

**TECHNICAL REQUIREMENTS**  
**to carrying out electronic communications through Amateur**  
**Service equipment**

**Adopted by Decision No.1212 dated 27.09.2007 of the Communications Regulation**  
**Commission, Promulgated in State Gazette, Issue 88 dated 2.11.2007, in force from**  
**2.11.2008**

**Chapter I**  
**General**

**Subject**

**Art. 1.** These technical requirements determine the conditions for carrying out of electronic communications through radio equipment from amateur radio service and the requirements regarding the persons who want to perform these.

**Art. 2.** Carrying out of electronic communications through radio equipment from amateur radio service is activity provided by radio amateurs exclusively with no profit and covers transmission and reception of information through radio communication systems and means.

**Art. 3.** For carrying out of electronic communications through radio equipment of amateur radio service is used the radio spectrum allocated for the amateur service and amateur satellite service according to the National Plan for allocation of the radio frequencies and radio frequency bands for civil needs, for the needs of the national defence and security, as well as for joint use by them.

**Effect on the persons**

**Art. 4.** Electronic communications through radio equipment of amateur service can be provided only by persons holding a licence of radio-amateur qualification or a harmonized amateur radio examination certificate (HAREC), referred to hereinafter as “radio amateur”.

**Art. 5.** The equipment of the amateur service can be used by radio amateurs only.

**Effect in time**

**Art. 6.** The validity of the granted call sign of a radio amateur is not limited except under the conditions of Art. 25, para 2.

**Territorial effect**

**Art. 7.** These requirements are valid on the territory of the Republic of Bulgaria.

**Register**

**Art. 8.** The Communications Regulation Commission, called bellow “commission” keeps public register of the radio amateurs.

**Chapter II**  
**Rights and Obligations**

**Rights**

**Art. 9.** The radio amateur has the right:

1. To build and/or use an amateur radio station;
2. To perform electronic communications through the amateur radio service equipment according to the class of the qualification license with the power, within the radio frequency bands and with class of emission given in Appendix № 1, in compliance with the rules of the International Telecommunication Union (ITU), the norms of the Electronic Communications Act

related to this activity and these technical requirements;

3. A class 1 radio amateur with length of service at least 5 years has the right, when participating in radio amateur contests, to use a radio transmitter with output power up to 1000 W (30 dBW) in fixed operational mode in the frequency bands as per Appendix № 1 from the designated place under strict compliance with the norms of electromagnetic safety.

4. To work from other amateur radio station in presence of the owner (person in charge), and during the radio connection, to use the call sign of the owner of the radio station he is working from, and below the line his own call sign.

**Art. 10.** Every radio amateur has the right to work on a club's amateur radio station observing the requirements stated in Appendix № 1.

### **Responsibilities**

**Art. 11.** The radio amateur is obliged:

1. Not to perform electronic communications in a commercial manner on his/her radio station;
2. Not to receive communications from or to enter into connection with radio stations of other radio services;
3. Not to cause intentional interferences to occupied radio frequency channel (frequency);
4. Not to transmit false signal of disaster and/or other extraordinary circumstances and signals that may be taken as such;
5. Not to transmit with power bigger than the permitted;
6. Not to emit carrier frequency, signals or messages if he has failed to identify himself by his call sign, as well as not to use for this purpose other's, invalid or shortened call signs;
7. In process of radio exchange, not to shorten the call signs of his correspondents;
8. Not to use cipher and codes (prearranged language), figures, words or abbreviations with no common sense;
9. Not to transmit radio programs, commercials, music, sound effects or combination thereof;
10. Not to transfer information with indecent or offensive contents;
11. To install and use an amateur radio station on board of a vessel or aircraft only after the consent of the relevant captain (commander);
12. Not to limit or hinder in any way the use of amateur repeaters and radio beacons;
13. To re-transmit in real time or recorded emission of other radio amateur only after his consent;

14. To comply with the requirements for electromagnetic compatibility and quality of emitted signal;

15. To observe the norms for electromagnetic safety determined in Ordinance № 9 of 1991 for the ultimate allowed levels of electromagnetic fields in residential areas and determination of hygiene-protected zones around emitting objects (promulgated in State gazette issue 35 of 1991 amended, issue 38 of 1991; amended, issue 8 of 2002).

