III. ACTIVITIES UNDER THE LAW ON ELECTRONIC COMMUNICATIONS AND THE LAW ON ELECTRONIC DOCUMENT AND ELECTRONIC SIGNATURE

1. Activities in implementation of the CRC's priorities adopted for 2014

1.1. Effective management of scarce resources

1.1.1. Radio frequency spectrum

CRC pursues the European policy regarding the management of the frequency spectrum for consumer needs depending on the national specifics, taking into account the interests of businesses and end users to continuously emerging new communication and information services.

The Commission encourages the introduction of new technologies and creates conditions for competitive electronic communications market, by providing conditions for a harmonized and efficient use of frequency resource.

In 2014, CRC continued its activities on the implementation of one of its main priorities - effective management and use of the scarce resource - radio frequency spectrum. CRC studied and analyzed the need for amending the regulations relating to the management of the frequency resource and to maintain an active and transparent dialogue with stakeholders, it held a public discussion, and as a result, the following were amended:

- Technical requirements for operation of the electronic communications networks of the mobile radio service and related equipment;
- Technical requirements for carrying out electronic communications through amateur service radio equipment;
- Technical requirements for operation of electronic communication networks from radio services: fixed satellite, mobile satellite, and related equipment;
- Rules for carrying out electronic communications through radio equipment using frequency spectrum, which does not need to be individually assigned;
- List of radio equipment using frequency bands harmonized throughout the European Union and electronic communications terminal equipment.

By amending these instruments, CRC continued to ensure conditions for a harmonized, effective, and interference-free use of the radio frequency spectrum and depending on the national specifics to implement the decisions and recommendations of the European Commission and the Electronic Communications Committee of the European Conference of Postal and Telecommunications Administrations.

Data on the use of the frequency resource in the Republic of Bulgaria in the Frequency Information System (EFIS) of the European Communications Office was updated in accordance with the amendments to the above regulations.

Allocation, planning, assignment, and effective use of the frequency spectrum

In 2014, with the amendment of the Rules for carrying out electronic communications through radio equipment using frequency spectrum, which does not need to be individually assigned (the Rules) and the adoption of the List of radio equipment using frequency bands harmonized throughout the European Union and electronic communications terminal equipment (the List), the following provisions were implemented in Bulgarian legislation:

- Decision 2013/654/EU of the European Commission amending Decision 2008/294/EC to include additional access technologies and frequency bands for mobile communication services on aircraft (MCA services);

- Decision 2013/752/EU amending Decision 2006/771/EU on harmonization of the radio frequency spectrum for use by short-range devices and repealing Decision 2005/928/EC;

- Recommendation ERC/REC 70-03 of the Electronic Communications Committee (ECC) on the use of short-range devices.

The amendment of the Rules ensured conditions for using additional technologies (UMTS and LTE) to provide MCA services on aircraft.

In accordance with Recommendation ERC/REC 70-03, revised on 7 February 2014, new bands were specified, including the conditions for their use by short-range devices, as well as changes in the conditions for use of some bands already specified.

The Rules specified the radio frequency spectrum of Earth Stations On Mobile Platforms (ESOMPs) as well as the conditions for their use to implement the provisions of Decision ECC/DEC(13)01 of the ECC on the harmonized use, free circulation and exemption from individual licensing of Land and Maritime Earth Stations On Mobile Platforms (ESOMPs) operating with NGSO FSS satellite systems in the frequency ranges 17.3-20.2 GHz (space-to-Earth) and 27.5-30.0 GHz (Earth-to-space).

The List has been prepared in accordance with the List of Class 1 Radio and Telecommunications Terminal Equipment and the List of Class 2 Radio Equipment, published in fulfilment of Commission Decision 2000/299/EC of 6 April 2000 laying down an initial classification of radio and terminal telecommunications equipment and associated identifiers, on the website of the European Communications Office (ECO) and the European Commission, Undertakings and Industry section, as well as by Decision 2013/752/EU.

One of the guidelines in the management of the radio frequency spectrum is to provide flexibility and neutrality in its use, both in terms of services provided and in terms of the technology used.

The band 1800 MHz (1710-1785 MHz and 1805-1880 MHz bands) is one of the bands in respect of which the principle of neutrality on the technology used and the services provided is applied, by transposing the provisions of the EU regulatory framework for electronic communications networks and services in Bulgarian legislation. Pursuant to the effective regulations, this band may be used to build GSM, UMTS, LTE and WiMAX terrestrial networks. Undertakings licensed to use the resources in the band 1800 MHz can adopt new technology through which to provide a variety of high-speed mobile broadband services. This makes the band 1800 MHz one of the most attractive bands for the construction and development of terrestrial mobile networks with the option to provide end users with high-speed mobile broadband services, including LTE.

In order to respect the principles of transparency, publicity and consultation, stipulated for in the provisions of the LEC, at the end of 2014, CRC initiated a procedure for holding public consultations on the prospects for the use of available resources in the band 1800 MHz During the public consultations, questions were posed regarding the interest of the undertakings to the bands 700 MHz, 800 MHz, 1800 MHz, 2 GHz, and 2.6 GHz. Following the analysis of the statements received on the questions posed, CRC will adopt the legal action required.

In 2014, CRC also held a public consultation on the prospects for the introduction of terrestrial digital sound broadcasting in the Republic of Bulgaria to examine and discuss the national interest of businesses and the preferred frequency range and the technology for the introduction of digital sound broadcasting. The results showed that there was no particular

interest in the introduction of terrestrial digital sound broadcasting in the bands 174-230 MHz and 526.5-1606.5 kHz. There was a principle interest in the introduction of terrestrial digital sound broadcasting in the band 174-230 MHz, as the preferred technology was T-DAB+.

In 2014, in order to create preconditions for efficient use of the radio frequency spectrum, to promote competition and business, as well as to ensure conditions for the introduction of new technology, the Tariff of fees charged by the CRC under the LEC was amended. In order to stimulate the demand for frequency resource, the one-off fee for spectrum authorizations in the bands 420 MHz, 460 MHz, 900 MHz, 1800 MHz, 2 GHz, 2.6 GHz, and 3.6 GHz was reduced. Given that the spectrum represents a national resource that enjoys a significant public interest, the Tariff also specifies fees to extend the term for using the granted frequency resource of the aforementioned ranges.

The amendment of the Tariff of fees charged by the CRC, amended the discount for the one-off administrative fee for authorization currently applied and the annual fee for the use of spectrum for VHF radio broadcasting stations located in the 20-kilometer border zone, including those on the Black Sea coast. The one-off administrative fee for authorization and the annual fee for the use of spectrum for terrestrial broadcasting in the VHF band was reduced, as the discount currently applied became 30%, while it was 20% before.

Decision No. 243/2012/EU of the European Parliament and of the Council established a policy program on radio frequency spectrum for strategic planning and harmonization of spectrum use in order to ensure the functioning of the internal market in EU policy, including the use of radio frequency spectrum, electronic communications, research, technological development and space, transport, energy and audio-visual policies. In accordance with Art. 9 (1) of Decision No. 243/2012/EU an inventory of existing uses of spectrum for commercial and public purposes (public sector bodies) was made. In 2014, activities were carried out related to the implementation of the provisions of Decision 2013/195/EU defining the practical arrangements, uniform formats and a methodology in relation to the radio frequency spectrum inventory established by Decision 243/2012/EU of the European Parliament and of the Council establishing a multiannual radio frequency spectrum policy programme.

In 2014, with the amendment of the National Frequency Allocation Plan, the bands 472-479 kHz, 1850-2000 kHz, 5250-5450 kHz, 70.0-70.5 MHz were assigned for use on a secondary basis by amateur radio service. By amending the Technical requirements for the provision of electronic communications through radio equipment from the amateur service, conditions were created for the use of these bands.

Mobile radio service

In 2014, the term of the authorization issued to Mobiltel EAD for the use of spectrum in the 900 MHz and 1800 MHz frequency bands to provide electronic communications through terrestrial network enabling carrying out electronic communication services, was extended. The term was extended by 10 years (until 2024).

CRC granted Max Telecom OOD an additional radio frequency resource (2x2 MHz) in the 1800 MHz band to provide electronic communications through terrestrial network enabling carrying out electronic communication services. This additional spectrum was allocated for the expansion, modernization, and development of the existing network of the enterprise in favor to the provision of wireless broadband access to users.

Three temporary authorizations were issued for the use of individually assigned scarce resource - frequency spectrum in the 1800 MHz frequency band (with provided 2x10 MHz) to test new technical methods and/or technology for electronic communications through terrestrial

network - LTE in the Republic of Bulgaria – to Mobiltel EAD, Bulsatcom EAD and BTC, respectively.

Temporary authorization for the use of individually assigned scarce resource - frequency spectrum 2x5 MHz in the 2 GHz band and 2x5 MHz in the 2,6 GHz band, for a demonstration of LTE equipment in the city of Sofia was issued to Nokia Solutions & Networks EOOD.

CRC also issued temporary authorizations for the use of individually assigned scarce resource - frequency spectrum in the 876-880/921-925 MHz bands to provide electronic communications for own needs through land mobile GSM-R network, to the National Railway Infrastructure Company. The temporary authorizations were issued, respectively, for:

- testing newly-built mobile terrestrial GSM-R network on railway track Plovdiv - Katunitza - Cheshnegirovo - Vinitsa - Parvomai - Skobelevo - Krum – Dimitrovgrad;
- testing new technical facilities on railway line Sofia - Proslav.

In 2014, CRC issued to the National Railway Infrastructure Company an authorization for use of individually assigned scarce resource - frequency spectrum to provide electronic communications for own needs through mobile terrestrial network - GSM-R, for a period of 15 years. The enterprise is entitled to use the assigned 876-880/921-925 MHz frequency bands on railway track Plovdiv - Katunitza - Cheshnegirovo - Vinitsa - Parvomai - Skobelevo - Krum-Dimitrovgrad – Nova nadezhda - Simeonovgrad zapad - Preslavets - Biser - Lyubimets - Svilengrad - Generalovo.

Following a request received, CRC terminated the authorization for the use of individually assigned scarce resource - radio frequency spectrum to provide electronic communications through mobile terrestrial network – PAMR - issued to Mobiltel EAD.

Following an analysis of the radio frequency spectrum provided for use and a national coordination and agreement of radio frequencies and frequency bands with all state authorities, departments and agencies concerned, 123 radio frequency channels (61 simplex and 31 duplex) were provided to undertakings for the construction of 92 new radio networks for carrying out electronic communications for private needs through an electronic communications network from the mobile radio service – PMR (Private Mobile Radio), and thus, the total number of deployed networks reached 1,876.

Fixed radio service

In 2014, 4 authorizations for the use of scarce resource - frequency spectrum were issued for electronic networks from the fixed radio service, as they are not intended for carrying out services. 8 authorizations were terminated and one authorization was withdrawn.

In the past year, 68 amendments were made to the technical data of a total of 5,108 radio relay links (RRLs), including the provision of radio frequency spectrum to new 1,302 links. A large number of RRLs was removed, thus their total number was reduced to 17,423, compared to 17,661 for 2013, i.e. the number of operating RRLs is down by 1.37% since the end of 2013. One of the reasons for the decreased number of radio relay links is the further improvement of technology used which determined the construction of networks with a total digital capacity of 150 to 900 Mbit/s and modulation levels of approximately 256/512/1024 QAM or 2048 QAM in one direction. The trend for deployment of high-tech digital systems using XPIC/CCDP technologies continued, as the number of RRLs using these systems reached 5,518 at the end of 2014 (an increase of 15 % compared to 2013 – 4,788 items).

Figure 40 presents information on the share distribution of the main operators holding authorizations as of December 2014 for the use of individually assigned scarce resource – frequency spectrum for carrying out electronic communications via electronic communications

network of the point-to-point type. The percentage ratio is preserved, as compared to 2013.

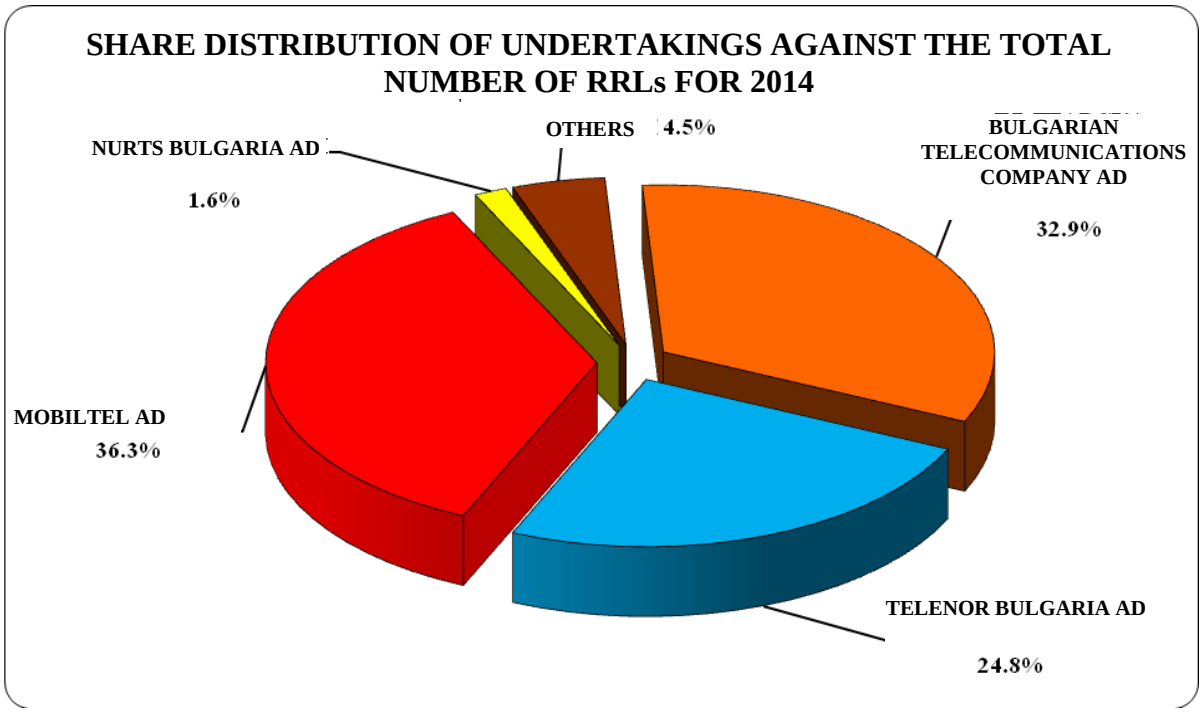


Fig. 40

Source: CRC

Figure 41 presents the growth of RRLs using XPIC/CCDP technologies by years.

