

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

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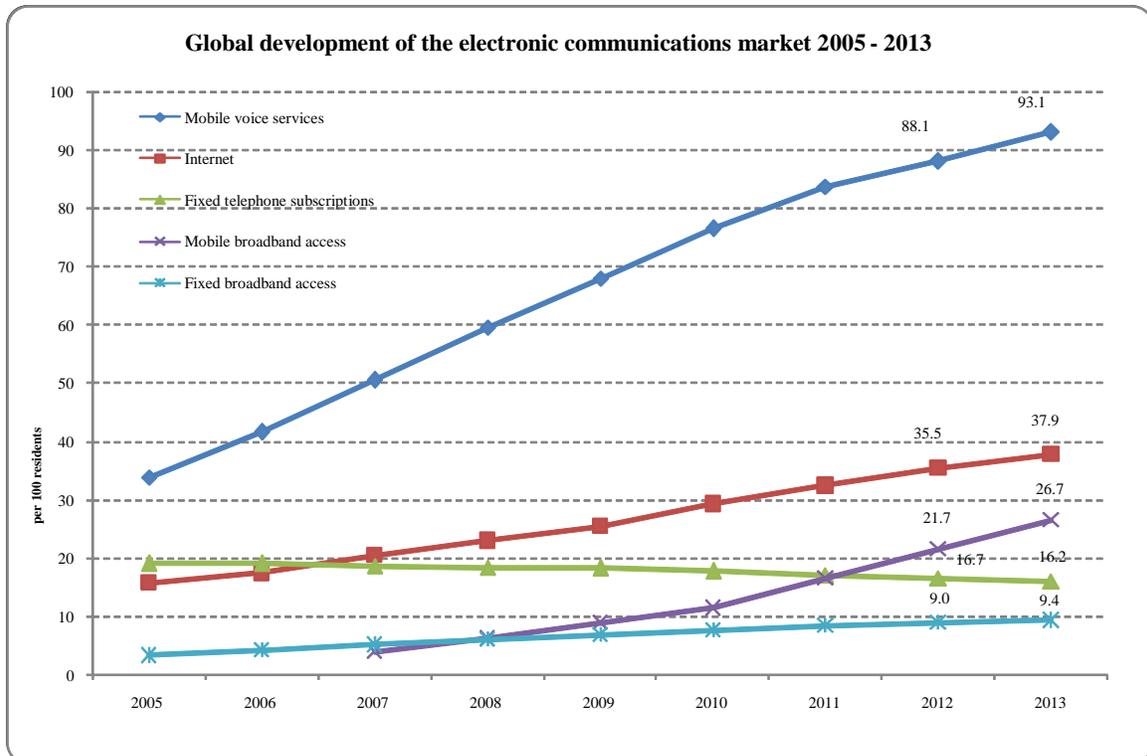
I. STATE, DEVELOPMENT AND PROSPECTS OF THE ELECTRONIC COMMUNICATIONS MARKET

1. Global development of the electronic communications market

Volume and growth of the sector

In 2013, the total volume of the telecommunication services market reached USD 1.63¹ trillion, which is a drop of 0.5% for another consecutive year, compared to the data reported by one of the international leading analytical companies **Gartner Inc** for 2012.

According to data of the International Telecommunication Union (**ITU**), in 2013, the global trend towards growth in the number of users of electronic communication services continued. Figure 1 displays data on the penetration by types of services over the last nine years (2005 – 2013).



Source: ITU World Telecommunication/ICT indicators database

Figure 1

Mobile voice services continued to hold the first place on the global electronic communications market. They registered a penetration of 93.1%, which is an increase of 5 percentage points since 2012. The same increase is reported in the mobile broadband access with a penetration of 26.7%. In 2013, the Internet services also registered a growth to 37.9% or an increase of the indicator by 2.4 percentage points on a one-year basis. Although at slow rates, the indicator of fixed broadband access penetration also registered a growth of 0.4 percentage points for a one-year period. The downward trend in the penetration per 100 inhabitants of the fixed telephone service on a global scale continued for another consecutive year. The data show that in 2013 a decrease, although minimal, was registered in this indicator – 0.5 percentage points since 2012.

Mobile services

According to **ITU** data, the subscribers of mobile services in 2013 were nearly as much as the world population (nearly 6.8 billion subscribers for a population of 7.1 billion)².

¹ <http://www.gartner.com/newsroom/id/2643919>

² <http://www.itu.int/en/ITU-D/Statistics/Documents/facts/ICTFactsFigures2013-e.pdf>

The trend towards increase in the number of subscribers of mobile voice services on a world scale is mainly due to the market in the developing countries where a growth of 59% was registered in the last five years (2009 – 2013). The penetration of mobile services in these countries grew from 58% in 2009 to 88% at the end of 2013.³

In terms of the "average degree of penetration of mobile services" indicators, the data show that in 2013 its value was 93.1% (Figure 1), with penetration at 119% in the developed countries, and 88% in the developing countries. This percentage is the highest in the countries of the Commonwealth of Independent States⁴ (CIS) and the European countries, 137.0% (6.5 percentage points more than in 2012) and 122.8% (3.2 percentage points more than in 2012), respectively. The lowest degree of penetration was registered in the African countries – 65.9% and in the countries in the Asia and Pacific region – 86.4%.

According to *ITU* data⁵ on the development of mobile services in the different regions of the world, in the countries from Africa, the Asia and Pacific region, and the Arab States, the trend towards increase of the number of mobile services subscribers continues to grow at faster rates compared to the number of mobile services subscribers in the remaining regions. For a five-year period, this increase reached 95% for the African countries, and in 2013, compared to 2012, it was 16%. The lowest degree of increase of this indicator is registered in the European countries.

Fixed voice services

According to *ITU* data, the downward trend in the use of traditional telephone services over fixed networks, persisted in 2013. A slight decline was reported on a world scale for the "number of fixed telephone lines" indicator with 1.8%, or in an absolute value, the decrease was 20 million lines (in 2012, the number of fixed telephone lines was 1,178 million, and in 2013 – 1,158 million). The greatest reduction of the "number of fixed telephone lines" indicator for a one-year period was reported in the Arab countries – 5.2%, while in the countries from the other regions, this decrease was between 1.2% and 2.6%.

A drop was also reported in the degree of penetration of fixed telephony services, as at the end of 2013 only 16.2% (16.7% in 2012) of the world population using this type of services. No change was observed in terms of the leading positions held by the European countries, where the highest degree of penetration of fixed telephone services was once again observed – 39.6% (for 2012, this percentage was 40.3%). The next two places were occupied by the countries from North and South America (27%) and the CIS countries (25%). The lowest degree of penetration was observed in Africa (1.3%)⁶.

Internet

In 2013, the number of Internet⁷ users was over 2.7 billion which is 37.9% of the world population. This percentage was 29.9% in the developing countries, and 75.7% in the developed countries. The European countries reported the highest degree of Internet penetration – 73.1%, followed by the countries from North and Latin America – 61.8%. The lowest degree of Internet penetration was registered in the African countries – 16.8%⁸.

According to *ITU* data, the registered increase of the Internet users in 2013, compared to 2012, was 8%, which was mainly due to the increased consumption in the developing countries. The highest degree of increase in the number of Internet users for 2013 was again reported in the African countries with a growth of 18.3% compared to 2012.

According to *ITU* data, on a global scale, households that had access to Internet services in 2013 made up 40.4% of the households worldwide, which represents an increase of 3.3 percentage points compared to 2012. In the last five years, this indicator registered a growth of 13.3 percentage points which is mainly due to its increase of 22.0 percentage points in the CIS countries. The lowest increase was in the African countries – 6.9 percentage points.

³ <http://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx> -Key 2005-2014 ICT data for the world, by geographic regions and by level of development

⁴ Includes the following countries: the Russian Federation, Ukraine, Moldova, Belarus, Georgia, Armenia, Azerbaijan, Kazakhstan, Kyrgyzstan, Turkmenistan, Uzbekistan and Tajikistan.

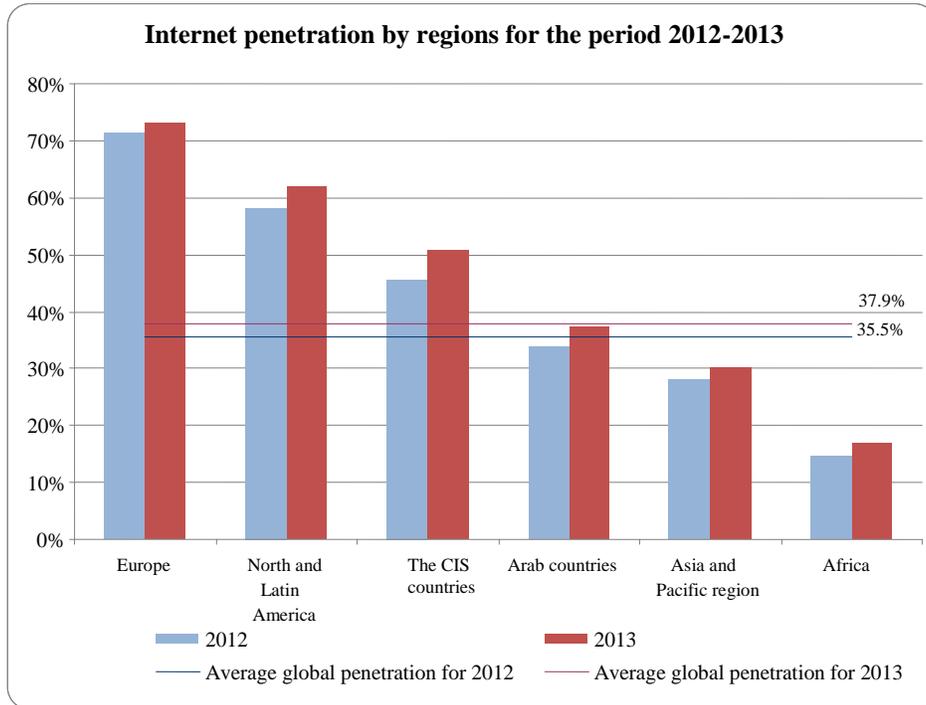
⁵ <http://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx> -Key 2005-2014 ICT data for the world, by geographic regions and by level of development

⁶ <http://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx> -Key 2005-2014 ICT data for the world, by geographic regions and by level of development

⁷ Includes narrow- and broadband Internet access

⁸ <http://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx> -Key 2005-2014 ICT data for the world, by geographic regions and by level of development

The chart below shows the internet penetration by regions for the period 2012 – 2013.



Source: ITU

Figure 2

In 2013, versus 2012, the reported growth in the "Internet penetration" indicator was 2.4 percentage points (for the period 2011 – 2012, this growth was 3 percentage points). The greatest increase of the indicator was reported in the CIS countries – 5.3 percentage points, while in the European countries it was only 1.7 percentage points⁹.

Fixed broadband Internet access

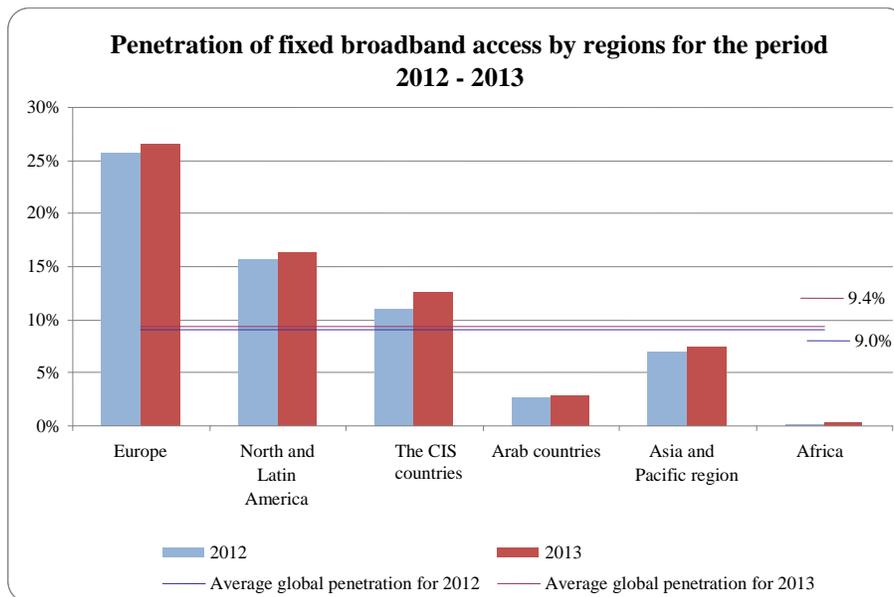
In 2013, the "fixed broadband access" service continued to attract new users (673.3 million subscribers), as it registered a growth of 6.0% in the number of subscribers using this type of service for a one-year period, which in an absolute value represents an increase of 38 million. As in the Internet service, a slowdown was also observed in the growth rate of the number of subscribers of the fixed broadband access for a one-year period of (-) 2 percentage points. This trend applies to a larger part of the regions¹⁰.

The penetration of fixed broadband access (9.4 % in 2013) reports a minimal growth of 0.4 percentage points compared to 2012, which is mainly due to the growth reported by the developed countries (increase of 0.9 percentage points).

The chart below shows penetration of fixed broadband access by regions for the period 2012 – 2013.

⁹ <http://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx> -Key 2005-2014 ICT data for the world, by geographic regions and by level of development

¹⁰ <http://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx> -Key 2005-2014 ICT data for the world, by geographic regions and by level of development



Source: ITU

Figure 3

In 2013, the CIS countries reported the highest degree of increase of the penetration indicator – 1.6 percentage points compared to 2012. In the remaining regions, this change varied between 0.1 and 0.9 percentage points, as it is the least significant in the African countries – 0.1 percentage points.

According to data of *Point Topic*¹¹, in 2013, broadband access using the copper technology (DSL, ADSL and ADSL2+) continued to prevail, although its share compared to the remaining broadband access technologies, decreased. Optical broadband access is increasingly preferred by users and in 2013 its influence continued to grow.

Mobile broadband access

In 2013, mobile broadband access remained an important factor for the development of electronic communications on a global scale. This is evidenced by the reported growth in the number of subscribers of 24.3%¹², which in an absolute value represented an increase of 377 million. According to ITU data, the growth in this segment of the electronic communications market is a result of the increased number of subscribers compared to the 2012 data both in the developing countries (by 36.6%), and in the developed ones (by 13.4%). Subscribers of mobile broadband access continued to be several times (2.9) more than subscribers of fixed broadband access.

The greatest relative increase in the number of mobile broadband access subscribers, for the period 2012 – 2013, was observed in the African countries (by 14.7%), and the least significant one is in the European countries (by 3.07%).

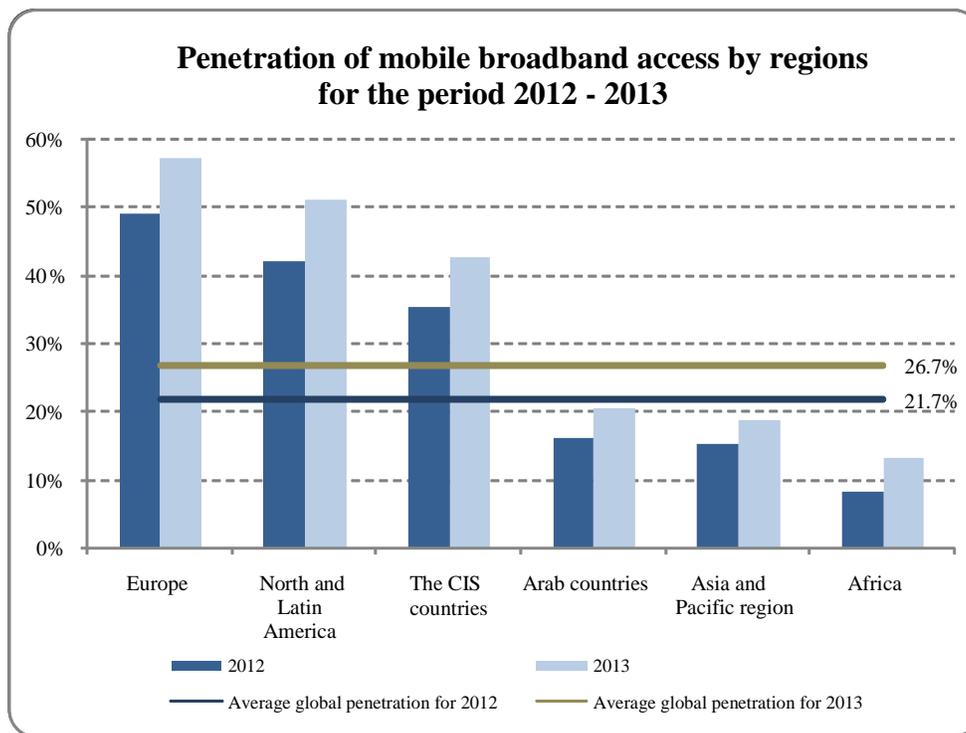
In 2013, the penetration rate of mobile broadband access services expanded by 5 percentage points compared to 2012, as it reached 26.7%.¹³

The figure below presents the global penetration of mobile broadband access by regions, for the period 2012 – 2013.

¹¹ <http://point-topic.com/free-analysis/global-broadband-subscriber-numbers-q4-2013/>

¹² <http://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx> -Key 2005-2014 ICT data for the world, by geographic regions and by level of development

¹³ <http://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx> -Key 2005-2014 ICT data for the world, by geographic regions and by level of development



Source: ITU

Figure 4

The *ITU* data for 2013 show that, during the reporting period under review, the penetration rate of mobile broadband Internet access continued to considerably outstrip the penetration of fixed broadband access (Figure 3 and Figure 4).

The penetration rate of mobile broadband access compared to 2012 was considerably higher than the one of the fixed broadband Internet access. This indicator has increased mostly in the countries from North and Latin America (by 9.2 percentage points in 2013 compared to 2012) and Europe (by 8.0 percentage points in 2013 compared to 2012).

2. Future development of the global electronic communications market

The global electronic communication services market has not yet recovered from the adverse economic conditions of the past years, and the increase in revenue is expected to be slight again.

The forecast of *Gartner Inc.* for 2014 once again envisages an increase in the revenue from telecommunication services. It is expected to be approximately 1.2% compared to the year before, as it is envisaged to reach USD 1.65 trillion¹⁴.

In its 2013 and 2014 report on the information and telecommunication technology market, the European Information Technology Observatory (EITO)¹⁵ envisages a growth in the telecommunication sector of approximately 4.5% in 2014 compared to 2013, as it is mainly due to the dynamic development of the offered mobile services.

The forecast of the analytical company *Ovum*¹⁶ for the breakdown of revenue from electronic communication services in the world, in the middle term (up to 2018), gives prevalence to voice services over broadband Internet access provision services – USD 804 billion against 568 billion.

Nevertheless, the studies in the field of telecommunications carried out by most analytical companies are to a great extent focused on the future development of the Internet access services. In its

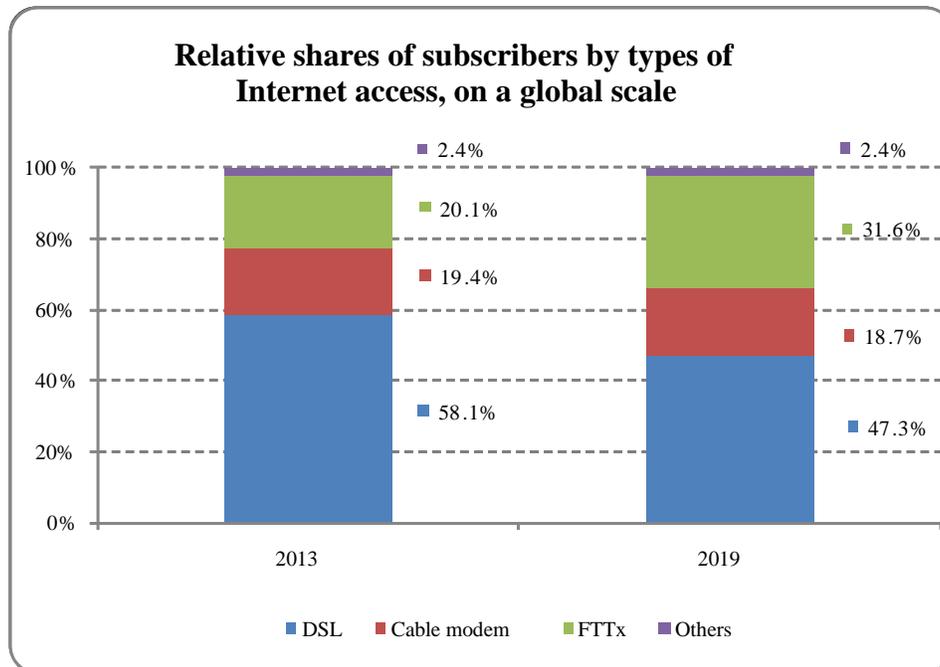
¹⁴ <http://www.gartner.com/newsroom/id/2643919>

¹⁵ <http://www.eito.com/>

¹⁶ <http://ovum.com/wp-content/uploads/2014/01/Ovum-Telecoms-Research-Agenda-2014.pdf>

report on the broadband Internet access¹⁷, *ITU* forecasts that penetration of this type of services up to 2015 will be 45% on a world scale, as it will be approximately 37% in the developing countries. In the same paper, *ITU* quotes data contained in the report of *Ericsson*¹⁸ on the forecast for the proportion between the number of users of fixed and mobile broadband Internet access in 2018. It is expected that over nine times more subscribers will use mobile broadband Internet access (9.1 billion¹⁹), compared to those using the service via fixed networks.

According to the forecast of the independent consulting firm *Broadbandtrends LLC*²⁰, subscribers of fixed Internet access will grow from 683 million in 2013 to 837 million in 2019, as penetration based on households is expected to reach 43.6%, compared to 38% in 2013. Figure 5 displays a forecast for the global development of technologies. DSL will remain the dominant technology, but a drop of nearly 11 percentage points is projected in its relative share compared to the total number of subscribers of fixed broadband access - from 58% in 2013 to 47% in 2019, with a corresponding growth in the relative share of subscribers using FTTx access.



Source: *Broadbandtrends LLC*

Figure 5

According to *Broadbandtrends LLC*, mobile broadband Internet access via the LTE technology remains the greatest threat for the access via fixed networks. This applies mainly to the developing markets where penetration of fixed Internet access is low, the offered mobile Internet speeds and the relevant price levels are comparable to those of the fixed one.

The development of mobile services has an increasing significance both for the telecommunication services sector and the socio-economic progress on a world scale in general. As EITO points out, the development of this sector is additionally boosted by the wider use of new mobile devices, applications and cloud systems.

This trend is also confirmed by the data announced by the *World GSM Association (GSMA)*, stating that a fast-pace growth is expected in the number of mobile services users and the generated data traffic, respectively. It is projected that the number of SIM cards will reach 7.4 billion in 2014 and 9.2 billion at the end of 2020²¹ (Figure 6).

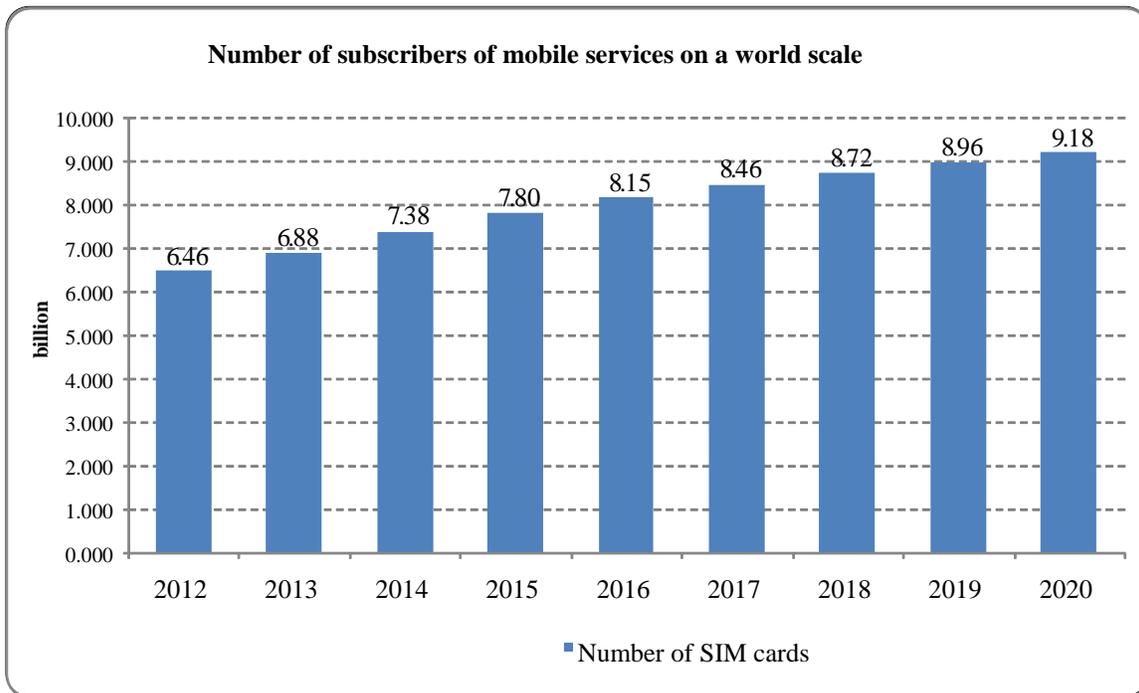
¹⁷ <http://www.broadbandcommission.org/documents/bb-annualreport2013.pdf>

¹⁸ <http://www.ericsson.com/res/docs/2013/ericsson-mobility-report-june-2013.pdf>

¹⁹ Including users using the Internet access service via mobile telephones and other types of mobile devices who have been counted as separate subscription.

