

Ordinance concerning the Amateur Radio Act (Amateur Radio Ordinance – AFuV)

AFuV

Date of issue: 15 February 2005

Long title:

“Amateur Radio Ordinance of 15 February 2005 (Federal Law Gazette I page 242), as last amended by Article 1 of the Ordinance of 27 May 2024 (Federal Law Gazette 2024 I No 175)”

Last updated: Last amended by Article 1 V of 27 May 2024 I No 175

Footnote

(+++ Reference as from: 19 February 2005 +++)

Enacting clause

The Federal Ministry of Economics and Labour is hereby issuing the following Ordinance in agreement with the Federal Ministry of Finance by virtue of section 3(2) sentence 2, section 4(1) sentence 1, section 6 and section 8 sentence 2 of the Amateur Radio Act of 23 June 1997 (Federal Law Gazette I page 1494), as amended by Article 229 of the Ordinance of 25 November 2003 (Federal Law Gazette I page 2304), in conjunction with Chapter 2 of the Administrative Expenses Act of 23 June 1970 (Federal Law Gazette I page 821):

Section 1 Scope

This Ordinance regulates:

1. the procedure for conducting examinations for radio amateurs and the requirements relating to their content;
2. the classification of the various types of amateur radio licence;
3. the recognition of foreign amateur radio examination certificates or authorisations;
4. the procedure for the assignment and details of the use and sharing of call signs;
5. amateur radio training; and
6. the general technical and operational conditions for operating in the amateur service, including the usage conditions for the frequency bands designated for the amateur service in the Spectrum Plan (Annex 1).

The regulations of the Ordinance concerning the Controls for the Limitation of Electromagnetic Fields of 20 August 2002 (Federal Law Gazette I page 3366) remain unaffected.

Section 2 Definitions

For the purposes of this Ordinance, the following definitions apply:

1. “examination for radio amateurs” means an examination for proof of the knowledge and skills necessary for independent and responsible participation in the amateur service, in

which a pass entitles the examinee to a corresponding amateur radio examination certificate;

2. "amateur radio licence or examination certificate" means the confirmation by a domestic or foreign examining body of the successful completion of an examination for radio amateurs based on certain examination requirements (licence class);
- 2a. "admission to participate in the amateur service" means permission that is granted by the Bundesnetzagentur für Elektrizität, Gas, Telekommunikation, Post und Eisenbahnen (Bundesnetzagentur), upon application, to participate in the amateur service and that is linked to the assignment of a personal call sign or a personal call sign combination;
3. "club station" means an amateur station that is operated by members of a group of at least three radio amateurs admitted to participate in the amateur service using a shared call sign;
- 3a. "club station call sign" means the shared call sign of a club station;
4. "remote-controlled or automatic amateur station" means an amateur station that is operated unattended and that produces remote-controlled or automatic emissions (repeater stations, digipeaters, radio beacons, etc);
5. "repeater station" means a remote-controlled or automatic amateur station or a remote-controlled and automatic amateur-satellite station that:
 - a) retransmits or forwards, via remote control, received amateur emissions, parts of such emissions or other received or stored content; and
 - b) can be used by any radio amateur with relevant spectrum usage rights and with the technical facilities to transmit communications;
6. "radio beacon" means an automatic amateur radio transmitter (including on satellites) that automatically produces regular emissions for field strength observations or reception tests;
- 6a. "unattended operation" means unattended, remote-controlled operation of a fixed amateur station under the continuous, indirect and full control of a radio amateur admitted to participate in the amateur service, including setting the frequencies used for transmission and reception and determining the time and duration of the amateur emissions;
7. "peak envelope power (PEP)" means the average power supplied to a real terminating resistor by a transmitter during one radio frequency cycle at the crest of the modulation envelope taken under normal operating conditions;
8. "effective radiated power (ERP)" means the product of the power directly supplied to an antenna and its gain in a given direction relative to a half-wave dipole;
9. "equivalent isotropically radiated power (EIRP)" means the product of the power supplied directly to an antenna and the antenna gain in a given direction relative to an isotropic antenna;
10. "occupied bandwidth" means the width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to 0.5% of the total mean power of a given emission;
11. "unwanted emission" means any emission outside the necessary bandwidth; the necessary bandwidth is the bandwidth that is just sufficient for a given class of emission to ensure the transmission of information at a speed and quality required under the given conditions.