### **Chapter III** **Requirements to the used technical equipment**

**Art. 12.** (1) The technical equipment used by the radio amateur should comply with the following requirements:

1. The modulating sound frequency band should be in the range from 0,3 up to 3 kHz;
2. The maximum allowable frequency bandwidths for the different classes of emission should not exceed the following values:
  - telegraphy with unfading oscillation, Morse code (CW) - 100 Hz;
  - double-band telephony with amplitude modulation (AM) - 6 kHz;
  - single-band telephony with amplitude modulation and suppressed carrier frequency (SSB) - 2,7 kHz;
3. The maximum frequency deviation in frequency modulation classes of emission (FM) should not exceed:
  - for frequency bellow 30 MHz -  $\pm 3$  kHz;
  - for frequency from 30 up to 440 MHz -  $\pm 5$  kHz;
  - for frequency over 440 MHz – depending on the technical specifications of the radio equipment and the relevant standards;
4. The amateur radio station should have the possibility to adjust the radio transmitter at switched-off power amplifier, using an equivalent antenna or by other way that guarantees minimum unwanted emissions;
5. The out-of-band emissions of the transmitter of the amateur station should not be greater than:
  - for transmitter with operating frequencies lower than 30 MHz, including SSB - minus  $(43 + 10 \log (\text{PEP}) \text{ dB})$  or minus 50 dB (with reference to the peak power), whichever is less limiting; PEP is the peak power at the antenna input;
  - for single sideband telephony with amplitude modulation and suppressed carrier frequency (SSB) from mobile radio station - minus 43 dB (with reference to the peak power);

- for transmitter with operating frequency over 30 MHz minus  $(43 + 10 \log(P))$ , or minus 70 dBc (decibels relative to unmodulated carrier), whichever is less limiting; P is average power;

6. Measuring of the out-of-band emissions as per para 5 is made under the following conditions:

- for frequency from 9 kHz up to 150 kHz, the measurement frequency band is 1 kHz;
- for frequency from 150 kHz up to 30 MHz, the measurement frequency band is 10 kHz;
- for frequency from 30 MHz up to 1 GHz, the measurement frequency band is 100 kHz;
- for frequency over 1 GHz, the measurement frequency band is 1 MHz.

(2) The radio amateur is obliged:

1. To prevent the amateur radio station from causing interference to other radio equipment and other electronic networks that comply with the relevant standards, as well as not to create health hazardous strength of the electromagnetic field; in case there is interference caused, the radio amateur is obliged to take all necessary measures to remove it, if the permanent interference and/or exceeding the maximum allowable electromagnetic field strength in residential areas are proven to have been caused by the amateur radio station;

2. To build, install and maintain the antennas and the feeder lines of the amateur radio station in such a manner that the minimum distance between the indoor components and any part of existing electronic communication devices is not less than 1 m; shorter distances are allowed for shielded lines, if operation without mutual interference has been guaranteed; outdoor antenna systems should be installed in compliance with the actual national standards;

3. Not to connect the grounding wires of amateur radio stations to electronic communication devices;

4. To use radio equipment that complies with the actual hygiene-protection norms and electromagnetic compatibility requirements;

5. To make on his own account, the relevant changes in location and fixed stations parameters prescribed by the Commission in case of problems arisen in relation to electromagnetic compatibility.

**Art. 13.** The radio amateur is obliged to perform electronic communications through radio equipment from the amateur service in compliance with the normative documents and applicable technical specifications, including the Bulgarian standards related to the subject of this activity.

## **Chapter IV**

### **Provision of information**

**Art. 14.** (1) The Commission may approach the radio amateur with justified written requests for provision of information in relevant volume, time and details necessary for the execution of its regulatory functions, and the radio amateur is obliged to submit such information.

(2) The Commission is obliged not to distribute the information as per para 1 in case that such information constitutes personal data or the radio amateur has declared it to be a

commercial secret.

## **Chapter V**

### **Charges and fees**

**Art. 15.** (1) The applicants pay single fees for administrative service according to the actual tariff of fees collected by the Commission pursuant to the Electronic Communications Act.

(2) There is no administrative fee for granting a call sign to a radio amateur or amateur club.

## **Chapter VI**

### **Control and penalties**

#### **Determining of infringement and imposing of penalties.**

**Art. 16.** (1) Control on the carrying out of electronic communications through radio equipment of the amateur service is conducted by authorized officers of the Commission according to the Electronic Communications Act.