²⁰ http://broadbandtrends.com/yahoo_site_admin/assets/docs/BBT_GlobalBBOutlook2013_131090_TOC.9143256.pdf

²¹ http://www.gsmamobileeconomy.com/GSMA_ME_Report_2014_R2_WEB.pdf



Source: GSMA

Figure 6

GSMA forecasts an increase in the number of subscribers of mobile broadband Internet access from 2.2 billion in 2013 to 5.9 billion in 2020. GSMA envisages that the number of LTE networks will grow from 256 at the end of 2013 to over 500 by 2017 in 128 countries in the world.

In this regard, it is also important to place the accent on the European Commission's (EC/the Commission) initiatives in the field of new-generation networks. One of them is the public-private partnership where it participates and as a result of which the scientific research programme in the field of 5G networks – "Project 5G PPP"²², is expected to have a total budget of EUR 4.2 billion. The project is a part of the EU programme for research "Horizon 2020" with a budget of EUR 6.2 billion, out of which the Commission will allocate EUR 700 million on research of mobile technologies and 5G networks.

The dynamics in the development of the telecommunications sector also determines the increased demand for new mobile devices to meet the user expectations. In its annual report "Technology, Media & Telecommunications Predictions 2014"²³, the consulting company **Deloitte** presents its forecast stating that in 2014 the number of sold phablets²⁴ will be equal to one fourth of all smartphones sold in the world. This is twice the volume for 2013 and ten times the sales for 2012. Nevertheless, **Deloitte** expresses its concern that after the initial quick success among the users, 2014 may turn out to be the heyday for phablets, as only a part of the smartphone users are expected to be ready to work with such a large mobile device.

At the same time, the appearance of OTT²⁵ services and the increasing use of mobile devices also determined the growth in the generated mobile data traffic on a global scale - 81%²⁶ in 2013 compared to the year before. In 2014, the number of instant messages sent via mobile telephones (MIM) on a global scale is expected to be more than twice the number of short text messages (SMS) - 50 billion versus 21 billion - a day.

²² <http://5g-ppp.eu>

²³ <http://www2.deloitte.com/global/en/pages/technology-media-and-telecommunications/articles/tmt-predictions-2014.html>

²⁴ phablet – a smartphone and tablet in one, smartphones with 5.0 – 6.9 inch screens

²⁵ over-the-top - online delivery of content without the Internet provider being involved

²⁶ http://www.cisco.com/c/en/us/solutions/collateral/service-provider/visual-networking-index-vni/white_paper_c11-520862.html

In its report, "Pyramid Perspective 2013 - Top Trends in the Global Communications Industry"²⁷ the analytical company **Pyramid Research** outlines the main trends in the development of the telecommunications market on a global scale:

- Consolidation of the mobile services market as a result of the decline in the growth rate of the number of subscribers, the increase in the initial capital expenses, and the decrease in the profit margin. **Pyramid Research** finds potential for this process in countries where the number of undertakings providing mobile services is higher (over three or four), in some countries from Africa and the Asia and Pacific region, as well as in countries from Central and Eastern Europe (Poland, Ukraine, Russia, Romania), where the indicators of mobile services market growth reflect the market situation in the same sector in the developed countries.
- Intensified exploitation of a common (shared) infrastructure by the undertakings providing electronic communications provoked by the need to use the scarce frequency resource and the high costs for development of their own network.
- Change in the model of payment for subscribers using mobile broadband Internet access through a LTE technology to become more reasonable and dynamic according to the consumer behaviour compared to the former way of payment used for the 3G networks where a certain volume of data is offered at a maximum attainable speed.
- Expanding the scope of use of M2M services²⁸ to more spheres of life, as this will lead to increased revenue from the provision of this type of services.
- Entry of undertakings providing mobile services to the OTT services segment through development of their own mobile applications or by entering into partnerships with the companies engaged in this business sector with the purpose to satisfy the consumer demand and take advantage of the possibility to increase their revenue.

3. Volume and structure of the Bulgarian electronic communications market

3.1. Volume of the market

In 2013, the Bulgarian electronic communications market registered a considerable decline (see Figure 7). The decline is in line with the overall economic development of the country as a result of the monetary policy aimed at restrictions in the income growth which resulted in a decreased consumption.

The number of undertakings registered with CRC as of 31.12.2013 for the provision of public electronic communications was 1129 (2.08% less than the previous reporting period), of which 1038 have submitted information to CRC for their activities in 2013.

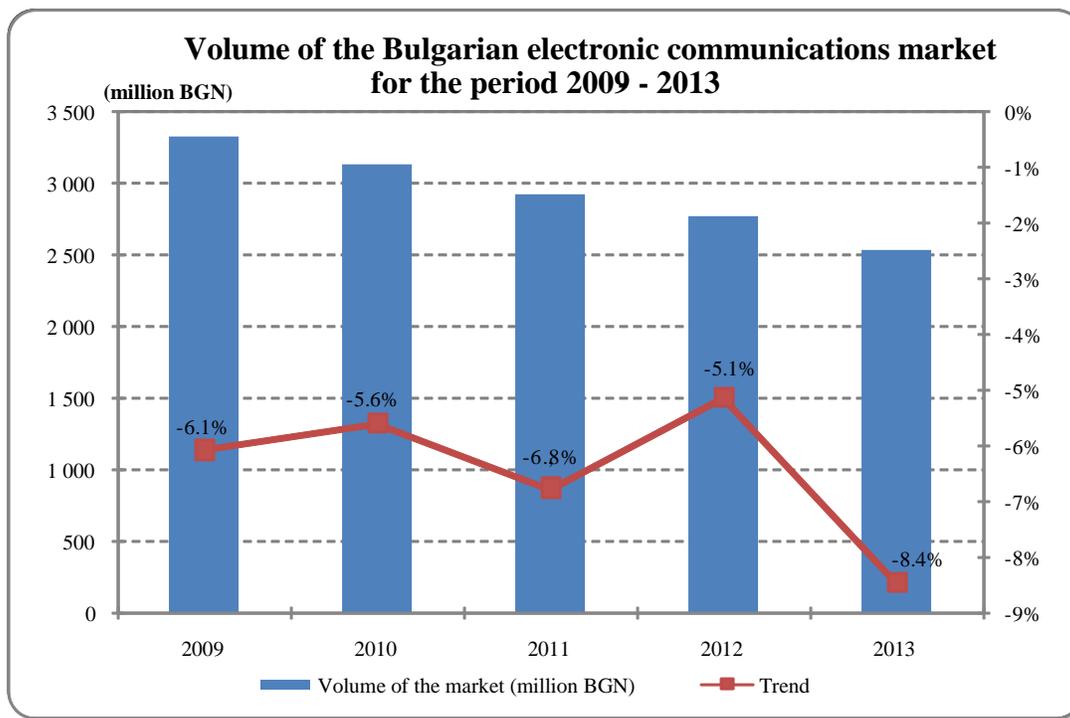
The volume of the electronic communications market for 2013 amounted to BGN 2.544 billion and was calculated based on summarized data provided by 862 undertakings that have been active in the reporting period. The total volume of the market included revenue generated by 37 undertakings which in 2013 submitted a notice for termination of their activity but reported revenue from the provision of public electronic communications by sending a questionnaire for activity reporting for the current year.

The figure below presents the dynamics in the volume of electronic communications market in the country for the period 2009 – 2013²⁹.

²⁷ <https://www.pyramidresearch.com/2013-Top-Trends.htm>

²⁸ Machine-to-machine - services for automated data transfer between different devices/machines and a central information platform

²⁹ The data for 2011 and 2012 have been updated



Source: Data submitted to CRC

Figure 7

Over the last five years (2009 – 2013), the volume of the Bulgarian electronic communications market has dropped by 23.6%, as for the period 2012 – 2013, this decrease was 8.4%, which in an absolute value represents BGN 234.6 million. This change is due to the greater drop (compared to the previous reporting period) of revenue in some market segments: fixed and mobile voice services, as well as reduction of revenue from the leased lines segment. It has also been influenced by the smaller degree of increase in the revenue generated in the data transfer and Internet and bundled services segment in 2013.

The total volume of the electronic communications market in 2013 represented 3.3% of the total GDP³⁰ of Bulgaria.

3.2. Structure of the market

Information on revenue from the activity related to provision of public electronic communications by segments determined according to the type of services provided in Bulgaria for the period 2011 - 2013, is presented on Table 1.

³⁰ Calculated using current prices. Source: NSI, http://www.nsi.bg/sites/default/files/files/data/timeseries/GDP_1.1.1.xls

Table 1

Structure of the public electronic communications market in Bulgaria according to the type of services provided for the period 2011 – 2013

Services related to the provision of public electronic communications	Year		
	2011	2012	2013
	(million BGN)		
1. Voice telephone services	2,046.18	1,796.66	1,485.42
<i>1.1. Fixed voice service through geographic numbers from NNP, "carrier selection" service and public payphones¹</i>	305.32	265.77	226.64
<i>1.2. Mobile voice service through numbers from NNP</i>	1,734.08	1,523.80	1,250.88
<i>1.3. Other voice services²</i>	6.77	7.07	7.89
2. Leased lines services	43.90	45.02	35.22
3. Data transfer and/or Internet access services	316.04	344.59	364.67
4. Transmission and/or broadcasting of radio and/or television programs	243.81	235.15	257.55
5. Bundled services	238.48	310.55	350.36
6. Other services³	40.20	46.49	50.61
Total	2,928.64	2,778.48	2,543.85

¹ The data for 2011 and 2012 have been updated.

² Includes revenue from the provision of VoIP (voice IP service where numbers (geographic or non-geographic) from NNP are not used, the service has no guaranteed quality and the user must use/have Internet access through the respective device - computer/telephone), voice service provided through numbers with national destination code "99x" and from the provision of voice service through trade agency.

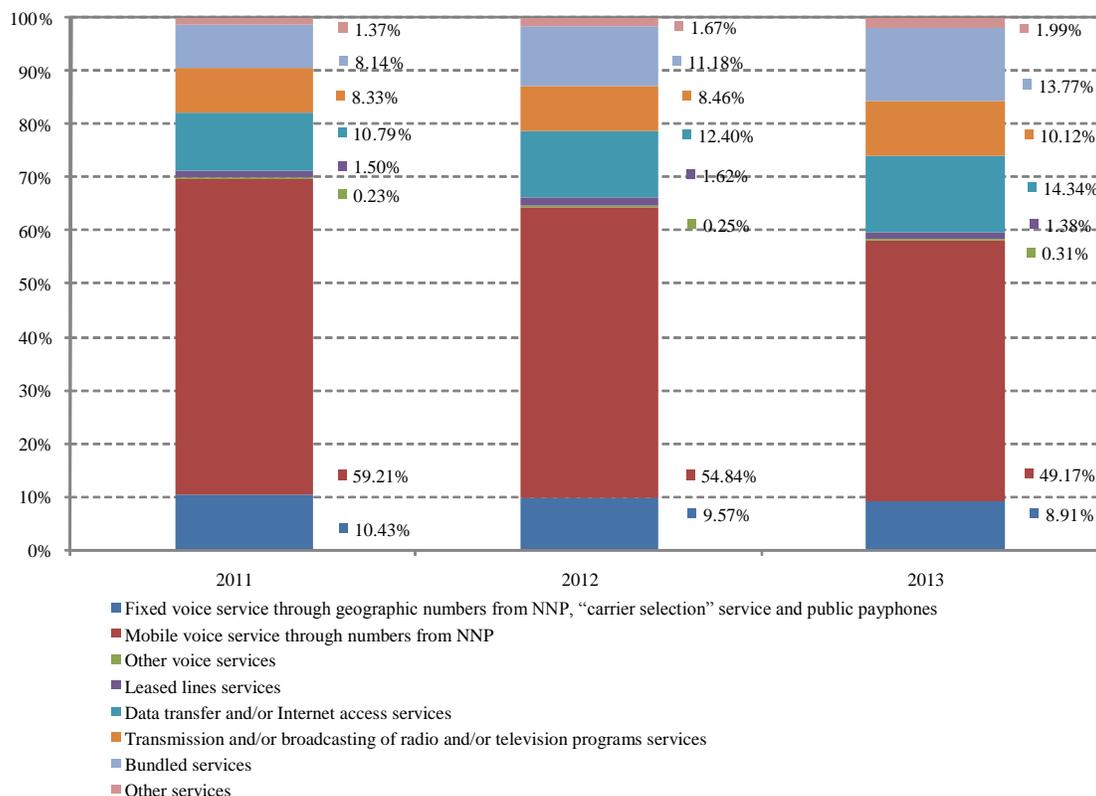
³ The segment includes revenues from provision of duct network access, satellite systems access services, co-location services other than the provided for interconnection and unbundled access, and other services.

Source: Data submitted to CRC

The change in the relative shares³¹ of the segments in the structure of the electronic communications market for the period 2011 – 2013 is presented on Figure 8.

³¹ Calculated on the basis of the total revenue from activity

Structure of the Bulgarian electronic communications market, 2011 - 2013



Source: Data submitted to CRC

Figure 8

The above data (Table 1 and Figure 8) show that the total volume of the market formed by revenue from the provision of electronic communications services continued to be determined by the voice services, the stand-alone data transfer and/or Internet access services and the bundled services in 2013 as well.

Despite the reported drop of 6.3 percentage points compared to 2012, in 2013, the share of voice telephone services (fixed, mobile and other voice services) in the total volume of the public electronic communications market remained the highest (58.4%). The stand-alone data transfer and/or Internet access services that took up 14.3% of the total market volume, rank second, as the observed increase was 1.9 percentage points compared to 2012. The next place in terms of importance in 2013 is once again held by bundled services, as the revenue from their provision represented 13.8% of the total market volume which was an increase of 2.6 percentage points compared to 2012.

Based on the above information, the following trends were outlined regarding the Bulgarian electronic communications market in 2013, as compared to 2012:

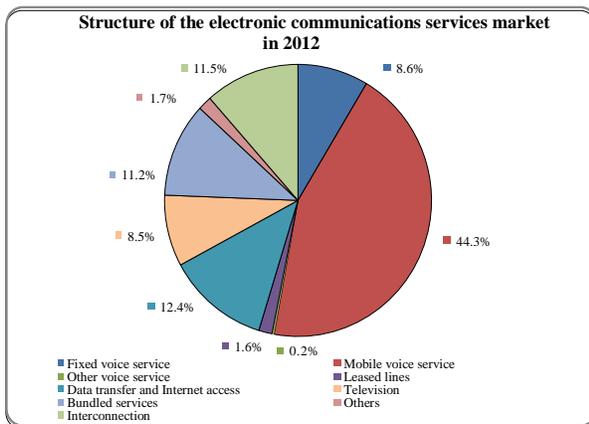
- A decline (in an absolute value) of 17.3% was registered in the "Voice telephone services" segment, as the highest decrease was observed in the mobile voice service – 17.9%;
- In the "leased lines services" segment, unlike 2012 when an increase of 2.54% in the revenue from this service was registered, in 2013, the indicator reports a great decrease – 21.76%, which was due to a drop in the revenue from the provision of both wholesale and retail leased lines;
- In the "data transfer and/or Internet access services" segment, the volume of revenue was up by 5.8%, as an increase in revenue was observed in the two main services provided in this segment – Internet access and data transfer;
- In the "Transmission and/or broadcasting of radio and/or TV programs services" segment, unlike the previous reporting period (a drop of 3.55% in 2012 versus 2011), in 2013, an increase of 9.5%

in revenue was observed, which was mainly due to a significant increase in the revenue from IPTV;

- The volume of revenue in the “Bundled services” segment registered an increase of 12.8%. The data show the onset of saturation of the electronic communications services market in terms of the different bundles that are offered;
- A growth of 8.9% was observed in the “Other services” segment which was mostly due to the increase of revenue from satellite system access services (increase of 183.6% since 2012). The other services in this segment also registered a growth. For the "co-location and other forms of shared use, including the provision of towers, masts, etc." services, the increase was 8.9% as compared to 2012, and for the "provision of duct network access" service – 6.2% for a one-year period.

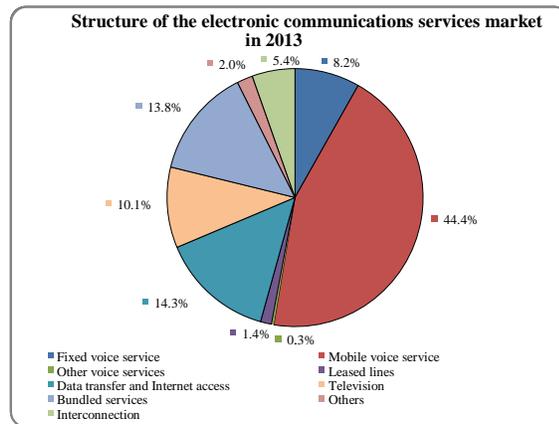
Interconnection

In 2013, the trend of the previous years towards decline in the volume of revenue from interconnection³² was preserved (Figures 9 and 10).



Source: Data submitted to CRC

Figure 9



Source: Data submitted to CRC

Figure 10

For a one-year period (2012 - 2013), revenue from interconnection has dropped by 57%. The share of revenue from interconnection in the total volume of the market also fell, as in 2013 it is 11.5%, or by 3.2 percentage points less compared to the previous reporting period (2012). The reduction of the revenue from interconnection is mainly due to the lower wholesale termination rates on fixed networks and termination rates on individual mobile networks effective as of 01.01.2013 (Decision No. 1361/31.05.2012 and Decision No. 1362/31.05.2012), and as of 01.07.2013 (Decision No. 134/14.02.2013 and Decision No. 135/14.02.2013).

Investments

The total amount of investments in deployment and maintenance of public electronic networks and services in 2013 reached BGN 524 million, compared to the investments of BGN 555 million, planned in 2012 for 2013. The reduction in the total volume of investments in 2013 was only 4% compared to the resources invested in 2012 and resulted from changes in the investment plans and from the continuing implementation of long-term investments. The number of undertakings which invested in 2013 was 473, or over half of all undertakings that were active during the year. According to data submitted to CRC, for 2014, 410 undertakings intend to invest approximately BGN 624 million in the activity related to provision of public electronic communications.

In 2013, a new indicator was introduced to report the investments made during the year and those allocated for the following year in networks for next-generation access (NGA). The 2013 data show that 62

³² When calculating the volume of the "interconnection" segment, revenue is included from: physical interconnection (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); origination and transit.

undertakings invested in building or upgrading their networks into NGA networks a total of BGN 86 million, while 63 undertakings have allocated BGN 88 million for investments in NGA in 2014.

4. Voice telephone services

The trend towards a reduction in the revenue from the services included in the "voice telephone services" market segment that was established in the period 2009-2012, persisted in 2013 as well. The total volume of this segment amounted to BGN 1.485 billion which represented a drop of 17.3% as compared to the revenue realized in 2012. The "voice telephone services" segment includes the provision of fixed voice services through geographic numbers from the NNP, the provision of public telephone service via the "carrier selection" service, telephone services via public payphones, mobile voice service through numbers from the NNP (including short text messages (SMS) and multimedia messages (MMS) and other voice services. Revenue from the "other voice services" position is formed from the provision of VoIP³³, voice service provided through numbers with national destination code 99x, and from the provision of voice service through trade representation.

Table 2 presents summarized information on the reviewed segment, namely: number of undertakings which provided services in this market segment in 2013, the number of their subscribers/lines who used voice telephone services, and the revenue from services provided.

Table 2

Number of undertakings, subscribers/lines and revenue by type of voice telephone services provided in 2013

Name of the service	Number of undertakings providing the service as of 31.12.2013	Number of subscribers/lines as of 31.12.2013		Revenue (in million BGN, VAT excl.) ²
		Total ¹	incl. bundled service subscribers	
1. Fixed voice service	///	///	///	226.643
1.1. Fixed voice service through numbers from the NNP and the "carrier selection" service	28	1,891,163*	537,197	224.793
1.2. Telephone service through public payphones	6	11,096**	///	1.849
2. Mobile voice service through numbers from the NNP	3	10,486,824	1,409,411	1,250.880
3. Other voice services ³	26	///	///	7.898
Total		///	///	1,485.421

¹ Incl. bundled service subscribers

² Excl. revenue from bundled services

³ Incl. VoIP, voice service through numbers with national destination code "99x" and others (resale, trade representation)

* Number of lines of fixed voice telephone service subscribers

** Number of public payphones/telephone booths

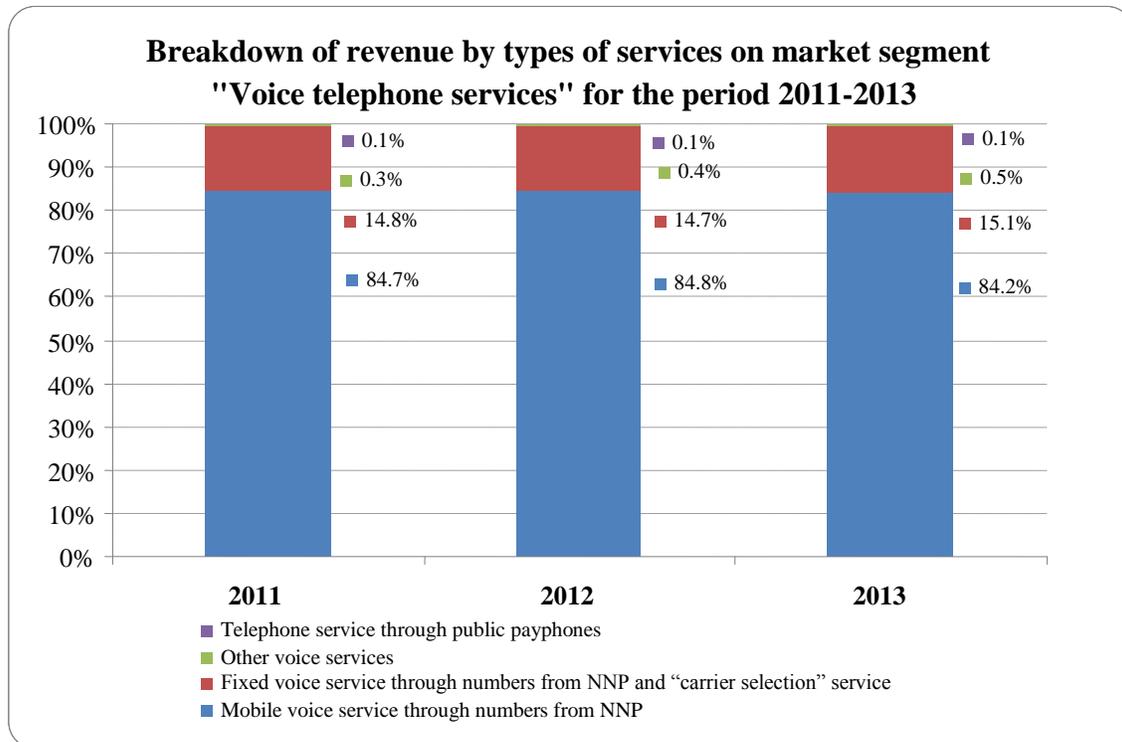
Source: Data submitted to CRC

In 2013, the total number of undertakings which declared activity on providing fixed telephone service amounted to 28, which was by 3 more than the year before. These are "BULSATCOM" AD, "IP WORLD COMMUNICATIONS" OOD and "NET 1" EOOD which are not new to the electronic communications market as they are providers of other electronic communications services, such as data transfer and/or Internet access services, VoIP and transmission and/or broadcasting of radio and TV programs services.

