I. STATE, DEVELOPMENT AND PROSPECTS OF THE ELECTRONIC COMMUNICATIONS MARKET

1. Global development of the electronic communications sector

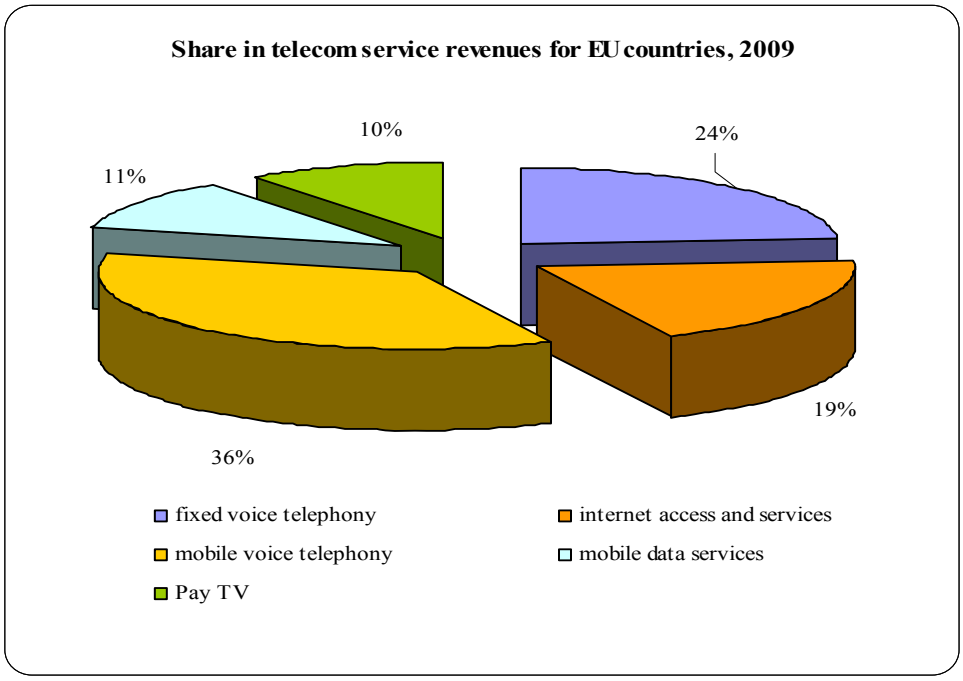
Size and growth of the sector

The global economic crisis, which persisted throughout 2009 as well, did not have a strong impact on the electronic communications sector. After in 2009 the market reported an insignificant market shrinking by approximately 0.5% as against 2008, forecasts for 2010 are for stabilization and increase of revenues by 2.9% to EUR 1.4 billion[1].

In 2009, the electronic communications market in Asia, South America and Eastern Europe registered a significant revenue spike, crisis notwithstanding. For example, revenues reported by the BRIC countries (Brazil, Russia, India and China) reached EUR 299 billion[2] in 2009, up 4.9% year-on-year. India led the way on the electronic communications market with a 10.5% growth or EUR 47 billion. China also registered growth of 2.2% and ranked third on the global market, third to the US and Japan[3].

According to data of the European Information Technologies Observatory (EITO), electronic communications market revenues in the EU countries shed 2.4% in revenues in 2009, a decline by approx. EUR 713 billion compared to the year before.

According to data of the 15th European Commission progress report on the single European electronic communications market, 2009, the largest size of revenues (15th EC report)[4], mobile services (voice and access to Internet) accounted for the largest share in the revenue pie or 47% – figure 1.

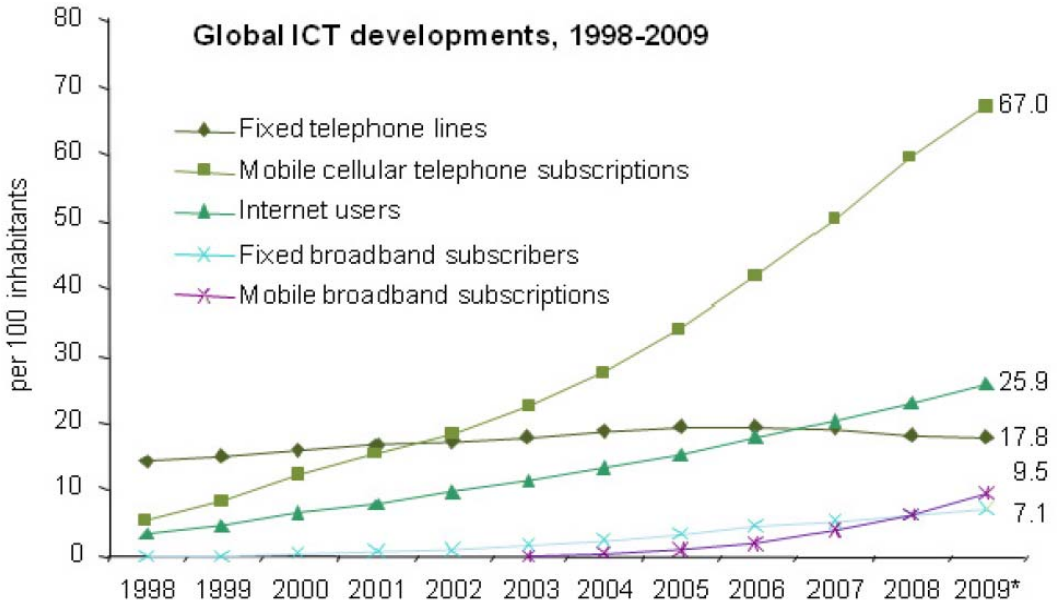


Source: *Commission staff working document accompanying the Progress report on the single European electronic communications market 2009 (15th Report)* **Fig. 1**

[1] According to EITO data, www.eito.com/pressinformation_20100303.htm
[2] According to EITO data, www.eito.com/pressinformation_20090929.htm
[3] According to EITO data, www.eito.com/pressinformation_20100303.htm
[4] Commission staff working document accompanying the Progress report on the single European electronic Communications market (15th report

Mobile communications

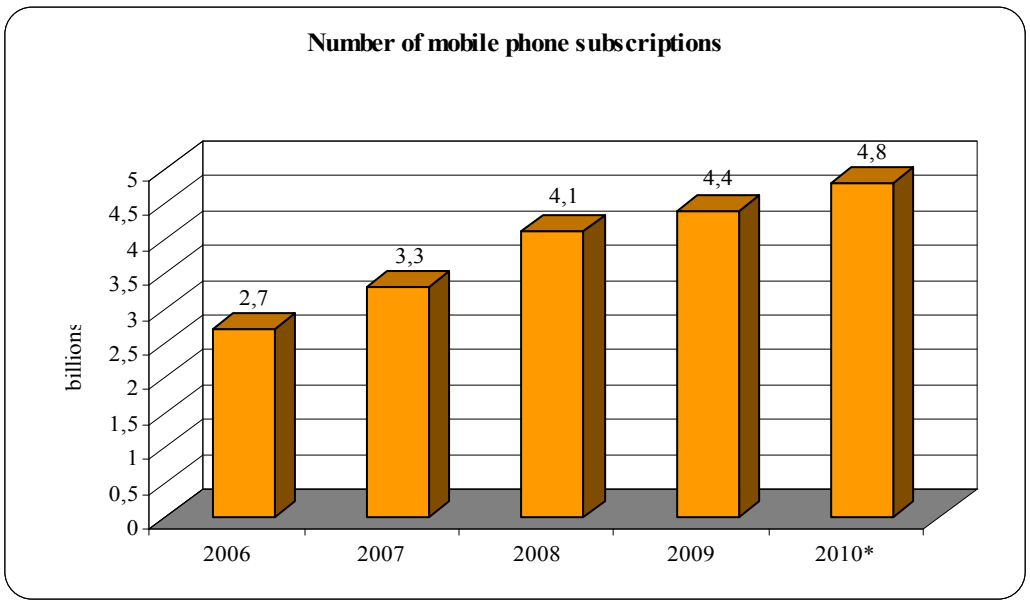
In 2009, despite the economic crisis and the reported decrease on the global electronic communications market, consumption on the mobile services sector ran an increase, whereas penetration that year reached 67%.