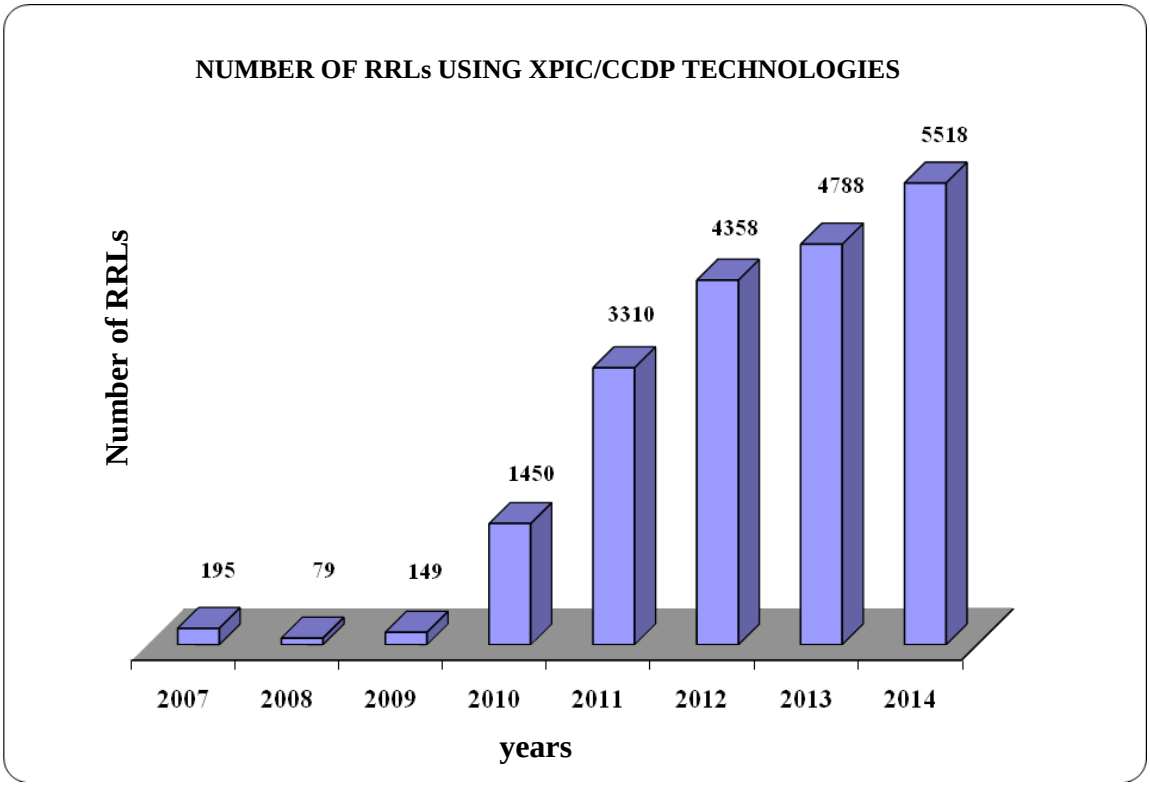


Fig. 41

Source: CRC

The trend towards a relative growth in the use of high-frequency bands, compared to the total number of RRLs, continued. In the 18 GHz their number reached 5,124 (5,104 in 2013), which constitutes a share of 29% in the total number of RRLs at the end of 2014. The development of high-density communication networks using the super-high-frequency bands continued. At the end of the year, RRLs in bands 23 GHz, 26 GHz, 28 GHz and 38 GHz, for which there are authorizations issued for the use of the frequency spectrum, totaled 7,032, as a sustainable migration of RRLs from bands 23 GHz and 26 GHz to bands 28 GHz and 38 GHz is observed here. The percentage ratio of the four bands remains 40.4% of the total number of RRLs. In 2014, the duplex frequency bands 74–76 GHz and 84–86 GHz for high-capacity RRLs (more than 1500 Mbps) started to be used.

In 2014, as in 2013, there was a downward trend in the number of the WiMAX technology transceivers in the 3.4-3.6 GHz frequency band. The total number reduced by approximately 3%, which had no significant effect on carrying out broadband services for fixed connectivity, limited mobility connectivity and mobile connectivity.

Satellite radio services

In 2014, the activity related to regulation of satellite radio services was focused on the coordination of positions, using geostationary orbit from fixed – satellite (FSS) and broadcasting – satellite (BSS) radio services. The approaching deadlines for launching the first Bulgarian satellite increase the intensity of the coordination process. The goal of this process is to avoid potential interferences to the Bulgarian planned systems on position 1.2˚ W (BSS) and 56.02˚ E (FSS), as well as of the additional modification made to the planned position for BSS at 1.9˚ E. To perform the coordination activities, analysis was performed of

the biweekly circulars (BR International Frequency Information Circular – BR IFIC), issued by the Radiocommunication Bureau of the ITU, using specialized program products provided to the administrations. Except for the analysis of the biweekly circulars, analysis is also made of the received proposals from other administrations to conclude agreements with a view to the successful coordination of the Bulgarian satellite systems.

After analyzing all biweekly circulars for 2014, the relevant objections were sent to comply with the regulatory functions of the CRC regarding the efficient use and effective management of scarce resource - radio frequency spectrum.

In 2014, in cooperation with the Ministry of Transport, Information Technology and Communications (MTITC) a new procedure was initiated before ITU for the realization of the Bulgarian planned satellite system from fixed - satellite (FSS) radio service of geostationary orbit position 56.02^{o} E.

In 2014, in connection with the adoption at the 56th meeting of the Communications Committee of the Roadmap of measures toward the compliance of selected and authorized Mobile Satellite Services (MSS) operators with common conditions of Decision 626/2008/EC, including intermediate new steps and corresponding time limits, an amendment was made to the model authorization for the use of spectrum by an integrated mobile satellite system. The amendment was made after holding consultations with the operators concerned.

Broadcasting

In connection with the amendment of the Tariff of fees charged by the CRC (prom. SG, issue 27 of 2014), amending the discount currently applied for broadcasting stations located in the 20-kilometer border zone, including those on the Black Sea coast, the CRC amended 113 local-coverage authorizations and 2 national-coverage authorizations for terrestrial analogue broadcasting of radio signals.

Analogue broadcasting

In 2014, in relation to the request of the Council for Electronic Media (CEM) for the provision of free frequency resource for 54 settlements concerning opened procedures to hold a competition, information was provided on 16 frequency assignments in the VHF band, including technical parameters, admissible powers, points of broadcasting, as well as other technical information for the cities of Asenovgrad, Kaolinovo, Kubrat, Madan, Novi Pazar, Popovo, Provadia, Silistra, Tervel, and Tutrakan. A total of 46 technical characteristics of electronic communication networks for terrestrial analogue broadcasting of radio signals were examined and analyzed, of which 6 were of undertakings authorized to use individually assigned scarce resource – radio frequency spectrum for carrying out electronic communications through electronic communication network for terrestrial analogue broadcasting with national coverage, and 40 – of undertakings authorized to use individually assigned scarce resource – radio frequency spectrum for carrying out electronic communications through electronic communication network for terrestrial analogue broadcasting with local coverage.

Digital broadcasting

With regard to the already issued authorizations for terrestrial digital broadcasting to NURTS DIGITAL EAD and FIRST DIGITAL EAD, 8 technical characteristics were examined and analyzed for 3 allotments on the territory of the country: Burgas, Ruse, and Smolyan.

With relation to the continued process for introduction of terrestrial digital television, reports and material were prepared on the performance of CRC's obligations.

National and international coordination

In 2014, in the Advisory Council for national coordination and agreement to CRC, 2,529 radio frequencies and frequency bands were coordinated and agreed. National coordination and agreement with all state authorities, departments, and agencies concerned are carried out with the goal to ensure the aeronautical and maritime safety, the protection of national security, and the efficient use of the radio frequency spectrum.

Upon requests received from other administrations, international coordination of radio frequency assignments of 1 VHF radio station with the appropriate technical parameters was carried out, in accordance with the Regional Agreement relating to the Use of the band 87.5-108 MHz for VHF (FM) Sound Broadcasting, Geneva, 1984 (Geneva - 1984). International coordination was performed in accordance with the Regional Agreement relating to the planning of the digital terrestrial broadcasting service in the frequency bands 174-230 MHz and 470-862 MHz, Geneva, 2006 (Geneva - 2006) of 5 frequency assignments and of 1 frequency allotment.

All biweekly circulars for 2014 of the Radiocommunication Bureau to the Radiocommunication Sector of the ITU related to the international information on frequencies BR IFIC (BR International Frequency Information Circular) for terrestrial services were processed and analysed. In this respect, the following radio frequency assignments to foreign administrations were coordinated:

- 39 radio frequency assignments and the relevant technical parameters, in accordance with the Regional Agreement, Geneva - 1984;
- 36 radio frequency assignments and the relevant technical parameters of DVB-T transmitters, in accordance with the Regional Agreement relating to the planning of the digital terrestrial broadcasting service in the frequency bands 174-230 MHz and 470-862 MHz, Geneva, 2006 (Geneva - 2006). Objections to 28 radio frequency allotments and 25 radio frequency assignments were made because of possible interference to Bulgarian networks for terrestrial digital broadcasting of television signals.

The Radiocommunication Bureau was sent request for addition of 1 radio frequency assignment of one Bulgarian VHF radio station in Plan Geneva – 1984. After successful coordination, 24 radio frequency assignments were entered into Plan Geneva – 1984.

In 2014, 97 radio frequency assignments in fixed radio service were entered into the Master International Frequency Register and 219 radio frequency assignments were suppressed.

12 radio frequency assignments, in accordance with the Regional Agreement relating to the planning of the digital terrestrial broadcasting in the frequency bands 174-230 MHz and 470-862 MHz, were recorded in Plan Geneva – 2006.

In accordance with the procedures under Art. 12 of the Radio Regulation of the ITU, 96 (55 for Season A and 41 for Season B) frequency assignments for terrestrial analogue and digital broadcasting of radio signals within the HF bands were coordinated.

Radio frequency assignments for satellite networks from the biweekly circulars BR IFIC for fixed-satellite and broadcasting-satellite radio services were processed and analyzed. As a result of the performed examinations of the technical parameters and the further calculations, correspondence was exchanged with the ITU and the relevant foreign administrations which had filed their requests with the biweekly circulars. In order to protect the Bulgarian positions on geostationary orbit and the assignments for fixed radio service from interferences, CRC sent

objections, in accordance with the procedural rules of the Radio Regulations, to ITU and to the administrations whose satellite networks might potentially affect us, as follows:

Written objections:

- in coordination of non-planned satellite systems and existing Bulgarian terrestrial networks, pursuant to Art. 21 of the Radio Regulation – 13 objections for 47 satellite systems;
- in coordination of satellite networks from the fixed-satellite radio service emitting in space to Earth direction and a possible interference to the feeder link of a satellite from the broadcasting-satellite radio service, pursuant to Art. 7 of Appendix 30A to the Radio Regulation – 8 objections for 26 satellite systems;
- coordination of satellite network on planned position from the broadcasting-satellite radio service and non-planned satellite network, pursuant to Art. 7 of Appendix 30 to the Radio Regulation – 12 objections for 32 satellite systems;
- coordination in exceeding the carrier-to-noise (C/N) ratio for satellite systems from the fixed-satellite radio service in frequency bands 4500-4800 MHz, 6725-7025 MHz, 10.70-10.95 GHz, 11.20-11.45 GHz and 12.75-13.25 GHz, pursuant to Appendix 30B to the Radio Regulation – 4 objections for 4 satellite systems;
- request for including the coordination in exceeding the carrier-to-noise (C/N) ratio for non-planned satellite system to satellite system operating in the frequency band 21.4-22 GHz, pursuant to Art. 9.52 of the Radio Regulation – 4 objections for 7 satellite systems.

Objections submitted via specialized ITU applications:

- coordination of satellite network on non-planned position from the broadcasting - satellite radio service and non-planned satellite network, pursuant to Art. 4 of Appendix 30 to the Radio Regulation – objections were made for 2 satellite systems;
- coordination of non-planned satellite station, potentially affecting another non-planned satellite station, pursuant to Art. 9.7 and Art. 9.41 of the Radio Regulation – objections were made for 96 satellite systems and notices were sent to the relevant administration;
- coordination of satellite station from broadcasting-satellite radio service and fixed radio service when both are on primary basis, pursuant to Art. 9.11 of the Radio Regulation – objections were made for 4 satellite systems;
- coordination of satellite station using non-geostationary orbit and satellite system on geostationary orbit, pursuant to Art. 9.12A of the Radio Regulation – objection was made for 1 satellite system;
- coordination of emitting satellite station and receiving station from fixed radio service included in the table of frequency assignments, pursuant to Art. 9.14 of the Radio Regulation – objections were made for 42 satellite systems;
- coordination of satellite station, potentially affecting a radio service included in the table of frequency assignments, pursuant to Art. 9.21/C of the Radio Regulation – objections were made for 9 satellite systems;
- request for exclusion of the territory of the Republic of Bulgaria from the zone of service of a particular satellite system, pursuant to the provisions of Art. 23.13/B and Art. 23.13/C of the Radio Regulation – for 8 satellite systems, after coordination of CRC's activities with MTITC.

  The protection of the orbital resources of the Republic of Bulgaria for fixed-satellite and

broadcasting-satellite radio services from other satellite systems is an important factor for the smooth implementation and operation of the national systems and the modification made from broadcasting-satellite radio service. Moreover, coordination allows the smooth operation of radio services in bands on co-primary basis.

Electromagnetic compatibility

In 2014, electromagnetic compatibility analyzes of 62 Bulgarian and 40 foreign VHF radio broadcasting stations with the aeronautical systems ILS, VOR and COM were carried out.

Due to the identified possible interference while carrying out analysis for electromagnetic compatibility with aeronautical radio services, 14 radio frequency assignments were submitted for measurement under the Methodology for measuring A1 type intermodulation products generated by the operation of closely situated VHF-FM radio transmission stations.

1.1.2. Numbering

In 2014, a transition to geographic codes with length of up to three digits was performed. As of 01.04.2014, the number of geographic codes was reduced from 2,085 to 99. The List of geographic codes of numbering areas in the Republic of Bulgaria was adopted by the CRC and published on the Commission's website.

The main goal achieved by this change was to ensure a sufficient resource of geographic numbers. Regions with insufficient resource decreased out and the new consolidated numbering regions have a capacity of 1 million numbers for two-digit codes and 100,000 for three-digit codes – i.e. sufficient numbers are available in all regions for all companies wishing to provide fixed telephony service. Moreover, the change is expected to improve the efficiency of use of numbering resources and facilitate the entry of new undertakings to the fixed telephony services market, as it becomes possible to provide services in a larger geographical region by assignment of less numbers.

Besides the regulatory effects of the change, positive effects for end users are expected because of the increased number of settlements served by one destination code where end users can take advantage of their right to portability.

In connection with the transition to new geographic codes amendments were made to the National Numbering Plan and Ordinance No. 1 of 2010 regarding the rules for use, allocation and the procedures for primary and secondary assignment for use, reservation and withdrawal of numbers, addresses and names.

In 2014, no authorizations were issued for the use of individually assigned scarce resource - numbers. Three undertakings have suspended their activity.

The total number of undertakings, which have been issued authorizations for the use of individually assigned scarce resource – numbers, for carrying out public electronic communications, at the end of 2014 is 36.

In 2014, the undertakings were assigned:

- **4000** geographic numbers;
- **200 000** numbers of the 430 range – for services using Machine-to-Machine (M2M) communication;
- **1100** numbers after code 700 – (Personal Number);
- **500** numbers after code 90 – Value-Added Services (VAS);
- **11** addresses (8 national and 3 international signaling point codes).

Due to optimisation of the undertakings' networks and services or due to suspension of their activity in 2014 are released: 87,400 geographic numbers, 100 numbers after code 800, 3600 numbers after code 90 and 1 for „carrier selection" service.

