II. ELECTRONIC COMMUNICATIONS NETWORKS AND SERVICES

1. Voice telephone services

In 2011, the volume of market segment "Voice telephone services" amounted to BGN 2.062 billion, which is a drop of 11.2% as compared to the year before.

The information about the number of undertakings which provided services in this market segment in 2011, the number of their subscribers/lines who used voice telephone services, and the revenue from services provided is presented in Table 2.

Table 2

Number of undertakings, subscribers/lines and revenue by type of voice telephone services provided in 2011

| | Number of undertakings | | | Revenue |
|---|-------------------------------------|--------------------|-------------------------------------|--|
| Name of the service | providing the service in 2011 | Total ¹ | incl. bundled service subscriber | (in million BGN VAT excl.) ² |
| 1. Fixed voice service ³ | /// | /// | /// | 321.109 |
| 1.1. Fixed voice service through numbers from the NNP and the "carrier selection" service | 22 | 2,292,934* | * 630,944 | 318.233 |
| 1.2. Telephone services through public payphones | 3 | 11,355** | • /// | 2.875 |
| 2. Mobile voice service through numbers from the NNP | 3 | 10,475,083 | 3 1,129,928 | 1,734.082 |
| 3. Other voice services ⁴ | 28 | /// | /// | 6.778 |
| Total | | /// | /// | 2,061.969 |

¹Incl. bundled service subscribers

²Excl. revenue from bundled services

³ Two of the undertakings providing fixed voice telephony service through geographic numbers also provided telephony services through public

payphones

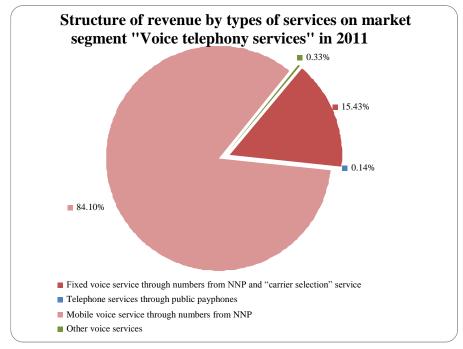
⁴ Incl. voice service through numbers with national destination code 099x, VoIP and other services related to the provision of voice telephony service *Number of lines of fixed telephone service subscribers

**Number of public payphones and booths

Source: Data submitted to CRC

In 2011, the number of undertakings providing mobile voice service remained unchanged. A decrease was reported in the number of undertakings which submitted information that they have been providing telephone services through public payphones during the year, as this number was 6 in 2010, and in the number of undertakings providing other voice services – from 29 the year before to 28 in 2011. The total number of undertakings which declared activity on providing fixed telephony service was up by one.

Figure 13 shows the distribution of revenue from different services in the segment volume.



Source: Data submitted to CRC

As the data presented on the chart clearly shows, the greatest share is occupied by revenue from mobile voice service (84.1%), followed by revenue from fixed voice service through numbers from the National Numbering Plan (NNP) and the "carrier selection" service with 15.4%. The share of revenue from public payphones and other voice services remains unchanged compared to the year before, and the reduced revenue from telephone services through public payphones is compensated by the increased revenue from other voice services.

1.1. Fixed voice telephony services

1.1.1. Players on the fixed telephony service market

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

• undertakings providing fixed telephony service and access to public telephony service through the "carrier selection" service – the activity is carried out under an authorization regime through the use of individually assigned scarce resource;

• undertakings providing access to public telephony service via public payphones – the activity is carried out under a notification regime.

With respect to the first group of undertakings, it should be noted that in 2011 CRC issued authorizations for the use of individually assigned scarce resource – numbers for provision of public electronic communications via public electronic communication network and provision of fixed telephony service to nine undertakings, and one of them – NETWORX-BULGARIA EOOD was also issued an authorization for the use of individually assigned scarce resource – numbers for provision of the "carrier selection" service. The table below contains a list of all undertakings which were authorized to carry out activity, as those which were active in 2011 are ticked.

Table 3

Authorized undertakings and undertakings actually carrying out activity related to the provision of public voice telephone service via fixed network and/or access to public voice telephone service through the "carrier selection" service in 2011

| Name of the undertakings | public voice telephone service through fixed network | | access to public voice telephone service through the "carrier selection" service | |
|---|--|--------------|--|--------------|
| | authorized | operating | authorized | operating |
| Total num | nber: 34 | 21 | 9 | 5 |
| IDT NETWORK AD | \checkmark | \checkmark | | |
| BLIZOO MEDIA AND BROADBAND EAD | \checkmark | \checkmark | | |
| BTC NET EOOD | | | \checkmark | \checkmark |
| BULSATCOM AD | \checkmark | | | |
| BULGARIAN TELECOMMUNICATIONS COMPANY AD | \checkmark | \checkmark | | |
| BULGARIAN TELECOM AND TELEVISION AD | \checkmark | | | |
| VARNA NET OOD | \checkmark | \checkmark | | |
| VESTITEL BG AD | \checkmark | | \checkmark | |
| VMOBILE AD | \checkmark | | | |
| VOXBONE S.A./N.V.* | \checkmark | \checkmark | | |
| GLOBAL COMMUNICATION NET AD | \checkmark | \checkmark | | |
| GOLD TELECOM BULGARIA AD | \checkmark | | \checkmark | \checkmark |
| ESCOM OOD | \checkmark | | | |
| EASTERN TELECOMMUNICATION COMPANY AD | \checkmark | \checkmark | \checkmark | \checkmark |
| INTERBUILD OOD | \checkmark | \checkmark | | |
| INTEROUTE BULGARIA EAD | \checkmark | \checkmark | | |
| INFOHELP EOOD | \checkmark | | | |
| IP WORLD COMMUNICATIONS EOOD | \checkmark | | | |
| CABLE SAT-WEST OOD | \checkmark | | | |
| COSMO BULGARIA MOBILE EAD | \checkmark | \checkmark | √ | |
| MOBILTEL EAD | \checkmark | \checkmark | | |
| NEXCOM-BULGARIA EAD** | \checkmark | | √ | |
| NET 1 EOOD | \checkmark | | | |
| NET IS SAT OOD | \checkmark | \checkmark | | |
| NET-CONNECT INTERNET EOOD* | \checkmark | \checkmark | | |
| NETWORX-BULGARIA EOOD** | \checkmark | | √ | |
| NETFINITY EOOD | \checkmark | \checkmark | | |
| ORBITEL EAD | \checkmark | \checkmark | √ | \checkmark |
| SKAT TV OOD | \checkmark | \checkmark | | |
| SPECTRUM NET EAD | \checkmark | | \checkmark | ~ |
| TEXBRIDGE TELECOM SERVICES EOOD | \checkmark | | | |
| TELEDATA AD | \checkmark | | | |
| TELECABLE AD | \checkmark | | | |
| TELECOM 1 OOD | \checkmark | \checkmark | | |
| TERRA COMMUNICATION" AD* | √ | \checkmark | | |

* In 2011, VOXBONE S.A., NET-CONNECT INTERNET EOOD and TERRA COMMUNICATIONS AD did not provide

** NEXCOM-BULGARIA EAD and NETWORX-BULGARIA EOOD had not provided information about their activity in 2011 by the time of the annual report's completion.

Note: The table does not contain information about "Trans Telecom" AD, since in 2011, with Decisions No. 331/31.03.2011 and No. 814/18.08.2011, CRC withdrew the authorizations issued to the company for the provision of public telephone service through geographic numbers and access to public telephone service through the "carrier selection" service.

Source: CRC Public Registry and data submitted to CRC

access to end users to the fixed telephone service through geographic numbers from NNP

A total of 22 undertakings declared to have been providing public voice telephone service via fixed network and/or access to public voice telephone service through the "carrier selection" service in 2011.

At the end of the year, the total number of undertakings which declared their intention to provide public telephone services via public payphones, reached 15. Of them, only three undertakings declared before CRC that they carry out activity related to provision of this service. This number includes BTC which provides the "access to public telephone service via public payphones" service, as a part of its obligation to perform the universal service.

1.1.2. Change in the "fixed voice telephone service" segment

The total volume of revenue generated in 2011 from the provision of fixed telephony services¹, access to public telephone services through the "carrier selection" service, and access to public telephone services through public payphones and phone booths, amounted to BGN 321.1 million. For another consecutive year, a drop was reported in the total volume of gained revenue, yet the decrease in 2011, compared to 2010, amounted to 15.8%, which is by 10 percentage points less than the decrease in 2010 against 2009.

The total outgoing traffic (measured in minutes) originated by subscribers² from national (local and long-distance calls, calls to land mobile networks, to networks for broadband wireless access, and to non-geographic numbers) and international calls also dropped, as the decline in 2011 was 9.5%, compared to the preceding year.

For another consecutive year, data about the activity related to provision of public telephone service through fixed network and through the "carrier selection" service show that the use of this service by subscribers of fixed telephony service is limited. The volume of traffic generated by the use of the "carrier selection" service in 2011 was down to half the traffic in 2010, and its share in the volume of telephone traffic originated by subscribers of fixed telephony service hardly reached 0.5%.

The market share of the incumbent, calculated on the basis of revenue³ from the provision of public telephone service via fixed network and "carrier selection" service, amounted to 91.4% in 2011, compared to 93.9% in 2010.

1.1.3. Fixed telephone lines

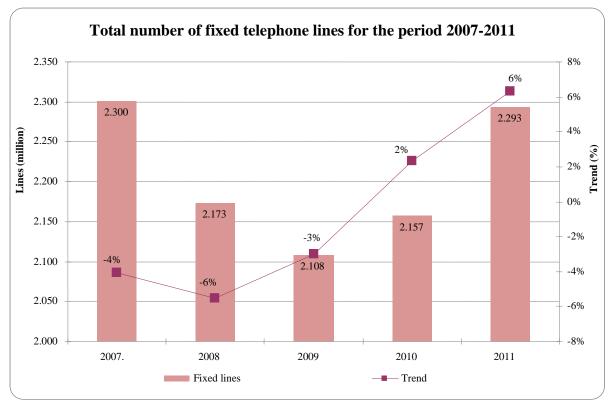
According to data submitted to CRC, 18 of the undertakings listed in Table 3 provided access to fixed telephony service through geographic numbers from the NNP in 2011, and 4 of them also offered access to public telephone service via the "carrier selection" service. One undertaking (BTC NET EOOD) offered access to public telephone service only through the "carrier selection" service.

In 2011, the total number of fixed telephone lines in Bulgaria registered a growth of 6%, compared to 2010, which is due to the increased number of fixed telephone lines of subscribers of the alternative undertakings (Figure 14). Fixed telephone lines of the incumbent's subscribers fell by 10% for a one-year period, and the market share of the undertaking calculated based on this index, reached 68.1%.

¹ Excluding revenue from installation fees and monthly subscriptions for bundled services which include fixed telephone services.

 $^{^2}$ Including traffic originated by subscribers of fixed telephone service, incl. the "carrier selection" service, as well as traffic from calls from public payphones.

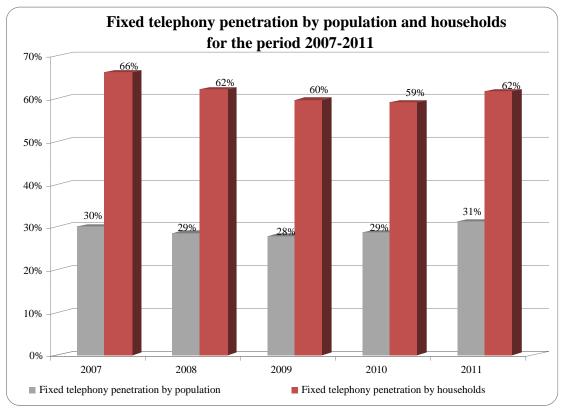
³ Using revenue from the provision of access to fixed telephone service (excl. revenue from monthly subscriptions for bundled services which include fixed telephone service), retail traffic revenue and other retail revenue from telephone service subscribers, wholesale interconnection services revenue, as the revenue generated from the provision of the "international transit" service are taken into account after deduction of the expenditure for traffic termination.



Source: Data submitted to CRC

The increased number of fixed telephone lines in the past two years is due to the rise in the number of fixed telephone lines with access via mobile networks and the growing spread of bundled services among users. The subscribers of bundled services which include fixed telephony service increased by over 60% at the end of 2011, as compared to the end of 2010.

According to data of the undertakings, the number of subscribers of the "carrier selection" service continued to drop in 2011. At the end of the year, the share of subscribers using the service in the total number of subscribers of fixed telephony service was insignificant -0.1%.