* Note: Data for 2009 is an estimate

Source: *ITU - Measuring the information society 2010* **Fig. 2**

As of the end of 2009, there were 4.4 billion registered mobile subscribers (Fig. 3), which is an increase of 7.32 % compared to 2008[5]



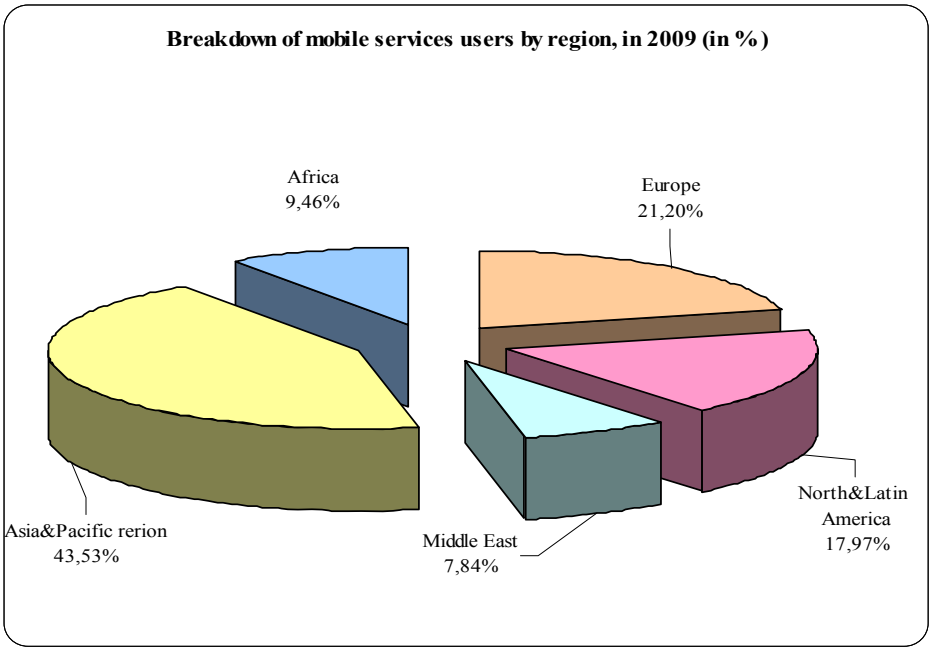
* Note: Data for 2010 is an estimate

Source: *EITO, IDATE*

Fig. 3

[5] EITO – www.eito.com/pressinformation_20090807.html

In 2009, the allocation of mobile services users by regions underwent a change. Africa and the Middle East is home to about 17.3 % of all mobile services users in the world, an increase by 3 percentage points compared to 2008 (14.34%). In the regions of North and Latin America (18.83% in 2008) and Europe (24.09 % in 2008), the reverse trend is observed. (See Fig. 4).



Source: *ITU*

Fig. 4

According to data of the International Telecommunications Union (ITU) – "Measuring the information society 2010," the quick and sustainable growth of mobile services in the past few years is mostly due to the developing countries, where this market segment has quickly increased its share. As for example, in 2009 India reported a 32% increase in the number of mobile services users, or up 457 million people, while for Brazil this percentage is 14 or 172 million people.

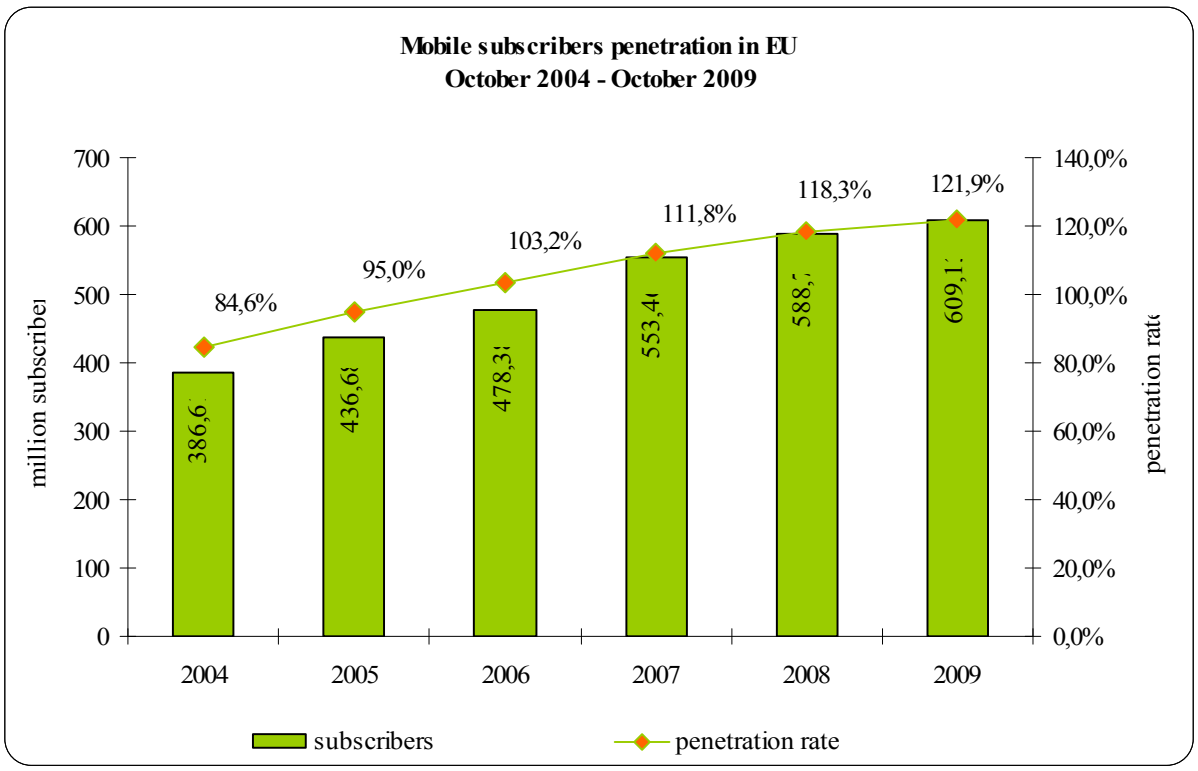
In the developed countries, the growth rate is lower. This is due to the fact that the level of mobile services usage in these countries is already high. EU countries registered a 4% surge in the mobile services usage for 2009[6].

Penetration of mobile services worldwide for 2009 is 67.0% (Fig. 2) as against 61.1% in 2008. According to ITU data, penetration of mobile services in the developing countries crossed the 50% threshold and reached 57%. Compared to 2005 (penetration of 23%), the value of this indicator more than doubled.

In October 2009, the level of mobile services penetration on the European market stood at 121.9%, an increase by 2.5% against October 2008[7].

[6] ITU - Measuring the information society 2010

[7] Commission staff working document accompanying the Progress report on the single European electronic Communications Market (15th Report)

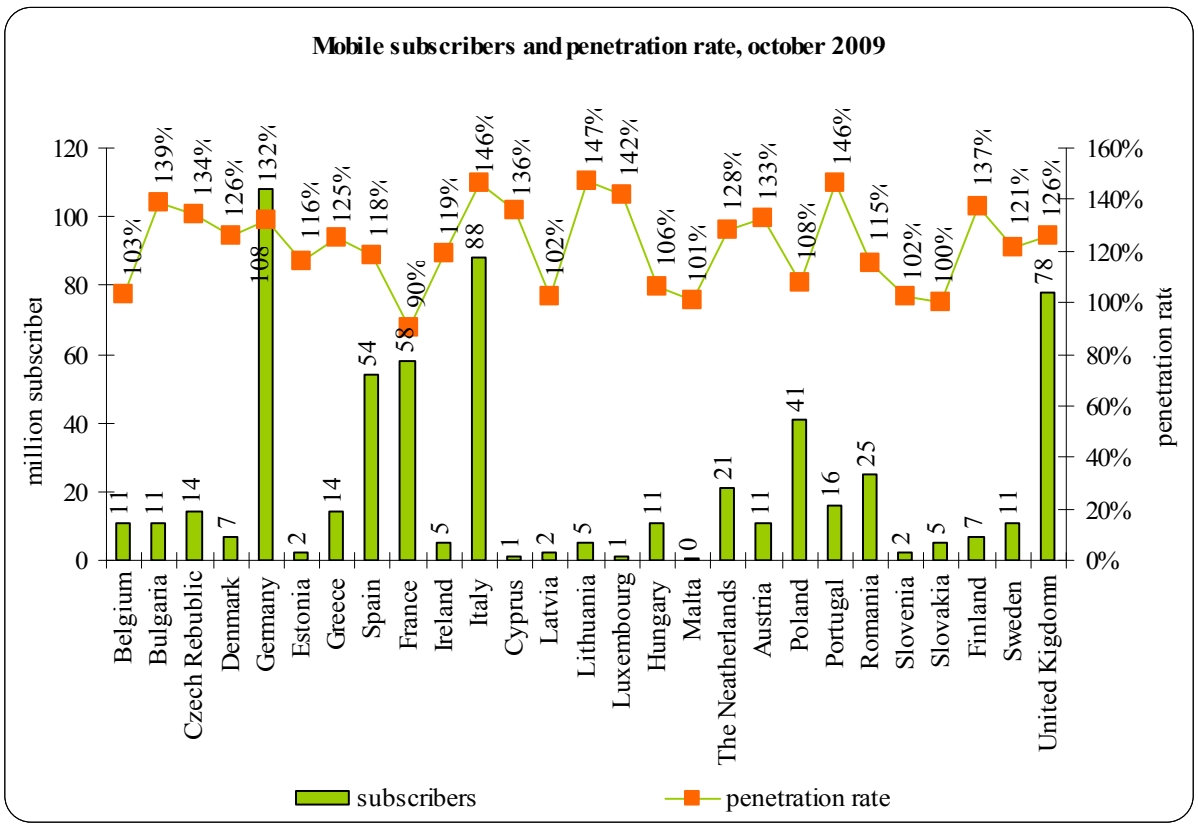


Note: Data base on active subscribers

Source: *Commission staff working document accompanying the Progress report on the single European electronic communications market 2009 (15th Report)*

Fig. 5

According to data of the 15th report of the European Commission, the mobile services penetration rate has significantly increased in Portugal, Romania and Finland, which is the consequence of a range of reasons (increased usage, large relative share of prepaid cards, average cost per minute, below the average for the EU). Mobile operators data shows that in Italy and Estonia the penetration rate has decreased mainly because of the suspension of prepaid cards. France reported the lowest level of mobile services penetration for 2009, which is most probably due to the policy of French mobile operators not to promotional rates for prepaid services.