The allocation of geographic numbers assigned to the undertakings at the end of 2014 is presented on Figure 42.

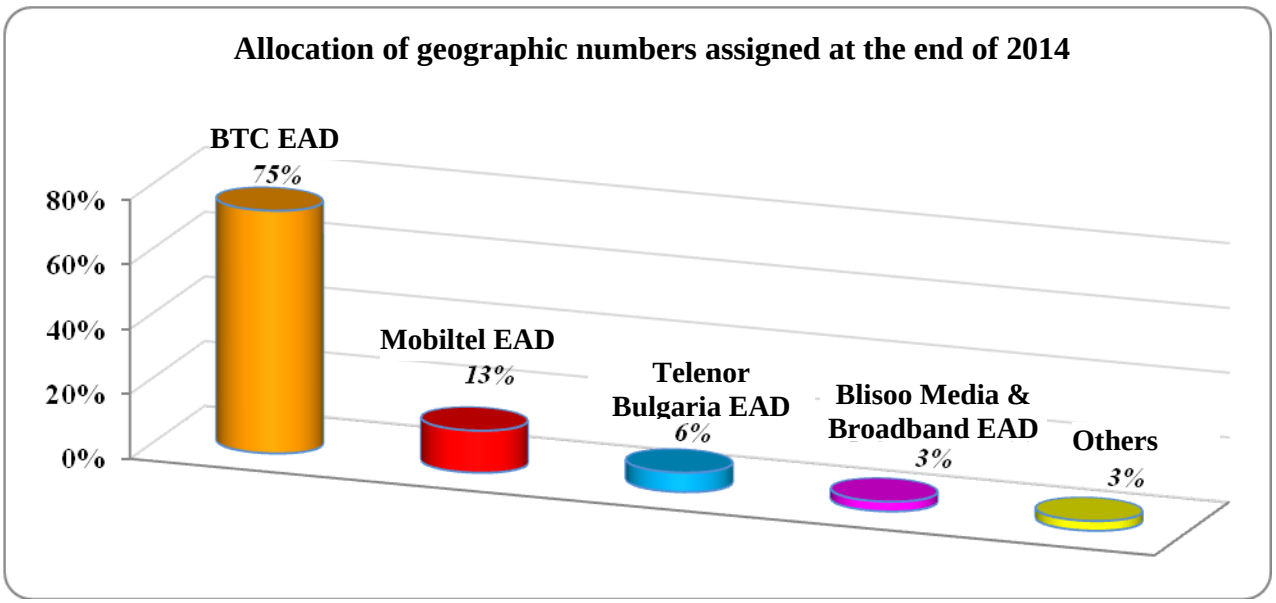


Fig. 42

The non-geographic numbers assigned to the undertakings at the end of 2014 are presented on Figure 43.

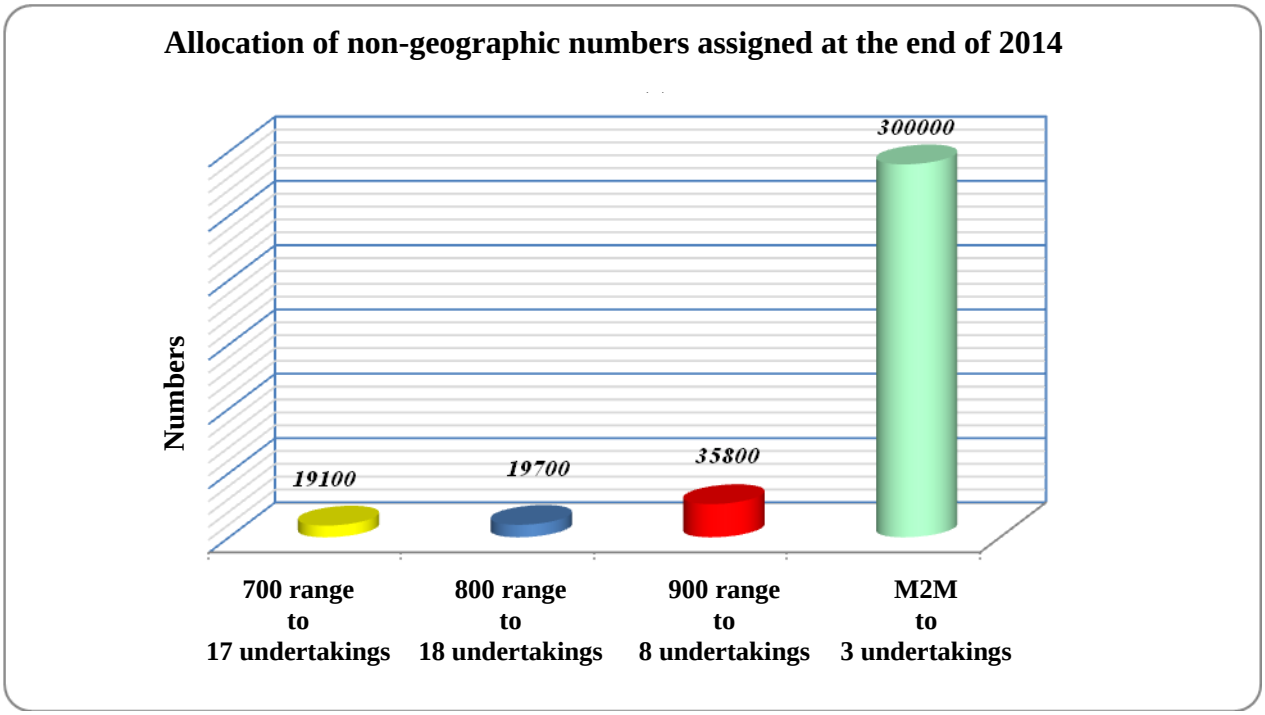


Fig. 43

1.1.3. Number portability

In 2014, there was an amendment to the Functional specifications for portability of non-geographic numbers, as code 430 was added (code to access services using Machine-2-Machine (M2M) communication).

In 2014, the trend towards increase in the number of ported numbers on both fixed and mobile networks was preserved, as it is clear from Figure 44.

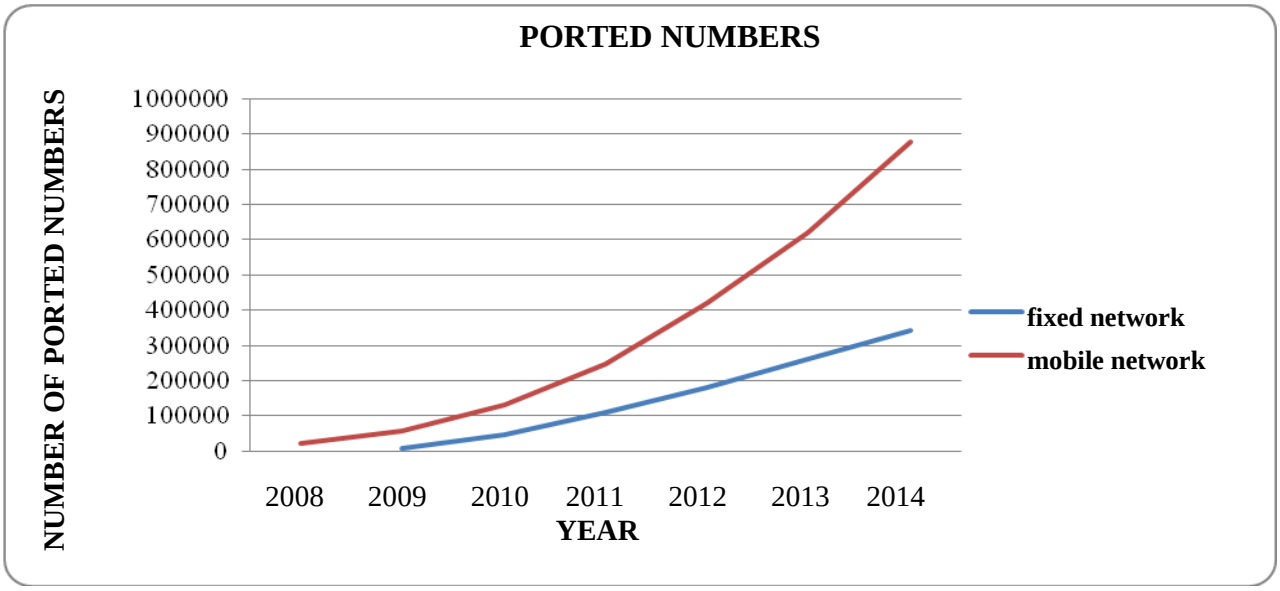


Fig. 44

- At the end of 2014, the numbers ported in mobile networks totaled 876,199, which is by 27.55% more than the numbers ported in 2013. The number of users who have benefited from their right to portability formed 7.26% of the total number of end users.
- The numbers ported in fixed networks totaled 342,317 at the end of 2014, which represents 12.21% of the total number of end users. In 2014, the ported numbers grew by 3.17%, as compared to the year before.
- As for non-geographic numbers, the ported numbers did not register a considerable growth. At the end of 2014, 69 numbers were ported.

1.2. Regulation and monitoring of the electronic communications services markets

The collection of information on the activity of the undertakings providing public electronic communications services, the analysis of the competitive environment on the markets of electronic communications networks and/or services and the regulatory measures adopted in order to ensure a competitive environment, are among the main working priorities of the CRC. Performing its regulation and monitoring functions and taking the best European practices into account, the CRC aims at providing opportunities to all stakeholders to benefit as much as

possible from the effective competition on the relevant electronic communications markets. To promote the development of an effective competition, the CRC:

- ***Performs monitoring of the electronic communications markets***

In accordance with Art. 40 of LEC, as well as Art. 15 of the Methodology for the terms and procedures of relevant markets definition, analysis and assessment[77] (the Methodology), the monitoring of the Bulgarian electronic communications market is carried out by CRC through observation of a set of parameters for which data is collected from approximately 1100 undertakings by means of special-purpose questionnaires, drafted in compliance with the public electronic communication services provided by them. The set of parameters includes information necessary to the Commission for:

- definition, analysis and assessment of the relevant electronic communications markets according to the 2009 European regulatory framework;
- preparation of a summarized annual analysis on the state and development of the electronic communications market in Bulgaria for the preceding year, part of the regulator's Annual Report;
- providing information to the EC related to the preparation of the annual progress reports for the single European electronic communications market aimed at achieving the objectives set out in the Digital Agenda Scoreboard for Europe adopted in May 2010;
- providing information to international institutions and organizations of which CRC is a member by virtue of international agreements: ITU, BEREC, Independent Regulators Group (IRG), etc.;
- control of the fulfilment of imposed specific obligations.

- ***Defines, analyzes, assesses the relevant electronic communications markets in accordance with the 2009 European Regulatory Framework and imposes specific obligations on undertakings having significant power on the relevant markets***

In 2014, one of the priorities adopted by CRC was the completion of the second round of analysis of the markets for the provision of (physical) wholesale access to network infrastructure (including full and shared unbundled access) at a fixed location and the provision of wholesale broadband access (markets 4 and 5 of EC Recommendation 2007/879/EC of 17 December 2007). In the process of analysis preparation, the European Commission adopted a new Recommendation (2014/710) on relevant product and service markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services. Its adoption imposed amendments in the draft of the prepared second round of analysis of markets 4 and 5 of EC Recommendation 2007/879/EC of 17 December 2007. In accordance with the adopted time limits for fulfilment of the priorities adopted by the CRC, by Decision No. 769 of 12.12.2014, the CRC initiated a public discussion of the draft decision on the analysis and assessment of the presence of effective competition on the wholesale market for local access provided at a fixed location and of the wholesale access for central access provided at a fixed location for mass market products (markets 3a and 3b, according to Recommendation 2014/710/EC).

[77] http://www.crc.bg/files/_bg/Metodika_2012_DV.pdf (adopted by Ordinance No. 2076 of 23.10.2012 of CRC and promulgated in the State Gazette, issue 89 of 13 November 2012.)

In performance of its duties relating to monitoring and control of the fulfilment of specific obligations imposed by analyses of the relevant markets, the CRC considered reports PR1-277/10.07.2014, PR1-306/28.07.2014 and PR1-339/18.08.2014 on price offers offered on the retail market. By its Decisions No. 453/14.07.2014 and 577/19.08.2014 the regulator established that the analysed price offers correspond to the price limits imposed by BTC**.**

- ***Collects information and monitors the fulfilment of obligations arising from the Regulation on international roaming***

In 2014 as well, the international roaming is regulated on the basis of the Regulation III[78] on roaming on public mobile communications networks within the Union. The Regulation stipulates for:

- the obligation to maintain maximum charges (price caps) for wholesale and retail voice calls, short text messages (SMS) and data transfer (mobile Internet) shall remain, with reduction from 1 July 2014. Pursuant to the provisions of the Regulation the same levels should be maintained unchanged until July 2022 for wholesale charges and until July 2017 for retail charges (Eurotariff);
- the obligations for transparency, avoidance of accidental roaming and bill shocks shall remain;
- introduction of obligation for separate sale of regulated retail roaming services, effective from 1 July 2014.

In 2014, the CRC performed monitoring of the fulfilment of the Regulation, and concluded that Bulgarian undertakings providing public electronic communication services via mobile networks:

1. Offer their subscribers Eurotariff for voice services, Euro-SMS tariff and Eurotariff for data;
2. Do not bind the Eurotariffs with a subscription fee or any other periodic or fixed charges, and the same can be combined with any retail tariff;
3. Fulfil the provisions for transparency, avoidance of accidental roaming and bill shocks in accordance with the requirements of the Regulation;
4. Apply prices, which correspond to the price caps specified in the Regulation for the regulated roaming wholesale and retail services.

Detailed information for the users of roaming services is published on the official website of CRC[79].

- ***Cooperates with the Commission for Protection of Competition***

On the grounds of the Rules for interaction and coordination adopted in 2008, which aim to establish conditions for effective cooperation and coordination between both institutions when exercising their legally delegated powers and implementing national and European electronic communications and competition law, the Commission for Protection of Competition (CPC) and CRC continued their active cooperation.

In 2014, the Commission assisted the CPC in carrying out investigations concerning potential breaches of the Law on Protection of Competition (LPC) and evaluations of economic concentration cases involving undertakings providing electronic communications services. On

[78] Regulation (EU) No 531/2012 of the European Parliament and of the Council of 13 June 2012 on roaming on public mobile communications networks within the Union

[79] http://www.crc.bg/files/_bg/Roaming_enduser__info-CRC-7-14.pdf

its part, in the beginning of 2015, the CPC presented its opinion in connection with the draft decision of the CRC for definition, analysis, and assessment of the wholesale market for local access provided at a fixed location and the wholesale market for central access provided at a fixed location for mass market products upon the public discussion held and in accordance with the term envisaged in Decision No. 769 of 12.12.2014 of the CRC.

1.3. Development and technical support of the National Radio Frequency Spectrum Monitoring System (NMS)

In 2014 as well, the development of the National Radio Frequency Spectrum Monitoring System (NMS) continued according to the adopted regional principle with the aim to establish an integrated system for monitoring and coverage of the entire territory of the country. In this regard, in 2014, tender procedures were held pursuant to the Law on Public Procurement for the supply of new transportable measuring systems:

- transportable measuring system for monitoring and control of the radio frequency spectrum to work in the frequency band from 9 kHz to 20.0 GHz;
- dedicated system for measuring the coverage and quality of the services provided from mobile terrestrial networks (GSM, UMTS and LTE) – for outdoor and indoor measurement.