Section 3 Admission to examinations

(1) An application for admission to an examination must be submitted to the Bundesnetzagentur (regulatory authority) in writing or electronically together with an application for the issue of an amateur radio licence following the successful completion of an examination. The Bundesnetzagentur will determine details of the application procedure and publish them in its Official Gazette.

(2) Fees are payable for examinations on the basis of the Act on Fees and Expenses for Federal Services and the Special Fee Ordinance of the Federal Ministry for Digital and Transport.

Section 4 Examination requirements and content

(1) Candidates applying for a class A amateur radio licence shall demonstrate the following in the examination for radio amateurs:

1. technical knowledge, including knowledge of electromagnetic compatibility and its application, protection of persons and property,
2. operational knowledge (national and international operating rules and procedures), and
3. knowledge of national provisions and international regulations and agreements.

(2) Candidates applying for a class E amateur radio licence shall demonstrate in the examination for radio amateurs the fundamentals of the knowledge required in subsection (1) para 1 and the knowledge required in subsection (1) paras 2 and 3.

(3) Candidates applying for a class N amateur radio licence shall demonstrate in the examination for radio amateurs the basic fundamentals of the knowledge required in subsection (1) para 1 and the knowledge required in subsection (1) paras 2 and 3.

(4) Holders of a class N or class E amateur radio licence may take an additional examination to obtain a class A amateur radio licence in which they shall demonstrate the relevant additional knowledge as required in subsection (1) para 1.

(5) Holders of a class N amateur radio licence may take an additional examination to obtain a class E amateur radio licence in which they shall demonstrate the relevant additional fundamentals of the knowledge as required in subsection (1) para 1.

(6) The Bundesnetzagentur will determine details of the content and requirements for examinations and of the additional examinations as referred to in subsections (4), (5) and (7), taking into account international recommendations, and will publish them in its Official Gazette.

(7) Skills in sending and receiving Morse code signals can be demonstrated in an optional additional examination. Fees are payable for examinations on the basis of the Act on Fees and Expenses for Federal Services and the Special Fee Ordinance of the Federal Ministry for Digital and Transport. The Bundesnetzagentur will certify the successful demonstration of practical skills in sending and receiving Morse code signals. The provisions of sections 5 and 6 apply accordingly.

Section 5 Examination procedure

(1) The examinations referred to in section 4(1), (2) and (3) consist of a written examination that can be followed by an oral examination in line with the conditions to be determined in accordance with subsection (5). Examinations are not public. The chair of the examination board can allow persons with a legitimate interest to be present at an examination.

(2) The examination board will decide the result of an examination. A pass is awarded when the candidate has demonstrated sufficient knowledge, capabilities and, where required, skills in all parts. In the absence of a unanimous decision on the result, the chair will decide.

(3) Candidates can retake failed examination parts within 24 months of announcement of the results of the first examination. After this period, the whole examination must be retaken. Candidates failing an additional examination must retake the whole additional examination. Section 3 applies accordingly.

(4) The examination locations and tasks must be fully accessible. The Bundesnetzagentur will make allowances to accommodate the special needs of candidates with disabilities or chronic illnesses when conducting examinations. Confirmation of a disability or chronic illness must be submitted together with an application for admission to an examination. The Bundesnetzagentur will decide on the nature and scope of the allowances to be made. Section 4 remains unaffected.

(5) The Bundesnetzagentur will determine details of the examination procedure, after consultation with the parties concerned, and publish them in its Official Gazette.