Source: *Commission staff working document accompanying the Progress report on the single European electronic communications market 2009 (15th Report)*

Fig. 6

In 2009, the number of UMTS subscribers in the EU was 172 million, which is an increase by 36% compared to 2008, while the number of subscribers to have used the traditional GSM technology has increased by a mere 5%. For the US, these figures are, respectively, 74% or 108 million subscribers for the UMTS technology and 7% or 177 million for the GSM technology[8].

According to data of *Portio Research*, in 2009 the number of short messages and multimedia messages (SMS and MMS) sent worldwide reached 4 218 billion, the increase being 25% versus 2008. According to the same source, in 2009 the relative share of revenues from SMS and MMS in the total mobile services revenues pie rose by 9% to reach 17.98% as of end-2009. By 2013, the number of sent messages is expected to reach 5 643 billion.

As of the end of 2009, there were more than 430 mobile virtual network operators (MVNO) worldwide[9].

Fixed communications

The global downward trend for revenues generated in the sector of voice services, carried through fixed phone networks persisted in 2009. As it can be seen from Fig. 2 a growing number of fixed phone subscribers prefer mobile services and/or internet, the fixed penetration rate registering a decline by 1.9 % to 17%.

The number of fixed lines worldwide came in at 1.21 billion in 2009, which is a 2.6% decrease compared to 2008[10]. This market segment is expected to globally shrink by 4.6% compared to 2009[11].

[8] ITU - Measuring the information society 2010
[9] According to The MVNO Directory 2009 report
[10] ITU – wwwitu.int/ITU-D/ICTEYE/Reports.aspx

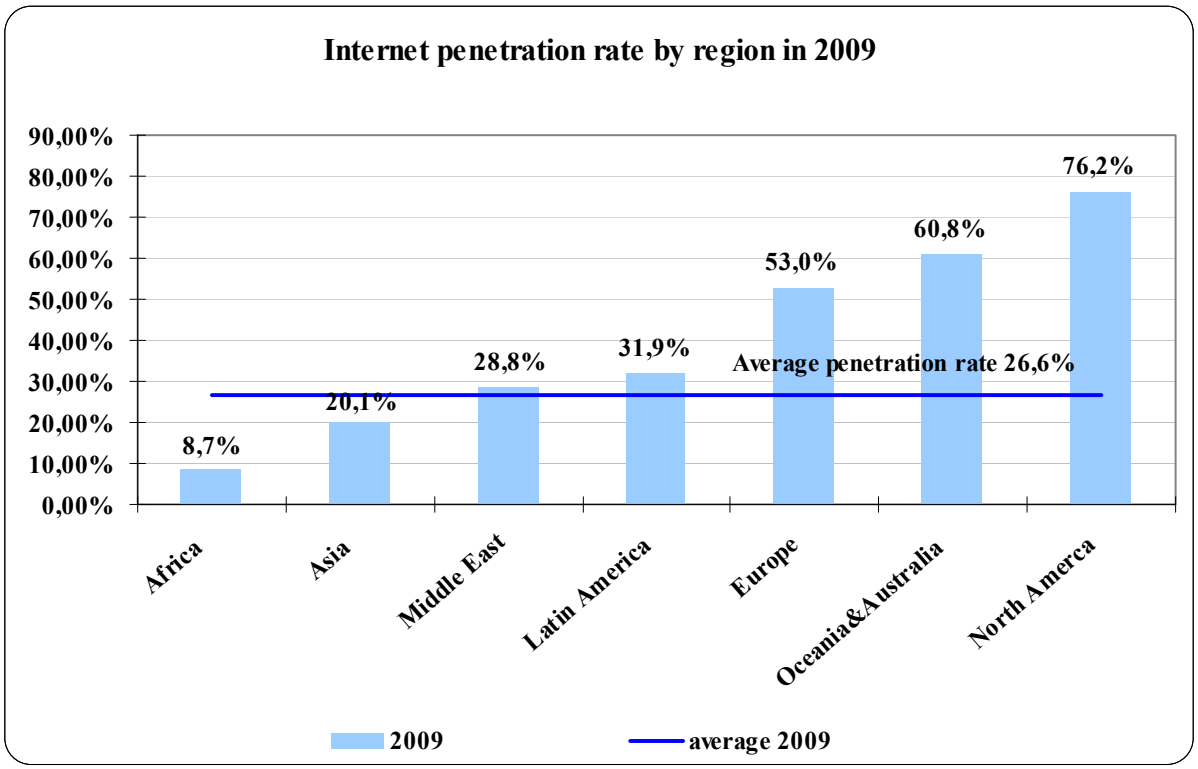
According to EITO, some 18% of households in the US no longer use fixed telephone services, having replaced it by a mobile one. In Japan, this percentage is at 20, while in Italy – at 26.

Internet

According to *Internet World Stats* data, as of end-2009 and in absolute terms the number of Internet users worldwide rose by 13.91% compared to the end of 2008, or there were 1,802 million users reported comprising 26.62% of the world's population. The average penetration rate worldwide has increased by 3.3 % during the year. The data reported comes to confirm the 2008 forecasts that despite the economic crisis internet usage will not register a decrease.

In 2009, some 1.9 billion people of the global population or 27.3% have access to a personal computer at home[12].

The figure below shows 2009 internet penetration by regions. Usage increases the most - or by 5.5 percentage points - in the Middle Eastern countries (Internet services penetration in the Middle East was at 23.30% in 2008). North America retained its leadership in terms of internet services usage per 100 citizens although in 2009 this is the only region to report a minimum decrease of 0.3 percentage points.



Source: *Internet World Stats*

Fig. 7

Around 22% of internet service subscribers reside in the European Union, which is home to only 10% of the world's population[13].

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Broadband internet access

According to *Point Topic* data, in the end of 2009 broadband subscribers have increased by 14.2% year-on-year to 466.95 million.

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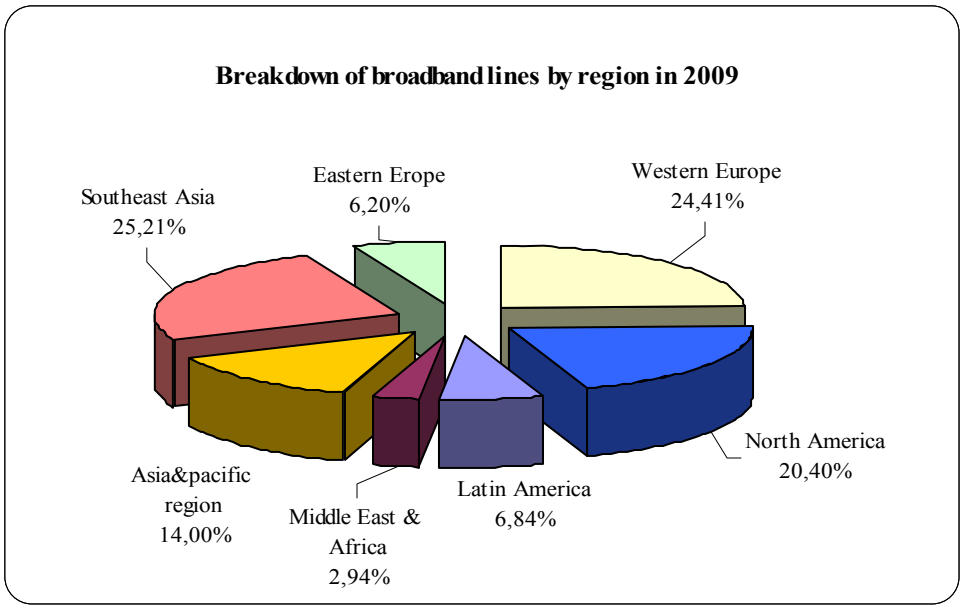
[11] According to EITO data, www.eito.com/pressinformmation_20100303.htm
[12] ITU – Measuring the information society 2010
[13] ITU - Measuring the information society 2010

In Europe in early 2009, 126 million subscribers of fixed broadband access were reported compared to 25 million five years ago, and 150 million mobile broadband access subscribers as compared to less than 1 million five years ago[14].

EU countries again registered the largest relative share in broadband services worldwide. Almost one quarter of EU citizens (24.8%) have broadband access to internet through a fixed. Still, the speed of data transmission is increasing, with 84.6% of the fixed broadband lines in the EU exceeding 2 Mbps and only 23.4% topping 10 Mbps[15].

The chart below presents the 2009 distribution of broadband access subscribers by regions.



Source: *Point Topic*

Fig. 8

In 2009, the global penetration rate for broadband access calculated based on population count was 23.3% in the developed countries and only 3.5% in the developing countries[16].