The supply of the measuring system increased the efficiency of the CRC's monitoring activity as a regulator to ensure transparency regarding the performed electronic communications and fulfilment of the obligations of the undertakings, as provided for in the requirements of the LEC, to the interest of end users. This expanded the CRC's capacity to perform monitoring, identification and localization of interference, as well as control of the mobile networks within the country. The measurements will be performed in accordance with the requirements of ITU, ETSI, etc.

In 2014, the main highlights regarding the technical and technological provision of the activities for control and monitoring of electronic communications networks are:

- NMS development;
- Technical provision and deployment of measuring equipment for monitoring and control of the Radio Frequency Spectrum (RFS);
- Examination of technological hardware and software equipment for control and monitoring of new networks and technology;
- Technical support of dedicated technological equipment: fixed, mobile and transportable monitoring stations, transportable measuring equipment and NMS communication networks (configuration, set up and administration).

At the end of 2014, for the implementation of its control functions, CRC has been operating the following measurement systems:

- 15 fixed stations for RFS monitoring (3 manned and 12 unmanned RMS) in the bands from 20 to 3000 MHz;
- 8 mobile stations for RFS monitoring;
- dedicated mobile station for GSM 900/1800 and DVB-T;
- transportable system for measurement of the GSM/UMTS networks coverage and quality;

- transportable system for measurement of the GSM/UMTS/LTE networks coverage and quality;
- 7 transportable measurement systems for DVB-T networks coverage and quality;
- 7 transportable measurement systems in the bands from 1.0 to 26.5 GHz;
- portable equipment in the bands from 9 kHz to 3 GHz.

1.4. International activity

Participation in the work of European structures

In 2014, the Commission continued to participate at the highest level in the General Assemblies of the Independent Regulators Group (IRG), in the Plenary Meetings of the Body of European Regulators for Electronic Communications (BEREC), and the European Regulators Group for Postal Services (ERGP).

At expert level, CRC participated in the work of the relevant Contact Networks and in the expert working groups on issues related to the revision of the Recommendation for the relevant markets, next-generation networks, network neutrality and the harmonized consultative process to deal with frauds or abuses in connection with Art. 28(2) of the Universal Service Directive.

CRC representatives also took part in:

- 2nd BEREC Stakeholder Meeting;
- Capacity Building Workshop in the area of next-generation access networks in April in Frauenfeld, Switzerland;
- Legal workshop dedicated to consumer questions on electronic communications organized by the Consumer Protection Cooperation Committee of the European Commission in cooperation with BEREC in September in Brussels;
- Workshop organized by the Irish NRA ComReg related to the activity of the working group on network neutrality at BEREC in Dublin, etc.

Communication with the European Commission

The Commission continued its active dialogue with the European Commission and the European bodies and structures.

The regulator took part in the 35th session of the Radio frequency spectrum Policy Group (RSPG), a joint workshop of the RSPG and BEREC, and EU workshop on 5G spectrum planning.

In addition, CRC representatives also took part in:

- Meeting between BEREC and the European Commission on the draft Recommendation of the European Commission on relevant product and service markets within the electronic communications sector susceptible to *ex ante* regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services and Explanatory Note thereto;
- Meeting on the implementation of the obligation for equivalence of input related to the preparation of a Guidance to implement the Recommendation of the European Commission on non-discrimination and costing methodologies and the meeting of Working Group 13a of the European Network and Information Security Agency (ENISA).

Participation in the activity of specialized international organizations

In 2014, CRC intensified its attendance and active position in large-scale forums organized by the International Telecommunication Union (ITU), Universal Postal Union (UPU), European Conference of Postal and Telecommunication Administrations (CEPT), European Telecommunications Standards Institute (ETSI), etc.

International Telecommunication Union

CRC took part in the largest ITU event for 2014 – the ITU Plenipotentiary Conference – the Union's supreme governing body, which took place in Busan, Korea. With the active cooperation of CRC, Bulgaria was re-elected for the seventh consecutive four-year mandate as a member of the ITU Council.

CRC also took part in the annual global events of ITU – Annual session of the Council, Global Symposium for Regulators (GSR-14) in Manama – Bahrain, the Leadership Summit of ITU Telecom World 2014 in Doha, Qatar. At the personal invitation of ITU's Secretary General in May the Chairman of the CRC participated as special guest in the High-Level Event (WSIS+10) of the World Summit on the Information Society in Geneva, Switzerland, where he pronounced an official statement on behalf of the Republic of Bulgaria.

On the eve of the Plenipotentiary Conference on 2 October 2014, at the invitation of the Chairman of CRC there was an official visit to Sofia of ITU's Deputy Secretary General, who was subsequently elected as Secretary General of the ITU.

The Commission was also represented in ITU's World Radiocommunications Seminar in Geneva, Switzerland in December 2014.

Universal Postal Union (UPU)

In the field of postal services, it should be noted that CRC participated in the sessions of UPU's Council of Administration and the Postal Operations Council, which took place in April and November 2014 in Bern, Switzerland.

Network of regulators of the Member States of the International Organisation of La Francophonie (FRATEL)

In 2014, CRC representatives took part in the 12th Annual Meeting of FRATEL, held in Marrakech, Morocco. In the course of a round table on *"Which are the leading targets of the regulator in determining the mechanism of frequency allocation?"* CRC made a presentation on the procedures for holding a tender or a competition for issuing authorization for use of individually assigned scarce resource - radio frequency spectrum in accordance with the LEC.

European Conference of Postal and Telecommunications Administrations (CEPT)

Experts from the specialized administration of the CRC participated in the activity of the working structures to CEPT; the regular meetings of the Committee for ITU Policy (Com-ITU) in May 2014 in Amsterdam, the Netherlands, and in September in Berlin, Germany, as well as meetings of the Conferences Preparatory Group (CPG) to the Electronic Communications Committee (ECC) in Riga, Latvia in March 2014.

CRC was also presented in the meetings of the Working Group on Frequency Management CEPT/ECC/WGFM in February in Budapest and in May in Trondheim, Norway, and in the meeting of Project Team FM 22 on Monitoring to the Frequency Management Working Group in April 2014 in Vilnius, Lithuania.

CRC also took part in the following meetings of CEPT working groups:

- Meeting of working group "Numbering and networks" CEPT/ECC/WGNaN in April 2014 in Lisbon, Portugal;
- Meeting of project team "Technical regulatory issues " WG NaN PT TRIS in March in Biel-Bienne, Switzerland;
- 49th Plenary meeting of CERP to CEPT in May 2014 in Skopje, Macedonia.

CRC participation in other significant international events

In 2014, CRC also took part in other important international events in the field of communications at European and international level:

- Ministerial Program of the Mobile World Congress, in February 2014 in Barcelona, Spain;
- Workshop organized by the Turkish regulator ICTA, 16-20.06.2014, Istanbul, Turkey;
- 9th Internet Governance Forum (IGF), 02-05.09.2014, Istanbul, Turkey;
- Conference of the International Amateur Radio Union (IARU), Region 1 in September 2014 in Albena, Bulgaria, during which the Chairman of the CRC officially welcomed the delegates;
- Conference on the implementation of international coordination in the short-wave range, 25.08 - 29.08.2014 in Sofia, Bulgaria, during which the CRC officially welcomed the delegates.

Bilateral and regional cooperation

In 2014, a CRC delegation led by Chairman of the Commission, made a visit to the National Regulatory Agency for Electronic Communications and Information Technology (ANRCETI) of the Republic of Moldova. Memorandum of Understanding in the field of electronic communications regulation was signed between CRC and ANRCETI. This was the 13th bilateral agreement signed by CRC after memoranda of cooperation with the NRAs of Greece, Egypt, Spain, Italy, Macedonia, Moldova (with ANRTI), Serbia, Turkey, Ukraine, Hungary, Croatia and Montenegro.

Following a high-level meeting during the ITU Telecom World 2013, in 2014 consultations started on a draft Memorandum of Understanding between the CRC and the National Broadcasting and Telecommunications Commission (NBTC) of the Kingdom of Thailand. Its signing was postponed due to cancellation of the Thai side of the visit of the Thai delegation in Sofia planned for June.

Memorandum of Understanding was signed between the CRC and the new National Commission for the State Regulation of Communications and Informatization (NCCIR) of Ukraine, following the closure of the National Commission for Communications Regulation (NCCR), which had a Memorandum signed with the CRC.

Following discussions at the Plenary Meeting of BEREC in Dublin, Ireland, held between the Chairman of the CRC and the Chairman of the Czech Telecommunication Office (CTU), a consultation process started on a draft Memorandum of Cooperation between the two regulators. The Memorandum was approved at a meeting of the CRC and signed in July 2014 in

Prague, during a visit of delegation of the CRC at the invitation of the Czech side. Thus, a framework for cooperation and promotion of the exchange of information between the two regulators on experience in the regulation of electronic communications was established.

On 18.09.2014, in Sofia a tripartite meeting was held between the CRC, CTU and the NRA of the Republic of Moldova (ANRCETI). In the spirit of the Memoranda of Cooperation signed, the best regulatory practices and experience were shared and discussed. This tripartite meeting manifested the constructive dialogue and active cooperation between the institutions of the three countries to find the best solutions to common problems of national markets regulation.

A draft Memorandum of Understanding between the CRC and the NRA of Albania was approved, which is expected to be signed in early 2015.

Along with its membership in the international and European organizations, CRC also maintains close cooperation at the regional level – based on both bilateral agreements with our neighbouring countries, and on participation in large-scale initiatives on a regional basis, for example:

- Participation in the Regional Conference "Accelerating the deployment of next-generation networks: pillar for digital growth", 13-14.02.2014, Athens, Greece;
- International Conference Capacity Balkans 2014, 07-08.04.2014, Bucharest, Romania;
- International conference organized by the Romanian regulator ANCOM, 27.05.2014, Bucharest, Romania;
- Meeting of heads of regulatory bodies from the Balkan countries, 20-23 August 2014 Skopje, Macedonia;
- 12th Regional Conference "Regulatory activity in the electronic communications sector", organized by the Electronic Communications and Postal Services Agency of Montenegro and ITU, 29-30.09.2014, Budva, Montenegro, etc.

The Commission consistently develops its relations with the countries from the region, as it aims at deepening the regional cooperation, according to the common European policy.

1.5. CRC's administrative capacity

1.5.1. Human resources

The establishment of a professional and responsible administration is an important part of CRC's operation. Attracting new employees and developing those having experience, as a competent, motivated, and effective team is a necessary and good practice in the regulatory authority.

The structure of the CRC's administration and the number of employees in 2014 are presented on Figure 45 as follows:

- Internal Audit Function 1
- Direct Subordination positions 1
- Coordination, Planning and International Relations Directorate 12
- Legal Regulation and General Legal Services Directorate 20
- Directorate General Communications Control 63
- Authorizations and Frequency Planning Directorate 31
- Technical Regulation and Electronic Signature Directorate 12
- Market Regulation Directorate 24

- Financial and Administrative Services Directorate

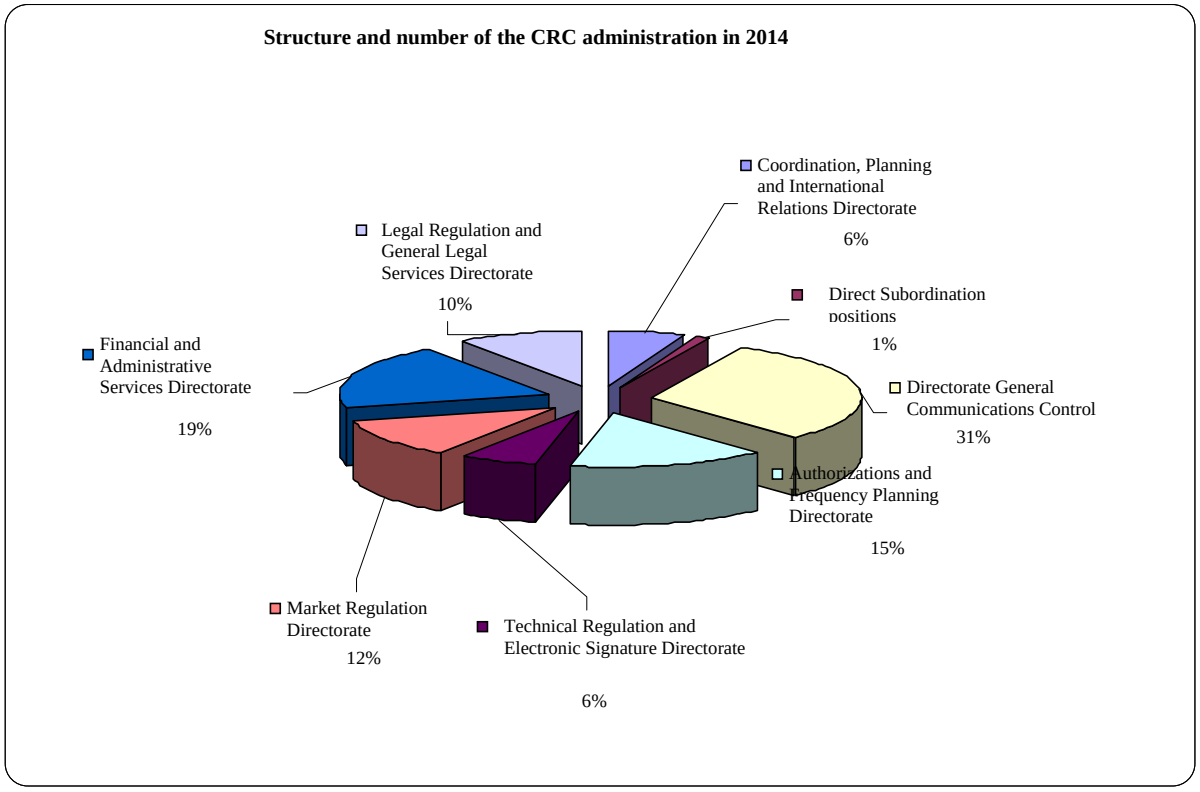


Fig. 45

The total number of staff of the CRC is 255 people, of which 208 were employed as of 31 December 2014, while the vacant positions were 47 (Figure 46).

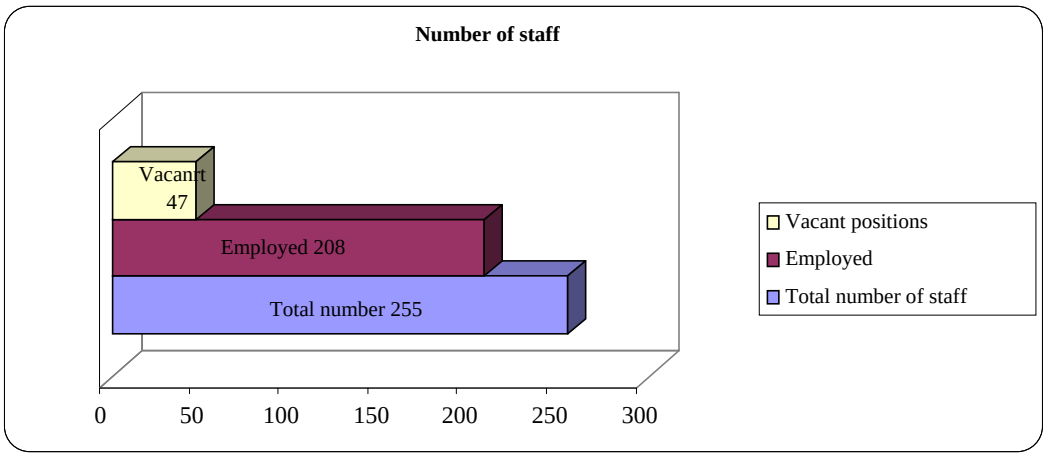


Fig. 46

The average age of the staff was 42 years, the total number of CRC employees was 208, of which 196 were university graduates.

