communications of July 29, 2008, the NRA should have completed its first market analysis within one year from the entry into force of the law, i.e. by August 27, 2009.

Country	Restrictions on NRA powers to collect information	Definition of relevant markets: by law or by NRA.	Basis for SMP designation: Competition law or 25% market share threshold?	Imposition of remedies: Pre-defined or by NRA discretion	Timeframe for market analysis
Serbia	No restrictions Public telecommunications operators are required to submit at the request by the NRA all information related to their activities (Article 21 of Telecommunications Law). Licence conditions of all licensed operators and service providers also contain an obligation to provide to the NRA any requested information in a timely manner.	Discretionary definition by the NRA In April 2008 RATEL adopted a decision identifying six markets relevant for ex ante regulation, comprising the four markets defined under the ONP framework and two additional markets: fixed telephony, mobile telephony, leased lines, interconnection, Internet services and provision of cable distribution systems	20% market share, measured by number of subscribers, which the NRA may raise to 25% (Article 4(49) of the Telecommunications Law)	SMP obligations are set out in Articles 9, 10, 39, 40, 43, 48, 53 and 111 of the Telecommunications Law.	Not defined
Kosovo	The NRA has the authority to collect and maintain information, including but not limited to statistics, financial, employment and network performance reports or other reports that it requires in order to fulfil its responsibilities (Telecommunications Act (UNMIK Regulation 2003/16), Section 12).	Discretionary definition by the NRA	25% market share in a relevant market, combined with an assessment of other criteria (Telecommunications Act (UNMIK Regulation 2003/16), Section 44)	Basic access and interconnection obligations are set out in Telecommunications Act and operators' licences. Further discretionary remedies can be imposed by the NRA.	Subject to NRA discretion or upon request of any service provider

Table D.1 - Market analysis and the discretionary powers of NRAs

2. Analysis of relevant markets by NRAs

Table D.2 shows the analyses of relevant retail and wholesale markets conducted by the NRAs.

Country	Relevant market	Geographic scope	Operator(s) with SMP	Remedies imposed on SMP operator(s)	Legal basis Reference to relevant legislation or NRA decision
Croatia	Wholesale voice call termination on individual mobile networks (M7/2007)	National	T-Mobile Hrvatska d.o.o. VIPNet d.o.o. Tele2 d.o.o.	 T-Mobile and VIPNet Access and interconnection Non discrimination Transparency (RIO) Price control and cost orientation Tele 2 Access and interconnection Non discrimination Transparency Price control 	Decision July 31, 2009
	Wholesale access and call origination on the public mobile telephone network (M15/2003)		No SMP Three criteria test is not met	None	Decision July 31, 2009
	Retail public mobile services		No SMP Three criteria test is not met	None	Decision July 31, 2009
	Wholesale SMS termination on individual mobile networks		No SMP Three criteria test is not met	None	Decision July 31, 2009
	Wholesale call termination on individual public telephone networks provided at a fixed location (M3/2007)	National	HT-Hrvatske telekomunikacije d.d. All other (8) alternative operators	 HT d.d.: Access and interconnection Non-discrimination Transparency (RIO) Price control and cost orientation Accounting separation Other operators: Access and interconnection Non-discrimination 	Decision July 31, 2009

Country	Relevant market	Geographic scope	Operator(s) with SMP	Remedies imposed on SMP operator(s)	Legal basis Reference to relevant legislation or NRA decision
				 Transparency (minimal offer) Price control 	
	Wholesale call origination on the public telephone network provided at a fixed location (M2/2007)	National	HT-Hrvatske telekomunikacije d.d.	 Access and interconnection Non-discrimination Transparency (RIO) Price control and cost orientation Accounting separation CPS and CS obligation 	Decision July 31, 2009
	Wholesale transit services in the public telephone networks (M10/2003)		No SMP Three criteria test is not met	None	Decision July 31, 2009
	Wholesale access to the network infrastructure (including shared and full access) at a fixed location (M4/2007)	National	HT-Hrvatske telekomunikacije d.d.	 Access and interconnection Non-discrimination Transparency (RUO) Price control and cost orientation Accounting separation 	Decision July 31, 2009
	Wholesale broadband access (M5/2007)	National	HT-Hrvatske telekomunikacije d.d.	 Access and interconnection Non-discrimination Transparency (RBO) Price control and cost orientation Accounting separation 	Decision July 31, 2009

Country	Relevant market	Geographic scope	Operator(s) with SMP	Remedies imposed on SMP operator(s)	Legal basis Reference to relevant legislation or NRA decision
FYROM	Retail access to the public telephone network from fixed location (1-2/2003)	National	Makedonski Telekom	 CS and CPS Wholesale line rental, based on retail minus Non discrimination Ex ante price control Transparency obligation (publication of charges, terms and conditions) Accounting separation Prohibition of anticompetitive behaviour Prohibition of unreasonable bundling of services (allow customers to buy unbundled elements of any service elements) 	Draft decision of Oct. 2009, currently under public consultation. Comments could be submitted until Feb. 17, 2010.
	Retail publicly available telephone calls from fixed location (3-6/2003)	National	Makedonski Telekom	 CS and CPS Wholesale line rental, based on retail minus Non discrimination Ex ante price control Transparency obligation (publication of charges, terms and conditions) Accounting separation Prohibition of anticompetitive behaviour Prohibition of unreasonable bundling of services (allow customers to buy unbundled elements of any service elements) 	Draft decision of Oct. 2009, currently under public consultation. Comments could be submitted until Feb. 17, 2010.
	Minimum set of leased lines (7/2003)	National	Makedonski Telekom	 Non discrimination Ex ante price control Transparency obligation Accounting separation 	Draft decision published for public consultation until Dec.27, 2009. Analysis of comments is in progress.

Country	Relevant market	Geographic scope	Operator(s) with SMP	Remedies imposed on SMP operator(s)	Legal basis Reference to relevant legislation or NRA decision
	Terminating segments of leased lines and trunk segments of leased lines (13-14/2003)	National	Makedonski Telekom	 Non discrimination Cost based prices Transparency obligation Accounting separation Access to and use of specific network facilities 	Draft decision published for public consultation until Dec.27, 2009. Analysis of comments is in progress.
	Wholesale call termination in individual mobile network (market 16/2003)	National	 T-Mobile ONE (previously Cosmofon) VIP This is the 2nd round analysis. Under AEC decision of January 18, 2008 two mobile operators - T- Mobile Macedonia and Cosmofon Skopje - were designated as having SMP 	 Non discrimination Cost based prices Transparency obligation Accounting separation Interconnection and access Under the 1st round analysis the same remedies were imposed on the two SMP operators 	Draft Decision submitted to Commission for protection of competition for opinion. After receiving the opinion Agency will publish Draft Decision for public consultation.
	National market for international roaming (market 17/2003)	National	None	None	Draft Decision submitted to Commission for protection of competition for opinion. After receiving the opinion Agency will publish Draft Decision for public consultation.

Country	Relevant market	Geographic scope	Operator(s) with SMP	Remedies imposed on SMP operator(s)	Legal basis Reference to relevant legislation or NRA decision
Turkey	Wholesale call termination in individual mobile network	National	 Turkcell Vodafone Avea Other mobile network operators (i.e. potential new entrants) 	 Turkcell, Vodafone, Avea: Non-discrimination Cost accounting Accounting separation Transparency Publication of reference offer Price control Interconnection Co-location Other mobile network operators: Interconnection Non-discrimination Transparency 	Decision no. 2009.DK – 10.627, of 08.12.2009
	Wholesale mobile access and call origination	National	• Turkcell	 Access and interconnection Non-discrimination Cost accounting Accounting separation Transparency Publication of reference access and interconnection offer Price control (cost orientation) Co-location 	Decision no. 2009/DK - 10.626 of 08.12.2009
	Retail access to the public telephone network at fixed location for residential and business customers	National	Türk Telekom	 Access Carrier (pre) selection Wholesale line rental Non-discrimination Price control 	Decision no. 2009/DK – 10/659 of 16.12.2009

Country	Relevant market	Geographic scope	Operator(s) with SMP	Remedies imposed on SMP operator(s)	Legal basis Reference to relevant legislation or NRA decision
	Retail publicly available national, local and international telephone calls at fixed location	National	Türk Telekom	 Access Carrier (pre) selection Non-discrimination Billing Price control 	Decision no. 2009/DK – 10.625 of 08.12.2009
	Wholesale call termination on public telephone networks provided at a fixed location	National	 Türk Telekom Other fixed telephone network operators assigned subscriber numbers 	 Türk Telekom: Interconnection Non-discrimination Co-location Cost accounting Accounting separation Transparency Publication of reference offer Price control (cost-oriented) Other fixed telephone network operators: Interconnection Non-discrimination transparency 	Decision no 2009.DK – 10.624 of 08.12.2009
	Wholesale call origination on the public telephone network provided at a fixed location	National	• Türk Telekom	 Interconnection Carrier (pre)selection Non-discrimination Cost accounting Accounting separation Transparency Publication of reference offer Price control Co-location and facility sharing 	Decision no. 2010/DK – 10/9 of 07.01.2010

Country	Relevant market	Geographic scope	Operator(s) with SMP	Remedies imposed on SMP operator(s)	Legal basis Reference to relevant legislation or NRA decision
	Transit services in the public	New market an	alysis is underway. Details on the pr	evious analysis and current obligation	s are provided below.
	telephone network provided at fixed locations	National	Türk Telekom	 Non-discrimination Cost accounting Accounting separation Transparency Publication of reference offer Price control 	TA Decision no. 2006/DK-10/142, Official Gazette dated 17/03/2006 (SMP designation for fixed markets: markets 1-14/2003)
	Wholesale unbundled access (including shared access) to local loops and sub loops for the purpose of providing broadband and voice services	National	Türk Telekom	 Unbundled access Non-discrimination Cost accounting Accounting separation Transparency Publication of reference offer Price control (cost-oriented) Co-location and facility sharing 	Decision no. 2010/DK – 10/10 of 07.01.2010
	Wholesale broadband access including bitstream access	National	Türk Telekom	 Wholesale broadband access (xDSL resale, XDSL IP/ATM BSA, ATM, FR, ME resale) Naked DSL (IP BSA) Non-discrimination Cost accounting Accounting separation Transparency Publication of reference offer Subject to tariff regulation Co location and facility sharing 	Decision no. 2010/DK – 10/20 of 07.01.2010

Country	Relevant market	Geographic scope	Operator(s) with SMP	Remedies imposed on SMP operator(s)	Legal basis Reference to relevant legislation or NRA decision
	Wholesale leased lines	National	• Türk Telekom	 Access (point-to-point line provision and partial circuits) Non-discrimination Cost accounting Accounting separation Transparency Price control (cost-oriented) Co-location Publication of reference offer 	Decision no. 2010/DK – 10/19 of 07.01.2010
	Retail leased lines (minimum set)	National	Türk Telekom	 Provision of minimum set Non-discrimination Transparency Price control Cost accounting Accounting separation Publication of SLA 	Decision no. 2010/DK – 10/18 of 07.01.2010
Albania	Wholesale call termination in individual mobile networks	Geographic extent of each mobile network	 Albanian Mobile Communications Vodafone Albania 	 Non-discrimination Cost orientation Transparency 	TRE decision of Sep. 18, 2007
	Retail public mobile services	National	 Albanian Mobile Communications Vodafone Albania 	 Access and interconnection Respect confidentiality Price control RIO 	TRE decision of Sep. 18, 2007
	Retail access to the public telephone network at fixed location	National	Albtelecom	CS/CPS Non-discrimination	TRE decision of Nov. 13, 2007
	Retail publicly available telephone calls at fixed location	National	Albtelecom	Cost orientation Transparency	TRE decision of Nov. 13, 2007
-	Wholesale call termination on geographic numbers in Albtelecom fixed network	National	Albtelecom	Access and interconnection	TRE decision of Nov. 13, 2007

Country	Relevant market	Geographic scope	Operator(s) with SMP	Remedies imposed on SMP operator(s)	Legal basis Reference to relevant legislation or NRA decision
	Wholesale call origination on the public telephone network provided at a fixed location	National	Albtelecom	 Respect confidentiality Price control RIO 	TRE decision of Nov. 13, 2007
	National transit services in the public telephone network provided at fixed locations	National	Albtelecom		TRE decision of Nov. 13, 2007
	International transit services in the public telephone network provided at fixed locations.	National	Albtelecom		TRE decision of Nov. 13, 2007
Decesie 9	 Fixed retail access and voice servi Leased lines markets (7, 13 and 1) 	ces and foxed wl 4/2003). Public c	s and call origination and retail mobile in nolesale interconnection (1-6/2003 and onsultation started in Nov. 2009 and en	8-10/2003) were published for publiched in Jan. 2010.	lic consultation in Sep. 2009.
Bosnia & Herzegovina	Fixed telephony services	Geographic extent of each fixed network	 BH Telecom Telekom Srpske HT Mostar 	 Non-discrimination Cost orientation Transparency Access and interconnection Price control RIO CS/CPS 	RAK decision of Dec. 28, 2009 (Official Gazette of BiH 05/2010)
	Mobile telephony services	Geographic extent of each mobile network	 BH Telecom Telekom Srpske HT Mostar 	 Non-discrimination Cost orientation Transparency Access and interconnection Price control RIO 	RAK decision of Dec. 28, 2009 (Official Gazette of BiH 05/2010)
	Leased lines	Geographic extent of each fixed network	 BH Telecom Telekom Srpske HT Mostar 	 Non-discrimination Cost orientation Transparency Access and interconnection Price control RIO 	RAK decision of Dec. 28, 2009 (Official Gazette of BiH 05/2010)

Country	Relevant market	Geographic scope	Operator(s) with SMP	Remedies imposed on SMP operator(s)	Legal basis Reference to relevant legislation or NRA decision
Montenegro	Retail public fixed voice telephone networks and services, including data transmission and leased lines services	National	Crnogorski Telekom (T-Com)	Not defined	Article 143, Transitional provisions of the Law on Electronic Communications of July 29, 2008 sets out the SMP
	Wholesale call termination in individual mobile and fixed networks	National	All network operators (not defined)		designations, without specifying the regulatory obligations for SMP operators
	Broadcasting transmission services	National	Broadcasting Center		
Serbia	Retail public fixed telephone networks and services	National	• Telekom Srbija	 Network access and interconnection Non-discrimination Cost orientation Transparency Prohibition of cross- subsidisation Retail price control 	RATEL decision of March 3, 2006
	Retail radio and television programme distribution via cable network	National	• SBB	Retail price controlAccounting separation	RATEL decision of Feb. 19, 2007
Kosovo	Retail public mobile services	National	• PTK (Vala)	 Non-discrimination Cost orientation Transparency Network access Respect confidentiality RIO 	Telecommunications Act (UNMIK Regulation 2003/16), Section 44
	Retail access to the public telephone network from fixed location	National	• PTK	 Non-discrimination Cost orientation Transparency Network access Respect confidentiality RIO 	

Table D.2 - Analyses of retail and wholesale markets

Notes:

- Croatia: According to the NRA decision of July 9, 2008 on the markets relevant for ex ante regulation, two further markets will be analysed at a later stage covering access to public fixed telephony services at fixed location for residential and business customers and retail and wholesale terminating segments of leased lines. The process for market analyses of the markets related to the provisioning of leased lines (minimum set of leased lines, wholesale terminating segments and trunk segments of leased lines) has already started.
- Turkey: In accordance with the law No: 406 all remedies were automatically imposed to the operators having SMP. But this provision was altered by the new Electronic Communications Law No. 5809 of Nov. 10, 2008. With the new Law the Authority has now the right to differentiate the remedies which are imposed on the operators with SMP.
- Serbia: On April 22, 2008 RATEL adopted a decision identifying six markets relevant for ex ante regulation, comprising the four relevant markets defined under the ONP framework and two additional markets: (i) Internet services; (ii) provision of cable distribution systems.

E. Competitive safeguards

1. Carrier selection and pre-selection

Article 19 of the Universal Service Directive (2002/22/EC) states that NRAs must require operators with SMP in the markets for the provision of connection to and use of the public telephone network at a fixed location to enable their subscribers to access the services of any interconnected provider of publicly available telephone services:

- on a call-by-call basis by dialling a carrier selection code; and
- by means of carrier pre-selection, with a facility to override any pre-selected choice on a call-by-call basis by dialling a carrier selection code.

Table E.1 details the regulatory obligations to offer CS and Table E.2 the obligations for CPS on the fixed networks of incumbent operators. These basic access services are not available in Albania, Serbia or Kosovo. In Turkey, although introduced in 2006, CS and CPS have been available for local calls since May 2009. Also in FYROM, CS and CPS services for local call were implemented only recently. In Croatia where the services have been available for almost five years, although in practice alternative operators were not interested in provision of call-by-call CS services until 2006. While both CS and CPS have been introduced in Montenegro, the incumbent operator's RIO only covers provision of call-by-call CS, leaving service providers to negotiate terms and conditions for CPS on commercial basis.

Country		CS implementation	for different type of call	s	Operators required to	Call origination for CS	
	Local	National	International	Calls to mobile	provide CS	included in RIO?	
Croatia	February 2005	February 2005	February 2005	February 2005	T-Com	T-Com RIO, Section 4.2	
FYROM	May 2008	January 2007	January 2007	January 2007	Makedonski Telekom	Makedonski Telekom RIO, Annex 3D	
Turkey	May 2009	April 2006	April 2006	April 2006	Türk Telekom	Türk Telekom RIO, Sections 2.1.1.2 and 3.1.6	
Albania	Not available	Not available	Not available	Not available	-	-	

Country		CS implementation	for different type of calls	;	Operators required to	Call origination for CS
	Local	National	International	Calls to mobile	provide CS	included in RIO?
Bosnia & Herzegovina	October 2006	October 2006	October 2006	October 2006	BH TelecomTelekom SrpskeHT Mostar	Yes
Montenegro	December 2007	December 2007	December 2007	December 2007	All public telecommunications operators, both fixed and mobile	Crnogorski Telekom RIO, Section 2.5
Serbia	Not available	Not available	Not available	Not available	-	-
Kosovo	Not available	Not available	Not available	Not available	-	-

Table E.1 - Obligations to provide carrier selection

Notes:

Albania: Users of Albtelecom have been able to use prepaid calling cards from service providers for national and international calls since 2002. Call origination for these calls (prepaid cards) is included in Albtelecom RIO, approved by TRE on October 2, 2009.

Serbia: CS and CPS are not defined in the Telecommunications Law. According to the Action plan for implementation of the National Strategy for Development of Telecommunications adopted by the government on January 15, 2009, the bylaw on implementation of CS and CPS should have been adopted by the end of 2009. Decision on the new timeframe is currently under discussion.

Country		CPS implementation	for different type of ca	lls	Operators required to	Call origination for CPS	
	Local	National	International	Calls to mobile	provide CPS	included in RIO?	
Croatia	February 2005	February 2005	February 2005	February 2005	T-Com	T-Com RIO, Section 4.2	
FYROM	May 2008	January 2007	January 2007	January 2007	Makedonski Telekom	Makedonski Telekom RIO, Annex 3D	
Turkey	October 2009	July 2006	July 2006	July 2006	Türk Telekom	Türk Telekom RIO, Sections 2.1.1.2 and 3.1.6	
Albania	Not available	Not available	Not available	Not available	-	-	
Bosnia & Herzegovina	July 2007	July 2007	July 2007	July 2007	BH TelecomTelekom SrpskeHT Mostar	Yes	
Montenegro	December 2007	December 2007	December 2007	December 2007	All public telecommunications operators, both fixed and mobile	No Only CS is included in Crnogorski Telekom RIO, Section 2.5	
Serbia	Not available	Not available	Not available	Not available	-	-	
Kosovo	Not available	Not available	Not available	Not available	-	-	

Table E.2 - Obligations to provide carrier pre-selection

Where carrier selection and pre-selection have been available for some time, then service providers have entered the markets, but in very small numbers (see Table E.3). There has been only limited adoption of these services by consumers and businesses. It appears that only in Croatia carrier selection and pre-selection, so far, can be considered to be a success. As of October 2009 there were over 240,000 CPS users in Croatia that corresponds to 14.3% of all fixed lines.

Country	CS impleme	entation	CPS implementation		
	Alternative operators offering CS	Number of CS users	Alternative operators offering CPS	Number of CPS users	
Croatia	5	N/A	4	244,260	
FYROM	1	4,450	0	0	
Turkey	8	N/A	10	N/A	
Albania	-	-	-	-	
Bosnia & Herzegovina	6	26,991	0	0	
Montenegro	6	N/A	0	0	
Serbia	-	-	-	-	
Kosovo	-	-	-	-	

Table E.3 - Implementation of carrier selection and pre-selection

Notes:

Croatia: The number of CPS users as of June 30, 2009.

FYROM The number of CS users as of June 30, 2009. Traffic generated by CS: 413,156 minutes, of which 95,658 for local calls; 107,767 for domestic long-distance calls; and 187,819 for international calls; and 21,912 for domestic mobile calls.

Bosnia & Herzegovina: Among CS users: 24,354 are residential and 2,637 business users.

Montenegro: The NRA has assigned six CS access codes (1001, 1011, 1012, 1013, 1020 and 1067) to VoIP, mobile and fixed network operators (T-Com Montenegro, VOIP Telecom, PTT Inzenjering, Dimal Telecom, IT Montenegro, T-Mobile Montenegro).

2. Number portability

Number portability in fixed networks is required to allow customers to switch operators, usually away from the incumbent to a rival, while retaining the value and familiarity of their existing number. The EU legal framework requires that it be available for both:

- geographic numbers; and
- non-geographic numbers.

There are a number of possible technical solutions. With **onward routing**, a call to a ported number is routed to the donor network (i.e. the network to which the called party previously subscribed to), which then forwards the call to the recipient network (i.e. the network providing service to the subscriber after porting). Whereas, with **direct routing**, a central or distributed database of ported numbers is used for routing calls to ported numbers directly to the recipient network:

• All calls query – ACQ

The originating operator consults the database for all calls.

• Query on release – QoR

The originating operator consults the database only when the call to the ported number is rejected by the donor network.

Table E.4 summarises the implementation of fixed number portability. Only FYROM, Croatia and Turkey, have so far implemented number portability in fixed networks. While in FYROM and Turkey it is still very early in the introduction of this service, in Croatia over 316,000 numbers have already been ported, which constitutes 18.5% of total fixed subscriber numbers. In Bosnia & Herzegovina the legislation on service number portability has been adopted, but the service is not yet operational.

Country	Imple	mentation	Deadline and legal basis	Inter-operator	Technical	NP database financing	Ported numbers statistics	
	Geographic numbers	Non-geographic numbers		charge per ported number	solution		Statistics	
Croatia	July 2005	July 2005	Deadline: Jan. 1, 2005, postponed to April 2005 (see Decision on number portability and carrier pre-selection). Art. 72 of the Telecommunications Law of 2003 By law on number portability and carrier reselection of Dec. 2004 (Official Gazette 183/04). HAT Decision on number portability and carrier pre- selection of August 26, 2005 (with amendments)	None	Direct routing, ACQ with centralised database	Centralised database is operated by the NRA and funded from the NRA budget.	316,940 fixed numbers ported at the end of 2Q 2009	

Country	Imple	mentation	Deadline and legal basis	Inter-operator charge per	Technical solution	NP database financing	Ported numbers statistics
	Geographic numbers	Non-geographic numbers		ported number	solution		Statistics
FYROM	September 2008	Not implemented	Deadline: Sep. 2008 Articles 84 and 85 of the Law on Electronic Communications Bylaw on number portability of Dec. 21, 2006 (with amendments) Technical description of the transactions and communication interface between the CRDB and operators approved by the NRA in March 2007. Bylaw document for Number Portability ("Official Gazette of RM", No. 135/2006, 57/2007, 145/2007, 87/2008, 17/2009 and 115/2009)	Maximum fee of MKD 200 (€3.27) one-off charge plus annual numbering usage fee set by AEC annually. The fee was defined in NRA decision of June 2009. Makedonski Telekom RIO, Annex 8B	Direct routing, QoR with centralised database	Centralised database is operated by the NRA and funded from the NRA budget.	14,456 as of Oct. 2009
Turkey	September 2009	September 2009	Implemented on Sep.10, 2009 Bylaw on Number Portability dated July 2, 2009 O.G No: 27276 Number Portability Ordinance (Official Gazette No 26421, Feb. 1, 2007). Centralised reference database established on May 9, 2008.	Inter-operator charges are defined freely by the operators upon negotiation. In case of dispute between the operators, ICTA defines the upper limit of the charges.	Direct routing, ACQ with centralised database (but other methods are not excluded)	Centralised database is operated by the NRA and funded from the NRA budget.	163 numbers ported as of Feb. 2010
Albania	Not implemented	Not implemented	Deadline: June 2009 Law on Electronic Communications (Law No. 9918 of May 19, 2008) sets the implementation deadline within 12 months from its entry into force Secondary legislation is required for implementation.	-	-	-	-

Country	Imple	mentation	Deadline and legal basis	Inter-operator	Technical	NP database financing	Ported numbers
	Geographic numbers	Non-geographic numbers		charge per ported number	solution		statistics
Bosnia & Herzegovina	Not implemented	Not Implemented	Deadline: Dec. 2009 Telecom Sector Policy, Official Gazette No. 8/2009, sets the implementation deadline at the end of 2009	Max. BAM 30.00 (€15)	Direct routing, ACQ with centralised database	Centralised database is to be financed by telecom operators	Although the legislation is in place, the service is not yet available
			Law on Communications (Official Gazette No. 31/2003, Art. 8, 27, 38 and 39)				
			RAK Rule on Number Portability No. 32/2008				
Montenegro	Not implemented	Not implemented	Deadline: Aug. 20, 2011 Legal basis: Article 110 of Law on Electronic Communications Secondary legislation is required for implementation.	-	-	-	-
Serbia	Not implemented	Not implemented	Deadline: not defined. Telecommunications Law provides no legal basis for number portability		-	-	-
Kosovo	Not implemented	Not implemented	Deadline: not defined. Legal basis: Section 39 of the Telecommunications Law	-	-	-	-

Table E.4 - Availability of fixed number portability

Notes:

- Albania: The first Public consultation on number portability was carried out in 2008. On Aug. 6, 2009 and Sep. 18, 2009 AKEP issued for public consultation two other documents on number portability (fixed and mobile): regulation and technical and commercial terms.
- Serbia: Number portability is not defined in the Telecommunications Law. According to the Action plan for implementation of the National Strategy for Development of Telecommunications adopted by the government on Jan. 15, 2009, the bylaw on implementation of number portability in fixed and mobile networks must be adopted by the end of 2009.

Table E.5 summarises the implementation of mobile number portability. Only Croatia, FYROM and Turkey have so far implemented number portability in mobile networks. In Turkey, it appears to be a particular success with over 7.5 million mobile numbers having been ported since its introduction in November 2008.

Country	Implementation	Implementation deadline	Inter-operator	Technical	NP database	Use	•
		and legal basis	charge per ported number	solution	financing	Ported numbers statistics	% of total mobile numbers
Croatia	October 1, 2006	Deadline: June 30, 2005. Article 72 of the Telecommunications Law of 2003 Ordinance on number portability and carrier pre-selection of Dec. 2004 (Official Gazette 183/04) NRA Decision on number portability and carrier pre-selection of Aug. 26, 2005 (with amendments)	None	Direct routing, ACQ with centralised database	Centralised database is operated by the NRA and funded from the NRA budget.	86,500 mobile numbers ported at the end of 2Q 2009.	1.38%
FYROM	September 2008	Deadline: July 2007, then postponed to September 2008 Articles 84 and 85 of the Law on Electronic Communications Bylaw on number portability of Dec. 21, 2006 (with amendments) Technical description of the transactions and communication interface between the CRDB and operators approved by the NRA in March 2007. Bylaw document for Number Portability ("Official Gazette of RM", No. 135/2006, 57/2007, 145/2007, 87/2008, 17/2009 and 115/2009)	According to the amendments to Article 84 of the Law on Electronic Communications of July 2008, one-off porting fee can be charged either from operators or from subscribers. Following NRA decision of June 2009, max one- time fee for number porting is €3.27 (excl. VAT)	Direct routing, QoR with centralised database	Centralised database is operated by the NRA and funded from the NRA budget.	4.693 mobile numbers ported as of Oct. 2009	0.11% (24% of active mobile subscribers)
Turkey	November 2008	Deadline: Nov. 2008 Number Portability Ordinance (Official Gazette No 26421, Feb. 1, 2007). Centralised reference database established on May 9, 2008 By-law on number portability of July 2, 2009	The NRA set the upper limit for inter- operator charges at TRY 2 (€0.92).	Direct routing, ACQ with centralised database (but other methods are not excluded)	Centralised database is operated by the NRA and funded from the NRA budget.	Approximately 7.5 million mobile numbers ported as of October 2009	11.5%
Albania	Not implemented	Deadline: June 2009 Law on Electronic Communications (Law No. 9918 of May 19, 2008) sets the implementation deadline within 12 months from its entry into force Secondary legislation is required for implementation.	-	-	-	-	-

Country	Implementation	Implementation deadline	Inter-operator	Technical	NP database	Use	•
		and legal basis	charge per ported number	solution	financing	Ported numbers statistics	% of total mobile numbers
Bosnia & Herzegovina	Not implemented	Deadline: Dec. 2009 Telecom Sector Policy, Official Gazette No. 8/2009, sets the implementation deadline at the end of 2009 Law on Communications (Official Gazette No. 31/2003, Art. 8, 27, 38 and 39) RAK Rule on Number Portability No. 32/2008	Max. BAM 30.00 (€15)	Direct routing, ACQ with centralised database	Centralised database is to be financed by telecom operators.	Not yet available commercially	-
Montenegro	Not implemented	Deadline: Aug. 20, 2011 Legal basis: Article 110 of Law on Electronic Communications Secondary legislation is required for implementation.	-	-	-	-	-
Serbia	Not implemented	Deadline: Jan. 2011 Regulation on mobile NP was published in the Official Gazette of the Republic of Serbia, No. 5/10 of 05.02.2010.	RSD 1,000 (€10.74)	Onward routing until fixed NP is established. ACQ with centralised database.	Centralised database is going to be operated by the NRA and funded from the NRA budget.	Not yet operational	-
Kosovo	Not implemented	Deadline: not defined. Telecommunications Law provides no legal basis for mobile number portability	-	-	-	-	-

Table E.5 - Availability of mobile number portability

Table E.6 shows where VoIP providers are allowed to use geographic and non-geographic numbers from the national numbering plan and where they are allowed to port-in such numbers from another operator, usually the incumbent operator. In most cases, in the absence of general number portability, it is not available for VoIP. Croatia and Montenegro have created dedicated number ranges for non-nomadic VoIP, respectively 075 and 078.

The term 'nomadic services' refers to services where the user can connect to their VoIP service from any network termination point and make or receive calls using the same number. Nomadic VoIP services are therefore provided independently of the physical location of the user. However, the user may be required to specify a particular physical location and corresponding network termination point as their 'home' location when signing the contract with the provider of the nomadic VoIP service in order to enable the provision of caller location information to the emergency services.

Country		Access to subs	criber numbers for Vol	Р		Number p	ortability	
	Geographic		Non-geo dedicated rang	• •	Geographic		Non-geographic	
	Non-nomadic VolP	Nomadic VoIP	Non-nomadic VoIP	Nomadic VoIP	Non-nomadic VolP	Nomadic VoIP	Non-nomadic VolP	Nomadic VoIP
Croatia	No	No	Yes (075)	No	No	No	Yes	No
FYROM	Yes	Yes	No	No	Yes	Yes	No	No
Turkey	Yes	No	No	Yes	Yes	Yes	Yes	Yes
Albania	No	No	No	No	NP not imp	lemented	NP not implemented	
Bosnia & Herzegovina	Yes	No	No	No	NP not imp	blemented	NP not impl	emented
Montenegro	No	No	Yes (078)	No	NP not imp	lemented	NP not impl	emented
Serbia	No	No	No	No	NP not implemented		NP not impl	emented
Kosovo	No	No	No	No	NP not imp	lemented	NP not impl	emented

Table E.6 - Availability of numbers and number portability for VoIP

Notes

- FYROM: 330,000 geographic numbers have been issued to alternative fixed operators that offer voice telephony services based on LLU or WiMAX as access technologies; 29,000 geographic numbers to CableTV operators offering voice telephony services. The NRA also issued 22 non-geographic free-phone numbers (0800-9abcd) to VoIP providers that offer outgoing international calls using pre-paid calling cards (these numbers are not assigned to the subscribers and do not offer the possibility of receiving calls).
- Albania: Article 90(3) of the new Law on Electronic Communications provides for the use of non-geographic numbers by nomadic VoIP services. Secondary legislation on new numbering regulation was adopted on Aug. 11, 2009.

3. Reference interconnection offer

One of the key factors in enabling a competitive telecommunications market is ensuring the availability of a reference interconnection offer (RIO) from the operators with significant market power in transparent and non-discriminatory manner.

Table E.7 gives an overview of fixed and mobile operators with SMP that are required to publish RIOs and the number of interconnection agreements made, grouped by the type of interconnection. While considerable work has been undertaken on the preparation and approval of RIOs, there are a significant number of gaps, especially for MNOs. In the case of FYROM, there is an appeal underway against changes introduced by the NRA.

Country	St	atus of RIO	Number of interconnection agreements		
	Fixed operators with SMP	Mobile operators with SMP	Fixed – Fixed	Fixed – Mobile	Mobile - Mobile
Croatia	T-HT (Hrvatske Telekomunikacije, T-Com) T-HT RIO valid from Oct. 1, 2009.	T-Mobile Hrvatska and VIPnet Current RIOs are valid from Oct. 1, 2009.	36	19	3
FYROM	Makedonski Telekom First RIO was introduced in Jan. 2006 and amended several times. Last amendments were introduced in May and Aug. 2009	T-Mobile and Cosmofon Current RIOs approved by the NRA on July 25, 2008 and valid from Aug. 2008.	12	9	3
Turkey	Türk Telekom RIO approved by the NRA and valid from Dec. 24, 2009	Turkcell, Vodafone and Avea RIOs approved by the NRA and valid from Dec. 15, 2009	34	52	3
Albania	Albtelecom RIO approved by the NRA on Feb. 10, 2009 and valid from Feb. 18, 2009	Vodafone Albania and AMC RIOs approved by the NRA on Feb. 10, 2009 and valid from Feb. 18, 2009	56	14	3
Bosnia & Herzegovina	BH Telecom, RIO valid from Nov. 2009 HT Mostar, RIO valid from Nov. 2009 Telekom Srpske, RIO valid from Nov. 2009 (with annexes)	No RIO published BH Telecom, Telekom Srpske and HT Mostar are designated as having SMP in mobile telephony services	15	-	-
Montenegro	Crnogorski Telekom, RIO approved by the NRA and valid from April 2008	No RIO published ProMonte and T-Mobile were designated as having SMP in mobile telephony services under Telecommunications Law of 2000, but regulatory obligations were never applied in practice.	1	6	3
Serbia	Telekom Srbija Standard RIO, Aug. 2008 RIO for interconnection with VoIP providers, March 2009 Not approved by the NRA	No RIO published No operator designated as having SMP	-	3	3
Kosovo	PTK, valid from Jan. 2007 Approved by the NRA on Jan. 12, 2007	No RIO published Vala has SMP in public mobile services market	1	1	1

Table E.7 - RIOs for fixed and mobile operators and number of agreements

Notes: Turkey:

There are no alternative fixed access networks in Turkey. All interconnection agreements with alternative fixed operators have been concluded so far with long distance carriers.

4. Reference unbundling offer

Table E.8 below shows the legal basis for a reference unbundling offer (RUO), with the set-up and monthly charges for a fully unbundled local loop and a shared loop. The levels of adoption by alternative operators are shown in terms of both the number of operator agreements and the number of loops that have been unbundled.

The number of loops unbundled to date is very small, being almost exclusively in Croatia where the RUO was first implemented in October 2005. Although Turkey has had a RUO since 2006, the number of unbundled loops is still very limited (approximately 14,000 out of a network of around 18 million lines). In Bosnia & Herzegovina RUO are available since January 1, 2010.

Albania, Montenegro, Serbia and Kosovo have yet to adopt RUOs. In 2009 LLU one-off fees decreased Turkey by 34%, while the monthly fees decreased by 12% for full access, and by 2.5% for shared access.

Country	Status of RUO	One-off and I	monthly prices	Implem	entation
	Legal basis	Fully unbundled loop	Shared loop	Number of LLU agreements	Number of unbundled loops
Croatia	T-Com RUO valid from Oct. 1, 2009 The first RUO was published in Oct. 2005 in accordance with LLU Ordinance of April 6, 2005 (amended Aug. 2005). Currently, public consultation on cost oriented prices to access of HT ducts. Makedonski Telekom RUO	One-off: HRK 370 (€51.00) Per month: HRK 52.14 (€7.19)	One-off: HRK 550 (€75.80) Per month: HRK 22.37 (€3.08)	6	115,750 as of Oct. 2009
	In Sep. 2008 the NRA adopted a new bylaw on LLU. Makedonski Telekom submitted a new RUO, which was approved by the NRA in Dec. 2008. The new RUO also includes unbundling of non-active loops and naked DSL. The first RUO was approved by AEC in May 2006.	 One-off for minimal review of local loop: MKD 983 (€16,06) One-off (for a block of 100 loops with physical collocation): MKD 7,214.00 (€117.87) or One-off (for a block of 100 loops with distant collocation): MKD 7,214.00 (€117.87) or One-off (for a block of 10 loops with physical collocation): MKD 2.504.00 (€40,91) or One-off (for a block of 10 loops with distant collocation): MKD 2,263.00 (€36,97) 	 One-off for minimal review of local loop: MKD 983 (€16,06) One-off (for a block of 100 loops with physical collocation): MKD 7,295.00 (€119,2) One-off (for a block of 100 loops with distant collocation): MKD 7,242.00 (€118.38) One-off (for a block of 10 loops with physical collocation): MKD 2.142.00 (€35) One-off (for a block of 10 loops with distant collocation): MKD 1,900.00 (€31,04) Per month: MKD 142.85 (€2.33) 		3,974 as of July 1, 2009

Country	Status of RUO	One-off and	monthly prices	Implementation	
	Legal basis	Fully unbundled loop	Shared loop	Number of LLU agreements	Number of unbundled loops
		 One off fee for connection MKD 1,473.00 (€24,06) Per month: MKD 430.00 (€7.03) 	 Naked-DSL, per month: MKD 430.00 (€7.03) 		
Turkey	Türk Telekom RUO The Communiqué on LLU of July 20, 2004 established that Türk Telekom must submit its RUO to NRA for approval every year. The first RUO was approved in Nov. 2006. In Aug. 2007 monthly prices were decreased (full unbundling from 20 TRY to 17 TRY shared access 6.5 TRY to 5.75 TRY) 2009 RUO was approved in Feb. 2009. Last amendments published Nov. 24, 2009. In June 2009 full unbundling monthly rental price and connection prices for full and shared access were decreased.	 One off: TRY 68 (€31.26) Per month: TRY 15.3 (€7.03) 	 One off: TRY 74 (€34.02) Per month: TRY 5.75 (€2.64) 	9	13,956 as of Oct. 2009
Albania	RUO not available The NRA adopted TRE Regulation No 416 of Dec. 7, 2007 on access and interconnection including rules for the publication and content of RUO, but there is no obligation for Albtelecom to provide LLU or to publish a RUO.	-	-	-	-
Bosnia & Herzegovina	BH Telecom RUO, HT Mostar RUO, Telelom Serpske RUO - all in force since Jan. 1, 2010 Regulation on LLU adopted by the NRA on May 27, 2008 According to the sector policy adopted by the Council of Ministers on Dec. 18, 2008, RUOs had to be implemented not later than by the end of 2009.	 One off: BAM 90.00 (€46.02) Per month: BAM 13.94 (€7.13) 	 One off: BAM 108.00 (€55.22) Per month: BAM 5.58 (€2.85) 	-	-
Montenegro	RUO not available	-	-	-	-
Serbia	RUO not available	-	-	-	-
Kosovo	RUO not available	-	-	-	-

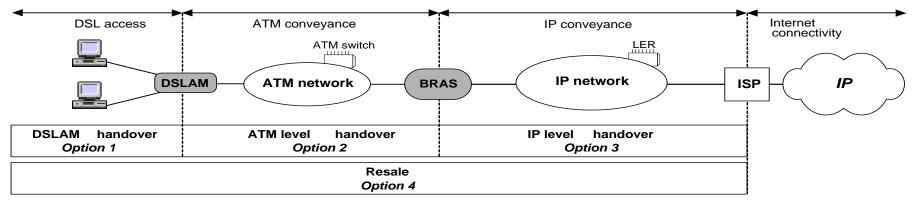
Table E.8 - Status of the RUO and local loop unbundling charges

Notes: FYROM: In Makedonski Telekom RUO one-off fees for installation are defined for block of 10 or 100 loops. The alternative operator On.Net launched its commercial activities using LLU in May 2008. There is no distinction between the charges applied to already active lines and to newly built ones.