The number of undertakings which declared activity on providing telephone service via public payphones/telephone booths was also up by three, but this has no significant influence on the number of public payphones/telephone booths maintained during the year, as these undertakings were entering the segment with only a few telephone booths. "BULGARIAN TELECOMMUNICATIONS COMPANY" EAD (BTC), as an undertaking imposed the obligation to provide the universal service, maintains the main part of the public payphones/telephone booths (over 99%)

³³ Voice IP service where numbers (geographic or non-geographic) from the NNP are not used, the service has no guaranteed quality and the user must use/have Internet access through the respective device - computer/telephone.

As it is clear from Table 2, the major part of the revenue in the segment is formed by the provision of mobile voice service with numbers from the NNP. Figure 11 shows the distribution of revenue from different services in the segment volume for the period 2011 - 2013.



Source: Data submitted to CRC

Figure 11

In 2013, the breakdown of revenue by types of services in the market segment "voice telephone services" did not undergo any significant change, compared to the years before. For yet another year mobile voice service held the highest share in revenue generated from voice services (84.2%), followed by revenue from fixed voice service through numbers from the National Numbering Plan (NNP) and the "carrier selection" service with 15.1%. The share of revenue from public payphones and the part of revenue generated from other voice services remained close to the levels of the previous years.

4.1. Fixed voice telephone services

Players on the fixed telephone services market

Undertakings providing services included in the "fixed voice telephone services" segment can generally be divided in two groups:

- undertakings providing public electronic communications under an authorization regime through the use of individually assigned scarce resource - numbers. This group includes the undertakings providing access to public telephony service through geographic numbers and through the "carrier selection" service, and the undertakings providing services through non-geographic numbers and the "transit" service;
- undertakings providing access to public telephony service via public payphones – the activity is carried out under a notification regime.

In 2013, CRC issued authorizations for the use of individually assigned scarce resource – numbers for provision of public electronic communications to five undertakings. The authorizations of COMPATEL LIMITED and "TELECOMMUNICATION COMPANY VARNA" EAD, "NOVATEL" EOOD and "TRITEL" OOD refer to the use of geographic numbers from the NNP, while "ALPHA TEC" OOD was given an access code to the "carrier selection" service.

Activity on the provision of fixed telephone services in 2013 was declared by 28³⁴ undertakings.

Development of the "fixed voice telephone service" segment

In 2013, the development trends in the "fixed telephone service" segment remained unchanged. The decreasing customers' interest to the fixed telephone services led to reduced consumption, therefore this market segment was characterized by a decline:

- in the total volume of revenue generated in 2013 from the provision of fixed telephone services³⁵, access to public telephone services through the "carrier selection" service, and access to public telephone services through public payphones and telephone booths, which amounted to BGN 226.6 million in 2013, which is a decrease of 14.7% compared to 2012;
- in the market share of the incumbent calculated both on the basis of revenue from providing public fixed telephone service on a fixed network and the "carrier selection" service, and on the basis of the number of fixed telephone lines. In 2013, the market share of the incumbent undertaking calculated on the basis of revenue amounted to 85.7%, down by 1.6 percentage points compared to 2012, while the one calculated on the basis of the number of lines made up 67.8%, which represented a decline of 0.4 percentage points compared to the year before;
- in the volume of outgoing traffic (measured in minutes) from subscribers³⁶ from national (local and long-distance calls, calls to terrestrial mobile networks, to networks for broadband wireless access, and to non-geographic numbers) and international calls. In 2013, as compared to 2012, the decline was 14.3%, compared to 10.0% of decrease in 2012 against 2011. The consumption of the "carrier selection" service also continued to shrink. The volume of the traffic generated from the "carrier selection" service was down by 36.5% compared to 2012, and its share in the total volume of telephone traffic originated by subscribers of fixed telephone service reached only 0.2%;
- in the total number of fixed telephone lines and in the number of subscribers to the "carrier selection" service.

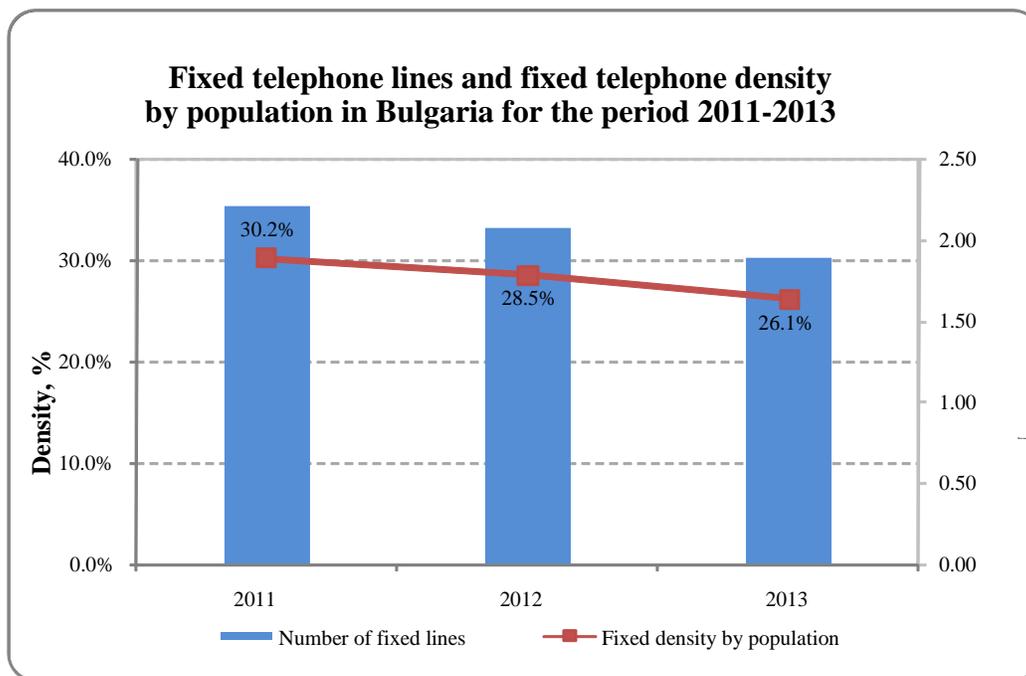
According to data submitted to CRC, the number of undertakings which provided access to fixed telephone service through geographic numbers from the NNP at the end of 2013 reached 22, and 3 of them also offered access to public telephone service via the "carrier selection" service.

The information submitted by the undertakings which provide access to end users to a fixed telephone service shows that, compared to the previous years, in 2013, the trend towards increase of the subscribers to fixed telephone lines with an access via mobile networks and of the subscribers who use fixed telephone service as a part of a bundled service with other electronic communications services has discontinued. The drop in the number of subscribers of fixed telephone service in 2013, compared to the previous year, was 8.8% (Figure 12).

³⁴ "IDT NETWORK" AD, "BLIZOO MEDIA AND BROADBAND" EAD, "BTC NET" EOOD, "BULSATCOM" AD, BTC, "VARNA NET" OOD, "VESTITEL BG" AD, "VMOBILE" AD, "VOICECOM" AD, "VOXBONE" S.A., "GLOBAL COMMUNICATION NET" AD, "GOLD TELECOM BULGARIA" AD, "ESCOM" OOD, "EASTERN TELECOMMUNICATION COMPANY" AD, "INTERBUILD" OOD, "INTERROUTE BULGARIA" EAD, "IP WORLD COMMUNICATIONS" OOD, "CABLE SAT-WEST" OOD, "COSMO BULGARIA MOBILE" EAD, "MOBILTEL" EAD, "NEXCOM-BULGARIA" EAD, "NET 1" EOOD, "NET IS SAT" OOD, "NET-CONNECT INTERNET" EOOD, "NETFINITY" EAD, "ORBTEL" EAD, "TELECOM 1" OOD and "TERRA VOICE" EAD (by Decision No. 535 of 08.08.2013 of CRC, the license of TERRA COMMUNICATIONS AD for the use of individually assigned scarce resource - numbers for public electronic communications - was transferred to "TERRA VOICE" EAD)

³⁵ Excluding revenue from installation fees and monthly subscriptions for fixed telephone service included in bundled services.

³⁶ Including traffic originated by subscribers of fixed telephone service, incl. the "carrier selection" service, as well as traffic from calls from public payphones.



Source: Data submitted to CRC

Figure 12

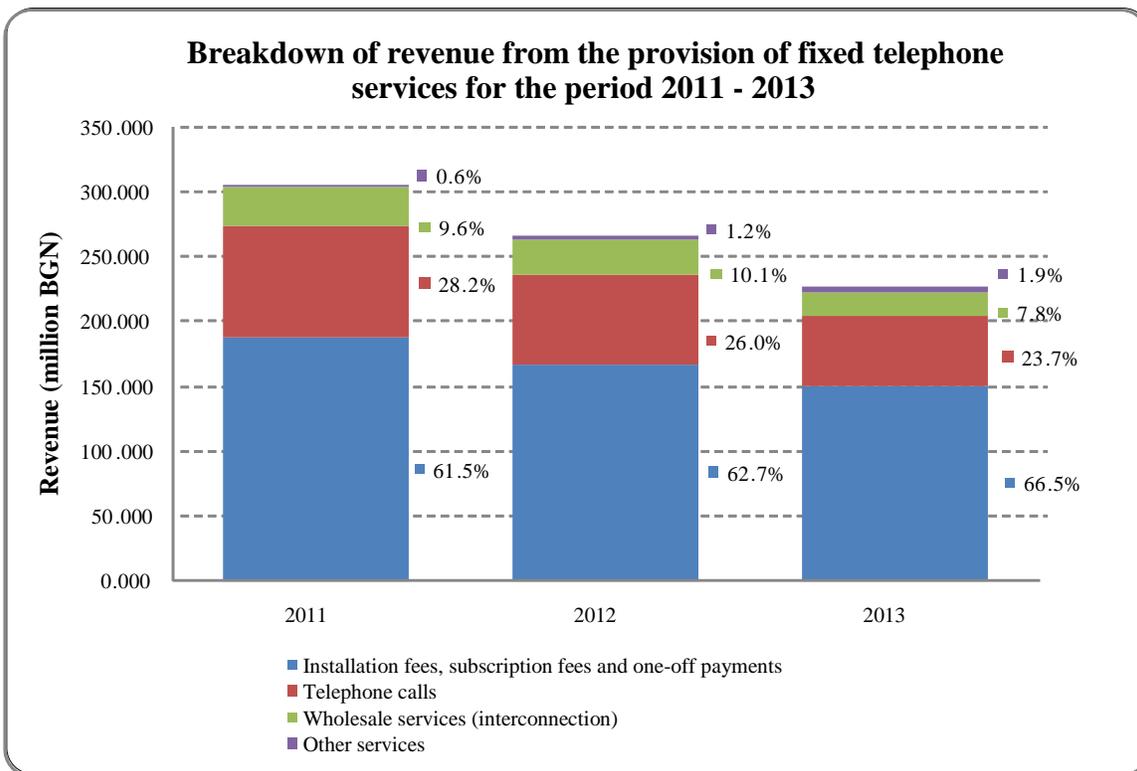
The general decline reported in 2013 was due not only to the decreased number of fixed telephone lines of the incumbent undertaking (by 9.3%), but also to the change in the number of fixed telephone lines of subscribers of the alternative undertakings which, at the end of 2013, has decreased by 7.9% compared to the year before. The decreased number of fixed telephone lines reflects on the value of the "fixed density by population" indicator calculated as the ratio between the total number of active telephone lines and the number of the country's population as of 31 December of the respective year.

In the "carrier selection" service, in addition to the decreased consumption for another consecutive year, a drop was also reported in the number of subscribers using this service. At the end of 2013, the number of subscribers of this service in an absolute value was below 700, and their share in the total number of subscribers of fixed telephone service was insignificant - 0.03%.

Breakdown of revenue and traffic generation from the provision of a fixed telephone service

As it is clear from Figure 13, the bulk of the revenue generated from the provision of fixed telephone service³⁷ is formed by revenue from subscriptions. For the period 2011 - 2013, there has been an increase in the relative share of revenue from subscriptions by 5 percentage points, which is mainly at the expense of the decrease in the relative share of revenue generated from telephone calls.

³⁷ Excluding revenue from monthly subscription and installation fees for a fixed telephone service which is included in a bundle with other electronic communications services. Including revenue from the "carrier selection" service and revenue from calls via public payphones and telephone booths.



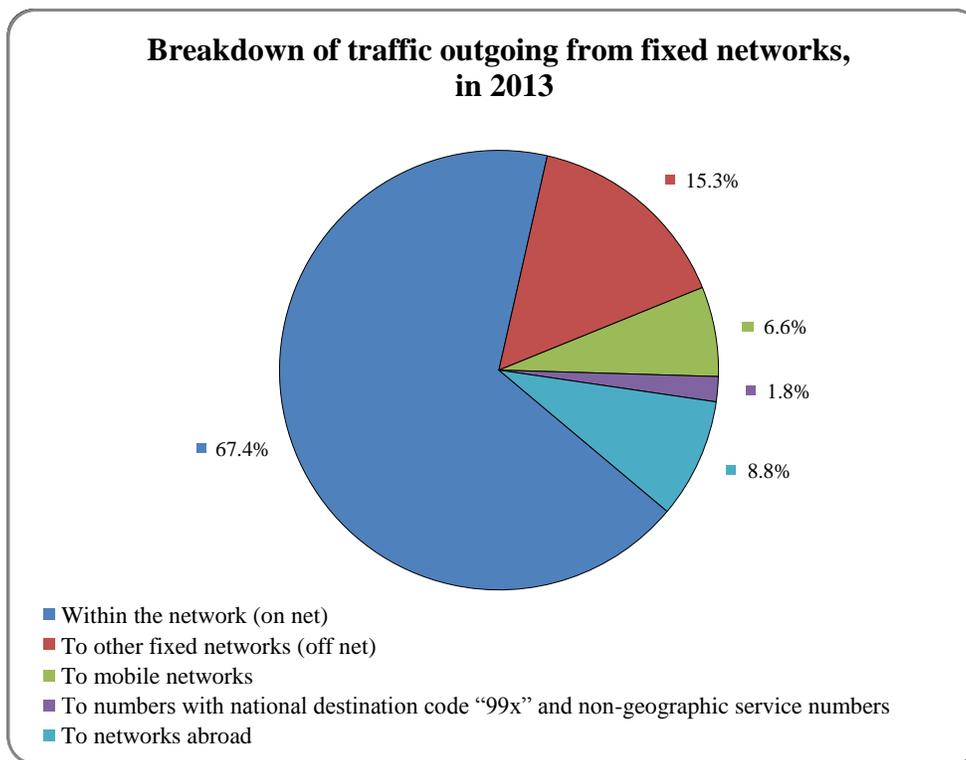
Source: Data submitted to CRC

Figure 13

Revenue generated from telephone calls decrease not only as a relative share in the total volume of revenue from fixed telephone service, but also in an absolute value, as this decrease for the period 2011 - 2013 is an average of around 20% per year. This is due to the already established practice of offering subscription plans with included free minutes for telephone calls. The data submitted by the undertakings reveal that a significant part of the volume of traffic generated by subscribers of fixed telephone service represents minutes included in the monthly subscriptions. In 2013, this type of traffic amounted to nearly 68% of the total retail traffic, as the greatest share of which, as it was expected, was made up of on net calls, and the smallest share – of calls to mobile networks.

Figure 14 displays the breakdown of the total volume of traffic generated from fixed networks.³⁸ As it is clear, the bulk of the volume of traffic is made up of on net calls, followed by calls to other fixed networks, and calls to networks abroad.

³⁸ Including traffic generated by subscribers of fixed telephone service with geographic numbers from the NNP, traffic generated by subscribers to the "carrier selection" services, and traffic from public payphones and public booths.



Source: Data submitted to CRC

Figure 14

Although occupying a major part of the total traffic generated in 2013, as compared to the previous year, the share of traffic from on net calls registered a slight decrease - by approximately 3 percentage points. In an absolute value, this decrease amounted to 17.8%. As for calls to other fixed networks, their share rose by a little over 2 percentage points, compared to the year before, and a growth of 0.7% was reported in an absolute value.

Public payphones

According to data of the undertakings, at the end of 2013, the number of public payphones and telephone booths in the country was 11,096. It may be noted that, compared to the preceding period, their number remained the same, and even a slight increase is registered (by 0.1%). In spite of this and regardless of the increased number of undertakings that maintain public telephone booths, the traffic and revenue from this service were down in 2013 as well, by 18.8% and 19.0%, respectively. As a whole, the traffic, revenue and number of maintained public payphones and telephone booths was almost entirely generated from the BTC's activity arising from the obligations of the undertaking in its capacity of universal service provider.

4.2. Mobile voice telephone services

Market players

In 2013, the number of undertakings which provided public mobile telephone services on the Bulgarian market was retained. The players on this market segment are "MOBILTEL" EAD, "COSMO BULGARIA MOBILE" EAD and BTC.

Network coverage

The table below presents information about the coverage as of 31.12.2013 of the terrestrial mobile networks of the three undertakings.

Table 3

Undertaking \ Index	Mobitel EAD		Cosmo Bulgaria Mobile EAD		BTC	
	GSM	UMTS	GSM	UMTS	GSM	UMTS
Coverage by territory	99.51%	97.87%	99.49%	80.39%	99.60%	97.90%
Coverage by population	99.99%	99.73%	99.98%	96.09%	99.99%	99.81%

Source: Data submitted to CRC

The above data clearly shows that coverage by GSM standard makes up over 99.5% of the territory of the country and 99.98% of the population. Therefore, investments of undertakings are focused on networks of UMTS standard. At the end of the year, BTC was the undertaking with the largest coverage by population of its mobile network of UMTS standard. The greatest growth of UMTS coverage by territory for a one-year period was registered by "COSMO BULGARIA MOBILE" EAD - nearly 4 percentage points.

The total number of active base stations of UMTS standard of the three undertakings increased, and as of 31.12.2013, it reached 3,911, which represents a growth of nearly 15% compared to the end of the previous year. Considering the achieved coverage of nearly 100% of GSM standard by territory and population, the increased number of GSM base stations since the end of the preceding year was within 1.8%, and as of 31.12.2013, their total number reached 7,721.

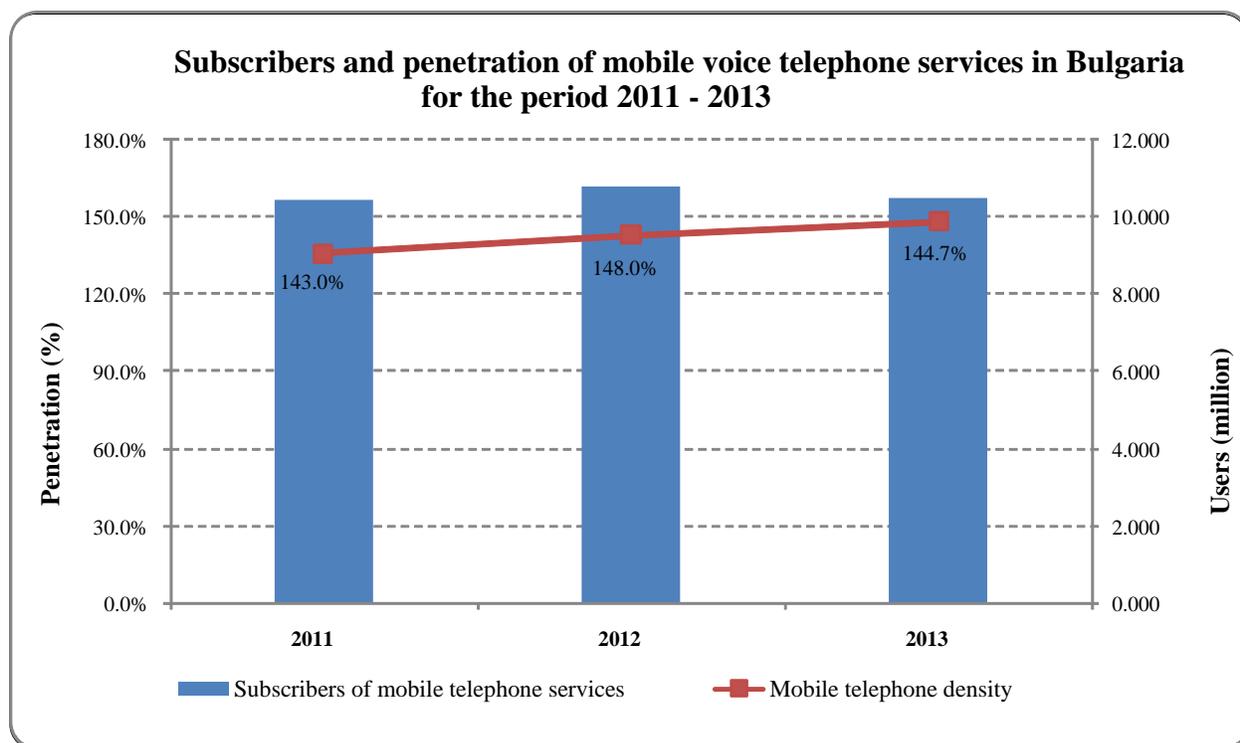
Development of the mobile voice telephone services segment

In 2013, this market segment is characterized by a decline in the following indicators:

- total revenue from providing mobile telephone services fell by 17.9% compared to the year before reaching BGN 1.251 billion at the end of 2013³⁹;
- the number of active SIM cards allowing the use of voice services which was 10,486,82440 as of 31.12.2013 - down by 2.7% since the end of 2012 (Figure 15).

³⁹ Includes revenues from mobile voice telephone services and supplementary services related to the mobile voice service (such as SMS, MMS, video calls, information services, etc.), except for revenue from monthly subscriptions for mobile telephony services provided bundled with other electronic communication services.

⁴⁰ Including the number of active SIM cards allowing the use of voice services and with 12-month validity of prepaid cards. Excluding the data transfer cards not allowing the making of voice calls.



Source: Data submitted to CRC

Figure 15

As a result of the decrease in the total number of the subscribers of mobile telephone services in 2013, the indicator of mobile telephone density registered a drop of a little over 3 percentage points since 2012, thus reaching 144.7%.

- market share of "MOBILTEL" EAD⁴¹, calculated both on the basis of the number of subscribers and the revenues from providing mobile telephone services, at the expense of an increased market share mainly of BTC⁴² and an insignificant increase in the market share of "COSMO BULGARIA" EAD⁴³.

Among the main factors that influenced over the segment development and the registered for another consecutive year drop of the above indicators, is the saturation of the traditional voice services markets, the reduced termination rates on individual mobile networks imposed by CRC's Decision No. 1362/31.05.2012 and Decision No. 135/14.02.2013, and the increased consumption of mobile telephone services offered in bundle with other electronic communication services. It should be noted that the general revenue indicator covers revenue from mobile telephone service provided stand-alone only. The number of subscribers of bundled services including mobile telephone services made up 13.4% of the total number of mobile telephone services users as of 31.12.2013.