The allocation of employees with higher education is in the following areas: technical sciences, legal sciences, economic sciences, informatics and mathematics, humanitarian sciences, etc. (Figure 47).

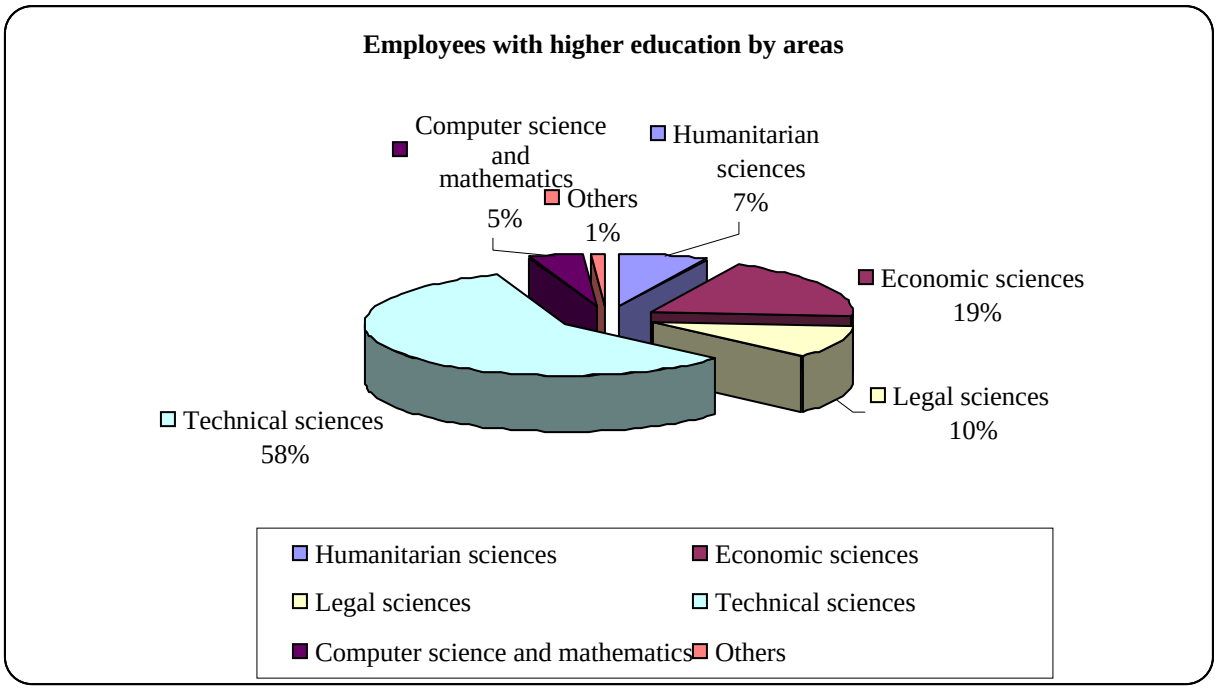


Fig. 47

In the process of recruiting civil servants for the CRC' administration, the Law on Civil Servants, the Ordinance on Recruitment Procedures for Civil Servants, and the Internal Rules are applied. In 2014, following the regulatory requirements, 8 employees were appointed via competitions.

For the purpose of knowledge enhancement, professional development and improvement, CRC' employees took part in specialized trainings of external organizations and trainings carried out by the Institute of Public Administration under the project awarded to CRC "Enhancing the Administrative Capacity of the Communications Regulation Commission" under Priority Axis II "Human Resources Management", Sub-Priority 2.2. "Competent and Efficient Public Administration".

The fields of training in different courses and seminars and the number of participants are presented on Figure 48 as follows:

- Managerial skills 68
- Prevention and countering corruption 7
- Legal aspects of the administrative activity 37
- Human resource management 131
- Financial and economic management 7
- Information technology and computer skills 102
- E-Government 7

- Foreign language training 57
- Specialized training 234

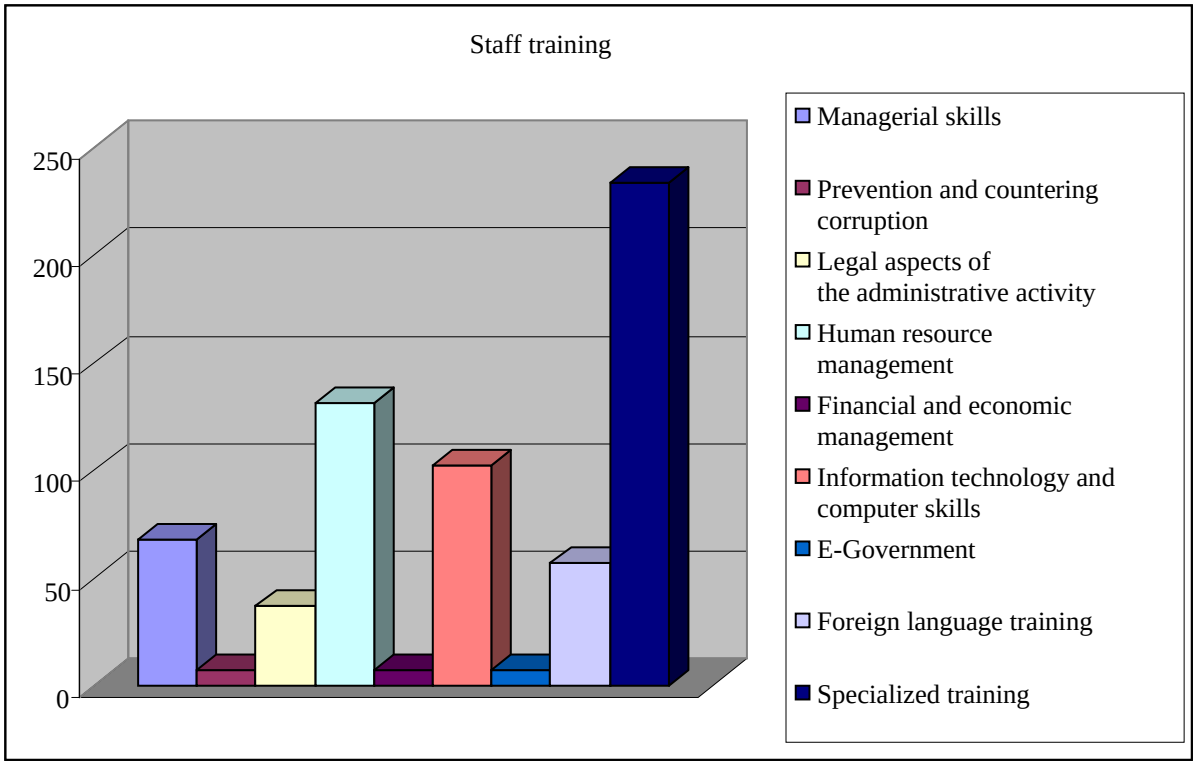


Fig. 48

1.5.2. Information services

In 2014, CRC continued its work on building its internal and external information systems with a view to increase the quality of work of its administrative employees, to facilitate the access of the citizens and the business to information and carrying out electronic administrative services. The activities related to the Commission's participation in e-government projects in the Republic of Bulgaria are as follows:

- Maintenance and operation of the information system “Licensing and Registers” providing 39 electronic administrative services to citizens and business. The information system was built with funds under Operational Programme "Administrative Capacity" and is certified under the Ordinance on the general requirements for operational compatibility and information security. Information system “Licensing and registers”, supports the management of IT processes in maintaining the electronic records of the Commission and allowing public access via the Internet in accordance with the requirements of the LEC, LEDES, and the Law on Postal Services (LPS). The system is connected with document turnover system “Eventis” in terms of receiving incoming numbers of documents received through “Licensing and Registers”, issuing resolutions, etc.

- Exploitation of a Documentary Portal to the document turnover system "Eventis", which enables citizens and businesses to send electronically signed documents and receive electronic statements by CRC.

2. Other important activities

2.1. Standardization

In compliance with Art. 30, item 22 of LEC, CRC performs the functions of the National Standardization Organization (NSO) for the European Telecommunications Standards Institute (ETSI). In 2014, CRC continued to actively participate in the work of four Technical Committees (TCs) for standardization (TC47, TC57, TC75, TC80) to the Bulgarian Institute for Standardization (BDS), which dealt with electronic communications.

In 2014, CRC took part in procedures of ETSI as follows:

Table 12

2014	Number of processed documents	Number of procedures
Vote(TAP) – Voting (two-step procedure)	**22**	**16**
ENAP – One-step procedure	**38**	**21**
MV – Member voting	**29**	**20**
Withdrawal – Withdrawal	**2**	**1**
PUB – All weekly received documents	**1,699**	

CRC notified ETSI electronically of the national EN standards published by BDS introducing the relevant ETSI EN standards. For the purpose of regulation and in cooperation with BDS, CRC introduced both national Standardization Documents (SD) and other standardization documents of ETSI.

In 2014, 40 ETSI EN standards were introduced by endorsement as Bulgarian standards and two BDS EN ETSI standards were repealed.

All translations of the titles of draft ETSI harmonized standards have been prepared and agreed on time by correspondence at TC of BDS.

On its website, CRC maintains and updates on an ongoing basis the standards and standardization documents of ETSI on the different procedures that are available for all concerned parties, including Small and Medium-sized Enterprises (SMEs). To support SMEs, information on Regulation (EU) No. 1025/2012 of the European Parliament and of the Council on European standardization is published on CRC's website. A link to the SME portal of BDS directs to public information in the programs of the European standardization bodies on the role of SMEs for the development of information and communication technology.

2.2. Radio equipment and electronic communication terminal equipment

In 2014, through the European portal OSN (One Stop Notification), CRC received, stored and considered 685 notifications for radio equipment, which will be placed on the market in compliance with Art. 269 of LEC and in conjunction with the implementation of Art. 6 paragraph 4 of Directive 1999/5/EC of the European Parliament and of the Council on radio equipment and telecommunications terminal equipment and mutual recognition of their conformity.

After an analysis of the received notifications concerning the ability to use frequency bands from the relevant radio equipment with the specified technical parameters and standards applied, 149 letters were sent. Thus, CRC informed the stakeholders about the inability of radio equipment to be put into service on the territory of the Republic of Bulgaria or the ability of particular radio equipment to be put into service in line with the conditions and the relevant technical parameters specified in the Bulgarian regulations.

Figure 49 shows, for comparison purposes, the number of received notifications and the number of letters sent by CRC for the period from the creation of the European OSN portal in 2008 until the end of 2014.

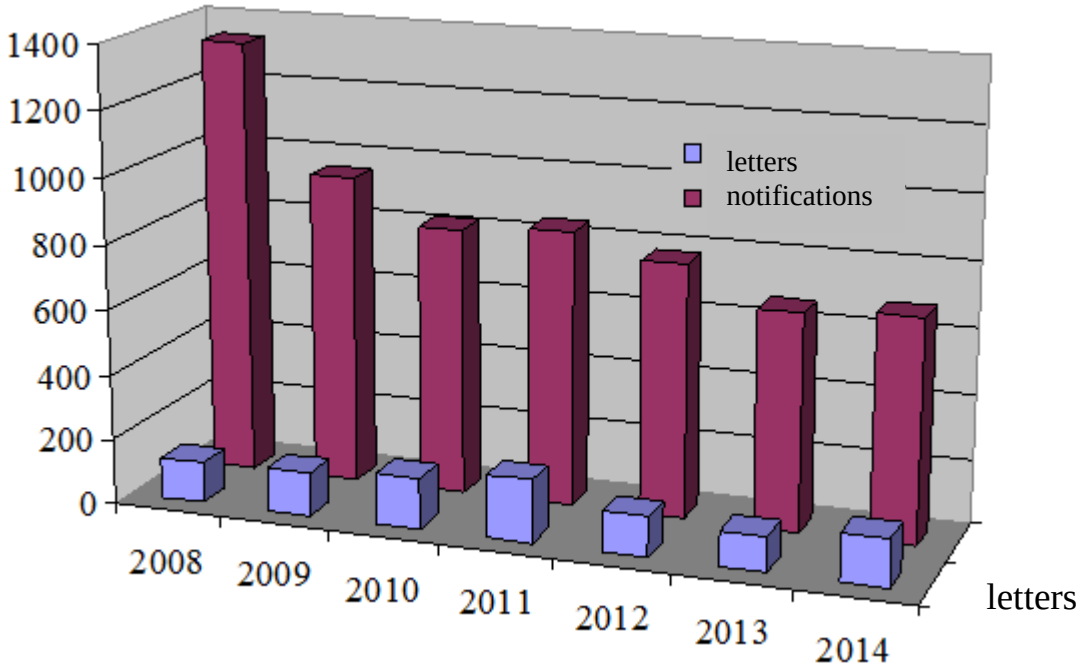


Fig. 49

The number of notifications received in 2014 under Directive 1999/5/EC does not differ significantly from the year before. The relatively unchanged number of notifications in the past two years confirms the compliance of producers with the requirements of Art. 6, paragraph 4 of Directive 1999/5/EC.

2.3. Performance of obligations related to Chapter 15 of LEC

In 2014, the CRC received one notification about a technical problem qualifying for incident reporting in accordance with the criteria laid down by the Commission in the General Requirements. In this regard and in fulfillment of its obligation under Art. 243b, Para. 5, CRC prepared and sent to the European Commission and ENISA the annual report on the notifications received.

In 2014, ENISA prepared *ICT Procurement Security Guide for Electronic Communications Service Providers* with recommendations to the undertakings providing electronic communications networks and services for better management of potential security risks in the products purchased or services outsourced, which could lead to security breaches in electronic communications services. Upon its preparation, consultations were held with the participation of Bulgarian undertakings as well. The Guide can be downloaded from the ENISA website.

2.4. Electronic signature

The qualified electronic signature (QES) is a key element and a means of building confidence and trust in e-commerce, electronic data exchange, e-banking and open communications. In order to facilitate electronic services, QES is considered evidence in any matter relating to the authentication of the signatory and proving data integrity. It has the same legal effect in criminal proceedings as a handwritten signature. Once chosen, QES quickly becomes the preferred online means.

In 2014, there was a considerable increase in the sale of certificates issued by Certification Service Providers (CSPs) to legal entities compared to those issued to individuals, which is associated with the automation of business operation and the high efficiency in the use of QES. Compared to 2013, an increase by 6.2% was reported in the issued and re-issued certificates for individuals, while those for legal entities decreased by 8.4% (Fig. 50).