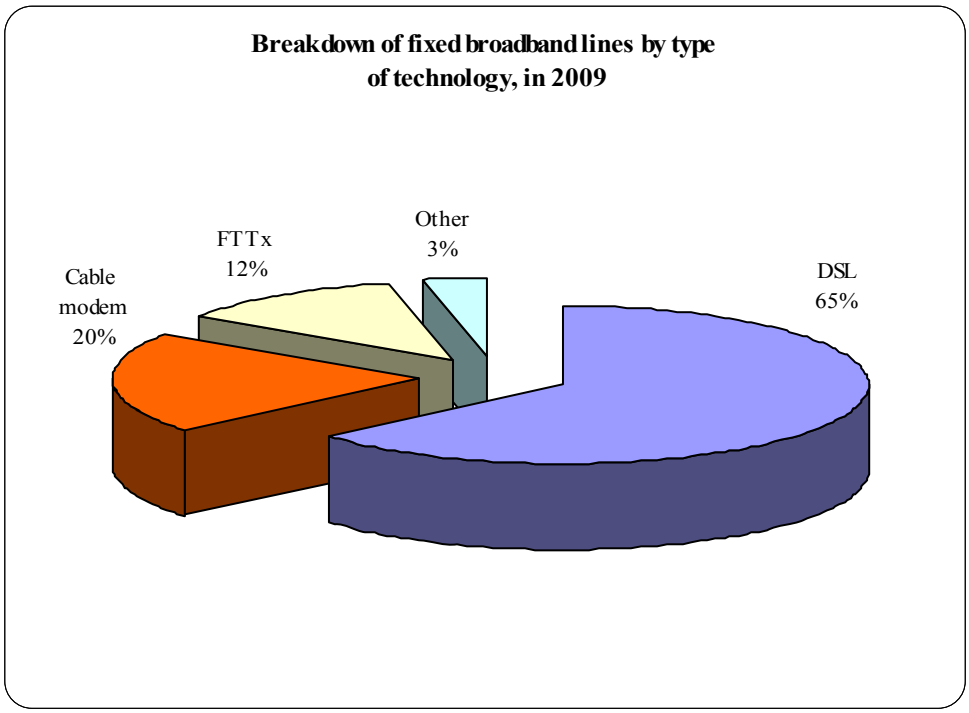
In 2009, the penetration rate of broadband access in the East European countries registered the largest change (31.9%) compared to 2008. The most insignificant change registered the Asian-Pacific region (1%). North America and West Europe remain the regions with highest broadband services penetration rate[17].

In January 2010, as many as 123.7 million fixed broadband lines were registered, up 9.3% from January 2009[18].

In 2009, the relative shares of the different types of technologies used for broadband access worldwide remained unchanged (Fig. 9). The world's most frequently used access technology, with a 65% share, was again the DSL technology, followed by cable modems (20.37%). Third remained the FTTx technology with 12.24%[19].

[14] ITU – Newsroom, www.itu.int/net/pressoffice/stats/2010/02/index.aspx
[15] Commission staff working document accompanying the Progress report on the single European electronic Communications Market (15th Report)
[16] ITU - Measuring the information society 2010
[17] Point Topic
[18] Commission staff working document accompanying the Progress report on the single European electronic Communications Market (15th Report)

[19] Point Topic



Source: *Point Topic*

Fig. 9

According to *Point Topic* data, the DSL technology has been mainly used in South East Asia and West Europe. The cable modem is most widespread in the North American countries, while the FTTx technology in the countries of the Asian-Pacific region.

Despite the decrease in the relative share of the DSL technology (79% at the end of 2009 compared to 81% in 2006), it is still the dominant broadband access option in the EU. For a one-year period (January 2009 – January 2010), 70% of the newly-built networks are based on xDSL technologies. In 2009, the most significant increase, 26%, in the fixed broadband access segment registered the lines using fibre optics for home use and fibre optics plus LAN[20].

Mobile broadband access

Mobile broadband access is one of the leading factors in the electronic communications development and its significance for the world economy is growing. In 2009, some 600 million people worldwide were subscribed to mobile broadband access in 2009 and according to ITU forecasts their number is slated to reach 1 billion[21].

In 2009, mobile broadband access grew faster than fixed broadband access. The penetration rate of mobile broadband access was 9.5% and 7.1 % for the fixed one (Fig. 2).

According to data of the 15th EC report, the average penetration rate of mobile broadband access in the EU countries rose by 2.4% as compared to 2008. In 2009, the use of mobile broadband access was on a steep rise in a number of EU member states. The average usage growth for the January 2009 – January 2010 period was 115%[22].

[20] Commission staff working document accompanying the Progress report on the single European electronic Communications Market (15th Report)
[21] ITU - www.itu.int/net/itunews/issues/2010/02/23.aspx
[22] Commission staff working document accompanying the Progress report on the single European electronic Communications Market (15th Report)

2. Development prospects of the global electronic communications sector

Leading research organizations have definitively positive predictions for the development of the global electronic communications market both for the short term – 2010 and the midterm – the next five years.

In the first half of 2010, *Gartner Group* analysts upgraded their short-term growth forecast for the sector twice. In mid-January 2010, the analysts announced the global market was set to increase by 4.7%[23] this year, up from their previous forecast for a milder growth of 3.2%[24]. In early April, when Q1 2010 results were issued, *Gartner Group* again adjusted its forecast to growth of 5.1% this time round[25] and revenues of nearly USD 2 trillion.

In a medium term, prospects for the electronic communications sector are even brighter. *Insight Research* analysts predict that in 2010–2015, revenues from electronic communications will grow by a geometrical mean of 13.8%[26] to USD 3.7 trillion. For the same period, analysts of the undertaking foresee investments into telecommunication equipment to increase from USD 199.6 billion in 2010 to USD 224.5 billion in 2015, achieving a geometrical mean growth of 2.4%[27].

From a regional point of view, however, positive expectations are not evenly distributed. Europe, the Middle East and Africa, which collectively form the EMEA region, are expected to develop the slowest in the next five years, their annual growth rate being at 9.1%[28]. In view of the high saturation rate in the wireless service segment, especially in the big European economies, growth depends on the development of third generation (3G) broadband and wireless services. The North American region will develop a bit quicker than EMEA, with the growth of revenues from services mainly depending on the growth of services on offer rather than on the increase of subscriber numbers.

Latin America and the Caribbean, collectively grouped in the LAC, are expected to develop fast, alongside Asia and the Pacific region, grouped in the AP region. According to the *Insight Research* forecast, the LAC region, which is dominated by the economies of Mexico and Brazil, will achieve an annual revenue growth of 14.1% in the next five years. This growth will mainly be influenced by the growth of the middle class in the region and the economic development as a consequence of key industries' privatization. The AP region is expected to reach the highest revenue growth rate in the next five years - 17.8% a year. In 2010, this region will replace the EMEA as the world's largest generator of revenues from electronic communications. India and China will be the key growth drivers, where the number of active users is set to increase significantly.

From a technological point of view, *Insight Research* analysts expect revenue growth from electronic communications to be almost entirely concentrated in a single segment in the next five years. In 2010–2015, revenues from broadband wireless services are expected to reach geometric mean growth of 62.4%. The relative share of these services in the electronic communications revenue total is expected to increase from 5.5% in 2010 to 32.4% in 2015. Narrowband wireless services, which have the largest relative share in 2010, are expected to achieve a geometrical mean growth of 8.5% for the forecast period. The relative share of these services will drop from 58.8% in 2010 to 46.3% by the end of 2015. For the forecast period, fixed broadband services will report a geometrical mean revenue growth of 6.0%, while their relative share in the revenue total from electronic communications will drop from 12.4% in 2010 to 8.7% in 2015. As far as fixed narrowband services are concerned, they are projected to achieve a geometrical mean growth of 0.6% and their relative share in the sector's revenues is set to drop from 23.3% in 2010 to 12.6% in 2015 over the next five years.

[23] http://www.gartner.com/it/page.jsp?id=1284813
[24] http://www.gartner.com/it/page.jsp?id=1209913
[25] http://www.gartner.com/it/page.jsp?id=1339013
[26] http://www.insight-corp.com/pr/1_06_10.asp
[27] http://www.insight-corp.com/pr/3_22_10.asp
[28] http://www.insight-corp.com/reports/review10.asp

Globally, broadband services suppliers are expected to continue their efforts to establish a lucrative business model for high speed services. In that vein, they rely on the opportunities, which the internet protocol provides for data and control transfer. Currently, high speed services most often include packages that combine voice over IP (VoIP), virtual private networks (VPN), video, games and entertainment, and cater to two main user groups – households and small-sized businesses.

The fast-paced development of the services with applications based on the Internet protocol will start influencing the network architecture.

Mobile operators are leaders in the application of new architectural models and services. As a whole, they are more experienced and have more control over the content of their networks, and solid billing platforms as well – conditions that guarantee stable incomes of multimedia content.

Fixed phone suppliers also expect exploitation and infrastructural savings from the introduction of new IP-based services. Many incumbents prefer to initially introduce IP-based services through an established network. This approach allows operators not to replace the switching elements of the old network which comprise irreparable costs. In this way, the new network architecture grants fixed phone suppliers the opportunity to retain their previous investments and to reduce the risk while at the same time they research and introduce new possibilities.

3. Legal and regulatory framework

In 2009, some significant amendments in the sector's regulatory framework were introduced. Experts from the Communications Regulation Commission (CRC) took part in the development of:

1. Bill for amendment and supplement to the Law on Postal Services;
2. Bill for amendment and supplement to Law on Radio and Television;
3. Instruction for the collaboration between the CRC, the Ministry of Transport, the Ministry of Interior, the Ministry of Defense, the State Agency for National Security, the State Agency for Metrological and Technical Surveillance and the Ministry of Regional Development and Public Works – National Construction Control Directorate.

During this period, a number of secondary legislative acts were prepared and accepted, as well as amended: ordinances, tariffs, methodologies, regulatory policies, technical requirements, general requirements, sample permits and electronic forms.