(2) Determining of infringement and imposing of penalties is made as per the order constituted in the Electronic Communications Act.

#### **Collaboration to the control authorities**

**Art. 17.** For carrying out of the control, the radio amateur is obliged to collaborate to the authorized officers of the Commission in the performing of their functions and granted power as per the Electronic Communications Act.

## **Chapter VII**

### **Obtaining of permit for qualification of radio amateur**

#### **Persons eligible to go to exam**

**Art. 18.** The candidate for exam is any physical person, which meets the following conditions:

1. The person is an adult (18 years of age) or has become 14 and has the written consent of a parent or guardian;

2. The person has submitted an application and the required accompanying documents as per Art. 19, complies with these technical requirements and has paid the administrative fee.

#### **Application for provision of electronic communications through radio equipment from the amateur service**

**Art. 19.** (1) In order to take an exam for radio amateur qualification, to receive a call sign, to be issued a document in foreign language (HAREC and/or CEPT), as well as to have a license of a radio amateur qualification being re-issued the applicant should submit application according to the sample available on the internet page of the Commission.

(2) The application should contain:

1. Identification data of the applicant;

2. Data for a call sign;

3. Data for possession of a license for radio amateur qualification;
4. Data for a possession of amateur radio station (required when obtaining a call sign);
5. Data for person in charge of a radio club (repeater) (required when applying for a call sign).

(3) The following documents should be attached to the application of physical persons:

1. Copy of the license for radio amateur qualification or a harmonized amateur radio examination certificate (HAREC) of the person;
2. Photo (required for preparing the amateur radio qualification certificate);
3. Written consent of a parent or guardian (required for persons of age 14 to 18);
4. Copy of evidence for paid fee as per Art. 15.

(4) The following documents should be submitted with the application by the legal persons and physical persons – sole proprietors:

1. Document issued by the legal person specifying a particular person in charge for the radio club;
2. Copy of the license for radio amateur qualification of the person in charge for the club (required for radio club);

(5) When determining the personal listening signs of radio amateurs listeners and temporary call signs the application submitted to the Commission should include only identification data of the applicant.

(6) All documents should be submitted in Bulgarian in duplicate.

(7) Person who wishes to have documents issued in foreign language (HAREC and/or CEPT), should fill in additionally the three names and the address from the identification data with Latin letters.

### **Qualification**

**Art. 20.** The conditions and order for obtaining a license for radio amateur qualification are stated in Appendix № 2.

**Art. 21.** According to these technical requirements, the rights and obligations related to performing of electronic communications through equipment of the amateur service arise on the date of issuing of the license for radio amateur qualification.

### **Granting a call sign**

**Art. 22.** The conditions and order for granting a call sign are stated in Appendix № 3.

**Art. 23.** (1) The Commission issues the permit for radio amateur qualification within 30-days after conducting the exam for gaining of radio amateur qualification.

(2) Upon radio amateur's request, the Commission grants him/her a call sign by letter.

**Art. 24.** (1) The Commission grants by a letter the call signs of radio clubs.

(2) A call sign of a radio club may be granted for use to any legal or physical person – sole proprietor, which complies with the following conditions:

1. He has submitted an application and the accompanying documents as per Art. 19 and observes these technical requirements;
2. He has assigned according to the established order a person in charge for the club, who should be a person above 18 holding a class 1 license for a radio amateur qualification.

**Issuing documents to radio amateurs foreigners**

**Art. 25.** (1) A radio amateur foreigner performs electronic communications through equipment of the amateur service according to these technical conditions without submitting an application as per Art. 19, under the following conditions:

1. He holds a CEPT license in accordance with Recommendation T/R 61-01 of CEPT;
2. He is residing temporarily in Republic of Bulgaria for a period up to three months.

(2) A radio amateur – foreigner temporarily residing in Republic of Bulgaria, who does not comply with the requirements as per para 1, should submit application as per Art. 19 for granting of a call sign accompanied by the following documents:

1. A document showing the radio amateur qualification class translated into Bulgarian and legalized;
2. National license of a radio amateur translated into Bulgarian and legalized;
3. Copy of a document certifying his residence in Republic of Bulgaria verified by the applicant.

(3) The Commission grants a call sign to the person as per para 2 for the term he has requested, but not for more than one year.