Ratio between users of prepaid services and contract subscribers

As it is clear from the figure below, the number of the contract subscribers in Bulgaria registered an increase at the expense of prepaid services subscribers whose share in the total number of

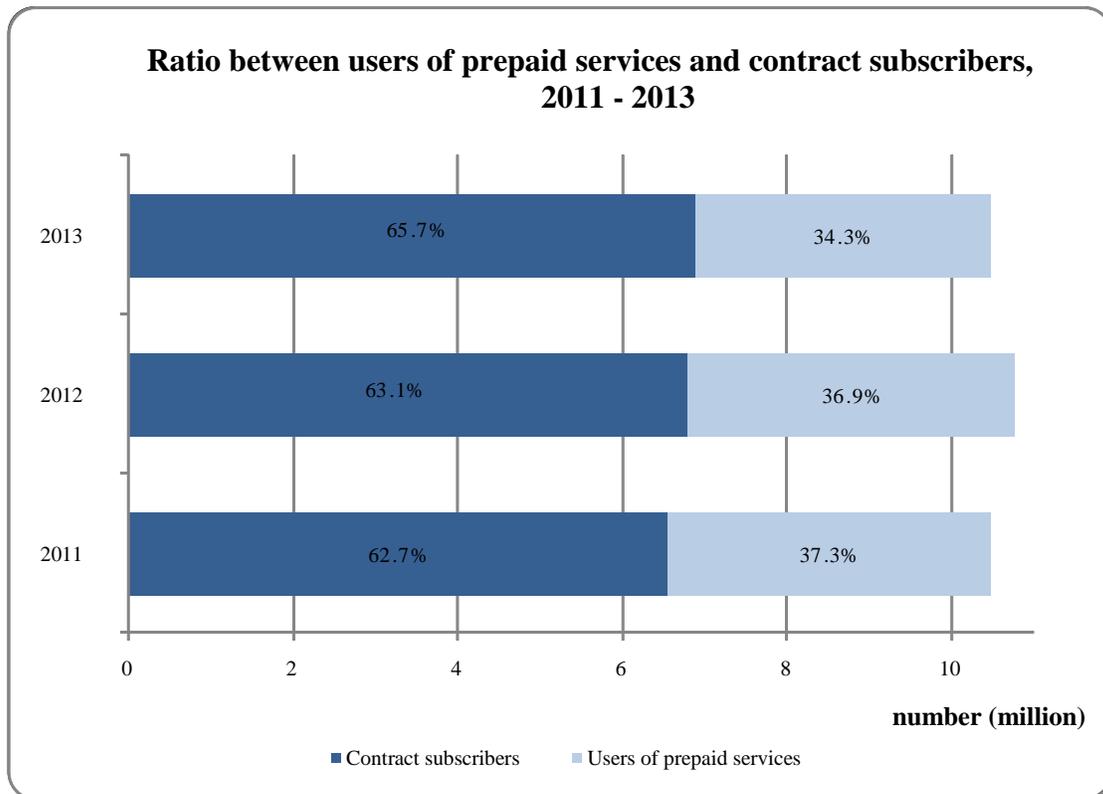
⁴¹ In 2013, the relative share of "MOBILTEL" EAD calculated on the basis of number of subscribers amounts to 40.7%, down by nearly 2.6 percentage points for a one-year period, while the one calculated on the basis of revenue makes up 42.3%, as it registers a drop of 2.3 percentage points.

⁴² In 2013, the relative share of BTC calculated on the basis of the number of subscribers amounted to 22.1%, up by nearly 1.7 percentage points since the year before, while the one calculated on the basis of revenue made up 21.3%, as it registered a growth of 2 percentage points.

⁴³ In 2013, the relative share of "COSMO BULGARIA MOBILE" EAD calculated on the basis of the number of subscribers amounted to 37.2%, up by 0.8 percentage points since the year before, while the one calculated on the basis of revenue made up 36.4%, as it registered a growth of 0.3 percentage points.

subscribers of mobile telephone services dropped by 34% (Figure 16)⁴⁴. In 2013, following the trend of the preceding years, over half (51.8%) of the new subscribers activated during the year were under contract.

The decline in the reported number of prepaid cards as of 31.12.2013 – nearly 10%, reflected on the number of active SIM cards indicator which, as it was already mentioned, was down, compared to the previous year.



Source: Data submitted to CRC

Figure 16

Subscribers of services provided under different trademark⁴⁵

According to data submitted to CRC as of 31.12.2013, the relative share of the number of subscribers of services provided under different trademark in the total number of active SIM cards allowing the use of voice services, remained stable compared to the data at the end of 2012 - around 6%. A slight decrease was reported in their absolute number - around 7% on a year-over-year basis - which was mainly due to the drop in the number of prepaid cards.

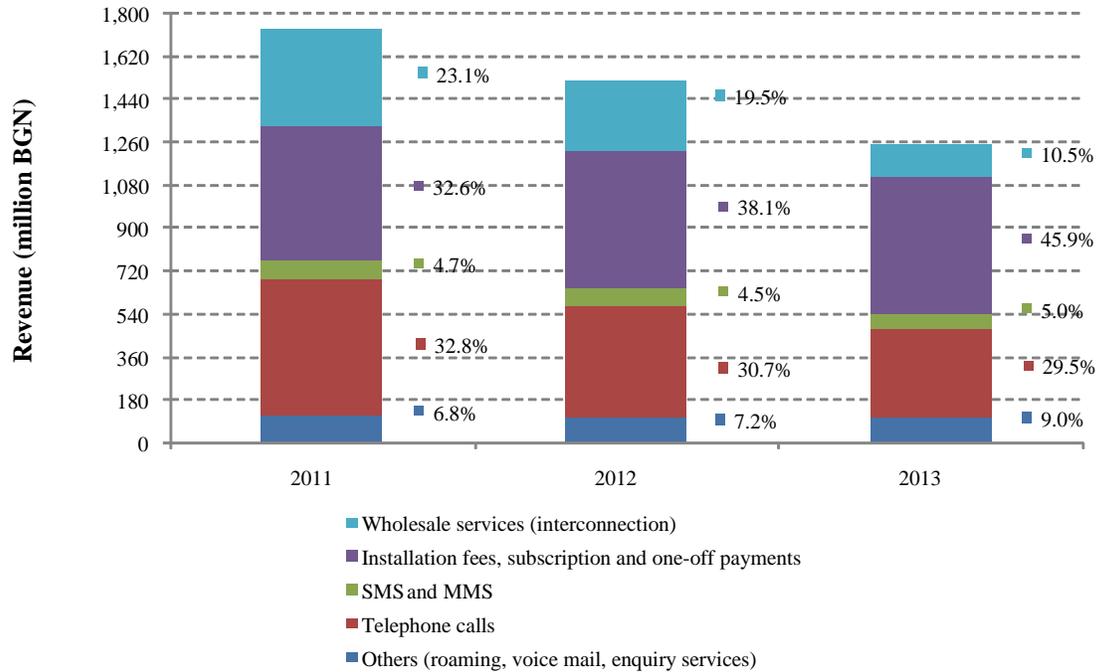
Breakdown of revenue from services provided via mobile networks

A decisive role in the breakdown of revenue continues to be played by those generated from monthly subscription and installation fees. In 2013, their share has grown by nearly 8 percentage points since 2012 making up 45.9% of the total volume of the segment (Figure 17).

⁴⁴ The data do not take into account mobile data card services which do not allow voice calls.

⁴⁵ Different trademarks are both trademarks owned by the undertaking (such as Loop, Frog Mobile) and trademarks owned by other legal entities (such as Alo, Da!). In 2013, BTC does not offer services provided under different trademark.

Breakdown of revenue from provision of mobile telephone services for the period 2011 - 2013

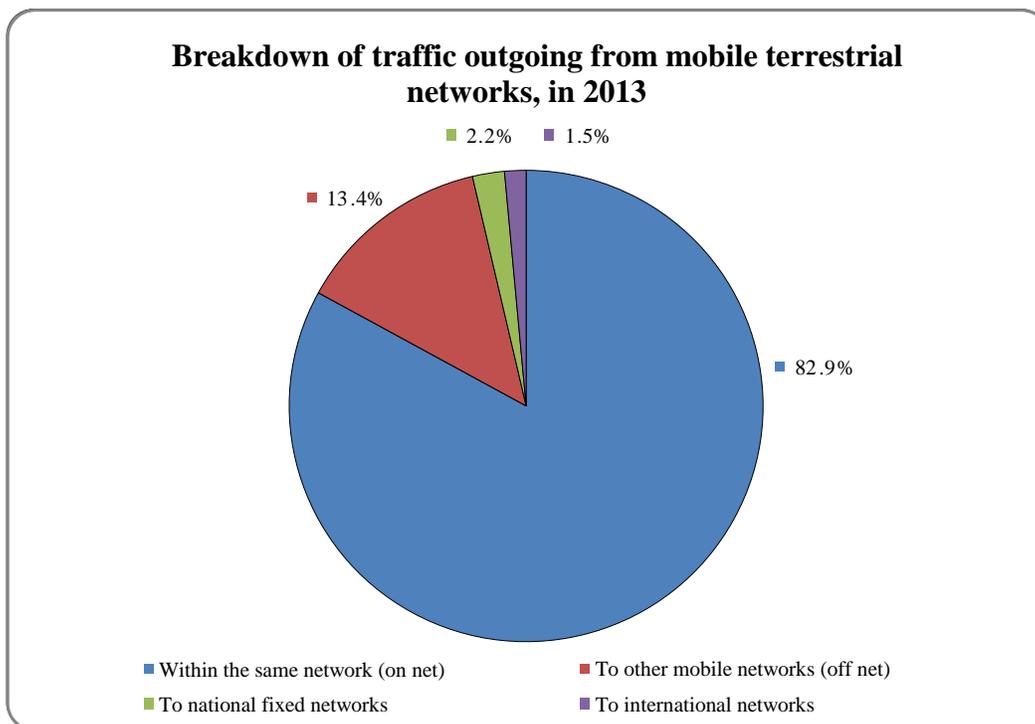


Source: Data submitted to CRC

Figure 17

Revenue from voice telephony makes up around 30% of the total amount of revenue from mobile telephone services. The actual share of voice services is even greater, as it is taken into account that revenue from calls included in the free-of-charge minute plans is reported as revenue from monthly subscription. The relative share of revenue from wholesale services registered a drop of 9 percentage points in 2013, as compared to the preceding year.

As it is clear from Figure 18, the relative share of traffic generated within the same mobile network (82.9%) of the total retail traffic generated on the mobile networks in the country, remains a determining factor in the traffic structure. Compared to 2012, the relative share of the traffic generated within the same mobile network dropped slowly, registering a decline of 2.6 percentage points. The relative share of the traffic generated to other mobile networks was within 13.4%, as it registered a growth of nearly 3 percentage points since the year before. The share of outgoing traffic to fixed networks remained unchanged since 2012 - 2.2% of the total outgoing traffic generated in 2013.



Source: Data submitted to CRC

Figure 18

Short multimedia and text messages

For the first time in several years, in 2013, the total number of sent multimedia messages (MMS) registered a drop of 2.4% compared to 2012. The number of sent short text messages (SMS) continues to grow, and as of 31.12.2013, their number was by 9.7% more, compared to the year before.

4.3. Voice services via non-geographic numbers with national destination code 099x provided over broadband wireless access (BWA) networks by means of radio frequency spectrum

The networks for broadband wireless access (BWA) by means of radio frequency spectrum allow the provision of voice telephone services through geographic and non-geographic numbers and services related to broadband wireless Internet access. Unlike the previous year, in 2013 was registered a decrease both in the number of subscribers of broadband wireless Internet access⁴⁶, and of subscribers of voice services.

As of 31.12.2013, three undertakings were licensed to build electronic communications networks for broadband wireless access (BWA): "MAX TELECOM" OOD, "NEXCOM BULGARIA" EAD, and "MOBILTEL" EAD. Of them, commercial activity is carried out by "MAX TELECOM" OOD and "NEXCOM BULGARIA" EAD. "MAX TELECOM" OOD provided voice services through non-geographic numbers with national destination code 099x, and "NEXCOM BULGARIA" EAD provided telephone services via fixed network - fixed terminal points, therefore their subscribers and revenue are included in the "fixed voice telephone service" segment.

As of 31.12.2013, the subscribers of voice services (stand-alone and bundled services) with destination code 099x reported a decline of 24%, when compared to the data on the number of subscribers at the end of 2012, as the decrease in the subscribers of bundled services is even greater and reached 71%. As for revenues⁴⁷, a decline of 67.5% was reported for a one-year period. In this regard,

⁴⁶ Information has been provided in section "Data transfer and/or Internet access"

⁴⁷ The used revenues are: non-traffic revenue (revenue from monthly subscription for stand-alone services) and traffic revenue from retail and wholesale services. Revenue from monthly subscription for bundled services is not included.

with a letter addressed to CRC of 29.10.2013, "Max Telecom" OOD notified the Commission that, as of the said date, the company has discontinued the provision of voice services to new subscribers on its WiMax network. The company's development strategy includes migration of all current subscribers of voice services to LTE technology, as it is expected that by the end of 2014 the provision of voice services via the WiMax network of "MAX TELECOM" OOD will be finally discontinued.

5. Leased lines services

Market players

As of 31.12.2013, a total of 69 undertakings were included in the CRC List of undertakings that intend to provide the "leased lines" service, including "international leased lines". During the year, 19 new undertakings notified the Commission of their intentions to provide the service, and 6⁴⁸ declared that they give up their intentions to provide it. At the end of 2013, 19⁴⁹ undertakings were active on the market segment, as 9 of them provided the service at both retail and wholesale level.

Development of the leased lines segment

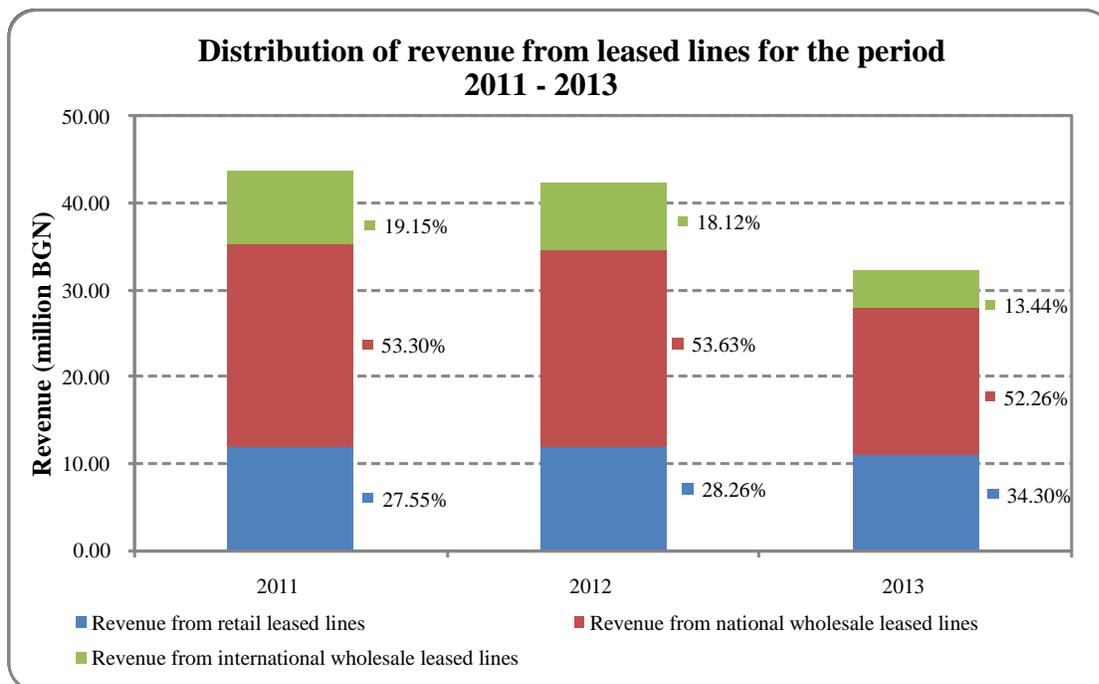
The volume of the "leased lines" segment registered a drop for another consecutive year. The total revenue⁵⁰ from the provision of the service in 2013 amounts to BGN 32.303 million, which represented a decrease of 23.83% since 2012. In terms of technologies used, this volume was realized on the basis of provided traditional and alternative leased lines. Traditional lines (analogue or digital) function in the physical layer of the OSI model, while alternative lines function in the upper layers, which is why they can guarantee higher speeds in providing electronic communication services. In this respect, one of the main factors for a decrease in the revenue is the growing consumption of alternative lines which have lower prices than traditional leased lines.

Figure 19 presents distribution of revenue generated from the provision of leased lines (wholesale and retail) for the period 2011 – 2013.

⁴⁸ "INTERBUILD" OOD, "IBEROCOM BULGARIA" OOD, "NETSTAR TELECOM" OOD; PCCW GLOBAL B.V. LLC, "SOFIA ONLINE" EOOD, and "NETBROK" OOD

⁴⁹ "IDT NETWORK" AD, "BLIZOO MEDIA AND BROADBAND" EAD, "BULGARTEL" EAD, "BULGARIAN TELECOMMUNICATION COMPANY" EAD, "VESTITEL BG" AD, "GLOBAL COMMUNICATION NETWORK" AD, "NBI SYSTEMS" OOD, ET "ANGELSOFT - ANGEL GAROV", "COSMO BULGARIA MOBILE" EAD, "MOBILTEL" EAD, "NET IS SAT" OOD, "NETERRA" EOOD, "NOVATEL" EOOD, "PANTEL INTERNATIONAL" EOOD (as of 11.09.2013, "PANTEL INTERNATIONAL" EOOD was renamed to "TURK TELECOM INTERNATIONAL" EOOD), "PLADI COMPUTERS" OOD, "PRONET TELECOM", "SOFIA COMMUNICATIONS" EAD, "TELECABLE" and "TELNET" OOD.

⁵⁰ Including revenue from national wholesale and retail leased lines, as well as revenue from national sections of international leased lines.



Source: Data submitted to CRC

Figure 19

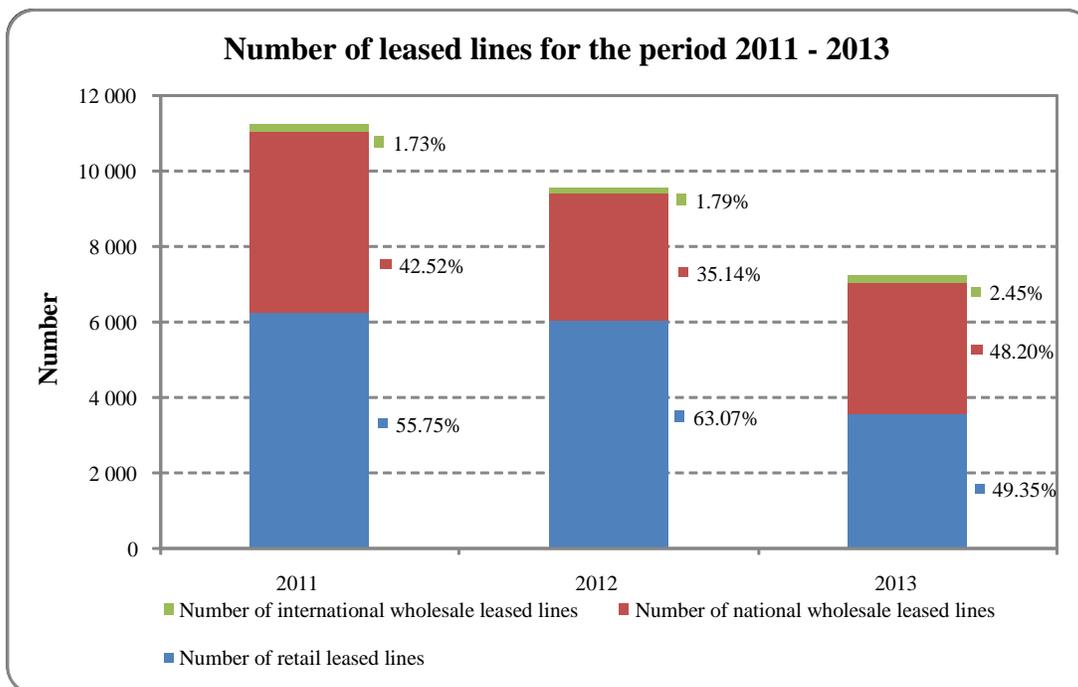
Despite the registered drop of 7.54% in the revenue from retail leased lines (BGN 11.08 million in 2013 and BGN 11.98 million in 2012, respectively), their share in the segment structure was up by 6.0 percentage points since 2012. The increase of this share is due to the decreased revenue from providing wholesale leased lines, as compared to the year before, by 29.7%. In 2013, 73.3% of the wholesale leased lines are alternative, which was a growth of 8.16 percentage points since 2012. This affects the volume of revenue, as prices of alternative leased lines were considerably lower than prices of traditional lines.

The share of the revenue from the provision of national leased lines remains almost unchanged in the structure of total revenue from the segment. In 2013, it fell by 1.3 percentage points since the year before (BGN 30.20 million in 2012 and BGN 21.22 million in 2013, respectively).

The total number of wholesale and retail leased lines provided in 2013 in general, dropped by 24.5%, compared to the previous year. This is mainly due to the decrease of 40.9% in the number of the provided retail leased lines. One of the reasons for decrease in the number of retail leased lines is the discontinued provision of this type of lines on part of "MOBILTEL" EAD in 2013, as well as the opportunities for cheaper modes of connection from leased lines, such as IP VPN.

In 2013, the number of provided wholesale leased lines registered a growth of 3.54% for national lines (3364 lines in 2012 and 3483 lines in 2013) and 3.51% for the international lines (177 lines in 2013 and 171 lines in 2012).

Figure 20 presents distribution of the number of retail and wholesale leased lines provided for the period 2011-2013.



Source: Data submitted to CRC

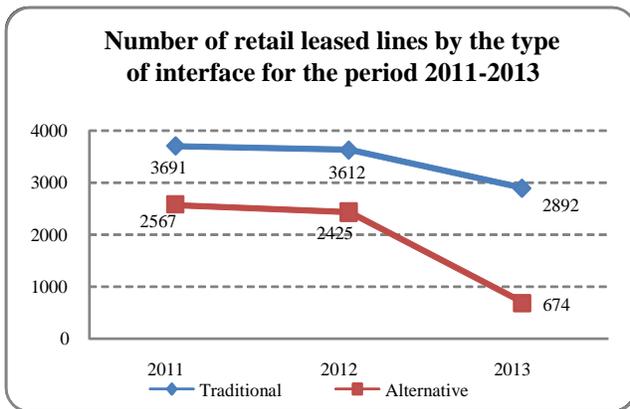
Figure 20

As it is clear from the chart, during the reviewed period, a considerable change is observed in the structure in terms of number of provided leased lines. In 2013, a decrease was observed in the share of retail leased lines in the total number of leased lines (nearly 14 percentage points) for one year, as they already covered below 50% of the total number of leased lines. They also decreased in an absolute value by 2471 lines since 2012 (6037 leased lines for 2012 and 3566 for 2013, respectively). During the year, only 5.8% of the total retail leased lines were newly opened.

The decline in the share of the retail leased lines in the total number of leased lines in 2013 was at the expense of increase in the share of wholesale leased lines. The share of the latter, as compared to the previous year, was up by 13 percentage points in the total number of leased lines. In absolute values, their number registered a growth of 3.5% for a one-year period (3535 lines in 2012 and 3660 in 2013).

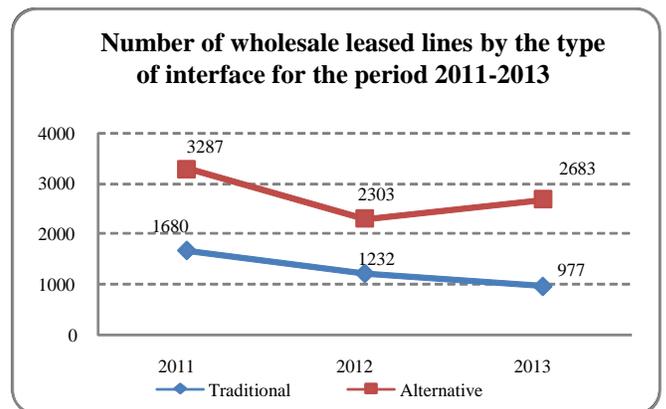
The calculated values of relative shares of BTC and the alternative undertakings, based on the revenue generated in 2013, show that BTC holds a relative share of 64% based on revenue from provision of leased lines, as for a one-year period, this share was up by 3.78 percentage points. The share of BTC, calculated on the basis of number of lines, fell by 0.69 percentage points since 2012, reaching 51.69% of the total number of provided leased lines.

Figures 21 and 22 present distribution of the number of retail and wholesale leased lines provided for the period 2011 – 2013 by the type of interface.



Source: Data submitted to CRC

Figure 21



Source: Data submitted to CRC

Figure 22

As the charts clearly show, there is a downward trend in the traditional wholesale leased lines during the reviewed period, and a growth in the alternative lines, as compared to 2012.