The following secondary legislative acts adjuncts to the Law on Electronic Communications were prepared by the CRC and are in force:

1. Rules on data collection that are necessary for the identification of users of prepaid services before 01.01.2010;;
2. Rules for the procedure of issuance of certificates for the use of individually assigned scarce resource – radio frequency spectrum for transmitting electronic communications through electronic communications networks for terrestrial analogue broadcasting of television signals;
3. Tariff for the fees collected by the CRC for 2010 under the Law on Electronic Communications.

The following amendments and supplements to the secondary legislative acts on the Law on Electronic Communications were prepared and effected by the CRC:

1. Functional specifications for the portability implementation of telephone numbers of national significance in case of change of the supplier of the public mobile telephone service;
2. Rules for carrying out electronic communications for own needs via radio facilities that use radio frequency spectrum which does not need to be individually assigned;
3. List of radio facilities that use radio frequency bands harmonized within the EU and the terminal electronic communication devices;
4. Rules for the conditions and procedure of access to public information at the CRC.

5. General requirements for carrying out public electronic communications;

6. Technical requirements for the operation of electronic communications networks from radio services – fixed satellite, mobile satellite and the related equipment;

7. Technical requirements for carrying out electronic communications through radio facilities in the amateur radio service;

8. Technical requirements for the operation of electronic communications networks from the fixed radio service and the related equipment

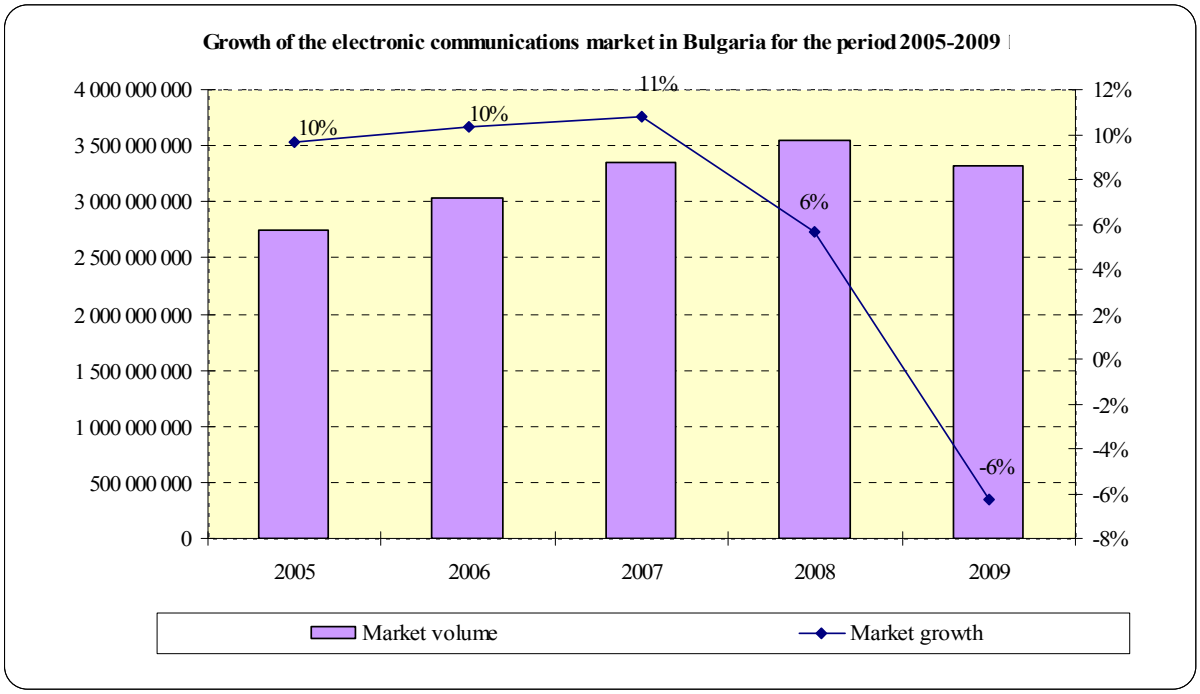
9. Technical requirements for the operation of mobile terrestrial networks and the related equipment;

10. Technical requirements for the operation of electronic communication networks from the mobile radio service and the related equipment;

4. Size and structure of the electronic communications market in Bulgaria

In 2009, the volume of the electronic communications market in Bulgaria that spans the market segments of fixed phone services, mobile services, leased lines, data transfer and Internet access, cable television, fixed satellite networks and other electronic communication networks and/or services[29], stands at BGN 3.325 billion or EUR 1.7 billion, where a 6% year-on-year slump was registered for the first year. The total size of the electronic communications market for the respective year constituted 5% of the total size of Bulgaria's GDP[30].

Figure 10 presents the changes in the size and growth of the domestic electronic communications market for the 2005-2009 period.



Note: The information about the size of the market for 2008 has been corrected

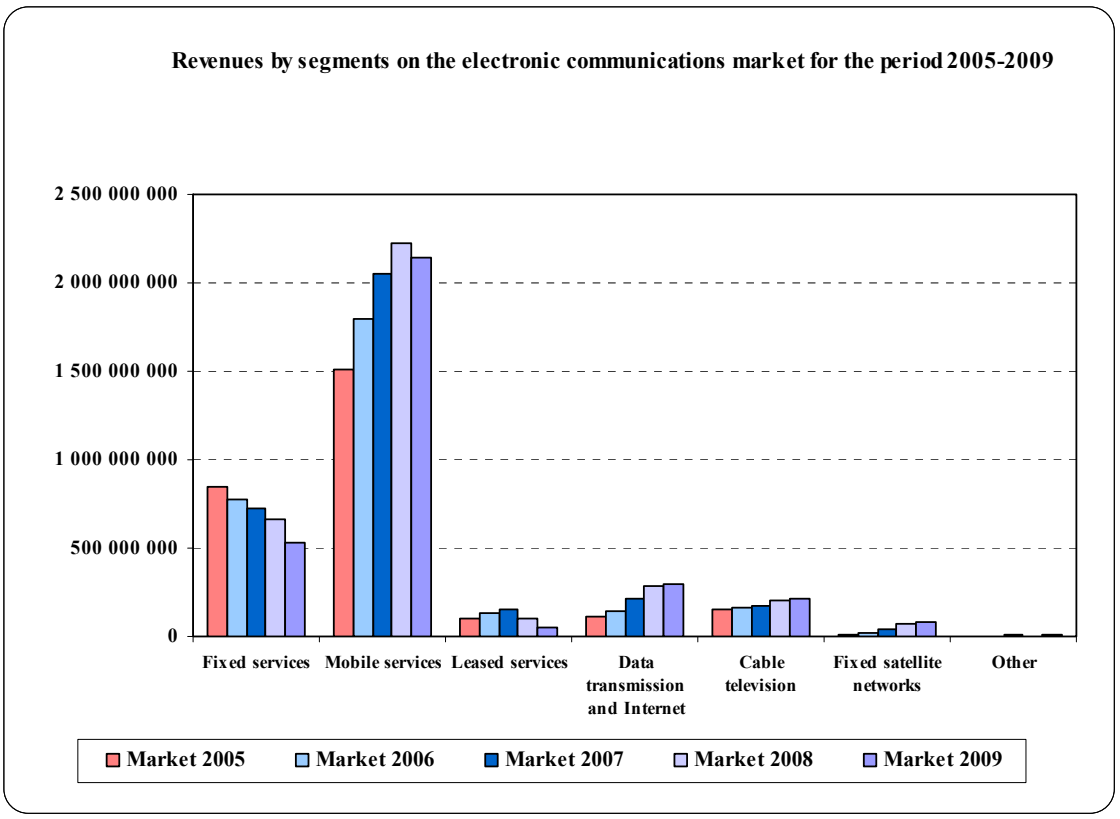
Source: *Data submitted to the CRC*

Fig. 10

[29] Includes revenues from telex, radio installation, revenues from the provision of public electronic communications through a network from the fixed radio service of the "point-to-point" type, revenues from the provision of voice services through numbers with national access code of the 99x type through broadband wireless access networks ("point-to-multipoint" type) and revenues from the provision of radio-relay lines for transferring of radio- and/or television programs.