Turkey:

5. Wholesale broadband access

Figure 33 shows the various possible handover points for DSL traffic between an incumbent operator and an alternative operator or ISP.



DSLAM: DSL Access Multiplexer / ATM: Asynchronous Transfer Mode / BRAS: Broadband-Remote Access Server / LER: Router

Figure 33 - DSL interconnection

DSL interconnection services – bitstream access (BSA)

Option 1 - handover at the DSLAM.

Option 2 - handover at the ATM network level, either at:

- the 'parent' ATM switch (i.e., the ATM switch closest to the DSLAM); or
- one or more 'distant' switches in the ATM network (involving additional conveyance across the ATM network by the incumbent);

Option 3 - handover at one or more points on the IP network of the incumbent.

Resale service

Option 4 – resale of end-to-end DSL service between the end-user and the ISP.

Table E.9 shows where bitstream access and resale offers are available, either on a commercial basis or mandated by the NRA. It shows the availability of the four options shown in Figure 33.

The extent of the adoption of the various options is shown in the final columns. Croatia has had some success with Option 3, while Turkey has made some progress with Options 3 and 4, with over 300,000 lines supplied to alternative operators using both options. Serbia has done well, with nearly 70,000 lines using Option 3.

Country	Legal basis	Option 1	Option 2	Option 3	Option 4	In	nplementation
	BSA/resale offered on commercial basis if not mandated?	DSLAM level	ATM/Ethernet handover	IP handover	End-to-end resale	Number of BSA/resale agreements	Number of broadband lines with BSA/resale by alternative operators
Croatia	 According to the latest market analysis of the wholesale broadband access market, Croatian Telecom (HT) has to offer bitstream access service with handover points at DSLAM, ATM/Ethernet and IP level. The price is defined based on retail minus methodology In Feb. 2009 the NRA approved T-Com's new reference offer for wholesale broadband access. The first version was approved in Dec. 2007, included as Annex to the RIO for ISPs. Two types of service are offered: ADSL Transport, which covers the transmission capacity from DSLAM to BRAS with handover in the incumbent's IP network, and Wholesale ADSL access, which covers the bitstream access from DSLAM to the customer. 	Yes (on request)	Yes (on request)	Yes (subject of the bitstream offer)	No (there is not any obligation)	5 (Option 3)	17,407 as of Oct. 2009
FYROM	Bylaw on wholesale bitstream access and bitstream resale (adopted in Dec. 2008, published in Official Gazette of No. 154/2008).Reference Bitstream offer of AD Makedonski Telekom approved by the Agency for electronic communications in July 2009 includes option 1, 3, and 4.BSA with handover at IP-level and resale have been offered commercially since 2007.	Yes	No	Yes	Yes	1	18,163 as of Oct. 2009

Country	Legal basis	Option 1	Option 2	Option 3	Option 4	In	nplementation
	BSA/resale offered on commercial basis if not mandated?	DSLAM level	ATM/Ethernet handover	IP handover	End-to-end resale	Number of BSA/resale agreements	Number of broadband lines with BSA/resale by alternative operators
Turkey	The obligation to provide wholesale bitstream access at IP level and resale was imposed on Türk Telekom by the TA board Decision No. 2004/535 of Oct. 6, 2004. The wholesale tariffs for bitstream access were approved in July 2005. The first reference offers were approved in Aug.2007. In July 2007, the TA also requested Türk Telekom to prepare by Jan.1, 2008 a wholesale BSA offer with handover at the ATM level (Option 2). Reference ATM level BSA Offer was approved in December 2008 and entered into force on July 1, 2009.	Not available	From July 1, 2009 Turk Telekom Reference ATM level BSA offer was published on March 10, 2009.	Yes Türk Telekom's Reference IP level BSA offer published on March 10, 2009	Yes Türk Telekom's Reference Resale ADSL/G.SHDSL offer published on March 10, 2009	13 (Option 3) 20 (Option 4)	397,971 (Option3) 6,183 (Option 4) as of Sep. 1, 2009, Massive migration from resale to BSA with IP handover from 2008, see notes below table.
Albania	No	Not available	Not available	Not available	Not available	-	-
Bosnia & Herzegovina	No	Not available	Not available	Not available	Not available	-	-
Montenegro	No	Not available	Not available	Not available	Not available	-	-
Serbia	Telekom Srbija offers wholesale ADSL on commercial basis	Not available	Not available	Commercial offer	Not available	around 30	103,701 as of end 2008
Kosovo	No	Not available	Not available	Not available	Not available	-	-

Table E.9 - Availability of wholesale fixed broadband access offers

Notes:

Turkey: Turk Telekom is obliged to offer LLU, bitstream access and broadband resale services to alternative operators (Internet Service Providers).Currently, Turk Telekom's wholesale broadband access offers with handover at ATM level (ERG Option 2) and IP level (ERG Option 3) and end-to-end resale (ERG Option 4) are available. The reference offer with handover at DSLAM level (ERG Option 1) is not under consideration. There are 13 agreements on IP level BSA and 20 agreements on resale services. TTNet (Turk Telekom's affiliate ISP) has agreements on both of these services.

6. Wholesale line rental

An incumbent operator may rent its subscriber lines on a wholesale basis to alternative operators that would then resell the subscriber line to the end user, usually known as wholesale line rental (WLR). In conjunction with carrier pre-selection ('all calls' option), WLR enables alternative operators to end the billing relationship between the incumbent and the end user.

Table E.10 shows the availability of WLR in the monitored countries. WLR is currently only available in FYROM, where a bylaw was adopted in December 2008, and the incumbent's reference offer was approved by the NRA in March 2009. In Turkey, the obligation to provide WLR was imposed on Türk Telekom in December 2009, following the analysis of fixed retail access markets, but not implemented in practice yet.

Country	Available	Legal basis for	Pricing rule set	Publication of a	Impleme	ntation
	since when?	the imposition of WLR	by NRA?	reference offer	Number of WLR agreements	Number of WLR lines
Croatia	No	None	-	-	-	-
FYROM	From Dec. 2008	Bylaw on wholesale line rental, adopted in Dec. 2008	Retail minus: 20% to 35%	Yes, approved and published in March 2009. The approved price is based on 'retail minus 20%. Last amendments and new fees were approved on Sep. 29, 2009	1	7,993 as of July 1, 2009
Turkey	No	ICTA final decision on analysis of retail fixed access markets Decision no. 2009/DK – 10/659 of 16.12.2009	-	-	-	-
Albania	No	None	-	-	-	-
Bosnia & Herzegovina	No	None	-	-	-	-
Montenegro	No	None	-	-	-	-
Serbia	No	None				
Kosovo	No	None	-	-	-	-

Table E.10 - Availability of wholesale line rental

7. Implementation of wholesale offers in practice

Table E.11 summarises the state of play with all types of wholesale offer. The large number of blank entries indicates the lack of progress.

Nonetheless, Croatia with fully unbundled loops and bitstream access is in a strong position, gaining experience for all parties. Turkey and Serbia have some success with BSA.

Country	Fully unbundled lines		Shared lines		Bitstream	Bitstream access		Broadband resale		Wholesale line rental	
	Number of agreements	Number of lines	Number of agreements	Number of lines	Number of agreements	Number of lines	Number of agreements	Number of lines	Number of agreements	Number of WLR lines	
Croatia	6	115,750	2	1,863	5	17,407	-	-	-	-	
FYROM	1	3,974	1	-	1	-	1	18,163	1	7,993	

Country	Fully unbundled lines		Share	Shared lines		Bitstream access		Broadband resale		Wholesale line rental	
	Number of agreements	Number of lines	Number of agreements	Number of lines	Number of agreements	Number of lines	Number of agreements	Number of lines	Number of agreements	Number of WLR lines	
Turkey	9	53	9	14,206	13	397,971	20	6,183	-	-	
Albania	-	-	-	-	-	-	-	-	-	-	
Bosnia & Herzegovina	-	-	-	-	-	-	-	-	-	-	
Montenegro	-	-	-	-	-	-	-	-	-	-	
Serbia	-	-	-	-	c.a. 30	103,701	-	-	-	-	
Kosovo	-	-	-	-	-	-	-	-	-	-	

Table E.11 - Implementation of wholesale offers in practice

Article 12 of the Access Directive establishes that, based on a market analysis, NRAs can impose obligations on operators with SMP to meet reasonable requests for access to network elements and associated facilities. The NRA may do so where it finds denial of access or unreasonable terms and conditions would hinder the emergence of a competitive market at the retail level or would not be in the end-users' interest. Operators may be required, inter alia, to provide collocation or other forms of facility sharing, including of ducts, buildings, or masts.

Article 12 of the Framework Directive calls NRAs to encourage the sharing of facilities and access to properties by electronic communications network operators. In particular, where undertakings are deprived of access to viable alternatives because of the need to protect the environment, public health, public security or to meet town and country planning objectives, the sharing of facilities or property (including physical co-location) or specific measures to facilitate the coordination of public works can be mandated subject to a prior public consultation. Such sharing or coordination arrangements may include rules for apportioning the costs of facility or property sharing.

Table E.12 shows whether obligations to provide access to ducts, have been imposed as a result of market analyses or based on specific legislation (e.g., national rules for electronic communications or competition law).

Country		Obligations to provide access to ducts				
	Market analysis	Other basis				
Croatia	Yes	Electronic Communications Act of 2008, article 30.				
	HAKOM decision on analysis of M4/2007, July 2009	An obligation may be imposed by the NRA for requirements concerning the protection of human health, environmental protection, spatial protection, protection and preservation of cultural goods, or for national security.				
FYROM	No	Under articles 30 and 51 of the Law for Electronic Communications and the Rules for Access and Utilization of Specific Network Facilities, the NRA may impose infrastructure sharing because of the need to protect public health, the environment or to meet planning objectives				

Country		Obligations to provide access to ducts
	Market analysis	Other basis
Turkey	No	Law on Electronic Communications No. 5809, article 17.
		An obligation to share facilities or properties in return for a reasonable charge may be imposed by the NRA because of the need to protect environment, public health and safety, urban and regional planning and efficient use of resources.
		Currently, Turkey has an implementing legislation for co-location and duct sharing. In February 2009 the NRA approved a document setting out facility sharing conditions and prices to be annexed to the Türk Telekom's reference wholesale offers. The annex document draws a framework for sharing of Türk Telekom's underground/aerial facilities, e.g. ducts, canals, manholes, etc.
Albania	No	Law on Electronic Communications No. 9918, article 22.
		In cases where the economic use of space, city planning and protection of environment requires so, operators of the public electronic communications networks that have the right to construct and install communication equipments in the private or public property shall construct or install them in such way as to enable their joint use. Undertakings of public communications networks shall be obliged negotiate agreements for the joint use of facilities and assets. The NRA shall encourage them to reach agreements for the joint use of the facilities and assets, provided it is technically feasible and compensation is given by the requesting party. A dispute resolution procedure on sharing of facilities is also covered by the same article. Article 42 of the same law specifies obligation to allow access and interconnection and joint usage of network facilities (including ducts) on SMP operators
Bosnia & Herzegovina	No	No
Montenegro	No	Rulebook on the Joint Use of Telecommunications Infrastructure (Official Gazette No. 65/2005)
		Article 1 of the Rulebook defines telecommunications infrastructure as land, buildings and other constructions, ducts, antenna masts and other necessary infrastructure needed for their use.
Serbia	No	There is no legal basis to impose such obligation in the in current law
		According to Telecommunications Law, article 87 (2), if technically feasible, the NRA may order sharing of infrastructure by two or more telecommunications operators in return for fair compensation.
		RATEL decision from December 8, 2006 on Principles for sharing of cable infrastructure
Kosovo	No	Section 3.6.3 of the Telecommunications Sector Policy supports the sharing of infrastructure facilities " between and among PTO's (including, but not limited to, backbone facilities, towers, ducts, and premises), should be mandatory, to the extent practicable and consistent with the provisions of the Telecommunications Law.
		Section 27 of the Law on Telecommunications, on shared use of facilities and public rights of way, states that "The TRA shall establish rules for the use of publicly and privately controlled property with respect to telecommunications services and service providers"

Table E.12 - Access to ducts

8. National roaming, mobile access and call origination

Table E.13 shows the commercial and mandated offers of access to mobile networks.

Country	Legal obliga	ition to offer	Commercial reality
	Mobile access and call origination for MVNOs and service providers	National roaming	
Croatia	There is no legal obligation to offer access since the market of wholesale access and call origination on mobile networks has been deregulated. HAKOM decision of July 31, 2009.	Based on commercial agreements	 National roaming 2G-2G: Tele2 on T-Mobile (from June 2008 until June 2011) Wholesale call origination: No Both T-Mobile and VIPnet provide wholesale call origination for Premium Rate Service (PRS). Access terms are commercially agreed and not regulated in the RIOs. PRS is different because the buyer of call origination can be directly a PRS service provider that has been assigned numbers and not an operator that has no spectrum but wants to provide mobile telephony services.
FYROM	No	No	National roaming 2G-2G: VIP on T-Mobile (from Sep. 2007)
Turkey	According to the analysis of M15/2003, Turkcell is designated as having SMP and obliged to provide call origination upon request. No specific regulation on MVNO and service provider access.	No National roaming may be imposed by the NRA within the scope of access obligations defined under Article 15 of Electronic Communications Law	No
Albania	No Market Analysis for wholesale mobile access and call origination services was under public consultation till Sep. 2009. AKEP is in the process of decision making for SMP and obligations	No	No
Bosnia & Herzegovina	No RAK has created Guidelines for introducing MVNO and SP on the BiH mobile communications market. In accordance with Telecom Sector Policy deadline for RIOs in the field of mobile communications is the end of year 2010	Mobile 2G operators were required to have national roaming with each other to ensure national coverage.	National roaming 2G-2G: Between all the three mobile operators
Montenegro	No	No	No

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Country	Legal obliga	ation to offer	Commercial reality
	Mobile access and call origination for MVNOs and service providers	National roaming	
Serbia	No Mobile operators with SMP are required to provide open access to their networks. To date, no mobile operator has been designated as having SMP in the mobile origination market	No	National roaming 2G-2G: VIP – mt:s (Telekom Srbija)
Kosovo	No specific obligations, but MVNO operations can be launched subject to a commercial agreement between an MNO and a service provider. The NRA issued an MVNO framework in Feb. 2008 (amended in May 2008) that clarifies licensing, numbering, interconnection and other service provision aspects for MVNO operations.	No	Two MVNO licences issued so far. Dardafone was licensed on June 12, 2008 and Dukagjini Telecommunications on June 24, 2008. Dardafone has a network access agreement with the MNO - Vala, whereas Dukagjini has with the MNO - IPKO.

Table E.13 - National roaming, mobile access and call origination

9. Price control and regulatory cost accounting for fixed and mobile wholesale prices

Where an operator is designated as having SMP in a wholesale market, NRAs are entitled under article 13 of Access Directive (2002/19/EC) to impose a cost accounting obligation to ensure that operators subject to price regulation follow fair, objective and transparent criteria when allocating their costs to services. However, the Directive does not prescribe which cost accounting methodology is to be used.

Table E.14 indicates the markets in which price controls have been imposed on operators having SMP. It also identifies the type of price control applied by the NRA and the specific Cost Accounting System (CAS) it has mandated:

- LRAIC: Long Run Average Incremental Costs
- LRIC: Long Run Incremental Costs
- FDC: Fully Distributed Costs
- EDC: Embedded Direct Costs

Where the LRIC model is used, it shows whether the costs have been calculated using:

- TD: a top-down model (starting from the SMP operator's accounting data);
- BU: a bottom-up model of an efficient network; or
- BU/TD: a reconciliation of the other two models.

A description of the CAS and an annual statement concerning compliance are required to be published (Article 13(4) of the Access Directive).

Country	Markets/activities	Pricing rule set	Meth	odology mandate	d by NRA	Legal basis
		by NRA?	Cost base	Cost standard	BU, TD or reconciliation	
Croatia	Fixed access and interconnection,	Benchmarking (EU average) LRIC is foreseen	-	-	-	Electronic Communications Act of 2008 For markets not yet analysed (e.g. fixed retail markets) the regulatory obligations imposed under the previous law
	Wholesale broadband access (public consultation is ongoing)	Retail minus				remain in force, in accordance of article 128 of the Act.
	Mobile call termination	Cost orientation Benchmarking (EU average) LRIC is foreseen	-	-	-	
FYROM	LLU, fixed interconnection	Cost orientation	Current cost	LRIC	Top-down	 Law on Electronic Communications Rules on the manner of recording the accounting separation related to interconnection and/or access activities, adopted in Dec. 2005 Rules on allocation of costs and capital employed, adopted in Dec. 2008 Rules on establishing the level of information detail to detail to be published in the reference interconnection offers, adopted in Sep. 2008.
	Call termination on individual mobile networks	Benchmarking (from 2008) Cost orientation (from 2010)	Current cost	LRIC	Top-down	 Rules on establishing the level of information detail to be published in the reference interconnection offers and the manner of their publication, adopted in December 2008 AEC Decision of Jan. 18, 2008 designating T-Mobile and Cosmofon as having SMP on mobile call termination market.
Turkey	Leased lines	Cost orientation	Forward- looking	LRIC	Reconciliation	Articles 13-14 of the Law on Electronic Communications; Article 10 of Tariff Ordinance
	LLU	Cost orientation	-	-	-	Articles 8, 11 and 12 of Access and Interconnection Ordinance and Communiqué on LLU. Turk Telekom is subject to price control obligation based on its SMP designation on the relevant market
	Fixed interconnection	Cost orientation	Current costs	LRIC	BU	Article 12 and 16 of Access and Interconnection Ordinance. Turk Telekom is subject to price control obligation based on its SMP designation on the relevant markets

Country	Markets/activities	Pricing rule set by NRA?	Methodology mandated by NRA			Legal basis	
			Cost base	Cost standard	BU, TD or reconciliation		
	Mobile call termination	Cost orientation	Current costs	LRIC	BU	Article 16 of Access and Interconnection Ordinance. Turkcell, Vodafone and Avea are subject to price control obligation based on their SMP designation on the relevant market	
Albania	Fixed interconnection	Benchmarking BU-LRAIC foreseen	-	-	-	Articles 45, 57 and 59 of the Law on Electronic Communications. Albtelecom is subject to price control obligation based on its SMP designation on the relevant markets	
	Mobile call termination	Benchmarking BU-LRAIC foreseen	-	-	-	Articles 45, 57 and 59 of the Law on Electronic Communications. AMC and Vodafone are subject to price control obligation based on their SMP designation on the relevant markets	
Bosnia & Herzegovina	Fixed interconnection	Benchmarking	-	-	-	RAK regulation on interconnection of March 11, 2002 Communications Law of 2002, article 21 (1) requires that the principle of cost orientation shall be applied to determine the level of the tariffs charged by companies having SMP.	
	Call termination on individual mobile networks	Benchmarking					
Montenegro	Fixed interconnection	Benchmarking	-	-	-	NRA decision of April 15, 2008 approving RIO of Crnogorski Telekom	
Serbia	Services in public fixed telephone network	Cost orientation	HCA	Top-down model	-	Telecommunications Law of 2003, article 56 (16) requires fixed and mobile operators to set cost-oriented wholesale	
	Radio and television program distribution service provision via cable network	Cost orientation	HCA	Top-down model		prices Rules on the application of the cost-accounting principle, separate accounts and reporting of a telecommunications operator with significant market power (Official Gazette of RoS No. 103/08)	
Kosovo	Fixed interconnection	Benchmarking	-	-	-	Based on section 6, paragraph 4, section 53, 57 of Law or Telecommunications, and also based on section 9 of the License for fixed national services granted to PTK, the NR approved PTK's RIO on January 12, 2007.	
	Mobile call termination	Benchmarking	-	-	-	TRA ruling of December 12, 2007 setting MTRs in a dispute between PTK Mobile (Vala) and Ipkonet mobile	

Table E.14 - Price control and regulatory cost accounting obligations

Notes:	
FYROM:	Agency has launched a public hearing on the calculation of the WACC of Makedonski Telekom, One Operator and T-Mobile. Comments could be submitted by 18.01.2010. After public hearing Agency will adopt final Decision of the value of WACC for the three operators. Additionally, Agency is the in process of developing a bottom up LRIC model for fixed operators (interconnection and LLU) and mobile operators (origination and termination). Deadline for the implementation is April 2010.
Albania:	AKEP has taken decisions on applying BU-LRAIC standard for interconnection of SMP mobile and fixed, and has procured international consultancy for developing BU-LRAIC models in 2009.
Serbia:	Telecommunications Law of 2003, articles 9, 10, 43, 44, 56, 57 requires fixed operators with SMP to set cost-oriented prices. This provision has not been implemented in practice. On Oct. 14, 2008, RATEL approved Rules on the application of the cost-accounting principle, separate accounts and reporting (Official Gazette No. 103/08) that foresees implementation of FAC HCA cost accounting model by July 2010 and LRIC model by July 2012 for operators designated as having SMP in the relevant markets.

F. Universal service

1. Scope of universal service and provider designation mechanism

Universal Service Directive 2002/22/EC requires any designation of a universal service (US) provider to be carried out by "an efficient, objective, transparent and non-discriminatory designation mechanism, whereby no undertaking is *a priori* excluded from being designated". These rules allow 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. Furthermore, 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 reduce the cost of universal service provision.

Table F.1 shows the designation of the universal service providers in SEE countries:

- the scope of universal service defined by national legislation;
- which operator(s) has been designated to provide the US obligations or where no designation procedure has been carried out which providers are currently required to provide the entire scope or specific elements of the universal service;
- the designation mechanism for the US providers and the legal basis;
- technology neutrality of the universal service obligation (e.g., whether there are any restrictions on mobile operators bidding for the provision of a connection to the public telephone network at a fixed location).

Country	Scope of US	Universal service providers	Designation mechanism for the US provider(s)	Technology neutral? Eligibility of mobile operators for US designation
Croatia	 Access to the public voice telephone services through a connection at a fixed location and data communications at a minimum speed of 33.6 kbps Access of end users to at least one comprehensive subscriber directory Directory enquiry services Provision of public payphones in the licensed areas Access to emergency services to all subscribers free of charge Lower tariffs for services provided to disabled people 	HT- Hrvatske Telekomunikacije d.d.	The NRA Council can impose an obligation on 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 a public voice service provider has a market share above 80%, HAT Council oblige 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 Nov. 28, 2005 the NRA designated T-HT as a USO provider for 5 years term, without public tender.	Yes
FYROM	 Access to publicly available telephone services at a determined geographical location, making and receiving local, national and international telephone calls, facsimile communications and data communications at a minimum speed of 2,400 bps Ensuring access to information in the single directory and directory enquiry services Provision of public pay telephones Ensuring conditions for equivalent access to and use of publicly available telephone services for disabled end users, including access to emergency calls services and information in single directory 	None	Under article 35 of the Law for Electronic Communications, the NRA may designate one or several universal service providers, following a public tender procedure. In Jan. 2008, Agency started a public tender with pre- qualification for Universal Service provider nomination. Two companies passed the first phase. In the meanwhile, the necessity to change some provisions in the Law for Electronic Communications related with Universal Service arose. The whole procedure for Universal Service provider(s) designation has been postponed until the adoption of the amendments into the Law.	Yes
Turkey	Access to emergency services to all subscribers free of charge	Türk Telekom	No designation mechanism – the requirement is set out in the concession agreement of Türk Telekom.	No
	Telephone directory services to be provided in the printed or electronic media	Türk Telekom		No
	Provision of public payphones	Türk Telekom		No
	Access to public fixed telephony services	Türk Telekom		No
	Provision of satellite services to Turkish Red Crescent Society	Türksat	No designation mechanism – Türksat is designated for provision of these services (voice and data via satellite)	No
	Digital broadcasting (DVB-T services)	-	No designation mechanism - the technical and legal studies continue.	No

Country	Scope of US	Universal service providers	Designation mechanism for the US provider(s)	Technology neutral? Eligibility of mobile operators for US designation
	Access to basic internet services	Türksat, Türk Telekom	No designation mechanism – Türk Telekom and Türksat are designated to establish the infrastructure of the basic internet services for training associations located in rural, high cost areas.	No
Albania	 Access to the telephone service available to the public from a defined geographic location, enabling the user to make and receive local, national and international calls, facsimile communications and data communication at a minimum speed of 32 kbps telephone directory public payphones and equivalent access to and use of telephone service for disabled end-users, including access to emergency calls services and information in telephone directory. 	 from a defined geographic location, enabling the user to make and receive local, national and international calls, facsimile communications and data communication at a minimum speed of 32 kbps telephone directory public payphones and equivalent access to and use of telephone service for disabled end-users, including access to emergency 		Yes
Bosnia & Herzegovina	Access to emergency services to all subscribers free of charge	All operators	No designation mechanism – the requirement is set out in the license terms.	Yes
	Provision of public payphones	BH TelecomTelekom SrpskeHT Mostar	No designation mechanism – the requirement is set out in the license terms of the three fixed incumbent operators.	No
	Lower tariffs for services provided to disabled and persons with special social needs	BH TelecomTelekom SrpskeHT Mostar	No designation mechanism – the requirement is set out in the license terms of the three fixed incumbent operators.	No
	Connections to the fixed public telephone network at a fixed location and access to fixed public telephone services at affordable prices, allowing users to make and receive national and international calls, supporting speech, facsimile and/or data communications; provision of directories and directory enquiry services; public pay phones	BH TelecomTelekom SrpskeHT Mostar	No designation mechanism – the requirement is set out in the license terms of the three fixed incumbent operators.	No

Country	Scope of US	Universal service providers	Designation mechanism for the US provider(s)	Technology neutral? Eligibility of mobile operators for US designation
Montenegro	 Access to public fixed telephone services equal access to and affordability of publicly available telephone services for disabled users and users with special social needs access to emergency services free of charge access to telephone directory and directory enquiry services. 	None	Under article 54 of the Law on Electronic Communications, the NRA may designate one or several universal service providers for a period of 5 years, following a public tender procedure	Not defined
Serbia	 The minimum scope must include: Access to a public fixed telephone service enabling functional Internet access special measures for disabled and socially disadvantaged users; free access to emergency services; public payphones and access to telephone directory and directory enquiry services. 	Not defined	Not defined	Yes
Kosovo	Access to emergency services to all subscribers free of charge	All public telecommunications operators	No designation mechanism – the requirement is set out in the licence	Yes

Table F.1 - Universal service scope and provider designation mechanism

Notes:

- Croatia: The Agency shall organise a public consultation at least once in every two years in order to verify universal services have been provided in the prescribed and adequate manner, and whether there are operators interested in providing one or more services within universal services and/or covering different geographical areas of Croatia.
- Turkey: Under the Universal Service Law (No. 5369) of June 16, 2005, the scope of universal service covers fixed telephone services, public payphones, printed or electronic directory services, emergency call services, basic internet services, passenger transport services to places that can be reached only through sea transport, and maritime emergency and security communications services. Apparently the passenger transport services relate to two islands in the Aegean where private companies are not willing to provide services during the winter. In 2006, this list was extended by the Council of Ministers to include two further elements: 1) services oriented to spread information technologies, including computer literacy, to help the development of information society and 2) services for the provision of the digital broadcasting by the utilisation of various broadcast media and technology via digital terrestrial transmitters to cover the entire settlements countrywide. The Universal Service Law envisages a tender procedure for the designation of universal service providers which has not yet been implemented.

- Bosnia & Herzegovina: The Law on Communications states that the Council of Ministers shall define the scope of universal service, the funding mechanism and the designation of the universal service providers. The NRA has submitted a draft decision covering the scope of universal service, undertakings the designation and the funding mechanisms and the requirement for the NRA to set QoS parameters and terms for defining USO funding mechanism. The draft is examined by several government bodies, as part of standard procedure before its adoption by the Council of Ministers.
- Montenegro: Chapter VI (Articles 52-52) of Law on Electronic Communications (Official Gazette of Montenegro, № 50/2008) provides legal basis for the Universal service. Universal service is not yet implemented in practice. Under the article 144 of Law on Electronic Communications the NRA was required, no later than 6 months from the entry into force of the law, to adopt the necessary regulations and initiate tender procedure for selection of operator of Universal Service, which was not achieved in practice. Secondary legislation is still under preparation.
- Serbia: Under the transitional provisions of the Telecommunications Law, Telekom Srbija was required to provide the "initial scope" of universal services until expiry of its exclusivity rights in June 2005. The initial scope of universal services was defined as comprising access to a public fixed telephone service enabling functional Internet access; special measures for disabled and socially disadvantaged users; free access to emergency services; public payphones and access to telephone directory and directory enquiry services. Following the expiry of Telekom Srbija's universal service obligations, the Ministry of Information Society and Telecommunications is required to define the scope of universal service based on the proposal of the NRA, while the NRA must designate the provider and establish the universal service fund. In accordance with the Action plan for implementation of the National Strategy for Development of Telecommunications, the Ministry will define the minimal set of universal services would be in the first half of 2009.
- Kosovo: The Law on Telecommunications, Section 21.6, allows the NRA to establish additional conditions for authorizations, based upon the class or category of services, which may include special arrangements for disabled people. Under Section 49, the NRA is also authorized to adopt secondary legislation on the scope of the USO, which may include specific measures for people with disabilities.

2. Universal service funding

Article 12 of the Universal Service Directive (2002/22/EC) requires NRAs to calculate the net cost of universal service provision where they consider that it may represent an unfair burden on the provider. According to Article 13, NRAs may either introduce a public funding mechanism for compensation or share the net cost between operators.

Table F.2 shows the legal basis for any calculations and reimbursement of costs for the universal service, the method of funding (if any) and the status of implementation.

Country	Legal basis for calculation and reimbursement of USO costs	Method of funding	Implementation
Croatia	Articles 39-40 of the Electronic Communications Act of June 19, 2008 (Official Gazette 73/2008)	Cost sharing The reimbursement of net costs for universal service provision is to be financed by all operators of publicly available telephone services with revenue exceeding 2% of the total revenue in this market. The amount of contributions to be paid by individual operators is to be set in proportion to their market shares.	Not implemented
FYROM	NRA has adopted a by-law document about the method of calculating the real costs and intangible benefits for universal service provision. Since there is no US provider nominated yet, the compensation scheme can't be implemented	Cost sharing The reimbursement of net costs for universal service provision is to be financed by the operators and providers with minimum annual gross revenues of €100,000. The contribution may not exceed 1% of the operator's gross revenue received from the provision of public electronic communications networks and services.	Not implemented

Country	Legal basis for calculation and reimbursement of USO costs	Method of funding	Implementation
Turkey	Law No.5369 on 'The Provision of Universal Services and Making Changes on Some Laws' (Official Gazette No. 25856, June 25, 2005) Ordinance on Principles and Procedures for the Collection of Universal Service Revenues and Execution of Expenditures (Official Gazette No. 26213, June 29, 2006). Net cost of the universal service shall be calculated on the basis of the difference between the net cost when the incumbent operator does not provide services within the scope of universal services and when it provides such service. However, the calculation of the net cost shall also take into consideration the benefits obtained by operators due to provision of the universal service.	 According to article 6 of the Universal Service Law of June 2005, contributions to the universal service fund consist of the following: 2% of the authorization fees collected by the Telecommunications Authority 1% of net sales revenues of all operators except for GSM operators 10% of payments by GSM operators to the Treasury 20% of administrative fines collected by the Telecommunications Authority 20% of what remains in the budget of the Telecommunications Authority budget after all expenditures are deducted Percentages can be increased by up to 20% by the Council of Ministers. These revenues are collected in the public budget and allocated to the budget of the Ministry of Transport. 	Not implemented
Albania	Articles 29 and 30 of the Law on Electronic Communications. NRA shall define the methodology for calculating the real costs and intangible benefits that should be taken into consideration in the calculation of real costs of universal service provision and in doing so it shall take into account the EU recommendation on universal service.	Cost sharing is foreseen by Law on Electronic Communications. Universal service fund is to be financed by the undertakings that own public electronic communication networks and provide electronic communication services, and the public electronic communications services providers, in accordance with the regulations to be adopted by the NRA. The contribution may not exceed 1% of the operator's gross revenue received from the provision of public electronic communications networks and services.	Not implemented
Bosnia & Herzegovina	None To be adopted during 2009. Draft decision pending of approval by the Council of Ministers. No reimbursement of USO cost is foreseen before the end of 2009.	Cost sharing is foreseen Contributions will be required from all undertakings providing electronic communications networks and services, set in proportion to their revenues.	Not implemented
Montenegro	USO cost compensation is foreseen by Law on Electronic Communications, Article 57	Cost sharing is foreseen by Law on Electronic Communications, Article 58 Contributions will be required from all undertakings providing electronic communications networks and services, set in proportion to their revenues. If the net USO cost exceeds 1% of the total electronic communications sector revenues in that specific year, the Ministry may provide for additional funding from the state budget.	Not implemented

Country	Legal basis for calculation and reimbursement of USO costs	Method of funding	Implementation
Serbia	USO cost compensation is foreseen by the Telecommunications Law, Article 50	Cost sharing is foreseen Contributions will be required from other public telecommunications operators in proportion to their market shares. The amounts and timing of such payments have to be set out in a separate regulation to be adopted by the NRA.	Not implemented
Kosovo	USO cost compensation is foreseen by the Law on Telecommunications, Section 49	Not decided	Not implemented

Table F.2 - Universal service funding

3. Subscriber directories

Directory information and a directory enquiry service constitute an essential access tool for publicly available telephone services. Two types of activities can be distinguished:

- collecting directory information from different providers of publicly available telephone services, aggregating this information into a single database and maintaining this database;
- providing access to such aggregated directory information, in particular by printing directories and providing directory enquiry services which are accessible via phone or online.

The European legislation addresses directories in the Universal Service Directive and the Privacy Directive:

- The Universal Service Directive addresses directory access for end-users. According to Art. 5 of the Universal Service Directive, at least one comprehensive directory (printed or in electronic form) and at least one comprehensive telephone directory enquiry service shall be available to end-users. These directories shall comprise all subscribers of publicly available telephone services. Art. 25 (1) Universal Service Directive gives all subscribers the right to have a directory entry.
- The Privacy Directive addresses subscribers' privacy interests. According to Art. 12 (2) Privacy Directive subscribers shall be given the opportunity to determine whether their personal data are included in a public directory, and if so, which data, and to verify, correct or withdraw such data. Not being included in a public subscriber directory, verifying, correcting or withdrawing personal data from it shall be free of charge.

a) Legislation on directories

Country	Obligation to inform or ask new subscribers? Free of charge?	Right to be included? Free of charge?	Right to be not included? Free of charge?	Scope mobile subscribers? pre-paid and post-paid?	Relevant legislation
Croatia	Yes, all subscribers must be informed before being included (free of charge).	Yes, all subscribers have the right to be included (free of charge).	Yes, all subscribers may request not to be included (free of charge).	All subscribers (including mobile subscribers and pre-paid subscribers).	Art. 47 Electronic Communications Act
FYROM	Yes, all subscribers must be informed before being included (free of charge).	Yes, all subscribers have the right to be included (free of charge)	Yes, but not free of charge. Refusal to be included in a public directory, and verifying, altering or erasing personal data shall be charged on the basis of real costs.	Opt-in, all subscribers are included. Subscribers must have the opportunity to determine which, if any, of their personal data from paragraph 1 of Article 118 of the Law for electronic communications will be included in a public directory. Subscribers may verify their personal data or require their correction or erasure.	All subscribers (including mobile subscribers and pre-paid subscribers)
Turkey	Yes, all new subscribers must be asked whether they want to be included (free of charge).	Yes, all subscribers have the right to be included	Yes, all subscribers may request not to be included (free of charge).	All subscribers	Art.8 Bylaw on the protection of consumer rights Art.19 Bylaw on personal information processing and protection of privacy in the telecommunications sector
Albania	Yes, all subscribers must be informed before being included (free of charge)	Yes, all subscribers have the right to be included (free of charge).	Yes, all subscribers may request not to be included (free of charge).	All telephony subscribers (including mobile subscribers and pre-paid subscribers)	Art. 104 Law on Electronic Communications
Bosnia & Herzegovina	No explicit obligation to inform subscribers or ask new subscribers whether or not they want to be included.	Yes, all subscribers have the right to be included (free of charge).	Yes, all subscribers may request not to be included (free of charge).	All subscribers (including mobile subscribers and pre-paid subscribers).	Art. 9 Law on Communications
Montenegro	Yes, all subscribers must be informed before being included (free of charge).	Yes, all subscribers have the right to be included (free of charge).	Yes, all subscribers may request not to be included (free of charge).	All subscribers	Art. 53 and 111 Law on electronic communications.

Country	Obligation to inform or ask new subscribers? Free of charge?	Right to be included? Free of charge?	Right to be not included? Free of charge?	Scope mobile subscribers? pre-paid and post-paid?	Relevant legislation
Serbia	No explicit obligation in legislation. However the fixed incumbent asks when registering the subscriber for the first time whether the subscriber wants to be included.	Yes, all subscribers have the right to be included (free of charge).	Yes, all subscribers may request not to be included (free of charge).	Fixed subscribers only	In the granted licence the operator is obliged to provide electronic telephone directory.
Kosovo	Art. 76 para. 3 of the Law on Telecommunications states that subscriber data may only be included in directories if the subscriber consents in writing. Art. 81 of the Law on the Information Society Services states that service providers must give subscribers the opportunity to decide whether they want to be included.	Yes, all subscribers have the right to be included (free of charge).	Yes, subscribers may request not to be included (free of charge).	All subscribers (including mobile subscribers and pre-paid subscribers). Art. 76 of the Telecommunications Law and; Art. 81 of the Law on the Information Society Services	Telecommunications Law and Law On The Information Society Services

Table F.3 - Subscriber inclusion in directories

Notes:

FYROM: There is a proposal to amend the Law for electronic communications in a direction that a subscriber has a right to be not included in directories for free of charge.