Traditional lines dominate the retail leased lines – 81.1% of the total number of retail leased lines provided in 2013, as their share is up by 21.2 percentage points since 2012 - as a result of discontinued provision of retail leased lines on part of "MOBILTEL" EAD.

As a whole, the leased lines market is unstable. The total number of leased lines, as well as revenue generated from them during the reviewed period, is down. Undertakings are turning towards construction of their own structures and other access options. The expansive development of broadband next-generation access infrastructures is not only a national, but also a pan-European trend, which leads to shrinkage of the leased lines market.

6. Data transfer and Internet access

In the past year, services related to Internet access and data transfer in the country continued to undergo an upward development. Table 4 presents summarized information on the reviewed segment: the number of undertakings which provided services in this market segment in 2013, the amount of revenue generated from services provided, and the number of their subscribers/users.

Table 4

Number of subscribers/users and revenue by type of Internet access and data transfer services provided in 2013

Name of the service	Number of undertakings providing the service in 2013	Number of subscribers/users as of 31.12.2013		Revenue (BGN, VAT excl.) ²
		Total ¹	incl. bundled services subscribers	
1. Retail Internet access and data transfer services	///	///	///	326.315
1.1. Internet access ³ , incl.:	614	3,821,252	1,684,873	289.025
1.1.1. Fixed	551	1,398,307	///	///
1.1.2. Wireless	167	2,422,945	///	///
Mobile access ⁴	3	2,367,584	991,611	///
Satellite	1	///	///	///
Other type (WiMAX, RLAN, HomeBox)	167	///	///	///
1.2. Data transfer services	52	///	///	35.806
1.3. Other services (hosting, e-mail, etc.)	///	///	///	1.484
2. Wholesale services	///	///	///	38.363
2.1. Provision of capacity for Internet connectivity (Peering and Transit)	85	///	///	15.587
2.2. Data transfer services	27	///	///	20.923
2.3. Wholesale provision of Internet access lines	14	///	///	1.853
Total	///	///	///	364.678

¹Incl. bundled services subscribers

²Excl. revenue from bundled services

³Data on the total number of Internet access services and revenue are obtained according to an expert estimation based on data submitted to CRC by 92.4% of registered undertakings.

⁴Incl. mobile access via data cards or modems, bundled services with mobile Internet access included, and subscribers of data transfer bundles purchased in addition to voice plans.

Market players

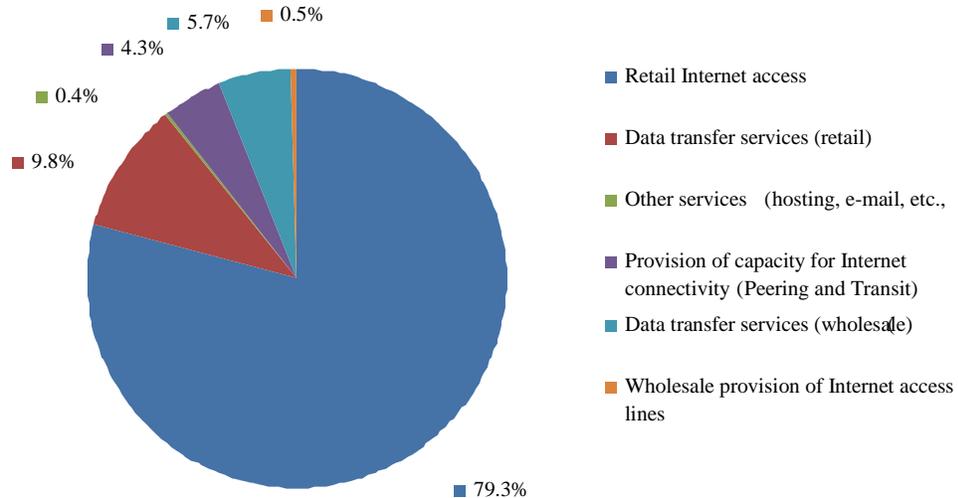
The total number of undertakings registered by CRC for their intention to provide these types of services is 868. The actual number of data transfer and Internet access service providers is 614, as a drop of 3% is registered (or 19 undertakings less) since 2012. Irrespective of the large number of active undertakings on the market, in 2013, ten of them hold a market share of 68.6% based on subscribers on the market of broadband fixed Internet access.

Development of the data transfer and Internet access segment

In 2013, revenue⁵¹ from the "Data transfer and Internet access" segment reached BGN 364.678 million, up by 5.1% since 2012. The revenue from wholesale services amounted to BGN 38.363 million, up by 9.1%, as compared to the year before, which was due to the increased revenue from provision of data transfer services.

⁵¹ Including revenue from services provided stand-alone related to retail Internet access (fixed and wireless), retail data transfer and wholesale services (capacity for Internet connectivity, wholesale access services, co-location of equipment for provision of Internet access lines, wholesale data transfer services).

**Breakdown of revenue by types of services on the market segment
“Data transfer and Internet access” in 2013**



Source: Data submitted to CRC

Figure 23

The revenue from retail Internet access services amounted to BGN 289 million and has the largest share (79.3%) of the total revenue for the segment, as in absolute values, an increase of 7.4% was observed, compared to the 2012 data.

In the past year, a considerable increase in the number of Internet access services was observed in the country. As of 31.12.2013, the total number of subscribers of Internet services (fixed and mobile Internet access), amounted to 3,821,252, that represented an increase of 22%⁵² since 31.12.2012. In 2013, the number of subscribers using bundled services (with fixed or mobile access included), was up by 12%, reaching 1,684,873, and made up 44.1% of the total number of subscribers using Internet access services.

The number of subscribers of fixed Internet access (including bundled services) grew by nearly 7% since 31.12.2012 and reached 1,398,307⁵³.

As of 31.12.2013, the number of subscribers using mobile services for Internet access⁵⁴ reports a growth of 34.7%, as compared to the year before, reaching 2,367,584. The increase in the number of subscribers of mobile Internet access was considerably influenced by the increase of 62.6% for a one-year period of the number of subscribers of mobile services for Internet access via data cards and/or modems.

In 2013, the share of the subscribers of a stand-alone service via data card or modem in the total number of subscribers of mobile access was 36.9%, while that of data transfer bundles purchased in addition to voice plans was 21.5%, as an increase was observed in the share of these types of services of approximately 6 and 2 percentage points, respectively, as compared to the 2012 data.

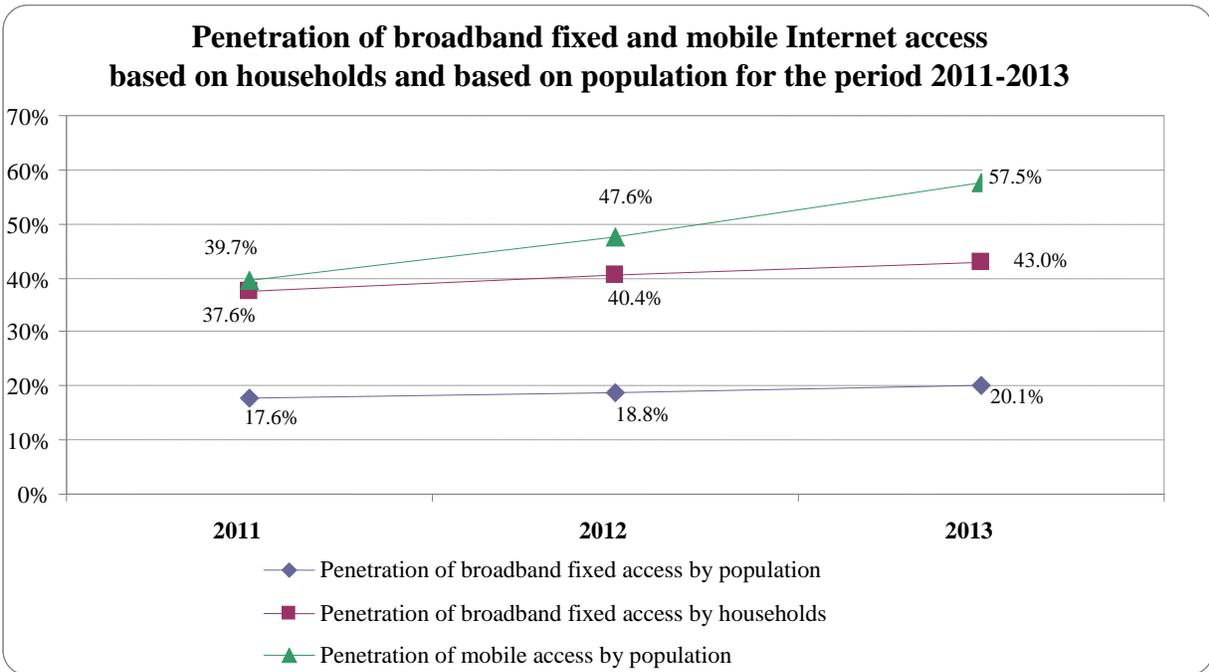
The penetration of broadband fixed and mobile Internet access⁵⁵ based on households and based on population for a three-year period is presented on Figure 24.

⁵² For comparison purposes, the data for 2012 have been updated.

⁵³ According to an expert estimation based on data submitted to CRC by 92.4% of registered undertakings.

⁵⁴ Mobile access via data cards and modems, subscribers of data transfer bundles purchased in addition to voice plans, subscribers of bundled services with mobile Internet access included

⁵⁵ These include: subscribers of mobile access via data cards and modems, subscribers of data transfer bundles purchased in addition to voice plans, subscribers of bundled services with mobile Internet access included, as well as subscribers of services for mobile Internet access provided without an individual subscription.



Source: Data submitted to CRC

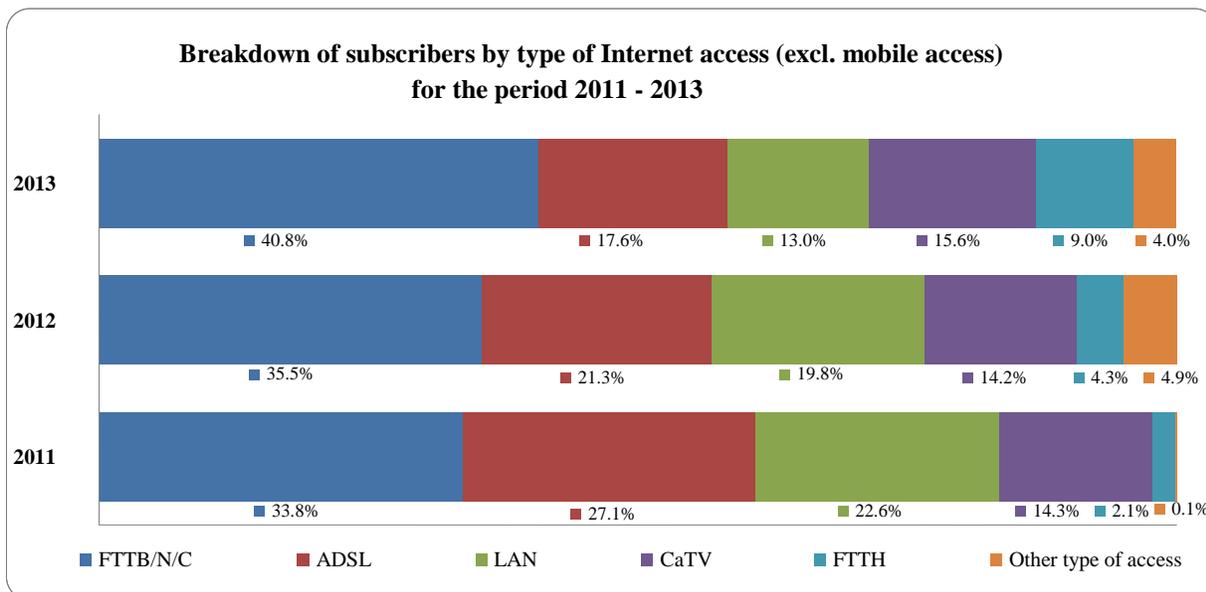
Figure 24

At the end of 2013, the penetration of broadband fixed Internet access by households reached 43.0%, as compared to 40.4% at the end of the preceding year and 37.6% at the end of 2011. For the reviewed period (2011 – 2013), the change in the "penetration of broadband fixed Internet access based on population" indicator was 2.5 percentage points, and as of 31.12.2013, it reached 20.1%⁵⁶. The number of subscribers using mobile Internet access was up by nearly 43.5% during the reviewed period which also reflected on the "penetration of mobile access by population" indicator in Bulgaria, as from 39.7% in the first year, the values reached 57.5% in 2013.

The breakdown of subscribers (excluding those using mobile access) by type of Internet access at the end of 2011, 2012⁵⁷ and 2013 is shown on Figure 25.

⁵⁶ For calculation of this index, the NSI data on the population in the country as of 31.12.2012 and 31.12.2013 were used, as well as the 2011 census data.

⁵⁷ For comparison purposes, the data for 2012 have been updated.



Source: Data submitted to CRC

Figure 25

The Internet access services via hybrid network are preferred by the users due to the fast speed of access and the possibility to benefit from additional services. Unlike the prevailing number of EU member states, in Bulgaria, the DSL access continues to give way to alternative technologies which, in turn, occupy a share of 82.4%.

In 2013, the highest share in the total number of subscribers with a fixed access (40.8%) was held by those using optical connectivity with different distance between the network point and the end user (mainly FTTB/N/C), as a growth of 7 percentage points was registered for the period 2011 – 2013.

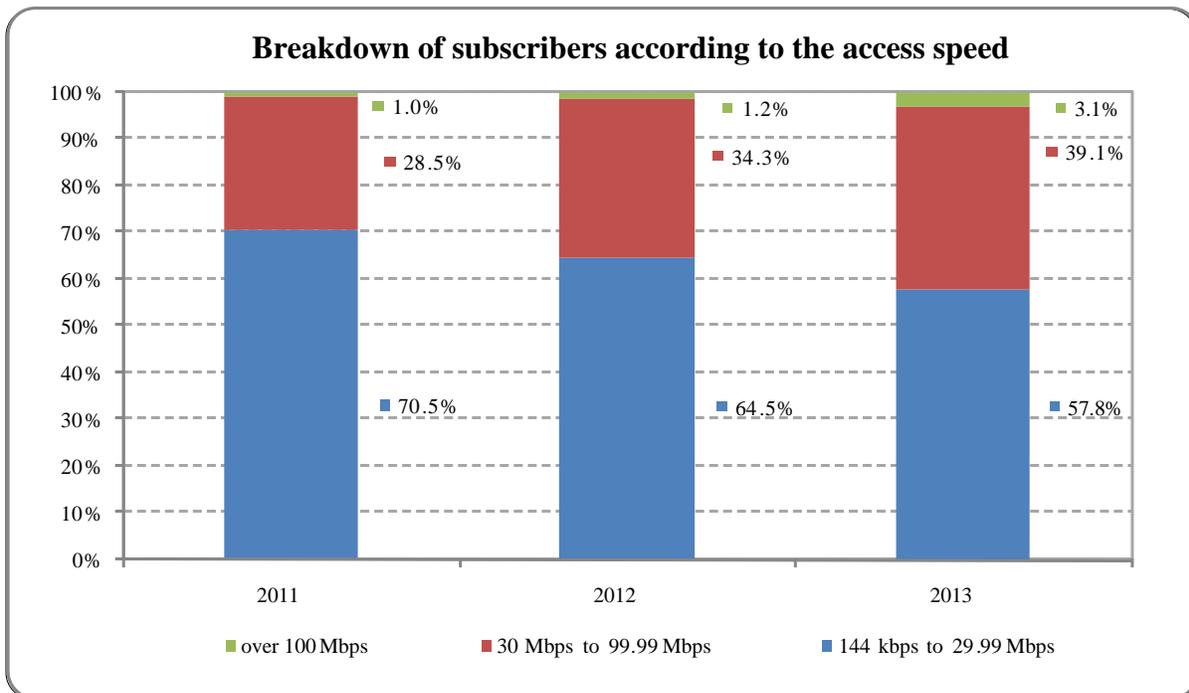
In 2013, the downward trend in the share of subscribers of the second most frequently used technology ADSL in Bulgaria continued (down by 3.7 percentage points versus 2012), as this share reached 17.6%, and for the period 2011 – 2013, the decrease is 9.5 percentage points. This change was mainly due to the updated network of the incumbent undertaking and the transition of its subscribers from ADSL to optical access (the observed growth is 1.3 times compared to the 2012 data).

The subscribers of CaTV access in 2013 rose by 16.6% since 2012, which constitutes an increase of 1.4 percentage points in the relative share of subscribers using this technology. It should be noted that as of 31.12.2013, the subscribers of cable access with Docsis 3.0 protocol allowing high-speed data transfer, for a one-year period, registered an increase of 49.2% reaching 51% of the total number of subscribers of CaTV technology.

A considerable drop (nearly 7 percentage points) was registered in the past year in the relative share of LAN⁵⁸ subscribers in the total market structure, as this reduction is mainly at the expense of a growing share of subscribers of optical connectivity, At the end of 2013, the networks of the LAN operators were used by 13% of the subscribers of Internet access, compared to 19.8% in 2012.

Figure 26 traces the change in distribution of subscribers according to the speed of the broadband access (except for mobile access) for a three-year period. Due to the insignificant number of subscribers using narrowband access (0.03% of the total number), the data on this type of access are not presented on the chart.

⁵⁸ LAN (Local Area Network) access - Access via a local cable network (built on the basis of Ethernet) which does not use an optical connection.



Source: Data submitted to CRC

Figure 26

As a result of the increasing share of subscribers using optical connectivity at the end of 2013, 39.1% of the users of broadband Internet access used international download speed from 30 Mbps to 99 Mbps, which represented an increase of 5.2 percentage points since 2012.

Of significant importance and a sign of increased quality of the service is the fact that in 2013, as compared to 2011, users using international download speed of over 100 Mbps were over 3 times more (reaching 44,308 from 12,804 subscribers as of 31.12.2011).

In 2014, it is expected that the trend towards an increase in the number of subscribers using bundled services will be preserved. The migration from hybrid to optical networks, the higher speeds and the better quality of service that can be offered by the undertakings, in addition to the considerable growth in the number of subscribers of mobile Internet access (via data cards and modems), are the main preconditions for increase in the number of subscribers in this segment.

7. Transmission and/or distribution of radio and TV programs services

In 2013, the size of the market segment "Transmission and/or broadcasting of radio and TV programs services" reached BGN 257.551 million, registering a growth of 9.5% since 2012. During the year, there was a growth in the revenue from almost all services in the segment, except for revenue from stand-alone cable television which registered a drop of 6.5%. The registered decline is mostly due to the increase in the number of subscribers of cable television offered bundled with other electronic communication services.

The highest growth in the segment was observed in the revenue from the provision of retail IPTV services (85.3%), followed by wholesale services for transmission of radio and television programs (44.5%).

Summarized information on the number of undertakings that provided transmission and/or broadcasting of radio and/or TV programs services, the number of their subscribers/users, and on the volume of revenue generated from them, along with the structure of the segment, is presented in Table 5 and Figure 27 below:

Table 5

Number of subscribers/users and revenue by type of transmission and/or distribution of radio and TV programs services in the segment provided in 2013

Name of the service	Number of undertakings providing the service in 2013	Number of subscribers/users as of 31.12.2013		Revenue (in million BGN, VAT excl.) ²
		Total ¹	incl. bundled services subscribers	
1. Retail distribution of radio and television programs	326	1,742,455	623,813	201.222
1.1. Cable television ³	293	<i>///</i>	<i>///</i>	<i>///</i>
1.2. Satellite television	2	<i>///</i>	<i>///</i>	<i>///</i>
1.3. IPTV	33	<i>///</i>	<i>///</i>	<i>///</i>
2. Terrestrial broadcasting of radio and television programs ⁴	73	<i>///</i>	<i>///</i>	<i>///</i>
3. Provision of transmission/distribution of radio and television programs	15	158	<i>///</i>	56.329
3.1. Transmission of radio and television programs services	6	55	<i>///</i>	15.338
3.2. Distribution of radio and television programs services, incl. IPTV wholesale service provided to other undertakings	10	103	<i>///</i>	40.991
Total	<i>///</i>	<i>///</i>	<i>///</i>	257.551

¹ Incl. bundled services subscribers

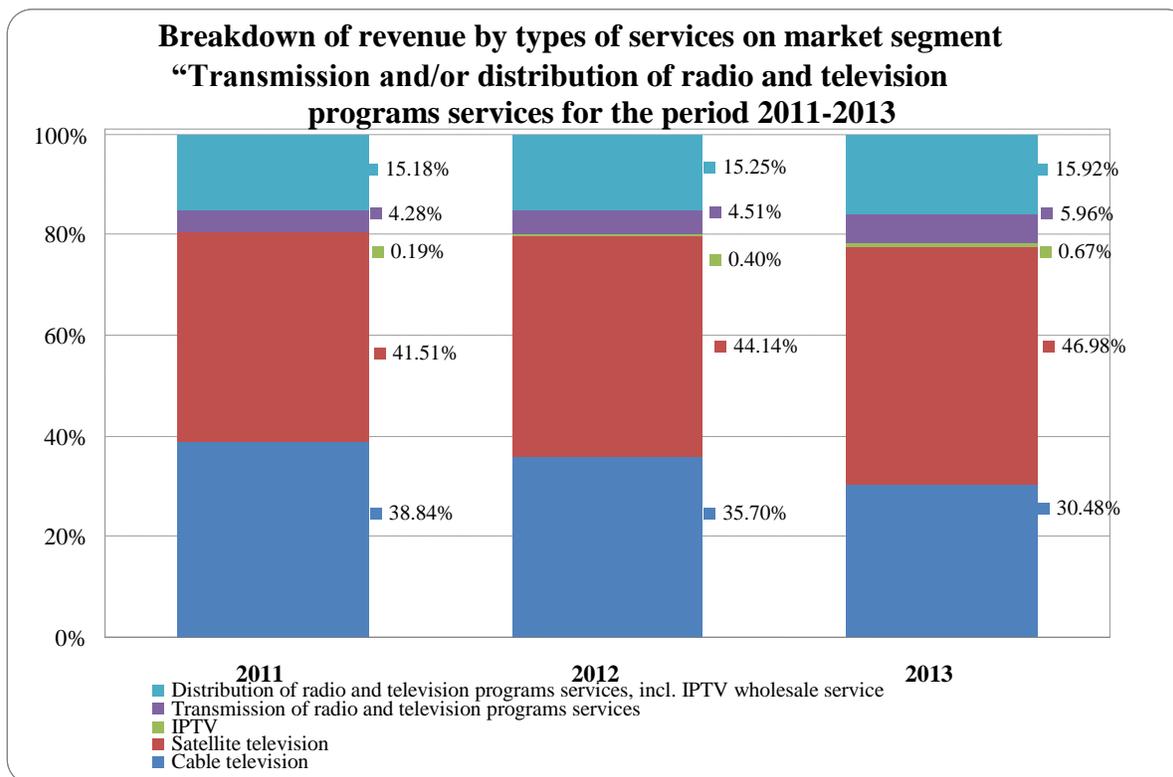
² Excl. revenue from bundled services

³ Data on the total number of cable television subscribers and revenue are obtained according to an expert estimation based on data submitted to CRC by 92.65% of registered undertakings. 24 of the undertakings registered in CRC for the provision of the service have not submitted an activity report for 2013.

⁴ 1 of the undertakings registered with CRC for the provision of the service has not submitted an activity report for 2013.

Source: Data submitted to CRC

With regard to the terrestrial broadcasting of radio and television programs, the number of undertakings is down by 11 compared to the year before, and as of the end of 2013, the number of active undertakings was 73. This decline is the natural result from the transition from terrestrial analogue to terrestrial digital broadcasting of radio and television programs in Bulgaria in 2013. The number of undertakings providing wholesale transmission/distribution of radio and television programs is by 2 less than the year before (for comparison, their number was 17 in 2012).



Source: Data submitted to CRC

Figure 27

In 2013, the largest share of the total volume of the segment (78.1%) continued to be occupied by the revenue from the provision of radio and TV retail programs services (Figure 27): cable television, satellite television and IPTV. Regardless of the high growth in the number of subscribers and revenue from the retail provision of IPTV reported during the year, its share remained the lowest in the segment – only 0.67%.

7.1. Retail distribution of radio and TV programs

Market players

The number of undertakings providing services related to retail distribution of radio and television programs decreases to 326 in 2013 (Table 5), as the observed drop was nearly 60 undertakings in absolute values, or 15.3% in relative values compared to 2012.