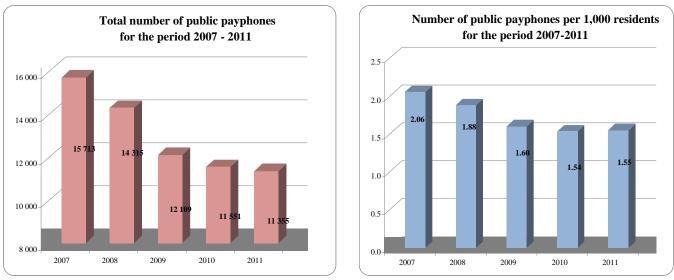
Source: Data submitted to CRC

The values of "fixed telephony penetration in terms of households" and "fixed telephony penetration in terms of population" indices were calculated as a ratio between the number of active telephone lines of residential subscribers and the number of households in the country, and between the total number of active telephone lines and the number of population in the country as of 31 December of the respective year⁴. As Figure 15 clearly shows, both indices report a growth by 3 percentage points and 2 percentage points, respectively, in 2011 against 2010.

1.1.4. Public payphones

The number of public payphones and phone booths amounted to 11,355 as of 31.12.2011, which is 1.7% less than the end of the preceding year (Fugure 16).

⁴ NSI is the source of data regarding the number of households and population. The number of households at the end of 2010 and 2011 was taken from the final results of the census carried out in February 2011.



Source: Data submitted to CRC

Figure 17

As Figure 17 clearly shows, the value of the "number of public payphones per 1,000 residents" index in Bulgaria did not change significantly for the period 2010 - 2011.

1.2. Mobile voice telephony services

1.2.1. Market players

At the end of 2011, three undertakings actually provided on the Bulgarian market mobile voice telephony services via networks working in bands 900 MHz, 1800 MHz and 2 GHz – MOBILTEL EAD, COSMO BULGARIA MOBILE EAD and BTC.

1.2.2. Network coverage

The table below presents information about the coverage as of 31.12.2011 of terrestrial mobile networks operating in bands 900 MHz, 1800 MHz and 2 GHz.

| T | a | b | le | 4 |
|---|---|---|----|---|
| | | | | |

| undertaking | Mobiltel EAD | | | Cosmo Bulgaria Mobile EAD | | BTC | |
|--------------------------|--------------|--------|--------|------------------------------|--------|--------|--|
| index | GSM | UMTS | GSM | UMTS | GSM | UMTS | |
| coverage by territory | 99.25% | 89.50% | 99.25% | 72.17% | 98.18% | 87.00% | |
| coverage by population | 99.99% | 97.64% | 99.98% | 92.95% | 99.99% | 97.81% | |

Source: Data submitted to CRC

In 2011, mobile undertakings continued to invest in their UMTS networks, which already cover over 90% of the country's population. At the end of the year, BTC was the undertaking with the largest UMTS coverage per population, while the three undertakings had almost the same coverage of GSM standard. On the other hand, over a one-year period, the

highest growth of UMTS coverage by territory was registered by Mobiltel EAD (34 points), followed by COSMO BULGARIA MOBILE EAD (12 points) and BTC (10 points).

1.2.3. Development of the voice telephony services market

Dynamics and development of the market

The total revenue from the provision of mobile telephony services reported another decrease: for the reviewed period, they were down by 10.5%, and came in at BGN 1.73 billion at the end of 2011.⁵

The reported trend towards decline in revenue of mobile undertakings is a result of the more unfavourable economic situation in the last several years (characterized by a slowdown in the economic growth and limitation of business expenses) and long-term effects, such as saturation of the traditional voice services markets and their entering into the maturity stage.

In 2011, an increase was reported in the number of subscribers of mobile telephony services. At the end of the year, the number of active SIM cards which allow the use of voice services was $10,475,083^6$ which is up by 2.7% since the end of 2010 (Fugure 18)

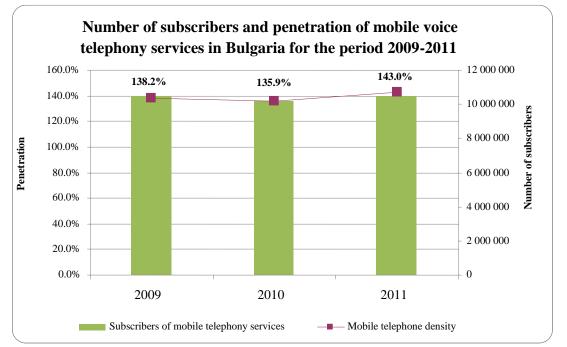


Figure 18

Note: In connection with the final data on the number of population at the end of 2010 and the end of 2011 published by NSI⁷, the index of penetration of mobile voice services per population for 2010 was recalculated, compared to the data published in the CRC's Annual Report for 2010.

Source: Data submitted to CRC

In 2011, as a result of the increase in the number of subscribers of mobile telephone

⁵ Includes revenue from mobile voice telephone services and additional services related to the mobile voice service (such as SMS, MMS, video calls, information services, etc.), except for revenue from monthly subscriptions for mobile telephone service provided bundled with other electronic communication services).

⁶ 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 voice telephone calls.

⁷ http://www.nsi.bg/ORPDOCS/Pop 6.1.1 Pop DR.xls

services, the index of mobile telephone penetration also registered a growth of 7 percentage points since 2010, thus reaching 143%.

Ratio between users of prepaid services and contract subscribers

Contract subscribers in Bulgaria continue to increase which reflects on the relative share of pre-paid subscribers in the total number of subscribers of mobile voice services and it was down to 37% at the end of 2011.

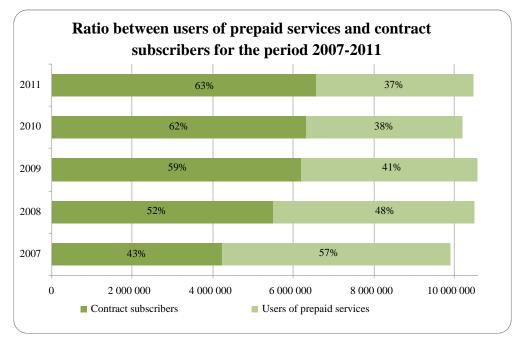


Figure 19

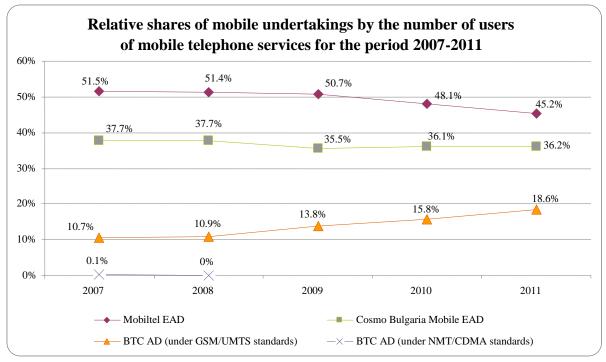
Note: The 2010 and 2011 data do not take into account mobile data card services which do not allow voice calls. The ratios for preceding years were calculated on the basis of data concerning all cards due to lack of comparative information.

Source: Data submitted to CRC

It should be noted that the trend of the previous year is preserved, as once again almost half (49.8%) of the new subscribers activated during the year were under contract. At the same time, the number of deactivated prepaid cards increased considerably. This is explained by, on the one hand, the requirement for compulsory registration of prepaid cards, effective as of the start of 2010, and on the other hand, the more favourable conditions offered when entering into contract, including lower call prices and many promotional offers with free minutes and terminal equipment included.

Relative shares

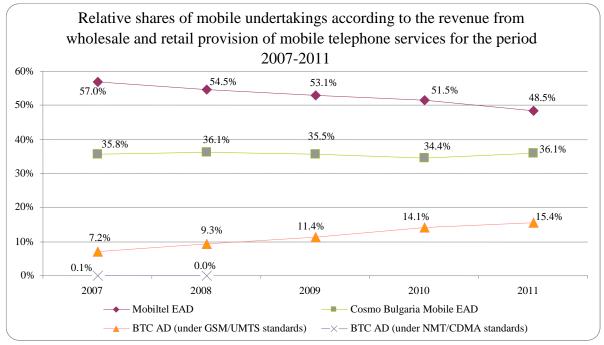
The change in the relative shares of undertakings, calculated both according to the number of subscribers and the revenue from the provision of mobile telephone services for the period 2007-2011, is presented on Figure 20 and Figure 21, respectively.



Source: Data submitted to CRC

Fugure 20

When considering the relative shares calculated according to the number of subscribers⁸, it makes an impression that the share of BTC rose by almost 3 percentage points on a one-year basis, mostly at the expense of MOBILTEL EAD.



Source: Data submitted to CRC

Figure 21

⁸ Market shares were calculated based on the number of active SIM cards which allow the making of voice calls at the end of the respective year.

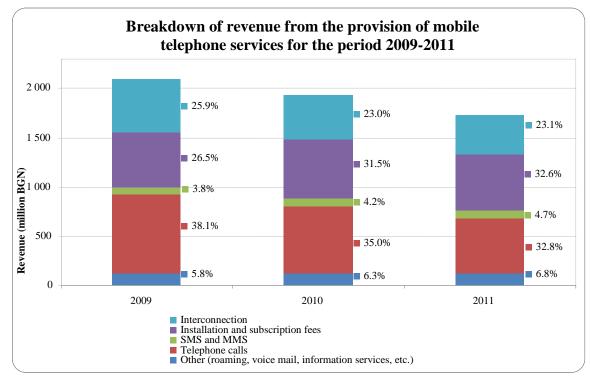
When looking into the relative shares by revenue⁹, cash flows from the provision of mobile voice telephone services are once again seen as undergoing reshuffle. For a one-year period, the market share of the largest undertaking declined by 3 percentage points, while that of the other two undertakings – COSMO BULGARIA MOBILE EAD and BTC grew by 1.7 percentage points and by 1.3 percentage points, respectively.

Undertakings with significant market power

With Decision No. 236/17.03.2009, CRC designated MOBILTEL EAD, COSMO BULGARIA MOBILE EAD and BTC as the undertakings having significant power on the wholesale market for voice call termination on their own mobile networks. In accordance with the glide-path adopted by CRC, in 2011 the termination rates on the networks of the three undertakings corresponded to its last step – BGN 0.13 (peak hours) and BGN 0.11 (off-peak hours). In the second half of 2011, CRC launched the second round of the procedure for definition, analysis and assessment the market for voice calls termination on individual networks.

1.2.4. Distribution of revenue from services provided via mobile networks operating in bands 900 MHz, 1800 MHz and 2 GHz

The information presented on Fugure 22 clearly shows that voice telephony remained the main revenue source for undertakings, as it forms approximately 32.8% of the total amount of revenue from mobile services.



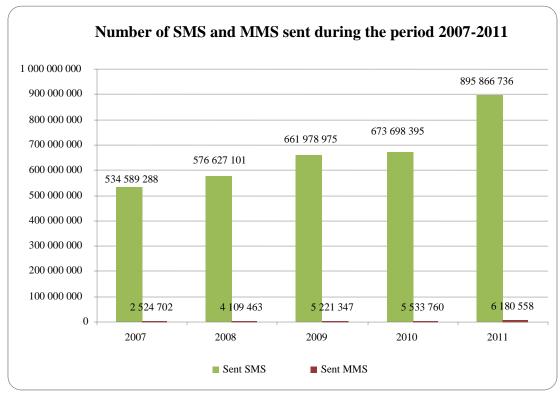
Source: Data submitted to CRC

Figure 22

However, it should be taken into account that the actual share of voice services is even

⁹ Market shares were calculated based on revenue from mobile voice services and additional services related to the mobile voice service (such as SMS, MMS, video calls, information services, etc.). The 2010 and 2011 data exclude the revenue from monthly subscriptions for mobile telephone service provided bundled with other electronic communication services.

higher because revenue from calls included in the free-of-charge minute plans is reported as revenue from monthly subscription - in 2011, this revenue increased by 1 percentage points, as compared to 2010, and comprised 32.6% of the total revenue. The share of additional services related to the provision of the telephone service remained stable.



Source: Data submitted to CRC

Fugure 23

The data on Fugure 23 show that in 2011, the total number of sent multimedia messages (MMS) rose by 12% compared to 2010, while the number of sent short text messages (SMS) was almost 33% higher than the year before.

Prospects for development

The development of the mobile telephony services in the future will focus much more on redistribution of existing subscribers than on attracting new ones.

From the introduction of the "number portability" service (April 2008) to the end of 2011, some 247,910 numbers were ported, almost 47% of them last year. However, the subscribers who took advantage of the "number portability" service still represent a very small portion of the total number of subscribers of mobile voice services - approximately 2.4%, which is just around 1 percentage point more than the end of 2010.