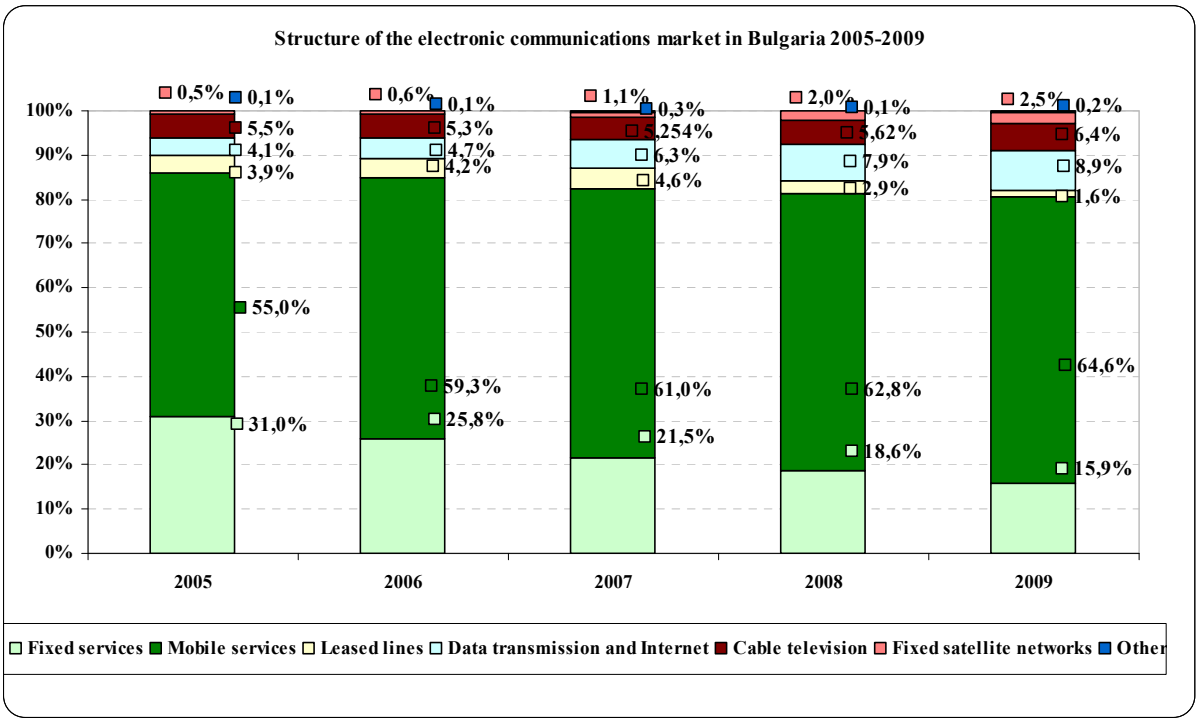
[30] Calculated using current prices. Source: National Statistical Institute

Figures 11 and 12 represent the changes to the size of revenues by segments and the dynamics in the structure of the electronic communications market.



Source: *Data submitted to the CRC*

As Figure 11 shows, revenues in the segments of cable television, data transfer and Internet access and fixed satellite networks sustain the growth tendency for the whole period whereas total revenues in the fixed phone services segment register a decline yet once again.



Source: *Data submitted to the CRC*

Fig. 12

Change in the segments of the overall electronic communications market

Market structure data presented in Fig. 12 show that market segments, which have traditionally reported growth in the past few years, except for the mobile terrestrial network segment, again headed growth in 2009 both in absolute and relative terms:

- in 2009, the year-on-year increase in absolute terms of the "Others" segment size was significant – nearly 50%; however, due to the relatively small share forming the total size of the market (0.2%), the change in relative terms was a mere 0.1%;
- the "satellite networks" segment grew in absolute terms, too – 19%;
- revenues from public electronic communications through a cable network for the transfer and/or distribution of radio– and television programs also increased during the year, where the absolute values rose by 7%;
- Although the growth rate decreased, revenues from "data transfer and Internet" increased by nearly 5% in absolute terms as compared to the previous year.

In 2009, the following electronic communications market segments saw a decline:

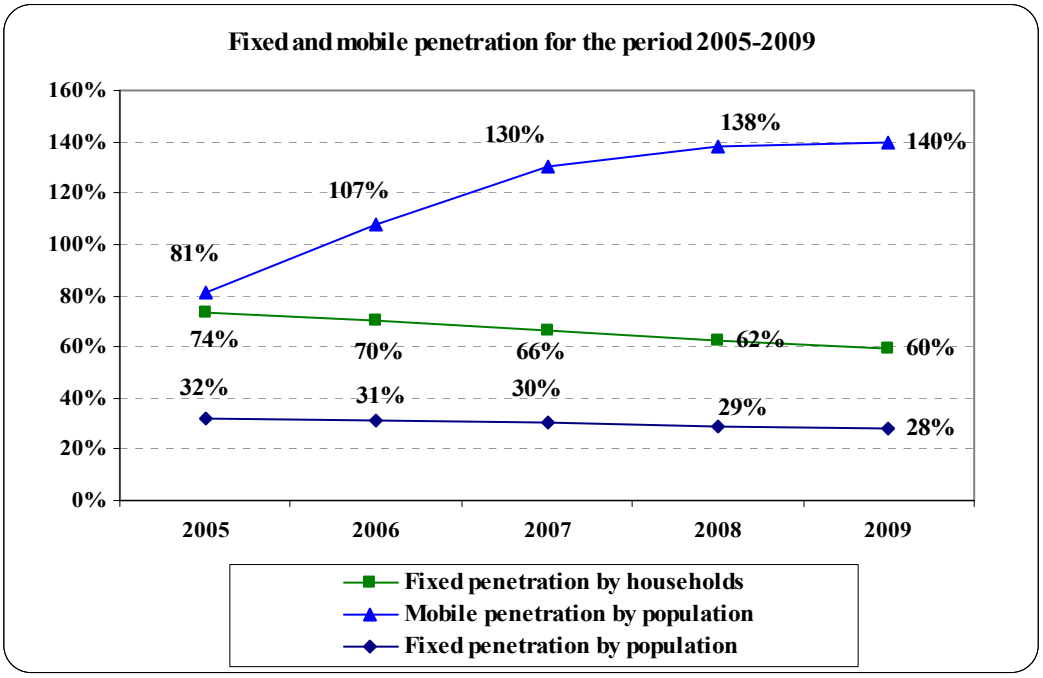
- Although the share of the "Mobile networks and services" segment increased by nearly 2 percentage points of the total market size, revenues in this segment registered a nearly 4% decline in absolute terms for the first year round;
- The size of the fixed phone services revenues traditionally declined. The share of the segment in the total size of the electronic communications market shed nearly 3% that year as compared to the one before;
- The "Leased lines" segment was down as well, with its share in the total market size shrinking by 1.3%.

For the first time in 2009, Bulgaria's "Mobile networks and services" segment declined year-on-year. For a one-year period, revenues slumped by 3.7%, were as of the end of 2009 they came in at BGN 2.15 billion and comprised more than half (64.6%) of the total domestic electronic communications revenues. Despite the decline, the significant relative share of the segment is due, on the one hand, to the trend seeing part of the voice telephone services users giving fixed phone services up and replacing them with mobile, as well as to the numerous aggressive promotions within the year related to discounts from the monthly fees for certain plans, including additional minutes for outgoing calls, etc.

The size of the fixed telephone services segment continued to shrink as for the past year this decline in the total market size was by 20% in absolute terms and by nearly 3% in relative terms, which shows that the downward trend for the 2004-2008 period in the revenues from fixed networks and fixed telephone services was reaffirmed in 2009.

The number of undertakings authorized to provide fixed telephone services and access to public telephone services by the "carrier selection" service (including the incumbent) totaled 23 in 2009. There were 17 undertakings offering a service alternative to "BTC" AD. These are: "ITD NETWORK"AD, "BTC NET" OOD, "VARNA NET" OOD, "VESTITEL BG"AD, "GOLD TELECOM BULGARIA" AD, "EUROCOM CABLE MANAGEMENT BULGARIA" EOOD, "EAST TELECOMMUNICATION COMPANY" AD, "INTERROUTE BULGARIA" EAD, "CABLETEL" EAD, "COSMO BULGARIA MOBILE" EAD, "MOBILTEL" EAD, "NEXCOM BULGARIA" EAD, "NET IS SAT" OOD, "ORBITEL" EAD, "SPECTRUM NET" AD, "TELECOM 1" OOD and "TRANS TELECOM" AD.

Figure 13 showcases the trend established in recent years for a decrease in the fixed telephone density and increase of the mobile one. The high mobile density penetration percentage is largely due to the practice of mobile operators in Bulgaria to report as active all prepaid services users who buy a SIM card and then recharge it for use on credit at least once every 12 months, which is a relatively long period compared to the practice of reporting this indicator in the EU countries.



Source: *Data submitted to the CRC*

Fig. 13

In 2009, Bulgaria's mobile density growth rate slowed down – the indicator grew by only 2 percentage points compared to the previous year. Another decrease is observed in the change of fixed density, calculated both on household basis (2%) and population basis (1%).

A total of 36 undertakings have notified the CRC that they intended to provide the "leased lines" service, including "international leased lines" with the expected starting date of the activity being 31.12.2009, where according to data submitted to the CRC only 17 had actually run operations. Revenues from the provision of the "leased lines" service amounted to BGN 51.7 million in 2009, which represented a decrease by over 49% compared to 2008. The big decrease was mainly due to two reasons – first, of note is the decrease of revenues from wholesale leased lines (to other undertakings providing public electronic communications), which dropped by 60%. This fact can be explained with the trend seeing undertakings which deliver public electronic communications in Bulgaria continuing to invest in the construction of own infrastructure and relying less on the rental of others' infrastructure. On the other hand, the enduring decrease of BTC AD revenues from the provision of the wholesale "leased lines" service, down by 73% year-on-year in 2009, had a significant impact on the decrease. Contrary to the performance in 2008, 2009 saw a year-on-year decrease of nearly 18% in the total revenues realized by alternative undertakings.

In 2009, 36 new undertakings offering public electronic communications through a cable radio and TV transmission and/or distribution network notified the CRC, according to the LEC, about their intent to perform this type of electronic communications activity. At the same time, the number of deregistration decisions issued by the CRC reached 60 – by 14 more compared to the previous year. According to an expert CRC assessment, the size of total revenues from cable networks amounted to nearly BGN 213 million[31], which is by 7% more than in 2008. A growing number of cable network service providers offer or intend to offer package services such as "Double play"(cable television and Internet access, and/or cable television and voice over IP), "Triple play"(cable television, Internet access and voice over IP), encoded programs, data transfer, services such as HDTV (a standard in digital television, supporting a format that allows higher broadcasting quality and higher resolution compared to the traditional analog or standard digital

[31] Revenues from the provision of a main package of channels are included, which feature, among others, an additional package and encoded channels, as well as package services such as Double play (cable television and Internet), Double play (cable television and voice over IP) and Triple play.

television) and video on demand. A growing number of cable network service providers offer not only analog but also digital reception of television channels. The relative share of subscribers that receive cable television in digital format has increased by nearly 9 percentage points against 2008 and reached 21.8% of the total number. High Definition television (HDTV) grew increasingly popular among using digital cable television and attracted 0.2% of Bulgaria's cable TV subscribers.