Bosnia and Herzegovina: Law on Communications stipulates that operators of public voice telephony services shall maintain an up-to-date subscriber directory, and that subscribers shall have the right to decide whether or not their number shall be included in the database. Although not specifically prescribed by the Law, operators do give the right to subscribers to be/to be not included in the database free of charge. Also, when applying for new service, subscribers are asked whether they want to be included free of charge. Mobile operators give the right to both post-paid and pre-paid subscribers to be included.

b) Availability of comprehensive directories

Country	Is a comprehensive directory or directory enquiry service available in practice? Form (printed, telephone enquiry, online)	Legal obligation to provide a comprehensive directory or directory enquiry service?	Legal provisions by which the provider of a directory or a directory enquiry service can request access to subscriber data of operators?
Croatia	Yes Comprehensive directory and directory enquiry service available in practice.	 The provisions on universal service in Art. 35 Electronic Communications Act include the provision of a comprehensive directory of subscribers of all publicly available telephone services and provision of a directory enquiry service to all end users, including users of public pay phones. The operator HT-Hrvatske telekomunikacije d.d. was designated as universal service provider by a decision of the NRA in 2005 and this designation includes the obligation to provide the comprehensive 	Art. 47 para. 8 to 10 Electronic Communications Act obliges all operators of publicly available telephone services to grant publishers of directories and providers of directory enquiry services access to their subscriber data on the basis of the principles of non-discrimination and cost orientation.
FYROM	No comprehensive directory available in practice. All voice telephony network operators provide directory enquiry service for their own subscribers (i.e. currently the incumbent, the three mobile operators, and one alternative fixed operator)	directory and a telephone enquiry service. Art. 33 and 34 Law on electronic communications defines the single directory and directory enquiry service as universal service. No undertaking is obliged to provide the service. A procedure of designating a universal service provider for comprehensive telephone directory and directory enquiry services is pending due to necessary amendments in the Law on electronic communications.	Art. 34 para. 6 Law on electronic communications obliges operators providing public telephone services to make subscriber data available to providers of the universal service. It also foresees a dispute settlement procedure. Some amendments of the Law for electronic communications are planned to be done in 2009, related with the comprehensive directory, directory enquiry service and the exchange of subscriber data between the authorised provider(s) for comprehensive directory and directory enquiry service with the operators.
Turkey	No comprehensive directory available in practice	No relevant legislation. No undertaking is obliged to provide the service.	Operators of directory enquiry service can request access to subscriber databases of all operators. Bylaw on authorisation for electronic communications sector of May 28, 2009 provides that operators having rights of use are obliged to make available directory services (article 20(d)).
Albania	No comprehensive directory available in practice	Art. 25 Law on electronic communications defines the general telephone directory as universal service. No undertaking is obliged to provide the service.	Art. 25 point 3 Law on electronic communications obliges providers of public telephone services to submit subscriber data to providers of universal services.
Bosnia & Herzegovina	No comprehensive directory available in practice.	No legal obligation to provide a comprehensive directory or directory enquiry service.	Art. 9 para. 1. d) obliges operators of public voice telephone services to make their subscriber directory available on request to other providers for an appropriate payment in electronic form or on-line for the purpose of providing information or publishing directories

Country	Is a comprehensive directory or directory enquiry service available in practice? Form (printed, telephone enquiry, online)	Legal obligation to provide a comprehensive directory or directory enquiry service?	Legal provisions by which the provider of a directory or a directory enquiry service can request access to subscriber data of operators?
Montenegro	No comprehensive directory available in practice	Art. 52 Law on electronic communication defines the universal phone directory enquiry as universal services. No undertaking is obliged to provide the services.	Art 53. Law on electronic communications.
Serbia	Yes Currently, the directory includes subscribers of fixed operator. Form: printed, telephone enquiry, online	In the granted licence the operator is obliged to provide electronic telephone directory.	No relevant legislation
Kosovo	No comprehensive directory available in practice	No relevant legislation. No undertaking is obliged to provide the service.	Art. 76 para. 5 and 6 Law on telecommunications oblige service providers to submit subscriber data to persons that wish to publish a directory at reasonable prices and under non-discriminatory conditions.

Table F.4 - Availability of comprehensive directories

c) 112 emergency number

Article 12 of the Universal Service Directive requires that all end-users of the electronic communications service for originating national calls to a number or numbers in a national telephone numbering plan, including users of public pay telephones, are able to call the emergency services free of charge and without having to use any means of payment, by using the single European emergency call number "112". Furthermore, caller location information must be made available free of charge to the authority handling emergency calls as soon as the call reaches that authority.

The table shows if:

- the 112 number is available;
- other emergency number(s) exist in the country;
- the existing emergency call is free of charge for end user;
- the call is also associated to location information (location of the caller); and
- provision of emergency call service is obligatory for fixed incumbent operator, mobile operators, fixed alternative operators, and/or public phones operators.

Country	Is the single European emergency number 112	other national n	Is the emergency number free of	Is the caller	If available please specify if the obligation to offer emergency service is by:			
	available? (Yes/No) If yes, please also provide legal basis and date of introduction.	emergency numbers available? Please provide details	charge for the caller? (Yes/No)	location information provided? (Yes/No)	Fixed incumbent operator (Yes/No)	Alternative operators (Yes/No)	Mobile operators (Yes/No)	Public payphones (Yes/No)
Croatia	Yes Feb. 2005 Law on protection and rescue (174/04)	92 Police 93 Fire brigade 94 Ambulance and 9155 Search and rescue at sea	Yes	Yes	Yes	Yes	Yes	Yes
FYROM	No	Yes 192 Police 193 Fire brigade 194 Ambulance	Yes	Yes*	Yes	Yes	Yes	Yes
Turkey	Yes, but currently connected only to medical emergency service. Project ongoing for combining other emergency services under 112	Yes 110 Fire 151 Coastal Safety 155 Police 156 Gendarmerie 157 Helpline for victims of human trafficking 158 Coast Guard 159 Road emergency 168 Turkish red crescent 177 Forest Fire	Yes	Yes Location data is provided for the following numbers: 110,112, 155, 156	Yes	Yes	Yes	Yes
Albania	No	126 Road accident 127 Ambulance 128 Fire Brigade 129 Police	Yes	No	Yes	Yes	Yes	Yes
Bosnia and Herzegovina	No	Yes 122 Police 123 Fire brigade 124 Ambulance	Yes	Yes	Yes	Yes	Yes	Yes

Country	Is the single European emergency number 112	Are there any other national Is the emergency number free of		Is the caller	If available please specify if the obligation to offer emergency service is by:			
	available? (Yes/No) If yes, please also provide legal basis and date of introduction.	emergency numbers available? Please provide details	charge for the caller? (Yes/No)	location information provided? (Yes/No)	Fixed incumbent operator (Yes/No)	Alternative operators (Yes/No)	Mobile operators (Yes/No)	Public payphones (Yes/No)
Montenegro	No June 1, 2010 Law on electronic communications. Rulebook on the introduction of the single European emergency call number "112", and on the quality of the service of handling the calls made to that number (Official Gazette of Montenegro, No 64/09).	Yes 122 Police 123 Fire 124 Crisis intervention	Yes	Not yet. Rulebook provides it should become operational by June 1, 2010	Yes	No	Yes	Yes
Serbia	No	92 Police 93 Fire 94 Ambulance	Yes	No CLI only	Yes		Yes	Yes
Kosovo	No According to Telecommunication Sector Policy, 3.1.4.a1, time frame for the Implementation of standard "E-112" emergency number was Q4 2008. The date of introduction has been postponed to Q4 2010	112, 92 Police 193 Fire Brigade 194 Ambulance	Yes According to Law on Telecommunications	No	Yes According to Law on Telecommunications, section 55	Yes	Yes	No

Table F.5 – Availability of single European emergency number 112

Notes:

FYROM: Government decision for the manner and time-frame for implementation of single European emergency number 112, published in the "Official Gazette of RM", No. 12/2007 dated of 02.02.2007. On Feb. 29, 2008 Government adopted the conceptual definition of the system E- 112. Feasibility study must be adopted prior to implementation

Bosnia & Herzegovina: Article 9 of Communication Law (Obligations of Telecommunications Operators Providing Public Voice Telephony Services) prescribes that telecommunications operators providing a public voice telephony service shall: (c) provide access free of charge to emergency services.

4. Itemised billing

Art. 10 and Annex I of the Universal Service Directive give subscribers the rights to receive itemised bills in order to allowing them verification and control of the charges, adequately monitor their usage and thereby exercise a reasonable degree of control over their bills. The details shall be laid down by the NRAs.

Art. 7 of the Privacy Directive addresses privacy concerns in relation to itemised billing, in particular the rights of calling users (because telephones are often used by persons other than the subscriber) and called subscribers. It also gives subscribers the right to receive non-itemised bills.

The table below shows:

- whether subscribers have the right to receive itemised bills;
- whether subscribers have the right to receive non-itemised bills;
- the applied methods for protection of privacy in itemised bills, e.g. making anonymous the last digits or that calls to toll-free numbers must not be included in the itemised bill;
- a reference to the relevant legislation.

Country	Right to receive itemised bills	Right to receive non-itemised bills	Methods for protection of privacy	Reference to the relevant legislation
Croatia	Yes	Yes	Calls to toll free numbers, including emergency numbers, must not be included in the itemised bill	Art. 44 Electronic communications act
FYROM	Yes Subscribers have the right to receive itemised bills which show the cumulative number of accounting units separately for local calls, national calls, international calls, calls to mobile networks, data transfer and other services. If a subscriber wants to get a more detailed bill, he/she can get it for free upon request.	No	Calls to toll free numbers, including emergency numbers, must not be included in the itemised bill	Art. 101 Law on electronic communications
Turkey	Yes	Yes	No	Art. 5 Bylaw on the protection of consumer rights
Albania	Yes	No	Calls to toll free numbers, including emergency numbers, must not be included in the itemised	Art. 106 Law on electronic communications Consumer protection law includes
			bill	obligation to deliver itemised bill for telecommunication services

Country	Right to receive itemised bills	Right to receive non-itemised bills	Methods for protection of privacy	Reference to the relevant legislation
Bosnia & Herzegovina	Yes	Yes	Calls which are free of charge to the calling subscriber, including calls to help lines, shall not be identified in the subscriber's itemized bills (obligation explicitly specified only for fixed operators).	Licence obligations.
Montenegro	Yes The law does not oblige operators to show details for every call; it only requires operators to show the number of accounting units accumulated for local calls, intercity calls, international calls, calls to mobile networks, calls to value added services and data transfer and other additional services.	Yes	Calls to toll free numbers, including emergency numbers, must not be included in the itemised bill	Art. 113 Law on electronic communication
Serbia	Yes	Yes	No	Art. 92 Telecommunications law
Kosovo	Yes	Yes	No	Art. 71 Law on telecommunications and Art. 76 Law on the information society services

Table F.6 – Itemised billing

Notes:

Bosnia & Herzegovina: Operators must provide to subscribers bills with billing items which allows verification and control of the charges incurred in using the fixed public telephone services. Complete itemised bills, which include information on each specified call (destination number, date, time duration and number of pulses) can be offered as separate service at economically justified price. Specifically for incumbent operators: exceptionally, in case of justified bill complaints, complete itemised bills shall be provided to subscribers free of charge. Operator shall ensure that calls which are free of charge to the calling subscriber, including calls to help lines, shall not be identified in the subscriber's itemized bills. New operators: upon subscriber's request, the licensee may modify review of calculation items in the bill.

5. Quality of service

Article 11 of the Universal Service Directive (2002/22/EC) provides that NRAs may set specific performance targets for the designated universal service providers. The standards are set out in Annex III to the Directive, specifying ETSI EG 201 769-1 version 1.1.1 (April 2000).

Table F.7 shows the quality of service targets set for operators, together with any work done to assess compliance.

Country	NRA imposed performance targets/QoS requirements	Operators subject to QoS requirements	QoS measured according to which standard?	Actual performances against targets published? (date + weblink)	Penalties for non- compliance
Croatia	Yes	HT – Hrvatske telekomunikacije QoS requirements imposed on the universal service provider are set out in the Ordinance on Universal Services adopted by the NRA on Feb. 16, 2009.	ETSI EG 201 769-1	Performance indicators published in April 2009.	No
FYROM	Yes	Every operator or provider of public voice telephony services has an obligation to publish its QoS parameters for the previous year on its website and to inform the NRA about the measured QoS parameters.	ETSI EG 201 769-1	After the check and validation of the reported data for QoS parameters, AEC will publish them on its website.	No
Turkey	Yes	Public fixed networks operators with SMP (currently, Turk Telekom) have an obligation to inform the NRA about the measured QoS parameters defined by NRA for each quarter.	ETSI EG 202.057-1	No	Yes
Albania	Yes	Every operator or provider of public voice telephony services (fixed and mobile) has an obligation to report to AKEP its QoS parameters for the previous year and for the first 6 months.	ETR 138/1994 ITU-T E.426 WTDR-1994*	No	No
Bosnia & Herzegovina	Yes	Fixed and mobile operators with SMP	ETSI EG 201	No	No
Montenegro	Not yet	All public operators (foreseen according to the draft rulebook)	ETSI EG 201 (foreseen)	No	No
Serbia	QoS parameters are set out in the operators' licences	All licensed public fixed and mobile network operators	ETSI EG 201 769-1 GSM: Handover success rate ≥95% Call success rate ≥98% Dropped call rate ≤2% UMTS: BLER ≤1%	No	No
Kosovo	QoS parameters are set out in the operators' licences	All licensed public fixed and mobile network operators	ETSI EG 201 769-1	No	No

Table F.7 - Application of Quality of Service requirements

Notes:	
FYROM:	In June 2006, the NRA adopted Rules on technical requirements for the quality of universal service. No US providers designated yet.
Turkey:	GSM operators are obliged to fulfil QoS requirements: call block rate must be less than 5% of total calls and call drop rate must be less than 2% of total calls.
	For more details, see Ordinance on Quality of Service in the Telecommunications Sector. This secondary legislation is to be revised in 2009.
Albania:	The QoS are included as an annex to the individual authorisations of operators for the allocated numbers. There is a requirement to report to AKEP QoS performance, but there is no publication requirement yet. New law on electronic communications has a provision for publication of QoS from operators. AKEP is in the process of preparing secondary legislation regulation.

Table F.8 shows the results of QoS measurements for key parameters according to ETSI indicators (1-5).

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)
Croatia	95% of requests are fulfilled within 32.27 days	11.78%	25.05 hours for 80% on target date for faults on access lines 57.50 hours for 95% on target date for faults on access lines; 23.65 hours for 80% on target date for all other faults 53.83 hours for 80% on target date for all other faults.	1.019 % for national calls within fixed network	1.395 seconds for 80% of calls
FYROM	95% of requests are fulfilled within six calendar days.99% of requests are fulfilled within thirteen calendar days.	13%	80% of reported faults are repaired within 23:22:57 hours. 95% of reported faults are repaired within 52:53:04 hours.	3.11% for national calls 0.04% for international calls	1.43 sec for national calls 3.2 sec for international calls
Turkey	Not reported	5.56%	80% of faults on access lines are repaired within 24 hours 95% in 48 hours	1.2% for national calls Not available for international long distance calls	Not reported
Albania	Not reported	4.4%	50 minutes	0.15% for local calls 1.73% for national calls 1.73% for international calls	Not reported
Bosnia & Herzegovina	8-22 days It depends on technical possibilities.	13-26%	80% faults - 28:00 - 51:30 95% faults - 125:18	3.01% for national calls 4.47% for international calls 1.15% for fixed to mobile calls	0.05 - 4 seconds
Montenegro	Normally 1-2 days Maximum 7 days, if technical conditions are fulfilled.	Not available	4 hours	0.1% for local Not available for long distance	0.2 sec for local calls

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)
Serbia	14 days (if technically possible)	12.21%	48 hours	average 0.37% 0. 0%% for calls originated and terminated at the same local switch 0.38% for national calls 0.42% for fixed to mobile calls 0.63% for international calls	1.50
Kosovo	6.4 days	0.3%	24 hours	0.2%	0.50

Table F.8 - Quality of service measurements of fixed incumbent operators

Notes:

Bosnia & Herzegovina: According to ETSI EG 201 769, was 18%, and 88% of faults were fixed by the end of next working day as of Dec. 31, 2008.

G. Fixed retail telephony tariffs

The reference date for the information in this section is October 1, 2009.

Regulatory objectives of pro-competitive telecommunications policies are aimed at protecting the interests of consumers in terms of choice, price, quality of service and value for money, in particular through promoting open and competitive markets. Retail prices represent one of the most important indicators enabling to assess the outcomes of regulatory policies.

Historically, telecommunications operators and regulators have set retail prices for network access as low as possible. Prices for other services, such as long distance calls, have been kept high to subsidise low access prices. With the introduction of competition, such an approach becomes untenable as new entrants concentrate on provision of services with high margins and avoid services priced below cost. A policy of rebalancing seeks to increase access prices, and reduce prices for services that have traditionally subsidized low access prices. The objective is to ensure that the price for each service reflects the underlying cost of providing that service.

Regulators usually allow several years for implementing tariff rebalancing over several years in order to soften the consequences for consumers. Furthermore, when monthly rentals and local call tariffs are increased, it has been common to differentiate between residential and business tariffs. At the end of the process, lower call tariffs can stimulate demand for access, helping to mitigate the effects of increased access prices.

However, some consumers, typically low-income or low-usage customers may experience an increase in their telecommunications costs as a result of the tariff rebalancing. The policy response has been to protect such users with targeted subsidies or special tariff packages.

1. Tariff rebalancing and regulation of retail tariffs

Table G.1 shows the extent of the regulation of retail prices of fixed operators designated as having SMP. In particular, it identified progress towards rebalancing of the retail tariffs of the incumbent operator. Any requirements for the advance notification of new retail prices to the NRA or the ministry are specified, together with the approval process, whether it must be granted or whether tacit approval is possible, after a period of notification has elapsed.

Retail price control methodologies may include one or more of the following:

- compliance with a price cap regulation that has been set for the specific service(s);
- price squeeze tests, one or both of:
 - Test 1: SMP operator's own costs: There is a price squeeze when the proposed retail prices would not cover the SMP operator's own network and commercial costs.
 - Test 2: Costs of an "efficient alternative operator": There is a price squeeze where the proposed retail prices could not be replicated by an alternative operator using the most efficient combination of its own network, commercial infrastructure and wholesale services purchased from the SMP-operator with prices fixed in the wholesale reference offer; and
- international benchmarking.

Country	Status of tariff rebalancing (target date if established)	Retail services and operators covered	Advance notification requirements	Notice period	Formal or tacit approval	Assessment method (for formal approvals)
Croatia	Ongoing	Fixed voice telephony (T- Com)	Yes – to HAKOM	30 days	Formal	Test 1
FYROM	Ongoing	Fixed access and voice telephony (Makedonski Telekom)	Yes – to AEC	30 days	Tacit	According to the Bylaw on Retail price regulation (Official Gazette of the Republic of Macedonia, No. 154/08 of December 12, 2008, AEC may apply one of the following methods: Price cap Individual tariff approval Benchmarking and Cost orientation
Turkey	Ongoing	Fixed voice telephony (Turk Telekom)	Yes – to ICTA	15 days for tariffs and 7 days for promotions	Tacit	According to By-law on Tariff published on November 12th, 2009, The tariff proposals might be applied by using the following methods separately or together. • Notification • Upper/lower limit • Cost Orientation • Price Cap
Albania	Ongoing	Fixed access and voice telephony (Albtelecom)	Yes – to AKEP	30 days	Formal	Price cap
Bosnia & Herzegovina	The second phase of tariff rebalancing will be carried out during 2010-2012. Rule on the Model of Tariff Rebalance of Voice Telephone Services has been adopted. Implementation from January 1, 2010.	 Fixed voice telephony services (three incumbent operators): access fee monthly subscription per minute price of national calls per minute price of international calls 	Yes – to RAK	1 month	Formal	Benchmarking/Price cap
Montenegro	Ongoing	Fixed voice telephony	Yes – to EKIP	7 days	Formal	Benchmarking/Price cap

Country	Status of tariff rebalancing (target date if established)	Retail services and operators covered	Advance notification requirements	Notice period	Formal or tacit approval	Assessment method (for formal approvals)
Serbia	Ongoing	Fixed voice telephony (Telekom Srbija) Cable TV services (SBB)	Yes – to RATEL	Not specified	Formal	Cost orientation
Kosovo	Ongoing	Fixed voice telephony (PTK)	Yes	Not specified	Formal	Cost orientation

Table G.1 - Tariff rebalancing and regulation of retail tariffs

Notes:

FYROM:	Before termination of the Concession Contract of Makedonski Telekom in Aug. 2008 with the latest amendments of the Law for electronic communications, retail prices were regulated with price cap. In Dec. 2008 the Commission of the Agency for electronic communication has adopted a bylaw for the regulation of
	retail prices. AEC drafted manual for price-squeeze test and started public consultation on Oct. 28, 2009.
Albania:	Tariff rebalancing methodology was approved in 2008 and implementation started on Sep. 15, 2008. Three 6-month phases are completed, the 4 th and last
	phase of this methodology started in March 2009 and will finish in Sep. 2010. The methodology will be reassessed during 2010.
Bosnia & Herzegovina	a: Assessment method on the base of the benchmark comparison with prices for the same services in other countries.
Serbia:	RATEL adopted the bylaw on the cost-based model on Oct. 14, 2008

2. Retail price caps

Under Article 17 of the Universal Service Directive (2002/22/EC), NRAs are empowered to impose regulatory obligations to control individual tariffs (*inter alia*, by price caps) on undertakings with SMP in a given retail market if they have concluded, following a market analysis, that:

- the given market is not competitive; and
- obligations imposed on the wholesale market under the Access Directive (2002/19/EC) and the obligation to offer carrier selection and/or carrier preselection under Article 19 of the Universal Service Directive have failed to address competition concerns.

Table G.2 shows where retail price caps have been imposed on operators and the period of their validity.

Country	Validity of current price cap	Price cap (or sub caps)
Croatia	None	-
FYROM	None	-
Turkey	Turk Telekom: Jan. 1, 2007 – Dec. 31, 2009 No price cap from Jan. 1, 2010	 Until Dec. 31, 2009, CPI + 3.3% for the service basket that include: PSTN, ISDN BRA and ISDN PA connection, transfer and monthly rental, and Local, national call services, Internet access call origination, calls to mobile network and international call services. From Jan. 1, 2010 the price cap method will no longer apply. New by-law on tariffs came into force Nov. 12, 2009 introducing ex post lower limit method applicable to all operators and advance notification requirements of Turk Telekom prices.

Country	Validity of current price cap	Price cap (or sub caps)
Albania	Albtelecom Sep. 1, 2008 – Aug. 31, 2010 AMC and Vodafone Sep. 1, 2008 to Aug. 31, 2010	 RPI-RPI for the whole basket (residential and business): one-off installation fee monthly subscription fee local calls national calls retention rate for calls to mobile retention rate for international calls RPI-23% for one prepaid tariff option for both MNOs (Albacarta for AMC and Vodafone Card for Vodafone) 	 Sub caps: RPI+15% for monthly rental residential RPI+4.2% for local calls (residential peak RPI-X ≤ 8%) RPI-15% national calls (within Albtelecom network) RPI-20% for retention rate for calls to mobile RPI-15% for retention rate for international calls Sub caps: RPI-28% for retention rate for calls to other MNOs (national) RPI-28% for retention rate for calls to fixed network (national)
Bosnia & Herzegovina	The second phase of tariff rebalancing will be carried out during 2010-2012.	To be defined	
Montenegro	None	-	
Serbia	None	-	
Kosovo	None	-	

Table G.2 - Retail price caps

Notes:

FYROM: According to the Bylaw for the regulation of the retail prices, Makedonski Telekom is obliged to submit to the AEC notification of price changes within 30 days before their coming into effect. In addition, AEC has started market analysis of the retail markets 1-6/2003. The draft decision published on Dec. 17, 2009 proposes to impose a price control obligation on the incumbent operator, with the methodology to be specified at a later stage subject to public consultation.

3. Call charging system

The charges for public fixed voice telephony services can comprise two components: an initial or set-up charge applied at the beginning of a call and a charge for the remainder of the call, that may not depend on the type of initial charge used.

Initial charges can be of four different types:

- Call set-up charge set at the start of the call (when the call is answered). This charge does not include any call time. Per second or per unit charges apply from the beginning of the call.
- Initial charge that is used in the same way as call set-up, but additionally includes a certain number of seconds of call time before normal time-based charging starts.

- Unit charge in effect works the same way as the initial charge: A full unit is charged at the beginning of the call, providing a certain number of seconds call time until the next unit is charged. Depending on the principle used by the operator (synchronous or asynchronous) the number of seconds call-time in the first unit may be less than the specified unit duration.
- Minimum charging is normally used with per second billing, to ensure the operator obtains a minimum revenue per call. If the call duration is short, the actual call charge may be less than the minimum charge. In such cases the minimum charge will be applied.

Charging system during the call can by of three different types:

- Real time charging or "per second billing" in which the cost of the call to be calculated based on the exact duration of the call (normally to the nearest second). A call set-up charge, initial charge or minimum charge may be applied, in addition to the duration charge.
- Unit based charging using fixed price unit. The duration of this unit will vary with the destination of the call and time of day. The call duration will always be raised to a multiple of whole units, so the user will nearly always pay for more time than is used. Rarely, a call set-up charge may be applied to this method.
- Fixed period charging uses a variable price, but fixed duration unit. The call is normally charged on a per minute basis, or per 6 seconds. The price for the period will vary with destination and time of day. The charged duration of the call will be raised to a multiple of whole periods. A call set-up charge or initial charge is often implemented in the form of a higher charge for the first minute or period. This initial charge may vary with destination and time of day.

Table G.3 presents information on the call charging systems used by the fixed incumbent operators and the minimum cost of a call for local, long distance, international calls and call to a mobile phone.

Country	Type of call	Initial	charges	Charging during the call	
		Types of charges	Nominal value (€ incl. VAT)	Minimum charging unit	Nominal value (€ incl. VAT)
Croatia	Local	Call set-up	0.013	60 seconds	0.039
	Long distance	Call set-up	0.013	60 seconds	0.039
	Fixed-to-mobile	None		First 15 seconds	0.067
				Or	or
				1 second	0.004
	International	None		First 15 seconds	0.078
				or	or
				1 second	0.005
FYROM	Local	None		60 seconds	0.019
	Long distance	None		60 seconds	0.058
	Fixed-to-mobile	None		60 seconds	0.193

Country	Type of call	Initial charges		Charging during the call		
		Types of charges	Nominal value (€ incl. VAT)	Minimum charging unit	Nominal value (€ incl. VAT)	
	International	None		60 seconds	0.191 – 1.042 (1-10 tariff group)	
Turkey	Local	None		60 seconds	0.037 (incl. SCT tax 15%)	
	Long distance	None		60 seconds	0.043 (incl. SCT tax 15%)	
	Fixed-to-mobile	None		20 seconds	0.183 (incl. SCT tax 15%)	
	International	None		60 seconds	0.057 (incl. SCT tax 15%)	
Albania	Local	None		24 seconds (peak) 37 seconds (off peak)	0.009 (residential) 0.0117 (business)	
	Long distance	None		8 seconds	0.009 (residential) 0.0117 (business)	
	Fixed-to-mobile	None		1.6-2 seconds	0.009 (residential) 0.0117 (business)	
	International	None		3.9 seconds (Zone 1) Less than 1 second (Zone 3-5)	0.009 (residential) 0.0117 (business)	
Bosnia &	Local	None		1 second	0.00033	
Herzegovina	Long distance	None		1 second	0.00070	
BH Telecom	Fixed-to-mobile	None		1 second	0.00155	
	International	None		1 second	Depends on international zone 0.0085 (to UK)	
Bosnia &	Local	None		1 second	0.00020	
Herzegovina	Long distance	None		1 second	0.00091	
Telekom Srpske	Fixed-to-mobile	None		1 second	0.00155	
	International	None		1 second	Depends on international zone 0.0130 (to UK)	
Bosnia &	Local	None		1 second	0.00027	
Herzegovina	Long distance	None		1 second	0.00091	
HT Mostar	Fixed-to-mobile	None		1 second	0.00155	
	International	None		1 second	Depends on international zone 0.0130 (to UK)	

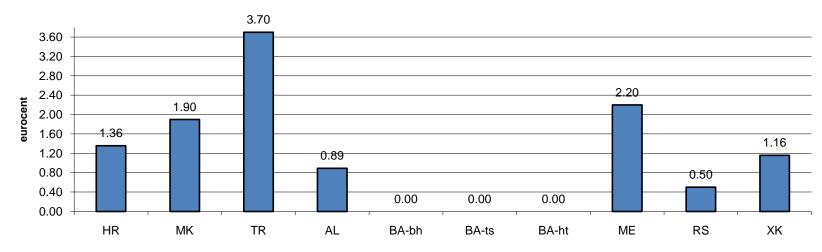
Country	Type of call	Initial charges		Charging during the call		
		Types of charges	Nominal value (€ incl. VAT)	Minimum charging unit	Nominal value (€ incl. VAT)	
Montenegro	Local	None		60 seconds	0.022	
	Long distance	None		60 seconds	0.0559	
	Fixed-to-mobile	None		60 seconds	0.222	
	International	None		60 seconds	Depends on international zone	
Serbia	Local	None		1 pulse (2 minutes off-peak, 1 minute peak)	0.005	
	Long distance	None		1 pulse (24 s off-peak, 12 s peak)	0.026	
	Fixed-to-mobile	None		1 pulse (4 s off-peak, 2.66 s peak)	0.115	
	International	None		1 pulse (from 1,727s to 0,54s)	0.178	
Kosovo	Local	Pulse	0.0116	4 minutes	0.046	
	Long distance	Pulse	0.0116	4 minutes	0.046	
	Fixed-to-mobile	Pulse	0.186	15 seconds	0.046	
	International	Pulse	0.302	9.2 seconds	0.046	

Table G.3 - Call charging systems of fixed incumbent operators

Notes:	
Croatia:	Reference date - August 31, 2009
	There are two call charging systems. In the first case the minimum charging unit is one minute or 60 seconds for the calls in the national network, but for calls
	to mobile networks and the international calls the minimum charging unit is 15 seconds. In the second case the minimum charging unit is one second (although
	the first 60 seconds of the call are always charged as 1 minute) with the call set-up charge at the amount of 0.08 HRK for all calls in the national network, the same charging unit of one second is also applied to calls to mobile networks and the international calls without the call set-up charge.
Turkey:	Charges include VAT and the Special Communication Tax of 15% for fixed network services.
Albania:	The charging system is pulse (unit) based. 1 pulse=1 ALL (residential) and 1.3 ALL (business).
	Duration in seconds of a pulse depends on the level of tariff and it is calculated as follows:
	1 Pulse (seconds)=60/(tariff per minute in ALL) for residential and 1 Pulse (seconds)=60*1.3/(tariff per minute in ALL) for business
	As 1 pulse is charged 1 ALL for residential and 1.3 ALL for business, we may say that for all calls the value per unit (initial and during the call) is 1 ALL for
	residential and 1.3 ALL for business. Duration of unit charge or pulses depends on the level of tariff in ALL. The values shown in the corresponding columns
	are calculated using the formula shown above.
Bosnia & Herzegovina	a: Rule 40/2009 on tariff rebalancing defines price cap for calls from fixed to own mobile network (on-net calls). Prices of calls from fixed to other mobile network
	(off-net calls) are out of scope of Rule 40/2009.
Serbia: Depending on	the type of call (local, long distance, international, non-geographic code) pulse length could be:
	2 min local (1 min in peak) - 24 sec long distance (12 sec in peak) - 4 sec national mobile (2,663 sec in peak)
	Price for international calls vary by country (from 1.727s to 0.54s)

H. Minimum cost of a local call

In the calculation of the minimum charge for calls using per second billing it is assumed that the call is terminated as soon as it starts, making the minimum charge for the call equal to any call set-up or defined minimum unit charge. Effectively, only in Bosnia and Herzegovina where there are no any call set up charges and there the billing per second is applied, the minimum cost of a call is zero.





Notes: Turkey:

The tariff includes a 15% Special Communications Tax.

1. Monthly subscription fees for residential and business users

Table H.1 shows the monthly rental prices for PSTN lines in the fixed network for residential subscribers in nominal euro with value added tax included. It shows the prices for the standard tariff plans and, where available, the prices for the low usage tariff plan. For the low usage tariff plan, it shows the basis for its offering (e.g., legal requirement such as a universal service obligation or commercial offer) and any restrictions that might apply (e.g., no possibility to use CS/CPS).

Albania shows a considerable increase of the residential monthly rental fee from the previous monitoring report (+49% net of exchange rate variation) however still the second lowest in the region, just before Serbia, and much below the EU average. Both Serbia and Albania have been gradually increasing the monthly rental fees since 2006, in a very slow tariff rebalancing process which is still not completed. In Montenegro, monthly rental increased by 17% from the previous monitoring period.

Croatia, Kosovo and Macedonia have the highest rates. Values are quite stable in all of the other countries.

Country	Standard monthly rental € with VAT			Availability of a low	Restrictions	Low	Value of call units included	
		Number of units	Nominal value of each unit, €	usage package Basis for the offer	applicable to low usage package	usage monthly rental, € with VAT	Number of units	Nominal value of each unit, €
Croatia	10.172	43	0.039	50% discount on Halo Start and Halo Super 60 Low-USO	Only for disabled people and family members of fallen Croatian soldiers	5.086	87	0.039
FYROM	7.697	0	-	Minimal model – tariffs model	None	4.244	0	-
Turkey	6.818	0	-	-	None	-	0	-
Albania	3.193	0	-	None	None	-	0	-
Bosnia & HerzegovinaBH TelecomTelekom SrpskeHT Mostar	 4.846 4.487 5.115 	160 minutes of local calls (peak time)	 0.020 0.012 0.016 	Yes special package: families of soldiers died in the war, disabled veterans, blind persons and the other disabled persons	None	 2.177 2.177 2.177 	160 minutes of local calls (peak time)	 0.020 0.012 0.016
Montenegro	6.981	100 minutes of local off-peak calls	0.013	Yes (mini package)	For residential users only	3.559	0	0
Serbia	2.472	150 pulses	-	A package to fully disabled customers offered on a commercial basis by Telekom Srbija	Only to disabled customers	1.236, (i.e. 50% of the standard monthly rental)-	300 pulses	0
Kosovo	8.074	250	0.046	Yes	None	4.025	-	-

Table H.1 - Residential monthly line rental charges of fixed incumbent

Notes:

Croatia:

Reference date October 1, 2009 Offer for low usage refers to fully disabled customers, and it is in commercial offer. Serbia still doesn't have a designated USO operator. Serbia:

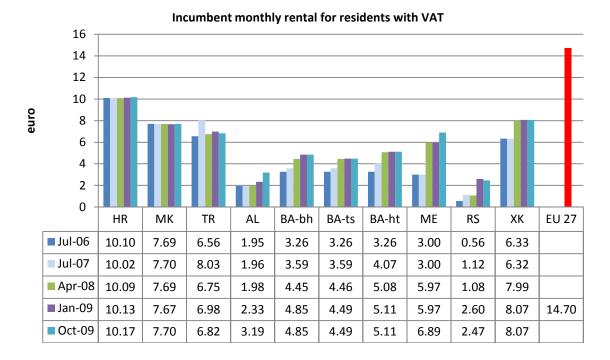


Figure 35 - Standard residential monthly rental (incl. VAT)

Notes:

The EU-27 average is taken from the 14th Implementation Report of the European Commission, March 2009. Turkey: The charges include the Special Communications Tax.

Prices are generally lower in South East Europe than the EU average. The relationship between national price levels may be expressed through purchasing power parity indexes that reflect the differences in relative price levels.

Taking these price levels into account means that the prices for consumers in this region appear higher than what is expressed through the nominal exchange rate, except for Kosovo where no PPP exchange rates are available yet.

Figure 36 below shows the differences in monthly rental when presented in nominal euro and in €/PPP values, except for Kosovo where no PPP exchange rates are available yet.

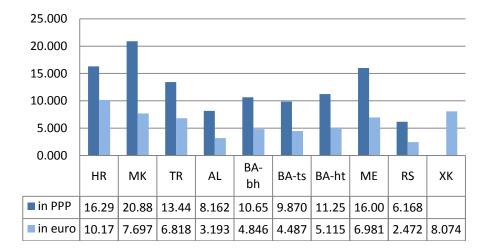


Figure 36 - Standard residential monthly rental (incl. VAT) expressed in PPP and nominal euro

Figure 37 below presents the low usage options in comparison with the standard monthly rental. Turkey and Albania do not have special low usage options. Albanian standard monthly rates is however lower than the low usage alternatives of all other countries, except for Bosnia and Herzegovina and Serbia.

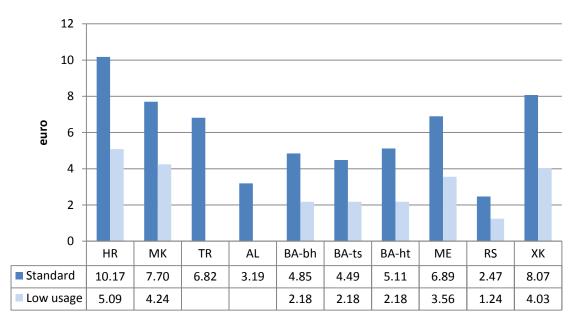


Figure 37 - Standard and low usage residential monthly rental including VAT

Notes:

Turkey: The charges include the Special Communications Tax

Serbia: Low usage available for disabled subscribers. Operator's decision is based on Article 49 of Law on Telecommunication.

Country	Standard monthly rental	Value of call units included			
	€	Number of units	Nominal value of each unit €		
Croatia	9.65	0	0		
FYROM	11.44	0	0		
Turkey	5.90	0	0		
Albania	10.03	0	0		
Bosnia & Herzegovina:					
BH Telecom	• 8.36	 160 minutes of local calls in peak time 	• 0.02		
Telekom Srpske	• 8.36	160 minutes of local calls in peak time	• 0.01		
HT Mostar	• 8.36	 160 minutes of local calls in peak time 	• 0.01		
Montenegro	5.10	0	0		
Serbia	2.09	0	0		
Kosovo	21.74	2,500	0.04		

Table H.2 shows the monthly rental prices for PSTN lines in the fixed network for business subscribers in nominal Euro without value added tax.

Table H.2 - Business monthly line rental charges of the fixed incumbent (excluding VAT)

Notes:

Turkey: Includes Special Communications tax

Serbia: If the subscriber spent less than 150 pulses per month he pays only monthly rental price of €2.20.

Montenegro: For double party lines monthly rental is €3.82. After rebalancing of tariffs, all prices for residential and business users are the same.

Figure 38 below shows the monthly line rental charges for business subscribers and presents the corresponding information from July 2007 for comparison. In Kosovo, monthly rental for business users remains considerably high in region, also much above the EU 27 average. Albania had significant price increases over two consecutive monitoring periods. Serbia considerably increased the business monthly rental at the beginning of 2009. There are no major changes in the other countries.



Figure 38 - Monthly rental business users

Notes:

Turkey: Includes Special Communications Tax.

The EU-27 average is taken from the 14th Implementation Report of the European Commission, March 2009.

2. One-off connection charges

Table H.3 shows the initial costs for the installation and connection of residential and business subscriptions. All prices are in euro. 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 operators have special reconnection tariffs that apply after a subscriber has been disconnected for failure to pay accounts. These are not included in the table.

Country	Residential (i	ncluding VAT)	Business (excluding VAT)		
	New line connection charge €	Reconnection charge (takeover) €	New line connection charge €	Reconnection charge (takeover) €	
Croatia	84.77	10.17	68.92	8.27	
FYROM	23.92	€7.697 (monthly rental)	20.27	€11.44 (monthly rental)	
Turkey	3.05	3.05	2.59	2.59	
Albania	62.43	62.43	52.02	52.02	
Bosnia & Herzegovina:					
BH Telecom	35.89	35.89	30.68	30.68	
Telekom Srpske	53.84	53.84	46.02	46.02	
HT Mostar	53.84	53.84	46.02	46.02	
Montenegro	64.99	14.63	55.55	10.68	
Serbia	63.38	4.72	107.43	4.00	
Kosovo	10.00	2.02	8.62	1.74	

Table H.3 - One-off connection charges of the fixed incumbent

Notes:

Turkey: Includes Special Communications Tax.