Section 6 Examination board

(1) The Bundesnetzagentur sets up examination boards to conduct examinations. Each examination board consists of a chair and at least one vice chair.

(2) The President of the Bundesnetzagentur appoints the chairs and vice chairs of the examination boards (examiners); the examiners need not be members of the Bundesnetzagentur. An appointment is generally for five years; it can be extended. The Bundesnetzagentur can terminate the appointment of an examiner before the end of an appointment period if there is an important reason for doing so. Important reasons include in particular concern that examination tasks cannot be carried out properly for health or other reasons.

(3) A person can be appointed as an examiner if the person:

1. is at least 18 years old; and
2. holds a class A amateur radio licence or a vocational qualification that is at least equivalent.

The Bundesnetzagentur will determine details and publish them in its Official Gazette.

Section 7 Amateur radio licences

(1) Amateur radio licences are divided into classes A, E and N. The Bundesnetzagentur will issue a licence following the successful completion of an examination for radio amateurs. The amateur radio licence classes are in line with the international recommendations that the Bundesnetzagentur has taken into account in accordance with section 4(6) when determining the details of the content and requirements for the examinations referred to in section 4(1), (2) and (3) and of the additional examinations referred to in section 4(4), (5) and (7).

(2) A class A amateur radio licence is issued when an examinee has been awarded a pass in accordance with section 5(2) following demonstration of the knowledge set out in section 4(1).

(3) A class E amateur radio licence is issued when an examinee has been awarded a pass in accordance with section 5(2) following demonstration of the knowledge set out in section 4(2).

(4) A class N amateur radio licence is issued when a candidate in an examination for radio amateurs has been awarded a pass in accordance with section 5(2) following demonstration of the knowledge set out in section 4(3).

Section 8 Recognition and issue of amateur radio examination certificates and amateur radio authorisations

(1) The Bundesnetzagentur can recognise amateur radio examination certificates and amateur radio authorisations issued by other countries, taking into account the harmonised regulations of the European Conference of Postal and Telecommunications Administrations (CEPT). The Bundesnetzagentur will lay down with the recognition the conditions under which amateur radio examination certificates and amateur radio authorisations are equivalent to German amateur radio licences and documents for admission to participate in the amateur service. The Bundesnetzagentur will publish the details in its Official Gazette.

(2) The Bundesnetzagentur can recognise amateur radio examination certificates or amateur radio authorisations other than those referred to in subsection (1) if the content and requirements for the examinations for radio amateurs on which they are based are equivalent to those for an amateur radio licence as set out in section 7.

Section 9 Admission to participate in the amateur service

(1) In accordance with section 3(1) of the Amateur Radio Act, the Bundesnetzagentur will, upon application, admit a natural person to participate in the amateur service on the basis of the amateur radio licence submitted or an equivalent certificate within the meaning of section 8 together with the assignment of a personal call sign.

(2) Admission to participate in the amateur service entitles a radio amateur to use the frequency bands listed in Annex 1 in compliance with the associated usage conditions, in line with the licence class specified in the radio amateur's admission document (scope of authorisation).

(3) Radio amateurs shall notify the Bundesnetzagentur of the planned locations of operation of their fixed amateur stations together with their application for admission to participate in the amateur service in accordance with section 3(1) of the Amateur Radio Act.

(4) A holder of an admission document within the meaning of subsection (1) shall notify the Bundesnetzagentur, in writing or electronically, without delay of any change of name or address as well as any new installation of a fixed amateur station or any permanent relocation of their fixed amateur stations before beginning operation.

(5) Admission to participate in the amateur service is not required for the reception of emissions.

Section 10 Call sign assignment

(1) The Bundesnetzagentur assigns personal call signs to radio amateurs on the basis of section 3(1) of the Amateur Radio Act. There is no right to the assignment of a specific call sign. A relinquished personal call sign can be reassigned to another radio amateur no earlier than one year following relinquishment.