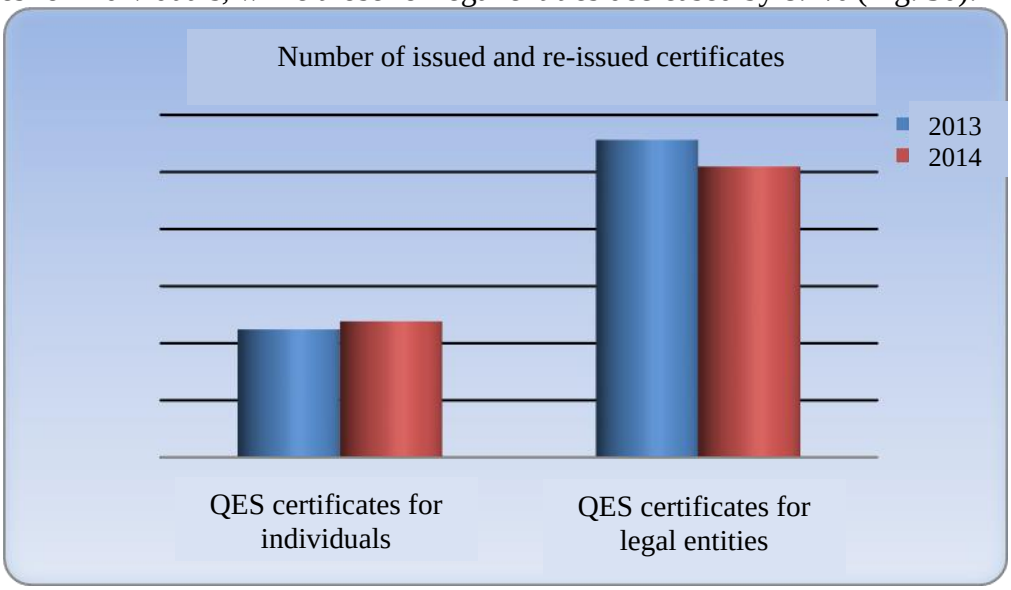


Fig. 50

CPSs continued the innovative development of their activity in services and products with high level of protection and legal security, meeting the needs of citizens and businesses. This is confirmed by the increased number of certificates for specific purposes (up by 31.9%) compared to the previous year (Figure 51).

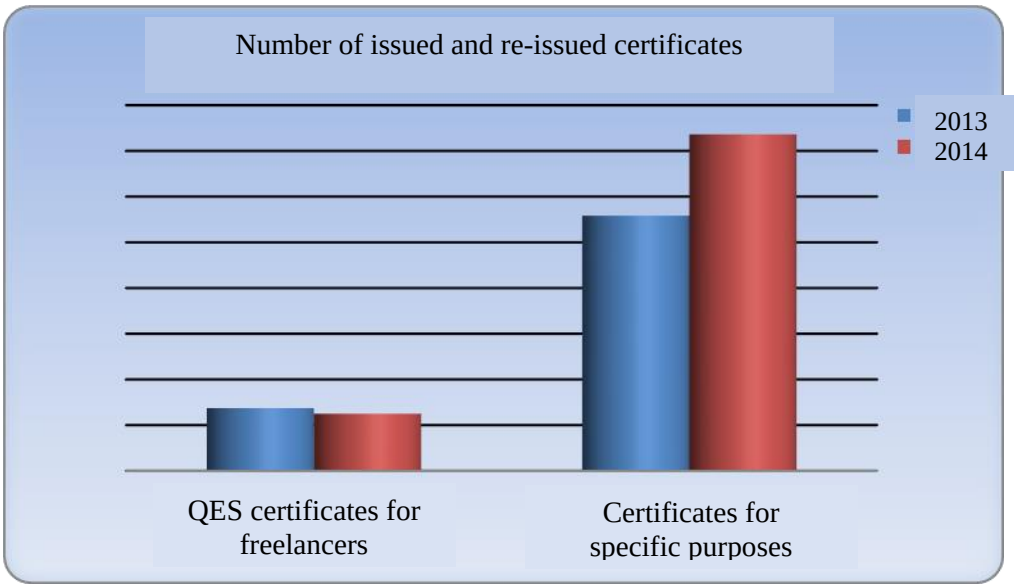


Fig. 51

The revenues of some of the companies was still negatively affected by the macroeconomic situation in the country, as well as by competition. As a whole, the financial results of the certification sector in 2014 showed 1% decrease in revenues and 32.8% decrease in investment compared to 2013.

In the past year, CRC implemented its control functions under LEDES by performing planned inspections of the activity of SEP Bulgaria AD, Information Services AD, Spectrum AD and Borika-Bankservice AD, and partial inspection of Infonotary EAD. The results of the inspections showed that no significant defaults were established in the companies' activities regarding the compliance with the requirements for reliability, security and quality of the certification services provided by them, as stipulated for in LEDES and the regulations.

CRC continues to maintain and update the Bulgarian Trust-service Status List (TL) containing data for CSPs issuing qualified electronic signature. The publication of TL builds trust in the online environment and facilitates the cross-border use of online services in the EU.

In 2014 as well, the work on creation of a unified system for interoperability of electronic signatures and the related certificates issued in different countries, is one of the priorities of the European Union. In 2014, as a tool and legal instrument, Regulation No. 910/2014 of the European Parliament and of the Council on electronic identification and trust services for electronic transactions in the internal market was issued. The Regulation establishes a common legal framework for the use of certification services and aims to ensure that cross-border online services implemented by Member States can be realized via secure electronic identification and secure electronic authentication. The implementation of the Regulation requires amendments to LEDES and the regulations.

2.5. Communications control

In performance of its control functions, in 2014 as well, the Commission observed the principles of the law, non-discrimination, transparency, and protection of end users in the Republic of Bulgaria in strict compliance with LEC and the regulations in the area of electronic communications.

The territorial structure of CRC allows its control functions to be performed on the entire territory of the country by the main unit in the city of Sofia and by five regional units in the cities of Plovdiv, Burgas, Varna, Veliko Tarnovo and Vratsa.

2.5.1. Monitoring and control of the radio frequency spectrum for civil needs

The development of technology and the need to provide up-to-date data on RFS availability increasingly strengthens the significant role of monitoring and control for its effective management. The availability of free RFS is getting more and more critical for both the introduction of new technology and the competition development. The need to establish conditions for the normal operation of the constructed radio networks requires continuous monitoring and control, which also contribute to the timely localization and elimination of sources of radio interference and illegal broadcasting equipment.

The growing number of users of services provided using RFS also requires strengthening of the role of monitoring for the effective management of this scarce national resource. On the other hand, the continuous improvement of the electronic communications requires greater flexibility in the RFS usage with the purpose of providing the undertakings with the highest possible volume of free radio frequency spectrum and the least restrictive technical conditions.

CRC performs the main activities related to RFS monitoring through the established radio monitoring system. Periodic control is carried out through fixed and mobile stations for radio monitoring on the entire territory of the country to ensure non-discriminatory treatment of the legitimate spectrum users and to guarantee a certain quality of the electronic communications services provided to end users.

In 2014 as well, special attention was paid to monitoring in the bands for television broadcasting in relation to the completed digitization process.

In 2014, the main RFS monitoring and control activities were as follows:

- Establishing conditions for **normal work of legitimate spectrum users and ensuring a certain quality of the electronic communications services provided to end users**, as well as avoiding interfering and illegal broadcasting through exercising preventive control.

  The steady trend of maintaining the parameters of broadcast radio and television signals according to the standards and reducing the secondary and intermodulation broadcasting generated continued, including in the scope of air radio service. In 2014, as a result of the ongoing regular planned monitoring, the undertakings were sent data electronically from 9,282 measurements made of basic technical parameters of radio broadcasting stations. As a result of the preventive control of the radio frequency spectrum, 13 instructions were given (about 7% less than 2013) for deviations of technical parameters, which had to be remedied within one month and all undertakings have adopted the measures required;
- Control regarding **conformity with the rules for the use of radio frequencies and radio frequency bands** for civil needs.

  In implementing the policy for management of the radio frequency spectrum and the conditions of the issued authorizations, a scheduled daily monitoring was carried out in frequency bands 20-3000 MHz through fixed (manned and unmanned) stations for radio monitoring by NMS, while periodic control and monitoring was carried out through mobile stations for radio monitoring on the entire territory of the country;

- Monitoring and control of the **conformity of the established broadcasting stations** for analogue terrestrial broadcasting of radio signals and digital terrestrial broadcasting of television signals with the approved technical characteristics.
  144 measurements were carried out in fulfilment of CRC decisions to verify the conformity with the approved technical characteristics;
- Monitoring for **evaluation of the electromagnetic environment:**
  - monitoring of VHF frequency bands for radio and television broadcasting to evaluate the electromagnetic environment and cross-border harmful interference.

  On an annual basis, mainly in the borderline areas of the country, measurements are carried out to evaluate cross-border interference: 524 measurement protocols carried out on the territory of 78 settlements in the borderline areas of the country were summarized and analyzed, concerning the intensity of the electromagnetic field and determining the direction of registered broadcasts from the territory of the neighboring countries Turkey, Serbia, Romania, Macedonia and Greece. Traditionally, special attention was paid to the evaluation of the electromagnetic environment and cross-border harmful interference during the summer months on the Bulgarian Black Sea coast – regular measurements were carried out in 7 settlements on the Bulgarian Black Sea coast. Once again, it was established that the penetration of cross-border broadcasting along the Black Sea coast in the summer period is too much affected by the air temperature, by the sea temperature and the state of the sea. As a result of the actions undertaken during the past years, no interference of Bulgarian broadcasting stations was established in their areas of service and relatively lower levels of cross-border signals received from Turkish broadcasting stations were registered;
  - monitoring of **PMR frequency ranges**

  Monitoring was carried out through fixed (manned and unmanned) stations for radio monitoring by NMS to evaluate the actual availability of RFS and to register illegal radio broadcasting on the territory of: city of Sofia (Fixed Station Sofia), village of Bryastovets (Remotely-operated Station Bryastovets), city of Plovdiv (FS Plovdiv), city of Varna (FS Varna), city of Vidin (RS Vidin), city of Blagoevgrad (RS Blagoevgrad), village of Stalevo (RS Stalevo), village of Todorovo (RS Pleven) and village of Radingrad (RS Razgrad).
  - monitoring of **VHF frequency bands for radio broadcasting** (87.5-108.0 MHz)

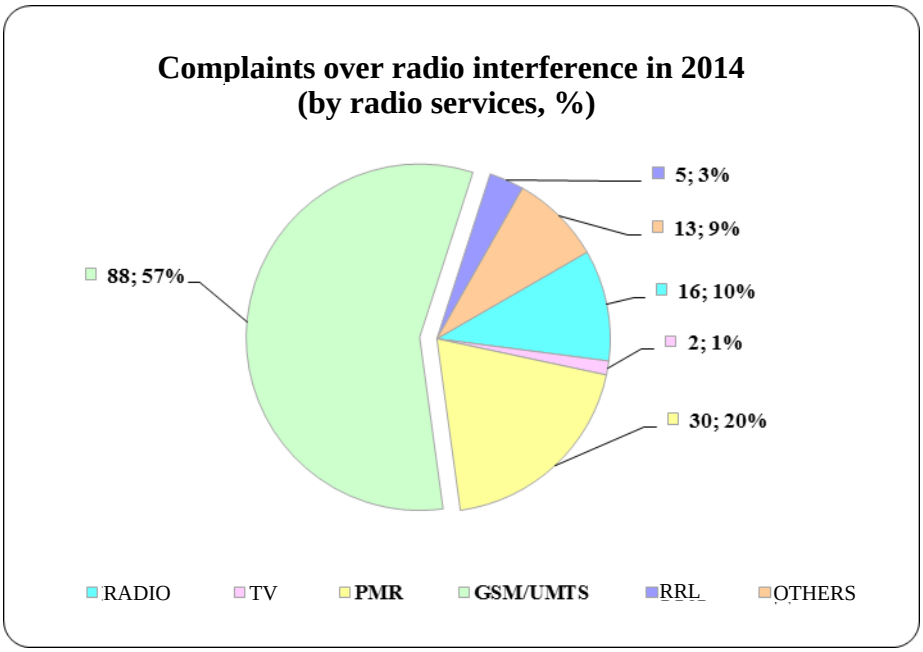
  In connection with the opening of procedures for conducting competitions for analogue terrestrial broadcasting by the Council for Electronic Media, radio monitoring was held on the territory of 10 settlements: city of Dobrich, city of Varbitsa, city of Kaolinovo, city of Novi Pazar, city of Kubrat, city of Tsar Kaloyan, city of Opaka, city of Madan, city of Asenovgrad and city of Yakorouda.
  - evaluation of the **electromagnetic compatibility** of VHF radio broadcasting stations in the band 87.5÷108.0 MHz and the radio navigation and communication equipment of the aeronautical services using the band 109÷137 MHz.

  In 2014, 12 measurements were carried out of 8 radio broadcasting stations: Radio Broadcasting Station Targovishte (city of Targovishte); Radio and TV Station Hrishteni (city of Stara Zagora), RTVS Frangata (city of Varna), city of Razgrad (railway station), RBS Kaliakra (city of Kavarna), RTVS Belogradchik (city of Belogradchik), RTVS Stramni rid (city of Momchilgrad) and TV Tower Aleya Yavorov (city of Sofia) to ensure the electromagnetic compatibility and trouble-free operation of radio navigation

and communication equipment of the aeronautical services. The measurements were carried out according to the *Methodology for measuring intermodulation products of type "A1", occurring during the operation of closely situated VHF-FM radio broadcasting stations (according to item 2.5. of Appendix 1 to the Technical requirements for operation of the electronic communications networks of the Radio broadcasting service and the related equipment);*

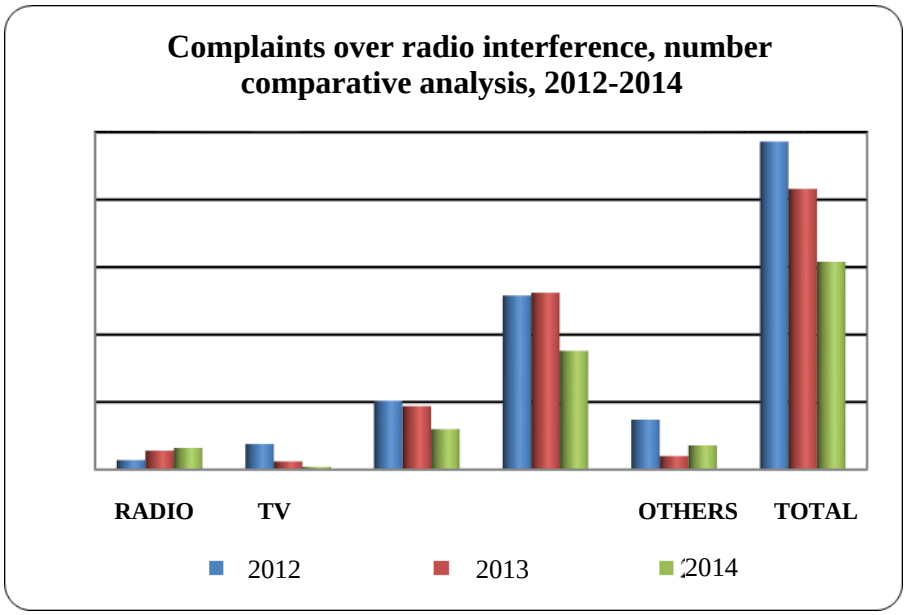
- Monitoring and control over the quality of provided services with a view to the **protection of public and consumer interest**:
  - Monitoring in relation to received **complaints and signals** from legitimate spectrum users, citizens, organizations and institutions

In 2014, 154 cases of radio interference were examined (Figure 52) and 353 measurement reports were drawn up on the results. The necessary measures for quick localization and elimination of interfering sources were timely undertaken. In 2014, a relatively high share was held by radio interference resulting from electromagnetic incompatibility and mutual interferences as a result of the shared use of different technology in bands designated for the operation of mobile radio networks. There were also frequent cases of registered interference of terrestrial mobile networks resulting from the use of household devices by citizens (radiotelephones, babyphones, etc.) imported from outside EU (for instance, USA and Canada) or purchased online that operate under DECT 6.0 standard in frequency bands, which are not permitted on the territory of the Republic of Bulgaria. Figure 53 shows a comparative analysis of radio interference cases solved in relation to complaints received, by type of radio services for the period 2012 - 2014.