Figure 39 shows the trends in connection charges for residential customers since 2006. Some of these have dropped quite dramatically, notably in Kosovo and Bosnia & Herzegovina. The level in Albania, previously much above the monitored countries' average, has now reached the level of the other countries. Connection charges in Croatia are now the highest among the monitored countries.

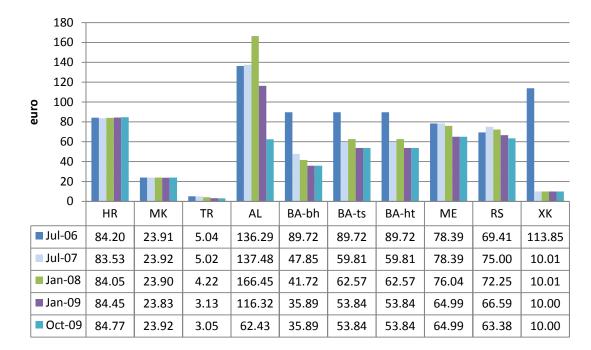


Figure 39 - Incumbent operator connection charges for residential customers (2006-2009)

Notes:

Turkey: Includes Special Communications Tax

3. Local fixed telephony tariffs of the incumbent and an alternative operator

Country	Largest alternative operator	Technologies used	
Croatia	OT - Optima Telekom	VoIP	
FYROM	Cosmofon	Fixed GSM	
		FWA	
	On.Net	LLU and WLR	
Turkey	Millenicom	PSTN + IP	
Albania	PRIMO	PSTN + IP	
Bosnia & Herzegovina	ANEKS	Cable-HFC	

Country	Largest alternative operator	Technologies used	
Montenegro m:tel		WiMAX	
Serbia No alternative operator		-	
Kosovo	Ipko	VoIP	

Table H.4 - Alternative operators chosen for comparison of retail tariffs

Notes:

Bosnia & Herzegovina: Company ANEKS d.o.o. Banja Luka is the largest alternative operator in BiH. Aneks d.o.o offers triple play services by optical-fiber transfer connections, usage of the latest IP and SS7 and highest-quality communications equipment.

Table H.5 below presents the local tariffs by the incumbent operator and an alternative operator for 3 minute calls and 10 minute calls. All tariffs are in euro with VAT included.

Country		Incu	mbent	Alternative operator	
		3 minutes, €	10 minutes, €	3 minutes, €	10 minutes, €
Croatia		0.117	0.390	0.122	0.383
FYROM		0.058	0.193	0.052	0.174
Turkey	Turkey		0.367	0.078	0.261
Albania		0.067	0.223	0.128	0.428
Bosnia & Herzegovina	BH Telecom	0.059	0.197	0.036	0.120
	Telekom Srpske	0.036	0.120	0.036	0.120
	HT Mostar	0.048	0.162	0.036	0.120
Montenegro		0.007	0.220	0.120	0.400
Serbia		0.015	0.051	-	-
Kosovo		0.035	0.116	0.209	0.696

Table H.5 - Local calls for residential customers (including VAT)

Notes: Turkey: Includes Special Communications Tax

Albania: The alternative operator PRIMO offers PSTN traditional fixed telephony (referred here as PSTN) and VoIP through PRIMO Phone (referred here as IP).

Figure 40 shows the cost of a three-minute local call in Eurocents on the network of the incumbent operator, including VAT for residential consumers. There is considerable variation in the prices, with Croatia and Turkey more expensive, while Serbia is the cheapest. The EU-27 average is indicated by the red line.

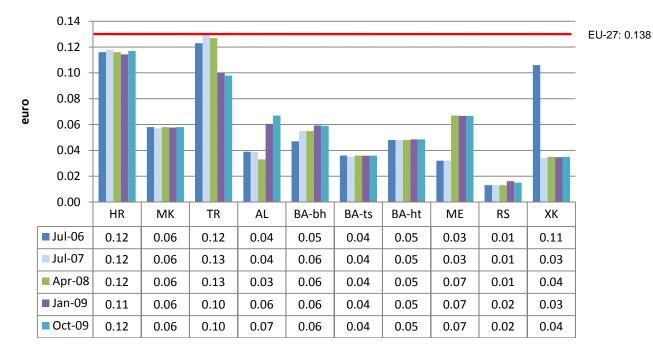


Figure 40 - Cost of a three-minute local call (incumbent) in nominal value

Notes: Turkey:

Includes Special Communications Tax of 15%.

EU-27: Source: 14th Implementation Report of the European Commission. March 2009.

Figure 41 shows the equivalent data for a ten-minute call with very similar patterns.

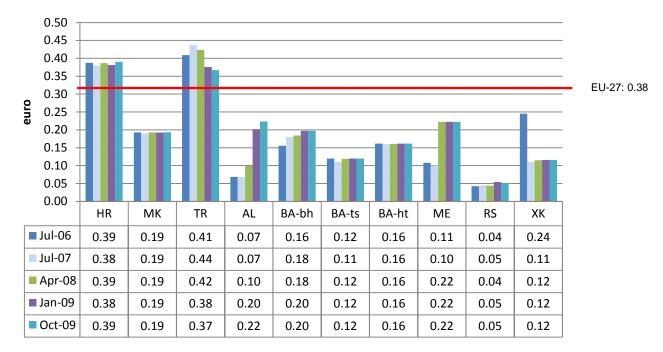


Figure 41 - Cost of a ten-minute local call (incumbent) in nominal value

Notes: Turkey:

key: Includes Special Communications Tax.

EU-27: Source: 14th Implementation Report of the European Commission. March 2009.

4. Long distance fixed telephony tariffs of the incumbent and an alternative operator

Table H.6 below presents the long distance tariffs by the incumbent operator and an alternative operator for 3-minute calls and 10-minute calls. All tariffs are in euro with VAT included.

It should be noted that in the past the alternative operators in Albania were regional operators that could not compete directly with the incumbent operator. With the introduction of the new authorisations regime, in 2008, all alternative operators can now compete with the incumbent on a national level (see Table C.3 for more details). Serbia is the only country where price information is missing, as there is no competitive fixed network alternative.

No substantial change is observed since the previous monitoring report. Long distance prices offered by alternative operators are significantly lower only in FYROM, and to a lesser extent, in Turkey and Montenegro.

Country		Incur	mbent	Alternative operator	
		3 minutes, €	10 minutes, €	3 minutes, €	10 minutes, €
Croatia		0.117	0.390	0.122	0.383
FYROM		0.174	0.579	0.052	0.174
Turkey		0.116	0.385	0.109	0.322
Albania		0.20	0.669	0.538	1.793
Bosnia & Herzegovina	BH Telecom	0.126	0.419	0.126	0.419
	Telekom Srpske	0.163	0.544	0.126	0.419
	HT Mostar	0.163	0.544	0.126	0.419
Montenegro		0.177	0.590	0.120	0.400
Serbia		0.077	0.256	-	-
Kosovo		0.035	0.116	0.209	0.696

Table H.6 - Long-distance calls for residential customers (including VAT)

Notes:

Albania:

Turkey: Includes Special Communications Tax

Albtelecom applies Regional and National calls. Table shows national calls tariffs. Regional call tariffs are lower than national call tariffs (e.g. 3.00 ALL Peak for residential).

Primo for PSTN telephony applies 2 distance based charges: Zone 2 (up to 50 Km and Zone 3 (more than 50 km). Table shows Zone 3 tariffs. Zone 2 tariff are approximately 20% lower than zone 3.

Figure 42 below presents the price developments for a 3-minute residential long distance call from July 2006. Figure 43 presents the corresponding information for a 10-minute call. The most dramatic decrease since 2008 is observed in Albania where prices have now reached the EU average level. In all other countries, long distance call prices have been stable.

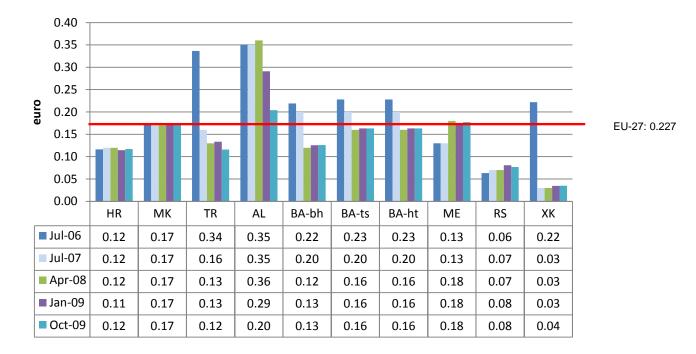


Figure 42 - Residential long distance charges for 3-minute calls (incumbent)

Notes:

Turkey: Includes Special Communications Tax.

The EU-27 average is taken from the 14th Implementation Report of the European Commission, March 2009.

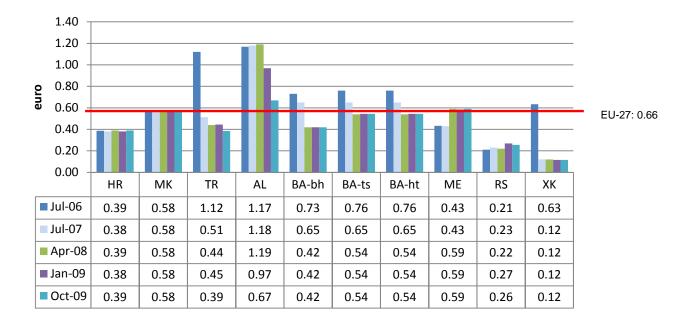


Figure 43 - Residential long distance charges for 10-minute call (incumbent)

Notes:

Turkey: Includes Special Communications Tax.

The EU-27 average is taken from the 14th Implementation Report of the European Commission, March 2009.

Table H.7 below presents the corresponding information on long distance calls for business subscribers. These prices are without VAT.

Country	Incumbent		Alternative operator		
	3 minutes, €	10 minutes, €	3 minutes, €	10 minutes, €	
Croatia	0.095	0.317	0.099	0.312	
FYROM	0.147	0.490	0.049	0.162	
Turkey	0.113	0.375	0.094	0.314	
Albania	0.217	0.725	0.538	1.793	

Country		Incumbent		Alternative operator	
		3 minutes, €	10 minutes, €	3 minutes, €	10 minutes, €
Bosnia & Herzegovina	BH Telecom	0.107	0.358	0.107	0.358
	Telekom Srpske	0.140	0.465	0.107	0.358
	HT Mostar	0.140	0.465	0.107	0.358
Montenegro		0.151	0.504	0.103	0.342
Serbia		0.081	0.270	-	-
Kosovo		0.030	0.100	0.180	0.600

Table H.7 - Long-distance calls for business customers (excluding VAT)

Notes:

Turkey: Includes Special Communications Tax.

Albania: Albtelecom applies regional and national calls. Table shows national calls tariffs. Regional call tariffs are lower than national call tariffs (e.g. 3.00 ALL Peak for residential).

Primo for PSTN telephony applies 2 distance based charges: Zone 2 (up to 50 Km and Zone 3 (more than 50 km). Table shows Zone 3 tariffs. Zone 2 tariff are approximately 20% lower than zone 3.

5. Fixed-to-mobile tariffs of the incumbent and an alternative operator

Table H.8 below presents the prices from the fixed network of the incumbent operator and for an alternative operator to a mobile network.

Country		Incur	Incumbent		ive operator
		3 minutes, €	10 minutes, €	3 minutes, €	10 minutes, €
Croatia		0.814	2.713	0.702	2.316
FYROM		0.578	1.927	0.405	1.350
Turkey		0.550	1.628	0.389	1.149
Albania	Albania		2.432	1.592	5.306
Bosnia & Herzegovina	BH Telecom	0.278	0.927	0.278	0.927
	Telekom Srpske	0.278	0.927	0.278	0.927
	HT Mostar	0.278	0.927	0.278	0.927
Montenegro		0.666	2.220	0.567	1.890
Serbia		0.346	1.155	-	-
Kosovo		0.348	1.160	0.348	1.160

Table H.8 - Fixed-to-mobile calls for residential customers (including VAT)

Notes: Turkey: Includes Special Communications Tax 15%.

Bosnia & Herzegovina: Fixed-to-mobile tariffs are now the same for all 3 operators. BH Telecom previously applied a lower price as reported in Report 2. In July 2009 BH Telecom increased price, up to the level of other two operators.

Figure 44 below presents the price developments for fixed to mobile calls for the incumbent operator since July 2006. The lowest rates are in Bosnia & Herzegovina, although an increase since the previous monitoring was reported just for BH Telecom. Turkey shows a dramatic decrease since 2006, with net value however slightly increasing since the previous monitoring. The slight decrease shown for Serbia is essentially due to exchange rate variation. Albania and Croatia have the highest fixed-to-mobile rates among the countries monitored. However, fixed-to-mobile rates show decreasing trends in Albania, with 16% net reduction since January 2009. Kosovo shows the most dramatic drop since the previous monitoring report, with prices fallen by over 37%.

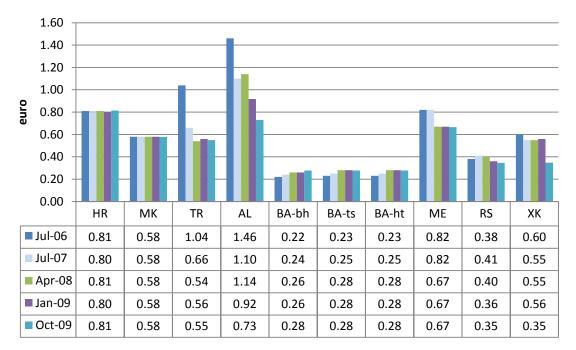


Figure 44 - Residential charges for 3-minute fixed to mobile calls (incumbent)

Notes: Turkey:

Includes Special Communications Tax.

Bosnia & Herzegovina: The charges shown above apply for calls to incumbents' own mobile networks. For calls to other mobile networks, charges are two times higher.

Country		Incu	mbent	Alternative operator		
		3 minutes, €	10 minutes, €	3 minutes, €	10 minutes, €	
Croatia		0.662	2.205	0.571	1.883	
FYROM		0.490	1.633	0.343	1.144	
Turkey		0.476 1.586 0.336		0.336	1.120	
Albania		0.790	2.635	1.592	5.306	
Bosnia & Herzegovina	BH Telecom	0.238	0.793	0.238	0.793	
	Telekom Srpske	0.238	0.793	0.238	0.793	
	HT Mostar	0.238	0.793	0.238	0.793	
Montenegro		0.569	1.897	0.485	1.615	
Serbia		0.365	1.215	-	-	
Kosovo		0.300	1.000	0.300	1.000	

Table H.9 presents the tariffs for fixed to mobile calls for business customers. The table includes tariffs from an alternative operator when available.

Table H.9 - Fixed-to-mobile calls for business customers of the incumbent and alternative operator (excluding VAT)

Notes:

Turkey: Includes Special Communications Tax.

Serbia: No alternative operators

6. International tariffs of the incumbent and an alternative operator

Table H.10 presents the long distance call tariffs to the UK for a ten-minute call from residential as well as business subscribers. The main difference between these tariffs is due to the fact that the residential tariffs include VAT. Tariffs are shown both for the incumbent operator and a major alternative operator.

Country		Res	idential	Business		
		Incumbent, €	Alternative operator, €	Incumbent, €	Alternative operator, €	
Croatia		3.815	3.062	3.101	2.489	
FYROM		1.910	1.910 1.719		1.457	
Turkey	Turkey		0.361	0.497	0.312	
Albania		1.372	5.707	1.486	5.707	
Bosnia & Herzegovina	BH Telecom	5.085	2.393	4.346	2.045	
	Telekom Srpske	7.777	-	6.647	-	
	HT Mostar	7.777	-	6.647	-	

Country	Resid	lential	Business		
	Incumbent, €	Alternative operator, €	Incumbent, €	Alternative operator, €	
Montenegro	1.760	3.000	1.504	2.564	
Serbia	2.589	0	2.723	-	
Kosovo	3.712	1.160	3.200	1.000	

Notes:

Turkey: Includes Special Communications Tax.

 Bosnia & Herzegovina:
 The prices for calls off peak time from fixed networks BH Telecom to mobile networks UK is lower by 20%.

 Montenegro:
 Ino packet. For residential subscribers €4.27 per month, including 50 minutes for calls to nine countries (Sweden, Switzerland, Austria, Netherlands, Hungary, Canada, Greece, Albania, Turkey)

 Ino favourite Packet: for residential subscribers €4.27 per month, including: outgoing minutes for a selected number of countries: Croatia (80 minutes), Macedonia (55 minutes), Bosnia and Herzegovina, France, Italy, Russia, Great Britain, Germany (50 minutes).

 Serbia:
 Pulse length = 1.188s

Figure 45 below shows the price developments since July 2006 for the international tariffs of the incumbent operator for residential users. The most considerable decreases since January 2009 are observed in Montenegro and Bosnia & Herzegovina (BH Telecom), with prices respectively falling by

approximately 25% and 22%, and to a smaller extent in Albania (-10%).

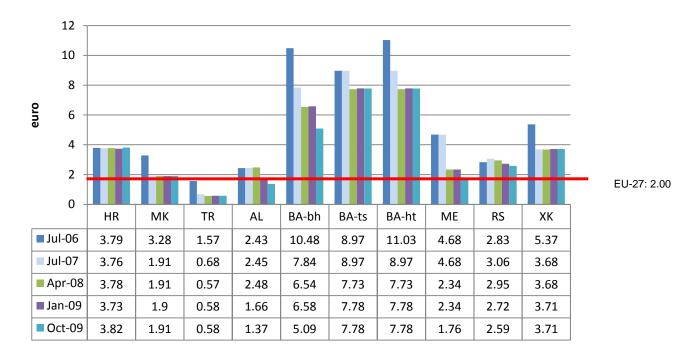


Figure 45 - 10-minute call to UK by incumbent operator for residential users

Notes:

Turkey: Includes Special Communications Tax

The EU-27 average is the tariff to a distant EU country taken from the 14th Implementation Report of the European Commission, March 2009.

Table H.11 and Figure 46 provide the corresponding tariff information for long distance calls to the United States. Prices in this case have been substantially stable since the previous monitoring period, with the only exception of Albania (10.7% net decrease).

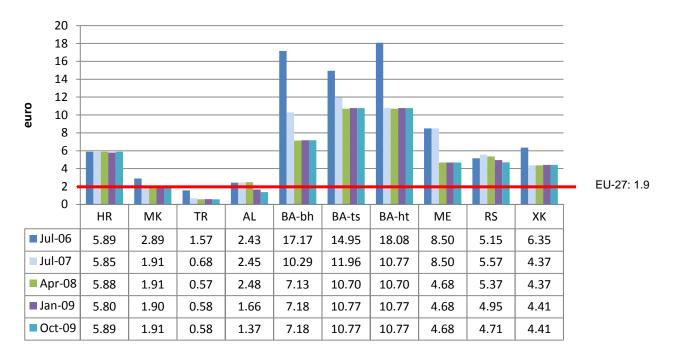


Figure 46 - 10-minute call to USA by incumbent operator for residential users

Country		Resid	Residential		siness
		Incumbent, €	Alternative operator, €	Incumbent, €	Alternative operator, €
Croatia		5.934	4.757	4.824	3.868
FYROM		1.910	1.719	1.618	1.457
Turkey		0.575	0.361	0.497	0.312
Albania	Albania		5.667	1.486	5.667
Bosnia & Herzegovina	BH Telecom	7.179	2.393	6.136	2.045
	Telekom Srpske	10.768	-	9.203	-
	HT Mostar	10.768	-	9.203	-
Montenegro		4.680	4.000	4.000	3.419
Serbia		4.707	-	4.947	-
Kosovo		4.408	1.160	3.800	1.000

Table H.11 - Ten-minute call to the USA

Notes:

Turkey: Includes Special Communications Tax. Bosnia & Herzegovina: BH Telecom -The prices for calls off peak time from fixed networks BH Telecom to fixed and mobile networks USA is lower by 20%.

Serbia: Pulse duration 1.188s

The EU-27 average is taken from the 14th Implementation Report of the European Commission, March 2009.

I. Mobile retail tariffs

Mobile network operators provide a range of tariff options that are quite complicated and difficult to compare. Consumers have to take into account a significant number of parameters, including the initial activation charge, monthly subscription charge, peak and off-peak tariffs, "free" calls and text messages included in the package, volume-dependent tariffs, SMS tariffs, tariffs for calls within the same network (on-net calls), tariffs for calls to other mobile networks (off-net), calls to fixed networks and, of course, cross-subsidies for the handset which can imply, for instance, minimum contract duration period.

In order to be able to make comparisons between its members states the OECD constructed a set of mobile tariff "baskets" building on its work in fixed telephony baskets. These baskets are updated to reflect changing usage patterns. The current baskets are referred to as the 2006 version, while the previous baskets – as the 2002 version. This report uses the 2006 baskets for the second time for the monitored countries. This means that basket prices can be directly compared with the European Union results which also use the 2006 baskets. However, as the previous monitoring reports used the 2002 basket, the exact comparisons with the previous results cannot be made. The European Commission adopted the OECD 2006 baskets in its 13th Implementation Report, reporting a wider range of data for operators and different tariff packages. It should be noted that the EC uses monthly and not annual results.

The table below shows the structure and composition of the 2006 mobile baskets. While the basket is the annual cost, the numbers of SMS and calls are for each month. The mobile baskets are defined as "low user"- a definition that includes 30 outgoing calls per month plus 33 SMS messages, "medium user"- 65 outgoing calls plus 50 SMS, and "high user"- 140 calls and 55 SMS.

	Calls	SMS	MMS	Fixed	d calls	Mobile	ecalls	Voicemail		Time of day	
				Local	National	On-net	Off-net		Peak	Off-peak	Weekend
Low user	30	33	0.67	15%	7%	48%	22%	8%	48%	25%	27%
Medium user	65	50	0.67	14%	7%	48%	24%	7%	50%	24%	26%
High user	140	55	1.00	13%	7%	47%	26%	7%	60%	19%	21%

Table I.1 - Composition of OECD 2006 mobile baskets

While some critics have argued for the creation of a "Balkan basket" or set of baskets that might better reflect local usage patterns, this would make any comparisons with the EU or with OECD impossible. Indeed, it would be likely to make historical comparisons very difficult, unless the old results could be recalculated.

Country	Operator	Low-user	Medium-user	High-user	
		€	€	€	
Croatia	T-Mobile	10.7	16.9	26.9	
	VIPnet	14.9	18.8	33.3	
	Tele2	8.4	13.8	23.3	
FYROM	T-mobile	5.7	13.0	25.9	
	Cosmofon	6.6	14.0	25.5	
	VIP	5.2	10.6	18.9	
Turkey	Avea	11.7	38.6	79.8	
	Turkcell	16.1	49.5	99.6	
	Vodafone	14.4	41.5	82.7	
Albania	AMC	11.0	25.4	47.9	
	Vodafone Albania	14.0	29.2	40.5	
	Eagle Mobile	11.6	21.1	40.6	
Bosnia &	BH Telecom	9.1	30.1	59.9	
Herzegovina	Telekom Srpske	12.1	24.1	48.0	
	HT Mostar (HT Eronet)	17.1	26.4	50.6	
Montenegro	M:Tel	4.9	13.2	27.2	
	ProMonte	4.9	15.1	27.0	
	T-Mobile	5.5	15.4	25.4	
Serbia	m:ts	3.4	7.0	13.8	
	Telenor	3.4	7.0	13.9	
Kosovo	Vala	6.0	19.2	32.3	
	ІРКО	5.8	18.7	34.4	

The table below shows the results for each usage basket, including both postpaid and prepaid offers.

Table I.2 - OECD 2006 mobile tariff baskets, October 2009

Notes:

Turkey: Includes Special Communications Tax 25%.

Albania: Postpaid

Montenegro: Low baskets are related with pre-paid packages.

Serbia: Postpaid. Includes Special Tax 10%

The three following figures show the prices in the low, medium and high user baskets in 2009 in the monitored countries. For comparison, the EU 27 average values from the 14th Implementation Report of the European Commission have been used.

The regional results for low users show that most countries have offerings that are cheaper than the simple average of EU operators (€12.48 per month). In Albania mobile prices have dropped considerably since the previous monitoring, as well as in Montenegro, Macedonia and Kosovo. Prices in Serbia are still the lowest in the region. Competitive pressure, including from the third mobile operator, is driving prices down towards increasingly lower levels.

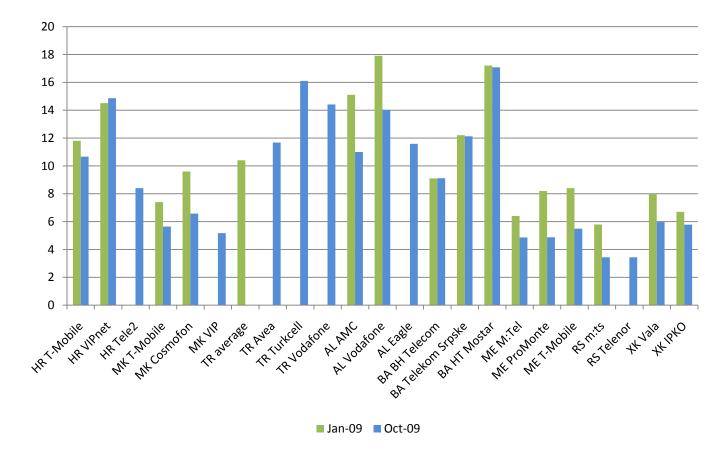


Figure 47 - Low usage OECD (2006) mobile basket

For medium users, the average price in the EU was €21.37. Average prices in Turkey and Bosnia & Herzegovina remain significantly higher, while in Croatia, FYROM, Montenegro and Serbia average prices tend to be lower than the EU average. A decrease of net prices from the previous monitoring period is observed most remarkably in Serbia, in spite of the special tax of 10% recently introduced on mobile services, for but also in Macedonia, Croatia, Montenegro and Kosovo.

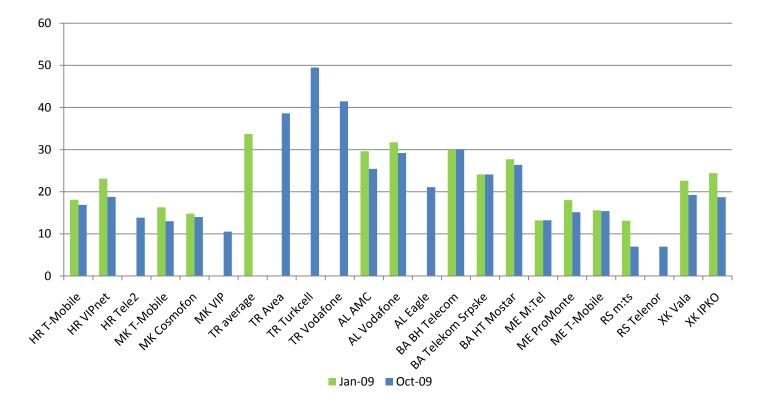


Figure 48 - Medium usage OECD (2006) mobile basket

For high users, Turkey Bosnia & Herzegovina and Albania are significantly above the EU average of €35.28 while other countries, notably Croatia, Montenegro and Serbia, offer lower prices.

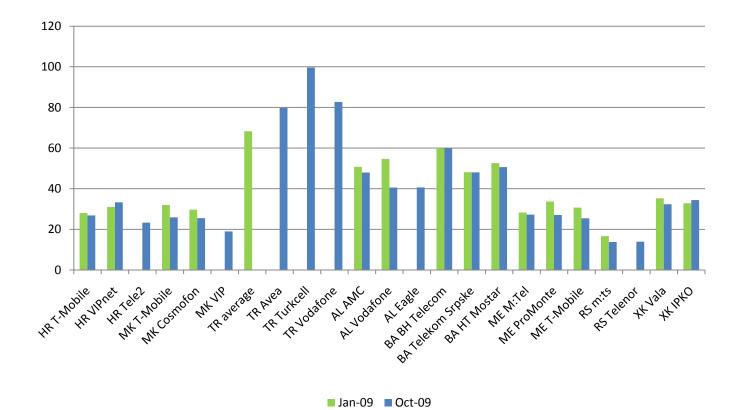


Figure 49 - High usage OECD (2006) mobile basket

J. Special cross-border arrangements for retail fixed and mobile tariffs

The political, economical and social events in the last fifteen years in South-Eastern Europe, in particular in the territory of the former Yugoslavia, created specific entities and territories some of which still have a provisional status. This has resulted in many special tariff arrangements that cross territorial boundaries. For example, there have been preferential rates between the Serb population in Bosnia & Herzegovina and Serbia. Similarly, there have been preferential rates for the Croatian population in Bosnia & Herzegovina and Croatia. Such arrangements are gradually being phased out and replaced by more conventional country tariffs.

On June 30, 2007 the EU regulation on international roaming came into force.²⁰ It set price caps for wholesale and retail charges and requires a pro-active provision of roaming prices to customers via SMS. The Regulation sets the maximum retail charges for 2007-2009 for outgoing and received calls and also for wholesale charges. The EU regulation was revised in June 2009²¹, setting a new glide path for reductions until 2011 of both wholesale and retail process for calls and SMS, and introduced wholesale caps also for data roaming services, However, operators in South-East Europe may not have access to the regulated wholesale tariffs within the EU and are not obliged to offer similar rates to other European operators.

Table J.1 sets out the current arrangements for cross-border fixed and mobile tariffs. It also identifies special international mobile roaming arrangements. However, it addresses only retail roaming offers as it would be beyond the scope of this project to assess confidential agreements on wholesale Inter Operator Tariffs (IOTs).

Country	Fixed network	Mobile network	Special retail international roaming offers
Croatia	-	-	-
FYROM	-	-	-
Turkey	-	-	-
Albania	-	There are cross-border arrangements for international mobile to mobile calls on networks that are part of the same international group. AMC reduces the charges by 34% for calls to other Cosmote Group networks (four SEE countries including Greece). Vodafone Albania charges for calls to Vodafone Greece are 34% lower than calls to neighbouring countries. Calls to Vodafone Group mobile operators are charged at lower tariffs than calls to other mobiles of the same country. Eagle Mobile (a new entrant) does not currently have any such arrangements.	Vodafone Albania applies reduced tariffs if customers roam on Vodafone Greece (34% lower) and on other Vodafone networks. Vodafone also offers it Passport package of roaming tariffs.

²⁰ http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2007:171:0032:0040:EN:PDF

²¹ http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:167:0012:0023:EN:PDF

Country	Fixed network	Mobile network	Special retail international roaming offers
Bosnia & Herzegovina Telekom Srpske ad Banja Luka	-	-	Telekom Srpske subscribers have free of charge incoming calls in Serbia and Montenegro on Telekom Serbia network.
Montenegro	To fixed networks in Serbia and Kosovo €0.110 per minute (peak time) €0.055 per minute (off peak)	To fixed networks in Serbia €0.190 per minute (peak time) €0.095 per minute (off peak)	All three mobile operators in Montenegro have special roaming offers for Serbia, with no charge for incoming calls when the user is in roaming.
Serbia	 Fixed Serbia – fixed Montenegro €0.130 per minute for residential, €0.162 per minute for business users. The same price is for fixed Serbia – fixed Republika Srpska (Republika Srpska is a constitutive entity of Bosnia & Herzegovina). For the rest of Bosnia & Herzegovina international rate for zone 1 is applied (€0.151 per minute for residential, €0.187 for business users). Fixed Serbia – mobile Montenegro €0.196 per minute for residential, €0.243 for business users. Fixed Serbia – mobile Republika Srpska €0.130 per minute for residential, €0.162 for business users. 	Telekom Srbija (m:ts) For the following three operators: Montenegro m:tel Bosnia & Herzegovina m:tel in the Republika Srpska Telekom Srpska fixed network the incoming call per minute is €0.054 (summer 2009). In all other neighbouring countries with Serbia incoming call per minute is €0.355 postpaid/€0.365 prepaid (summer 2009).	Vip mobile All operators owned by mobilkom austria: mobilkom austria (A1) - Austria, Mobiltel (M-TEL) - Bulgaria, Vipnet (HR VIP) - Croatia, mobilkom liechtenstein (FL1) - Liechtenstein, Si.mobil (SI.MOBIL) - Slovenia, Vip operator (Vip MK) – Macedonia (€0.312 incoming call per minute). For selected networks in ex-YU countries VIP has special package (Ex Yu packet 30) at €5.371 (RSD 500), which includes 30 minutes free of charge for incoming and outgoing calls.
Kosovo	-	-	-

Table J.1 - Special cross-border arrangements for retail fixed and mobile tariffs

K. Leased lines retail tariffs

1. National leased lines

Leased lines are the building blocks for alternative networks that compete, directly or indirectly, with the networks of the incumbent operators. Before competition begins in a market the prices are generally quite high. Price pressures are introduced as alternatives become available, for example, by operators associated with energy and railway companies. Such competition has probably had more effect on prices than obligations requiring cost orientation, at least on more popular route.

There is a long history of legislation, litigation, reporting on and a sector inquiry into the provision of leased lines. A pro-competitive framework was set out in a Council Directive in 1992.²² A minimum set of leased lines was carried through into the 1998 and 2003 regulatory packages, though it is now proposed to handle these in a technology neutral manner, using market analyses for the provision of local access.

In a series of figures below, the tariffs for national leased lines are shown for 2 km leased lines with the transmission capacities of 64 kbps, 2 Mbps and 34 Mbps.

All prices are annual and retail, excluding VAT and without any one-time or connection charges. Not all operators have tariffs that correspond directly to these categories, in which case the closest alternative has been selected. In Turkey, the leased line offerings are based not on distance but on four levels: 1) same exchange, 2) different exchange, 3) inner city, and 4) intercity. The 2 km distance has been considered to be the "different exchange" rate.

Leased lines at 64 kbps are now often replaced by more advanced technologies such as ISDN, ADSL and SDSL where these are available with Service Level Agreements (SLA).

Figure 50 shows the prices for a short circuit of 2 kilometres at 64 kbps speed. While Montenegro and Turkey are relatively cheap, Albania, Croatia and FYROM are expensive in terms of South-East Europe. Prices have been considerably stable since 2006 and the only slight differences shown are mostly due to exchange rates variations.

²² http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31992L0044:EN:HTML

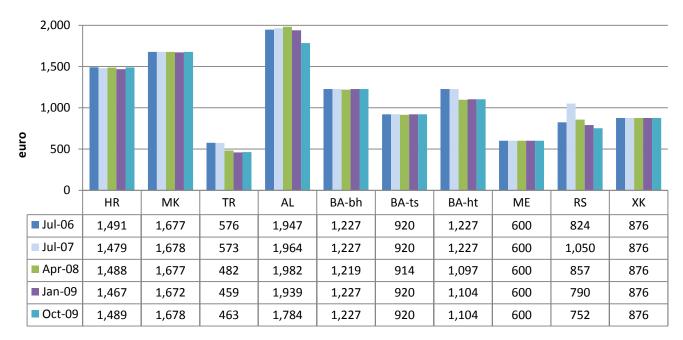


Figure 50 - Annual prices for a 2 km 64 kbps leased line

Figure 51 shows the prices for short circuits of 2 km at the higher speed of 2 Mbps, though these too have often been replaced by other technologies where appropriate SLAs are available.

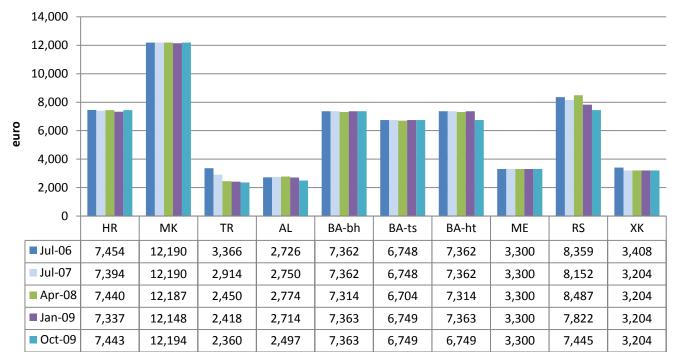


Figure 51 - Annual prices for a 2km 2 Mbps leased line

Figure 52 shows the prices for higher speed leased lines at 34 Mbps. The shorter 2km circuits are currently not available in Albania and in FYROM. The prices in Kosovo and Turkey are relatively low, while Serbia is expensive.

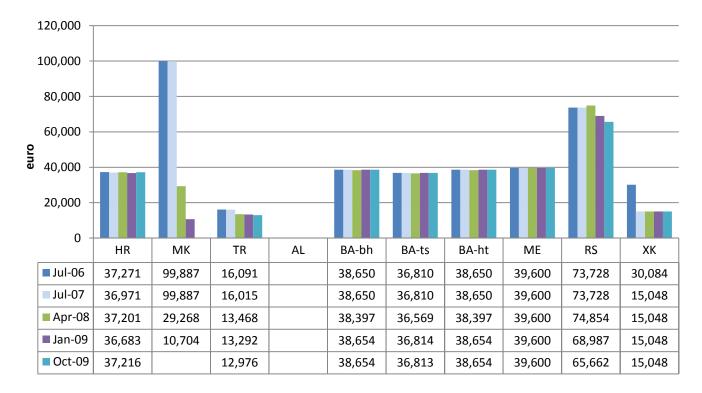


Figure 52 - Annual prices for a 2km 34Mbps leased line

2. International leased lines

International leased lines have traditionally been provided in the form of two half-circuits, one national half-circuit being connected to another half-circuit or to a transit circuit near the border, with the corresponding arrangement in the destination country. 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 have a higher charge. Only single routing lines are only available in Turkey, otherwise the tariffs are for double routing half-circuits.

The annual prices (excluding VAT) for international half-circuits are given for:

- 64 kbps to a near country and to the UK;
- 2 Mbps to a near country and to the UK.

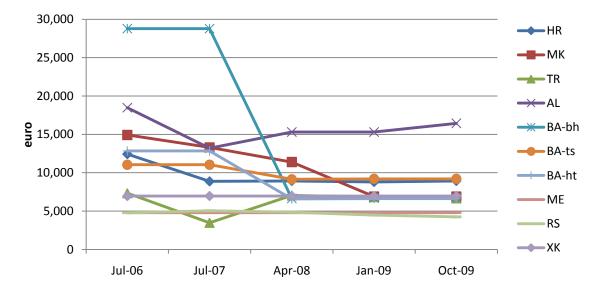
For comparison, EU averages have been taken from the 14th Implementation report, showing prices in the autumn of 2006. These are to a near and to a distant country which, for this report, has been uniformly taken to be the United Kingdom.

Figure 53, Figure 54 and Figure 55 show the annual charges for 64 kbps half-circuits. Albania and FYROM are the obvious exception on the longer routes to the UK.

Figure 56, Figure 57 and Figure 58 shows the 2 Mbps prices, where again Albania is expensive on the routes to the UK.

Prices have been decreasing over the last four years, except in Albania, where the incumbent fixed line operator has kept its tariffs for leased line offerings largely unchanged since mid-2007.

For 64 kbps half circuits to UK, tariffs have not fallen so significantly. Charges in Albania and FYROM are the highest in the region, with all other incumbent operators now charging below €13,000. Prices have been decreasing since 2006, but have been quite stable over the last two monitoring periods. Changes since April 2008 are mainly due to exchange rate fluctuations.