The prospects for development of the mobile voice services are related to:

- preservation and intensification of the trend for increase in the number of users of voice telephone services who stop using fixed services and replace them with mobile ones;

- reduction of the user's average monthly costs for mobile telephony services;

- offering many promotions related to discounts on monthly subscription prices, inclusion of additional minutes for outgoing calls, etc.;

- increase in the consumption of mobile telephony services offered bundled with other electronic communication services, as a result of mobile operators' entering into new market segments;

- change in the structure of the mobile market in general – to end users, services related to Internet access, content, etc., will gain greater importance, considering also the increased sales of smart phones.

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

In 2011, voice services provided via networks for broadband wireless access continued to undergo a difficult development

As of 31.12.2011, three undertakings were licensed to build electronic communications networks for broadband wireless access (BWA): MAX TELECOM OOD, NEXCOM BULGARIA EAD, and CARRIER BG AD, of which commercial activity was carried out only by MAX TELECOM OOD through the provision of voice services via non-geographic numbers with national destination code 099x, and NEXCOM BULGARIA EAD through services related to geographic numbers.

In 2011, following the declaration of insolvency and due to the systematic nonpayment of fees due, with Decision No. 814/18.08.2011, CRC withdrew the authorization for building of electronic communications networks for broadband wireless access of TRANS TELECOM AD.

The networks for broadband wireless access (BWA) allow the provision of voice telephone services through geographic and non-geographic numbers and services related to broadband wireless Internet access. As of 31.12.2011, the subscribers of voice services with 099x numbers registered an increase of nearly 57% and constituted 0.01% of the total number of voice services subscribers at the end of the year.

In 2011, the total revenue from the provision of voice services via networks for broadband wireless access (BWA) by means of radio frequency spectrum registered a decline of 45.14%, as they made up only 0.08% of the volume of the electronic communications market in Bulgaria.

It should be noted that similarly to the preceding year 2010, the main portion of revenue gained in 2011 was from wholesale services (around 98%), mostly from transit of incoming international calls.

In 2011, the revenue from retail services reported a drop of 19.34% compared to the year before, as this change was mainly due to the decrease in the minutes of outgoing traffic generated by subscribers who made calls through non-geographic numbers national destination code 099x

The need for significant investments in the network development (building of a sufficient number of base stations which will allow the provision of services like voice and Internet access), and the high price of end-user terminal equipment in the conditions of financial crisis, are among the main reasons for the negative impact on the development of the networks for broadband wireless access (BWA) in Bulgaria, and the voice service in particular.

2.Leased lines services

2.1. Market players

As of 31.12.2011, a total of 50 undertakings have notified CRC of their intention to provide the "leased lines" service, including "international leased lines". In 2011, 9 new undertakings notified the Commission that they will start providing this service, while 3 undertakings filed documents to terminate this activity.

According to the data submitted to CRC, in 2011, 20 undertakings were active on the market segment of leased lines, 10 of them provided the service at both retail and wholesale level (Table 5).

Undertakings which provided the "leased lines" services for the period 2009 - 2011 2009 2010 2011 Undertaking wholesale retail wholesale retail wholesale retail IDT NETWORK AD ~ 1 ~ ~ BLIZOO MEDIA AND BROADBAND EAD √ √ \checkmark √ √ BULGARTEL EAD ~ ~ BULGARIAN TELECOMMUNICATIONS COMPANY AD ~ 1 ⁄ √ ~ ~ ~ VARNA LAN OOD VESTITEL BG AD \checkmark √ ~ ~ ~ ~ ✓ ✓ GLOBAL COMMUNICATION NET AD ~ ~ ~ 1 NBI SYSTEMS OOD 1 INVITEL INTERNATIONAL ✓ BULGARIA EOOD ~ INTERBUILD OOD \checkmark COSMO BULGARIA MOBILE EAD MOBILTEL EAD ✓ ✓ √ √ √ ~ NETGUARD OOD ✓ ✓ ✓ √ ✓ ~ NETERRA EOOD √ NETSTAR TELECOM OOD NETWORX - BULGARIA OOD √ ✓ ~ ~ √ NOVATEL EOOD ✓ ✓ ✓ ✓ ✓ ~ PLADI COMPUTERS OOD ~ ~ ~ RACOM AD SUNNY BEACH AD ✓ \checkmark \checkmark \checkmark ~ ✓ ✓ SOFIA COMMUNICATIONS EAD √ SOFIA ONLINE EOOD SPECTRUM NET AD ~ ~ TELNET OOD 1 Number of active undertakings which provide 19 15 10 16 11 11 wholesale and retail leased lines 17 18 20 Total number of active undertakings:

Undertakings which provided the "leased lines" services for the period 2009 - 2011

Source: CRC Public Registry and data submitted to CRC

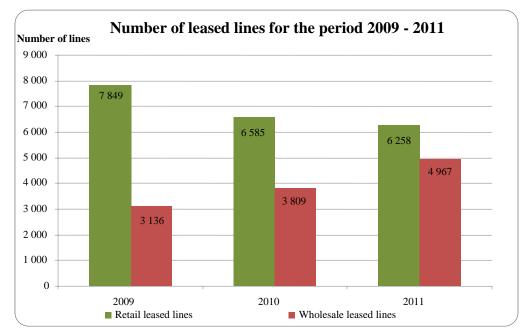
2.2. Volume of the market and market shares

Revenue from the provision of "leased lines" service in 2011 amounted to nearly BGN 44 million, which represents a decrease of approximately 11% since 2010.¹⁰

While the number of retail leased lines in 2011 dropped by nearly 5% since 2010, the number of wholesale leased lines grew by 30.4% as compared to the preceding year (Fugure 24).

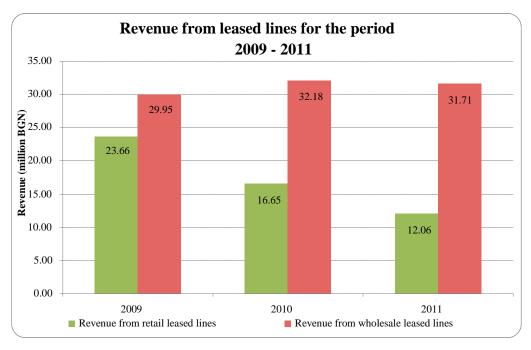
Table 5

¹⁰ According to 2011 annual questionnaire on activity reporting, undertakings that offer international leased lines are required to declare only the revenues from the national sections of the lines.



Source: Data submitted to CRC

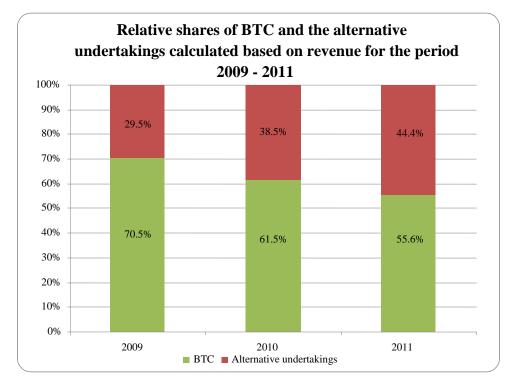
Although the decrease in revenue generated from leased lines has been a steady trend in the last several years, it is mostly due to the drop in revenue from retail leased lines which in 2011 were down by 27.6% compared to 2010, and to a much lower extent comes as a result of the decline in revenue generated from the wholesale leased lines which amounts to 1.5% (Fugure 25).



Source: Data submitted to CRC

Figure 25

The relative share of the incumbent of the "leased lines" segment calculated based on the revenues generated from this activity, continued to drop and in 2011 constituted 55.6% of the segment (in comparison to 61.5% in 2010 and 70.5% in 2009) – Figure 26.

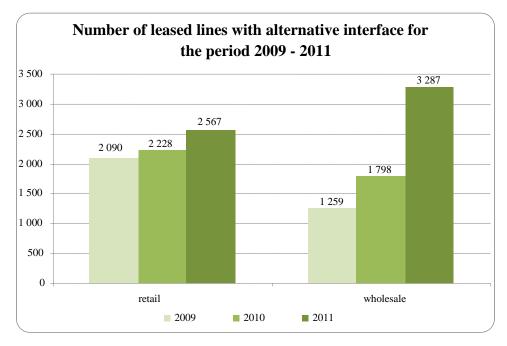


Source: Data submitted to CRC

In 2011, the relative share of the incumbent was lower in the retail segment, as in terms of the number of provided leased lines, the share of BTC was down to 59.4%, and in terms of generated revenue, it dropped to 85%. Certain decline was also observed in the relative share of the undertaking in the wholesale leased lines segment, where, based on the number of lines, its share dropped to 27.4% in 2011, and based on revenue – to 44.5% (in the preceding year, these shares were respectively 42.7% based on lines, and 46.9% based on revenue).

The development of technologies in the last years has increased the trend towards supply and demand of alternative leased lines¹¹ (Ethernet) at the expense of the traditional ones (analogue and digital), since the technical capacity and the quality of the service of the alternative (Ethernet) networks provide functional characteristics which can be reviewed as alternative to those of the traditional leased lines (Fugure 27).

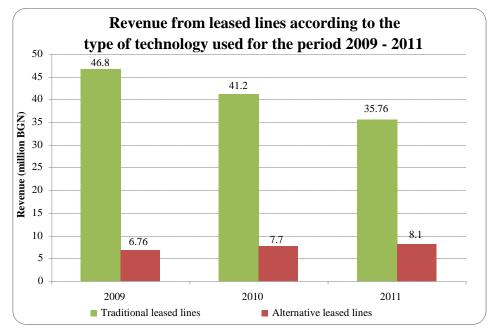
¹¹ At the end of 2011, all alternative leased lines provided in this market segment (retail and/or wholesale) were Ethernet.



Source: Data submitted to CRC

In 2011, the number of alternative leased lines provided grew by 15.2% at retail level, and by 82.8% at wholesale level, while the number of traditional ones reported a drop by 15.3% at retail level, and 16.5% at wholesale level, as compared to 2010. As a result of the migration to alternative leased lines, revenue from traditional ones dropped significantly in 2011, as compared to 2010 (by 37.5%).

Regardless of the observed growth in the number of alternative leased lines provided at both retail and wholesale level, revenue from these lines either remained at the same level or increased very insignificantly compared to 2010 (Fugure 28). This may be explained by the growing competition observed in this market segment, which influences the level of prices towards decrease.



Source: Data submitted to CRC

Figure 28

3. Data transfer and Internet access

Services related to Internet access and data transfer in the country continued to undergo a dynamic development. In 2011, the total number of undertakings registered with CRC for data transfer and Internet access services was 917 The number of undertakings which actively provided services stood at 646 up 6% from 2010.

The undertakings active in this segment offer their services in two ways – individually or bundled with other electronic services, such as television and voice. In 2011, revenue from individual Internet access and data transfer services remained almost unchanged at BGN 316¹² million, compared to BGN 317 million a year ago. At the same time, revenue from bundles, including Internet access services, reached BGN 219 million, with annual growth of 117%¹³.

According to data submitted to CRC, revenue from wholesale services (sale of Internet capacity, MAN connectivity, bitstream access and unbundled access to subscriber line) amounted to BGN 34 million in 2011 and increased by 20% compared to the preceding year. At the same time, 643 undertakings offered services intended for end users (retail). Revenue from these services amounted to BGN 282 million and slipped by 2% year-on-year.

In the past year, Internet users in the country grew significantly in number. As of 31.12.2011, the total number of Internet services' subscribers (fixed and mobile Internet access) reached $1,605,246^{14}$, up 14.6% compared to 31.12.2010.

Depending on whether users receive Internet access in a fixed position or not, services are categorized as fixed or mobile. As of 31.12.2011, the number of subscribers of fixed Internet access (including bundled services) reached 1,289,289, up 13.5% year-on-year. As of 31.12.2011, the number of active subscribers of mobile Internet access services via data cards or modem reached 315,957 up 19% since the year before.

Fixed Internet access (including bundled services) registered a growth both in terms of residential and business subscribers. As of 31.12.2011, the number of residential subscribers rose by 14% to 1,130,326, and the number of business subscribers increased by 10% to 158,963.

At the end of 2011, penetration of fixed Internet access among households in the country was $37.6\%^{15}$ compared to 33.0% at the end of the preceding year. On population basis, penetration as of 31.12.2011 reached 17.6% compared to $15.1\%^{16}$ a year ago.

The increase in the number of subscribers of fixed Internet access reflected on the number of settlements where such services were offered. At the end of 2011, fixed Internet access was offered in 2,747 settlements, which was a net increase of 395 more than at the end of 2010.

A dynamic change has been observed in the last several years in the structure of fixed Internet access. Between 31.12.2009 and 31.12.2011, the relative share of subscribers using bundled Internet access services in the total number of subscribers expanded from 24% to 41%. If the rapid development of bundled services continues at its present pace, it is very likely that by the end of next year the majority of fixed Internet access subscribers will have a bundled services contract next year.