As of 31.12.2013, the total number of undertakings registered in CRC for the provision of cable television was 376, as the number of undertakings that actually provided this service decreased by 16 since 2012, reaching 293⁵⁹. This is an indicator that the trend observed in the last several years towards decrease in the number of cable operators continues, and it is accompanied by an intensified competition between the undertakings carrying out activity in this market segment in terms of quality and diversity of offered services.

In 2013, the number of cable operators providing digital TV programs to their subscribers is up by 59 since 2012, reaching 160, which constitutes around 55% of the total number of undertakings actually carrying out activity in 2013. To compare with, this share was 33% in the preceding year, and 23% in 2011.

As of 31.12.2013, the number of undertakings that provide satellite television in Bulgaria was two: "BULSATCOM" AD and BTC, as the authorization⁶⁰ of the third undertaking that provided satellite television in 2012 - "SATELLITE" AD - was withdrawn by CRC's Decision No. 11/09.01.2014.

⁵⁹ 24 undertakings of those registered as of 31.12.2013 did not provide activity report for 2013.

⁶⁰ "SATELLITE" AD did not provide information on its activity report for 2013.

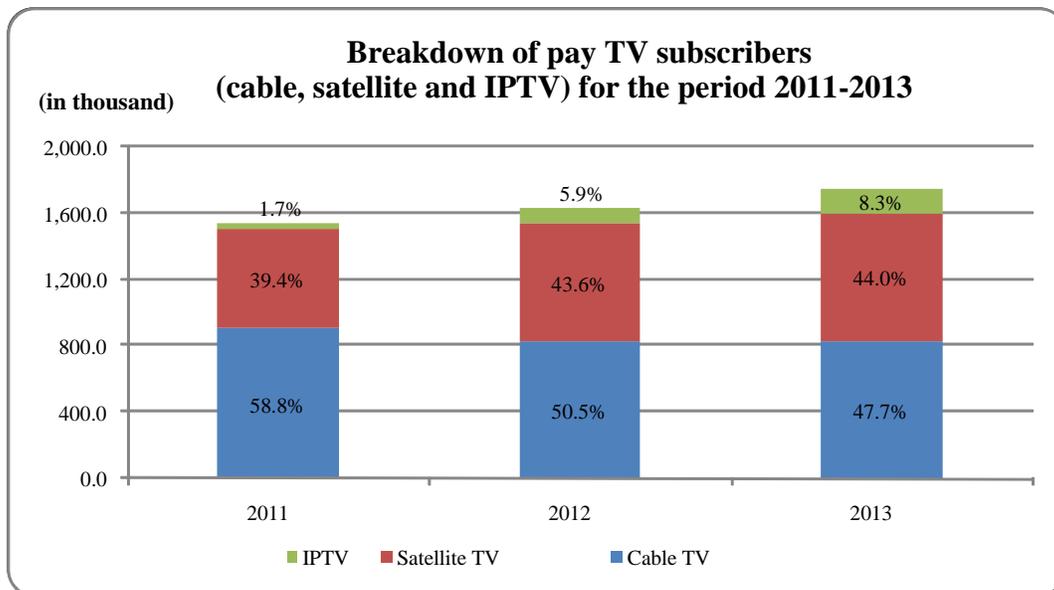
Over the last years, IP television has been gaining popularity among users as a means for reception of reliable and quality television signal accompanied by interactive and flexible service. As of 31.12.2013, 166 undertakings were registered as providing IPTV, 33 of them actually provided this service. Another 5 declared their intention to start offering the service in 2014.

With regard to the breakdown of undertakings according to the way of provision of IPTV, 24 undertakings purchased the IPTV service from another undertaking for resale purposes in 2013, while the remaining 9 provided services through their own platform. Resale is a preferred method for the providers, in respect of costs for maintenance of own platform and settlement of copyright and related rights for radio and television programs.

The number of undertakings providing IPTV through their own platform in 2013 was up by one in an absolute value, compared to 2012. Two active undertakings started providing services through their own platform in 2013 instead of wholesale purchase of the service from other providers, and 2 undertakings, new to the sector, started providing the service through their own platform. The fact that the undertakings providing television service through their own platform increase their relative share is impressive, but they still constitute below 30% of all players carrying out activity on this market segment. Nevertheless, they occupy a significant share in the number of subscribers receiving IP television (98%), and 92.5% of the users of IPTV are subscribers of the two largest undertakings in the segment BTC and "MOBILTEL" EAD, as their share grew by 3.5 percentage points since the year before.

Subscribers and revenue generated from the provision of services related to retail distribution of radio and television programs

For the period 2011 – 2013, the number of subscribers of retail pay TV was up by 13%, as for the last year only, the observed growth was 6.5%, reaching 1.72 million subscribers.



Source: Data submitted to CRC

Figure 28

In 2013, the most significant increase was observed in the subscribers of IP television, compared to the year before - nearly 50%, and as of 31.12.2013, they reached 8.3% of the subscribers of pay TV in the country (Figure 28). The subscribers of IP television continued to grow in 2013 as well which is not only due to the advantages of the service over the traditional cable and satellite television, namely, its interactivity and the opportunity for integration with other IP-based services (Internet, VoIP, etc.), but also to the presence of high diversity of bundled services provided by the undertakings. Unlike the previous years, however, the growth rate drops considerably which shows that the inter-platform competition in the segment in terms of the quality and diversity of offered services intensifies.

The number of users of satellite television also registered an increase – 7.7%, as 88% of the new subscribers are subscribers of bundled services with included satellite television. The number of

subscribers using the service stand-alone or bundled with other electronic communication services reached in 2013 44% of the total number of subscribers of pay TV in Bulgaria.

Unlike the preceding several years when a drop in the number of subscribers of cable TV was observed, there was an insignificant growth of 0.5% in 2013. This growth resulted from the improved quality of the service and the offering of better conditions to the users under the pressure of the increasing competition between undertakings providing television service based on different technological platforms (cable TV, satellite TV and IPTV). As of 31.12.2013, subscribers of cable TV continue to hold the greatest share in the total number of subscribers of pay TV in the country – 47.7%⁶¹.

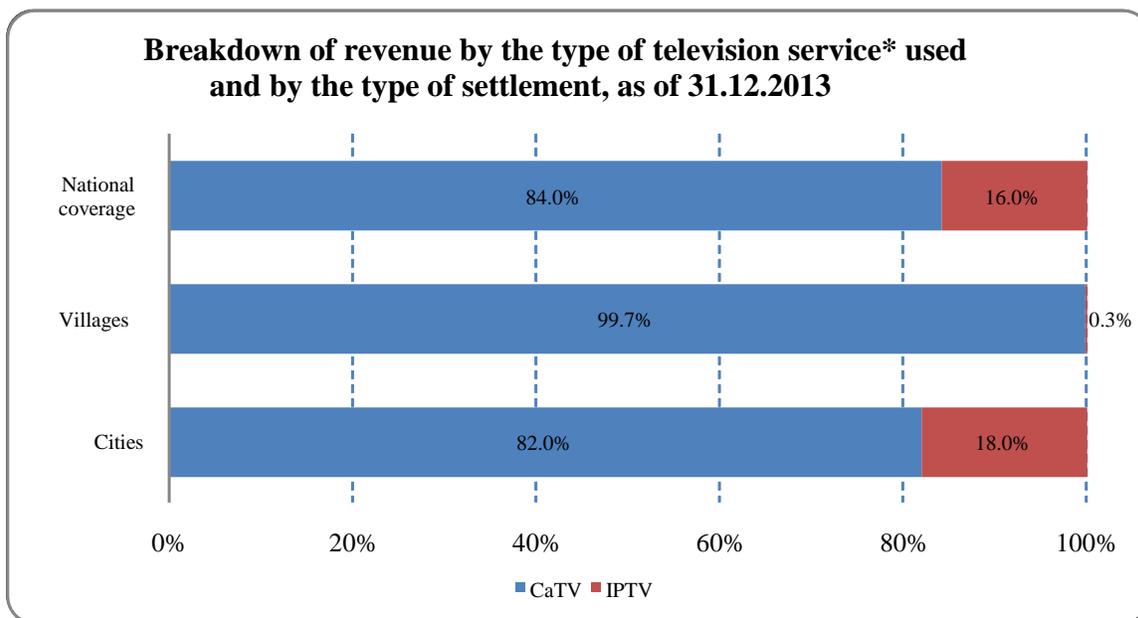
In the last several years, the TV sets and the quality they ensure have undergone a strong development. This has reflected on the services offered by an increasing part of television content providers, as value-added services are gradually beginning to turn into a necessity for end users.

In the breakdown of subscribers using HD format, according to the type of television service they receive, the greatest share is held by satellite television users – 47%, followed by subscribers of cable television – 40%, and IPTV – 13%. The total number of subscribers of high-definition television was almost 700 thousand as of 31.12.2013, as it grew by 80% since the year before.

The services “Pay-per-View” (PPV) and Video on Demand (VOD) have been gaining popularity in Bulgaria in the last several years. They are offered by undertakings providing cable television, as well as by IPTV providers, and as of 31.12.2013 the number of unique subscribers who have used the services at least once is as follows:

- for the PPV service, this number increased by 28%, compared to the previous year, reaching 2,690;
- for the Video on Demand (VOD) service, the growth is around 34%, reaching 33.6 thousand subscribers.

The chart below displays the breakdown of subscribers of pay TV according to the settlement where they use this service as of 31.12.2013.



* The data on the number of subscribers of satellite television by settlements is not available

Source: Data submitted to CRC

Figure 29

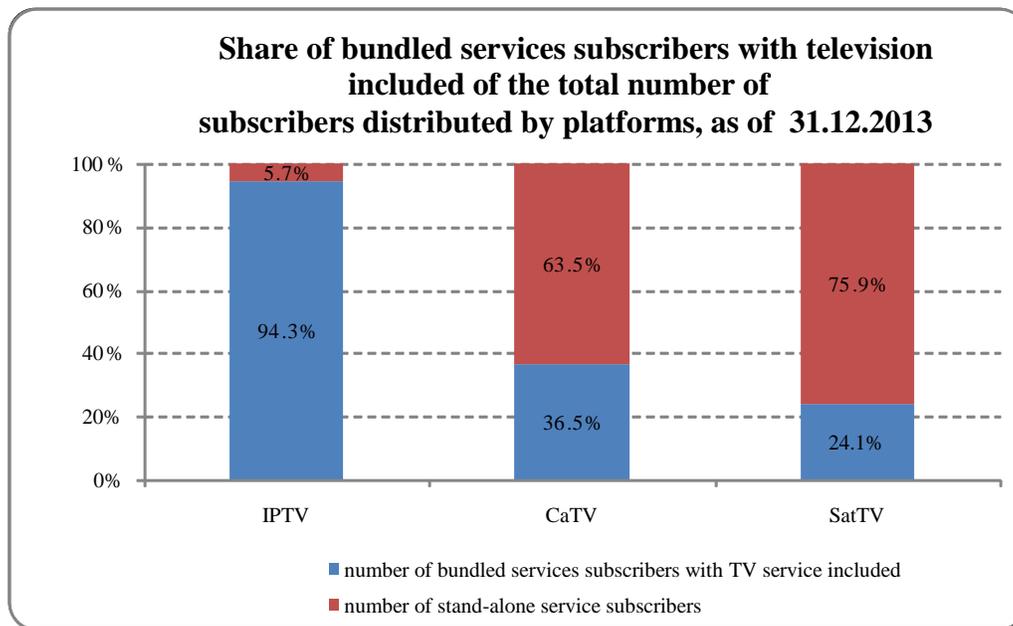
As it is clear from Figure 29, the undertakings providing IP television are focusing their efforts mainly on attracting users in the cities. At the end of 2013, the share of subscribers of IPTV in the total number of subscribers of pay TV⁶² in the cities was 18%, as this share rose by 5 percentage points for a

⁶¹ According to an expert estimation based on data submitted to CRC by 93.65% of registered undertakings.

⁶² The data on the number of subscribers and the revenue from provision of satellite television by settlements is not available

one-year period. In the villages, 99.7% of the users of pay TV were receiving cable television, as their share remains unchanged since 2012.

The number of subscribers of bundled services with television included increases every year, as for the period 2011 – 2013, their share is up by 9.7 percentage points. The following chart (Figure 30) shows the share of subscribers of bundled services with television included in the total number of subscribers distributed by platforms, as of 31.12.2013.



Source: Data submitted to CRC

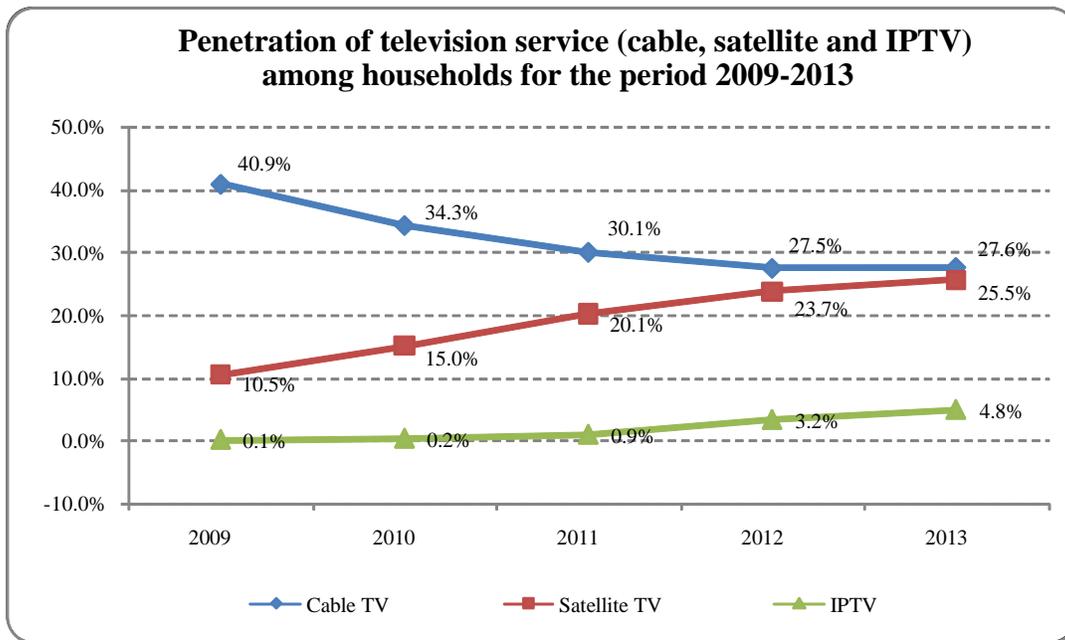
Figure 30

The chart clearly shows that the number of subscribers of bundled services with IP television included constitutes over 94% of the total number of subscribers of IP television, as this share has grown for the last three years (2011 – 2013) by nearly 5 percentage points. For the same period, the relative share of subscribers of bundled services with cable television⁶³ included increased up to 36.5%, while that of subscribers of bundled services with satellite television included reached 24.1%.

As a result of the increased number of subscribers, the penetration rate of pay TV (cable TV, satellite TV and IPTV) among households, as of 31.12.2013, preserved its upward trend, as it increased its share by 3.6 percentage points since the preceding year, and by 6.5 percentage points since 2009, reaching 58%⁶⁴ (for comparison, at the end of 2012, this indicator was 54.4%). The highest growth was registered in the penetration rate of satellite television (1.8 percentage points) against 2012, as its share amounted to 25.5% at the end of 2013. The share of cable television in 2013 was 27.6%, or by 0.1 percentage points more than the year before, while that of IPTV reached 4.8%, which represents an increase of 1.6 percentage points since 2012 (Figure 31).

⁶³ Calculated based on assessment of the number of subscribers on the basis of data received from 93.65% of the registered undertakings

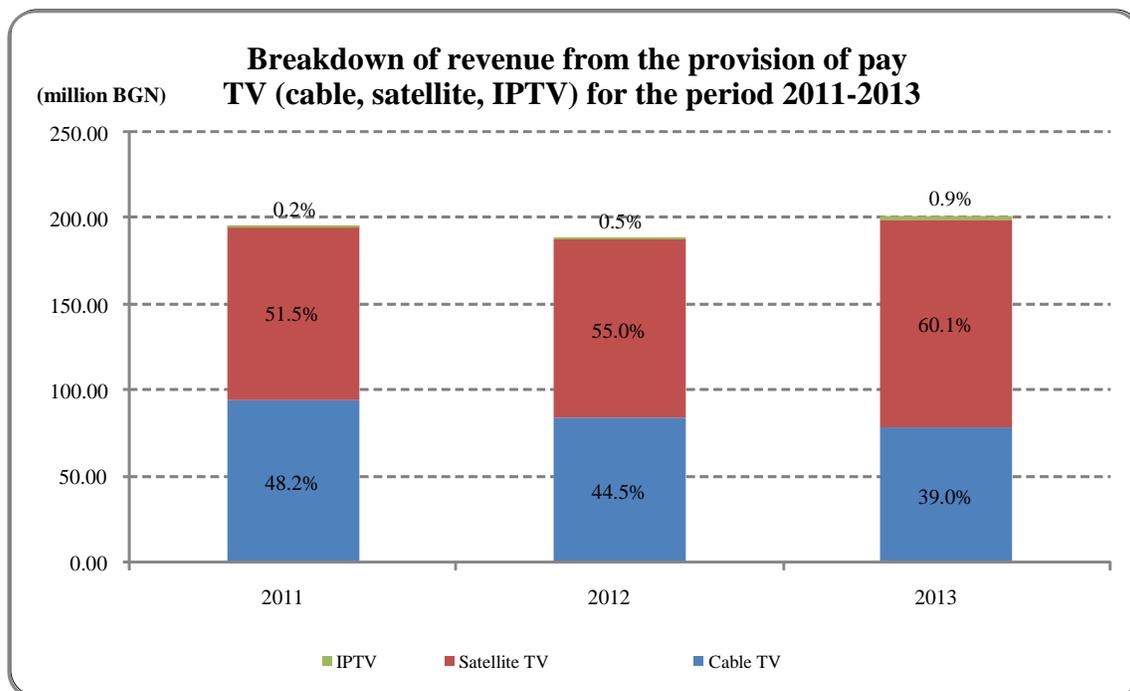
⁶⁴ The number of households (3,005,589 - ordinary households) used to calculate the index was taken from the last official census carried out by NSI in 2011.



Source: Data submitted to CRC

Figure 31

The volume of total revenue generated from subscribers of pay TV in 2013 amounted to BGN 201.22 million. Unlike the previous one-year period when a decline of 4% was observed in the total revenue from pay TV, in 2013, it grew by 7%, compared to 2012.



Source: Data submitted to CRC

Figure 32

The growth in the total volume of the market of pay TV in Bulgaria results from the increased revenue from satellite and IP television for the period 2012 – 2013. The most significant is the increase in revenue from IPTV – over 85%, followed by revenue from satellite television – by 16.6%. For another consecutive year, revenue from cable television shows a downward trend. In 2013, compared to the previous year, the reported drop is 6.5%, as the share held by revenue from cable television in the total

amount of revenue from pay TV in Bulgaria reached 39%⁶⁵ (Figure 32). As it was already stated above, the decline in revenue from cable television is mainly due to the significant share of subscribers of bundled services with cable television included in the total number of subscribers using this type of television.

At the end of September 2013, the transition from analogue to digital terrestrial broadcasting of radio and television programs in Bulgaria was completed. Its effect on the market of pay TV in the country has yet to be revealed, and it will be reported at the end of the following year. As it is clear from the data presented on Figure 28 above, at the end of 2013, there is a growth since the previous year in the number of subscribers of satellite television as well as in the number of subscribers of cable and IP television, i.e. the digitization of the TV air until now has not had any negative effect on the segment of pay TV in Bulgaria.

Due to the increasing competition between providers of cable, satellite and IP television, a redistribution of the subscribers of paid television is expected to take place in the following several years, in addition to an increased migration of users from traditional platforms to IPTV.

7.2. Wholesale transmission and/or distribution of radio and TV programs and IPTV

In 2013, a total of 15 undertakings provided wholesale transmission and/or distribution of radio and television programs services. The revenue generated from them amount to BGN 56.329 million and register a growth of 21.20% compared to the preceding year as a result of the reported during the year increase in revenue from the provision of almost all wholesale services for transmission and/or distribution of radio and TV programs, except for the wholesale IPTV service and the provision of another type of distribution (cable). These two services register a decline of 6.13% against 2012.

In general, revenue from transmission of radio and television programs services rose by 44.48% against 2012, while an increase of 14.31% was reported in revenue from distribution of radio and television programs as a result of the increased revenue from the "terrestrial broadcasting" and "satellite broadcasting" services.

A detailed information on the number of undertakings which in 2013 provided wholesale transmission and/or distribution of radio and television programs services, the number of users of these services and the volume of revenues generated from them, as well as on the structure of the above services' market is displayed in Table 6 and on Figure 33 below:

⁶⁵ The volume of total revenue from cable television excludes revenue from the provision of bundled services.

Table 6

Number of subscribers/users and revenues from the provision of wholesale transmission and/or distribution of radio and TV programs services, incl. wholesale IPTV services, in 2013

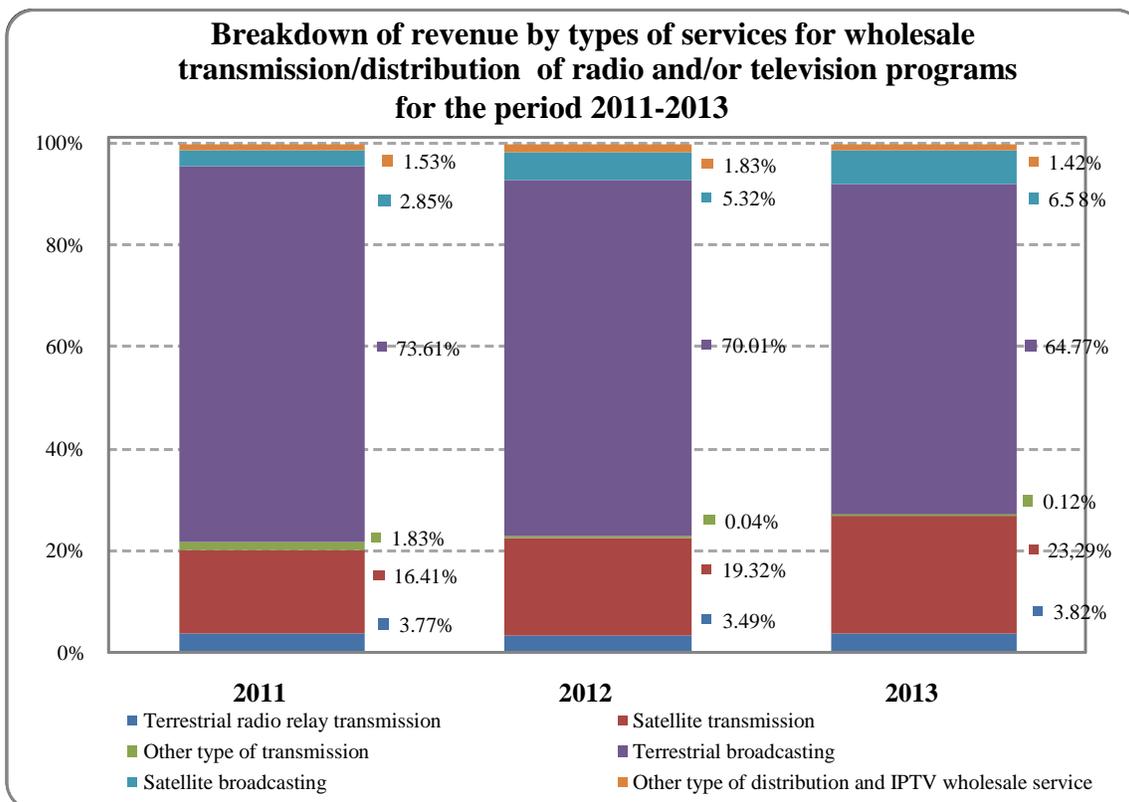
Types of services for wholesale transmission and/or distribution of radio and/or television programs services	Number of undertakings providing the service in 2013	Number of subscribers/users of the service as of 31.12.2013	Revenue from the service in 2013 (in million BGN, VAT excl.)
1.1. Services for transmission of radio and/or television programs, incl.:	6	55	15.338
1.1.1. Terrestrial radio relay transmission	1	8	2.149
1.1.2. Satellite transmission	3	27	13.119
1.1.3. Other type of transmission	3	20	0.069
1.2. Services for distribution of radio and/or television programs, incl. IPTV wholesale service provided to other undertakings, incl. :	10	103	40.991
1.2.1. Terrestrial broadcasting	7	51	36.484
1.2.2. Satellite broadcasting	1	20	3.710
1.2.3. Other type of distribution of radio and/or television programs, incl. IPTV wholesale service	3	32	0.797
Total	15	158	56.329

Source: Data submitted to CRC

In 2013, the number of undertakings providing transmission of radio and TV programs services dropped by 2 undertakings compared to the year before, while the number of users of these services registered an increase of 1.9% at the end of 2013.