(4) A radio amateur – foreigner residing in Bulgaria for more than one year, submits an application as per Art. 19 for granting of a call sign and the following documents with the application:

1. A document showing the radio amateur qualification class translated into Bulgarian and legalized;
2. National license of a radio amateur translated into Bulgarian and legalized;
3. Copy of a document certifying his residence in Republic of Bulgaria verified by the applicant.

## **Chapter VIII**

### **Issuing of CEPT and HAREC documents**

**Art. 26.** Upon request by a radio amateur holding a license for radio amateur qualification class 1 and a call sign, the Commission issues CEPT license in accordance with Recommendation T/R 61-01 of the Conference of European Postal & Telecommunications Administrations for provision of telecommunications through radio equipment of the amateur service during their temporary stay in countries, which have joined this recommendation.

**Art. 27.** The Commission issues to holders of a license for radio amateur qualification class 1, upon their request, a harmonized radio amateur certificate HAREC in accordance with Recommendation T/R 61-02 of CEPT.

### **ADDITIONAL REGULATION**

**§ 1.** In the sense of the license:

1. "Radio amateur" is a physical person holding a license for radio amateur qualification or a harmonized radio amateur certificate (HAREC), who with no profit performs electronic communications through radio equipment of the amateur service.

2. "Amateur radio station" is radio communication equipment consisting of one or several radio transmitters or radio receivers or a combination thereof including antenna-feeder systems and auxiliary devices and can be used for provision of electronic communications in at least one of the bands as per Appendix 1.

3. "Fixed radio station" is a radio station which has been installed and operates from a specific geographic location.

4. "Mobile radio station" is a radio station which can be moved and operated from points of different geographic location or while moving.

5. "Mobile transportable radio station" is a mobile radio station which can be installed on a vehicle and is intended to operate from a location or while being in motion.

6. " Mobile portable radio station" is a mobile radio station which can be carried and operated by one person and is intended to work on one location or while being in motion.

7. Maximum allowed output power (W, dBW) of the radio transmitter is expressed by peak power.

8. "Peak power" is the average power fed from the transmitter to the antenna feeder within one radio frequency period corresponding to the maximum amplitude of the modulated signal envelope under normal operation conditions.

9. "Average power" is the power supplied from the transmitter to the antenna feeder within long enough period of time under normal operation conditions.

10. "Amateur radio communications" are the communications established between amateur radio stations.

11. "Amateur radio club" is association of persons holding radio amateur qualification for provision of electronic communications through radio equipment from amateur radio service registered in the Court under the law of non-profit legal entities or belonging to organisation, institution, department or other subjects – legal entities or sole proprietors.

12. "Amateur repeater" (analogue, digital) is an automatic amateur fixed station used as intermediate station for receiving, transforming and retransmitting of signals emitted from amateur radio stations.

13. "Amateur radio beacon" is automatic transmitting fixed radio station of small power operating continuously in specific amateur frequency band.

14. "Radio amateur contest" is a sport electronic communication activity through radio equipment from the amateur radio service that takes place in a preliminary fixed time interval during which the amateur radio communications are provided as per particular sport rules and criteria.

15. "Clarifying word" is a word of the International Phonetic Alphabet used to clarify relevant letter while working in telephony.

16. "Effectively radiated power" is the product of the power at the antenna input and its gain relative to a half-wave dipole in the maximum of the directivity pattern.

17. "Personal amateur radio station" is an amateur radio station used for carrying out of electronic communications by the radio amateur.

18. "Club amateur radio station" is an amateur radio station used for carrying out of electronic communications by amateur radio club.

19. "Radio amateur bulletin" is emitting of messages connected with the radio amateur activity of a radio amateur.

20. "Telegraphy" is a form of provision of electronic communications where the information is represented by the Morse code.

21. "Temporary resident" is a foreigner who resides on a short term or long term basis in the sense of the Law of foreigners in Republic of Bulgaria.

## **TRANSITIONAL AND CONCLUSIVE REGULATIONS**

**§ 2.** These technical requirements are issued pursuant to Art. 32, para 2 of the Electronic Communications Act.

**§ 3.** The technical requirements enter into force on the date of promulgation in the State Gazette.

**§ 4.** The certificates issued under General License № 207 of 1999 for provision of telecommunications for own purposes and for the purposes of the amateur radio service have the validity of the letter for granting of a call sign according to Art. 23, para 2 and Art. 24, para 1 .

