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II. LEGAL AND REGULATORY FRAMEWORK

1. EU regulatory framework for electronic communications

At the end of 2016 the European commission announced the second comprehensive review of the European regulatory framework in the area of electronic communications and published a proposal of Directive establishing the European Electronic Communication Code and Regulation of the European Parliament and of the Council establishing the Body of European regulators for Electronic Communications (BEREC). The review of the European regulatory framework in the area of electronic communications includes also the revision of Directive 2002/58/EC.

On 10.01.2017 the European commission published a proposal for a Regulation of the European Parliament and of the Council concerning the respect for private life and the protection of personal data in electronic communications and repealing Directive 2002/58/EC.

By the end of 2017 the final EU legislation has not been adopted. The adoption of the European code for electronic communications and BEREC Regulation is planned to be in the second quarter of 2018.

2. Legal and regulatory framework in Bulgaria

In 2017 the Law on Electronic Communications (LEC) was amended three times whereas the changes did not lead to major changes in the regulatory framework. An important amendment of the LEC in 2017 was the provision of administrative fines for breaches of Commission Implementing Regulation (EU) 2016/2286 of 15 December 2016 laying down detailed rules on the application of fair use policy and on the methodology for assessing the sustainability of the abolition of retail roaming surcharges and on the application to be submitted by a roaming provider for the purposes of that assessment (OB, L 344/46 of 17 December 2016).

For the same period the following RCR secondary legislative acts became effective:

- Decision No. 249 of 11.05.2017 amending and supplementing the Technical requirements for the operation of Electronic Communications networks from fixed radio broadcasting service and the related facilities.
- Decision No. 333 of 21.06.2017 amending and supplementing the Rules for carrying out electronic communications via radio equipment using a radio frequency spectrum which does not need to be individually assigned.
- Decision No. 565 of 26.10.2017 amending and supplementing the General requirements for the provision of public electronic communications (amend. and suppl. SG, issue 90 of 10 November 2017).
- Decision No. 608 of 07.12.2017 amending and supplementing the Technical requirements for the operation of mobile terrestrial networks and the related facilities.

3. Main Regulatory decisions of CRC in 2017

The total number of decisions of the CRC adopted in 2017 was 633, the majority of which are under the CRC's powers according to the Law on Electronic Communications. The decisions adopted by the CRC during the year that play a significant role in ensuring a predictable and competitive environment in the sector are as follows:

- Decision No. 479 of 23.08.2017 on imposing a price restriction to BULGARIAN TELECOMMUNICATION COMPANY EAD for period of six months from 01.09.2017 with respect to non-traffic services for IP-interconnection
- Decision No. 610 of 07.12.2017 on launching a public consultation procedure on a draft Decision for establishing guidelines on the published interconnection terms and conditions of the mobile network of the Bulgarian Telecommunication Company EAD, Mobiltel EAD and Telenor Bulgaria EAD.
- Decision No. 620 of 14.12.2017 on launching a public consultation procedure on a draft CRC's Position on fulfilment of the requirements of Art.3 and Art.4 of Regulation (EU) 2015/2120 by providers of Internet access to end users.

4. Carrying out electronic communications

4.1. Authorisations for the use of an individually assigned scarce resource

The authorisations for the use of an individually assigned scarce resource issued during the year are presented in Table 8.

Table 8

Authorisations under the Law on Electronic Communications for 2017				
Electronic Communication network	Amendments/Supplements (number)	Authorisations issued (number)	Terminated/Revoked/Expired (number)	Transfers (incl. partial) Lease (number)
Electronic communication networks for terrestrial analogue broadcasting of radio signals with national and local coverage	55	43	7	6
Electronic communication networks for digital terrestrial radio	1	-	3	-

broadcasting				
Electronic communication networks from the mobile radio service – PMR	83*	19*	40	11
Electronic communication networks from the aeronautical mobile radio service	1	1	-	-
Electronic communication networks from the aeronautical mobile radio service, radiolocation and radio navigation for air traffic management and the provision of air navigation services of the flights on the civil airspace with national coverage	1	-	-	-
Mobile terrestrial network GSM-R	1	-	-	-
Terrestrial network in radio frequency band 1800 GHz	1	-	-	1
Provision of positions on geostationary orbits allocated to the Republic of Bulgaria via international agreements	1	-	-	-
Electronic communication networks from the fixed satellite radio service	1	2	-	-
Electronic communication networks via integrated mobile satellite system	1	-	-	-