In 2013, the number of undertakings providing distribution of radio and TV programs services, including wholesale IPTV service, remained unchanged compared to the year before (10 undertakings), and the number of users of this type of services was down by 6.4%.

Breakdown of revenue by types of services for wholesale transmission/distribution of radio and/or television programs for the period 2011-2013



Source: Data submitted to CRC

Figure 33

The data on Figure 33 shows that in 2013 the largest share in the revenue from provision of wholesale transmission and/or distribution of radio and TV programs services was again held by the terrestrial broadcasting – 64.77%, while the smallest share (0.12%) was occupied by the wholesale services for the provision of other types of distribution (cable) of radio and TV programs. The undertakings providing wholesale IPTV services in 2013 are "VESTITEL BG" AD, "NETERRA COMMUNICATIONS" EOOD and "VIORA INTERACTIVE" OOD, and as of 31.12.2013, only the latter two undertakings provide this service on the market. This circumstance also reflects on the amount of revenue from the provision of wholesale IPTV services in 2013 - compared to the period 2010 – 2012, when a sustainable growth in this revenue is observed (an increase of almost 3 times), in 2013, there is a drop of 6% versus 2012.

Terrestrial radio relay transmission and terrestrial broadcasting

In 2013, revenue from undertakings performing activity for terrestrial broadcasting of radio and television signals amounted to BGN 38.6 million registering an increase of 13% compared to 2012.

The main part (94.4%) of this revenue was generated from the provision of services related to broadcasting of radio and television programs. The remaining 5.6% was earned from the provision of program transmission services.

VHF/FM broadcasting

At the end of 2013, 72 undertakings had the right to provide terrestrial analogue radio broadcasting, and the total number of active authorizations was 313. During the year, 2 authorizations of two undertakings were terminated.

The undertakings with national coverage as of 31.12.2013 are two - BNR and "DARIK RADIO" AD. The achieved coverage by population of the BNR programs as of 31.12.2013 was 95% for "Horizont" program, and 91% for "Hristo Botev" program, and of DARIK RADIO AD – 95.5 %.

The local-coverage undertakings are 70, which represents 97.2% of the total number, as 30 of them (42.3%) carry out activity in more than one settlement.

Digital terrestrial broadcasting

With relation to execution of the Plan for introduction of terrestrial digital television broadcasting (DVB-T) in the Republic of Bulgaria, the issued CRC authorizations for use of individually assigned scarce resource – frequency spectrum for the provision of electronic communications via electronic communications network for terrestrial analogue broadcasting of television signals, were terminated on 30.09.2013.

As of the end of 2013, a total of 5 undertakings have the right to provide electronic communications based on the authorizations issued for terrestrial digital broadcasting of radio and TV signals, as the networks of 4 of them have a national coverage – "NURTS DIGITAL" EAD, "FIRST DIGITAL" EAD, HD MEDIA SERVICES LTD and "BULSATCOM" AD, while the network of 1 undertaking - "NURTS BULGARIA" AD - is for the territory of the city of Sofia. Three of them carried out activity related to terrestrial digital broadcasting in 2013 - NURTS BULGARIA" AD, "NURTS DIGITAL" EAD and "FIRST DIGITAL" EAD.

8. Bundled services

In 2013, the observed in the previous years trend towards increase in the consumption of bundled services⁶⁶ by the Bulgarian population, continued.

Considering the data collected from undertakings which have been providing public electronic communications in Bulgaria for the last years, it is clear that the subscribers' interest in bundled services has been growing due to the facilities they offer. At the end of 2013, the number of undertakings providing bundled services was 110, as most offered was the Double Play service "Television and fixed Internet access" (by 101 undertakings).

Revenue⁶⁷ (from installation fees and monthly subscription) generated by undertakings providing bundled electronic communication services at the end of 2013, reached BGN 350.4 million, which represents an increase of 12.8% compared to the previous year. The relative share of the "Bundled services" segment represented 13.8% in the total volume of the Bulgarian electronic communications market (an increase of 2.6 percentage points, compared to 2012).

For yet another year, revenue from the Double Play services held the largest share in the total volume of bundled services offered, as they amounted to BGN 285.7 million. Revenue from Triple Play services were BGN 61.3 million, while that from Quadruple Play service amounted to BGN 2.4 million.

The greatest increase in revenue on an annual basis was observed in the bundle which includes mobile voice service, fixed Internet access and television (55.3%). This is due, on the one hand, to the increasing scope of penetration of undertakings providing mobile services on the markets for Internet and television access and, on the other hand, to the fact that the provision of this bundle has started comparatively recently – in the period 2010 – 2011.

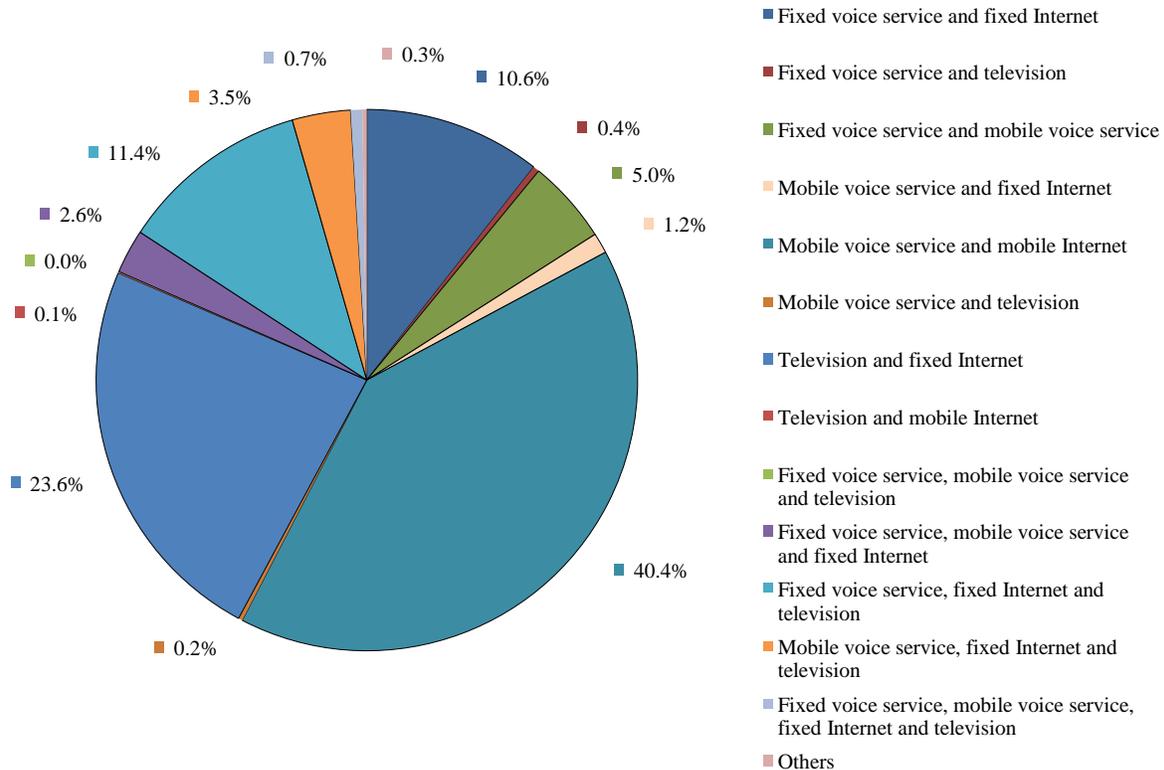
The greatest decline in revenue was observed in the service which includes mobile voice service and fixed Internet access (84.1%). This can be explained by the great increase of revenue generated from bundles combining mobile voice service with mobile Internet access and fixed voice service with fixed Internet access. The drop registered by the remaining types of bundles is due to the decreasing consumption of fixed voice service included in them.

The following Figure 34 provides information on the breakdown of revenue by types of bundle services at the end of the year.

⁶⁶ Pursuant to §1, item 79 of the supplementary provisions of LEC, the term "price package" is defined as a "bundle of two or more services with prices different from the price of each service when offered outside the bundle". According to the description adopted by CRC, bundle services include two or more electronic communication services offered jointly by any given undertaking (at a common price), as services are offered under fixed, previously determined proportions and conditions. Generally, bundled services divide into two types: "pure bundle" and "mixed bundle" which differ in terms of whether the user has the option to purchase any of the bundled services separately. Tied services, on their part, means that a service is offered only if purchased together with another service, as the latter can also be purchased separately. It should be taken into account that the information published in the Annual Report does not pertain to the cases of offered "pure bundles" (e.g., the provision of access to a public telephone network and publicly available telephone services at a fixed location).

⁶⁷ Excluding revenue from out-of-bundle consumption when the provided bundled services include voice telephone services.

Breakdown of revenue by types of bundled services for 2013



Source: Data submitted to CRC

Figure 34

In 2013, over 80% of the total volume of revenue from bundled services was formed by four types of bundled services:

- mobile voice service and mobile Internet access (40.5%) – a service which in the last few years has registered high growth both in terms of generated revenue and the number of subscribers;
- television and fixed Internet access (23.6%) - this is the most offered bundled service by undertakings, and it is also one of the first bundled service offered on the market;
- fixed voice service, fixed Internet access and television (11.4%);
- fixed voice service and fixed Internet access (10.6%).

According to data of the undertakings providing electronic communication services in Bulgaria, the number of bundled services subscribers was 2.03 million at the end of 2013, which represents an increase of 8%, compared to 2012.

Despite the observed growth of bundled services subscribers, the share of subscribers, as a percentage of population, still remains low – at 27.8%⁶⁸. However, compared to the end of 2012, the “penetration based on population” indicator has increased by 2.1 percentage points. At the end of 2013, the “penetration based on households” indicator is 59.2%⁶⁹ (by 4.5 percentage points higher than in 2012), which gives us grounds to conclude that in 2013 over half the Bulgarian households are subscribers of more than one electronic communications service.

⁶⁸ The “penetration based on population” indicator was calculated on the basis of NSI data on the number of population as of 31.12.2012, <http://www.nsi.bg/otrasal.php?otr=19&a1=376&a2=377&a3=378#cont>

⁶⁹ Only residential subscribers of bundled services as of 31.12.2012 were taken into account for calculation of the “penetration based on population” indicator. The NSI data on the number of households as of 01.02.2011 were used.

The trends in the development of bundled services depend on the consumer demand and behaviour. The table below provides information on the development of the different types of bundled services.

Table 7

Change in subscribers of bundled services in 2013, versus 2012, in percentage

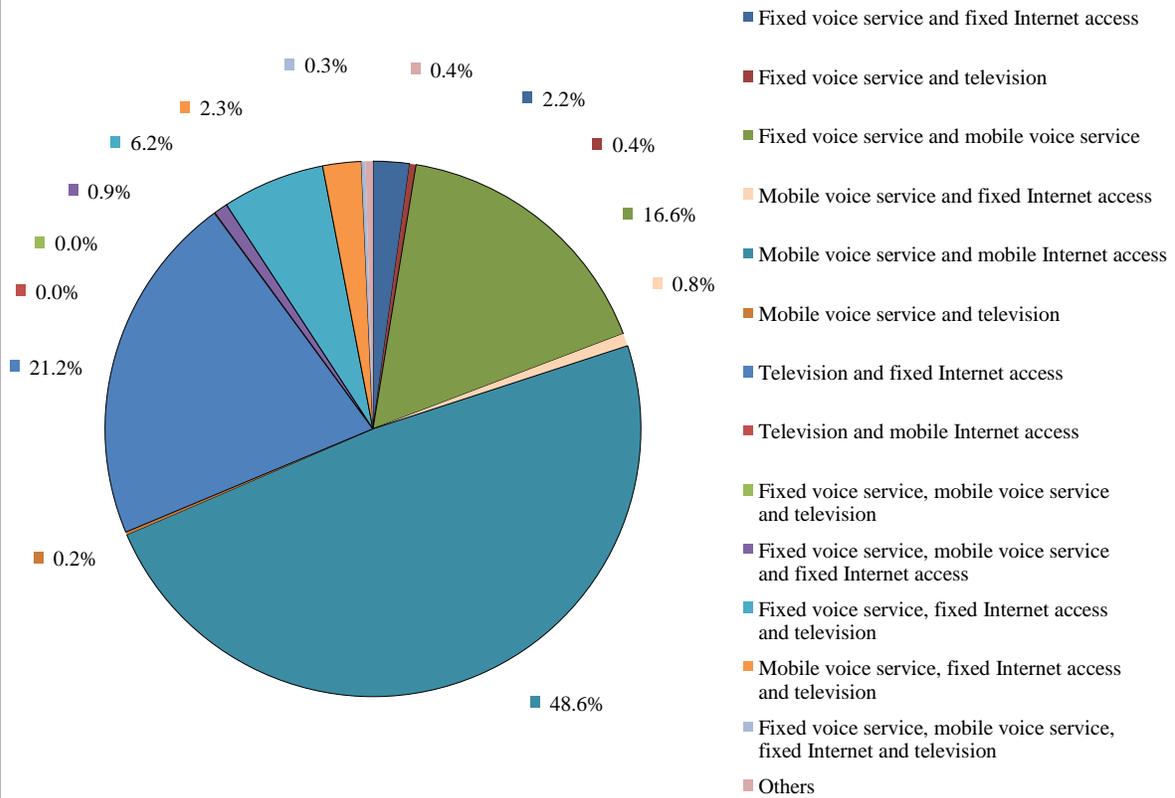
Name of the bundle	Change in subscribers in 2013 compared to 2012 (%)
Television and fixed Internet access	+53.5
Mobile voice service, fixed Internet and television	+24.5
Fixed voice service and television	+12.1
Mobile voice service and mobile Internet access	+11.0
Fixed voice service and mobile voice service	-3.6
Fixed voice service, fixed Internet access and television	-16.8
Mobile voice service and fixed Internet access	-29.8
Fixed voice service and fixed Internet access	-33.4
Fixed voice service, mobile voice service and television	-36.9
Mobile voice service and television	-40.5
Fixed voice service, mobile voice service and fixed Internet access	-53.7
Fixed voice service, mobile voice service, fixed Internet access and television	-79.3

Source: Data submitted to CRC

With respect to the change in the number of subscribers of bundled services, the same trends are observed as those in terms of generated revenue. The highest increase is observed in the bundled service with television and fixed Internet access which is due to its leading positions as the most offered and one of the longest existing on the market. The types of bundles that register a decline compared to the year before include fixed voice service, except for bundles with mobile voice service and television, and television, mobile voice service and Internet access included. Their decrease is explained with the increased number of subscribers of the bundle combining the three services in one.

The breakdown of subscribers by types of bundled services in Bulgaria is presented on Figure 35.

Breakdown of subscribers by types of bundled services as of 31.12.2013

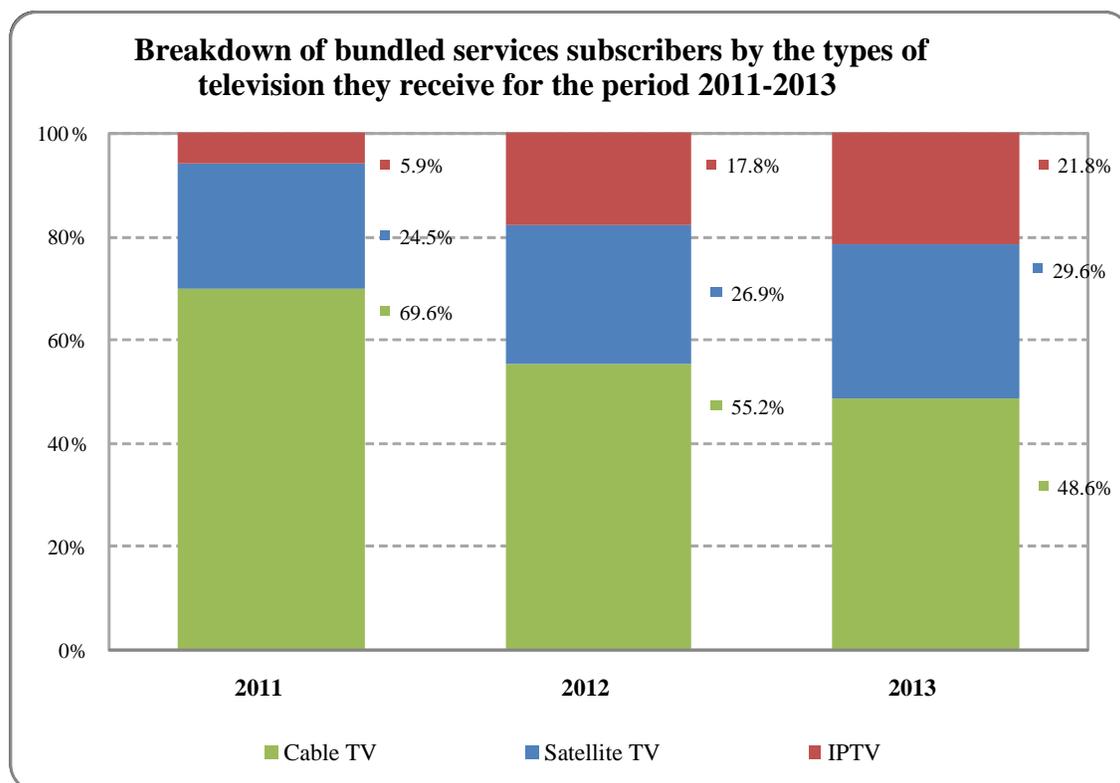


Source: Data submitted to CRC

Figure 35

The presented data clearly shows that subscribers were mostly interested in three types of Double Play services: mobile voice service and mobile Internet access (48.6%), television and fixed Internet access (21.2%), fixed voice service and mobile voice service (16.6%). These three most used bundled services were most preferred in 2012 as well, but in different order. The first place, as in last year, is still occupied by the bundle including mobile voice service and mobile Internet access, as it takes up almost half the market of bundled services based on subscribers and revenue.

Figure 36 presents the breakdown of bundled services subscribers according to the type of television service they receive.



Source: Data submitted to CRC

Figure 36

As it is clear from the chart above, at the end of 2013, 48.6% of subscribers of bundled services with television service included used cable television, 29.6% – satellite television, and 21.8% – IPTV. For the period 2011 – 2013, a decline is observed in the relative share of bundled services with cable television in the total number of subscribers of bundled services with television, but in an absolute value, at the end of 2013, a growth is reported of 23.4 thousand subscribers of bundled services with cable television since the end of 2011. The subscribers of bundles with satellite television increase by a little over 48 thousand in the past year, while the number of subscribers of bundles with IPTV is up by more than 45 thousand.

With relation to the requirements of the European Commission and the more correct presenting of revenue generated from different electronic communications services, as of 2013, CRC requires from the undertakings providing bundled services to submit information on the breakdown of revenue by the individual types of services included in the bundle⁷⁰. The collected data show that the major part (over one third) is occupied by mobile voice service (33.9%), followed by fixed Internet access (29%) and television (21.2%). These are the three services participating in the formation of these bundled services that were mentioned above as leading in terms of both generated revenue and subscribers. The next place is held by mobile Internet access (8.01%) which, as of this year, is offered in combination not only with mobile voice service, but also with television. In the future, this trend is expected to persist and it is also expected to begin being offered in bundle with other electronic communications services. The last place is occupied by fixed voice service (7.95%) which, as it was already mentioned, is a component of these bundled services which show the greatest reduction compared to 2012.

Bundled services are becoming a more attractive solution both for users and undertakings providing electronic communications services. In 2013, the motive power on the Bulgarian bundled services market continues to be the mobile services - voice services and mobile Internet. The traditional bundled services - fixed Internet access and television - also retains its positions. As it is clear from the presented data, in 2013, a slowdown is observed in the growth rates of revenue and subscribers, unlike what has been observed in the previous years (in times), which indicates that the market has reached a

⁷⁰ The breakdown of revenue by individual types of services included in the bundle is carried out based on an assessment on the basis of the prices of the individual services that have close or similar characteristics (for example, included in the subscription free-of-charge minutes for calls to national fixed and/or mobile networks, Internet download speed, number of included TV programs, etc.) of services included in the bundled service.

certain degree of saturation. This circumstance could lead to increased quality of offered services and/or reduced prices.

9. Future development of the Bulgarian electronic communications market

The expectations for the development of the Bulgarian electronic communications market are unfavourable. They are based on the steady decline in the market volume under the pressure of the OTT services, such as Skype, Viber and WhatsApp offering software for data transfer and video conference connection developed by some of the largest technological companies in the world, such as Google, Microsoft, Yahoo. In addition, the migration of subscribers of fixed voice services to mobile voice services and use of the alternative options provided by the cheap VoIP services, and the gradual over-saturation of the mobile services market, will contribute to the overall decline of the volume of the Bulgarian electronic communications market.

Despite the outlined negative trends on the market, a growth in the following market segments is expected to take place in the short-run:

- in the "voice services" segment, the increasing supply and consumption of voice services offered in bundle with other electronic communications services is expected to continue in the next years, in addition to an increased offer of numerous promotions related to discounts from the monthly subscription fees, inclusion of additional free-of-charge minutes for outgoing calls, etc.
- a growth in the revenue from services related to broadband Internet access at a fixed location. The migration toward hybrid and optical networks in order to offer higher speeds and improve the quality of service will continue, and as a result, the trend towards increase in the number of subscribers of high-speed broadband Internet access at speeds equal to or higher than 30 Mbps will persist;
- mobile Internet access will outstrip in its development the access at a fixed location. The growth in the consumption of services related to mobile Internet access, high-speed data and multimedia content transfer is also expected to result from the migration from WiMAX to the LTE technology in 2014 of the subscribers of "Max Telecom" and the completion of the building and commissioning of the network of "Bulsatcom" AD by the end of 2014.
- In the "transmission and/or distribution of radio and TV programs services" segment, the prospects for development are related to the world trends towards increase in the number of subscribers of satellite and IP-based television at the expense of those of cable television, and an increasing role of bundled services with prevailing participation of IP television.

In conclusion, it may be noted that the future development of the Bulgarian electronic communications market will follow the world trends and will continue to be mainly focused on offering bundled services, with a predominant impact of services including mobile and fixed broadband Internet access, satellite and IP-based television, and an additional incentive for the increase of the number of users will also be the deployment of 4G services through the building and exploitation of LTE networks.