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Figure 53 - Annual prices for international half circuits 64 kbps to near country (2006-2009)



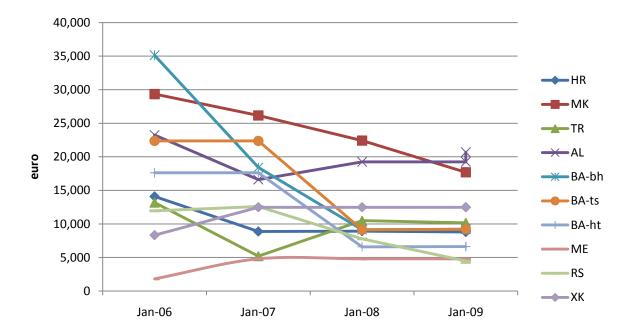


Figure 54 - Annual prices for a 64 kbps international half-circuit to the UK (2006-2009)

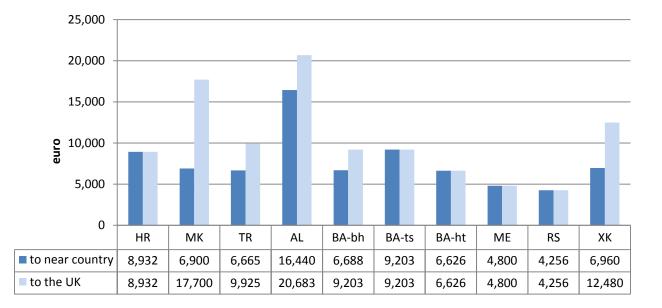
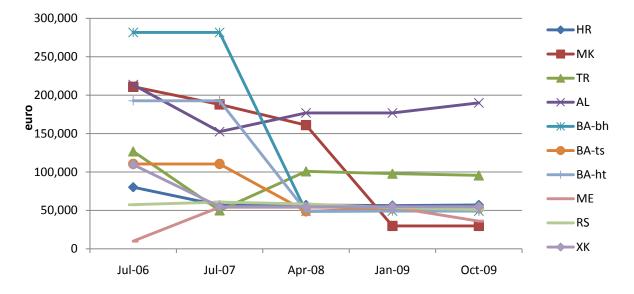


Figure 55 - Annual prices for a 64 kbps international half-circuit, October 2009

For 2 Mbps half circuits to a near country, retail prices were reduced significantly, except in Albania, where they remain the highest in the region by a significant margin. All other incumbents have reduced charges to below €100,000 per year. In FYROM, prices were significantly reduced based on the bylaw for regulation of terminating and trunk segments of leased lines adopted by the NRA in September 2008.



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Figure 56 - Annual prices for international half circuits 2 Mbps to near country (2006-2009)

In the case of 2 Mbps half circuits to the UK, charges have not fallen significantly, except in FYROM, Serbia and Republika Srpska. The Albanian incumbent charges are significantly higher than the rest of the region. Turkey also remains expensive at €165,000 per annum. Montenegro has the lowest prices and reduced them further since January 2009 (33% decrease). All other incumbents are keeping charges stable at below €100,000 per annum.



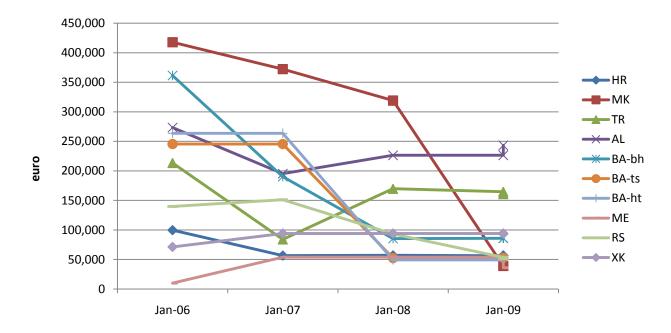


Figure 57 - Annual prices for a 2 Mbps international half-circuit to the UK (2006-2009)

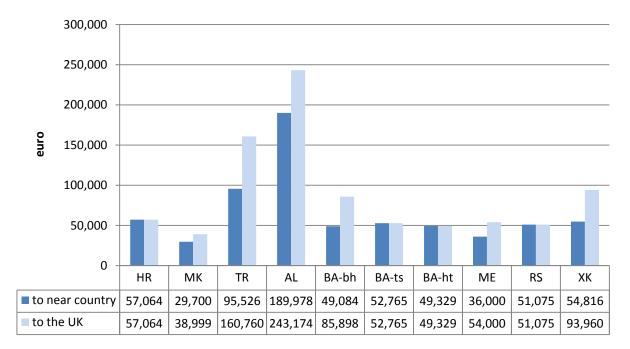


Figure 58 - Annual prices for a 2 Mbps international half-circuit, October 2009

Notes: Turkey: Without Special Communications Tax

L. Internet and broadband retail prices

1. Dial-up Internet access cost

Access to the Internet for households in South-East Europe has primarily been by dial-up on fixed telephone lines. While FYROM, Turkey, Albania and Kosovo have moved into broadband as the major form of Internet access, dial-up service remains a significant form of access in Croatia, Bosnia & Herzegovina, Montenegro and Serbia.

Table L.1 shows the cost of forty hours of dial-up access to the Internet. The prices vary considerably across countries and even within Bosnia & Herzegovina. The most expensive prices are in FYROM at over \in 70 per month, followed by Croatia, slightly above \in 60. The remaining countries have charges between \in 20 and \in 37 per month. In terms of PPP, prices are considerably more expensive in Macedonia than in the rest of the region.

Country	ISP c	harge	PSTN	usage	Total		
	€	PPP	€	PPP	€	PPP	
Croatia	40.69	65.18	20.34	32.59	61.03	97.77	
FYROM	74.07	200.97	-	-	74.07	200.97	
Turkey	3.73	7.64	19.08	37.61	22.81	44.97	
Albania	10.82	27.65	21.40	54.72	32.22	82.37	
Bosnia & Herzegovina / BH Telecom	7.36	16.19	14.36	31.58	21.72	47.77	
Bosnia & Herzegovina / Telekom Srpske	11.96	26.32	21.54	47.37	33.50	73.69	
Bosnia & Herzegovina / HT Mostar	5.98	13.16	31.59	69.48	37.57	82.64	
Montenegro	9.80	22.47	32.85	69.48	37.57	82.64	
Serbia	10.90	27.20	12.30	30.69	23.20	57.90	
Kosovo	8.0	-	27.84	-	27.84	-	

Table L.1 - Dial-up Internet access cost - 40 hours at peak time including VAT

Notes:

Turkey: Includes Special Communications Tax 15%.

Montenegro: ISP price is dependant only on user's category (residential or business). The price indicated in the table is for residential users. Price for 40 hours for business users is €15.8 (VAT included 17%) The prices shown above are the ones offered by T-Com Montenegro, the largest ISP in the country. Both residential and business users have several tariff packages at their disposal (10, 20, 50 or 100 hours, and also unlimited monthly access), with different prices. PSTN price includes VAT (17%) and it is for residential users Price is dependant only on traffic period (peak or off-peak).

Serbia:

PSTN €12.94 (RSD 1,204.56) for business users.

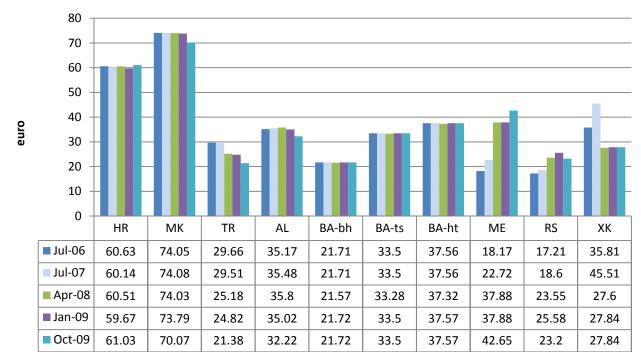


Figure 59 - 40 hours peak time use of Internet (2006-2009) in Euro

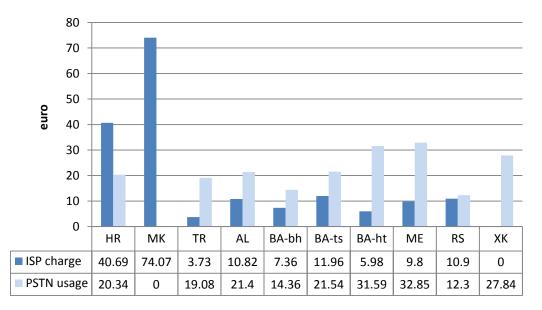


Figure 60 - 40 hours peak time use of Internet: PSTN/ISP charges, in Euro

Country	ISP c	harge	PSTN	usage	Total		
	€	PPP	€	PPP	€	PPP	
Croatia	10.17	16.29	5.09	8.15	15.26	24.44	
FYROM	18.52	50.24	-	-	18.52	50.24	
Turkey	3.73	7.36	9.54	18.81	13.27	26.16	
Albania	10.82	27.65	8.56	21.89	19.38	49.54	
Bosnia & Herzegovina / BH Telecom	7.36	16.19	3.59	7.9	10.95	24.08	
Bosnia & Herzegovina / Telekom Srpska	2.99	6.58	7.18	15.79	10.17	22.37	
Bosnia & Herzegovina / HT Mostar	5.98	13.16	9.33	20.53	15.31	33.69	

For twenty hours a similar range of prices can be seen in Table L.2. The cheapest is Serbia, while the most expensive offers are in Albania and FYROM.

Country	ISP cl	harge	PSTN	usage	Total		
	€ PPP		€	PPP	€	PPP	
Montenegro	4.90	11.23	8.21	18.83	13.11	30.06	
Serbia	5.45	13.60	3.08	7.68	8.53	21.28	
Kosovo	-	-	13.92	-	13.92	-	

Notes:

Turkey:Includes Special Communications Tax 15%.Montenegro:ISP price is dependant only on user's category (residential or business).
Residential users 20 hours = €4.9 (VAT included - 17%)
Business users 20 hours = €7.9 (VAT included - 17%)
These are the prices offered by T-Com Montenegro, the largest ISP in Montenegro. Both residential and business users have several tariff packages at their
disposal (10, 20, 50 or 100 hours, and also unlimited monthly access), with different prices. PSTN price is for residential users, in off-peak time. Price is dependent
only on traffic period (peak or off-peak).Serbia:PSTN €1.62 (RSD 150.6) for business users

2. Broadband Internet access cost

Table L.3, Figure 61, Figure 62 and Figure 63 below show the monthly subscription charges for broadband Internet access for both xDSL from the incumbent operator and for an alternative operator, in euro including VAT.

Country	Speed	Incumbent DSL, €	Alternative operator, €	Alternative operator and technology
Croatia	512 kbps	-	-	
	1 Mbps	-	-	
	2 Mbps	10.98	5.28	OT-Optima telekom d.d., ADSL
FYROM	512 kbps	9.63	9.45	OnNet ADSL over LLU and Bitstream access
	1 Mbps	22.30	35.69	OnNet ADSL over LLU and Bitstream access
	2 Mbps	-	-	•
Turkey	512 kbps	-	-	-
	1 Mbps	25.62	25.62	Doğan Telekom, ADSL (www.smileadsl.com)
	2 Mbps	29.34	29.34	Doğan Telekom, ADSL (www.smileadsl.com)

Country	Speed	Incumbent DSL, €	Alternative operator, €	Alternative operator and technology
Albania	512 kbps	22.29	25.00	Primo, ADSL
	1 Mbps	44.58	34.99	Primo, ADSL
			17.94	Abissnet, ADSL 2+
	2 Mbps	66.88	23.94	Abissnet, ADSL 2+
Bosnia & Herzegovina:	512 kbps	14.96	14.96	Logosoft d.o.o. Sarajevo – DSL
BH Telecom	1 Mbps	10.17	-	
	2 Mbps	26.92	26.92	Logosoft d.o.o. Sarajevo - DSL
Bosnia & Herzegovina:	512 kbps	14.96	-	
Telekom Srpske	1 Mbps	-	-	
	2 Mbps	41.87	-	
Bosnia & Herzegovina:	512 kbps	17.35	-	
HT Mostar	1 Mbps	11.37	-	
	2 Mbps	29.31	-	
Montenegro	512 kbps	-	15.00	M:Tel; Wi-Max (FWA at 3.5 GHz band, IEEE 802.16d standard)
	1 Mbps	20.00	30.00	M:Tel; Wi-Max (FWA at 3.5 GHz band, IEEE 802.16d standard)
	2 Mbps		38.00	M:Tel; Wi-Max (FWA at 3.5 GHz band, IEEE 802.16d standard)
Serbia	512 kbps	-	-	-
	1 Mbps	26.30	15.83	INTCS (Sezampro), ADSL Internet
	2 Mbps	22.69	23.95	INTCS (Sezampro), ADSL Internet
Kosovo	512 kbps	15.13	-	
	1 Mbps	10.08	14.96	
	2 Mbps	45.39	19.95	lpko, cable

Table L.3 - Broadband Internet monthly subscription (including VAT)

Notes:

Croatia: Incumbent minimum access speed is 4 Mbps.

FYROM: Makedonski Telekom - The access speed is reduced on 64/64 kbps, when the total monthly traffic exceeds this level. OnNet- Price for additional traffic: 90 MKD (€1.5) per 1GB.

Information presented above is for residential users and for two alternative operators: Primo and Abissnet. Abissnet does not provide internet access below 1Mbs. It Albania: provides also access at 3Mbs/s (€46.80 including VAT).

Incumbent operator T-Com Montenegro has no packages at 512 kbps and at 2Mbps in its standard DSL offer. Montenegro: According to its pricelist, offered packages for residential users are:

- 1Mbps/128kbps, 1G per month €11.96 (excluding VAT)
- 1Mbps/256kbps, flat rate €17.09 (excluding VAT) •
- 3Mbps/256kbps, flat rate €21.36 (excluding VAT) •
- 6Mbps/256kbps, flat rate €38.45 (excluding VAT) •

According to Alternative operator M:Tel pricelist, offered packages for residential users are:

- 512kbps/128kbps, flat rate € 12.82 (excluding VAT, 24 month contract) •
- 1Mbps/256kbps, flat rate €25.64 (excluding VAT, 24 month contract)
- 2 Mbps/256 kbps, flat rate €32.48 (excluding VAT, 24 month contract) •

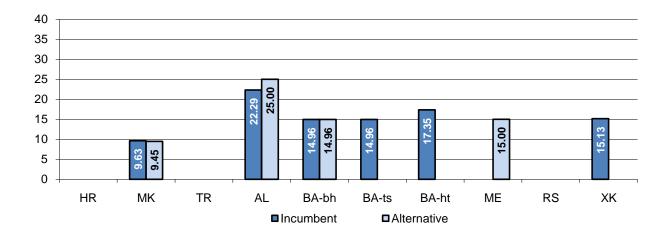


Figure 61 - Broadband 512 kbps monthly subscription charges in euro, including VAT

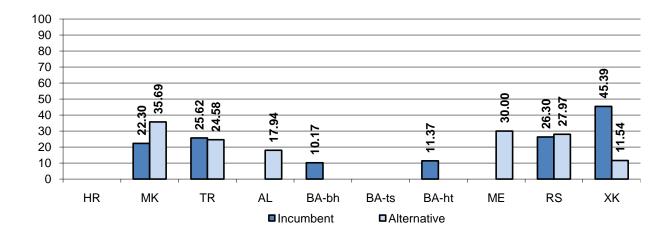


Figure 62 - Broadband 1 Mbps monthly subscription charges in euro, including VAT

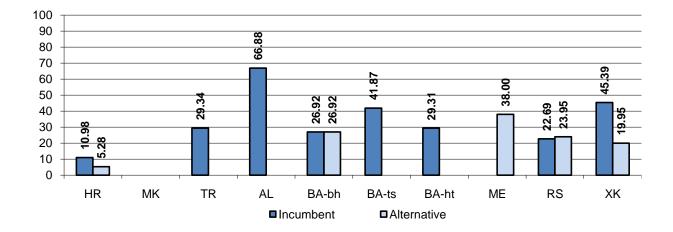


Figure 63 - Broadband 2 Mbps monthly subscription charges in euro, including VAT

M. Wholesale tariffs

The information in this section has a reference date of October 1, 2009, unless stated otherwise.

1. Call termination on the incumbent and alternative operators' fixed networks

Table M.1 and Table M.2 show the interconnection tariffs on the fixed networks of the incumbent and major alternative operators, respectively. This information for alternative networks is not available for all of the monitored countries, either because it is seen as confidential or simply because there are no alternative fixed networks.

In most of the monitored countries, fixed operators apply the same termination rates, regardless of whether a call originates on a national fixed or mobile network. The exceptions are Croatia and Kosovo, where higher termination rates apply to calls originating on mobile networks.

In addition to per minute call conveyance charges, the incumbent operators in Croatia and Serbia, as well as all fixed network operators in Albania, apply call setup charges.

Since the previous monitoring tariffs have remained stable. In Turkey the local termination is available for the first time. Termination decreased considerably in Albania since the previous monitoring period. In peak time termination charges decreased respectively by 16.3%, 29.8% and 23.5% for local, single transit, and double transit calls.

Country			Single transit, €				Double transit, €						
		Peal	۲.	Off-peak		Peak		Off-peak		Peak		Off-peak	
		Setup	Per min.	Setup	Per min.	Setup	Per min.	Setup	Per min.	Setup	Per min.	Setup	Per min.
Croatia		0.0021	0.0066	0.0010	0.0033	0.0021	0.0103	0.0010	0.0052	0.0021	0.0171	0.0010	0.0085
FYROM		0.0000	0.0070	0.0000	0.0047	0.0000	0.0103	0.0000	0.0069	0.0000	0.0144	0.0000	0.0095
Turkey		0.0000	0.0064	0.0000	0.0064	0.0000	0.0079	0.0000	0.0079	0.0000	0.0124	0.0000	0.0124
Albania		0.0001	0.0057	0.0001	0.0057	0.0002	0.0094	0.0002	0.0094	0.0004	0.0131	0.0004	0.0131
Bosnia & Herzegovina	BH Telecom	0.0000	0.0089	0.0000	0.0067	0.0000	0.0134	0.0000	0.0101	0.0000	0.0179	0.0000	0.0134
	Telekom Srpske	0.0000	0.0089	0.0000	0.0067	0.0000	0.0134	0.0000	0.0101	0.0000	0.0179	0.0000	0.0134
	HT Mostar	0.0000	0.0089	0.0000	0.0089	0.0000	0.0134	0.0000	0.0134	0.0000	0.0179	0.0000	0.0179
Montenegro		0.0000	0.0225	0.0000	0.0225	0.0000	0.0270	0.0000	0.0270	N/A	N/A	N/A	N/A
Serbia		0.0031	0.0122	0.0031	0.0122	0.0031	0.0197	0.0031	0.0197	0.0033	0.0307	0.0033	0.0307
Kosovo		0.0000	0.0400	0.0000	0.0240	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Table M.1 - Call termination on the incumbent operator's fixed network

Notes:

Turkey:No peak or off-peak differentiation.Kosovo:Single transit and double transit not available.

Country			Local, €				Single transit, €				Double transit, €			
		Р	Peak		Off-peak		Peak		Off-peak		Peak		-peak	
		Setup	Per min.	Setup	Per min.	Setup	Per min.	Setup	Per min.	Setup	Per min.	Setup	Per min.	
Croatia		0.0000	0.0110	0.0000	0.0055	0.0000	0.0110	0.0000	0.0055	0.0000	0.0110	0.0000	0.0055	
FYROM		-	-	-	-	-	-	-	-	-	-	-	-	
		-	-	-	-	-	-	-	-	-	-	-	-	
Turkey	Turkey		0.0147	0.0000	0.0147	0.000	0.0147	0.000	0.0147	0.0000	0.0147	0.0000	0.0147	
Albania		0.0002	0.0074	0.0002	0.0074	0.0003	0.0123	0.0003	0.0123	-	-	-	-	
Bosnia & Herzegovina	BH Telecom	0.0000	0.0100	0.0000	0.0050	0.0000	0.0150	0.0000	0.0075	0.0000	0.0205	0.0000	0.0102	
	Telekom Srpske	0.0000	0.0100	0.0000	0.0083	0.0000	0.0150	0.0000	0.0083	0.0000	0.0205	0.0000	0.0205	
	HT Mostar	0.0000	0.0100			0.0000	0.0150			0.0000	0.0205			
Montenegro		0.0000	0.0300	0.0000	0.0300	0.0000	0.0300	0.0000	0.0300	-	-	-	-	
Serbia		-	-	-	-	-	-	-	-	-	-	-	-	
Kosovo		0.0000	0.0400	0.0000	0.0400	-	-	-	-	-	-	-	-	

Table M.2 - Call termination on the largest alternative network

Notes:

FYROM: The operator submitted interconnection agreements to the Agency but data are strictly confidential.

Albania: Some alternative operators have agreed symmetric rates with Albtelecom i.e. the same charges as shown in previous table.

Mobile to fixed termination charges are not different from fixed to fixed termination charges.

Most of alternative operators interconnect with MNOs and abroad through Albtelcom and the charges fixed-fixed, mobile-fixed, and abroad-fixed are the same (operators pay Albtelecom for transit).

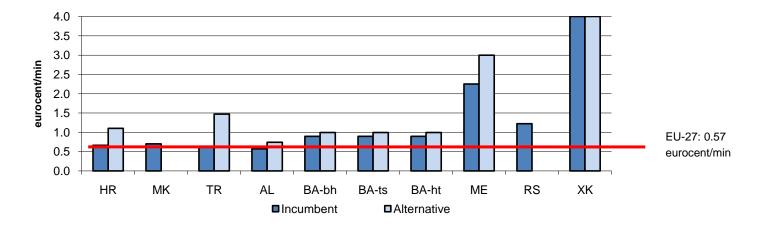
Some alternative operators have interconnected directly with MNOs and the mobile to fixed termination charge is 3 ALL per minute.

Bosnia & Herzegovina: Company ANEKS d.o.o. Banja Luka is the largest alternative operator in BiH.

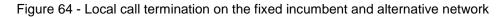
Serbia: There is only one fixed operator in Serbia.

Kosovo: Calls to IPKO fixed network

Figure 64, Figure 65 and Figure 66 show the fixed call termination rates on the incumbent and alternative networks at local, single transit and double transit level, respectively, in comparison with the EU-27 average values according to the 14th Implementation Report.



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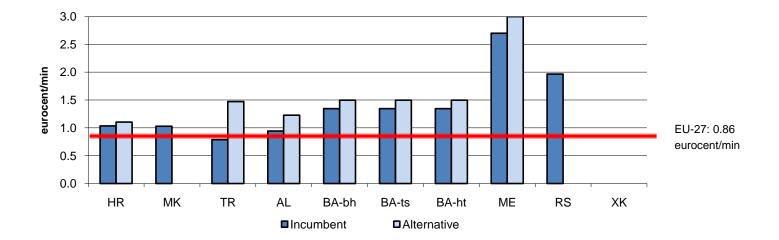


Figure 65 - Single transit call termination on the fixed incumbent and alternative network

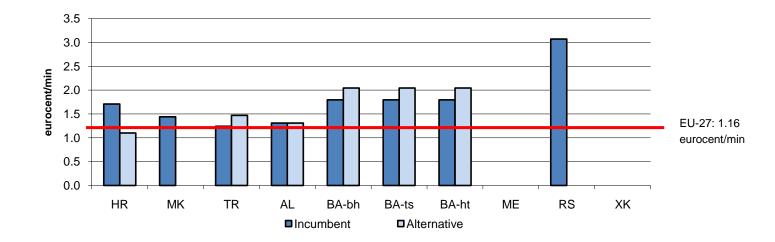


Figure 66 - Double transit call termination on the fixed incumbent and alternative network

2. Call termination on mobile networks – all mobile operators

Table M.3 below presents the termination rates of the mobile operators for all countries where this information is available.

Country	Operator	Peak, €		Off-peak, €	
		Setup	Per min	Setup	Per min
Croatia	T-Mobile Hrvatska	0.0000	0.0926	0.0000	0.0936
	VIPnet	0.0000	0.0926	0.0000	0.0926
	Tele2	0.0000	0.1241	0.0000	0.0620
FYROM	T-Mobile	0.0000	0.0621	0.0000	0.0621
	Cosmofon	0.0000	0.0621	0.0000	0.0621
	VIP Operator	0.0000	0.0956	0.0000	0.0956
Turkey	Turkcell	0.0000	0.0291	0.0000	0.0291
	Vodafone	0.0000	0.0300	0.0000	0.0300
	Avea	0.0000	0.0345	0.0000	0.0345

Country	Operator	P	eak, €	Off-	peak, €
		Setup	Per min	Setup	Per min
Albania	AMC	0.0023	0.0780	0.0023	0.0780
	Vodafone Albania	0.0023	0.0780	0.0023	0.0780
	Eagle Mobile	0.0029	0.0990	0.0029	0.0990
Bosnia & Herzegovina	BH Telecom	0.0000	0.1380	0.0000	0.1380
	Telekom Srpske	0.0000	0.1304	0.0000	0.1304
	HT Mostar (Eronet)	0.0000	0.1380	0.0000	0.1380
Montenegro	ProMonte	0.0000	0.1000	0.0000	0.1000
	T-Mobile	0.0000	0.1000	0.0000	0.1000
	m:tel	0.0000	0.1000	0.0000	0.1000
Serbia	m:ts	0.0031	0.0586	0.0031	0.0586
	Telenor	0.0031	0.0586	0.0031	0.0586
	Vip mobile	0.0031	0.0586	0.0031	0.0586
Kosovo	Vala	0.0000	0.0400	0.0000	0.0240
	lpko	0.0000	0.0400	0.0000	0.0240

Table M.3 - Call termination on all mobile networks

Notes:

The operator submitted interconnection agreements to the Agency but data are strictly confidential. Termination rates, approved by ICTA, apply from May 1, 2009. No peak / off peak price differentiation FYROM:

Turkey:

Serbia: The interconnection agreements between mobile operators are confidential.

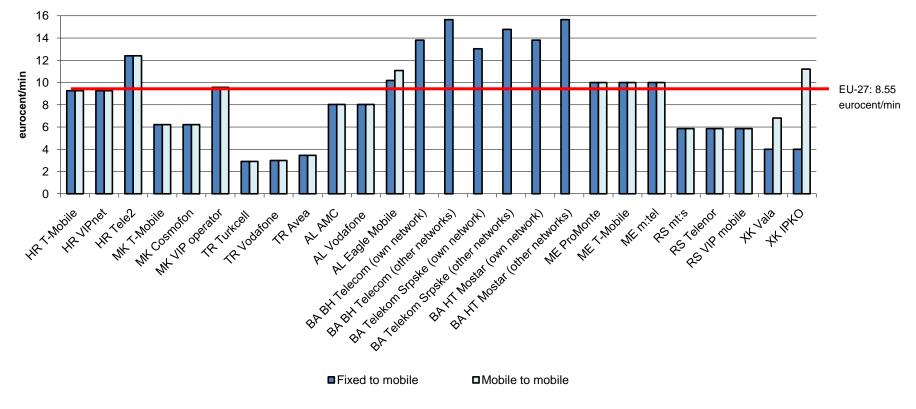


Figure 67 - Mobile termination rates, peak time

3. LLU charges

Figure 68 and Figure 69 below compare the one-off connection charges and monthly rental prices for full and shared LLU access in the three monitored countries and the EU-27 averages according to the 14th Implementation report. The slight changes from the prices shown in the previous monitoring report are due to exchange rate variations, except for Turkey, where LLU set-up fees fell by approximately 34%, and monthly fees by 12% (full access) and 2.5% (shared access).

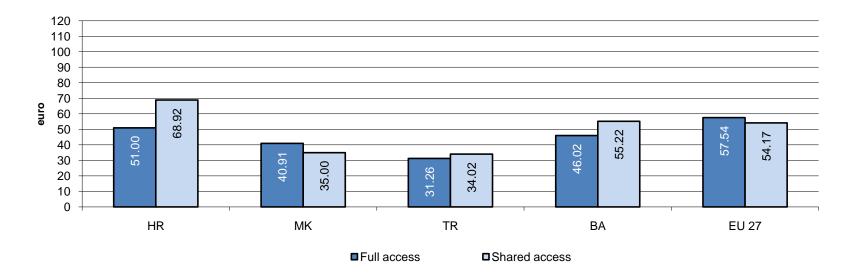


Figure 68 - Connection prices for fully unbundled loop and shared access

Notes:

Croatia: Data in this chart refer to set-up fees with works at customer premises. Fees without works are respectively €37.22 (full) and €55.13 (shared access)

FYROM: The connection prices as set per a block of 10 loops with physical collocation.

Bosnia & Herzegovina: The same connection charges are applied by the three incumbent operators: BH Telecom, Telekom Srpske and HT Mostar. RUOs are in force from Jan. 1, 2010.

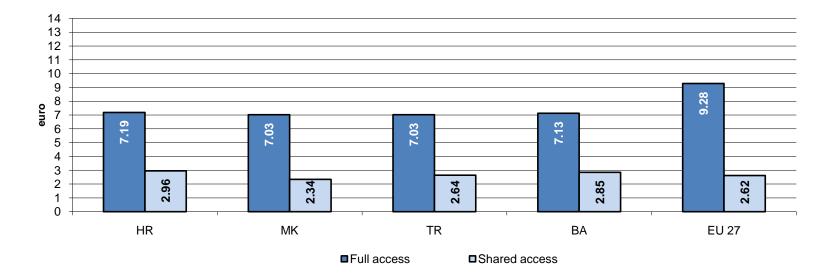


Figure 69 - Monthly rental prices for fully unbundled loop and shared access

Notes:

Bosnia & Herzegovina: The same monthly charges are applied by the three incumbent operators: BH Telecom, Telekom Srpske and HT Mostar. RUOs are in force from Jan. 1, 2010.

- N. Information society legislation and policy
- 1. Information society legislation

The following table lists the titles and sources of the relevant legislation on information society topics. The first two columns provide the title of the law or ordinance in the original language and in English translation and the third column references to the official gazette number of the original version and later amendments (eventually only the last amendment or amendments relevant in the context of this study). Links are provided if texts are available online in original language or English translation.

The scope of the covered primary legislation includes:

- law on electronic communications (or law on telecommunications) and special laws on certain topics of electronic communications regulation, such as law on universal service, law on digital switchover, law on wireless communications, law on data retention etc.;
- laws on broadcasting or electronic media, law on the public service broadcaster;
- law on competition;
- laws on electronic signature, e-commerce and electronic documents;
- law on data protection;
- the Criminal Code;
- other laws relevant for the sector (for example Law on the information society services, laws containing special provisions for Internet service providers etc.) or other laws that are referred to in other tables of this study.

With regard to secondary legislation, contributing authorities were asked to include the most important items of secondary legislation, in particular on the following topics (if these topics are addressed by secondary legislation and not by individual decisions of the NRA):

- network access and interconnection, joint use of infrastructure;
- authorisation and licensing framework (including most relevant provisions on fees);
- universal service;
- tariff regulation;
- data protection in electronic communications, network security; and
- other secondary legislation that the contributing authorities referred to in other tables of the questionnaire.

Country	Title of the law (original language) Link to full text, if available online	Title of the law (in English) Link to full text of translation, if available	Publication of original version and last amendment (official gazette number)
Croatia	Zakon o elektroničkim komunikacijama	Electronic Communications Act	(OG 73/08) http://narodne- novine.nn.hr/clanci/sluzbeni/340018.html
	Pravilnik o namjeni radiofrekvencijskog spektra	Ordinance on Radio Frequency Spectrum Allocation	(OG 136/08) http://narodne- novine.nn.hr/clanci/sluzbeni/2008_11_136_3838.html
	Pravilnik o uvjetima dodjele i uporabe radiofrekvencijskog spektra	Ordinance on Conditions of Assignment and Use of Radio Frequency Spectrum	(OG 136/08) http://narodne- novine.nn.hr/clanci/sluzbeni/2008_11_136_3839.html
	Pravilnik o prelasku s analognog na digitalno odašiljanje radijskih i televizijskih programa te pristupu položajima u multipleksu u zemaljskoj digitalnoj radiodifuziji	Ordinance on Transition from Analogue to Digital Broadcasting of Radio and Television Programmes and Access to Multiplex Positions in Digital Terrestrial Broadcasting	(OG 148/08) http://narodne- novine.nn.hr/clanci/sluzbeni/2008_12_148_4074.html
	Pravilnik o plaćanju naknada za pravo uporabe adresa, brojeva i radiofrekvencijskog spektra	Ordinance on Payment of Fees for Right to Use Addresses, Numbers and Radio Frequency Spectrum	(OG 154/08, 28/09) http://narodne- novine.nn.hr/clanci/sluzbeni/2008_12_154_4201.html http://narodne- novine.nn.hr/clanci/sluzbeni/2009_03_28_642.html
	Pravilnik o plaćanju naknada za obavljanje poslova Hrvatske agencije za poštu i elektroničke komunikacije	Ordinance on Payment of Fees for Carrying Out of Tasks of the Croatian Post and Electronic Communications Agency	(OG 158/09) http://narodne- novine.nn.hr/clanci/sluzbeni/2009_12_158_3945.html
	Pravilnik o dodjeli adresa i brojeva	Ordinance on Addressing and Numbering	(OG 154/08) http://narodne- novine.nn.hr/clanci/sluzbeni/2008_12_154_4205.html
	Pravilnik o načinu i uvjetima obavljanja djelatnosti elektroničkih komunikacijskih mreža i usluga	Ordinance on Manner and Conditions for Provision of Electronic Communications Networks and Services	(OG 154/08) http://narodne- novine.nn.hr/clanci/sluzbeni/2008_12_154_4202.html
	Pravilnik o načinu i uvjetima pristupa i zajedničkog korištenja elektroničke komunikacijske infrastrukture i povezane opreme	Ordinance on Manner and Conditions of Access and Shared Use of Electronic Communications Infrastructure and Associated Facilities	(OG 154/08) http://narodne- novine.nn.hr/clanci/sluzbeni/2008_12_154_4203.html
	Pravilnik o načinu rada unutarnje ustrojstvene jedinice za zaštitu prava korisnika	Ordinance on Functioning of the Internal Customer Protection Unit	(OG 10/09, 154/09) http://narodne- novine.nn.hr/clanci/sluzbeni/2009_01_10_239.html http://narodne- novine.nn.hr/clanci/sluzbeni/2009_12_154_3790.html
	Pravilnik o univerzalnim uslugama u elektroničkim komunikacijama	Ordinance on Universal Services in Electronic Communications	(OG 23/09) http://narodne- novine.nn.hr/clanci/sluzbeni/2009_02_23_516.html
	Pravilnik o imeniku i službi davanja obavijesti o pretplatnicima	Ordinance on Directory and Directory Enquiry Service	(OG 23/09) http://narodne- novine.nn.hr/clanci/sluzbeni/2009_02_23_517.html
	Pravilnik o potvrdi i naknadi za pravo puta	Ordinance on Right-of-Way Certificate and Payment of Fees for Right of Way	(OG 31/09) http://narodne- novine.nn.hr/clanci/sluzbeni/2009_03_31_699.html
	Pravilnik o standardnim ponudama	Ordinance on Reference Offers	(OG 37/09) http://narodne- novine.nn.hr/clanci/sluzbeni/2009_03_37_829.html

Country	Title of the law (original language) Link to full text, if available online	Title of the law (in English) Link to full text of translation, if available	Publication of original version and last amendment (official gazette number)
	Pravilnik o prenosivosti broja	Ordinance on Number Portability	(OG 42/09) http://narodne- novine.nn.hr/clanci/sluzbeni/2009_04_42_954.html
	Pravilnik o načinu i uvjetima određivanja zone elektroničke komunikacijske infrastrukture i povezane opreme, zaštitne zone i radijskog koridora te obveze investitora radova ili građevine	Ordinance on Manner and Conditions for Determination of Zone of Electronic Communications Infrastructure and Associated Facilities, of Protection Zone and Radio Corridor, and of Obligation of Construction Work or Building Investor	(OG 42/09) http://narodne- novine.nn.hr/clanci/sluzbeni/2009_04_42_953.html
	Pravilnik o načinu i uvjetima sprječavanja i suzbijanja zlouporaba i prijevara u pružanju usluga elektroničke pošte	Ordinance on Manner and Conditions for Prevention and Suppression of Abuse and Fraud in Provision of Electronic Mail Services	(OG 42/09) http://narodne- novine.nn.hr/clanci/sluzbeni/2009_04_42_952.html
	Pravilnik o amaterskim radijskim komunikacijama	Ordinance on Amateur Radio Communications	(OG 61/09, 92/09) http://narodne- novine.nn.hr/clanci/sluzbeni/2009_05_61_1412.html http://narodne- novine.nn.hr/clanci/sluzbeni/2009_07_92_2330.html
	Pravilnik o jedinstvenom europskom broju za hitne službe	Ordinance on Single European Emergency Call Number	(OG 82/09) http://narodne- novine.nn.hr/clanci/sluzbeni/2009_07_82_1992.html
	Pravilnik o tehničkim uvjetima za elektroničku komunikacijsku mrežu poslovnih i stambenih zgrada	Ordinance on Technical Requirements for Electronic Communications Network in Office and Residential Buildings	(OG 155/09) http://narodne- novine.nn.hr/clanci/sluzbeni/2009_12_155_3833.html
	Pravilnik o elektromagnetskoj kompatibilnosti (EMC)	Ordinance on Electromagnetic Compatibility (EMC)	(OG 112/08, 5/10) http://narodne- novine.nn.hr/clanci/sluzbeni/2008_10_112_3262.html http://narodne- novine.nn.hr/clanci/sluzbeni/2010_01_5_127.html
	Pravilnik o radijskoj opremi i telekomunikacijskoj terminalnoj opremi	Ordinance on Radio Equipment and Telecommunications Terminal Equipment	(OG 112/08) http://narodne- novine.nn.hr/clanci/sluzbeni/2008_10_112_3263.html
	Pravilnik o uvjetima uporabe norme za kodiranje digitalnog televizijskog signala u zemaljskim radiodifuzijskim sustavima	Ordinance on Conditions of Use of Encoding Standard for Digital Television Signal in Terrestrial Broadcasting Systems	(OG 73/07) http://narodne- novine.nn.hr/clanci/sluzbeni/2007_07_73_2291.html
	Pravilnik o ograničenjima jakosti elektromagnetskih polja za radijsku opremu i telekomunikacijsku terminalnu opremu	Ordinance on Limitations in Intensity of Electromagnetic Fields for Radio Equipment and Telecommunications Terminal Equipment	(OG 183/04) http://narodne- novine.nn.hr/clanci/sluzbeni/2004_12_183_3160.html
	Zakon o medijima	Media Act	(OG 153/09) http://narodne- novine.nn.hr/clanci/sluzbeni/2009_12_153_3740.html