Unlike most European markets where incumbent undertakings have a high market share (on subscribers' basis), the fixed Internet access market in Bulgaria is highly

¹² According to an expert evaluation based on data submitted to CRC by 88% of registered undertakings.

¹³ Detailed information on bundled services is provided in item 5 Bundled services.

¹⁴ According to an expert evaluation based on data submitted to CRC by 88% of registered undertakings.

¹⁵ For calculation of this index, the data on home subscribers were compared to the total number of households in the country according to Census 2011 carried out by NSI.

¹⁶ For calculation of this index, the NSI data on the population in the country as of 31.12.2011 and 31.12.2010 were used.

fragmented. As of 31.12.2011, the relative share of BTC in the total number of fixed Internet access subscribers was down to 26.2% against 30.6% a year ago.

The fragmentation of the fixed Internet access market is illustrated by the ranking of the 10 largest undertakings. According to CRC data, the total market share of the ten biggest Internet providers in the country (based on subscribers) reached 66.5% as of 31.12.2011, up of 3.4 percentage points from a year ago.

Table 6

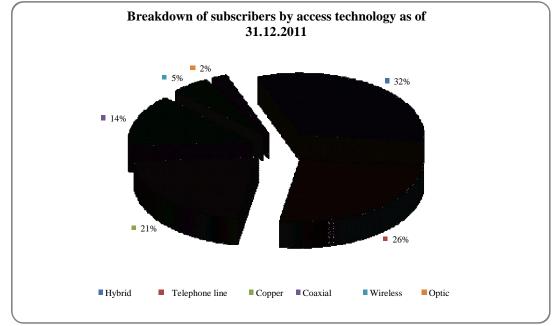
| Undertaing | Ran | ık | |
|----------------------------|--------|--------|--|
| Undertaking | 2011 | 2010 | |
| BTC | 1 | 1 | |
| BLIZOO MEDIA AND BROADBAND | 2 | 2 | |
| BULSATCOM | 3 | 4 | |
| MEGALAN NETWORK | 4 | 3 | |
| MAX TELECOM | 5 | 18 | |
| NET 1 | 6 | 5 | |
| MOBILTEL | 7 | 9 | |
| NETWORX - BULGARIA | 8 | 7 | |
| SPECTRUM NET | 9 | 6 | |
| POWERNET | 10 | 8 | |
| TOTAL | 66.50% | 63.10% | |

| Top 10 Internet providers based on subscribers for the period $2010 - 200$ |
|--|
|--|

Source: Data submitted to CRC

A consolidation process is underway on the market for fixed Internet access. In the past year, MOBILTEL EAD aquired MEGALAN NETWORK AD and SPECTRUM NET EAD. A year earlier, as a result of the merger between two leading undertakings, the second biggest provider was founded – BLIZOO MEDIA AND BROADBAND EAD.

The large number of undertakings offering Internet access services predetermines the presence of wide diversity of technologies for fixed access on the market. According to the type of transmission media in the subscriber network, technologies are as follows: telephone line (ADSL and Dial-up), coaxial cable (CaTV), optics (FTTH), hybrid networks (FTTB/N/C), copper networks (LAN) and wireless networks (RLAN, WiMax, satellite access).



Source: Data submitted to CRC

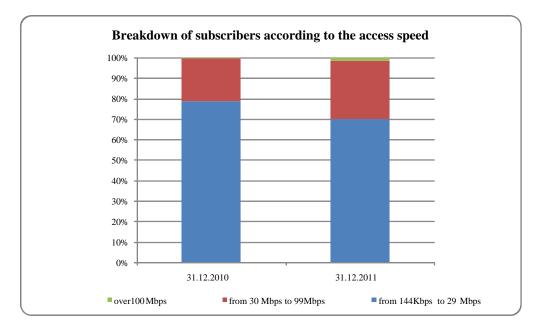
At the end of the past year, hybrid technologies occupied a leading position on the Bulgarian market. When compared to the previous year, their relative share (on subscribers' basis) was up by 5 percentage points, thus reaching 32%. In this way, they superseded the leading until then technology of Internet access via telephone line (ADSL).

There are two types of Internet access via telephone line – Dial-up and non dial-up (ADSL). Dial-up access has the disadvantage of occupying the telephone line and, respectively, the user pays both the Internet access rate and the telephone traffic. Moreover, the speed of Internet connection may not exceed 56 Kbps, which makes this access non-competitive to others. As of 31.12.2011, the relative share of subscribers to dial-up access in the country was significantly below 1%. Non dial-up access via telephone line (ADSL) suggests the use of a digital line and delivers much higher speeds. When compared to the preceding year, the relative share of subscribers of ADSL access dropped by 5 percentage points to 26%.

The leading undertaking offering Internet access services via telephone line was BTC. The incumbent, defined as an undertaking with significant power on the market for wholesale access to (physical) infrastructure and the market for wholesale broadband access, was assigned the obligation to provide specific access to this network thus enabling other undertakings to offer DSL services to users in the country. As of 31.12.2011, five companies had already entered into contracts for bitstream access with BTC. However, only one undertaking actually provided such access to end users –ORBITEL EAD. At the end of 2011, the relative share of the subscribers of DSL bitstream access was negligibly small, as their number was well below 100.

From a technological point of view, migration has been observed in the market of fixed Internet access for the last years. The relative share of hybrid and coaxial subscriber networks expands at the expense of traditional LAN and ADSL technology. This migration process brings a higher service quality.

One of the main criteria for Internet service quality is the access speed. As of 31.12.2011, based on CRC data, 50% of the fixed Internet access subscribers used access with international download speed exceeding 15 Mbps. For comparison purposes, as of 31.12.2010, 50% of the fixed Internet services users had international download speed of over 12 Mbps.



Source: Data submitted to CRC

Figure 30

In 2012 the main trends on the market related to fixed Internet access are expected to be preserved. The active offering of bundled services will lead to an increase in the relative share of their subscribers, which is very likely to exceed 50%. Migration from traditional access technology to optical and hybrid networks is also a process difficult to reverse. On its part, the spread of hybrid networks will enable additional rise in offered speeds. As a result of the fast development rate of mobile services, the relative share of mobile Internet subscribers is expected to increase at the expense of fixed Internet subscribers.

4. Transmission and/or broadcasting of radio and/or TV programs services

4.1. Structure of market segment "Transmission and/or distribution of radio and/or television programs services"

In 2011, the size of the market segment "Transmission and/or distribution of radio and/or TV programs services" reached BGN 243.810 million and decreased by almost 17% over a one-year period, which is mostly due to the decrease of 34% in revenue from cable television for end users where the total number of subscribers fell by 12.5% in the last year.

In 2011, the highest growth in the segment was observed in revenue from the provision of IPTV wholesale services and IPTV to end users. The revenue from IPTV wholesale service grew 2.4 times, while the revenue from the provision of IPTV to end users 2.7 times respectively and the number of subscribers increased 3.7 times.

Information on the number of undertakings that provided transmission and/or distribution of radio and/or TV programs services in 2011, 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 7 and Figure 31 below:

Table 7

Number of subscribers/users and revenue by type of transmission and/or distribution of radio and/or TV programs services in the segment provided in 2011

| | Number of undertakings providing the service in 2011 | Number of subscribers/users as of 31.12.2011 | | Revenue |
|---|--|---|--|---|
| Name of the service | | Total ¹ | incl. bundled services subscribers | (in million BGN, VAT excl.) ² |
| 1. Retail distribution of radio and television programs | 385 | 1,535,338 | 401,312 | 196.364 |
| 1.1. Cable television ³ | 337 | 903,461 | 279,383 | 94.690 |
| 1.2. Satellite television | 3 | 605,499 | 98,240 | 101.202 |
| 1.3. IPTV | 51 | 26,378 | 23,689 | 0.472 |
| 2. Terrestrial broadcasting of radio and/or television programs ⁴ | 88 | /// | /// | /// |
| 3. Provision of transmission/distribution of radio and/or television programs | 17 | 229 | /// | 47.446 |
| 3.1. Transmission of radio and/or television programs services | 5 | 87 | /// | 8.529 |
| 3.2. Distribution of radio and/or television programs services, incl. IPTV wholesale service provided to other undertakings | 14 | 142 | /// | 38.917 |
| | Fotal /// | /// | /// | 243.810 |

¹Incl. bundled services subscribers

²Excl. revenue from bundled services

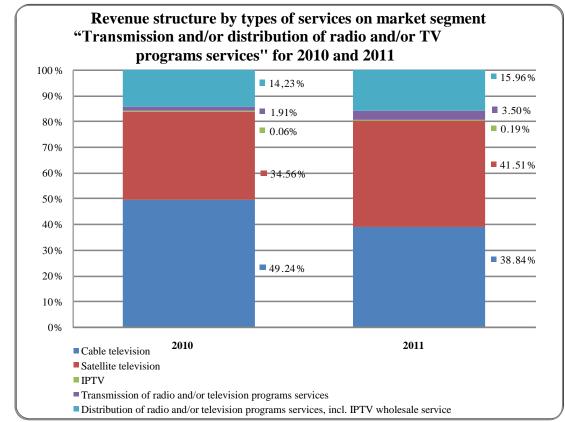
³Data on the total number of cable television subscribers and revenue were calculated by an expert evaluation based on data submitted to CRC by 91.5% of

the registered undertakings.

⁴12 of the undertakings registered with CRC for the provision of the service have not submitted an activity report for 2011.

Source: Data submitted to CRC

Compared to 2010, the number of undertakings providing radio and TV programs services to end users grew by 4.6%, and the number of subscribers - by 3.1%. In 2011 an increase by nearly 19% was registered in the number of undertakings providing terrestrial broadcasting of radio and TV programs services, while the number of undertakings providing wholesale transmission/distribution of radio and TV programs was up by 6%.



Source: Data submitted to CRC



In 2011, the largest share of the total volume of the segment (80.5%) continued to be occupied by the revenue from the provision of radio and TV retail programs services such as: cable television, satellite television and IPTV. Regardless of the high growth in the number of subscribers and revenue during the year, the share of revenue from IPTV, provided to end users remains the lowest in the segment -0.19%.

4.2. Retail distribution of radio and TV programs

4.2.1. Cable television

In 2011, 39 new undertakings notified CRC of their intention to provide public electronic communications through a cable network for transmission and/or distribution of radio and TV programs. The number of undertakings which filed documents with CRC to terminate this activity was 47.

In 2011, the total number of undertakings registered with CRC was 435^{17} , as the number of undertakings that actually provided cable television remained almost at the same level as the year before – 337 (340 in 2010), which indicates sustainability of the market segment with regard to reorganization and consolidation of undertakings operating there.

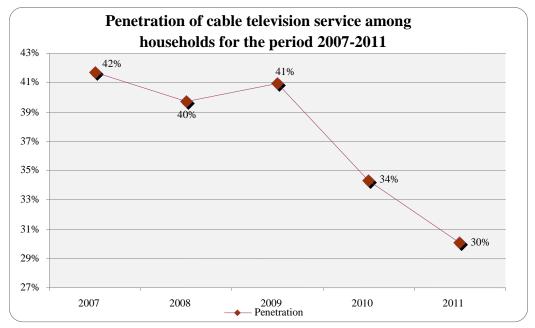
Subscribers and revenue from cable television

According to an expert estimation based on data submitted to CRC by 91.5% of the registered undertakings, the total number of subscribers of cable television in Bulgaria was

¹⁷ Total number of undertakings providing transmission and/or distribution of radio and/or TV programs services as of 31.12.2011, excluding those effaced during the year.

903,461 as of 31.12.2011, as it decreased by $12.5\%^{18}$ against 2010. The decrease in the number of subscribers is mainly due to the observed migration to services alternative to cable television, namely satellite television and IPTV, which registered a growth in the number of subscribers in 2011.

The penetration of cable television among Bulgarian households dropped by 4 percentage points, compared to the preceding year, and at the end of the year reached 30% (Figure 32).

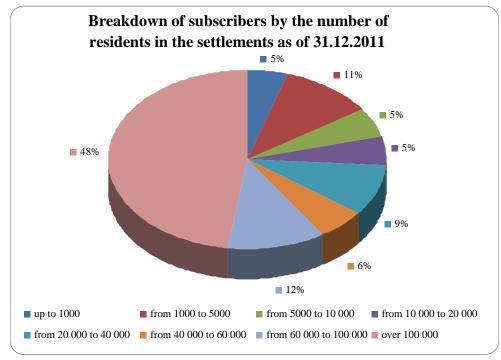


Source: Data submitted to CRC

Figure 32

In 2011, approximately half of the subscribers of cable television were concentrated in cities with population of over 100,000 residents, while the relative share of subscribers in towns with population of over 60,000 residents (cumulative), dropped to 60%. In small settlements with up to 5,000 residents, this index grew by 4 percentage points, as compared to the year before, thus reaching 16% (Fugure 33).