Electronic communication networks from the fixed radio service of the "point-to-point" type	48**	-	-	1
Authorisation for the use of individually assigned scarce resource – numbers for carrying out public electronic communications	31	0	3	1
Temporary authorisations	1	13	2	-
TOTAL:	226	78	55	20

st The total number of provided radio frequencies for these authorisations is 137

4.2. Notifications on carrying out public electronic communications

Activities on the notifications submitted in 2017 for carrying out public electronic communications are presented in Table 9.

Table 9

Type of activity	2017 (number)
Processed notifications for carrying out public electronic communications	149
Processed notifications for termination of carrying out public electronic communications	88
Issued certificates for entry in the Register	27
Undertakings entered in the Register	52
Undertakings deleted from the Register	85

^{**} Amendments and supplements to the technical data of a total of 4370 radio relay links, including provided radio frequency spectrum for new 886 links.

4.3. Carrying out electronic communications through amateur service radio equipment

The authorisations, certificates and licenses for radio amateur qualification issued in the year are presented in Table 10.

Table10

Authorisations, certificates and licenses		
Type of document	2017 (number)	
Authorisations for radio amateur qualification	296	
HAREC certificates	21	
CEPT licenses	34	
Determined call signs	415*	

^{*92} of the determined call signs are temporary

In 2017, 11 amateur radio license exams were held with 291 examined persons in the towns of Sofia, Plovdiv, Varna, Bansko and Kazanlak. The chart below shows the distribution of the people by age groups of individuals, who have taken an amateur radio license exam during the last 5 years.

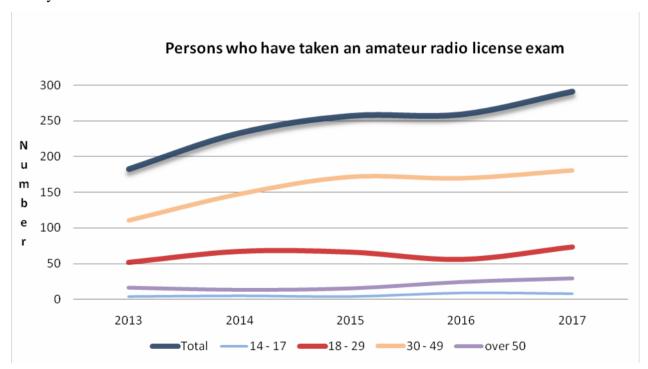


Fig. 34

Following the last year trend, the number of applicants for the acquisition of amateur radio license continued to increase. Amateur radio activity provoked a growing interest which is the biggest among people aged between 30-49 years (64% of the applicants were in that age group). The number of people aged 14-17 years who liked to practise amateur radio activity was relatively low (2.5% of the applicants), but in the last 2 years there has been an increased interest and compared to 2013 the applicant increased twice. The changes in 2014 of the Technical

requirements for the carrying out of telecommunications through radio equipment from the amateur service can be considered as a factor allowing the people who have not taken an exam (mostly children) to make radio links under certain conditions.