(2) The Bundesnetzagentur will, upon application, assign to a radio amateur, in addition to the personal call sign referred to in subsection (1), further call signs for amateur radio training, remote-controlled and automatic amateur stations or club stations. Call signs may be assigned for a limited period of time.

(3) The Bundesnetzagentur will draw up a call sign plan for the amateur service in Germany and publish it in its Official Gazette. The call sign plan contains the call sign series used, including the classification according to classes and purposes, the permissible identifications, the call sign combinations that cannot be assigned, and the common international call sign suffixes.

Section 11 Call sign use

(1) Call signs serve the purpose of identification. The call signs assigned for a specific purpose must be transmitted at the beginning and end of each communication and at least every ten minutes during transmissions. Under the scope of this Ordinance, an amateur station may only be used or operated using an amateur radio call sign assignment valid in Germany. The Bundesnetzagentur can determine further details of call sign use, including exceptions under subsection (6) sentence 2, and publish them in its Official Gazette.

(2) In the case of low-power amateur stations for direction-finding, call signs need not be transmitted if identifications as referred to in section 10(3) are used.

(3) The call sign can be supplemented with common international suffixes. These suffixes may not distort the call sign assigned.

(4) In the case of unattended operation of an amateur station within the meaning of section 13a, the personal call sign can be supplemented with the word "remote" for speech mode or the suffix "/R" for telegraphy or digital operating modes.

(5) In the case of amateur radio training within the meaning of section 12, the personal call sign or the club station call sign must be supplemented with the word “trainee” for speech mode. The personal call sign or the club station call sign must be supplemented with the suffix “/T” for telegraphy or digital operating modes.

(6) A call sign may not be used at different locations at the same time to participate in the amateur service. Exceptions are permitted but require prior approval from the Bundesnetzagentur.

Section 12 Amateur radio training

(1) Amateur radio training serves the practical preparation for taking an examination for radio amateurs to obtain an amateur radio licence. Radio amateurs admitted to participate in the amateur service with class A and E amateur radio licences are entitled to conduct radio training. The scope of authorisation for radio training corresponds to the scope of authorisation of the radio amateur trainer.

(2) Within the framework of amateur radio training, persons not holding a relevant amateur radio licence are permitted to participate in the amateur service under the direct guidance and supervision of a radio amateur admitted to participate in the amateur service and entitled to conduct radio training.

(3) During amateur radio training, the trainee shall use the personal call sign assigned to the trainer or the club station call sign supplemented as specified in section 11(5).

(4) The trainer shall provide information about the type and scope of the amateur radio training when required by the Bundesnetzagentur.

Section 13 Remote-controlled or automatic amateur stations

(1) Operation of a remote-controlled or automatic amateur station requires the assignment of a separate call sign as referred to in section 3(3) para 3 of the Amateur Radio Act. An amateur station may only be operated at the locations specified in the call sign assignment subject to the general conditions set out in the assignment. Unattended operation of an amateur station is based on section 13a.

(2) Call sign assignment must be preceded by a location-related compatibility study for the specific frequency to be used. A holder of a document for admission to participate in the amateur service within the meaning of section 2 para 2 can only be assigned a call sign if relevant frequencies are available.

(3) The scope of the authorisation to operate a remote-controlled or automatic amateur station will be determined with the call sign assignment. It can be subject to further conditions intended to ensure interference-free spectrum use. The Bundesnetzagentur will determine details, after consultation with the parties concerned, and publish them in its Official Gazette.

(4) Radio amateurs with an assigned call sign must be allowed to operate using remote-controlled amateur stations as referred to in subsection (1). Transmissions and radiocommunications traffic from amateur stations as referred to in subsection (1) have priority over other amateur radio traffic and may not be adversely affected. To ensure interference-free operation, the holder of a call sign for a remote-controlled amateur station as referred to in subsection (1) can exclude other radio amateurs from using the amateur station. The Bundesnetzagentur must be notified accordingly.