¹⁸ The estimation of the number of subscribers and revenue from cable television in 2010 was recalculated, as the undertakings that did not submit report on their activity for 2010 and were effaced from the CRC Registry as of 01.01.2012, were not taken into account.

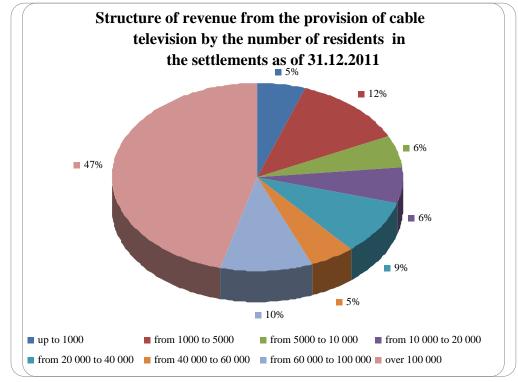


Source: Data submitted to CRC

According to an expert estimation based on data submitted to CRC by 91.5% of the registered undertakings, the volume of total revenue generated from cable television subscribers amounted to BGN 94.7 million, which is nearly 34.4% less, compared with 2010¹⁹. This is due to the decreased number of cable television subscribers at the expense of satellite and IP-based television, as well as to the increased share of bundled services subscribers which constituted approximately 35% of the total number of cable television subscribers at the end of 2011.

Figure 34 presents the structure of revenue from the provision of public electronic communications through a cable network for transmission and/or distribution of radio and TV programs.

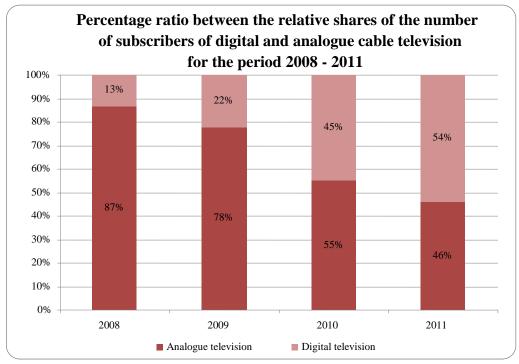
¹⁹ The volume of total revenue from cable television excludes revenue from the provision of bundled services.



Source: Data submitted to CRC

Figure 34

The number of undertakings providing digital television programs to subscribers increased by 20 against 2010, as it reached 76. However, the main share of revenue from the provision of cable television in 2011 was still generated from broadcasting of analogue programs - 52%. A considerable number of undertakings (17) providing digital cable television did not declare any revenue from the provision of this service to their subscribers in the activity statement questionnaires in 2011, which indicates the absence of additional fees for the use of digital television by subscribers. This is mainly due to the technological development and the intensified competition with undertakings providing television service based on a different technological platform (satellite television, IPTV). The trend observed in the last years towards an increase in the number of subscribers of digital cable television at the expense of the analogue one, is due to the higher quality and more favourable conditions offered by undertakings, and also to the technology development in terms of terminal devices which allow and stimulate a growing part of cable television users to replace the traditional analogue signal with a digital one. The relative share of users that receive digital cable television grew by 9 percentage points since 2010, and covers 54% of all cable television subscribers (Figure 35). Due to the growing interest towards digital television programs, more undertakings reorient their activity in this direction.



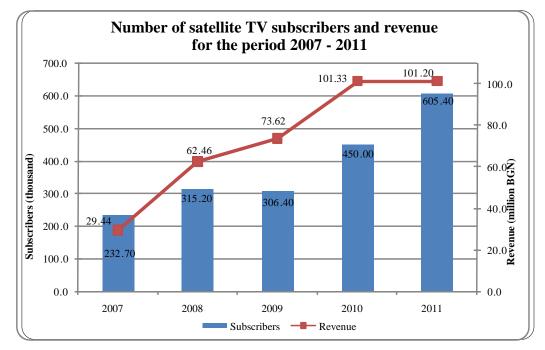
Source: Data submitted to CRC



4.2.2. Satellite television

In 2011 three undertakings are authorised by CRC to provide satellite television – BULSATCOM AD, BTC and SATELLITE BG AD. As of 31.12.2011, they provided the satellite TV service both stand-alone or bundled with other electronic communication services to 605.4 thousand subscribers, which represents a growth of 34% in the number of subscribers compared with the end of 2010. In an absolute value, the number of satellite television subscribers grew by 155.4 thousand in the past year and 60% of them were subscribers of bundled services with satellite television included. In 2011, along with BTC, bundled services with satellite television were also offered by the largest provider of satellite television in the country – "BULSATCOM" AD. As a result, the number of subscribers using this type of television bundled with other electronic communication services increased over 20 times in the past year, and their share in the total number of satellite television subscribers reached 16% in 2011. To compare with, only 1% of the subscribers of satellite TV used this service bundled in 2010.

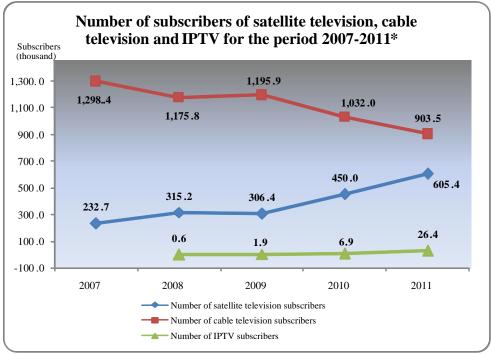
In 2011 the total revenue from satellite television provided stand-alone amounted to BGN 101.2 million and registered a slight decline of BGN 0.1 million against 2010 (Figure 36) as a result of the increasing competition between the players in this market segment.



Source: Data submitted to CRC

The penetration rate of satellite television service among households is 20.1% at the end of 2011, registering a growth of over 5 percentage points, compared with 2010, when the reported penetration rate was a little below $15\%^{20}$. To compare with, the penetration rate of cable television in 2011 was 30.6% representing 4 percentage points less than the preceding year, while the penetration rate of IPTV was 0.88%. Data on the number of subscribers of satellite television, cable television and IPTV for the period 2007–2011 is presented on Figure 37 below.

 $^{^{20}}$ The number of households (3,005,589) used to calculate the index was taken from the last official census carried out by NSI in 2011.



* There is no data available to CRC about the number of IPTV subscribers in 2007

Source: Data submitted to CRC

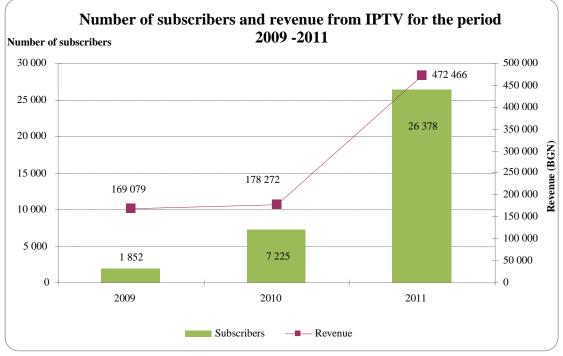
Figure 37

Considering the fact that in 2012 BULSATCOMAD intends to start providing new electronic communication services (fixed and mobile voice services), competition in the offering of bundled services with satellite television will continue to increase, and the growth rate in the number of subscribers of bundled services is again expected to outstrip the growth of subscribers of individually provided satellite television. This will help reaffirm the trend observed in 2011 towards a drop in the volume of revenue from individually provided satellite television, yet it will have a positive effect on the increase in the total number of subscribers using this type of television, as well as on the availability of more favourable offers which will be offered by competing undertakings to the end users.

4.2.3. IPTV

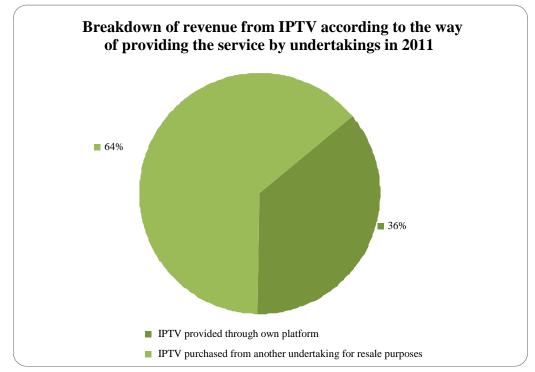
The television delivered to end users through a platform based on Internet protocol (IPTV) has gained greater popularity in the past years. During the period under review, 51 undertakings provided this service, as their number has doubled in the past year (25 in 2010). Another 11 undertakings have declared their intention to start offering the service in 2012. The number of subscribers as of 31.12.2011 was over 26 thousand, which represents an increase of over 3 times against 2010, and over 14 times against 2009. Revenue²¹ for 2011 exceeded BGN 470 thousand, i.e. it has increased over 2 times, as compared to 2010 (Fugure 38). The increased interest of end users to this service is due to the advantages of the IP television over the traditional cable and satellite television, namely its interactivity, which allows a two-way connection and a great diversity of additional multimedia services (video on demand, time-shifted TV, personalized content, information, entertainment and other interactive applications), and the possibility for integration with other IP-based services (Internet, VoIP, etc.).

²¹ The volume of total revenue from IPTV for 2010 and 2011 excludes revenue from the provision of bundled services, while the 2009 index includes both revenue from individual service and revenue from bundles with included IPTV.



Source: Data submitted to CRC

The following chart (Figure 39) presents the breakdown of revenue from IPTV according to the way of provision of the service by he undertakings. Nearly 2/3 of the total revenue is generated from resale of the service. The purchase of IP-based television service and its resale to end users 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 cooperation between a wholesale provider and retail providers allows the high initial costs to be allocated proportionaltely between them. 36% of the total revenue is generated from provision of the service through an own platform. Although this share is still relatively small, an increase is observed against 2010 when the percentage ratio was 82 to 18 in favour of platform rental. This shows that a growing number of undertakings make their own investments and focus on providing this type of television. The use of own platform enables undertakings to generate higher revenue in the long run.



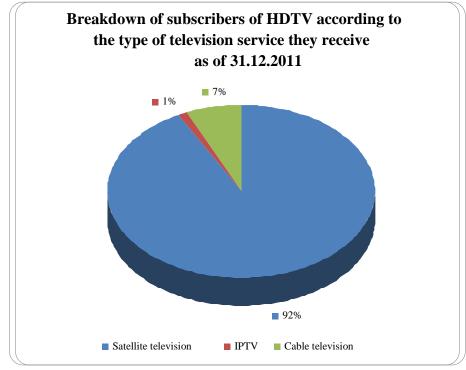
Source: Data submitted to CRC

Operators on the Bulgarian market are still using only a small part of the additional features of IPTV, yet new services are expected to be added and the interest of users is projected to increase in the future. Thanks to the feedback, the interactive technology changes the way people perceive the television content. The integration with the global network reflects the development trends of the television service in the future when it will exit the borders of traditional television receiver and, as leading IT companies predict, any surface will become a display²².

4.2.4. Value-added services – HDTV and Pay-Per-View (PPV)

The high-definition television (HDTV) is becoming more popular among users of television services. The chart below shows the breakdown of subscribers using this format according to the type of television service they receive. The greatest share is held by satellite television users -92%, which grew by 23 percentage points for a one-year period, followed by subscribers of cable television -7% and IPTV -1% (Figure 40).

²² Top 25 Technology Predictions, Cisco, 2009 (http://www.cisco.com/web/about/ac79/docs/Top_25_Predictions_121409rev.pdf)



Source: Data submitted to CRC

The service "Pay-per-View" (PPV), which entered the Bulgarian market in the last several years, is offered by undertakings providing cable television, as well as by IPTV providers, and as of 31.12.2011 the number of subscribers of this service was only 550.

4.3. Terrestrial radio relay transmission and terrestrial broadcasting

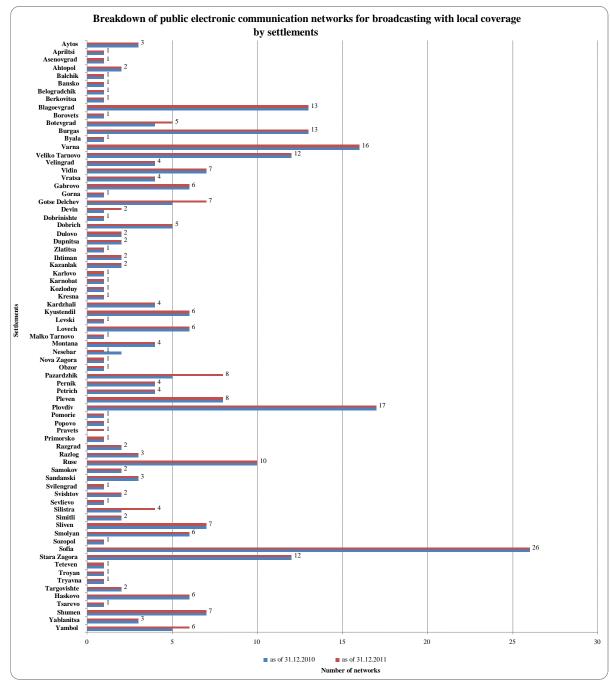
In 2011, revenue from undertakings performing activity for terrestrial broadcasting of radio and television signals amounted to BGN 36.6 million registering a drop of 5.4% versus 2010.