Country	Title of the law (original language) Link to full text, if available online	Title of the law (in English) Link to full text of translation, if available	Publication of original version and last amendment (official gazette number)
	Zakon o elektroničkim medijima	Electronic Media Act	(OG 122/03, 79/07, 32/08, 65/09) http://www.nn.hr/clanci/sluzbeno/2003/1729.htm http://www.nn.hr/clanci/sluzbeno/2007/2493.htm http://www.nn.hr/clanci/sluzbeno/2008/1032.htm http://narodne- novine.nn.hr/clanci/sluzbeni/2009_06_65_1460.html
	Zakon o Hrvatskoj radioteleviziji	Croatian Radiotelevision Act	(OG 25/03) http://www.nn.hr/clanci/sluzbeno/2003/0362.htm
	Zakon o Hrvatskoj izvještajnoj novinskoj agenciji	Croatian News Agency Act	(OG 96/01) http://www.nn.hr/clanci/sluzbeno/2001/1612.htm
	Zakon o potvrđivanju Europske konvencije o prekograničnoj televiziji i Protokola o izmjenama Europske konvencije o prekograničnoj televiziji	Act on Confirmation of the European Convention On Transfrontier Television and the Protocol Amending the European Convention On Transfrontier Television	(OG – IA 11/01) http://narodne-novine.nn.hr/clanci/medunarodni/328037.html
	Zakon o zaštiti tržišnog natjecanja	Competition Act	(OG 79/09) http://narodne- novine.nn.hr/clanci/sluzbeni/2009_07_79_1877.html
	Zakon o elektroničkom potpisu	Electronic Signature Act	(OG 10/02, 80/08) http://narodne- novine.nn.hr/clanci/sluzbeni/2002_01_10_242.html http://narodne- novine.nn.hr/clanci/sluzbeni/2008_07_80_2604.html
	Pravilnik o evidenciji davatelja usluga certificiranja elektroničkog potpisa	Ordinance on the Records of Certification Authorities for Electronic Signatures	(OG 54/02, 112/07) http://narodne- novine.nn.hr/clanci/sluzbeni/2002_05_54_1021.html http://narodne- novine.nn.hr/clanci/sluzbeni/2007_10_112_3313.html
	Pravilnik o registru davatelja usluga certificiranja elektroničkih potpisa koji izdaju kvalificirane certifikate	Ordinance on the Register of Qualified Certification Authorities for Electronic Signatures	(OG 54/02) http://narodne- novine.nn.hr/clanci/sluzbeni/2002_05_54_1022.html
	Pravilnik o mjerama i postupcima uporabe i zaštite elektorničkog potpisa i naprednog elektorničkog potpisa, sredstava za izradu elektorničkog potpisa, naprednog elektroničkog potpisa i sustava certificiranja i obveznog osiguranja davatelja usluga izdavanja kvalificiranih certifikata	Ordinance on the Measures and procedures for the Use and Protection of Electronic Signature and Advanced Electronic Signature, Electronic Signature and Advanced Electronic Signature Development Tools and Certification System and Obligatory Insurance for Certification Authorities Issuing Qualified Certificates	(OG 54/02) http://narodne- novine.nn.hr/clanci/sluzbeni/2002_05_54_1023.html
	Pravilnik o tehničkim pravilima i uvjetima povezivanja sustava certificiranja elektorničkih potpisa	Ordinance on the Technical Rules and Conditions for Linking Certifying Systems for Electronic Signatures	(OG 89/02) http://narodne- novine.nn.hr/clanci/sluzbeni/2002_07_89_1472.html

Country	Title of the law (original language) Link to full text, if available online	Title of the law (in English) Link to full text of translation, if available	Publication of original version and last amendment (official gazette number)
	Uredba o djelokrugu, sadržaju i nositelju poslova certificiranja elektroničkih potpisa za tijela državne uprave	Regulation on the Scope of Operations, Content and Responsible Authority for Operations of Electronic Signature Certification for State Administration Bodies	(OG 146/04) http://narodne- novine.nn.hr/clanci/sluzbeni/2004_10_146_2554.html
	Zakon o elektroničkoj trgovini	Electronic Commerce Act	(OG 173/03, 67/08, 36/09) http://narodne- novine.nn.hr/clanci/sluzbeni/2003_10_173_2504.html http://narodne- novine.nn.hr/clanci/sluzbeni/2008_06_67_2228.html http://narodne- novine.nn.hr/clanci/sluzbeni/2009_03_36_796.html
	Zakon o elektroničkoj ispravi	Electronic Document Act	(OG 150/05) http://www.nn.hr/clanci/sluzbeno/2005/2898.htm
	Zakon o zaštiti osobnih podataka	Personal Data Protection Act	(OG 103/03, 118/06, 41/08) http://narodne- novine.nn.hr/clanci/sluzbeni/2003_06_103_1364.html http://narodne- novine.nn.hr/clanci/sluzbeni/2006_11_118_2616.html http://narodne- novine.nn.hr/clanci/sluzbeni/2008_04_41_1381.html
	Uredba o načinu pohranjivanja i posebnim mjerama tehničke zaštite posebnih kategorija osobnih podataka	Regulation on the Procedure for Storage and Special Measures Relating to the Technical Protection of Special Categories of Personal Data	(OG 139/04) http://narodne- novine.nn.hr/clanci/sluzbeni/2004_10_139_2433.html
	Uredba o načinu vođenja i obrascu evidencije o zbirkama osobnih podataka	Regulation on the Procedure for Managing Record Forms of Personal Data Collections	(OG 105/04) http://narodne- novine.nn.hr/clanci/sluzbeni/2004_07_105_2031.html
	Zakon o informacijskoj sigurnosti	Information Security Act	(OG 79/2007) http://narodne- novine.nn.hr/clanci/sluzbeni/2007_07_79_2484.html
	Uredba o mjerama informacijske sigurnost	Regulation on Information Security Measures	(OG 46/08) http://narodne- novine.nn.hr/clanci/sluzbeni/2008_04_46_1547.html
	Uredba o obvezama iz područja nacionalne sigurnosti Republike Hrvatske za pravne i fizičke osobe u telekomunikacijama	Regulation on the Obligations in the Area of National Security of the Republic of Croatia for Legal and Natural Persons in Telecommunications	(OG 64/08) http://narodne- novine.nn.hr/clanci/sluzbeni/2008_06_64_2178.html
	Uredba o sigurnosnoj provjeri za pristup klasificiranim podacima	Regulation on the Safety Check for the Access to Classified Data	(OG 72/07) http://narodne- novine.nn.hr/clanci/sluzbeni/2007_07_72_2237.html
	Zakon o tajnosti podataka	Data Secrecy Act	(OG 79/2007) http://narodne- novine.nn.hr/clanci/sluzbeni/2007_07_79_2483.html
	Zakon o pravu na pristup informacijama	Right to Information Access Act	(OG 172/03) http://narodne- novine.nn.hr/clanci/sluzbeni/2003_10_172_2491.html

Country	Title of the law (original language) Link to full text, if available online	Title of the law (in English) Link to full text of translation, if available	Publication of original version and last amendment (official gazette number)
	Pravilnik o ustroju, sadržaju i načinu vođenja službenog upisnika u ostvarivanju prava na pristup informacijama	Ordinance on the Organisation, Contents and Manner of Keeping Official Register on Obtaining Rights to Information Access)	(OG 137/04) http://narodne- novine.nn.hr/clanci/sluzbeni/2004_10_137_2418.html
	Zakon o potvrđivanju Konvencije o kibernetičkom kriminalu	Act on Confirmation of the Convention on Cybercrime	(OG - IA 9/02) http://narodne- novine.nn.hr/clanci/medunarodni/327873.html
	Kazneni zakon	Criminal Code	(OG 110/97, 27/98, 50/00, 129/00, 51/01, 11/03, 190/03, 105/04, 71/06, 110/07, 152/07) http://narodne- novine.nn.hr/clanci/sluzbeni/1997_10_110_1668.html http://narodne- novine.nn.hr/clanci/sluzbeni/1998_02_27_333.html http://narodne- novine.nn.hr/clanci/sluzbeni/2000_12_129_2385.html http://narodne- novine.nn.hr/clanci/sluzbeni/2001_06_51_816.html http://narodne- novine.nn.hr/clanci/sluzbeni/2003_12_190_2986.html http://narodne- novine.nn.hr/clanci/sluzbeni/2004_07_105_2026.html http://narodne- novine.nn.hr/clanci/sluzbeni/2006_06_71_1706.html http://narodne- novine.nn.hr/clanci/sluzbeni/2007_10_110_3227.html
	Zakon o autorskom pravu i srodnim pravima	Copyright an Related Rights Act	(OG 167/03, 79/07) http://narodne- novine.nn.hr/clanci/sluzbeni/2003_10_167_2399.html http://narodne- novine.nn.hr/clanci/sluzbeni/2007_07_79_2491.html
	Zakon o zaštiti topografija poluvodičkih proizvoda	Act on the Protection of Topographies of Semiconductor Products	(OG 173/03, 76/07, 30/09) http://narodne- novine.nn.hr/clanci/sluzbeni/2003_10_173_2497.html http://narodne- novine.nn.hr/clanci/sluzbeni/2007_07_76_2412.html http://narodne- novine.nn.hr/clanci/sluzbeni/2009_03_30_656.html
	Zakon o patentu	Patent Act	(OG 173/03, 87/05, 76/07, 30/09) http://narodne- novine.nn.hr/clanci/sluzbeni/2003_10_173_2494.html http://narodne- novine.nn.hr/clanci/sluzbeni/2005_07_87_1710.html http://narodne- novine.nn.hr/clanci/sluzbeni/2007_07_76_2409.html http://narodne- novine.nn.hr/clanci/sluzbeni/2009_03_30_654.html

Country	Title of the law (original language) Link to full text, if available online	Title of the law (in English) Link to full text of translation, if available	Publication of original version and last amendment (official gazette number)
	Zakon o tehničkim zahtjevima za proizvode i ocjeni sukladnosti	Act on Technical Requirements for Products and Compliance Appraisal	(OG 158/03, 79/07) http://narodne-novine.nn.hr/clanci/sluzbeni/306849.html http://narodne-novine.nn.hr/clanci/sluzbeni/298927.html
	Uredba o postupcima službenog obavješćivanja u području norma, tehničkih propisa, te propisa o uslugama informacijskog društva	Regulation on procedures for the provision on notification in the field of standards, technical regulations and conformity assessment procedures and of regulations on information society services	(OG 28/09) http://narodne- novine.nn.hr/clanci/sluzbeni/2009_03_28_600.html
The Former Yugoslav Republic of Macedonia	Zakon za elektronski komunikacii http://www.aek.mk/index.php?option=com_con tent&view=category&id=77&Itemid=89&Iang= mk	Law on electronic communications http://www.aek.mk/index.php?option=com_content&vi ew=category&id=77&Itemid=89&Iang=en	13/2005, 14/2007, 55/2007 and 98/2008
	Zakon za radiodifuzna dejnost	Broadcasting Law	100/2005, 19/2007 and 103/2008
	Zakon za zashtita na konkurencijata	Law on competition	04/2005, 70/2006 and 22/2007
	Zakon za zashtita na lichnite podatoci	Law on private data protection	12/1994, 4/2002 and 07/2005
	Zakon za elektronska trgovija	Law on electronic commerce	133/2007
	Zakon za pravna zashtita na uslugite koi se zasnovaat na ili opfakaat usloven pristap	Law on legal protection of services that are based on or concern conditional access http://mio.gov.mk/files/pdf/na_angliski/Law_on_Interc eption_of_Comunications_%21.pdf	127/2008
	Zakon za podatoci vo elektronski oblik l elektronski potpis	Law on data in electronic form and electronic signatures	34/2001, 06/2002 and 98/2008
	Krivichen zakon na republika Makedonija	Crime Code of the Republic of Macedonia	37/1996, 7/2008, 139/2008
	Zakon za sledenje na komunikacii	Law on interception of communications http://mio.gov.mk/files/pdf/na_angliski/Law_on_Interc eption_of_Comunications_%21.pdf	121/2006, 110/2008, 05/2009
	Zakon za avtorskoto pravo I srodnite prava	Law on copyright and related rights	47/1996, 3/1998, 98/2002, 4/2005, 23/2005,131/2007
	Zakon za sloboden pristap do informacii od javen karakter	Law of free access to information of public character	13/2006
	Zakon za elektronsko upravuvanje	Law of electronic administration	105/2009
Turkey	5809 sayılı Elektronik Haberleşme Kanunu http://www.tk.gov.tr/Duzenlemeler/Hukuki/Kan unlar/2008/elektronik_haberlesme_kanunu.htm	Electronic Communications Law http://www.btk.gov.tr/eng/duzenmaineng2.html	Official Gazette 27050 dated 10.11.2008 (not amended)
	5070 sayılı Elektronik İmza Kanunu http://www.tk.gov.tr/eimza/eimza_yasasi.htm	Electronic Signature Law http://www.tk.gov.tr/eng/pdf/Electronic_Signature_La w.pdf	Official Gazette 25355 dated 23.01.2004 (not amended)

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	5651 Sayılı İnternet Ortamında Yapılan Yayınların Düzenlenmesi ve Bu Yayınlar Yoluyla İşlenen Suçlarla Mücadele Edilmesi Hakkında Kanun http://www.tk.gov.tr/Duzenlemeler/Hukuki/Kan unlar/2007/internetsuclari.pdf	Law no. 5651 On Regulating Broadcast in Internet and Combating Crimes Committed Through Such Broadcast	Official Gazette 26530 dated 23.05.2007 (not amended)
	5237 sayılı Türk Ceza Kanunu	Turkish Criminal Code	Official Gazette 25611 dated 12.10.2004
	4054 sayılı Rekabetin Korunması Hakkında Kanun	Law on The Protection Of Competition http://www.rekabet.gov.tr/index.php?Sayfa=sayfaiceri k&icId=165	Official Gazette 22140 dated 13.12.1994 last amendment by Law no. 5728, dated 08.02.2008, Official Gazette 26781
	5369 sayılı Evrensel Hizmet Kanunu	Universal Service Law http://www.tk.gov.tr/eng/pdf/5369.pdf	Official Gazette 25856 dated 25.06.2005 last amendment by Law no. 5809, Official Gazette 27050 dated 10.11.2008
	4982 sayılı Bilgi Edinme Hakkı Kanunu http://rega.basbakanlik.gov.tr/eskiler/2003/10/2 0031024.htm#1	Freedom of Information Act	Official Gazette 25269 dated 24.10.2003
	3984 sayılı Radyo ve Televizyonların Kuruluş ve Yayınları Hakkında Kanun	Law on Establishment and Broadcasting of Television Enterprises	Official Gazette 21911 dated 20.04.1994, last amendment by Law no. 5785, dated 10.07.2008
	2954 sayılı Türkiye Radyo ve Televizyon Kanunu	Law on Turkish Radio and Television Corporation	Official Gazette 18221 dated 14.11.1983, last amendment by Law no. 5767, Official Gazette 26918 dated 26.06.2008
	4822 sayılı Tüketicinin Korunması Hakkında Değişiklik Yapılmasına Dair Kanun http://rega.basbakanlik.gov.tr/eskiler/2003/03/2 0030314.htm#1	Law amending the Law on Protection of Consumers (articles provided for the distance contracts)	Official Gazette 25048 dated 14.03.2003
	Fikir ve Sanat Eserleri Kanunu	Law on Intellectual and Artistic Works	Official Gazette 7981 dated 13.12.1951, last amendment by Law No: 5571, 28.12.2006
	Telekomünikasyon Sektöründe Kişisel Verilerin İşlenmesi ve Gizliliğinin Korunmasına Dair Yönetmelik http://www.tk.gov.tr/Duzenlemeler/Hukuki/yone tmelikler/Yonetmelikler.htm	Bylaw on Processing of Personal Data and Protection of Privacy in The Telecommunications Sector http://www.tk.gov.tr/eng/pdf/data_protection.pdf	Official Gazette 25365 dated 06.02.2004 (in the revision process)
	Telekomünikasyon Sektöründe Tüketici Hakları Yönetmeliği	Bylaw On The Consumer Rights in The Telecommunications Sector	Official Gazette 25678 dated 22.12.2004
	http://www.tk.gov.tr/Duzenlemeler/Hukuki/yone tmelikler/Tuketici-Haklari%20Yonetmeligi.pdf	http://www.tk.gov.tr/eng/pdf/Ordinance%20On%20Th e%20Consumer%20Rights%20In%20The%20Teleco mmunications%20Sector.pdf	

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	Telekomünikasyon Hizmetlerinin Yürütülmesinde Geçiş Hakkına İlişkin Yönetmelik http://www.tk.gov.tr/Duzenlemeler/Hukuki/yone tmelikler/2006/02_05_06_26156_sayili_yonet melik.pdf	Bylaw Regarding The Rights Of Way In Execution Of Telecommunication Services http://www.tk.gov.tr/eng/pdf/regulation_on_the_rights_ of_way.pdf	Official Gazette 26156 dated 02.05.2006
	Erişim ve Arabağlantı Yönetmeliği http://www.tk.gov.tr/Duzenlemeler/Hukuki/yone tmelikler/2009/erisimvearabaglanti.pdf	Bylaw on Access and Interconnection http://www.tk.gov.tr/pdf/ordinance_access_interconne ction.pdf	Official Gazette 26552 dated 14.06.2007, last amendment Official Gazette 27343 dated 08.09.2009
	Numara Taşınabilirliği Yönetmeliği http://www.tk.gov.tr/Duzenlemeler/Hukuki/yone tmelikler/2009/nty.pdf	Bylaw on Number Portability http://www.tk.gov.tr/eng/duzenmaineng2.html	Official Gazette 26421 dated 01.02.2007, last amendment Official Gazette 27276 dated 02.07.2009
	Elektronik Haberleşme Güvenliği Yönetmeliği / Elektronik Haberleşme Güvenliği Yönetmeliğinde Değişiklik Yapılmasına Dair Yönetmelik http://www.tk.gov.tr/Duzenlemeler/Hukuki/yone tmelikler/2008/elektronikhaberlesmeguvenligi.p df http://www.tk.gov.tr/Duzenlemeler/Hukuki/yone tmelikler/2009/EHGY_YD_020309.pdf	Bylaw Amending Bylaw on Security of Electronic Communications	Official Gazette 26942 dated 20.07.2008, last amendment Official Gazette 27157 dated 02.03.2009
	İşletmecilere ait Ticari Sırların Korunması ile Kamuoyuna Açıklanabilecek Bilgilerin Yayımlanmasına İlişkin Usul ve Esaslar Hakkında Yönetmelik http://www.tk.gov.tr/Duzenlemeler/Hukuki/yone tmelikler/2009/ticari-sirlarin-korunmasi.pdf	Bylaw On Protection Of Operators' Trade Secrets And Publication Of Publicly Available Information http://www.btk.gov.tr/eng/pdf/2009/ordinance_on_trad e_secrets.pdf	Official Gazette 27241 dated 28.05.2009
	Elektronik Kimlik Bilgisini Haiz Cihazlara Dair Yönetmelik http://www.tk.gov.tr/Duzenlemeler/Hukuki/yone tmelikler/2009/ekbhcdy.htm	Bylaw on the Devices with Electronic Identity http://www.tk.gov.tr/eng/duzenmaineng2.html	Official Gazette 27271 dated 27.06.2009
	Spektrum Yönetimi Yönetmeliği http://www.tk.gov.tr/Duzenlemeler/Hukuki/yone tmelikler/2009/spektrumyonetmeligi.pdf	Bylaw on Spectrum Management http://www.btk.gov.tr/eng/doc/byLaw-on-SM.doc	Official Gazette 27276 dated 02.07.2009
	Tarife Yönetmeliği http://www.tk.gov.tr/Duzenlemeler/Hukuki/yone tmelikler/Yonetmelikler.htm	Bylaw on Tariff http://www.tk.gov.tr/pdf/TARIFF_ORDINANCE.pdf	Official Gazette 24507 dated 28.08.2001 (in the revision process)

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	Telekomünikasyon Sektöründe Hizmet Kalitesi Yönetmeliği http://www.tk.gov.tr/Duzenlemeler/Hukuki/yone tmelikler/Telekomunikasyon-Sektorunde- Hizmet-Kalitesi-Yonetmeligi.pdf	Bylaw on the quality of service in the telecommunications sector http://www.tk.gov.tr/eng/pdf/Ordinance%20On%20Qu ality%20Of%20Service%20In%20The%20Telecommu nication%20Sector.pdf	Official Gazette 25744 dated 03.03.2005
	Etkin Piyasa Gücüne Sahip İşletmecilerin Belirlenmesine İlişkin Usul ve Esaslar Hakkında Yönetmelik http://www.tk.gov.tr/Duzenlemeler/Hukuki/yone tmelikler/Yonetmelikler.htm	Bylaw on Principles and Procedures for Determination of the Operators with Significant Market Power http://www.tk.gov.tr/eng/duzenmaineng2.html	Official Gazette 26396 dated 07.01.2007, last amendment Official Gazette 27336 dated 01.09.2009
	Elektronik Haberleşme Sektörüne İlişkin Yetkilendirme Yönetmeliği http://www.tk.gov.tr/Duzenlemeler/Hukuki/yone tmelikler/2009/ehsiyy.pdf	Bylaw on Authorization for electronic Communications sector http://www.tk.gov.tr/eng/aoecs.html	Official Gazette 27241 dated 28.05 2009
	Numaralandırma Yönetmeliği http://www.tk.gov.tr/Duzenlemeler/Hukuki/yone tmelikler/Yonetmelikler.htm	Bylaw on numbering http://www.tk.gov.tr/eng/Numbering_Regulation.pdf	Official Gazette 25385 dated 26.02.2004, last amendment Official Gazette 27271 dated 27.06.2009
	Elektronik İmza Kanununun Uygulanmasına İlişkin Usul ve Esaslar Hakkında Yönetmelik http://www.tk.gov.tr/Duzenlemeler/Hukuki/yone tmelikler/e-imza-yonetmelik.pdf	Bylaw on the Procedures and Principles Pertaining to the Implementation of Electronic Signature Law http://www.tk.gov.tr/eng/pdf/Ordinance_on_Electronic _Signature.pdf	Official Gazette 25692 dated 06.01.2005
	Elektronik Belge Standartları Konulu Başbakanlık Genelgesi	Prime Ministry Circular regarding the Electronic Documents Standards	Official Gazette 26938 dated 16.07.2008
	Kamu Sertifikasyon Merkezi Oluşturulması Konulu Başbakanlık Genelgesi http://www.bilgitoplumu.gov.tr/mevzuat/24_200 40906_Genelge_200421.pdf	Prime Ministry Circular regarding Establishment of a Public Institutions Certification Centre	Official Gazette 25575 dated 6.09.2004
	Kamu Sertifikasyon Hizmetlerine İlişkin Usul ve Esaslar Hakkında Başbakanlık Genelgesi http://www.bilgitoplumu.gov.tr/mevzuat/35_200 60620_Genelge_200613.pdf	Prime Ministry Circular on the procedures about Public Certification Services	Official Gazette 26144 dated 19.04.2006
Albania	Ligj Nr. 9918 datë 19.05.2008 "Për komunikimet elektronike në Republikën e Shqipërisë"	Law no. 9918 dated 19.05.2008 on electronic communications	84/2008
	Ligji Nr.9880 datë 25.2.2008 "Per nenshkrimin elektronik"	Law no. 9880 dated 25.02.2008 on electronic signature on 25.2.2008	40/2008

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	Ligji nr.9742 datë 28.05.2007 "Për transmetimet numerike në Republikën e Shqipërisë"	Law no. 9742 dated 28.05.2007 "On digital transmission in the Republic of Albania"	74/2007
	Ligji nr. 8410 datë 30.09.1998 "Për Radion dhe Televizionin Publik e Privat ne Republiken e Shqiperise"	Law no. 8410 dated 30.09.1998 "On public and private radio and television in Republic of Albania"	24/1998
	ndryshuar me ligjin nr. 8655 date 31.07.2000, me ligjin nr. 8794 datë 10.05.2001,	amended by law no. 8655 dated 31.07.2000, amended by law no. 8794 dated 10.05.2001,	24/2000 34/2001
	me ligjin nr. 9016 datë 20.02.2003, me ligjin nr. 9124 datë 29.07.2003,	amended by law no. 9016 dated 20.02.2003, amended by law no. 9124 dated 29.07.2003,	18/2003 71/2003
	me ligjin nr. 9531 datë 11.05.2006, me ligjin nr. 9584 datë 17.07.2006, me ligjin nr. 9677 datë 13.01.2007, me ligjin nr. 9262 datë 21.07.2008	amended by law no. 9531 dated 11.05.2006, amended by law no. 9584 dated 17.07.2006, amended by law no. 9677 dated 13.01.2007, amended by law no. 9262 dated 21.07.2008	65/2006 84/2006 2/2007 125/2008
	Ligji nr. 9121 datë 28.07.2003 "Per mbrojtjen e konkurrences" amenduar me Ligjin nr. 9499, date 03.04.2006, me Ligjin nr. 9584, date 17.07.2006	Law no. 9121 dated 28.07.2003 "On competition", amended by law no. 9499 dated 03.04.2006 and by law no. 9584 dated 17.07.2006.	71/2003, 37/2006 and 84/2006
	Ligji nr. 9887 datë 10.3.2008 "Per mbrojtjen e te dhenave personale"	Law no. 9887 dated 10.03.2008 "On personal data protection"	43/2008
	Ligji nr. 7895 datë 27.01.1995 "Kodi Penal" i ndryshuar Ligji nr. 9859 datë 21.01.2008, Ligji nr. 10023 datë 27.11.2008	Law no. 7895 dated 27.01.1995 "Criminal code", amendments on cybercrime by law no. 9859 dated 21.01.2008 and law no. 10023 dated 27.11.2008	2/1995 (original version) 10/2008 and 190/2008 (amendments on cybercrime) Other amendments not included
	Ligji Nr.10128 datë 11.05.2009 "Per tregetine elektronike "	Law No.10128 dated 11.05.2009 on electronic commerce	85/2009
	VKM nr. 479 datë 06.05.2009 "Per miratimin e Planit Kombetar te Frekuencave"	Council of Ministers Decision no. 479 dated 06.05.2009 "On the approval of National Frequencies Plan"	90/2009
	VKM nr. 59 datë 21.01.2009 "Per miratimin e Strategjise Ndersektoriale per Shoqerine e Informacionit"	Council of Ministers Decision no. 59 dated 21.01.2009 "Inter-sector strategy for the information society"	25/2009
	VKM nr. 525, datë 13.05.2009, "Per miratimin e Rregullores per Nenshkrimin Elektronik"	Council of Ministers Decision no. 525, dated 13.05.2009, "On approval of Regulation for Electronic Signature"	
	Rregullore mbi Aksesin dhe Interkoneksionin miratuar me Vendim te Keshillit Drejtues te ERT-se, nr. 416 datë 07.12.2007	Regulation "On access and interconnection", approved by the Governing Council of TRE, decision no. 416 dated 07.12.2007	www.akep.gov.al

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	Rregullore mbi analizen e tregut miratuar me vendimin e Keshillit Drejtues te AKEP-se nr. 747 datë 17.07.2009	Regulation "On market analyses", approved by the Governing Council of AKEP, decision no. 747 dated 17.07.2009	www.akep.gov.al
	Rregullore mbi "Njoftimin e autorizimit te Pergjithshem" miratuar nga Keshilli Drejtues i AKEP, me vendimin nr.495 dt. 19.09.2008	Regulation "On general authorisation notification", approved by the Governing Council of AKEP, decision no. 495 dated 19.09.2009	www.akep.gov.al
	Rregullore mbi regjistrimin e domain name nen .al dhe nendomaineve .gov.al, mil.al, edu.al, com.al, org.al dhe net.al, miratuar me vednimin e Keshillit Drejtues te ERT-se nr. 437 dt. 21.02.2008	Regulation "On the registration and administration of the domain names under .al and sub-domains .gov.al, .mil.al, .edu.al, .com.al, .org.al and .net.al", approved by the Governing Council of TRE, decision no. 437 dated 21.02.2008	www.akep.gov.al
	Draft law on e-document approved by Council of	Ministers on October 28, 2009.	
Bosnia & Herzegovina	Zakon o komunikacijama http://www.mkt.gov.ba/bos/dokumenti/zakoni/B S-01-kom.pdf	Law on Communications http://www.rak.ba/en/legal/?cid=2427	31/03, last amendment 14/03
	Zakon o konkurenciji Bosne i Hercegovine http://www.bihkonk.gov.ba	Law on Competition http://www.bihkonk.gov.ba/en/	18/06, last amendment 76/07
	Zakon o javnom radiotelevizijskom sistemu Bosne i Hercegovine http://www.mkt.gov.ba/bos/dokumenti/zakoni/B S-01-rtvsist.pdf	Law on Broadcasting System BiH	78/05
	Zakon o javnom radiotelevizijskom servisu Bosne i Hercegovine http://www.mkt.gov.ba/bos/dokumenti/zakoni/B S-01-rtvserv.pdf	Law on Broadcasting Service BiH	92/05
	Zakon o elektronskom potpisu http://www.mkt.gov.ba/bos/dokumenti/zakoni/B S-01-elepot.pdf	Law on Electronic Signature	91/06
	Zakon o elektronskom pravnom i poslovnom prometu http://www.mkt.gov.ba/bos/dokumenti/zakoni/B S-01-elepravpot.pdf	Law on Electronic legal and business transactions	88/07
	Odluka o osnovama upotrebe e-Potpisa i pružanja usluiuga ovjeravanja	Decision of the bases of usage eSignature and providing certifications services	
	Secondary legislation	•	
	Pravilo o interkonekciji br. 16/2002 http://www.rak.ba/bs/legal/rules- codes/telecom/rules/default.aspx?cid=1403	Interconnection Rule http://www.rak.ba/en/legal/rules- codes/telecom/rules/default.aspx?cid=699	36/02

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	Pravilo o pristupu izdvojenoj lokalnoj petlji br. 35/2008 http://www.rak.ba/bs/legal/rules- odes/telecom/rules/default.aspx?cid=4934	Rule 35/2008 on unbundled access to the local loop http://www.rak.ba/en/legal/rules- codes/telecom/rules/default.aspx?cid=4975	54/08
	Pravilo 20 o utvrđivanju graničnih cijena iznajmljenih linija u BiH http://www.rak.ba/bs/legal/rules- codes/telecom/rules/default.aspx?cid=2927	Rule 20/2003 on determining ceiling prices for leased circuits in Bosnia and Herzegovina http://www.rak.ba/en/legal/rules- codes/telecom/rules/default.aspx?cid=2929	41/03, last amendment 105/08
	Pravilo 24/2005 o modelu rebalansa cijena govornih telefonskih usluga u BiH http://www.rak.ba/bs/legal/rules- codes/telecom/rules/default.aspx?cid=3842	Rule 24/2005 on the model of tariff rebalance of voice telephone services in Bosnia and Herzegovina http://www.rak.ba/en/legal/rules- codes/telecom/rules/default.aspx?cid=3940	50/05, last amendment 105/08
	Pravilo o izmjenama i dopunama pravila o visini naknade za dozvolu za mrežnog operatora CRA Pravilo 15/2002 http://www.rak.ba/bs/legal/rules- codes/telecom/rules/default.aspx?cid=5177	Rule on the amendment of the rule on the license fees for network operatorsCRA rule 15/2002 http://www.rak.ba/en/legal/rules- codes/telecom/rules/default.aspx?cid=5381	105/08
	Pravilo o izmjenama i dopunama pravila o visini naknade za dozvole za pružanje internet usluga CRA Pravilo 14/2002	Rule on the amendment of the rule on the license fee for the provision of internet services - CRA rule 14/2002	105/08
	http://www.rak.ba/bs/legal/rules- codes/telecom/rules/default.aspx?cid=5174	http://www.rak.ba/en/legal/rules- codes/telecom/rules/default.aspx?cid=5380	
Montenegro	Zakon o elektronskim komunikacijama http://www.gov.me/files/1227718289.pdf	Law on electronic communications	50/08, 70/09
	Zakon o elektronskom potpisu http://www.gov.me/files/1198662448.pdf	Law on electronic Signature http://www.gov.me/files/1265290512.pdf	55/03, 31/05 Amendments to the law being prepared.
	Zakon o elektronskoj trgovini http://www.gov.me/files/1198662564.pdf	Law on electronic Commerce http://www.gov.me/eng/rsr/vijesti.php?akcija=vijesti&id =7839	80/04 Amendments to the law being prepared.
	Zakon o elektronskom dokumentu http://www.gov.me/files/1221489506.pdf	Law on electronic document	5/08
	Zakon o primjeni propisa kojima se uređuje zaštita prava intelektualne svojine http://www.pkcg.org/zakonodavstvo/intelektual na_svojina/dok_1.pdf	Law on application of legal acts for protection of intellectual property rights	45/05
	Zakon o medijima	Media Law	51/02, 56/04
	Zakon o radio difuziji	Broadcasting Law	51/02, 62/02, 46/04, 77/06, 50/08, 79/08

Country	Title of the law (original language) Link to full text, if available online	Title of the law (in English) Link to full text of translation, if available	Publication of original version and last amendment (official gazette number)
	Zakon o javnim radio-difuznim servisima Crne Gore http://www.skupstina.me/24_saziv/index1.php?	Law on public broadcasting services of Montenegro	79/08
	module=17⊂=13&akt=896		
	Zakon o elektronskim medijima	Electronic Media Law	Draft version prepared With adoption of the Electronic Media Law the Broadcasting Law will be repealed.
	Zakon o prelasku sa analognih na digitalne zemaljske radio-difuzne sisteme	Law on switch over from analogue to digital terrestrial broadcasting systems	Draft version prepared
	Zakon o slobodnom pristupu informacijama http://www.skupstina.me/24_saziv/index1.php? module=17&akt=608⊂=13	Law on free access to information	68/05
	Zakon o tajnosti podataka http://www.skupstina.me/24_saziv/index1.php? module=17⊂=13&akt=376	Information Secrecy Law http://www.gov.me/eng/minunutr/vijesti.php?akcija=vij esti&id=157346	14/08
	Zakon o zastiti neobjavljenih podataka http://www.skupstina.me/24_saziv/index1.php? module=17&akt=261⊂=13	Law on protection of unpublished data	16/07
	Zakon o izmjeni zakona o zastiti neobjavljenih podataka http://www.skupstina.me/24_saziv/index1.php? module=17⊂=13&akt=861	Law on modification of law on protection of unpublished data	73/08
	Zakon o zaštiti podataka o ličnosti http://www.skupstina.me/24_saziv/index1.php? module=17⊂=13&akt=895	Law on personal data protection	79/08, 70/09
	Pravilnik o uslovima za izgradnju telekomunikacionih mreža	Rulebook on conditions of construction of telecommunication networks	10/06
	Pravilnik o zajedničkom korišćenju telekomunikacione infrastrukture http://www.agentel.cg.yu/regulativa/pravilnik% 200%20zajednickom%20koriscenju%20teleko munikacione%20infrastrukture.pdf	Rulebook on common usage of telecommunication infrastructure	65/05
	Pravilnik o pristupu i interkonekciji http://www.agentel.cg.yu/konsultacije/2006/Inte rkonekcija/Nacrt_Pravilnika.pdf	Rulebook on access and interconnection	4/06
	Zakon o potvrđivanju Konvencije o računarskom kriminalu	Law on confirmation of Convention on Cyber crime	Adopted. Not published yet.

Country	Title of the law (original language) Link to full text, if available online	Title of the law (in English) Link to full text of translation, if available	Publication of original version and last amendment (official gazette number)
	Zakon o potvrđivanju dodatnog protokola uz Konvenciju o računarskom kriminalu	Law on confirmation of additional protocol to the Convention on Cyber crime	Adopted. Not published yet.
Serbia	Zakon o telekomunikacijama http://www.mtid.gov.rs/dokumenta/zakoni,_ure dbe_i_pravilnici.49.html	Law on Telecommunications http://www.ratel.rs/index.php?page=regulativa⌖ =r_zakon&item=38&get_treerot=9⟨=eng	44/03 and 36/06
	Zakon o elektronskom dokumentu http://www.mtid.gov.rs/upload/documents/propi si/zakoni/Zakon%20o%20elektronskom%20do kumentu.pdf	Law on Electronic Document	51/2009
	Zakon o elektronskom potpisu http://www.mtid.gov.rs/upload/documents/propi si/zakoni/Zakon%20o%20elektronskom%20pot pisu.pdf	Law on Electronic Signature	135/2004
	Zakon o informacionom sistemu Republike Srbije	Law on Information Systems in the Republic of Serbia	12/1996
	Krivični zakonik http://www.arii.sr.gov.yu/?view_doc_legislation	Criminal code	85/2005
	Zakon o zaštiti podataka o ličnosti	Law on personal data protection	97/2008
	Zakon o elektronskoj trgovini	Law on electronic commerce	41/2009
	Spisak usluga Univerzalnog servisa	Bylaw on determining the initial set of services which are provided as the Universal Service	55/2009
	Uredba o obezbedjivanju i zastiti informacionih sistema državnih organa	Act of securing and protecting information systems in government institutions	41/1990
	Uputstvo za izradu i usvajanje projekata informacionih sistema organa uprave	Guidelines for development and acceptance of projects related to information systems in government institutions	49/1989
	Pravilnik o bližim uslovima za izdavanje kvalifikovanog elektronskog potpisa	Regulation on conditions for issuing qualified electronic signatures	26/2008
	Pravilnik o tehnicko-tehnoloskim postupcima za formiranje kvalifikovanog elektronskog potpisa i kriterijumima koje treba da ispune sredstva za formiranje elektronskog potpisa http://www.mtid.gov.rs/upload/documents/propi si/podzakonski/Pravilnik%200%20tehnicko- tehnoloskim%20postupcima.pdf	Regulation on technical and technological steps for creating qualified electronic signature and criteria that needs to be fulfilled by the means for creating qualified digital signatures	26/2008

Country	Title of the law (original language) Link to full text, if available online	Title of the law (in English) Link to full text of translation, if available	Publication of original version and last amendment (official gazette number)
	Pravilnik o Registru sertifikacionih tela koja izdaju kvalifikovane elektronske sertifikate u Republici Srbiji http://www.mtid.gov.rs/upload/documents/propi si/podzakonski/Pravilnik%200%20registru%20i zdavalaca%20kvalifikovanih%20sertifikata.pdf	Regulation on register of certification bodies for issuing qualified electronic certificates in the Republic of Serbia	26/2008
	Pravilnik o vodjenju evidencije sertifikacionih tela http://www.mtid.gov.rs/upload/documents/propi si/podzakonski/Pravilnik%200%20evidenciji%2 Osertifikacionih%20tela.pdf	Regulation on record keeping of certification bodies	48/2005, 82/2005 and 116/2005
	Pravilnik o izdavanju vremenskog žiga http://www.mtid.gov.rs/upload/documents/propi si/podzakonski/ZED- Pravilnik%200%20izdavanju%20vremenskog %20ziga.pdf	Regulation on issuing the time stamp	112/2009
	Uredba o određivanju Ministarstva unutrašnjih poslova za izdavanje kvalifikovanih elektronskih sertifikata	Act on appointment of the Ministry of interior affairs for issuing qualified electronic certificates	111/2009
	Strategija povećanja učešća domaće industrije u razvoju telekomunikacija u Republici Srbiji	Strategy on the increase of the participation of the domestic industry in the development of the telecommunications in the Republic of Serbia	Adopted by government on December 29, 2009. Not published yet in the official gazette.
Kosovo	Ligji nr. 2002/7 për telekomunikacionin http://www.unmikonline.org/regulations/unmikg azette/03albanian/A2003regs/RA2003_16.pdf Ligji Nr. 03/L-085 http://www.assembly- kosova.org/common/docs/ligjet/2008_03- L085_al.pdf	Law no. 2002/7 on telecommunications http://www.unmikonline.org/regulations/unmikgazette/ 02english/E2003regs/RE2003_16.pdf Amended by law no. 03/L-085 http://www.assembly- kosova.org/common/docs/ligjet/2008_03-L085_en.pdf	No official gazette numbers. Laws are cited by the number of the law (see left columns). See also the indexes of the official gazette for 2006/2007 and 2008: http://www.ks- gov.net/gazetazyrtare/Documents/english_2006_2007.pdf http://www.ks-gov.net/gazetazyrtare/Documents/Indexi- english.pdf
	Ligji nr. 02/L-23 për shërbimet e shoqerise http://www.unmikonline.org/regulations/unmikg azette/03albanian/A2006regs/RA2006_32_AL A02_L23.pdf	Law no. 02/L-23 on the information society services http://www.unmikonline.org/regulations/unmikgazette/ 02english/E2006regs/RE2006_32_ALE02_L23.pdf NB This law includes laws on electronic commerce, distance contracts, electronic invoicing, electronic payment, data protection, electronic signatures and protection of information systems.	