**§ 5.** The Licenses for amateur radio operator qualification issued by the time of coming into force of these technical requirements, sustain their validity.

**§ 6.** (1) The radio amateur class certificates and the licenses for radio amateur qualification

issued by the time of coming into force of these technical requirements sustain their validity and are equalized to the permits for radio amateur qualification, as follows:

1. Certificates of Radio Amateur Class A, B and C are equalized to a permit of radio amateur Class 1 qualification;

2. The certificate of Radio Amateur Class D is equalized to a permit of radio amateur Class 2 qualification;

3. The permit for Class 2 radio amateur qualification is equalized to a permit for radio amateur Class 1 qualification;

4. The permit for Class 3 radio amateur qualification is equalized to a permit for radio amateur Class 2 qualification;

(2) Upon demonstrated desire of a radio amateur, the Commission re-issues his/her certificate of radio amateur class or his/her permit for radio amateur qualification with a permit for qualification of radio amateur.

§ 7. The personal listener's signs assigned by the time of entering into force of these technical requirements sustain their validity.

#### Appendix 1

to Art. 9, para 2 and 3 and Art.10 and § 1

Radio frequency spectrum allocated for provision of electronic communications through radio equipment from amateur radio service, allowed maximum powers and classes of emission of the amateur radio stations.				
I. Personal and club's amateur radio stations and radio beacons.				
Radio amateur Class 1				
Radio frequency band	Allocation of the radio frequency band among the radio services according to the National Plan of Allocation of the Radio Frequency Spectrum	Power of transmitter, not more than		Class of emission
		W	dBW	
135,7—137,8 kHz	FIXED MARITIME MOBILE Radio navigation Amateur *	1*	0*	A1A
1810—1850 kHz	AMATEUR	100	20	A1A, J3E
3500—3800 kHz	AMATEUR	350**	25,4	All classes of

	FIXED MOBILE, except aeronautical mobile			emission
7000—7100 kHz	AMATEUR AMATEUR— SATELLITE			
10100—10150 kHz	FIXED Amateur	350	25,4	A1A, A3E, J2(A,B,C,D, J3C
14000—14250 kHz	AMATEUR AMATEUR— SATELLITE	350**	25,4	All classes of emission
14250—14350 kHz	AMATEUR			
18068—18168 kHz	AMATEUR AMATEUR— SATELLITE			
21000—21450 kHz	AMATEUR AMATEUR— SATELLITE			
24890—24990 kHz	AMATEUR AMATEUR— SATELLITE			
28—29,7 MHz	AMATEUR AMATEUR— SATELLITE			
50,05—50,20 MHz	LAND MOBILE Amateur ***	10	10	A1(A,B,C,D); J3(C,E,F)
144—146 MHz	AMATEUR AMATEUR— SATELLITE	100	20	All classes of emission
430—432 MHz	AMATEUR RADIOLOCATION	50	17	All classes of emission
432—433,05 MHz	AMATEUR RADIO-LOCATION Earth exploration satellite (active)			

433,05—434,79 MHz	AMATEUR RADIOLOCATION Land Mobile Earth exploration satellite (active)			
434,79—438 MHz	AMATEUR AMATEUR— SATELLITE RADIOLOCATION Earth exploration satellite (active)			
438—440 MHz	AMATEUR RADIOLOCATION			
1240—1300 MHz	EARTH EXPLORATION SATELLITE (active) RADIOLOCATION SATELLITE RADIONAVIGATION (Space-Earth) (Space - Space) Amateur	10	10	All classes of emission
2300—2400 MHz	FIXED MOBILE Amateur Radiolocation	5	7	All classes of emission
2400—2450 MHz	FIXED MOBILE Amateur Amateur—satellite			
3400—3500 MHz	FIXED FIXED— SATELLITE (Space-Earth) MOBILE Amateur Radiolocation			
5650—5725 MHz	RADIOLOCATION MOBILE, except aeronautical mobile Amateur	5	7	All classes of emission