10. Provision of the universal service

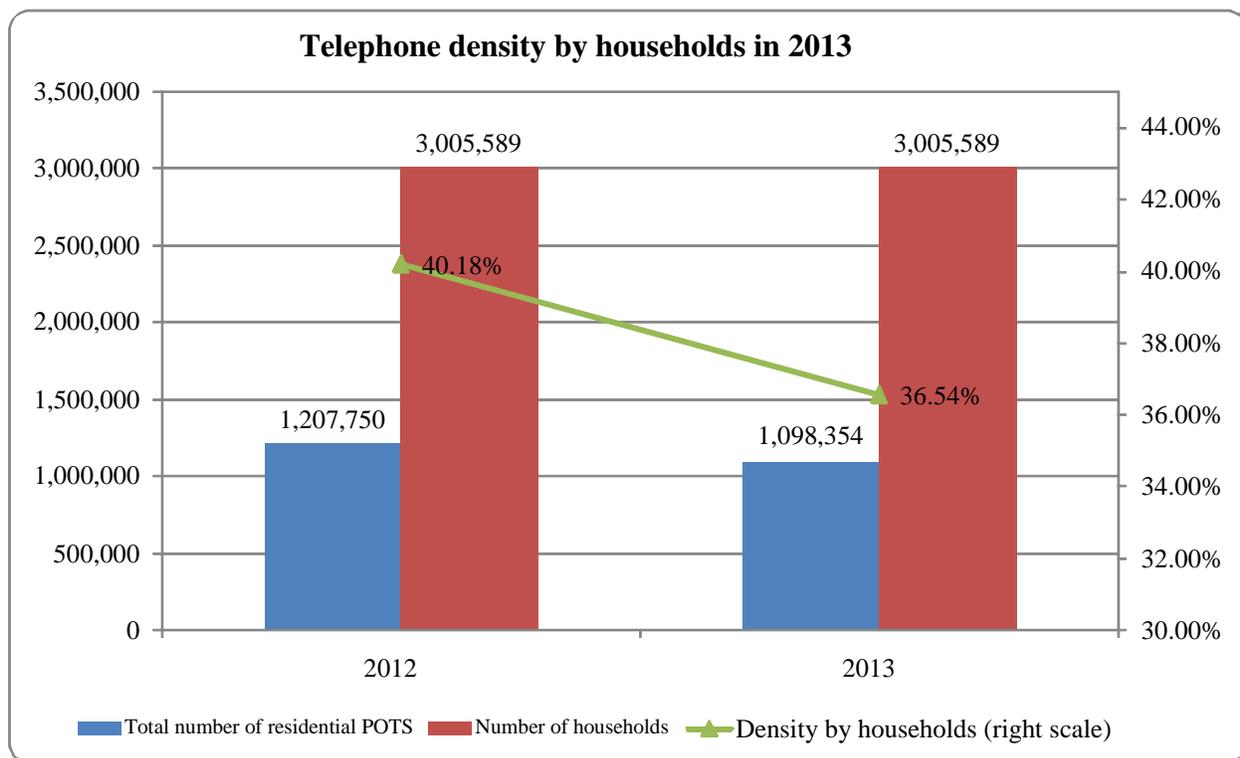
10.1. Degree of satisfaction from the universal service provision

As of 31.12.2013, the undertaking obliged to provide the universal service, "Bulgarian Telecommunications Company" EAD, ensures 83% coverage measured by the number of territorial units. When compared to 2012, a drop of 1 percentage point is registered which is due to the reduced demand for fixed telephone services. The above coverage includes settlements and settlement formations (resorts, etc.), which are included in the Unified Classification of Administrative-Territorial and Territorial Units⁷¹.

In 2013, the telephone density by households⁷² registers a decline of 3.6 percentage points since the year before, reaching 36.54%. The decline in the values of this indicator reflects a steady downtrend in the number of residential subscribers of BTC which in 2013 fell by 109,396 compared to 2012.

⁷¹ According to NSI data, the number of territorial units in Bulgaria was 5,265 as of 11.03.2014.

⁷² The "density by households" index is measured by dividing the total number of residential lines to the number of households in the country.



Source: NSI and data submitted to CRC

Figure 37

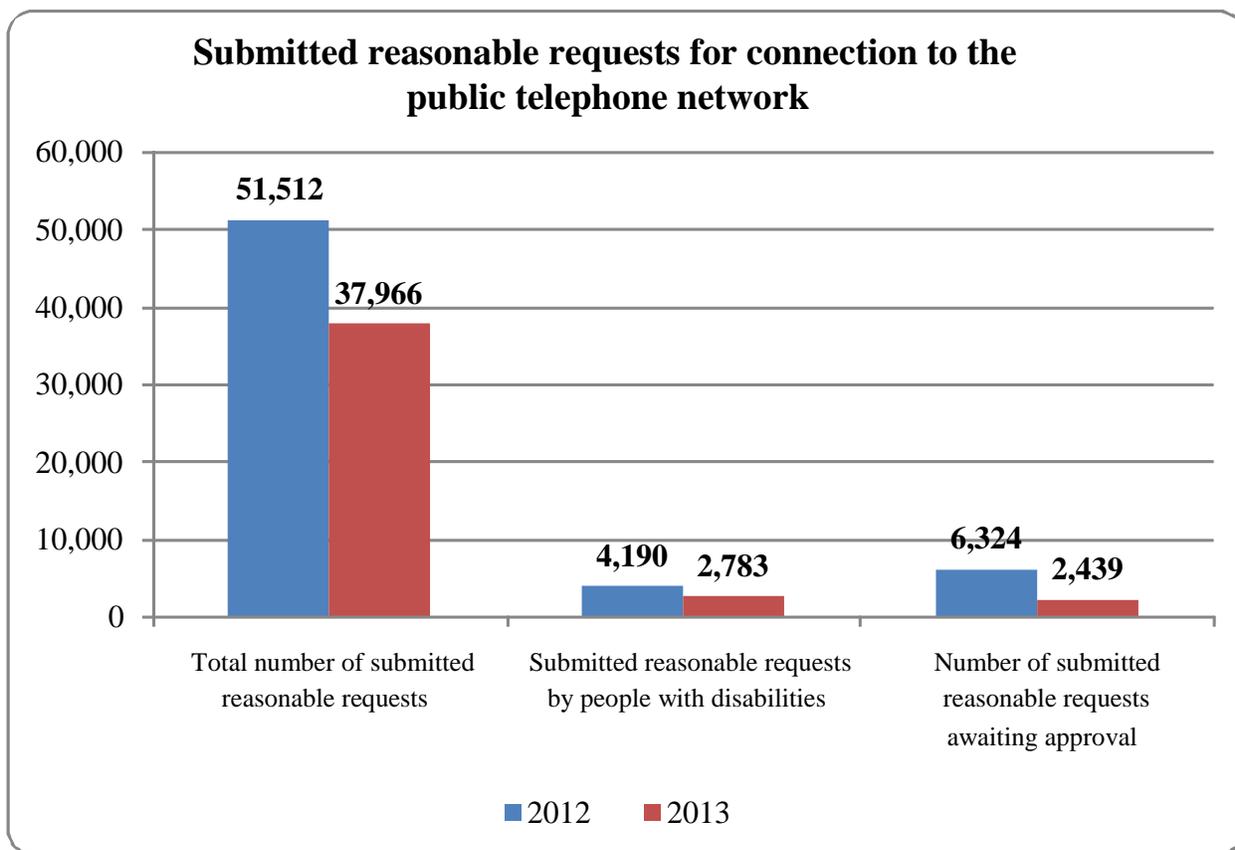
10.2. Analysis of the provision of the universal service

10.2.1. Access to and provision of the universal service

In 2013, the access to and the provision of the universal service follow the downtrend established in the previous years.

As it is clear from the data presented on Figure 38, at the end of 2013, the submitted reasonable requests for connection fell by 26.3% as compared to 2012. The downtrend in the number of submitted reasonable requests for connection to the fixed telephone service filed by people with disabilities continues, as in 2013, the number of submitted reasonable requests for connection is by 1,407 less than in the previous year. With a view to the growth in the number of those entitled⁷³ to specific bundled services in the scope of the universal service due to reduced working capacity, the decreased number of reasonable requests submitted by this consumer group may be deemed as a signal that the offered services are not sufficiently attractive for them.

⁷³ The number of newly granted disability pensions in 2013 is up by 2.8% compared to 2012.



Source: Data submitted to CRC

Figure 38

In 2013, the percentage of requests awaiting approval is down by 6.42%, which is due to the undertaking's aspiration to attract new subscribers. In this regard, the number of requests for connection to the public fixed telephone network which were given up also fell by 28%⁷⁴ since 2012, as the number of rejections for connection on part of the users is down by 21.7 %. Nevertheless, the data show that the most frequent reason for rejection of connection is still the discontinued interest on part of the clients, as this makes up 77.4% of all rejections.

As provider of the universal service, BTC provided access and public telephone services to 1,098,354 subscribers in 2013, which represents a decrease of a little over 9% since the year before, when this indicator amounted to 1,207,750.

In 2013, the number of subscribers of dial-up Internet is very small and amounts to 336 subscribers, while in 2012, this service was used by 562 subscribers. The number of calls to the numbers for access 134xx in 2013 is by 15% less than that in 2012 and forms 0.02% of the total volume of calls to national numbers.

BTC performs its obligation to ensure free-of-charge calls to emergency numbers, as their number amounts to 0.17% of the total volume of calls to national numbers and is down by 20% compared to the previous year.

10.2.2. Access to public payphones

The obligation of BTC to provide public payphones is stipulated in Ordinance No. 6⁷⁵ which stipulates criteria for a sufficient number of public payphones. A sufficient number of public payphones is considered to be present when there is at least 1 public payphone and/or 1 public access point for voice telephone services available in municipalities with up to 500 residents; at least 1 public payphone and/or 1

⁷⁴ A drop in the submitted requests for connection to the public fixed telephone network from 12,549 in 2012 to 9,024 in 2013.

⁷⁵ Ordinance No. 6 of 13 March 2008 on the universal service under the Law on the Electronic Communications (title amended SG, issue 77 of 9 October 2012)

public access point to voice telephone services per 500 residents in municipalities with more than 500 residents and at least 1 public payphone and/or 1 public access point for voice telephone services per 1500 residents in municipalities with more than 1500 residents.

Table 8 presents data about the performance of the obligation to provide a sufficient number of public payphones in 2013:

Table 8

Population	Number of municipalities	Number of public payphones installed by BTC	Sufficient number of public payphones	Performance of the criteria for a sufficient number of public payphones
below 500 residents	719	422	719	-297
from 500 to 1500 residents	1030	1154	1323	-169
over 1500 residents	521	9509	3892	5617
Total:	2270	11085	5934	5151

Source: Data submitted to CRC

Unlike the previous years when a downtrend in the number of public payphones owned by BTC was observed, in 2013, the same indicator showed an insignificant increase of 0.08% compared to the year before (from 11,076 in 2012 to 11,085 in 2013). As in 2012, in 2013, the criteria for a sufficient number of public payphones installed in municipalities with over 1500 residents exceeded considerably the minimum number required by Ordinance No. 6. In the remaining categories, the criteria for a sufficient number of public payphones were not met.

The number of public payphones, property of BTC, whose qualitative characteristics include facilities for users with impaired hearing and for users with no or impaired eyesight, also registered a slight increase of 0.19% on a one-year basis. As of 31.12.2013, these public payphones make up 66.8% of the total number of public payphones in the country. Part of them provide for a textual or other type of connection for people with impaired hearing or speech and are accessible for users in wheelchairs by being installed in suitable locations. An increase of 1 percentage point was observed in the quality parameter of the provided public payphones "Percentage of functional public payphones of BTC", which was 91% at the end of 2013.

Free calls to the national emergency numbers and to the single European emergency number 112 can be made from all public payphones owned by BTC.

10.2.3. Ensuring telephone directory and provision of enquiry services

In compliance with LEC and with relation to the provisions of Art. 6 of Ordinance No. 5⁷⁶, the undertakings obligated to provide the universal service must issue at least one telephone directory in printed and/or electronic form. In 2013, with its Decision 82/24.01.2013, CRC approved the proposal⁷⁷ extended by BTC for release of a public telephone directory in an electronic form in 2013 which is available at the undertaking's official website⁷⁸.

In compliance with its obligation to provide a telephone directory enquiry service for the numbers comprised in the comprehensive telephone directory, BTC provided end users with a 24-hour telephone directory enquiry service in the past year through number 11 800.

⁷⁶ Ordinance No. 5 of 13.12.2007 on the terms and procedure for release of telephone directories, including working with database, their transfer and use, and for provision of telephone enquiry services

⁷⁷ Letter Ref. No. 04-04-295/21.12.2012

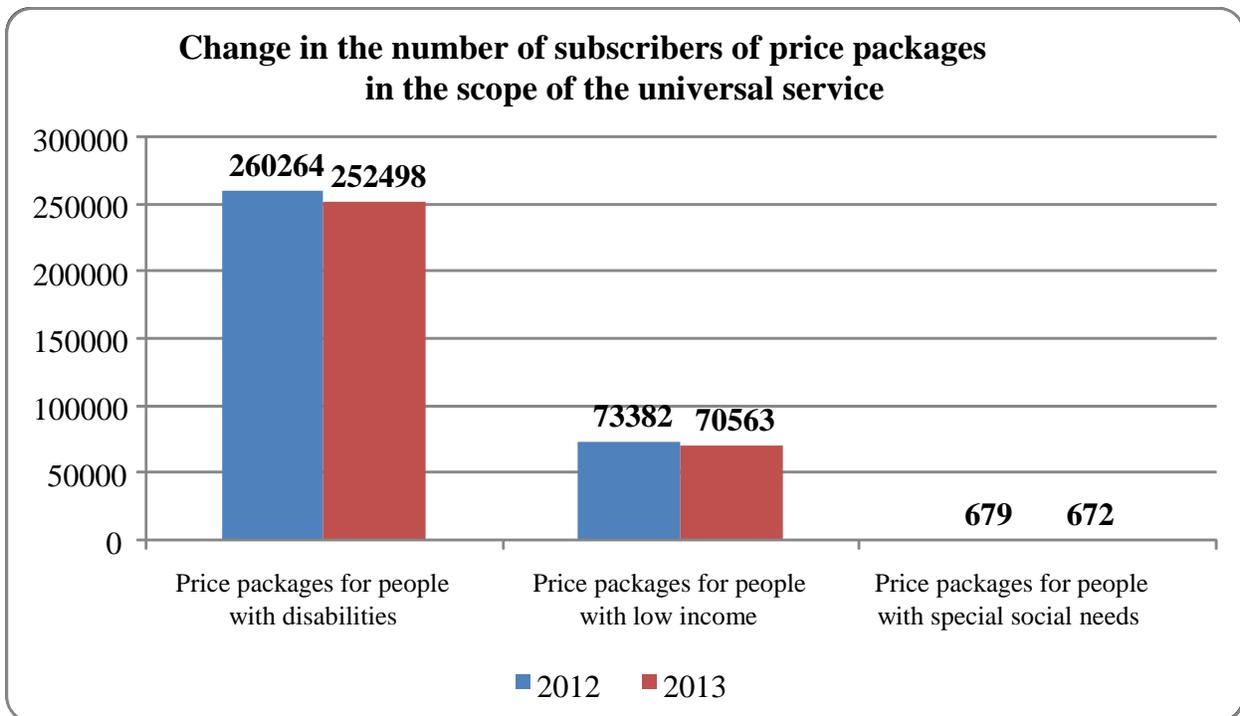
⁷⁸ <http://www.vivacom.bg/online/cgi-bin/wpd.cgi?temp=home.html&ls=0;>

10.2.4. Affordability of tariffs of the universal service

In 2013, there were no changes in the obligations imposed on BTC for affordability⁷⁹ of the universal service.

The undertaking continued to offer, without any change in the prices and conditions, the price packages intended for users: with low income ("Limited plan", as named by BTC); people whose work capacity or capacity for social adaptation has been impaired by over 90% ("Handicap 160" and "Handicap 300" plan, as named by BTC); people whose work capacity or capacity for social adaptation has been impaired by over 50% ("Handicap 300" plan, as named by BTC); people admitted to social or health institutions ("Social and health institutions" plan, as named by BTC).

The chart below displays the trend in the number of subscribers of price packages in the scope of the universal service for 2012 and 2013:



Source: Estimates based on data submitted to CRC

Figure 39

The chart clearly shows that the number of users of the three types of price packages was down by 3%, 3.8% and 1%, respectively, and the users of services in the scope of the universal service decreased by 3.2% in general.

10.3. Quality of the universal service

The service quality parameters of the universal service provision are stipulated in Ordinance No. 6⁸⁰, as Table 9 displays a comparison with the service quality indicators of the previous year.

⁷⁹ Stipulated in the Methodology for determining prices and price packages for the universal service adopted with Ordinance No. 2544 of 25.10.2008 of the Council of Ministers, prom. SG, issue 94 of 31/10/2008

⁸⁰ Ordinance No. 6 of 13 March 2008 on the universal service under the Law on the Electronic Communications (title amended - SG, issue 77 of 9 October 2012)

Table 9

Quality parameters of the universal service provision		
Parameters	2012	2013
1. Supply time for initial connection:		
<i>1.1. Times by which the fastest 95% of orders are completed</i>	13 days	14 days
<i>1.2. Times by which the fastest 99% of orders are completed</i>	24 days	24 days
<i>1.3. Percentage of orders completed by the date agreed with the customer, and when this percentage is below 80% - the average days of delay</i>	93%	98%
2. Fault rate per subscriber line	1.40%	1.45%
3. Fault repair time:		
<i>3.1. Time by which the fastest 80% of valid faults on access lines are repaired</i>	4.5 hours	3 hours
<i>3.2. Time by which the fastest 95% of valid faults on access lines are repaired</i>	26 hours	25 hours
<i>3.3. Percentage of faults cleared within the time specified in the contract with the customer</i>	95.60%	95.50%
4. Unsuccessful calls rate:		
<i>4.1. for national calls</i>	0.9%	0.9%
<i>4.2. for international calls</i>	1.5%	1.5%
5. Call set up time:		
<i>5.1. average call set up time for national calls</i>	0.169 seconds	0.158 seconds
<i>5.2. average call set up time for international calls</i>	0.376 seconds	0.363 seconds
6. Response time for operator supported calls		
<i>6.1. average response time</i>	16 seconds	11 seconds
<i>6.2. rate of calls taken within 20 seconds</i>	92%	94%
7. Call set up time (response) for calls to telephone enquiry services		
<i>7.1. average response time</i>	19 seconds	16 seconds
<i>7.2. rate of calls taken within 20 seconds</i>	91%	91%
8. Percentage of bills correctness complaints	21%	23%

9. The voice quality assessment factor (R factor)		
9.1. for wired access technology	70	70
9.2. for wireless access technology	75	75
10. One-way voice delay	not more than 150 milliseconds	not more than 150 milliseconds
11. Ratio between coin and card operated public payphones	1:5	1:5
12. Percentage of functional public telephone devices	90%	91%

Source: Data submitted to CRC

Data shows that, as compared to 2012, BTC reported a higher quality of the universal service under the following indicators:

- fault repair time;
- percentage of orders completed by the date agreed with the customer;
- call set-up time - national and international calls;
- response time for operator supported calls;
- average call set up time (response) for calls to telephone enquiry services

10.4. Compensation of net costs accrued due to the universal service provision

In 2013, the execution of the contract for verification of the net costs⁸¹ incurred by BTC for 2009 and 2010 financial years ended. In compliance with *Art. 207, Para 5 of LEC*, the results from the net costs calculation and the audit conclusions are publicly available⁸².

In implementation of the provisions of *Art. 207, Para 6 of LEC*, the Commission adopted⁸³ a draft statement concerning the existence and the size of unfair burden for BTC from the provision of the universal service for 2009 and 2010 financial years and launched a procedure for public consultations with a view to comply with the principles of transparency and regulatory predictability. During the consultations conducted with the stakeholders, BTC, in its capacity as a party which has initiated the procedure for compensation of the net costs, withdrew its applications for compensation in 2009, 2010, 2011 and 2012 financial years⁸⁴. By Decision No. 816/30.10.2013, CRC terminated the public consultations on the draft statement concerning the existence and the size of unfair burden for BTC from the provision of the universal service for 2009 and 2010 financial years due to the termination of the administrative procedure resulting from the withdrawn applications by BTC. In this regard, in 2013, no funds were deposited in the Fund for compensation of the universal service due to the absence of grounds for their collection.

10.5. Complaints and complaint resolution

According to the General Conditions governing the relations between BTC and the end users, the undertaking gives options to the users to individually track and control their costs through:

- the provision of detailed bills free of charge⁸⁵;
- selective limitation of outgoing calls free of charge;

⁸¹Public procurement with subject "Verification of the net costs incurred for the "Bulgarian Telecommunications Company" EAD by the provision of the universal service for 2009 and 2010 financial years."

⁸²http://www.crc.bg/files/_bg/Доклад_за_заклучения_и_оценки_нетните_разходи_на_БТК_за_20.pdf

⁸³ Decision No. 742/03.10.2013.

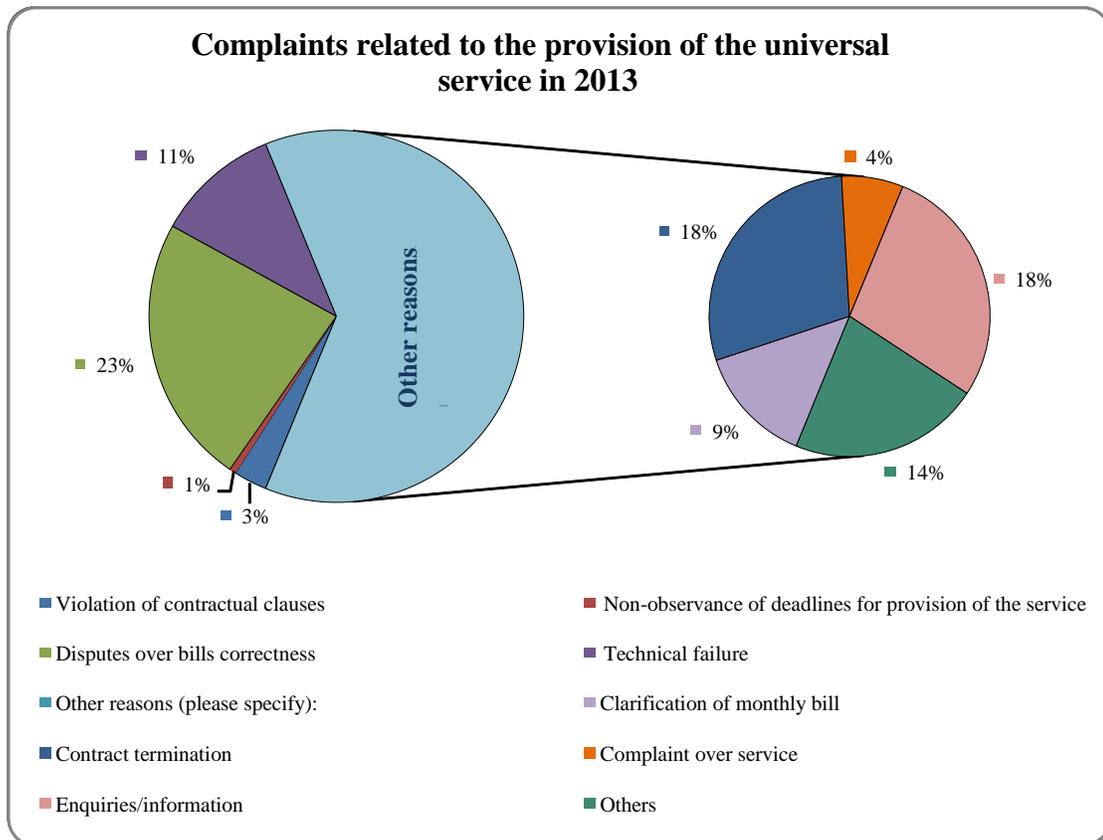
⁸⁴ Letter Ref. No. 04-04-225/25.10.2013

⁸⁵ The content of the itemized bill is defined in *Art. 260, Para 3 of LEC*

- deferred payment when connecting to public telephone networks.

In 2013, the number of complaints filed with the undertaking regarding the provision of the universal service, was 12,645, which is by 24.5% less than in 2012, and stood at 11.52 complaints per 1,000 residential subscribers.

Most often complaints disputed technical failures, bills correctness, invoice delivery, violation of contractual clauses. The causes for filing complaints are illustrated on the figure below:



Source: Data submitted to CRC

Figure 40

As it is clear from Figure 40, in 2013, percentage of complaints regarding technical failures was 11% of the total number of complaints, which is down by 2 percentage points compared to 2012. Percentage of complaints regarding contract termination was 18% of the total number of complaints, registering a drop of 4 percentage points, as compared to the same indicator in the previous year.

In 2013, BTC responded to 99.8% of the incoming complaints within the regulatory deadline of 30 days, while the percentage of resolved complaints dropped by 2 percentage points compared to 2012 and reached 41% of the total number of complaints filed.

10.6. Future development of the universal service

The consumer demand for services in the scope of the universal service is formed in the conditions of replacements of the existing network of BTC with optical network and the expanding penetration of convergent services. Although there is no efficient competition on the retail markets for fixed telephone services, the users have a great choice of services and prices, including bundled services, which allow them to reduce their costs for the electronic communications services used by them. Taking into account the steady trend towards decrease in the demand for traditional telephone services at a fixed location, the increasing trend towards their replacement with mobile telephone services, we expect that the interest in the services in the scope of the universal service in Bulgaria will continue to drop.