Country	Title of the law (original language) Link to full text, if available online	Title of the law (in English) Link to full text of translation, if available	Publication of original version and last amendment (official gazette number)
	Ligji nr. 02/L-15 për komisionin e pavarur te mediave dhe transmetimin http://www.unmikonline.org/regulations/unmikgaz ette/03albanian/A2005regs/RA2005_34_ALA02L _15.pdf	Law no. 02/L-15 on the independent media commission and broadcasting http://www.unmikonline.org/regulations/unmikgazette/ 02english/E2005regs/RE2005_34_ALE02L_15.pdf	
	Ligji nr. 2004/36 per konkurrencën http://www.unmikonline.org/regulations/unmikgaz ette/03albanian/A2004regs/RA2004_44_ALA200 4_36.pdf	Law no. 2004/36 on competition http://www.unmikonline.org/regulations/unmikgazette/ 02english/E2004regs/RE2004_44_ALE2004_36.pdf	
	RA 2003/25 Kodi i përkohshëm penal i Kosovës	RE 2003/25 Provisional criminal code of Kosovo Amended by UNMIK/REG/2004/19 Promulgated by Decree No. DL-059-2008, dated 27.11.2008, of the President http://www.md-ks.org/?page=2,95	
	Udhëzimi administrativ nr. 2004/3 mbi caktimin e dënimeve për kundërvajtjet nga telekomunikacioni http://www.art-ks.org/docs/Law/MTPT-Admin- Instruction-2004_3.pdf	Administrative instruction no. 2004/3 onto charges definition for infractions from telecommunication http://www.art-ks.org/docs/Law/MTPT-Admin- Instruction-2004_3.pdf	
	Plani i numeracionit për rrjetat e telekomunikacionit në Kosovë http://www.art- ks.org/docs/Law/Plani%20i%20numeracionit% 20për%20rrjetat%20e%20telekomunikacionit% 20në%20Kosovë.pdf	Numbering plan for telecommunication networks in Kosovo http://www.art- ks.org/docs/Law/Regulation%20on%20National%20N umbering%20Plan.pdf	
	Udhëzim administrativ nr. 180/07 mbi tarifën për procesim të aplikacionit http://www.art- ks.org/docs/Aplications/Udhëzim%20Administr ativ%20mbi%20Tarifën%20për%20Procesim% 20të%20Aplikacionit.pdf	Administrative instruction on tariffs for application processing http://www.art- ks.org/docs/Aplications/ADMINISTRATIVE%20INSTR UCTION%20ON%20TARIFFS%20FOR%20APPLICA TION%20PROCESSING.pdf	
	Rregullore për dhënien e licencës për akordimin e së drejtës për shfrytëzimin e radio frekuencave, nr. 008/08 http://www.art- ks.org/docs/regulation/Rregullore_per_Dhenie n_e_Licences_per_Akordimin_e_se_Drejtes_p er_Shfrytezimin_e_Radio_Frekuencave.pdf	Regulation on granting license for the right to use radio frequencies http://www.art- ks.org/docs/regulation/Regulation_on_Granting_the_L icense_for_the_Right_to_Use_Radio_Frequenciesfull 111.pdf	

Country	Title of the law (original language) Link to full text, if available online	Title of the law (in English) Link to full text of translation, if available	Publication of original version and last amendment (official gazette number)
	Rregullorës për licenca dhe autorizime http://www.art- ks.org/docs/regulation/Rregullore_per_Licenca _dhe_Autorizime.doc Ndryshimi dhe plotësimi i rregullorës për licenca dhe autorizime, nr. 182/07-B http://www.art- ks.org/docs/regulation/Ndryshimi_dhe_Plotesi mi_i_Rregullores_per_Licenca_dhe_Autorizim e.pdf	Regulation on licensing and authorisations http://www.art- ks.org/docs/regulation/Regulation_on_Licenses_and_ Authorisations.doc Amendments to the regulation on licensing and authorisations	
	Rregullore për mbrojtjen e konsumatorit dhe fshehtësisë së përdoruesve të shërbimeve telekomunikuese, nr. 222/08 http://www.art- ks.org/docs/regulation/Rregullore%20Per%20 Mbrojtjen%20e%20Konsumatorit%20dhe%20F shehtesise%20se%20Perdoruesve%20te%20 Sherbimeve%20Telekomunikuese.pdf	Regulation on consumer protection and telecommunications services consumer privacy http://www.art- ks.org/docs/regulation/REGULATION%20ON%20CONS UMER%20PROTECTION%20AND%20TELECOMMUNI CATIONS%20SERVICES%20CONSUMER%20PRIVAC Y.pdf	
	Rregullore për tarifim të spektrit Ndryshimi dhe plotësimi i rregullorës për tarifim të spektrit, nr. 028/09 http://www.art- ks.org/docs/regulation/Ndryshimi_dhe_Plotesi mi_i_Rregullores_per_Tarifim_te_Spektrit.pdf	Regulation on spectrum tariffs plan http://www.art- ks.org/docs/regulation/Regulation_on_Spectrum_Tarif fs_Plan.pdf Amendments to the regulation on spectrum tariffs http://www.art- ks.org/docs/regulation/Amendments_to_the_Regulation_ on_Spectrum_Tariffs.doc	
	Rregullore për procedurën e zgjidhjes së konflikteve , nr. 183/07 http://www.art- ks.org/docs/Law/RregullorepërProcedurëneZgj idhjessëKonflikteve.pdf	Regulation on procedures for dispute resolution http://www.art- ks.org/docs/Law/RegulationonDisputeResolution.pdf	

Table N.1 - Information society legislation

2. Information society policy

The following table shows

- the body (or bodies) which is (are) responsible for preparing and overseeing the information society policy; and
- the title and links to relevant adopted or prepared policy documents (if available, to English translations).

Country	Responsible body for information society policy	Information society policy documents
Croatia	Central State Administrative Office for e-Croatia National Council for the Information Society	 Programme of the Government of the Republic of Croatia for 2009–2011, chapter 22: Information Society http://www.vlada.hr/hr/content/download/100711/1435109/file/Program%20Vlade%202009. -2011.pdf e-Croatia Programme (www.e-hrvatska.hr)
The Former Yugoslav Republic of Macedonia	Ministry of Information Society Ministry of Transport and Communication	 National Strategy for development of information society National Strategy for development of electronic communication with information technologies Government Programme of the Republic of Macedonia National next generation broadband strategy
Turkey	State Planning Organization http://www.dpt.gov.tr/	Information Society Strategy and annexed Action Plan (2006–2010) adopted by the High Planning Council, decision no. 2006/38 of July 11, 2006 http://www.bilgitoplumu.gov.tr/
Albania	Ministry of State for Reforms and Relations to Parliament	 Crosscutting strategy for the information society, decision no. 59 of January 21, 2009 A new policy for electronic communications has been prepared. It will be presented for public consultation on Feb. 16, 2010 and adopted by the Council of Ministers in due course.
Bosnia & Herzegovina	Ministry of Communication and Transport BiH	Policy of Information Society Development in BiH, adopted by the Council of Ministers in November 2004, http://www.undp.ba/index.aspx?PID=36&RID=37
Montenegro	Ministry for Information Society http://www.mid.gov.me/	Strategy for Information Society Development of Montenegro, for period 2009–2013 http://www.gov.me/files/1255505965.pdf Strategy of Electronic Communications Sector in Montenegro, May 2006 http://www.gov.me/files/1238591508.pdf
Serbia	Ministry of Telecommunications and Information Society http://www.mtid.gov.rs/	 Strategy for the development of information society in the Republic of Serbia, "Official gazette of the Republic of Serbia", No. 87/2006 Strategy for switchover from analogue to digital broadcasting of radio and television programme in the Republic of Serbia, "Official Gazette of the Republic of Serbia", No. 52/2009 Strategy for e-Government development in period of 2009 to 2013, "Official Journal of Republic of Serbia", No. 83/2009 National Strategy for Broadband Access up to 2012, "Official Journal of Republic of Serbia", No. 84/2009

Country	Responsible body for information society policy	Information society policy documents
		 Action plan for the implementation eSEE Agenda+ for the development of information society in SEE 2007–2012, "Official Journal of Republic of Serbia", No. 29/2009
Kosovo	Ministry of Transport and Post-Telecommunication http://www.mtpt.org/ Ministry of Public Administration for e-Government Services http://www.ks-gov.net/map/	Ministry of Transport and Post-Telecommunication E-Government Strategy 2009–2015 and Action Plan http://www.ks-gov.net/MAP/DocumentsShpalljet/E_Governance_Strategy_20092015.pdf

Table N.2 - Information society policy

Notes:

Croatia: The Central State Administrative Office for e-Croatia executes activities concerning the monitoring and coordinating the implementation of the projects in the area of information and communication technologies within the state administration bodies and coordinates and monitors the development of information society in the Republic of Croatia. It supports the National Council for the Information Society in technical and professional matter. National Council for Information Society was established on

It supports the National Council for the Information Society in technical and professional matter. National Council for Information Society was established on September 2, 2004 (official gazette 126/2004) as the advisory body of the Government of the Republic of Croatia with the aim of consideration, determination and promotion of all relevant questions in the scope of information society development in the Republic of Croatia.

Albania: The responsibility for information society policy has been given to the Ministry of State for Reforms and Relations to Parliament. The National Agency for Information Society (AKSHI) will continue its work and support the Ministry. Government decided to double AKSHI's staff and to significantly increase its budget.

O. Fundamental rights and freedoms

The review of the EU 2003 regulatory framework raised a new discussion on fundamental rights and freedoms in the information society. The controversy between European Parliament and the Council on amendment 138 (renumbered 46 in second reading) delayed adoption of the package. The text, which was finally agreed in the conciliation procedure, became law as new article 1 para. 3a of the Framework Directive: *"Measures taken by Member States regarding end-users' access to, or use of, services and applications through electronic communications networks shall respect the fundamental rights and freedoms of natural persons as guaranteed by the European Convention for the Protection of Human Rights and Fundamental Freedoms and general principles of Community law." In particular, measures that would restrict end-users access to services and applications may only be imposed if they are <i>"appropriate, proportionate and necessary within a democratic society"* and duly respect *"the principle of the presumption of innocence and the right to privacy"*.

Issues which have been controversial in several EU member states include the following:

• Laws or proposed bills that would restrict certain end-users right to access the Internet, in particular end-users who repeatedly infringed copyright laws.

In this context it is being discussed whether such laws interfere with fundamental rights, in particular whether the law puts the burden of proof on the end-user and whether the applied procedure respects the rights of innocent end-users who might suffer the consequences of misconduct carried out by other users of the same account. The issue particularly addressed by the European Parliament is whether a penalty may only be imposed by judicial authorities, or if that can also be done by an administrative authority as by the French HADOPI.

According to the new provision in the Framework Directive, the procedure before blocking a person is not necessarily to be taken by a judge, but it must be fair and impartial and must include the right to be heard of the persons concerned (except in urgent cases). After the decision, the right to effective and timely judicial review shall be guaranteed.

• Laws or proposed bills that would restrict end-users right to access certain websites, in particular if these websites contain illegal content.

Examples for this discussion are the German law on combating child porn in communications networks and laws on blacklisting paedophile content or unauthorised gambling websites in Italy.

In this context it is being discussed how the applied procedures differentiate between legitimate and illegal content, how to supervise the administration of the blacklist of blocked websites and how blocked users and content providers can appeal decisions. It is particularly problematic to deal with websites that contain a large amount of legitimate content and only singular illegal files (for example the popular video portals), because any decision to block access to the illegal content can interfere with many innocent users' fundamental rights.

1. Constitutional rights

The following tables address which fundamental rights and freedoms are guaranteed by the constitution or legal system of the participating countries

Country	Freedom of expression	Right to respect for private and family life	Relevant case law
Croatia	Art. 38 of the Constitution	Art. 35 of the Constitution	No relevant case law
The Former Yugoslav Republic of Macedonia	Art. 16 of the Constitution	Art. 25 of the Constitution	No relevant case law
Turkey	Art. 26 of the Constitution	Art. 20 of the Constitution	Many court decisions based on Law no. 5651, see table O.2
Albania	Art. 22 of the Constitution	Art. 53 of the Constitution	No relevant case law
Bosnia & Herzegovina	Art. 2 g) and h) of the Constitution	Art. 2 f) of the Constitution	No relevant case law
Montenegro	Art. 47 of the Constitution	Art. 40, 42, 43 of the Constitution	No relevant case law
Serbia	Art. 46 of the Constitution	Art. 42 of the Constitution	Judgement of the Constitutional Court of Serbia (IUz 149/2008), published in the Official gazette of the Republic of Serbia no. 50/2009 (see note below)
Kosovo	Art. 40 of the Constitution	Art. 36 of the Constitution	No relevant case law

Table O.1 - Constitutional rights

Notes:

Bosnia & Herzegovina: According the Constitution of Bosnia & Herzegovina the European Convention on Human Rights with its all protocols and the International Pact on Citizens and Political Rights with optional protocols are directly applied.

- Serbia: Art. 41 of the Constitution protects the confidentiality of letters and other means of communications. This article allows interception only under court orders and only for prosecution of crimes and state security. Art. 55 para. 1 of the Law on telecommunications allowed interception not only under court orders but also under other (unspecified) laws. The Constitutional Court repealed this reference to other laws, as it extended the scope of possible interception to cases of interception without court order or for other purposes than allowed by the Constitution.
- 2. Mechanisms to restrict the freedom of expression and information

The following table addresses whether there are laws or other mechanisms that could potentially restrict the freedom of expression and information and which safeguards these laws or mechanism foresee. In particular, the table contains:

- laws which block access to certain websites or certain content on websites, for example by obliging Internet access providers to implement filters or blocking mechanisms, or
- laws which restrict certain users from accessing the Internet, for example persons who have been found guilty to infringe copyrights.

The table does not include the typical mechanisms that are foreseen in most criminal procedure codes, for example that the criminal court may confiscate things that have been used to commit a crime or that the court may impose alternative sanctions such as avoiding certain situations for a specified time (diversion programmes). The table also does not include restrictions of Internet access imposed on persons in jails.

Country	Legal source	Description of the mechanism Responsible (judicial?) authorities Technical implementation Measures addressed to Internet service providers or to end-users?	Safeguards Appeal procedures? Compensation for ISPs? Protection of innocent users which use the same service?
Croatia	No such regulation	No such mechanism	-
The Former Yugoslav Republic of Macedonia	No such regulation	No such mechanism	-
Turkey	Law no. 5651, dated May 4, 2007 on "Regulation Of Publications On The Internet And Combating Crimes Committed By Means Of Such Publications"	The official justification of the law is that it aims to protect families and children from Internet abuse, namely encouragement of drug use, gambling or suicide, sexual exploitation, etc. The law stipulates that reasonable suspicion of a content which constitutes one of the offences indicated in Art. 8 of the Law will lead to blocking access to a web site. The decision to block access will be made by a judge during the prosecution and by a court during the trial. In urgent cases, a public prosecutor can also decide to block access for 24 hours, pending approval by a judge. Information and Communication Technologies Authority Telecommunication Communication	If the decision of blocking of access to a web site is given by a judge or by a court, the web site owner can appeal to competent courts according to the Criminal Procedure Code. In case this decision is given by TCP, the web site owner can appeal to administrative courts according to the Administrative Adjudication Procedures Law no. 2577. The content providers of web sites that have been blocked may apply to the courts in every situation and to the TCP notifying that they have removed the contents that constitutes one of the offences indicated in art. 8 of the law. After technical and legal review, TCP may repeal the decision on blocking access. Content and service providers can also apply to the courts for compensation, according to the general rules.

Country	Legal source	Description of the mechanism Responsible (judicial?) authorities Technical implementation Measures addressed to Internet service providers or to end-users?	Safeguards Appeal procedures? Compensation for ISPs? Protection of innocent users which use the same service?
		 Presidency (ICTA-TCP) can ex officio block the access to a certain web site as an administrative precaution. The reports made by persons or institutions to the Internet hotline established by the TCP are subject to technical and legal investigation by legal and technical experts. If content provider or hosting provider is located abroad, TCP can block access for only 8 crimes. The 8 crimes are provocation for committing suicide, sexual exploitation of children, facilitating the use of narcotics or psychotropic substances, procurement of hazardous material for health, prostitution, pornography, providing a place and possibilities for gambling and crimes against the Atatürk-Law no 5816. 	Within the context of Article 9 of the law, cases of violation of personal rights are subject to enabling removal of the content and the right of reply (notice and take down procedure).
Albania	No such regulation	No such mechanism	-
Bosnia & Herzegovina	No such regulation	No such mechanism	-
Montenegro	No such regulation	No such mechanism	-
Serbia	No such regulation	No such mechanism	-
Kosovo	No such regulation	No such mechanism	-

Table O.2 - Mechanisms to restrict the freedom of expression and information

P. Information society statistics

1. Computer and Internet usage by individuals

Table P.1 provides data on computer and Internet usage by individuals. The percentage of individuals regularly using the Internet is policy indicator A.2 of the eEurope 2005 benchmarking framework.

- population is defined as being from 16 to 74 years;
- regularly is defined as at least weekly;

- usage includes all locations and methods of access;
- *e*Europe analyses used background variables of age, gender, employment status and education level;
- i2010 benchmarking framework added bandwidth as a variable.

Country	Percentage of individuals who used a computer in the last three months			Percentage of individuals regularly using the Internet			Comments (different data definition, date of survey)	
	Total	Female	Male	Total	Female	Male]	
Croatia	50	47	53	47	43	51	Survey of first quarter 2009. Central Bureau of Statistics. Data shown are estimates obtained through the IKT-DOM survey, which is the annual survey on the usage of Information- Communication Technologies (ICT) in households and by individuals.	
FYROM	55.5	53	58	50	48.1	51.8	Survey of first quarter 2009. State Statistical Office	
Turkey	35.6	25.8	45.7	30	20.9	39.4	Survey of April 2009. Slight change of the population projections since the last report, as the new statistics is based on the Address Based Population Registration System (ABPRS), which has some differences in the distribution of population by age, sex and regions compared to the censuses.	
Albania	[30]	[29]	[31]	[30]	[29]	[31]	Estimate by AKEP as of end 2009 based on different sources (INSTAT Survey, figures reported by ISPs, mobile operators, Ministry of Education and Science, survey on Internet coffee)	
Bosnia & Herzegovina	[36,47]*	N/A	N/A	[34]**	N/A	N/A	* Estimate based on various sources (statistical institutes in BiH, studies of WB, UNDP and EC and some NGOs, i.e. BAIT, BHIST) ** Estimate by RAK as of January 2009	
Montenegro	[57.5]	[53.5]	[61.8]	[40.7]	[36.9]	[44.7]	Survey of Agency of electronic communications and postal services based on research of Centre for Monitoring (CEMI) in July 2008. The methodology is not comparable with Eurostat methodology.	
Serbia	49.3	44.6	54.2	38.1	34.1	42.3	Survey of the Statistical Office in 2009, see: http://webrzs.stat.gov.rs/axd/en/dokumenti/ict/2009/ICT2009e.pdf	
Kosovo	[32.5]	[25]	[40]	[25]	[19]	[31]	Estimate based on subscriber numbers of the main ISPs and surveys of the Riinvest Institute.	

Table P.1 - Computer and Internet usage by individuals

2. Computer and Internet usage by enterprises

Table P.2 provides data on computer and Internet usage by enterprises, as collected by national statistics institutes and, where available, grouped by the size of the enterprises. Indicator B.1 of the *e*Europe 2005 benchmarking framework asks for the percentage of persons employed using computers connected to the Internet, in their normal work routine. However, these data are generally not collected in South-East Europe, Instead, the table includes:

- percentage of enterprises using computers;
- percentage of enterprises having access to the Internet (*e*Europe indicator B.2); and
- comments, in particular on the date of the survey and eventually different data definitions.

Country	Percentage of enterprises using computers (by number of employees)			Percentage of enterprises having access to the Internet (by number of employees)			t	Comments (different data definition, date of survey)	
	Total (10+)	10-49	50-249	250+	Total (10+)	10-49	50-249	250+	
Croatia	98.0	98.0	99.0	99.0	97.0	97.0	99.0	98.0	Survey of first quarter 2008. Central Bureau of Statistics. http://www.dzs.hr/Eng/Publication/2008/2-1-8_1e2008.htm
FYROM	93.5	92.3	97.4	100.0	83.4	81.1	89.6	98.0	Survey of December 2008
Turkey	90.7	89.5	97.7	99.3	88.8	87.5	96.9	99.0	Survey of April 2009
Albania	N/A	N/A	N/A	N/A	[87]*	[64.9]**	[93.4]**	[94.2]**	* Survey conducted by IDRA in 2008 (sample of 300 enterprises) ** Enterprises using the Internet to get information, grouped by 0-49, 50- 249 and 250+ employees
Bosnia & Herzegovina	[85]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Estimation based on several sources.
Montenegro	92.9	N/A	N/A	N/A	90.5	N/A	N/A	N/A	Data are based on ISSP ICT Survey, December 2007. No newer data available.
Serbia	97.8	97	100	100	94.5	93.4	97.7	100	Survey of May 2009
Kosovo	87.4	86.0	95.6	99.0	78.1	77.0	92.3	98.3	Survey made by Riinvest, April 2008. No recent data available.

3. Body responsible for Information society statistics

Table P.3 shows the body, whether the national statistics institute or another organisation, that collects and publishes data on information society indicators. The indicators were defined in the Council Resolution of February 18, 2003 on the implementation of the *e*Europe 2005 Action Plan and further developed under the i2010 Benchmarking Framework, in particular on:

- supply and demand of e-government, e-learning and e-health services;
- buying and selling online; and
- ICT skills and Internet users' experience regarding ICT security.

Country	Responsible body for information society statistics, URL	Short description of available statistical data, URL
Croatia	Central Bureau of Statistics http://www.dzs.hr/	Usage of ICT in households and by individuals 2008 results: http://www.dzs.hr/Eng/Publication/2008/2-1-9_1e2008.htm Usage of ICT in enterprises 2008 results: http://www.dzs.hr/Eng/Publication/2008/2-1-8_1e2008.htm ICT expenditures and investments in enterprises (pilot survey, first results will be published in 2011)
FYROM	State Statistical Office of the Republic of Macedonia http://www.stat.gov.mk/	Usage of ICT in households and by individuals Usage of ICT in the financial sector Usage of ICT in enterprises Usage of ICT in the public sector
Turkey	Turkish Statistical Institute (TURKSTAT) http://www.turkstat.gov.tr/	Use of information technologies in households (computer and Internet usage by gender and age group, by education level and by labour force status, also separately for rural and urban areas) Use of information technologies in enterprises (computer usage and Internet access grouped by economic activity and size of the company, data on the type of Internet connection, on the purpose of Internet usage and the proportion of enterprises which have a website) http://www.turkstat.gov.tr/VeriBilgi.do?tb_id=60&ust_id=2
Albania	Institute of Statistics (INSTAT) http://www.instat.gov.al/	No information society statistics available INSTAT is planning to include use of ICT in its periodic surveys of enterprises. AKEP and MSRPR have some market data of the electronic communications markets.
Bosnia & Herzegovina	No dedicated public authority	No information society statistics available See comment below
Montenegro	Ministry for Information Society http://www.mid.gov.me/ Statistical Office of Montenegro (MONSTAT) http://www.monstat.org/	Responsible for promotion of ICT development and for benchmarking process of Information society indicators. Responsible for collecting and publishing of all statistical data.

Country	Responsible body for information society statistics, URL	Short description of available statistical data, URL		
Serbia	Statistical Office of the Republic of Serbia http://www.stat.gov.rs/ Republic Agency for Telecommunications (RATEL)	Use of information technologies in households (computer and Internet usage by gender and age group, by education level and by labour force status, also separately for rural and urban areas)		
	http://www.ratel.rs/	Use of information technologies in enterprises (computer usage and Internet access grouped by economic activity and size of the company, data on the type of Internet connection, on the purpose of Internet usage and the proportion of enterprises which have a Website)		
		http://webrzs.stat.gov.rs/axd/dokumenti/ict/2009/IKT2009.pdf RATEL produces annual statistics on telecommunications markets and broadband. http://www.ratel.rs/index.php?page=static&item=50&get_treerot=10⟨=eng		
Kosovo	Telecommunication Regulatory Authority (TRA) http://www.art-ks.org/ Statistical Office of Kosovo http://www.ks-gov.net/esk/	No information society statistics available		

Table P.3 - Body responsible for Information society statistics

Notes:

Bosnia & Herzegovina: According to strategic documents for the development of the information society of BiH (Policy for Development of the Information Society of BiH, Strategy for Development of the Information Society of BiH and Action Plan for Development of the Information Society of BiH), the responsible body for information society statistics shall be the Agency for Development of the Information Society of BiH (ARID). The law on ARID has not been adopted and ARID has not been established yet. The statistical institutes will be in charge for data collection, ARID will be focal point to distribute and follow up the final reports.

Q. Network and information security

To address security challenges to the information society, the European Union institutions have developed three main lines of action:

- the regulatory framework on electronic communications requires providers of publicly available electronic communications services to safeguard the security of their services and addresses specific questions such as spam and cookies (Directive on Privacy and Electronic Communications);
- the fight against cybercrime, through the adoption of a framework decision (which echoes the Council of Europe Convention on Cybercrime) and initiatives specifically aimed at protecting minors; and
- specific network and information security measures.

This last line of action is achieved through the development of an EU strategy for a secure information society, a dialogue with stakeholders and the setting up of the European Network and Information Security Agency (ENISA) whose tasks include the collection of information, the analysis of current and emerging network risks, the development of common methodologies and the promotion of exchanges of best practices as well as methods of alert.

1. Network security obligations

Table Q.1 shows the:

- legal provisions obliging providers to safeguard the security of their services (see Article 4, Privacy Directive);
- the classes of providers obliged by these provisions (publicly available electronic communications services PECS, publicly available telephone services – PATS or other definition); and
- the national body or bodies responsible for supervision (for example the NRA, the data protection authority, a body responsible for disaster prevention, a body responsible for network security or several of such bodies).

Country	Legal provisions on security of electronic communications services	Scope of obliged providers	Body/bodies responsible for supervision	
Croatia	Art. 99 Electronic communications act	Providers of public communications services	NRA	
FYROM	Art. 110 Law on electronic communications Law on personal data protection	Operators of public communications networks and service providers of communications services	NRA is responsible for technical measures. Data privacy protection for end consumers is a responsibility of the Directorate for personal data protection.	
Turkey	Art. 51 Electronic communications law	All operators	NRA	
	Art. 6 and 7 Bylaw on personal information processing and protection of privacy in the telecommunications sector	Providers of telecommunications services	NRA	
	Bylaw on security of electronic communications	Equity companies which provide electronic communications networks and/or services	NRA	
Albania	Art. 122 Law on electronic communications	Providers of public electronic communications networks and services	NRA	
Bosnia & Herzegovina	Art. 5 Law on communications	Providers of public telecommunications services and networks	NRA	
Montenegro	Art. 112 Law on electronic communications	Providers of public communications networks and services	NRA	
Serbia	Art. 54 Telecommunications law	Public telecommunications operators	NRA	
Kosovo	Art. 43 Law on telecommunications	Providers of public telecommunications services	NRA	

Table Q.1 - Network security obligations

Notes: Turkey:

Art. 51 of the Electronic communications law entitles the authority to determine the procedures and principles for processing of personal data. See also Art. 12(2)(j) of that law. Art. 6 of the Bylaw on personal information processing obliges all operators (that is, providers of telecommunications services for profit) to have their technical and organisational measures of network security approved by the NRA. Art. 7 of this bylaw transposes art. 4 para. 2 of the Privacy Directive. The Bylaw on security of electronic communications came into force on July 20, 2008. It obliges equity companies which provide electronic communications networks and/or services to ensure the security of communication and to perform internal audits. The bylaw has been prepared considering ITU Recommendation X.1051 and the standard ISO/IEC 27001.

2. Cybercrime

The main EU actions on the fight against cybercrime have been:

- Council Framework Decision of February 24, 2005 on attacks against information systems that provides that committing, commissioning, attempting, instigating or abetting the following acts, intentionally and unlawfully, is a criminal offence:
 - accessing the whole or part of an information system (i.e. 'hacking');
 - interfering with an information system (such as the sending of viruses or 'denial of service attacks') seriously to interrupt or hinder its functioning;
 - interfering with computer data (e.g., alteration, deletion or damaging of data) on an information system (even in the absence of damage to a person).
 - NB. This framework decision echoes the Council of Europe Convention on Cybercrime, which also covers other computer-related offences and some traditional offences that take place over networks as well as procedural measures and measures on international cooperation.
- other more specific regulatory initiatives, in particular to fight sexual exploitation of children and child pornography including through computer systems (Framework Decision 2004/68), and to fight fraud and counterfeiting of non-cash means of payment (Framework Decision 2001/413).
- policy initiatives, for example, to address new forms of cybercrime (e.g., identity theft) and improve cross-border enforcement cooperation.

Table Q.2 shows:

- whether the country has ratified and transposed into national legislation the Council of Europe Convention on Cybercrime;
- whether national legislation considers attacks against information systems as criminal offences;
- whether national legislation considers other computer related acts as criminal offences; and
- the policy framework on the fight against cybercrime, and the main lines of that policy.

Country	Ratification of Council of Europe Convention on Cybercrime	Are the following attacks against information systems considered as criminal offences? Illegal access? Illegal interception? Data interference? System interference?	Are the following computer-related acts considered criminal offences? Computer-related forgery? Computer-related fraud? Offences related to child pornography? Offences related to infringements of copyright and related rights	Policy framework on the fight against cybercrime
Croatia	Yes, on July 8, 2002 (Official Gazette 9/2002) Ratification of the Protocol to the Convention on cyber crime concerning the criminalization of acts of racist and xenophobic nature committed through computer systems on May 9, 2008 (Official Gazette 4/2008)	 Yes, in the Criminal Code: illegal access and interception (art. 223 para. 1) systems interference (art. 223 para. 2) data interference (art. 223 para. 3) 	 Yes, in the Criminal Code: child pornography (art. 196) computer forgery (art. 223a) computer fraud (art. 224a) the provisions on copyright do not explicitly refer to computer related acts but include all forms of communicating works to the public (art. 229ff). 	National Programme of Information Security in the Republic of Croatia
FYROM	Yes, on June 16, 2004 Ratification of the Protocol to the Convention on cyber crime concerning the criminalization of acts of racist and xenophobic nature committed through computer systems on July 5, 2005	 Yes, in the Criminal Code: Damage and illegal entrance into a computer system (Article 251) Creation and input of computer viruses (Article 251a) illegal access to computer resources, unauthorised use of computer data, illegal use and multiplication of computer data, illegal manipulation with computer data, changing, damaging of data or programs, abuse of passwords. 	 Yes, in the Criminal Code: Violation of copyright and similar rights (Article 157) Violation of the right of the distributor of a satellite signal with special protection (Article 157a) Piracy of audio and visual work (Article 157b) Piracy of a phonogram (Article 157c) Production and distribution of child's pornography through a computer system (Article 193a) Internet communication with minor under 14 for abuse, child pornography or other abuse (Article 193b) Computer fraud (Article 251b) Producing and obtaining of means for forgery of credit cards (Article 271) Issuance of a bad cheque and abuse of credit cards (Article 274b) 	No explicit policy framework

Country	Ratification of Council of Europe Convention on Cybercrime	Are the following attacks against information systems considered as criminal offences? Illegal access? Illegal interception? Data interference? System interference?	Are the following computer-related acts considered criminal offences? Computer-related forgery? Computer-related fraud? Offences related to child pornography? Offences related to infringements of copyright and related rights	Policy framework on the fight against cybercrime
Turkey	No According to the 2010 Annual Programme (adopted by the Council of Ministers on Oct. 12, 2009) the Ministry of Justice will launch a study aiming to become a signatory to the Convention on Cybercrime.	 Yes, in the Criminal Code: illegal access (art. 243 par. 1) illegal interception (art. 243 par. 1) system interference (art. 244 par. 1) data interference (art. 244 par. 2) 	 Yes, in the Criminal Code: computer related forgery (art. 244 par. 2) computer related fraud (art.158 par.1 subpar. f) offences related to child pornography (art. 226 par. 3-5) offences related to infringements of copyright and related rights(art. 1/B, 2, 71-75) of the Law on Intellectual and Artistic Works (5846/1951 rev. 2006) 	Turkish National "Strategy Document for the Fight Against Organised Crime (Oct. 2006)" covers main principles to deal with all organised crime types in Turkey including cyber crime (section 3.7). A first draft of the action plan in line with the strategy document has been prepared and the negotiations between responsible bodies for division of responsibilities and for finalisation are ongoing. The action plan will soon be published.
Albania	Yes Law No. 8888 dated April 25, 2002	 Yes, in the Criminal Code: Unauthorised access (art. 192/b) Illegal interception of computer data (art. 293/a) Data interference (art. 293/b) System interference (art. 293/c) Misuse of computer devices (art. 293/ç) 	 Yes, in the Criminal Code: Offences related to child pornography (art. 117) Computer-related fraud (art. 143/b) Computer-related forgery (art. 186/a) Offences related to infringements of copyright and related rights (law 9380 on copyright) 	 On Jan. 9, 2008 the Government approved a sector strategy of public order, with the following main items on cybercrime: to establish a special organisational unit to deal with cybercrime; to recruit officers with special knowledge on the field; and to improve the legislation in the field of cyber crime.
Bosnia & Herzegovina	Yes, in 2006	No provisions in the Criminal Code	No provisions in the Criminal Code	No explicit policy framework
Montenegro	No A law on ratification has been adopted, but not yet published.	 Yes, in the Criminal Code: data interference (art. 349) computer sabotage (art. 350) distribution of viruses (art. 351) unauthorised use (art. 353) disturbing electronic processing (art. 354) illegal access (art. 355) 	 Yes, in the Criminal Code: criminal offences against copyright (art. 234) computer fraud (art. 352) electronic distribution of child pornography covered by art. 211 	No explicit policy framework

Country	Ratification of Council of Europe Convention on Cybercrime	Are the following attacks against information systems considered as criminal offences? Illegal access? Illegal interception? Data interference? System interference?	Are the following computer-related acts considered criminal offences? Computer-related forgery? Computer-related fraud? Offences related to child pornography? Offences related to infringements of copyright and related rights	Policy framework on the fight against cybercrime
Serbia	Yes, on March 19, 2009	356) Yes, in the Criminal Code:	Yes, in the Criminal Code:	Law on organisation and competences
		 damaging computer data and programs (art. 298) computer sabotage (art. 299) creating and introducing computer viruses (art. 300) unauthorised access (art. 302) preventing or restricting access to a public computer network (art. 303) unauthorised use of a computer (art. 304) 	 computer fraud (art. 301) child pornography (art. 185) criminal offences against intellectual property (art. 198 to 202) 	of public authorities for fighting high technology crime (Official gazette of the Republic of Serbia, no. 61/2005)
Kosovo	No A Draft Law on prevention and fight of the cyber crime was approved by government and passed first reading in the Assembly.	 Yes Intrusion into computer systems, data interference (Article 264, Criminal Code) Illegal access to information systems (Article 98, Law on information society services) Illegal interference with information systems (Article 99, Law on information society services) Illegal access (Article 9 of Draft Law on prevention and fight of the cyber crime) Illegal interception (Article 10 of Draft Law on prevention and fight of the cyber crime) 	 Computer-related forgery and computer-related fraud (Article 14 of Draft Law on prevention and fight of the cyber crime) Offences related to child pornography (Article 16 of Draft Law on prevention and fight of the cyber crime) Offences related to infringements of copyright and related rights (Law on copyrights and related rights) 	No, will be covered by the Law on prevention and fight of the cyber crime.

Table Q.2 - National measures to fight against cybercrime

3. Bodies in charge for security policy

Table Q.3 shows:

- the body (or bodies) responsible for network and information security policy, in particular for collection of information, the analysis of current and emerging network risks, the development of common methodologies and the promotion of exchanges of best practices as well as methods of alert;
- a short description of the body's responsibilities; and
- references to relevant policy documents, websites promoting security awareness or alert networks.

The table only list bodies that are responsible for policy making and for the network and information security in general (that is including commercial and private users). It does not include bodies that are solely responsible for governmental networks or solely responsible for the security of information exchange between governmental bodies.

Country	Body/bodies responsible for network and information security policy		Description of responsibilities	Policy documents, websites, alert networks
Croatia	Office of the Council on National Security (UVNS)	•	Central state body responsible for information security Coordinates activities in implementation of measures and standards of information security	http://www.uvns.hr/ National Programme for Information Security in the Republic of Croatia, adopted by government and Parliament in March 2005
	Institute for Information Systems Security (ZSIS)	•	Central state body for technical aspects of information security in information systems of government bodies and legal entities In charge of information systems security accreditations procedures	http://www.zsis.hr/
	National CERT in Croatian Academic and Research Network – CARNet	•	National body for prevention and protection from computer threats to public information systems	http://www.cert.hr/ Computer security brochure for Internet users (http://www.cert.hr/bk2/index.html?lang=en)
FYROM	Not yet established.	-		-
Turkey	TR-CERT	•	Public information security awareness activities via national information security portal	http://www.bilgiguvenligi.gov.tr/ (National Information Security Portal)
		•	Technical trainings on information security (for public officials) Consultancy to state institutions for establishing Information Security Management System	http://www.tr-cert.gov.tr/ (National CERT Coordination Center)
		•	(ISMS) Performing penetration tests for information technology systems of state institutions	
		•	Preparing the policy document of "minimum security requirements for government	

Country	Body/bodies responsible for network and information security policy	Description of responsibilities	Policy documents, websites, alert networks
		 information and information systems" (in progress) Preparing the policy document of "security categorisation for government information and information systems" (in progress) 	
		 Preparation of guidance documents on information security; prepared documents are hosted at www.bilgiguvenligi.gov.tr (in Turkish) 	
		International cooperation:	
		Participation to biannual NATO-CERT (NCIRC) CyberDefense Workshops	
		 Co-operation with NCIRC based on MoU (Memorandum of Understanding) 	
		Participation to international CERT meetings and conferences (FIRST, TF- CSIRT)	
		 Participation to biannual OECD-WPISP (Working Party on Information Security and Privacy) meetings 	
		 Designing and implementing the information security projects of state bodies (Government, Military) 	
		Operating Turkish National CERT/CC (Coordination Center) (accredited by "Trusted Introducer for CSIRTs in Europe")	
		Incident response coordination	
		Computer Security incident response teams (CSIRT) support	
		Alarm and alerting services	
		 Leading government bodies for establishing government CERT organizations (Consultancy, Training, Exercise) 	
Albania	No dedicated body responsible	-	-
Bosnia & Herzegovina	No dedicated body responsible	-	-
Montenegro	Ministry for Information Society		Programme of information security, adopted in May 2008
Serbia	No dedicated body responsible	-	-

Country	Body/bodies responsible for network and information security policy		Description of responsibilities	Policy documents, websites, alert networks
Kosovo	The NRA and the Ministry of Transport and Communications for public and telecommunications networks Ministry of Public Services for governmental networks	• • •	Prepare policy documents for the government Collect data on information security Public awareness activities Coordinate information security projects of state institutions	-

Table Q.3 - Bodies responsible for network and information security policy

Notes: Turkey:

TR-CERT is operating under the National Research Institute of Electronics and Cryptology, http://www.uekae.tubitak.gov.tr/. TR-CERT has been established according to the "Information Society Strategy Action Plan (2006-2010)", which was prepared by the Information Society Department of the Prime Ministry State Planning Organization.

R. Electronic commerce and electronic signatures

1. Market access and liability

Table R.1 shows whether certain provisions of the Electronic Commerce Directive (2000/31/EC) have been transposed.

- According to Art. 4 of the E-Commerce Directive Member States shall ensure that the taking up and pursuit of the activity of an information society service provider may not be made subject to prior authorisation or any other requirement having equivalent effect.
- Art. 12 to 14 of the E-Commerce Directive exempt certain activities of Internet service providers ('mere conduit', caching and hosting) from criminal and civil liability under certain conditions.
- According to art. 15 Member States shall neither impose on providers a general obligation to monitor the information they transmit or store nor a general obligation to actively seek facts or circumstances indicating illegal activity.