The main part -95.4% of this revenue was generated from the provision of services related to broadcasting of radio and television programs. The remaining 4.6% was earned from the provision of program transmission services.

4.3.1. VHF/FM broadcasting

At the end of 2011, a total of 78 undertakings were licensed for the provision of terrestrial broadcasting with local coverage, and the number of issued authorizations totalled 302.

Figure 41 presents the breakdown of public electronic communication networks for broadcasting with local coverage by settlements as of 31 December 2010 and 2011. At the end of 2011, 37.2% of the undertakings performed activity in more than one settlement.



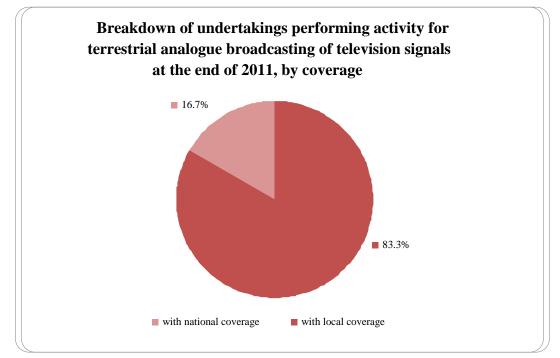
Source: CRC

The achieved coverage by population of the BNR programs as of 31.12.2011 was 81.6%, and of DARIK RADIO AD – 95.5%.

4.3.2. Television broadcasting

As of 31.12.2011, a total of 18 undertakings were entitled to provide electronic communications through the licenses issued to them for terrestrial analogue broadcasting of television signals, as 15 of them were with local coverage.

BULGARIAN NATIONAL TELEVISION (BNT), BTV MEDIA GROUP EAD and NOVA BROADCASTING GROUP AD had licenses with national coverage.



Source: CRC

The achieved as of 31.12.2011 coverage by population of the national programs of the three undertakings with national coverage of networks was 98% for BNT, 97.7% for BTV MEDIA GROUP EAD and 94% for NOVA BROADCASTING GROUP AD.

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

In 2011, a total of 17 undertakings provided wholesale transmission and/or distribution of radio and television programs services, and their revenues amounted to BGN 47.446 million, registering an insignificant growth of 0.23%, as compared to the preceding year.

A detailed information on the number of undertakings which in 2011 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 8 and on Figure 43 below:

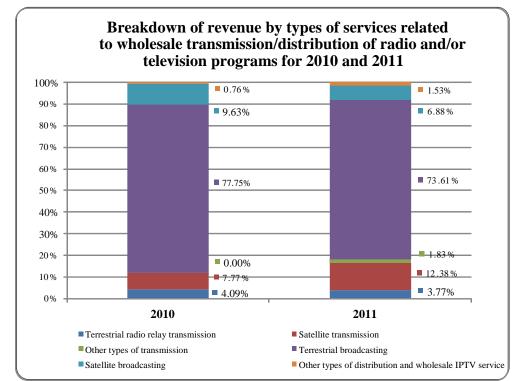
Table 8

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 2011

| Types of services for the wholesale transmission and/or distribution of radio and/or television programs | Number of undertakings providing the service in 2011 | Number of subscribers/ users of the service as of 31.12.2011 | Revenues from the service in 2011 (million BGN, excl. VAT) |
|--|--|--|--|
| 1.1. Transmission of radio and/or television programs services, incl.: | 5 | 87 | 8.529 |
| 1.1.1. Terrestrial radio relay transmission | 1 | 27 | 1.789 |
| 1.1.2. Satellite transmission | 4 | 59 | 5.872 |
| 1.1.3. Other types of transmission | 1 | 1 | 0.868 |
| 1.2. Distribution of radio and/or television programs services, incl. wholesale IPTV service provided to other undertakings, incl. : | 14 | 142 | 38.917 |
| 1.2.1. Terrestrial broadcasting | 2 | 62 | 34.923 |
| 1.2.2. Satellite broadcasting | 3 | 24 | 3.266 |
| 1.2.3. Other types of distribution of radio and/or television programs, incl. wholesale IPTV service | 3 | 56 | 0.728 |
| Т | otal 17 | 229 | 47.446 |

Source: Data submitted to CRC

In 2011, the number of undertakings providing transmission of radio and TV programs services grew by 1 compared to the year before, and the number of users of this services increased by 3.6%. The number of undertakings providing distribution of radio and TV programs services, incl. wholesale IPTV service registered a growth of nearly 8% compared to 2010, and the number of users of this type of services increased by 4.4%.



Source: Data submitted to CRC

The data shows that in 2011 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 provision of terrestrial broadcasting – 73.6%, while the smallest share (1.5%) continued to be occupied by the wholesale IPTV and the provision of other types of distribution (cable) of radio and TV programs. In 2011, 2 undertakings provided wholesale IPTV services – VESTITEL BG AD and NETERRA COMMUNICATIONS EOOD, and compared to 2010, the amount of revenue from this service increased 2.4 times.

5. Bundled services

In 2011, the relative share of the "Bundled services" segment represented 8.1% in the total volume of the Bulgarian electronic communications market, which is an increase of nearly 5 percentage points, as compared to 2010.

Bundling electronic communication services has positive effects both in terms of supply and demand. The users benefit by paying one price for several services at a certain discount rate and contractual relations with one provider only. The investments of undertakings in this segment are focused on single convergent networks for the provision of integrated services which, in turn, optimizes the costs of their provision. The range of products and services is expanded and new subscribers are attracted.

Pursuant to 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.

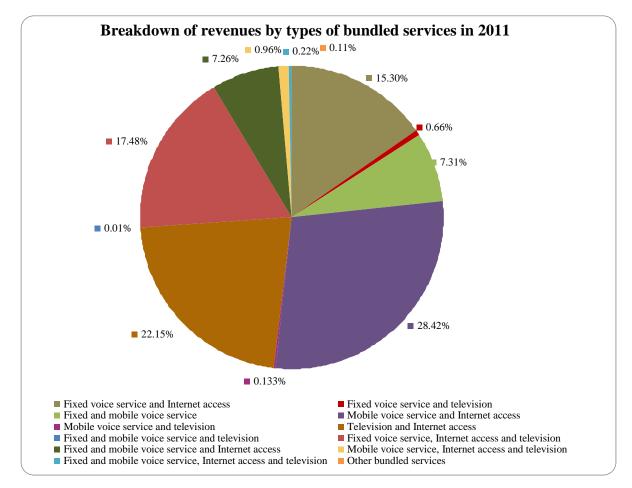
According to the description adopted by CRC, bundle services (bundling) include two or more electronic communication services offered jointly by any given undertaking (at a common price), as services are offered under fixed, previously determined proportions and conditions. Generally, bundled services divide into two types: "pure bundle" or "mixed bundle" which differ in terms of whether the user has the option to purchase any of the bundled services separately. Tied services (tying), 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", the most common of which is the provision of access to a public telephone network and publicly available telephone services at a fixed location.

From the data of undertakings which have been providing public electronic communications in Bulgaria for the last four years, it is clear that the subscribers' interest in bundled services has been growing due to the facilities they offer. At the end of 2011, undertakings providing bundled services were 117, as they have increased by 44.4% against 2010. Most of the undertakings offer the Double Play service "Television and Internet access" -111.

Revenue²³ (from installation fees and monthly subscription) generated by undertakings providing bundled electronic communication services at the end of 2011, amounted to BGN 238.5 million. In 2011, the total revenue from bundled services rose by 137%, as compared to the preceding year 2010, or in an absolute value they increased 2.37 times. Revenue from the Double Play services held the largest share in the bundled services offered in 2011, as they exceeded BGN 176.4 million. Revenue from Triple Play services were BGN 61.3 million, while that from Quadruple Play service, together with other bundle services, amounted to BGN 768.5 thousand. The Triple Play service combining mobile voice service, Internet and television, as well as the Quadruple Play service including fixed voice service, mobile voice service, Internet and television, were offered on the electronic communications market for the first time in 2011, as their revenue made up a little over 1% of the total revenue from all bundle services at the end of 2011.

²³ Without revenue from out-of-bundle consumption when the provided bundled services include voice telephone services.



Source: Data submitted to CRC

Most bundled services registered a steady growth in terms of revenue, as the most significant growth was reported by the service including mobile voice service and television – nearly 329 times versus 2010. This unprecedented growth at an annual basis is due, on the one hand, to the diversified range of bundled services comprising different combinations of electronic communication services provided by mobile undertakings. Striving to keep the present and attract new subscribers of mobile voice services from their competitors, undertakings rely on flexible conditions in their subscription plans by tying the main mobile service in a bundle with other electronic communication services. Moreover, subscribers do not pay any fee for the equipment and installation of the television service. Another reason for the considerable growth reported in the revenue from mobile voice service and television on a one-year basis is that the service started to be offered at the end of 2010 by one undertaking only, and the reported number of subscribers in 2010 was symbolic - below 200. Despite its considerable increase, the relative share of revenue from the Double Play service comprising mobile voice service and television in the total volume of revenue from bundled services, is insignificant - only 0.13%. However, the value of these market indices is typical of a service standing between the initial phase of introduction and the phase of growth in its life cycle, and it gives us reasons to believe that it will succeed in gaining market positions in the following reporting periods.

The bundle comprising mobile voice service and Internet access also registered a significant growth. For a one-year period it has increased 8.25 times, or by 725.14%, compared to 2010. The bundled service comprising mobile voice service and Internet access holds the highest relative share of revenue in the total revenue from all bundled services

offered at the end of 2011 - 28.42%. It should be pointed out that this bundle includes both fixed and mobile Internet access. Considering that the bundled service is offered only by mobile undertakings, the considerably predominant consumption of mobile Internet in the bundle is objective. At the end of 2011, the percentage ratio between revenue from mobile voice service with mobile Internet access included, and mobile voice service with fixed Internet access, was 85/15 respectively.

The second place in terms of revenue is occupied by the Double Play service comprising television and Internet access (22.15%). In 2010, this bundle generated the highest revenue from all bundles offered (27.07%) which is partially due to the fact that it was among the first offered bundled combinations of electronic communication services and it is still in the process of winning popularity among users. This is supported by the fact that in 2011 revenue from this bundled service continued to increase and nearly doubled since 2010, as it registered a growth of 93.8% on an annual basis.

The next place in terms of revenue share in the total volume of revenue from bundled services is held by the Triple Play service comprising fixed voice service, Internet access and television (17.48%). It registered a significant growth rate compared to the preceding year 2010, as its revenue increased almost 2.5 times, which represents a growth of 140.8% on a one-year basis.

The fourth bundled service in terms of revenue generated in 2011 is the fixed voice service combined with Internet access (15.3%). In 2010, revenue from this service ranked second with the highest relative share in the total revenue from bundled services (24.66%). The drop in its position in terms of revenue could be explained with the faster increase of subscribers of mobile voice service with Internet access included, as well as by the specific use of the latter and its higher price. This Double Play service indirectly reflects the high penetration of mobile voice service compared to the decreasing penetration of fixed voice services, which partially determines the outstripping development of bundled service comprising mobile voice service comprising fixed voice service and Internet access does not undergo development. For a one-year period, revenue from its provision registered a growth of 47%.

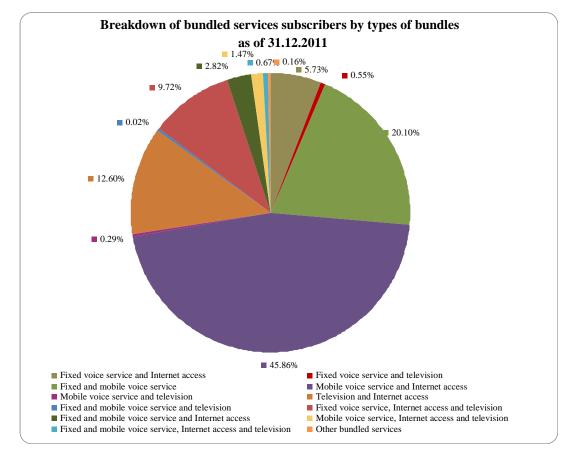
The above four types of bundled services formed over 80% of the total volume of revenue from bundled services at the end of the reviewed period. The following positions are distributed between the following bundles offered in 2011: fixed voice service and mobile voice service (7.31%); fixed voice service, mobile voice service and Internet access (7.26%); mobile voice service, Internet access and television (0.96%); fixed voice service and television (0.66%); fixed voice service, mobile voice service, Internet access and television (0.22%); mobile voice service and television (0.13%); other bundled services (0,11%); fixed voice service and television (0.01%).