4.4. Interconnection and access

4.4.1. Implementation of interconnection based on Internet protocol

In 2017 the Communications Regulation Commission continued its work for effective implementation of the interconnection based on Internet protocol (IP interconnection). The following more important activities had been fulfilled:

- Control over fulfilment of Decision No. 356/23.06.2016 by the obligated undertakings by periodically collecting information about received and submitted request for IP interconnection provision; the stage of each request; reasons due to requests had not been submitted or agreements had not been concluded.
- Imposition of price constraints on one-off and monthly prices offered by BTC for the IP interconnection services "VoIP port (10 Mbps)" and "IP interconnection line -10 Mbps to OLO premises -10 Mbps".
- By Decision No.479/23.08.2017 CRC decided that BTC has not proved the cost-orientation of the prices for "VoIP port (10 Mbps)" and "Interconnection line to OLO premises 10 Mbps" services and imposed price restrictions for a period of six months as of 01.09.2017.
- Preparation and adoption of interpretative decisions on issues received by undertakings in connection with fulfilment of CRC Decisions No.No.356/23.06.2016 and 624/16.12.2016.

4.4.2. Disputes and CRC position on issues related to the interconnection and access

In the past year CRC has not received requests from the undertakings to resolve disputes related to interconnection and access. The Commission was informed for cases of international traffic with manipulated CLI terminated in their networks. CRC reviewed the interconnection agreements and their terms concerning interaction between undertakings in case of termination of traffic with manipulated CLI. In order to unify the practice of undertakings regarding the applied procedures for avoiding traffic termination with manipulated CLI and limiting the cases of termination of such traffic, CRC prepared a draft decision which was submitted for a public consultation procedure. The draft document contains binding instructions for amendment of interconnection agreements.

443. Approval of a draft revision of BTC's Reference unbundling offer

In 2017, BTC submitted to the Commission a draft revision of Reference unbundling offer (RUO), concerning service provision by VDSL technology. After public consultation procedure the Commission approved the draft of the RUO, submitted by BTC with binding instructions for its amendment.

4.4.4. Introduction of Directive 2014/61/EC into Bulgarian legislation

CRC participated in the process of drafting the Law on Electronic Communication Networks and Physical Infrastructure (LECNPI) which implemented Directive 2014/61/EC into Bulgarian legislation. Opinions were prepared and submitted to the Parliamentary Committee on Transport, Information Technology and Communications in the 43rd and 44th National Assembly.

LECNPI (prom.SG No.21 of 9 March 2018, effective from the day of promulgation) envisages that the Commission shall resolve disputes in connection of providing access to and/or shared use of physical infrastructure.

4.4.5. Quality of Internet access service and network neutrality

According to Art.5, para.1 of Regulation EC 2015/2120 (Regulation), CRC as a national regulatory authority is required to monitor the implementation of the obligations to ensure open Internet access and traffic management practices applied by Internet Service Providers (ISPs).

In compliance with the provisions of the Regulation, CRC prepared a supplementary questionnaire for the 2017 annual activity report of the ISPs. On the basis of collected information, the first CRC annual report was prepared (for the period $30\,$ April $2016\,$ – $30\,$ April 2017), which contains the observations, findings and actions of the Commission related to the implementation of the Regulation by ISPs. The report was submitted to the European commission (EC), the Body of European Regulators for Electronic Communications (BEREC) and published on the Commission's website.

In 2017, CRC prepared a draft position on fulfilment of the requirements of Art.3 and Art.4 of the Regulation from ISPs. By its position, the Commission aims to clarify how the requirements of the Regulation that are left to the regulator's discretion should be fulfilled by ISPs and also to ensure greater transparency and harmonization of ISP's contractual terms with endusers.

Pursuant to Art.4, point 4 of the Regulation, in 2017 CRC started the preparation of tender documentation for the preparation of technical specification or QoS measurement system of Internet access service. The system will be used as a mechanism for monitoring and controlling the quality parameters defined by the Regulation.

4.4.6. Participation in BEREC working groups and in the review of the European regulatory framework

The Commission provided its opinion during the preparation of the Directive on establishing the European Electronic Communications Code. CRC cooperated with BEREC in preparation of reports related to implementation of Directive (EU) 2014/61, implementation of Regulation (EU) 2015/2120, new sharing forms based on WDM, location of the network termination point, review of the common position on markets 3a, 3b and 4.