Country	Does a law explicitly state	Have the provisions on liability of intermediary service providers been transposed into national law?			
	that information society services do not need prior authorisation?	'mere conduit' Art. 12 E-Commerce Directive	'caching' Art. 13 E-Commerce Directive	hosting Art. 14 E-Commerce Directive	no general obligation to monitor Art. 15 E-Commerce Directive
Croatia	Yes Art. 5 Electronic commerce act	Yes Art. 16, 20 Electronic commerce act	Yes Art. 17, 20 Electronic commerce act	Yes Art. 18, 20 Electronic commerce act	Yes Art. 21 Electronic commerce act

Country	Does a law explicitly state	Have the provision	s on liability of intermediary se	rvice providers been transposed	d into national law?
	that information society services do not need prior authorisation?	'mere conduit' Art. 12 E-Commerce Directive	ʻcaching' Art. 13 E-Commerce Directive	hosting Art. 14 E-Commerce Directive	no general obligation to monitor Art. 15 E-Commerce Directive
FYROM	Yes	Yes	Yes	Yes	Yes
	Art. 6 Law on electronic	Art. 15 Law on electronic	Art. 16 Law on electronic	Art. 17 Law on electronic	Art. 20 Law on electronic
	commerce	commerce	commerce	commerce	commerce
Turkey	No	No	No	Art. 5 of Law no. 5651 contains a similar provision, but not as a transposition of the Electronic Commerce Directive	Art. 5 of Law no. 5651 contains a similar provision, but not as a transposition of the Electronic Commerce Directive
Albania	Yes	Yes	Yes	Yes	Yes
	Art. 6 Law on electronic	Art. 15 Law on electronic	Art. 16 Law on electronic	Art. 17 Law on electronic	Art. 20 Law on electronic
	commerce	commerce	commerce	commerce	commerce
Bosnia &	Yes	Yes	Yes	Yes	Yes
Herzegovina	Art. 14 E-Commerce law	Art. 24 E-Commerce law	Art. 25 E-Commerce law	Art. 26 E-Commerce law	Art. 28 E-Commerce law
Montenegro	Yes	Yes	Yes	Yes	Yes
	Art. 6 Law on electronic	Art. 18 Law on electronic	Art. 19 Law on electronic	Art. 20 Law on electronic	Art. 21 Law on electronic
	commerce	commerce	commerce	commerce	commerce
Serbia	Yes	Yes	Yes	Yes	Yes
	Art. 5 Law on electronic	Art. 16 Law on electronic	Art. 17 Law on electronic	Art. 18 Law on electronic	Art. 20 Law on electronic
	commerce	commerce	commerce	commerce	commerce
Kosovo	Yes	Yes	Yes	Yes	Yes
	Art. 17 Law on the information	Art. 24 Law on the information	Art. 25 Law on the information	Art. 26 Law on the information	Art. 27 Law on the information
	society services	society services	society services	society services	society services

Table R.1 - Market access and liability

Notes:

Turkey:Works are underway regarding the alignment with the Electronic Commerce Directive under the responsibility of Ministry of Justice.Serbia:The Law on electronic commerce was adopted by parliament in 2009 (Official Gazette of the Republic of Serbia, No. 41/2009).

2. Legal recognition of electronic contracts and electronic signatures

Table R.2 shows whether the legislation in South-East Europe has been adapted to recognise the conclusion of electronic contracts and whether electronic signatures are legally recognised. These questions are important pre-conditions to ensure the take-up of electronic commerce.

The Electronic Commerce Directive (2000/31/EC) requires Member States to remove any legal obstacles for the use of electronic contracts. This means that a contract cannot be deprived of legal validity on the ground that it has been made by electronic means. The table shows whether this general principle is recognised in the legal system. Art. 9 of the directive lists categories of contracts which would not automatically be legally valid and whose electronic

conclusion could be restricted (such as contracts on real estate or contracts governed by family law). The table does not include details to what extent the countries made use of these exceptions.

The Electronic Signatures Directive (1999/93/EC) distinguishes between ordinary electronic signatures and 'advanced electronic signatures' that are based on 'qualified certificates' and created by a 'secure signature-creation device' (referred to in the table as 'qualified electronic signatures'). The technical requirements of qualified electronic signatures are specified in the three annexes of the directive. They are based on public key cryptography, involving the intervention of 'certification service providers'.

The Directive specifies that there is no automatic legal recognition of ordinary electronic signatures but that they cannot be denied legal effect or refused as evidence in courts solely on the grounds that they are in electronic format or because they are not 'qualified signatures'.

Qualified electronic signatures on the other hand must be legally recognised as equivalent to hand-written signatures and be admissible in courts.

Country	Are there any regulatory obstacles to the conclusion of electronic contracts (if yes, specify type of problem)?	Are ordinary electronic signatures denied legal effect or refused as evidence in courts?	Are qualified electronic signatures recognised as equivalent to hand-written signatures?
Croatia	No	No	Yes
		Art. 6 Electronic signature act	Art. 5 Electronic signature act
FYROM	No	No Art. 12 of Law on data in electronic form and electronic signatures	Yes Art. 13 of Law on data in electronic form and electronic signatures
Turkey	No	No The legal effect of ordinary electronic signatures is not explicitly regulated in the electronic signature law. Ordinary electronic signatures have legal effectiveness under the discretion of the judge according to art. 240, 287 and 367 of the Code of civil procedure.	Yes Art. 5 Electronic signature law Art. 295/A Code of civil procedure
Albania	No	No	Yes Art. 4 Law no. 9880 on electronic signature.
Bosnia & Herzegovina	No	No	Yes Art. 5 Law of electronic signature
Montenegro	No	No	Yes Art. 7 Law on electronic signature
Serbia	No	No	Yes Art. 10 Law on electronic signature
Kosovo	No	No	Yes Art. 86 Law on the information society services

Table R.2 - Legal recognition of electronic contracts and signatures

3. Market access, supervision and accreditation

According to Article 3 of the Electronic Signatures Directive, Member States:

- shall not make the provision of certification services subject to prior authorisation;
- may introduce voluntary accreditation schemes aiming on enhanced levels certification-service provision; and
- shall ensure the establishment of a supervision scheme for certification-service providers issuing qualified certificates.

Table R.3 shows whether prior authorisation, a voluntary accreditation scheme and/or supervision have been established and which institutions are responsible.

Country	Are providers required to notify?	Is prior authorisation required?	Voluntary accreditation scheme established?	Supervision established?
Croatia	Certification-service providers must notify to the ministry at least 8 days in advance.	No prior authorisation required. Art. 13, 15 and 16 Electronic signature act	Yes Art. 34a to 34d Electronic signature act Croatian Accreditation Agency	Yes Ministry of the Economy, Labour and Entrepreneurship and State Inspectors' Office
FYROM	Certification-service provider is obligated to register its activity with the Ministry of Finance in the register of CAs at least 30 days prior beginning of its operation. Art. 16 Law on data in electronic form and electronic signatures	No prior authorisation required by the law. In practice, prior authorisation required by secondary legislation on the registration process: Providers must be registered in the register of CAs before starting provision of certification services.	No Art. 43 to 46 Law on data in electronic form and electronic signatures provide a legal basis for accreditation by the Ministry of Finance, but no voluntary accreditation scheme has been established yet.	Yes Ministry of Finance http://www.finance.gov.mk/
Turkey	Providers of qualified certificates must notify to the NRA two months in advance. Art. 8 Electronic signature law	No prior authorisation required. Certification-service providers are not obliged to wait for registration before being allowed to begin their activities.	No	Yes Information and Communication Technologies Authority http://www.btk.gov.tr/ Art. 15 Electronic signature Law
Albania	Certification-service providers must notify to the authority immediately at the beginning of their activities. Art. 11 Law on electronic signature	No prior authorisation required. Art. 11 Law on electronic signature	No	Yes National Authority for Electronic Certification http://www.akce.gov.al/ Art. 16 of the Law on electronic signature

Country	Are providers required to notify?	Is prior authorisation required?	Voluntary accreditation scheme established?	Supervision established?
Bosnia & Herzegovina	Certification-service providers must notify to the supervision body immediately at the beginning of their activities. Art. 7 Law on electronic signature	No prior authorisation required. Certification-service providers are not obliged to wait for registration before being allowed to begin their activities.	No	No According to art. 20 Law on electronic signature the office for accreditations and supervision (supervision body) shall be established in the Ministry of Communications and Transport.
Montenegro	Providers of non-qualified certificates must notify to the supervision body at least 8 days in advance (Art. 19 Law on electronic signature) Providers of qualified certificates must apply for registration. The supervision body must issue its decision within 15 days after the date on which a complete request is submitted (Art. 22 Law on electronic signature9	No prior authorisation required. Art. 18 Law on electronic signature	No	Yes Ministry of Information Society http://www.mid.gov.me/
Serbia	Providers of qualified certificates must notify to the Ministry of Telecommunication and Information Society 15 days in advance. Art. 15 Law on electronic signature	No prior authorisation required for non- qualified certificates. Providers of qualified certificates must apply for registration. Art. 20 para. 4 Law on electronic signature	No	Yes Ministry of Telecommunication and Information Society http://www.mtid.gov.rs/
Kosovo	No obligation to notify under the chapter on electronic signatures in the Law on the information society services.	No prior authorisation required. Art. 17 Law on the information society services	No	No The chapter on electronic signatures in the Law on the information society services does not foresee a supervisory authority.

Table R.3 - Market access for providers of certification services

4. Electronic signature market data

Table R.4 shows:

- certification service providers, which issue qualified certificates in the respective country;
 - NB. The table shows certification service providers, which are established in the respective country, as well as certification service providers, which are established in another country, but are active on the respective national market, for example by establishing a network of registration services, or by gaining a voluntary accreditation.
- available market data on usage of electronic signatures, in particular: number of valid qualified certificates.

Country	Certification service provider(s) issuing qualified certificates Name(s) and URL(s)	Data on usage of electronic signatures
Croatia	Financial agency (Fina) http://www.fina.hr/	September 30, 2009: 9,716 valid normal certificates 9,716 valid qualified certificates
FYROM	KIBS AD Skopje http://ca.kibs.com.mk/ Makedonski Telekom http://ca.mt.net.mk/	No data available
Turkey	E – Güven Corp. http://www.e-guven.com/ TUBITAK UEKAE (NRIEC) http://www.kamusm.gov.tr/ TurkTrust Corp. http://www.turktrust.com.tr/ E – Tuğra Corp. http://www.e-tugra.com.tr/	September 2009: 63,567 active traditional qualified electronic certificates 45,691 active mobile qualified electronic certificates
Albania	No such providers	Not applicable
Bosnia & Herzegovina	No such providers	Not applicable
Montenegro	No such providers	24% of enterprises use electronic signatures
Serbia	PTT Communications "Serbia", http://www.ca.posta.rs/ Serbian Chamber of Commerce, http://www.pks.rs/ Ministry of interior, http://www.mup.sr.gov.yu/	PTT Communications "Serbia": 1,800 valid qualified certificates and 200 valid normal certificates Serbian Chamber of Commerce: 350 valid qualified certificates Ministry of interior will begin issuing qualified certificates for biometric IDs by the end of the first quarter 2010.
Kosovo	No such providers	Not applicable

Table R.4 - Market data on electronic signatures

S. Data protection and data retention

1. Protection of confidentiality of communications

According to Article 5 of the Privacy Directive, member states shall ensure the confidentiality of communications and the related traffic data through national legislation. In particular, they shall prohibit listening, tapping, storage or other kinds of interception or surveillance of communications and the related traffic data by persons other than users, without the consent of the users concerned, with the exception of lawful interception.

Table S.1 shows:

- legal provisions for the protection of confidentiality of communications;
- the scope of the protected communications: content of the communications and/or related traffic and location data;

- whether the provisions only refer to interception by an operator and its staff or also to interception by third parties;
- which penalties are prescribed by the provision; and is interception considered a criminal offence, a misdemeanour or can intercepted persons only enforce the provision by a lawsuit under civil law.

Country	Legal provisions on confidentiality	Scope of protected communications: content and/or traffic data	Protection against interception by operator and/or interception by third parties	Penalties
Croatia	Art. 100 Electronic communications act	All data in telecommunication traffic	Interception by operator and interception by third parties	Misdemeanour (article 119 Electronic communications act) A responsible person of a legal entity will be fined with an amount from $\in 2,757$ to $\in 13,784$. A natural person who broke the law will be fined with an amount from $\in 1,378$ to $\in 6,892$. It is possible to penalise the legal entity with the protective measure of prohibiting practice for 3 months to one year and for the natural person or responsible person in the legal entity the same measure for one to six months.
	Art. 230 Criminal Code	All data in telecommunication traffic	Interception by anyone	Criminal offence The penalty can vary between a monetary fine and one year in prison. If the offence is done during performing official duties, the offender can be penalised with a sentence between one year and three years in prison.
FYROM	Art. 111 Law on electronic communications	 Content of communications Traffic data and location data relating to communications Unsuccessful attempts to establish a connection. 	Interception by operator	 Misdemeanour fines (Law on electronic communications): A fine in the amount of 7 to 10% for the legal entity which undertakes surveillance, tapping, interruption, recording, storage and diverting of communications and data in instances forbidden by the law; or 4 to 7% for the legal entity which fails to protect the confidentiality of electronic communications of the total annual revenue acquired during the commercial year prior the year when the misdemeanour was performed or of the total revenue acquired for a shorter period of the year preceding the misdemeanour.

Country	Legal provisions on confidentiality	Scope of protected communications: content and/or traffic data	Protection against interception by operator and/or interception by third parties	Penalties
	Art. 151 Criminal Code	This provision does not explicitly refer to communications data, it applies to everyone who taps or records <i>on audio</i> a conversation or statement that was not intended for him.	Interception by anyone	 Criminal offence Imprisonment up to one year or a pecuniary fine Imprisonment up to three years, if the crime was committed by an official while performing his duty
Turkey	Art. 132, 135, 136 Turkish Criminal Code	 Content of communications Traffic data and location data relating to communications 	Interception by operator and interception by third parties	 Criminal offence Imprisonment from 6 months to 2 years (Art. 132) Imprisonment from 6 months to 3 years (Art. 135) Imprisonment from 1 year to 4 years (Art. 136)
	Art. 6 Law on regulating broadcast in Internet and combating crimes committed through such broadcast	Traffic data	Interception by operator and interception by third parties	Misdemeanour: €4,598 to €22,988
	Art. 8 Bylaw on personal information processing and protection of privacy in the telecommunications sector	Content data and traffic data	Interception by operator and interception by third parties	No penalty provided in the bylaw See comment below
Albania	Art. 123 Criminal Code (obstruction or breach of privacy of correspondence) and 293/a Criminal Code (illegal interception of computer data)	Content of communications	Interception by anyone	 Criminal offences pecuniary fine or up to two years of imprisonment (art. 123, violation of privacy) 3 to 7 years of imprisonment (art. 293/a, public computer system interception) 7 to 15 years of imprisonment (art. 293/a, state computer system interception)
	Art. 123 Law on electronic communications	Content data and traffic data	Interception by operator and interception by third parties	Misdemeanour with a fine from 7% to 10% of annual revenue
Bosnia & Herzegovina	No explicit legislation, but operators and	service providers ensure confidentiality	(content data and traffic data) acco	rding to their licences.
Montenegro	Art. 119 Law on electronic communications	 Content of communications Data of user Traffic data and location data relating to communications Unsuccessful attempts to establish a connection 	Interception by operator and interception by third parties	Misdemeanour, with a fine from the tenfold to the 250-fold of the minimal income in the country Art. 138, premise 1, point 38 Law on electronic communications

Country	Legal provisions on confidentiality	Scope of protected communications: content and/or traffic data	Protection against interception by operator and/or interception by third parties	Penalties
Serbia	Art. 54 and 55 Telecommunications law	Content data and traffic data	Interception by operator and interception by third parties	Misdemeanour, with a fine of at least €645 Art. 97 Telecommunications law
	Art. 142, 143, 144, 146 Criminal Code	Content data and traffic data	Interception by operator and interception by third parties	Criminal offence Imprisonment of three months to five years or pecuniary fine
Kosovo	Art. 74 Law on telecommunications	Content data and traffic data	Interception by operator and interception by third parties	Misdemeanour TRA may impose fines according to the general provision in art. 15 Law on telecommunications. This provision does not specify the amount.
	Art. 74 and 98 Law on the information society services	Content data and traffic data	Interception by operator and interception by third parties	Criminal offence, imprisonment of a maximum of no less than one year in serious cases. Serious cases are defined as excluding cases where the conduct resulted in no damage or economic benefit. Art. 101 Law on the information society services

Table S.1 - Protection of confidentiality of communications

Notes: Turkey:

This bylaw is being reviewed. According to the draft of the new bylaw a fine in the amount of up to 3% of the total annual revenue acquired during the commercial year prior to the current year is foreseen.

2. Traffic and location data

According to Article 6 Privacy Directive, traffic data relating to subscribers and users must be erased or made anonymous when it is no longer needed for the purpose of a communication, for billing and interconnection payments, or for lawful interception. Some countries transpose this provision by defining a certain period of time (which is typically the same for all operators and subscribers), some refer to the period during which the bill may be lawfully challenged or payment can be pursued (which is typically dependent on the contract between the operator and the subscriber).

NB. See Table S.3 on data retention below. Data retention means that operators are obliged to retain traffic data for the purpose of lawful interception, for a longer period than needed by the operator for its own purposes, in particular billing. This table does not cover lawful interception or data retention. It only refers to legal provisions that specify the period for which the operator can store and use the date for its own purposes.

Article 6 para. 3 Privacy Directive requires the subscriber's informed consent before providers can use traffic data for marketing their own services or for the provision of value added services.

Article 9 Privacy Directive contains provisions to protect location data, in particular that the usage of location data typically needs informed consent by the user or subscriber and even where consent has been obtained, the user or subscriber must be able to temporarily refuse the processing of location data.

The table below shows:

- how the member state defines the maximum period for storage and processing of traffic data for purposes of the operator, e.g. billing (regardless of eventually longer periods defined in data retention legislation);
- whether informed consent is required before traffic data can be used for marketing purposes or for provision of value-added services;
- whether informed consent is required before location data can be used; and
- whether the user/subscriber can, even after giving consent, temporarily refuse the processing of location data.

Country	Traffic	c data	Location data	
	Maximum storage period	Informed consent required for marketing?	Informed consent required?	Possibility to temporarily refuse?
Croatia	As long as needed for billing (period of statute of limitation – 1 year) Art. 102 Electronic communications act	Yes	Yes Art. 104 Electronic communications act	Yes
FYROM	As long as needed for billing. Art. 112 Law on electronic communications	Yes	Yes Art. 114 Law on electronic communications	Yes
Turkey	6 months – 2 years for Art. 6, Law no. 5651 on regulating broadcast in Internet and combating crimes committed through such broadcast (This storage period is obligatory for access providers)	Yes Art. 9 Bylaw on personal information processing and protection of privacy in the telecommunications sector	Yes Art. 9 Bylaw on personal information processing and protection of privacy in the telecommunications sector	Yes Art. 9 Bylaw on personal information processing and protection of privacy in the telecommunications sector
	 1 year – Draft bylaw on processing of personal data and protection of privacy in the telecommunications sector See comments below 			
Albania	As long as needed for billing Art. 124 Law on electronic communications	Yes	Yes Art. 126 Law on electronic communications	Yes
Bosnia & Herzegovina	Not regulated	Not regulated	Not regulated	Not regulated

Country	Traffic	Traffic data		on data
	Maximum storage period	Informed consent required for marketing?	Informed consent required?	Possibility to temporarily refuse?
Montenegro	All personal data must be deleted or made anonymous after five years or as soon as it is no longer needed. Art. 121 Law on electronic communications	Yes	Yes Art. 123 Law on electronic communications	Yes
Serbia	As long as needed for billing. Art. 54 Telecommunications law	Not regulated	Not regulated	Not regulated
Kosovo	As long as needed for billing. Art. 75 and 76 Law on telecommunications Art. 75 Law on the information society services	Yes	Yes Art. 78 Law on the information society services	Yes

Table S.2 - Processing of traffic and location data

Notes: Turkey:

Access provider is the natural or legal person that provides access to the Internet to his users (Art. 2 Law no. 5651). The bylaw on personal information processing and protection of privacy in the telecommunications sector, as published in the official gazette on February 6, 2004 is currently in force. Works are underway to publish an amended version of the bylaw. The draft bylaw foresees 1 year as maximum storage period.

3. Data retention

According to the Privacy Directive, providers typically have to erase traffic data as soon as they do not need them any more for their legitimate purposes (in particular for billing, see the table above). However, Art. 15 (1) Privacy Directive establishes an exception to that principle and allows Member States to adopt legislation providing for the retention of data for a limited period where this constitutes a necessary, appropriate and proportionate measure in a democratic society to safeguard national security (i.e. State security), defence, public security, and the prevention, investigation, detection and prosecution of criminal offences or of unauthorised use of electronic communication systems.

Directive 2006/24/EC on Data Retention harmonises Member States' laws on the retention of traffic, location and identification data to ensure the investigation, detection and prosecution of 'serious crimes'. All categories of data covered by the directive must be retained for a minimum of six months and for a maximum of two years specifies the principles, the types of data to be retained and the retention periods.

The table below shows:

- the legal basis for an obligation to systematically retain traffic data;
- the types of data covered, in particular telephony data and/or Internet data (Internet access, Internet mail and/or Internet telephony);
- the retention periods (minimum and/or maximum); and

• who bears the costs of retaining data (in particular investments to set up a data retention system) and whether the operator has a right to being compensated.

Country	Legal basis for data retention obligations	Types of data covered (telephony data and/or Internet data)	Retention period (Min. or max.)	Who bears the costs? Right to compensation?	
Croatia	Art. 109 and 110 Electronic Communications Act	Telephony data and Internet data	12 months	Operators bear the costs. No right to compensation.	
FYROM		hich does not however determine the types es of data to be retained and the retention		beriod. FYROM plans to change the	
Turkey	No provisions on data retention in the legislation in force Draft bylaw on personal information processing and protection of privacy in the telecommunications sector (see comment below)	Draft bylaw: Telephony data and Internet data	Draft bylaw: 12 months	Draft bylaw: Operators bear the costs. No right to compensation.	
Albania	Art. 101 Law on electronic communications	Telephony data Although art. 101 of the new law obliges all providers of public electronic communications networks and services, the list of retained data refers to telephony data; there is no specific requirement for Internet data.	Maximum 2 years	Operators bear the costs. No right to compensation.	
Bosnia & Herzegovina	Law on legal interception of communications	Telephony data and Internet data	Maximum 12 months	Operators bear the costs. No right to compensation.	
Montenegro	Art. 126 Law on electronic communications	Telephony data and Internet data	Minimum 6 months Maximum 2 years	Operators bear the costs. No right to compensation.	
Serbia	No primary legislation on data retention. Data retention will be regulated by the Law on electronic communications.				
Kosovo	No legal provisions on data retention	No legal provisions on data retention			

Table S.3 - Data retention obligations

Notes: Turkey:

The Bylaw on personal information processing and protection of privacy in the telecommunications sector, as published in the official gazette on February 6, 2004 is currently in force. Works are underway to publish an amended version of the bylaw in order to transpose the Data Retention Directive.

4. Spam

Art. 13 of the Privacy Directive requires unsolicited commercial communications by e-mail to be subject to the individual's prior consent (opt-in), except for the sending of direct marketing emails to existing customers. For companies, Member States are free to require an opt-in or an opt-out.

NB. In addition to other requirements, Art. 7 of the Electronic Commerce Directive states that when unsolicited commercial communications by e-mail is allowed, it must be clearly identifiable and service providers who send such communications must respect opt-out registers.

The table below shows whether spam is authorised or prohibited in the countries and whether there is a dedicated public authority to fight the phenomenon.

Country		ls spam p	rohibited or allowed?	Authority to fight spam
	To companies	To individuals	Legal basis	
Croatia	Prohibited	Prohibited	Art. 107 Electronic communications act	HAKOM – NRA
				CARNet – CERT
FYROM	Prohibited	Prohibited	Art. 117 Law on electronic communications	No dedicated public authority
			Art. 17 Law on personal data protection	Directorate for personal data protection is responsible for individuals
				(www.dzlp.mk)
				Agency for electronic communications for network operators and service providers (www.aec.mk)
Turkey	Prohibited	Prohibited	Art. 20 Bylaw on personal information processing and protection of privacy in the	TÜBİTAK-UEKAE (NRIEC) designs and implements awareness raising activities against security threats including spam.
			telecommunications sector	http://www.uekae.tubitak.gov.tr/
				Turkish anti-spam organization (TASO) also fights against spam.
				http://www.spam.org.tr/
				ICTA implements projects with operators and civil society in order to fight
				spam.
		D 1122 1		http://www.btk.gov.tr/
Albania	Prohibited	Prohibited	Art. 128 Law on electronic communications	No dedicated public authority
				AKEP inspectors can prosecute infringements by misdemeanour proceedings
Bosnia & Herzegovina	No explicit legislation	No explicit legislation	No explicit legislation or regulation on spam	No dedicated public authority
Montenegro	Prohibited	Prohibited	Art. 124 of Law on electronic communications	No dedicated public authority
Serbia	Prohibited	Prohibited	Art. 9 Law on advertising	No dedicated public authority
Kosovo	Allowed, under conditions	Allowed, under conditions	Art. 19 and 20 Law on the information society services:	No dedicated public authority
			20.1. Unsolicited commercial communications by electronic mail are permitted provided however that such communications by a service provider need to be clearly identifiable and unambiguously as such According to article 20.2 service providers must respect opt-out registers	

Table S.4 - Legal provisions on spam

Notes:

- Turkey: There is no specific legislation about spam. However, article 50(5) of Law no 5809 on subscriber's contract includes provisions regarding spam which takes into account the provisions of the E-Commerce Directive. Nevertheless, this provision is considered as unsatisfactory because it adopts opt-out method and determines only the obligations of electronic communications operators regarding spam, but omits the roles and responsibilities of other parties. On the other hand, the draft E-Commerce Law covers some provisions addressing spam in line with the E-Commerce Directive.
- T. Management of Internet domains
- 1. National domain name registry

Table T.1 shows:

- The name and website of the national registry in charge of the country codes Top Level Domains (ccTLD). The registry is the body which manages the central database and the domain name servers.
- The legal basis of to the registry in the national legislation, for example a body could be given the responsibility to act as the national registry by law, by an ordinance, by a contract with the government, or it could not have a formal legal basis.
- The legal basis of the national domain name policy, in particular the rules on who can register a domain name, rules on accrediting registrars and dispute settlement provisions. For example, such rules could be defined by an ordinance of a minister or the registry could have the legal power to adopt such rules.

Country	Name and website of the national registry	Legal basis of the national registry	Legal basis of the national domain name policy
Croatia	Croatian Academic and Research Network - CARNet http://www.dns.hr/	Contract with Internet Assigned Number Authority (IANA), Art. 79 Electronic communications act	Currently: Regulations of CARNet Under enactment procedure: Ordinance on Organisation and Management of National Internet Top-level Domain, to be enacted by the Minister of Science, Education and Sports, on the proposal by CARNet, and approved by the Minister of the Sea, Transport and Infrastructure and the State Secretary of the Central State Administrative Office for e-Croatia, based on Art. 79 Electronic communications act.
FYROM	Macedonian Academic and Research Network (MARNet) http://dns.marnet.net.mk/	 MARNet was established in 1994 as department of the "Ss Cyril and Methodious" University by endorsement of the Ministry of Sciences and decision of the University Board. A national law on the organisation and operation of the National and Research Education Network (NREN) is under preparation. It will establish NREN as new legal entity, which will also take over the function of the national registry. The law is in procedure for adoption by Parliament. 	Statute on the organisation and management of the national top level domain in the area of internet '.mk' and the subdomains within. This Statute was adopted by the MARNet Management Board and the University Board and published in the national official gazette. It has no formal recognition as a national law.

Country	Name and website of the national registry	Legal basis of the national registry	Legal basis of the national domain name policy
Turkey	Nic.tr – ".tr" Domain Names Administration Middle East Technical University (METU) https://www.nic.tr/	Nic.tr is an organisational unit of METU, operating since 1991 when first world-wide internet connection of the country has been established by METU. No explicit legislation on domain name management except ICANN contract between nic.tr and ICANN. Currently, the preparation process is ongoing regarding domain name management in line with the new Electronic Communications Law. ICTA prepared a draft Domain Names Bylaw, which foresees that a national registry will be selected by the board of ICTA. nic.tr will continue its operations during the transition period.	General Terms and Conditions, as adopted by the DNS Working Group of Internet Council that was formed under the auspices of Ministry of Transport and Communication. According to Art. 5 of Electronic Communications Law (Law no: 5809, Nov. 5, 2008), the Ministry is competent for domain name strategy and policy.
Albania	Authority of Electronic and Postal Communications (AKEP) http://www.akep.gov.al/	Under article 8 point k) of Law no. 9918 on electronic communications, AKEP is the responsible authority for the administration of ccTLD .al and other sub-domains.	Regulation "On the registration and administration of the domain names under .al and sub-domains .gov.al, .mil.al, .edu.al, .com.al, .org.al and .net.al", adopted by AKEP's predecessor TRE on February 21, 2008.
Bosnia & Herzegovina	University Teleinformatic Centre (UTIC) http://www.utic.ba/	From 1996 UTIC has been authorised by IANA. Also in 1996 the government of Bosnia & Herzegovina authorised UTIC. No explicit legislation on domain name management.	Regulations regarding the registration and use of the domain name under the Bosnia & Herzegovina country Internet .BA domain, adopted by UTIC. The Ministry of Communications and Transport intends to adopt a policy on management and usage of the .BA top level domain in 2010.
Montenegro	.ME Register (doMEn) http://www.domen.me/	On the basis of article 7(1) of the Law on the property of the Republic of Montenegro the government adopted a decision establishing the Council for ".me" domain. This council announced a public invitation for selection of the Agent for domain registration. GoDaddy.com won this public tender.	Decision of the Council for ".me" domain of July 14, 2007.
Serbia	Register of National Internet Domain of Serbia (RNIDS) http://www.rnids.rs/	 RNIDS is a non-governmental and non-profit association of Internet Service Providers and university institutions, established as a fund in July 2006. On Sep. 25, 2007 ICANN decided to delegate the .rs domain registry to RNIDS and also designated RNIDS as temporary caretaker of the .yu registry until its closure. Registration of .rs started on March 10, 2008. Operation of .yu will end in March 2010. In Jan. 2010 the government appointed the Ministry of telecommunications and information society in cooperation with RNIDS to ensure the conditions for introducing a Cyrillic country code top-level domain. No explicit legislation on domain name management. 	General Terms and Conditions for Registration of .rs Domain Names, as adopted by the General Assembly of RNIDS on October 26, 2007
Kosovo	N/A	N/A	N/A

Table T.1 - National domain name registry

2. Registrars of domain names

The management of Internet domain names consists of two different functions, which can be performed by different bodies:

- administrating the registry, in particular a central database and domain name servers (registry function); and
- registering individual domain names, customer contact and billing (registrar function).

For some top-level domains, the registry is the only registrar. In many countries, the registrar function is performed by many different registrars in a competitive environment. Usually, such registrars are accredited (and to some extent supervised) by the registry and have access to the registry's central database by means of an electronic interface.

Table T.2 shows:

- whether the registry itself is the only registrar or competition between registrars has been established;
- whether foreign registrars become accredited and, if yes, if accreditation of foreign registrars is restricted to certain countries;
- whether registrars are accredited by the registry or by a different body;
- whether an electronic interface between registrars and registry exists; and
- the number of active registrars.

Country	Competition between registrars exists?	Can foreign registrars become accredited?	Who accredits registrars?	Electronic interface exists?	Number of active registrars
Croatia	No (but will be introduced in 2010)	No	Registrars will be accredited by the registry	- (will be introduced in 2010)	1
FYROM	No	No	-	-	1
Turkey	Yes	No (for the time being)	The registry	Yes	13 (Oct. 2009, see comment below)
Albania	No	No	-	-	1
Bosnia & Herzegovina	Yes	No	The registry	Yes	20 (Jan. 2010)
Montenegro	Yes	Yes	The registry	Yes	115 (Oct. 2009)
Serbia	Yes	Yes, but local legal presence is required (e.g. a company registered in Serbia, legal representative resident in Serbia or a proxy contact resident in Serbia)	The registry	Yes	37 (Oct. 2009)
Kosovo	N/A	N/A	N/A	N/A	N/A

Croatia CARNet is going to introduce a registry-registrar system by mid 2010. Registrars are going to be accredited by CARNet and terms and conditions will be publicly available in order to assure fair competition between registrars. There will be two electronic interfaces - web based (web forms) and web service. It is planned to have at least five registrars and that only legal entities registered in Croatia could become accredited.

Turkey: The accreditation process has been stopped due to the foregoing legislation preparation process. So the number of active registrars is the same as last year.

3. Cybersquatting and dispute resolution

Cybersquatting is registering, trafficking in, or using a domain name with intent to profit from the goodwill of a trademark belonging to someone else. The cybersquatter then offers to sell the domain to the person or company who owns a trademark contained within the name at an inflated price.

Table T.3 describes the national policies against cyber squatting, including the availability of alternative dispute resolution mechanisms.

Country	Policies against cybersquatting	Dispute resolution mechanism
Croatia	The current regulations for .hr contain very strict rules on domain name registration and administration: only one domain name per holder and the domain name must correspond to holder's name or holder's service, product or activity. The domain name cannot be sold or transferred. For commercial purposes domains can be registered under .com.hr. Under .com.hr no such rules apply, but registrations of these domains are not free of charge. These rules will be retained in the new Ordinance on Organisation and Management of National Internet Top-level Domain	Domain name disputes are resolved according to arbitration rules based on ICANN's Uniform Domain Name Dispute Resolution Policy. The arbitration rules are published on CARNet's website and will also be included in the new Ordinance on Organisation and Management of National Internet Top-level Domain.
FYROM	There are certain general statements in the registry's Statute that the registrants shall not use the domain names for impersonating third party identity and use the domain name in bad faith but there are no instruments for enforcing such policy apart from the dispute resolution policy.	 A dispute resolution policy has been stipulated in the Statute that offers three mechanisms for resolution of disputes: mutual negotiation and resolution between the affected parties by means of an independent Arbitrage Committee or by means of an of authoritative court resolution.
Turkey	As it is stated in the ".tr" Domain Names Policies, Rules and Procedures' document, domain names under ".tr" are not to be sold, rented or transferred. In the case of violation, all domain names registered to the owner of the relevant domain name will be subject to deletion. Domain names may only be transferred on the condition that certified rights are also transferred (trademark and patent rights etc.).	Domain name disputes can be ultimately resolved by court proceedings or by the DNS Working Group. The Ministry of Transport established the "DNS Working Group" in 2000 which functions under the authority of the Internet Council and consists of eleven corporate members of sector representatives, as a means to apply the division of legislative, executive and judicial powers for ".tr" Domain Names. In this context, DNS Working Group operates as the pre-legislative authority and is in charge of determining policies, rules and procedures. The draft domain names bylaw foresees an alternative dispute resolution mechanism that will be run by dispute resolution service providers. The mechanism is planned to be in parallel with ICANN's mechanism.
Albania	Regulation on the registration and administration of domain names under .al (article 4 point 2 and 3, article 18, point 2/d, article 34 point 3)	Domain name disputes can be resolved in court proceedings or by arbitration.

Notes:

Country	Policies against cybersquatting	Dispute resolution mechanism
Bosnia & Herzegovina	WIPO's ccTLD best practices for the prevention and resolution of Intellectual Property disputes No explicit legislation on cybersquatting or domain name disputes	ICANN's Uniform Domain Name Dispute Resolution Policy
Montenegro	Art 27 of the Rules on registration and use of domain below the national internet Domain ".me": "In case of any litigation regarding the right to use the name of the domain between the user of a domain registered according to this Rulebook and third person, international standards, usual rules, and Uniform Domain-Name Dispute-Resolution Policy (UDRP) will be applied."	.ME Uniform Domain Name Dispute Resolution Policy (based on ICANN's Uniform Domain Name Dispute Resolution Policy) The World Intellectual Property Organization (WIPO) is assigned as dispute resolution provider. All claims have to be filed with WIPO.
Serbia	No explicit legislation on cybersquatting or domain name disputes	 Rules on Arbitration Proceedings for Settling Disputes Arising out of Registration of .rs Domains, as adopted by the General Assembly of RNIDS on October 26, 2007. Each registrant must in advance give his consent to participate in arbitration proceedings and to comply by the final decision (Art. 18 of the General Terms and Conditions). Domain name disputes can be resolved by arbitration or in court proceedings.
Kosovo	Kosovo does not have a ccTLD, so for the moment is not facing any domain name disputes.	TRA has approved a regulation on procedures for dispute resolution based on Art. 4 and 11 of the Law on telecommunications, This also applies to domain name disputes.

Table T.3 - Policies against cybersquatting and dispute resolution mechanism

4. Domain market data

Table T.4 shows:

- the number of registered sub domains of the relevant ccTLD;
- the price charged by the registry per sub domain and year (excluding VAT);
- whether this price covers solely the registry functions (for countries with separated functions of registry and registrars) or if it also includes registrar functions (for countries where the registry is the only registrar).

	Number of domains	Price per domain and year (excl. VAT)	Services covered by this price
Croatia	72,870 (Dec. 31, 2009)	hr: free of charge (but see table T.3 on rules for using second-level domains)	Registration, activation and annual maintenance of the domain
		 from.hr, name.hr, iz.hr (for natural persons): free of charge 	
		 com.hr (commercial): €24.62 for registration and first year, €20.52 for following years 	
		About 80% of all registered domains are free of charge.	

	Number of domains	Price per domain and year (excl. VAT)	Services covered by this price
FYROM	About 13,700 (Oct. 2009)	 €8.58 for the first year, half that price yearly subscription afterwards for local registrants. Doubled price for foreign registrants. 	Registration and 3 free of charge updates within the subscription period. Further changes are charged €2.62 per change. Registrar functions included
Turkey	200,506 (Oct. 1, 2009)	 com.tr, net.tr: €9.43 namesurname.com.tr, namesurname.net.tr: €4.52 biz.tr, info.tr, tv.tr, org.tr, web.tr, gen.tr, av.tr, bbs.tr, dr.tr: €5.66 k12.tr, name.tr, tel.tr, bel.tr : €1.89 gov.tr, edu.tr, pol.tr, mil.tr, tsk.tr: free of charge 	Annual registration for a ".tr" domain and any other operation regarding this domain (contact change, DNS server change etc.) Registrar functions not included
Albania	1,700 (Sep. 2009)	\$75 per 2 years (corresponds to \$37.5 or €25.15 per year – CI)	Registrar functions included
Bosnia & Herzegovina	About 9,919 (Nov. 2009)	First year: €40.9 Next four of five years: €15.34	.ba domain name registration by the registry (includes yearly maintenance for the first year). Registrar functions not included
Montenegro	311,587 (Oct. 2009)	 Open registrations €10 per year, minimum term 1 year €5.99 for domains of third level for Montenegrin registrars 	Registry services. Registrar functions not included
Serbia	54,760 .rs domains (Jan. 22, 2010)	Wholesale prices: • €24.41 for .rs • €5.37 for .in.rs • €8.59 for .co.rs, .edu.rs, .org.rs	Annual registration for .rs domain by the registry Registrar functions not included
Kosovo	N/A	N/A	N/A

Table T.4 - Domain market data

Notes:

FYROM:

There was no strict policy for deactivation and deregistration of domains that had outstanding registration debts until September 2009 when a wide action was taken to deactivate them and make them available for new registrations. In the course of this action more than 4,000 domains were deactivated.