According to data of the undertakings providing electronic communication services in Bulgaria, the number of bundled services subscribers exceeded 1.586 million at the end of 2011, which represents an increase of 2.48 times, as compared to the preceding year 2010. For the period 2008 - 2011, the registered increase in the number of bundled services subscribers was nearly 18 times.

Despite the high growth rate of bundled services subscribers, the share of revenue, as a percentage of population, still remains low – at $21.65\%^{24}$. However, when compared to the end of 2010, the "penetration based on population" index has increased by more than 13

²⁴ The "penetration based on population" index was calculated on the basis of NSI data on the number of population as of 31.12.2011, <u>http://www.nsi.bg/otrasal.php?otr=19&a1=376&a2=377&a3=378#cont</u>

percentage points. At the end of 2011, the index "penetration based on households" came in at 46.94%²⁵, which represents an increase of nearly 29 percentage points against 2010. The percentage value of this index suggests that in 2011 almost half the Bulgarian households were subscribed to bundled electronic communication services which could be deemed as significant progress not only in the segment of bundled services, but also in the sphere of digital society in Bulgaria.



The breakdown of subscribers by types of bundled services in Bulgaria is presented on Figure 45.

Source: Data submitted to CRC

Figure 45

The data presented on Figure 45 clearly shows that subscribers were mostly interested in three types of Double Play services: mobile voice service and Internet access (45.86%), fixed voice service and mobile voice service (20.1%), and television and Internet access (12.6%). It is interesting to note that the three most used bundled services were most preferred in 2010 as well, although in different order in terms of the number of subscribers. The number of subscribers of the bundle comprising television and Internet access in 2011 gave way to the number of subscribers attracted by the service combining mobile voice service and Internet access. This trend could be explained by the objective presumption that subscribers of the "television and Internet access" service are mainly separate households comprising more than one physical user. In addition, in the business sphere, it is more practical to use mobile voice service combined with Internet access which also explains the larger number of business subscribers to this service. 93% of subscribers using mobile voice service in combination with Internet access prefer to have a mobile Internet connection which is mainly explained by the

²⁵ Only home subscribers of bundled services as of 31.12.2011 were taken into account for calculation of the "penetration based on population" index. The NSI data on the number of households as of 01.02.2011 were used.

specific needs satisfied by mobile Internet. The growth of subscribers of the most preferred bundled service in 2011 was almost six times the number of its subscribers in 2010.

Subscribers of the three most preferred types of bundled services constituted 78.6% of all bundled services subscribers. Among the remaining bundled services with a relative share of over 5% were the fixed voice service, Internet access and television (9.72%) and fixed voice service and Internet access (5.73%). The next place was occupied by the fixed voice service, mobile voice service and Internet access (2.82%). Subscribers of the remaining six types of bundled services made up 3.16% of all bundled services subscribers, as 2.14% of them were held by the new bundled services – the Triple Play service combining in a bundle mobile voice service, Internet access and television; and the Quadruple Play service comprising fixed voice service, mobile voice service, Internet access and television. In 2011, no subscribers and revenue are reported from the bundled service comprising voice service through numbers with national destination code 099x and Internet access.

In 2011, the most significant increase in terms of both revenue and number of subscribers was registered by the bundled services comprising mobile voice service and television – almost 31 times compared to the preceding year. Nevertheless, the relative share based on number of subscribers of this bundled service hardly made up 0.29% of the total number of bundled services subscribers. The following reporting periods will most probably observe development in the potential of this bundled service.

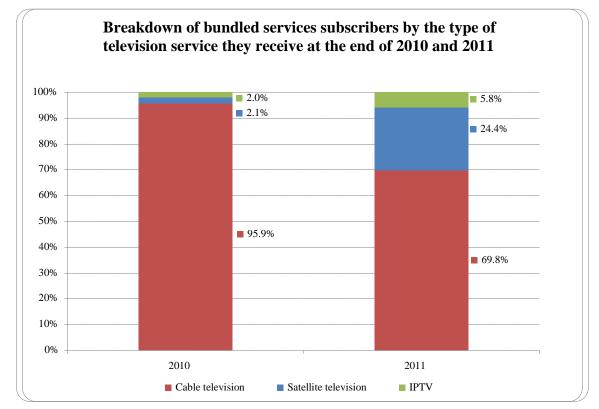
Apart from the noticeable increase in the number of subscribers of bundled service combining mobile voice service and Internet access (almost 6 times versus 2010), what makes impression in 2011 is the considerable growth in the number of subscribers of bundled service comprising fixed voice service and mobile voice service – by 116% against 2010. The next place in terms of growth rate is occupied by Triple Play service comprising fixed voice service, Internet access and television – by 79.39%, followed by the bundle of fixed voice service and television – 72.84%, and the bundle of television and Internet access – 61.37%.

In 2011, the most significant decrease was observed in the number of subscribers of Triple Play service comprising fixed voice service, mobile voice service and television – by 73.38% compared to 2010. Less noticeable was the decrease in the bundle of fixed voice service and Internet access – 13.27%, and the one of fixed voice service, mobile voice service and Internet access – by 5.28%.

As it was mentioned above, the subscribers of new bundled services offered in 2011 (mobile voice service, Internet access and television, and fixed voice service, mobile voice service, Internet access and television) took up a relative share of 2.14% in the total volume of bundled services subscribers in 2011.

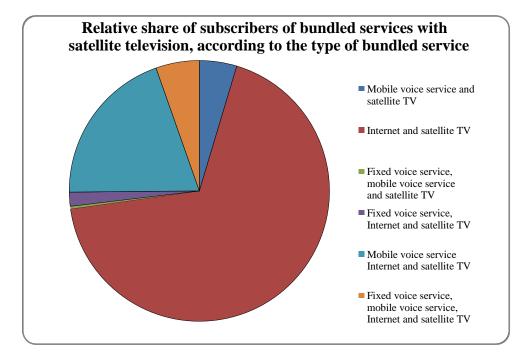
Despite the outstripping increase in the number of subscribers to the "mobile voice service and Internet access" and "fixed voice service and mobile voice service", the use of the Double Play service "television and Internet access" remained widely spread in 2011. Meanwhile, the most preferred Triple Play services include a service related to television provision. The interest of users in bundled services, comprising the Double and Triple Play service with television included, has grown in the past years, since these services bring additional value, which is expressed in the improvement of quality, price discounts, and the option to choose between different bundles according to the individual needs.

Figure 46 presents the breakdown of bundled services subscribers according to the type of television service they receive.



Source: Data submitted to CRC

As it is clear from the chart above, around 70% of subscribers to bundled services (with television service included) used cable television at the end of 2011. Bundled services with satellite television and IPTV included are developing fast, and the share of bundled services with satellite television included grew by over 22 percentage points for a one-year period and reached 24.5%, while the one with IPTV included covered nearly 6% of the market segment.



Source: Data submitted to CRC

In contrast with 2010, when subscribers used only two types of bundled services with satellite television included (satellite television and mobile voice service and Internet access), the number of the types of bundled services with satellite television included increased three times in 2011. Most preferred by subscribers was the Double Play service with satellite television and Internet access, as over 2/3 of them were subscribed to this bundle at the end of the year (Fugure 47).

6. Provision of universal service

6.1. Assignment of the universal service

In March 2011, the Ministry of Transport, Information Technology and Communications (MTITC) made amendments to Ordinance No. 6^{26} concerning the requirements and parameters of the universal service quality, the special measures for people with disabilities and the procedures for selection of undertakings providing public electronic communication networks and/or services, as well as for the assignment of the obligation for provision of the universal service.

The amendments of Ordinance No. 6 created conditions ensuring the participation of all interested undertakings in a procedure for assigning the obligation for provision of the universal service. In this respect, with Decision No. 340/11.03.2011, CRC launched a procedure of public consultation to determine the target values of service quality parameters for the provision of the universal service. With Decision No. 341 of 31 March 2011, CRC adopted the results from the conducted public consultations. Taking into account the undertakings' statements, with Decision No. 345/31.03.2011, the regulator determined the target values²⁷ of service quality parameters.

With a view to compliance with the principles of objectivity, transparency and nondiscrimination, CRC developed a consultative document covering the elements of the universal service, subject of the procedure, the territorial scope of the obligation, the criteria

²⁶ Prom. SG, issue 26 of 29 March 2011

²⁷ http://www.crc.bg/files/_bg/reshenie_345_31032011.pdf

for selection of undertaking/s in assigning the universal service or part thereof, and the term of the obligation to provide the universal service. With Decision No. 340 of 31 March 2011, CRC launched a procedure of public consultations on the consultative document for the selection of undertaking/s for the assignment of the obligation to provide the universal service. Meanwhile, MTITC developed and filed with the Council of Ministers a proposal for amendment to LEC introducing the changes in the 2002 Community regulatory framework, including the material changes in the Universal Service Directive²⁸. The new provisions of the bill for amendment and supplement to LEC required a change in the existing secondary legislation in the area of the universal service, as the procedure for selection of an undertaking which will be assigned with the obligation to provide the universal service should comply with the new requirements of the legislative provisions.

6.2. Provision of the universal service on the entire territory of the country

In 2011, the undertaking obligated to provide the universal service in Bulgaria, was BTC. The obligations imposed on the undertaking referred to provision, of a predetermined quality and at affordable prices, on the entire territory of the country, of the services within the scope²⁹ of the universal service.

In performance of its obligation to provide the universal service on the entire territory of the country, as of 31.12.2011, BTC secured 81% coverage by number of territorial units. The above coverage includes settlements³⁰ and settlement formations³¹ (resorts, etc.), which are not included in the Unified Classification of Administrative-Territorial and Territorial Units.

In 2011, phone density by households³² was 44.16%, registering a decline of 6.32% compared to the year before, which is due to the decreasing number of residential subscribers who in 2011 were by 10.01% less than 2010, in addition to the increased number of households³³, which is up by 83,702 households, as compared to the 2001census.

²⁸ Directive 2002/22/EC of the European Parliament and the Cuoncil of 7 March 2002 on universal service and users' rights related to electronic communications networks and services (Universal Service Directive)

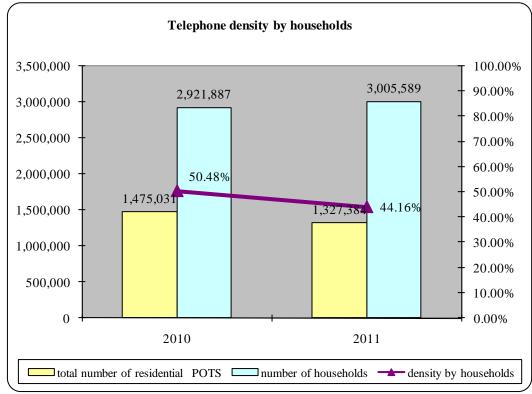
²⁹ The scope of the universal service is defined in Art. 182, Para 2 of LEC.

 $^{^{30}}$ According to NSI data, the number of settlements in Bulgaria was 5,302 as of 09.04.2012.

³¹ According to NSI data, the number of settlement formations in Bulgaria was 130 as of 09.04.2012.

³² The "density by households" index is measured by dividing the total number of residential lines to the number of households in the country. For calculation of the 2011 index were used NSI data from the population census carried out in February 2011.

³³ The number of households was taken from the latest officially published data of the National Statistical Institute as of 2011.



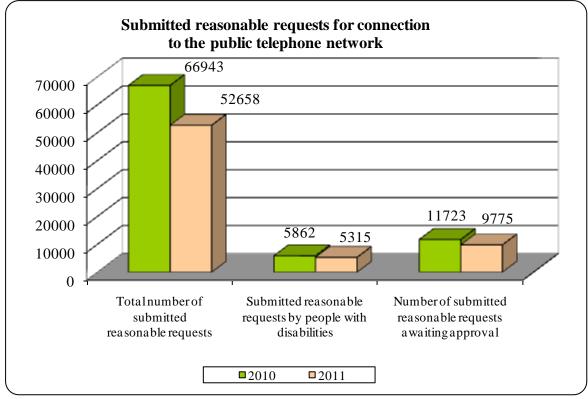
Source: Data submitted to CRC

6.3. Connection at a fixed location to the public telephone network and access to public telephone services

As it is clear from the chart below, as of 31.12.2011, the quantity of submitted reasonable requests³⁴ for connection to the public fixed telephony network of BTC decreased considerably (by 14,285) since 2010, and totaled 52,658³⁵. In 2011, a decline of 9.33% was observed in the number of requests submitted by people with disabilities.

³⁴ BTC treats all requests submitted by residential subscribers as reasonable requests that refer to the permanent address of the end user located within the construction borders of the settlement.