Source: CRC

Fig. 52

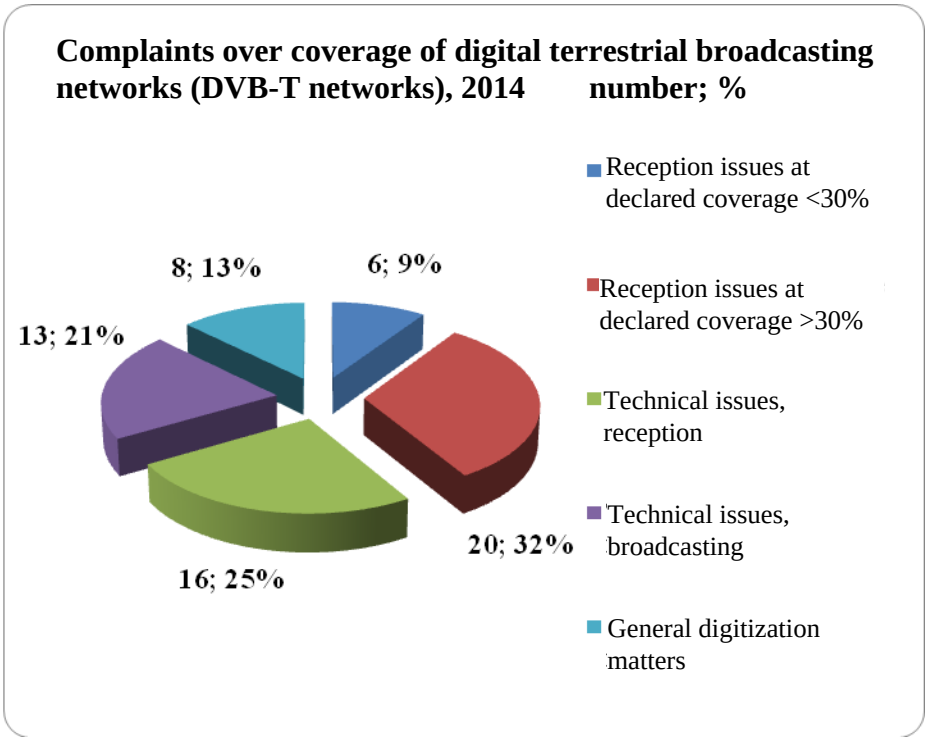


Source: CRC

Fig. 53

- Monitoring and inspections concerning received complaints and signals related to the ensured **coverage of the terrestrial digital television of DVB-T standard**

Measurements and inspections were carried out in relation to 68 complaints and signals from applicants and forwarded to other institutions (CEM, MTITC, etc.). The results from the performed scheduled measurements and the inspections under these complaints were summarized in 313 measurement reports – analysis of the results of the inspections made in relation to received complaints concerning issues with the coverage of electronic communications networks under DVB-T standard is presented on Figure 54.



Source: CRC

Fig. 54

- Coverage of mobile terrestrial networks under the **GSM/UMTS** standard

In 2014, in relation to received complaints and signals, analyzes were made and 58 statements were drawn up regarding the coverage declared by the undertakings for the settlements subject to complaints received by the Commission.

The results from the RFS monitoring and control carried out in 2014 were summarized in over **4700 measurement reports** and their analysis by types of activities is displayed on Figure 55.

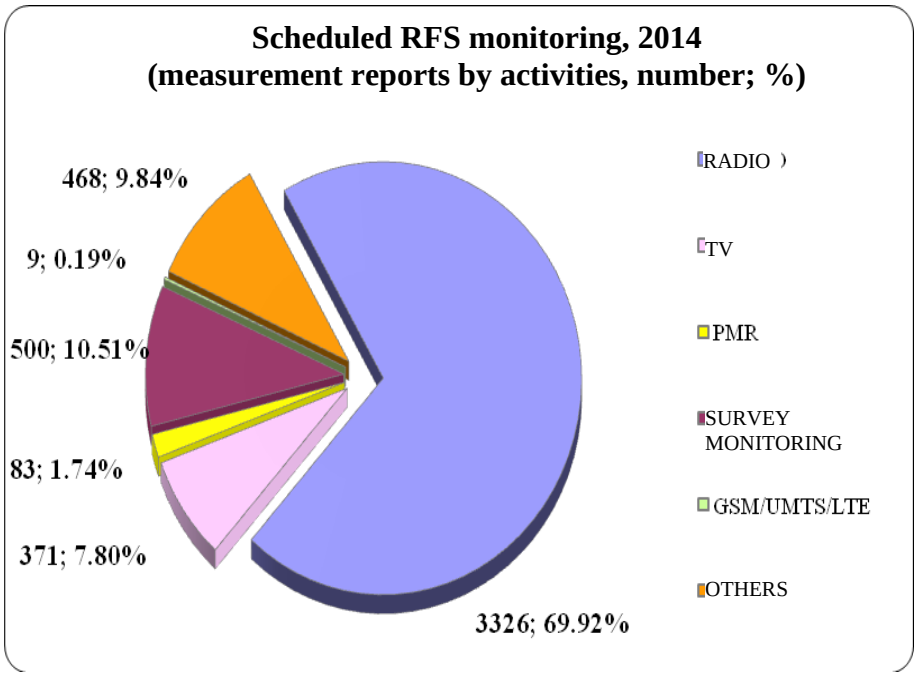


Fig. 55

Source: CRC

2.5.2. Inspection activity

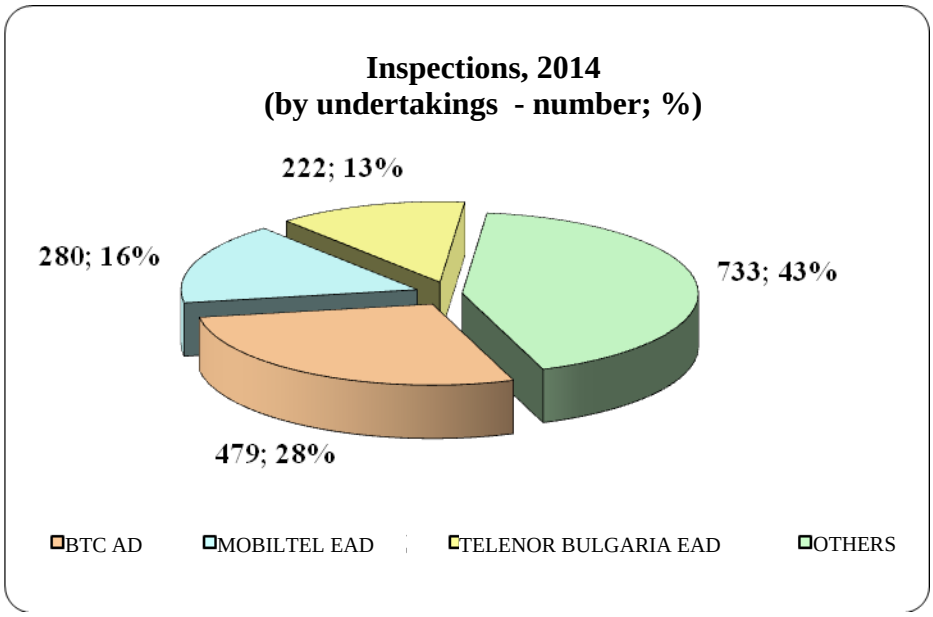
In 2014, the CRC control activity related to electronic communications provision pursuant to LEC and in conformity with the requirements of LEDES, was focused on:

2.5.2.1. Control on the provision of electronic communications under LEC

In 2014, over 1700 inspections were carried out in relation to:

- Implementing CRC decisions;
- Compliance with the provisions of the authorizations issued;
- Compliance with the requirements of Chapter 14 of LEC;
- Compliance with the General requirements for carrying out public electronic communications; sending unsolicited messages for direct marketing and advertising by the undertakings without the prior consent of users;
- User data protection;
- Failure to provide end users with itemized bills; portability of geographic, non-geographic and mobile numbers;
- Claims of consumers regarding high bills charged and incorrect billing of calls in international roaming;
- Radio interference to legitimate RFS users;
- problems and/or lack of quality coverage of mobile networks and digital television broadcasting networks;
- Problems with the quality of services provided to end users, etc.

About 57% of the inspections were performed of the three major undertakings providing electronic communication services in relation to complaints submitted to CRC by end users concerning the services provided by them: BTC – 479 inspections, Mobiltel EAD – 280 inspections, and Telenor Bulgaria EAD – 222 inspections.



Source: CRC

Fig. 56

In 2014, the following main inspections were carried out for compliance with the requirements of LEC:

- Inspections related to solving problems in the **number portability** implementation in case of changing the telephony service provider.
  In 2014, 128 inspections were carried out on complaints concerning impeding the right of number portability for mobile and fixed numbers. In 2014 as well, there was a downward trend for complaints received related to impeding the user right to number portability. In relation to the inspections made for established violations of the Functional specifications for implementing portability of nationally significant numbers in case of changing the public mobile service provider and violations of the Functional specifications for portability of geographic numbers in case of change of provider of fixed telephony service and/or change of address within the same geographic national destination code, a total of 10 acts of administrative violations (AOVs) were drawn up, as these were 102 in 2013.
- Inspections related to the **protection of the interests of end users** (compliance of the requirements of Chapter 14 of LEC) concerning contracts with undertakings providing electronic communications services: turning fixed-term contracts into permanent ones; termination of fixed-term contracts with a one-month notice; terms of individual contracts; conditions and terms for payment of services offered; prices of services offered; prices for bundles, requisites of individual contracts offered, etc.

217 inspections were carried out: of BTC – 87, of Mobiltel EAD – 57, of Telenor Bulgaria EAD – 28, and 45 inspections of other undertakings providing electronic communication services;

- Inspections related to the **user data protection** (compliance with the requirements of Chapter 15, Section III of LEC).

296 inspections were carried out as follows: sending unsolicited messages for the purpose of direct marketing and advertising without the prior consent of the user – 217 inspections; free-of-charge provision of itemized bills for used services – 25 inspections; providing data on the personal identification number to third parties for collection of liabilities – 54 inspections, etc. 35 AOVs were drawn up for the established violations concerning user data protection;

- Inspections of the **compliance of transmission stations and compliance with the provisions of the authorizations.**

In 2014, 351 inspections were carried out, as 144 of them were of electronic communications networks for terrestrial analogue radio broadcasting and digital television broadcasting for compliance of the transmission stations with the technical parameters approved by CRC, as well as compliance with the provisions of the issued authorizations and of the Technical requirements for operation of the electronic communications networks of the Radio broadcasting service and the related equipment. 5 inconsistencies to the technical parameters approved by CRC were established and the required instructions were given - all undertakings adopted measures to make their stations compliant with the approved technical characteristics;

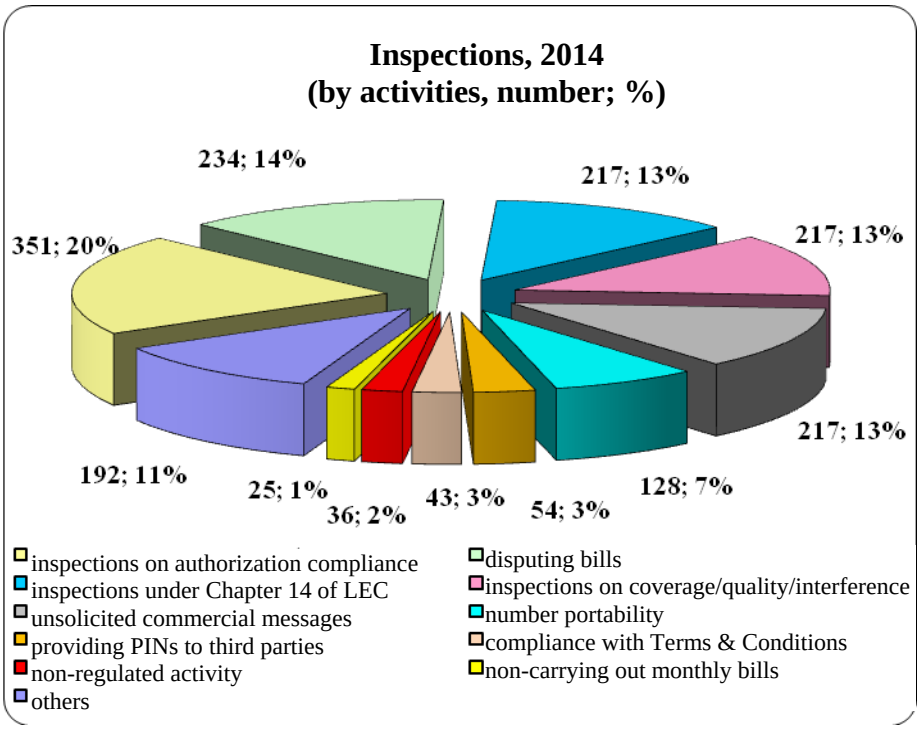
- Inspections of electronic communications networks of the **mobile radio PMR** – in relation to the effective use of the scarce resource provided – radio frequency spectrum.

87 inspections were made of undertakings providing electronic communications for won needs through electronic communications network of mobile radio service of the PMR type. 23 AOVs were drawn up for the established violations;

- Inspections of **cable electronic communications networks** for transmission and/or distribution of radio and TV programs, for data transfer without the use of scarce resource

103 inspections were carried out and 23 AOVs were drawn up, mainly related to non-fulfilled obligations of the undertakings to provide CRC with activity report for 2013.

The summarized data for the performed control activity and the engaged administrative and punitive liability in violations of LEC and secondary regulations in 2014, are presented on Figures 57 and 58.



Source: CRC

Fig. 57

As a result of the inspections carried out, for the administrative violations of LEC established, 142 acts of administrative violations were drawn up and delivered in 2014.