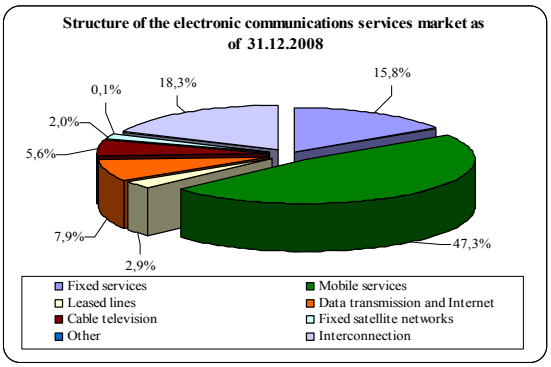
Despite the slowdown compared to the year before, the size of the "fixed satellite networks" market segment continued to increase to BGN 83.32 million. Growth in absolute terms totaled BGN 13.42 million compared to a total size of BGN 69.90 million in 2008. Like the year before, the growth of the segment was the result of a surge in revenue from satellite digital television and radio and of satellite broadcasting (transfer) of wholesale radio- and TV channels, which for the past 3 years rose by BGN 50.05 million (2.5 times). In 2009, the share of revenues from these services amounted to BGN 83.01 million, while in 2008 they stood at BGN 66.16 million. Year 2009 sustained the trend that saw the share of end-user services surpassing that of wholesale services – 89% of the revenues were generated from services delivered to end users and 11% from wholesale services.

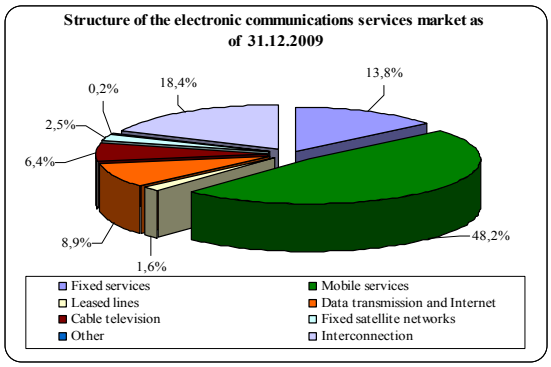
For 2009, the size of the "data transfer and Internet access services" market segment came in at approximately BGN 295.22 million and reported an increase of 5% compared to the year before. The number of ADSL service subscribers increased by 21%. According to CRC data, the broadband services penetration in Bulgaria was 13% as of year-end.

As of the end of 2009, five undertakings had authorizations to build a nationwide network of the "point-to-multipoint" type using the WiMAX technology. Three of them were actually operational on the market - "MAX TELECOM" OOD, "TRANS TELECOM"AD (with the trade mark "1One") and "NEXCOM BULGARIA" EAD. As of the end of 2009, users of services provided through broadband wireless networks using the WiMAX technology increased by 31.28% in Bulgaria compared to the end of 2008. Revenues, although they still represented a small part of the revenue total of the whole electronic communications market, registered a 33% growth compared to 2008 and amounted to almost BGN 1.820 million.

Interconnection

The following charts present interconnection as an individual segment in the general electronic communications market structure.





Note: when calculating the size of the "interconnection" segment, revenues from physical interconnection realization are included (ports, lines and connection points); traffic termination (arising from fixed/mobile undertakings and WiMAX networks both in the country and abroad, including SMS and MMS traffic), carrier selection, transit traffic and collocation.

Source: *Data submitted to the CRC*

Fig. 14 **Fig. 15**

The change in the size of interconnection revenues in 2009 was insignificant, and as of the end of the year a 6% decline was registered. As a whole, the share of revenues from interconnection in the total electronic communications market size was sustained at 18%.

In 2009, total investments into network construction and maintenance and services development declared by the undertakings providing electronic communications amounted to BGN 554 million, which is a near 30% decline compared to the previous year. For 2010, undertakings plan to invest a little over BGN 583 million in the sector.

Bundled services

It should be noted that at the moment there is no unanimity what the term "bundling" exactly means. LEC texts quoted the "price package" concept, which according to item 79 of the additional regulations is defined as a package of two or more services whose prices differ from the ones for each of the services should the latter be delivered individually.

In the appendix to a CRC Decision No. 650/25.06.2009 for the purposes of analyzing the market for access to a specific location and publicly accessible telephone services rendered in specific location, a detailed description of the terms "converged services" and "bundled services", based on the practice of the European courts, of the EC as well as all non-binding documents - guidelines and recommendations[32]. According to the provided description, the package services (bundling) include two or more electronic communication services, rendered by an undertaking jointly, where the services are provided in fixed, defined in advance proportions and terms. Bundling is generally of two types – "sheer bundling" or "combined bundling", the demarcating component being whether the consumer is able to buy any of the services separately. Converged services (tying), for their part, are observed in a situation when a service is offered only when bought together with another service, where the latter might also be purchased separately.

One should take into account that the information published further down does not concern the cases of "sheer bundling" offerings, the most popular being the offer of access to a public telephone network and publicly accessible phone services in a specific location.

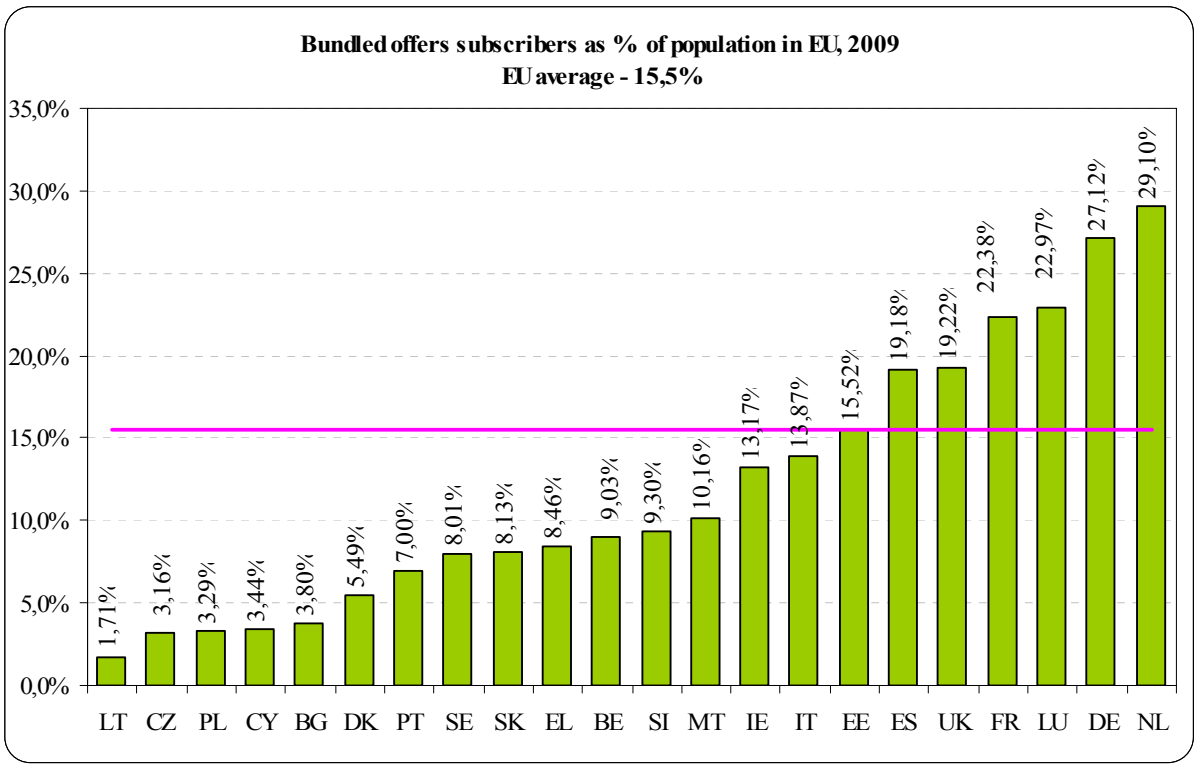
According to data of undertakings providing public electronic communications in Bulgaria, the number of bundled services subscribers reached 287,000 at the end of 2009, a threefold increase against 2008. Despite the high growth rate, the share of bundled package subscribers as percent of the population remains low – hardly 3.8% compared to the EU-wide parameter[33] - 15.5%.

Fig. 16 presents the share of bundled package subscribers as percent of the population by EU member states[34].

[32] Appendix to a CRC Decision No. 650/25.06.2009, pp. 168-172

[33] Commission staff working document accompanying the Progress report on the single European electronic communications market 2009 (15th Report)

[34] In the text to item 5 Converged services – bundled offers (Commission staff working document accompanying the Progress report on the single European electronic communications market 2009 (15th Report)) is stated that in the data presented there are some differences because of the different definitions and lack of information for some of the states.