³⁵ For comparison purposes with the preceding period, the number of submitted requests includes the number of requests withdrawn in 2011, which is 12,261 requests.



Source: Data submitted to CRC

In 2011, 58.15% of submitted reasonable requests were respected, while 18.56% are awaiting approval. The number of the submitted requests for connection, which were given up due to the technical time necessary for creating a connection, came in at 10,240, while rejections for other reasons amounted to 2,021. As the only provider of the universal service, BTC provided access to public telephone services to 1,327,384 users.

In 2011, BTC offered dial-up Internet access to 1,350 subscribers, with the traffic of calls to the numbers for access 134xx reaching 0.10% of the total number of calls to national numbers.

By the provision of public telephone services, BTC performs its obligation to ensure free-of-charge calls to emergency numbers. Since they are used by end users in case of need only, their volume, measured in minutes, was insignificant and amounted to 0.22% of the total volume of calls to national numbers.

6.4. Public payphones of specified quality allowing free of charge calls to emergency numbers

The obligation of BTC to provide public payphones, stipulated in Regulation No. 6, envisages that a criterion for a sufficient number of public payphones is reached.

Table 9 presents data about the performance of the obligation to provide a sufficient number³⁶ of public payphones in 2011:

| | 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 | 1,276 | 735 | not applicable | + 735 | | |
| from 500 to 1500 residents | 1,066 | 1,205 | 1,369 | - 164 | | |
| over 1500 residents | 512 | 9,308 | 3,838 | + 5,470 | | |
| Total: | | 11,248 | 5,207 | + 6,041 | | |

Table 9

Source: Data submitted to CRC

As a whole, the number of public payphones owned by BTC registered an insignificant drop in 2011, as compared to the preceding year, by nearly 1.29% (from 11,395 in 2010 to 11,248 in 2011). The criterion for a sufficient number of public payphones in municipalities with 500 to 1500 residents was not met, while the number of installed public payphones in the remaining municipalities exceeds considerably the minimum number required by Ordinance No. 6.

Public telephones, property of BTC, whose qualitative characteristics include facilities for users with impaired hearing and for users with no or impaired eyesight, reached 67.18% of the total number of public payphones in the country, as of 31.12.2011. Part of them contain 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. At the end of 2011, BTC reported 72.33% functional public payphones, which is by 4.51% less than the year before.

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

6.5. Telephone directory, telephone enquiry services

In 2011, in compliance with the regulations in force, BTC submitted a proposal regarding the total number of printed telephone directories, accompanied by a plan for release of the telephone directory, as well as analysis of revenue from its distribution and costs related to its publishing. With Decision No. 812/18.08.2011, CRC approved the undertaking's proposal as a result of which a comprehensive telephone directory was released including the numbers of subscribers of all undertakings who had expressed their explicit consent for including their data in the directory.

The updated electronic form of the telephone directory is available at the BTC official website³⁷.

In compliance with its obligation to offer the numbers from the comprehensive

³⁶ According to Art. 5, Para 2 of Regulation No. 6, a sufficient number of public payphones is considered to be present when there is at least 1 public payphone available per 500 residents in municipalities with more than 500 residents and at least 1 public payphone per 1500 residents in municipalities with more than 1500 residents.

³⁷ http://www.vivacom.bg/online/cgi-bin/wpd.cgi?temp=home.html&ls=0

telephone directory, BTC, through number 11 800, provided end users with a 24-hour telephone directory enquiry service in the past year.

6.6. Affordability of the universal service prices

In performance of its obligations for affordability³⁸ of the universal service price, in 2011 BTC determined as affordable the prices for:

• connection³⁹ at a fixed location to the public telephone network;

• maintenance of access to public telephone services (monthly subscription/standard plan) 40 ;

• price packages included in the scope of the universal service.

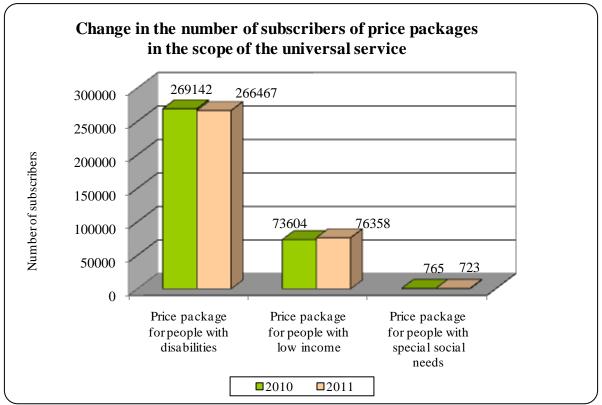
In 2011, BTC continued to offer price packages intended for users with: low income ("Limited plan", as named by BTC); people with disabilities whose work capacity or capacity for social adaptation has been impaired by over 90% ("Handicap 160" and "Handicap 300" plan, as named by BTC); people with disabilities whose work capacity or capacity for social adaptation has been impaired by over 50% ("Handicap 300" plan, as named by BTC); people 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), offered in 2010 as well. The conditions and prices at which the price packages in the scope of the universal service were offered in 2011 remained unchanged.

The chart below displays the changed number of subscribers of price packages in the scope of the universal service in 2011 versus 2010. The chart clearly shows that the number of users of price packages for people with disabilities and special social needs was down by 1% and 5%, respectively, while a growth was observed for a second consecutive year in the price package for low-income people since 2010.

³⁸ Stipulated in the Methodology for determining prices and price packages for the universal service adopted with Ordinance No. 254 of 23.10.2008 of the Council of Ministers, prom. SG, issue 94 of 31.10.2008.

³⁹ The price for connection is BGN 24, VAT incl., and pertains to connection based on a reasonable request submitted by the end user, as well as the price for connection at a fixed location of BGN 12, VAT incl., under the conditions of "Handicap 160" and "Handicap 300" plans

⁴⁰ With Decision No. 992/13.08.2009, CRC approved the proposal extended by BTC for a new price plan for home subscribers of the fixed voice telephone service, which excludes consumption (certain number of minutes for calls or data transfer).



Source: Data submitted to CRC

6.7. Quality of the universal service provision

The amendment of service quality parameters of the universal service provision in 2011 versus 2010 is displayed in Table 10.

| Quality parameters of the universal service provisionI. Of telephone service provided at a fixed location | | | | | | |
|---|---------|-------|------|--|--|--|
| | | | | | | |
| 1. Supply time for initial connection | days | 8 | 8 | | | |
| 2. Fault rate per subscriber line | | | | | | |
| 2.1. for digital subscriber lines | % | 1.405 | 1.4 | | | |
| 2.2. for analogue subscriber lines | % | 3.58 | 0 | | | |
| 3. Fault repair time – average value | hours | 1.71 | 1.71 | | | |
| 4. Unsuccessful calls rate | % | 0.10 | 0.10 | | | |
| 5. Call set up time | seconds | 0.48 | 1.1 | | | |
| 6. Call set up time (response) for calls to operator service – average response time | seconds | 13 | 14 | | | |
| 7. Call set up time (response) for calls to telephone enquiry services | seconds | 13 | 14 | | | |
| 8. Percentage of bills correctness complaints | % | 26 | 26 | | | |
| 9. The voice quality assessment factor (R factor) | | | | | | |
| 9.1. for wired access technology | | 75 | 75 | | | |

Table 10

| 9.2. for wireless access technology | | 70 | 70 | | | |
|--|--------------|----------------------|-------------------|--|--|--|
| 10. One-way voice delay | milliseconds | not more than 150 | not more than 150 | | | |
| II.Of public telephone devices | | | | | | |
| 1. Fault repair time – average value | hours | 09:52:37 | 09:24:00 | | | |
| 2. Unsuccessful calls rate | % | 0 | 0.1 | | | |
| 3. Call set up time | seconds | < 0.5 | <0.5 | | | |
| 4. Call set up time (response) for calls to operator service – average response time | seconds | 39 | 13 | | | |
| 5. Call set up time (response) for calls to telephone enquiry services | seconds | 8.5 | 13 | | | |
| 6. Percentage of functional public telephone devices | % | 76.84 | 72.33 | | | |

Source: Data submitted to CRC

Data shows that, as compared to 2010, BTC reported a higher quality of the universal service under the following parameters:

- the fault report rate per fixed analogue access line dropped by 100%;
- the fault repair time of public payphones was downsized by 5%;
- the response time for operator supported calls was reduced by 67%.

6.8. 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:

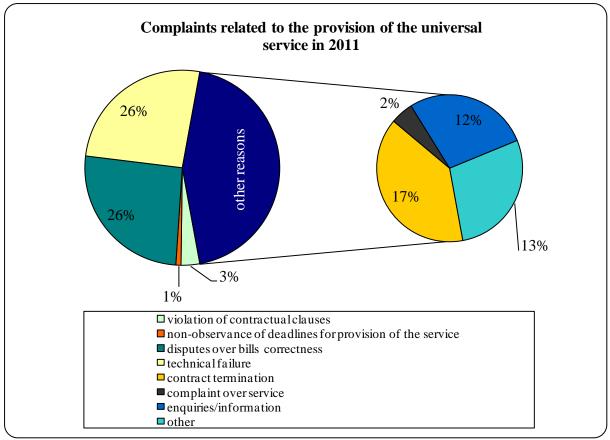
- the provision of detailed bills free of charge⁴¹;
- selective limitation of outgoing calls free of charge;
- deferred payment when connecting to public telephone networks.

According to BTC data, as of 31.12.2011, there are no more residential subscriber lines served by exchanges which do not provide the "charge by time" option. The replacement of the hierarchic structure of BTC with a new type, and the transition from analogue to digital telephone exchanges, eliminated the technical impossibility for users to receive itemized bill with the number, type and duration of calls made.

In 2011, the number of complaints filed with the undertaking regarding the provision of the universal service was 21,643, which is by 7% less than in 2010, and stood at 16.31 complaints per 1000 residential subscribers. The growth of 3.85% in the number of complaints per 1000 residential users, compared to the preceding year, is due to the decreasing number of residential subscribers who in 2011 were by 10.01% less than in 2010.

Most often complaints disputed technical failures, bills correctness, invoice delivery, violation of contractual provisions. The reasons are illustrated on the chart below:

⁴¹ The content of the itemized bill is defined in Art. 260, Para 3 of LEC.



Source: Data submitted to CRC

Figure 51

Percentage of complaints regarding technical failures was 26% of the total number of complaints, which is down by 3% compared to 2010. Percentage of complaints regarding contract termination was 17% of the total number of complaints, registering a rise of 2%, as compared to the same index in 2010.

BTC responded to 75% of the incoming complaints within the regulatory deadline of 30 days, which is by 8% more than in 2010, while the percentage of resolved complaints was 36%.

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

6.9.1. Application for compensation of the unfair burden incurred by the provision of the universal service

Based on the request filed by BTC in June 2011 for compensation of the net costs incurred by the provision of the universal service in 2010, CRC inspected the submitted documents and calculated net costs. The undertaking furnished CRC with the required additional documents and with clarifications related to the net costs evaluation, as the additional information⁴² for 2009 was submitted in October 2011.

In accordance with the statutory requirement to assign an audit of the accounts and/or any other information serving as a basis for calculation of the net costs incurred by the obligations pertaining to the universal service provision, with Decision No. 957 of 06.10.2011, CRC called a public procurement with subject "Verification of the cost accounting system of the BULGARIAN TELECOMMUNICATIONS COMPANY AD and

⁴² Letter by BTC, Inc. No. 04-04-302/04.10.2011

evaluation of the net costs for provision of the universal service in 2009 and 2010 financial years".

Immediately before opening the price offers, as a result of the amendments to LEC, with Decision No. 27/11.01.2012, CRC suspended the opened procedure.

6.9.2. Universal service compensation fund

According to the provisions of Art. 203, Para 2 of LEC, the Managing Board of the Fund prepares annually up to 31 May, a report for the preceding year, which includes:

1. the amount of net costs incurred by the provision of the universal service;

2. evaluation of the intangible benefits of undertakings providing universal service;

3. the amount of contributions of the undertakings to the Fund;

4. the amount of funds spent.

The report under Para 2 is published on the CRC's website.

With a view to the suspended procedure aimed at auditing of the accounts and/or any other information serving as a basis for calculation of the net costs incurred by the obligations pertaining to the universal service provision, CRC has not prepared any statements on the presence of unfair burden, and respectively, the Managing Board of the Fund for compensation of the universal service has not announced any decision on items 1 - 4 above.

6.10. Prospects for development of the universal service

As a whole, due to the stable government policy, the provision of the universal service in Bulgaria is expected to retain its influence in a social-economic aspect, and the activities related to compensation of the unfair burden incurred by the provision of the universal service and the selection of provider/s of the universal service are expected to continue in 2012.