	Amateur— Satellite****			
5725—5830 MHz	FIXED— SATELLITE (Earth-Space) RADIOLOCATION Amateur Mobile			
5830—5850 MHz	FIXED— SATELLITE (Earth-Space) RADIOLOCATION Amateur Amateur—satellite Mobile			
10—10,30 GHz	FIXED MOBILE RADIOLOCATION Amateur	1	0	All classes of emission
10,30—10,45 GHz	FIXED RADIOLOCATION Amateur Mobile			
10,45—10,50 GHz	FIXED MOBILE RADIOLOCATION Amateur Amateur—Satellite			
24—24,05 GHz	AMATEUR AMATEUR— SATELLITE			
24,05—24,25 GHz	RADIOLOCATION Amateur Earth exploration satellite (active) Fixed Mobile			
47—47,2 GHz	AMATEUR AMATEUR— SATELLITE			

47, 2—47,5 GHz	FIXED FIXED— SATELLITE (Earth-Space) MOBILE Amateur			
47,5—47,9 GHz	FIXED FIXED— SATELLITE (Earth-Space) (Space-Earth) MOBILE Amateur			
48,2—48,54 GHz	FIXED FIXED— SATELLITE (Earth-Space) (Space-Earth) MOBILE Amateur			
76—77,5 GHz	RADIO ASTRONOMY RADIOLOCATION Amateur Amateur-Satellite Space research (Space-Earth)			
77,5—78 GHz	AMATEUR AMATEUR— SATELLITE Radioastronomy Space research (Space-Earth)			
78—79 GHz	RADIOLOCATION Amateur Amateur-Satellite Radioastronomy Space research (Space-Earth)			
79—81 GHz	RADIO ASTRONOMY RADIOLOCATION Amateur Amateur-Satellite			

	Space research (Space-Earth)			
81—81,5 GHz	FIXED FIXED— SATELLITE (Earth-Space) MOBILE MOBILE— SATELLITE (Earth-Space) RADIO ASTRONOMY Space research (Space-Earth) Amateur Amateur—satellite			
122,25—123 GHz	FIXED INTER-SATELLITE MOBILE Amateur			
134—136 GHz	AMATEUR AMATEUR— SATELLITE Radioastronomy			
136—141 GHz	RADIO ASTRONOMY RADIOLOCATION Amateur Amateur—Satellite			
241—248 GHz	RADIO ASTRONOMY RADIOLOCATION Amateur Amateur—Satellite			
248—250 GHz	AMATEUR AMATEUR— SATELLITE Radioastronomy			

\* The radio frequency band 135,7—137,8 kHz is used on secondary basis with effectively radiated power up to 1 W for the needs of amateur radio service in accordance with Recommendation 62-01 of CEPT.

\*\* For fixed station according to Art. 9, para 3.

\*\*\* The radio frequency band 50,05—50,20 MHz is used on secondary basis with power up to 10 W for the needs of the Amateur radio service observing the required guard distance.

\*\*\*\* The Amateur satellite radio service can operate in the radio frequency band 5650—5670 MHz provided that it does not cause harmful interference of the other radio services operating in the same frequency band. Any harmful interference by stations in the Amateur satellite radio service should be instantly removed. The use of this band by the Amateur satellite radio service is limited to direction Earth-Space.

Radio amateur class 2

Radio frequency band	Allocation of the radio frequency band among the radio services according to the National Plan of radio spectrum allocation	Power of transmitter not more than		Class of emission
		W	dBW	
144—146 MHz	AMATEUR AMATEUR— SATELLITE	5	7	A3E, F2D, F3E, J3E
430—432 MHz	AMATEUR RADIOLOCATION			
432—433,05 MHz	AMATEUR RADIOLOCATION Earth exploration satellite (active)			
433,05—434,79 MHz	AMATEUR RADIOLOCATION Land Mobile Earth exploration satellite (active)			
434,79—438 MHz	AMATEUR AMATEUR— SATELLITE RADIOLOCATION Earth exploration satellite (active)			
438—440 MHz	AMATEUR RADIOLOCATION			

Notes:

1. In the column “Allocation of the radio frequency band among the radio services according to the National Plan of radio spectrum allocation” the names of the primary basis services are typed in capital letters, and the names of the secondary basis services – in small letters.			
2. In the radio frequency bands, where the Amateur radio service is on secondary basis, the emitted power is according to the appendix, only in case it does not cause interference to the radio services on primary basis.			
3. When using a Mobile transportable radio station and for amateur radio beacons, the maximum allowable power complies with the tables above, but may not exceed 50 W (17 dBW).			
4. When using a Mobile portable radio station the maximum allowable power complies with the tables above, but may not exceed 10 W (10 dBW).			
<b>II. Amateur repeaters.</b>			
Radio frequency band	Power of transmitter not more than		Class of emission
	W	dBW	
29500—29700 kHz	100	20	F1(B,E), F3E, G3E
145—146 MHz	50	17	F1(B,E), F2D, F3E, G3E
433—435 MHz			
1290—1300 MHz	10	10	F1(B,E), F2D, F3E, G3E
<b>III. Amateur radio transmitters for the sport “radio direction finding”</b>			
Radio frequency band	Power of transmitter not more than		Class of emission
	W	dBW	
3510—3600 kHz	5	7	A1A
144—145 MHz	1,5	1,7	A2A
Notes: 1. “Radio frequency band” includes the whole useful spectrum of the signal.			
2. “All classes of emission” includes: A1(A,B,C,D), A2(A,B,C,D), A3(C,E), F1(A,B,C), F2(A,C,D), F3(C,E,F), G3(C,E,F), J2(A,B,C,D), J3(C,E,F), R3(C,E).			

## Appendix 2

to Art. 20

### Conditions and order for obtaining of license for radio amateur qualification

1. The Bulgarian radio amateurs depending on their theoretical and practical experience are qualified into two radio amateur classes, as follows:

Class 1 – equivalent to CEPT license;

Class 2 – national class.

Persons exercising radio amateur listening activity only are radio amateur listeners.

2. The Commission will issue license for radio amateur qualification and/or harmonized radio amateur certificate (HAREC) as per Recommendation T/R 61-02 of CEPT after successfully passed examination in:

2.1. Electrical engineering and radio engineering;

2.2. Codes and radio amateur abbreviations, rules and procedures when conducting radio amateur communications;

2.3. Normative regulation – ITU Radio Regulations, Electronic Communications Act and these technical requirements.

3. The examination as per para 2.1, 2.2 and 2.3 shall be in written and shall be conducted in the form of a test under a program complying with Recommendation T/R 61-02 of CEPT and approved by the Chairman of the Commission.

3.1. Each test shall contain 60 questions and shall be approved by the Chairman of the Commission

3.2. The exam shall be considered passed, if the candidate has answered correctly at least 48 questions.

4. Radio amateurs may raise their qualification starting from Class 2. A condition for qualifying for Class 1 is the possession of license for qualification of a Class 2 radio amateur for at least six months from the date of exam.

5. Exams shall be conducted by a Commission appointed by the Chairman of the Commission.

6. The examination Commission shall be composed of two representatives of the Commission one of which is a chairman, and one member, who is a radio amateur holding a permit for qualification of a Class 1 radio amateur.

7. The candidates apply for the exam by submitting an application as per Art.19, and paying the respective fee.

8. The exams shall be conducted according to a time schedule and in locations determined by the chairman of the Commission.

9. The Commission shall draw up a protocol to reflect the results from the exam. This protocol shall be approved by the chairman of the Commission.

10. The written works as per para 3 shall be kept by the Commission for one year.

11. To be issued a copy of the permit for qualification the radio amateur shall submit written request to the chairman of the Commission and send a photo and a copy of the receipt for the fee he/she has paid.

### **Appendix 3**

to Art. 22

#### **Order of determination and using of a call sign**

1. The Commission shall determine the call signs of all Bulgarian radio amateurs. They

shall consist of the letters (National prefix) LZ and one figure followed by not more than three letters of the Latin alphabet. The figures 1, 3, 5, 7 and 9 shall be used for South Bulgaria (first zone), and the figures 2, 4, 6 and 8 for North Bulgaria (second zone). The figures in the call sign of the club amateur radio stations shall be followed by letter K and a combination of letters AA to ZZ.

2. The Commission shall determine temporary call signs in connection with celebration of important dates, participation in international radio amateur contests, expeditions, etc. After the letters (National prefix) LZ the temporary call signs may consist of more than one figure and/or more than three letters.