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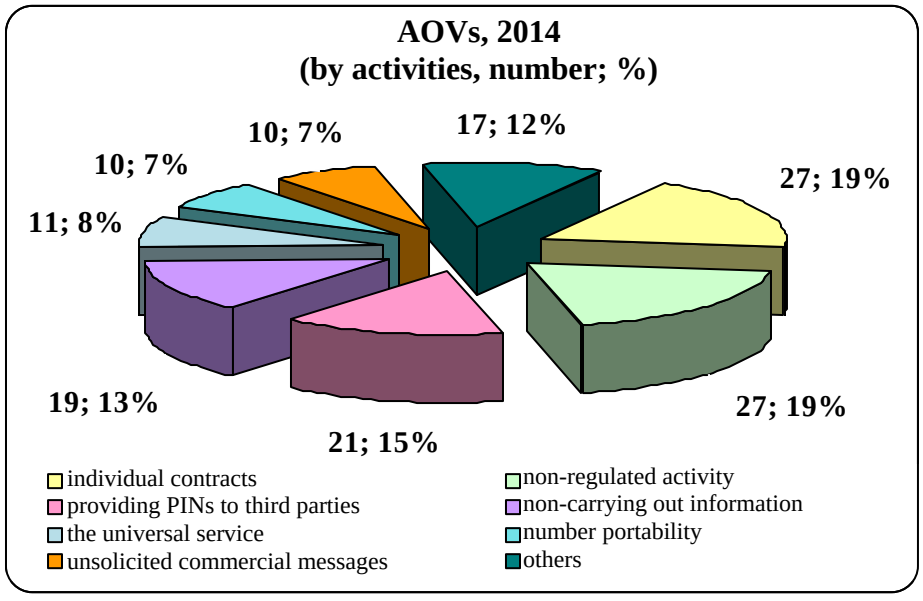

Source: CRC

Fig. 58

2.5.2.2. Control activity on the compliance with the requirements of LEDES

In 2014, 6 inspections were carried out on the fulfilment of the LEDES requirements. 4 AOVs were drawn up for violation of the LEDES requirements.

2.6. Enforcement activity

In order to direct the undertakings' behaviour in favour of end users, in 2014, the Chairman of CRC issued 197 penalty notices (PNs) for established violations of the legislations controlled by the Commission. The total amount of sanctions determined by PNs is BGN 1,061,300.

Currently, 54 of the PNs issued in 2014 have entered into force, and all cases where no voluntary payment was received were sent to the competent National Revenues Agency. The annulled PNs are 9. The remaining PNs are still being appealed before the relevant court (regional or administrative).

2.7. Protection of the interests of the users of electronic communication services

In 2014, CRC received 2,992 complaints by users against different undertakings providing public electronic communication services. CRC also received 73 inquiries under LEC.

User complaints concern the following problems:

- cable damages – 24 complaints;
- credit limit – 30 complaints;
- quality of telephony service/fax – 27 complaints;
- overhead cables – 17 complaints;
- mobile network coverage – 72 complaints;
- quality of Internet access service – 104 complaints;
- unfair trade practices – 118 complaints;
- lack of fixed telephony service – 52 complaints;
- complaints under Art. 231 of LEC – 17 complaints;
- complaints from the tariffing of mobile telephony services – 23 complaints;
- incompetent service – 66 complaints;
- non-provision of itemized bills – 28 complaints;
- contract termination – 207 complaints;
- bill complaints – 865 complaints;
- contract termination (Art. 229a of LEC) – 48 complaints;
- contract termination (Art. 228, Para. 3 and Para. 5 of LEC) – 62 complaints;
- receiving unsolicited commercial messages – 100 complaints;
- geographic number portability – 20 complaints;
- mobile number portability – 39 complaints;
- postal service issues – 117 complaints;
- remote sale contracts – 36 complaints;
- collection of liabilities by collection companies – 154 complaints;
- roaming – 45 complaints;
- border roaming – 5 complaints;
- contractual relations – 216 complaints;
- bills for mobile Internet use – 89 complaints;
- locked telephone device – 6 complaints;
- TV service quality – 61 complaints;
- mobile Internet quality – 49 complaints;
- pre-paid service issues – 38 complaints;
- complaints from electromagnetic emissions – 4 complaints;

- complaints under Art. 40 and Art. 41 of the General Requirements – 2 complaints;
- complaints under Art. 42 – Art. 45 of the General Requirements – 13 complaints;
- complaints under Art. 46 – Art. 48 of the General Requirements – 3 complaints;
- complaints under Art. 49 of the General Requirements – 9 complaints;
- complaints under Art. 50 of the General Requirements – 42 complaints;
- telephone frauds – 4 complaints;
- others – 180 complaints.

Based on the foregoing, it is clear that in 2014 the downward trend continued (by nearly 10%) regarding the total number of complaints filed with the regulator. For comparison, 3,291 complaints were filed in 2013, while in 2012 – 5,032 complaints.

More than half of the received complaints (1,781 complaints) refer to unfair trade practices, contract termination, bill complaints (incl. for mobile Internet), receiving unsolicited commercial messages, quality of Internet access, and non-fulfilment of other contractual obligations.

When the complaint concerns non-fulfilment of contractual obligations (contract disputes), the regulator requested opinions of the respective undertaking, in order to cooperate and assist the affected end user. As a result of these actions, the undertakings respected the recommendations of the CRC, which led to dispute settlement in favor of the user. In this connection, the total number of opinions requested from undertakings amounted to 590. The total number of positive opinions, with which the undertakings satisfied the complaints of users/subscribers and solved the issues amounted to 338. The negative opinions were 252.

In the cases of alleged unfair trade practices or other violations of the Law on Consumer Protection (e.g. infringements of the rules governing remote sale contracts) reported by users, CRC has timely notified the Commission for Consumer Protection to adopt actions by competence. A number of complaints were also forwarded by competence to other state bodies (the National Construction Supervision Directorate, the Commission for Personal Data Protection, the Ministry of Health, the Prosecutor's Office of the Republic of Bulgaria, etc.).

In 2014, CRC adopted a common measure to increase mobile service users' awareness on the coverage of mobile networks. By Decision No. 512/07.08.2014, CRC obliged Mobiltel EAD, Telenor Bulgaria EAD (Cosmo Bulgaria Mobile EAD as of the date of adoption of the decision), and BTC to publish prominently on their websites an electronic map of the achieved coverage of their networks for carrying out mobile services. The published information is subject to certain requirements for details and comparability, as specified by CRC. Pursuant to the Decision, the undertakings have published information on the following addresses:

- http://www.mtel.bg/detailed-coverage-map
- http://www.telenor.bg/bg/coverage-map
- https://www.vivacom.bg/bg/residential/ceni-i-uslugi/mobilniuslugi/pokritie/interaktivna-karta
- http://www.vivacom.bg/bg/business/ceni-i-uslugi/mobilniuslugi/pokritie/interaktivna-karta

In 2014, a procedure was adopted to govern the activities that should be undertaken by CRC in the event of fraud or abuse with numbers. In such cases, end users could be negatively affected upon the use of electronic communication services.

The application of the procedure is envisaged in case that access to numbers or services needs to be restricted, when this is justified due to fraud or abuse (Art. 138c, Para. 3, 4 and 5 of LEC). The procedure adopted by CRC has been prepared in accordance with the Guidelines of BEREC[80] on Art. 28 (2) of the Universal Service Directive: harmonized consultative process.

[80]The Body of European Regulators for Electronic Communications (BEREC)

In 2014, CRC adopted a new Consumer Charter of the Communications Regulation Commission, in order to improve the quality of administrative services provided by the CRC.

In order to prevent administrative violations and for the purpose of predictability, in 2014, CRC adopted positions on the implementation of specific provisions of LEC and the instruments issued on the basis of this law. The positions adopted by the CRC in 2014 are:

- Position on the application of Art. 43, Para. 2 of the General requirements for carrying out public electronic communications in conjunction with Art. 228, Para. 3 of LEC, and
- Position on the application of Art. 260, Para. 4 of LEC regarding pre-paid services.

IV. BUDGET

With the Law on State Budget of the Republic of Bulgaria, the receivables in CRC budget for 2014 were set as BGN 95 million. During the year, the receivables to the Commission's budget totaled BGN 117.8 million from fees, penalty notices and interest, which represents a 24% overfulfillment of the revenues part.

The execution of the revenues part of the CRC budget for 2014 was as follows:

Table 13

Type of revenues	**Value (BGN '000)**	**Share (%)**
1. Own revenues approved with the CRC budget for 2014	**95,000**	**100%**
2. Revenues realized for 2014, incl.:	**117,789**	**100%**
- one-off fees	63,710	54.09
- administrative annual charge - control	4,457	3.78
- charges for the use of an individually assigned scarce resource - radio frequency spectrum	31,519	26.76
- charges for the use of an individually assigned scarce resource – positions on a geostationary orbit assigned for the Republic of Bulgaria according to international agreements	97	0.08
- charges for the use of an individually assigned scarce resource following tender calls	2,564	2.18
- charges for the use of an individually assigned scarce resource - numbers from the National Numbering Plan	7,778	6.60
- fines and property sanctions	7,646	6.49
- interest	18	0.02

The allocation of revenues received at CRC is regulated by Art. 148 of LEC and Art. 64 of PSA.

The revenues received at CRC in 2014 was allocated as follows:

Table 14

No.	**ALLOCATION LINES**	**DEDUCTIONS ON ITEMS (BGN '000)**	**SHARE (%)**
A.	**TOTAL REVENUES ASSIGNED TO THE NATIONAL BUDGET, INCL. FROM:**	**59,719**	**50.70**
1	Annual charges for the use of an individually assigned scarce resource - RFS	7,879	13.19
2	Annual fees for the use of an individually assigned scarce resource - positions on a geostationary orbit assigned for the Republic of Bulgaria according to international agreements	68	0.11

3	One-off fees for additional use of radio frequency spectrum	43,858	73.44
4	Charges for the use of individually assigned scarce resource following tender calls	1,795	3.01
5	Fines and property sanctions	6,117	10.24
6	One-off administrative fees under PSA	2	0.01
B.	**TOTAL REVENUES ASSIGNED TO THE MTITC, INCL.:**	**27,364**	**23.23**
1	Annual charges for the use of an individually assigned scarce resource - RFS	11,032	40.32
2	Annual fees for the use of an individually assigned scarce resource - positions on a geostationary orbit assigned for the Republic of Bulgaria according to international agreements	24	0.09
3	One-off fees for additional use of radio frequency spectrum	15,663	57.24
4	Charges for the use of individually assigned scarce resource following tender calls	641	2.34
5	One-off administrative fees under PSA	4	0.01
C.	**TOTAL REVENUES ASSIGNED TO THE CRC BUDGET, INCL.:**	**30,706**	**26.07**
1	One-off administrative fees for issuance of authorizations and for administrative services	1,047	3.41
2	One-off fees for additional use of radio frequency spectrum	3,133	10.20
3	Administrative annual charge - control	4,457	14.51
4	Annual charges for the use of an individually assigned scarce resource - RFS	12,608	41.06
5	Annual fees for the use of an individually assigned scarce resource - positions on a geostationary orbit assigned for the Republic of Bulgaria according to international agreements;	5	0.02
6	Charges for the use of individually assigned scarce resource following tender calls	128	0.42
7	Annual charges for the use of individually assigned scarce resource - numbers from the NNP	7,778	25.33
8	Fines and property sanctions	1,529	4.98
9	Interest	18	0.06
10	One-off administrative fees under PSA	3	0.01
	TOTAL DEDUCTIONS TO ALLOCATION LINES	**117,789**	**100.0**

Based on acts for finding public state receivables to be collected and penalty notices issued by CRC, a total of BGN 136 thousand were collected by the National Revenues Agency in 2014, allocated as follows:

Table 15

(BGN '000)

	Allocation				
Revenues from:	%	Total	R.B.	MTITC	CRC
1.	2.	3.	4.	5.	6.
Penalty notices (PNs)	80-0-20%	95	76	0	19
Acts for finding public state receivables (AFPSRs)	25-35-40%	16	4	6	6
Interest under PNs and AFPSRs	0-0-100%	25	0	0	25
TOTAL:		136	80	6	50

The CRC expenditures for 2014 are as follows:

Table 16

Type of expenses	**Value (BGN '000)**	**Share (%)**
1. Salaries	3,875	56.77
2. Social security contributions	999	14.64
3. Other remunerations and payments	200	2.93
4. Operative costs	1,268	18.57
5. Membership fee	51	0.75
6. Capital expenditure	433	6.34
Total expenditure	**6,826**	**100%**

V. BALANCE SHEET

CONCLUSION

In the context of the dynamic digital world nowadays, products and services that are used anywhere, anytime, on any device and with guaranteed quality are more and more significant to social progress and economic development. The development of electronic communications allowed for the mobile use of market and administrative services. In the long run, the development of electronic communications market in Bulgaria is expected to continue the observed migration of subscribers from fixed voice services to mobile services. Given the maturity of the market, the growth rate of broadband access and mobile services will slow down. The impact of OTT services on electronic communications market is increasing, but the extent of that impact depends on the business model which will be implemented by the undertakings providing traditional communication services, compared to OTT providers.

To meet the new challenges related to the promotion of competition and consumer protection, the strategy and objectives of the regulator are to be reviewed and adapted according to the amendments to the revised European regulatory framework. One of the key priorities of the CRC for 2015 will be to update the Commission's strategy, given the need for intensive work and a proactive position in the process of review and revision of the European regulatory framework. The involvement of BEREC in this process also requires the recognition of the increasing involvement on behalf of CRC. The responsibility of the Bulgarian regulator to implement the European regulatory framework, conforming its policies and actions to the national specifics, remains a challenge that can be met with the implementation of both the current practice of CRC, and the best regulatory practices recommended by BEREC.

The completion of the second round of analysis of the relevant markets of wholesale local access provided at a fixed location (3a) and of central access provided at a fixed location for mass market products (3b) according to the list of markets to Recommendation 2014/710/EU on relevant markets will create a predictable regulatory environment for the undertakings operating on the market. In 2015 as well, the focus of the actions of CRC will be the improvement of market conditions by reviewing the relevant wholesale markets and selection of appropriate regulatory measures. CRC will launch the second round of the procedure for definition, analysis and assessment of the wholesale market for high-quality access provided at a fixed location (Market 4 of Recommendation 2014/710/EU). CRC will also review the imposed specific obligations on the wholesale markets for call termination on individual public telephone networks provided at a fixed location and voice call termination on individual mobile networks (Markets 1 and 2 of Recommendation 2014/710/EU). Meanwhile, CRC will continue its work on the review and amendment of the regulations related to the quality of Internet access service in order to refine the requirements for the undertakings and ensure transparency and protection of end users.

The work of the CRC will continue to be mainly guided by the creation of conditions that lead to increased efficiency in the deployment of high-speed electronic communications infrastructure and the implementation and enforcement of mechanisms for improving the quality of broadband access services. CRC will continue its work on putting into practice the provisions of the new decisions of the European Commission on harmonized radio frequency spectrum use and ensuring efficient allocation and use of this scarce resource. One of the priorities of the CRC is also to update the Regulatory policy for radio frequency spectrum management and the effective management and use of this scarce resource in accordance with the policies of the European Union.

In 2015 as well, the amendments to the European regulatory framework will continue to be introduced in Bulgarian legislation. In this aspect, the activities of CRC will be focused on harmonizing the practice at the European and regional level and further development of competition at the national level.

Pursuant to its powers and in the spirit of an open and constructive dialogue with all stakeholders, the Commission will continue to contribute to the improvement of the conditions for market development, increasing the opportunities for informed consumer choice and adequate protection of their rights.