Note: The data for Bulgaria is as of 31.12.2009, the data for the remaining member states of EC is as of 01.07.2009.

Source: *Commission staff working document accompanying the Progress report on the single European electronic communications market 2009 (15th Report) and CRC data*

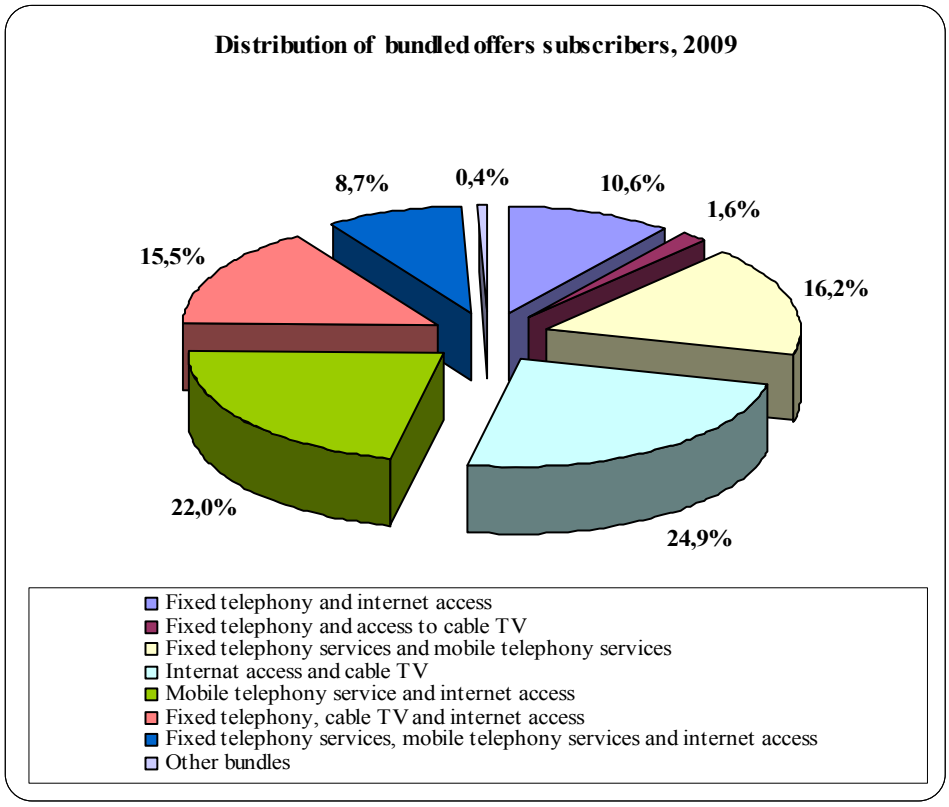
Fig. 16

As the chart shows, the Netherlands and Germany are the countries with the highest share of bundled service subscribers calculated as a percent of the population with, respectively, 29.10% and 27.10%, followed by Luxemburg (22.97%) and France (22.38%). Lithuania reported the lowest penetration of bundled services.

In most cases, it is hard to estimate the size of bundled services from the point of view of generated revenues because of the vast diversity in commercial offerings and different corporate methods for reporting them. Sometimes the services are invoiced together, in other cases separate agreements are signed and are reported as revenues from subscribers for each of the services included in the bundle.

From the 2008 and 2009 data of the undertakings providing public electronic communications in Bulgaria, it is clear that bundled services are of growing interest electronic communication services subscribers due to the advantages they provide to the end user. The key advantages for the bundled service subscribers are: one provider for several services, which saves time during the servicing and payment of monthly bills; as well as lower bundling prices compared to individual use of each of the services.

The subscribers' distribution by type of bundling in Bulgaria is presented on Fig.17.



Source: *Data submitted to the CRC*

Fig. 17

From the data presented in Fig. 17, it is clear that the interest of bundled service subscribers is directed in general to four types of bundled service offers – three "Double play" varieties (Internet and TV access, mobile phone service and Internet access and fixed phone and mobile phone services) and the "Triple play", including a fixed phone service, Internet and TV access.

The total number of undertakings providing bundled services in 2009 came in to 62, the highest being the number of undertakings offering the "Double play" – Internet and TV – 47 undertakings.

5. Prospects for development of the Bulgarian electronic communications market.

The prospects before the Bulgarian electronic communications market for 2010 are related to several opportunities:

- strengthening market competition through adequate regulation of markets, where there is no effective competition, and creating investment incentives;
- help spearhead the adoption of broadband internet access, which is encouraged by state funding, among others;
- implementation of new technologies, higher product variety, and continuous reduction of the price of electronic communication services for consumers;

Next year, the trend witnessed worldwide for subscriber migration from fixed phone to mobile phone services is expected to persist on the Bulgarian market as well. It will be a key factor to bring the mobile phone services market to the final point of saturation which will lead to a fall in the mobile subscriber growth rate and which will intensify further the competition between Bulgaria's three mobile operators.

This, for its part, together with the plan adopted by the CRC with a Decision 236/17.03.2009 for a glide-path termination price reduction for the undertakings' mobile networks

as of 1 January and as of 1 July 2010 will lead to a price reduction for the mobile phone services' end users as well and will probably reduce the observed so far traffic closure in the individual networks. As for the cut in retail prices, of importance will be the next reduction of price caps for voice calls while in roaming as of 1 July 2010.

Intensification of competition will stimulate mobile undertakings' ambitions to win more customers with a contract mostly by attracting the ones using prepaid services. This trend will deepen in 2010 as well due to the new requirement for compulsory registration of prepaid cards.

In 2009, revenues generated by mobile phone undertakings somewhat decreased, by 3% against 2008, largely due to cut in revenues from voice services, as well as short messaging and multimedia messaging (SMS and MMS), which is explained with their increasing desire to launch some new customer services. In this way, mobile undertakings aim to diversify their product portfolio and to generate some new sources of revenues. Such services are, for example, the bundled offers including fixed phone services and/or broadband access, the remote access and home monitoring, mobile TV, navigation services, real time calls and messages via Internet, electronic health services, advertising options in the mobile phone sphere, etc.

According to the undertakings providing electronic communications consumer interest toward bundled offerings will remain and even increase in 2010 mostly due to businesses' interest in cutting their telecommunication services costs. The offers include various combinations of fixed phone and mobile voice services, broadband internet, cable and IP TV. These services are in wide offer by incumbents, mobile and cable providers, and growingly by undertakings offering electronic communications through data transfer networks (the most popular among them being the Double play "TV and Internet access" and Triple play "fixed phone, Internet and TV access).

Bundled offers growingly penetrate the market both due to the clients willing to reduce their costs for these services and by the electronic communications providers' wish to optimize their provision costs. An increasingly popular bundle was Internet access and a laptop and card/device for mobile Internet. The sale of smart phones also registered high growth.

Next year, several regulatory steps are expected. They will probably create even more favorable conditions for the development of a completive electronic communications market in Bulgaria. One of them relates to the completion of the first package of market analyses by the CRC, which includes the adoption of a market analysis on the (physical) access to network infrastructure in a specific location and provision of wholesale broadband access. With their acceptance and after imposing some obligations for the undertakings with significant power on these markets, prerequisites for rousing the fixed phone and broadband access market will be created.

Another factor favoring competition development is the option for consumers to use the "number portability" service, which from July 2009 is provided for geographic numbers as well. Next year, the CRC plans to undertake some changes in the procedures for geographic and non-geographic number portability onto mobile networks. These will include some new requirements to the undertakings, including provision of the "one-stop-shop" service, shortening the term, reducing the service fee paid by the accepting to the donor undertaking, removal of the fee paid by consumers, etc. The goal of such step will be to encourage the use of the "number portability" service as an incentive to stimulate effective competition development among undertakings offering electronic communication services.

On the electronic communication services market, expectations are that the trend for consolidation witnessed in the past few years will persist. After the merger of the two largest fixed alternative undertakings (through a purchase of ORBITEL EAD by MAGYAR TELEKOM and SPECTRUM NET AD) and the two largest cable operators (Eurocom Cable Management Bulgaria EOOD and CableTel EAD), this process will probably continue and between the

undertakings providing Internet access and data transfer services, with the markets still being largely fragmented.

The broadband Internet access market, which by the end of 2009 reached 13% penetration based on population, will continue to develop as well. According to CRC data, the bulk of Internet providers plan to invest in the modernization and expansion of their data transfer networks in 2010. A stimulus for competition is expected to provide the CRC market analysis completion and acceptance on broadband wholesale access, which will favorably influence the broadband services market as well as the implementation of measures of the National Strategy for development of broadband access in Bulgaria, accepted in November 2009. The latter aims to ensure that the entire population in the country have an opportunity to get broadband access in his/her town or village until 2013, which for its part will be achieved mainly by projects for inter- and internal city connection, financed by the state and operational program "Regional development".

Mobile undeertakings growingly concentrate on the broadband Internet access segment. Increase in use in 2009 stimulates them to more actively invest into their networks, mostly in more modern technologies for high speed data transfer.

It is expected that in 2010 competent institutions (the MTITC and the CRC) shall start their work on the implementation of national legislation on changes stipulated in the revised Regulatory framework of the European Union (in force with their promulgation in the Official Journal of the EU on 19.12.2009), which the EU member states should transpose until the end of May 2011. The changes include the creation of the Body of European Regulators for Electronic Communications (BEREC) as well, which for its part will have a significant role in the drafting of a policy in the field of electronic communications in the EU and in their application.