3. When using the amateur radio station outside the permanent address, after his call sign, the radio amateur shall transmit a sign under line:

3.1. Figure "1" for South Bulgaria (first zone) or figure "2" for North Bulgaria (second zone) indicating temporary operation from other residence place having the radio station powered from the mains at the temporary residence;

3.2. Letter "П"(P) or the word "portable" (for telephony) indicating operation of Mobile portable amateur radio station;

3.3. letter "M" or the word "mobile" (for telephony) indicating operation from road vehicle;

3.4. Letters "MM" or the words "maritime mobile" (for telephony) indicating operation from onboard of a vessel;

3.5. Letters "AM" or the words "aeronautical mobile" (for telephony) indicating operation from onboard of an aircraft;

3.6. The requirements as per para 3 shall not be mandatory when participating in radio amateur contests.

4. Foreign radio amateurs, which are temporary residing and perform electronic communications from the territory of Republic of Bulgaria shall form their call sign by transmitting LZ and under line their personal call sign.

5. At the start and the end of each amateur radio connection the radio amateur shall transmit his call sign, and during the radio session he shall indicate his location (locator and/or residence place).

6. When operating in telephony the following international phonetic alphabet shall be used:

Latin letter	Explanatory word	Pronunciation of the explanatory word (in Bulgarian)	Corresponding Cyrillic letter	Explanatory word allowed between Bulgarian radio amateurs only
A	ALFA	АЛФА	А	АНТОН (ANTON)
B	BRAVO	БРАВО	Б	БОРИС (BORIS)
C	CHARLIE	ЧАРЛИ	Ц	ЦВЕТАН (TSVETAN)
D	DELTA	ДЕЛТА	Д	ДИМИТЪР (DIMITAR)
E	ECHO	ЕКО	Е	ЕЛЕНА (ELENA)
F	FOXTROT	ФОКСТРОТ	Ф	ФИЛИП (PHILIP)
G	GOLF	ГОЛФ	Г	ГЕОРГИ (GEORGI)

H	HOTEL	ХОТЕЛ	X	ХРИСТО (HRISTO)
I	INDIA	ИНДИЯ	I	ИВАН (IVAN)
J	JULIETTE	ДЖУЛИЕТ	J	ЙОРДАН (YORDAN)
K	KILO	КИЛО	K	КИРИЛ (KIRIL)
L	LIMA	ЛИМА	L	ЛЮДМИЛ (LYUDMIL)
M	MIKE	МАЙК	M	МАРИЯ (MARIA)
N	NOVEMBER	НОВЕМБЪР	N	НИКОЛАЙ (NIKOLAI)
O	OSCAR	ОСКАР	O	ОГНЯН (OGNYAN)
P	PAPA	ПАПА	P	ПЕТЪР (PETAR)
Q	QUEBEC	КВЕБЕК	Q	ЩЕРЮ (SHTERYU)
R	ROMEO	РОМЕО	R	РУМЕН (RUMEN)
S	SIERRA	СИЕРА	S	СТЕФАН (STEFAN)
T	TANGO	ТАНГО	T	ТОДОР (TODOR)
U	UNIFORM	ЮНИФОРМ	U	УЛЯНА (ULYANA)
V	VICTOR	ВИКТОР	V	ЖИВКО (JIVKO)
W	WHISKEY	УИСКИ	W	ВАСИЛ (VASIL)
X	X-RAY	ЕКСРЕЙ	X	ЕР-ГОЛЯМ (ER-GOLYAM)
Y	YANKEE	ЯНКИ	Y	ЕР-МАЛЪК (ER-MALAK)
Z	ZULU	ЗУЛУ	Z	ЗАХАРИ (ZHARI)
			Ч	ЧАВДАР (CHAVDAR)
			Ш	ШИПКА (SHIPKA)
			Ю	ЮЛИЯ (YULIA)
			Я	ЯВОР (YAVOR)

7. The Commission shall determine the call signs of the radio amateur repeaters and radio beacons. They shall consist of the letters (National prefix) LZ and the figure 0, followed by three

letters of the Latin alphabet. The amateur repeaters and radio beacons shall transmit automatically (at telegraphy or telephony) the call sign, locator and elevation above sea level.

**8.** The Commission shall allocate the call signs MO, MOE, MOI, MOS, MOH, MO5 to amateur radio transmitters used in the sport radio direction finding. The call signs shall be transmitted automatically in telegraphy.

**9.** The Commission shall determine personal listener's signs to radio amateur listeners. They shall consist of the letters (National prefix) LZ, one figure, dash and three-digit sequence number. The figure after LZ shall be formed as per item 1.

**10.** The Commission may assign vacated call signs:

10.1. to other radio amateurs after expiring of 10 years from the date of their vacation;

10.2. to other radio clubs after expiring of one year from the date of their vacation.