(5) An assignment for a radio station as referred to in subsection (1) can also be revoked, apart from in the cases specified in section 49(2) of the Administrative Procedures Act, if:

1. the holder of the call sign has not begun operation of the remote-controlled or automatic amateur station for the intended purpose within one year of assignment or has interrupted operation for more than one year;
2. compatibility with other usages is no longer ensured; or
3. the condition in subsection (2) sentence 2 is no longer met; or
4. the holder of the call sign fails to meet their obligations under subsection (1) sentence 2 or fails to meet a condition as referred to in subsection (3) sentence 2.

Section 13a Unattended operation

(1) Unattended operation of an amateur station is only permitted for holders of a document for admission to participate in the amateur service with a class A scope of authorisation. In the case of a club station, access must be restricted to members of a group of radio amateurs admitted to participate in the amateur service within the meaning of section 2 para 3.

(2) A class A personal call sign is assigned to the holder in accordance with section 3(1) of the Amateur Radio Act for the purpose of unattended operation as a call sign as referred to in section 3(3) para 3 of the Amateur Radio Act. A class A call sign for the operation of a club station is assigned to the holder in line with section 3(3) para 4 of the Amateur Radio Act for the purpose of unattended operation as a call sign as referred to in section 3(3) para 3 of the Amateur Radio Act. The call sign can be shared for unattended operation by the group of radio amateurs within the meaning of section 14.

(3) Notification in accordance with section 9(4) must include the contact details of the operator of the amateur station to enable contact without delay in the event of radio interference. Changes in the contact details must be notified to the Bundesnetzagentur, in writing or electronically, without delay.

(4) The holder of the call sign as referred to in section 14(1) sentence 1 shall provide information about the group of radio amateurs entitled to unattended operation when required by the Bundesnetzagentur.

(5) The holder of the call sign shall take state-of-the-art measures to prevent unauthorised or improper access to the amateur station. In the event of interference, the holder of the call sign must be able to close down the amateur station at any time when required by the Bundesnetzagentur. The holder of the call sign shall ensure that they can be contacted by telephone without delay using the contact details provided in accordance with subsection (3) sentence 2 during operation of the amateur station and that they can meet the information obligations arising from section 29 of the Electromagnetic Compatibility Act of 14 December 2016 (Federal Law Gazette I page 2879), as last amended by Article 51 of the Act of 23 June 2021 (Federal Law Gazette I page 1858), and from section 31 of the Radio Equipment Act of 27 June 2017 (Federal Law Gazette I page 1947), as last amended by Article 52 of the Act of 23 June 2021 (Federal Law Gazette I page 1858). Sections 16 and 17 remain unaffected.

(6) In the case of amateur radio training using remote-controlled amateur stations, the call sign must be supplemented as set out in section 11(5).

Section 14 Club stations

(1) The Bundesnetzagentur can, upon application, assign a club station call sign as referred to in section 3(3) para 4 of the Amateur Radio Act to a radio amateur admitted to participate in the amateur service if the head of a group of radio amateurs within the meaning of section 2 para 3 has nominated the radio amateur to the Bundesnetzagentur, in writing or electronically, as the person responsible for the club station. The Bundesnetzagentur will determine the scope of authorisation for the operation of the club station with the assignment of the club station call sign within the meaning of section 2 para 3a. The Bundesnetzagentur will determine, upon application by the head of the group of radio amateurs, the members covered by the assignment of the call sign.

(2) Without prejudice to the provisions of section 3(4) of the Amateur Radio Act, the assignment can be revoked if the head of the group of radio amateurs withdraws the nomination of a radio amateur in writing or electronically or if the group has disbanded.

(3) Amateur radio training within the meaning of section 12 can be carried out using club stations.

(4) Radio amateurs admitted to participate in the amateur service with a class E amateur radio licence may share use of the club station within the scope of their authorisation as referred to in section 9(2).

Section 15 List of call signs

(1) The Bundesnetzagentur publishes a list of call signs with the assigned German call signs and their holders.

(2) The list of call signs includes the following information:

1. the assigned call sign, class and purpose,
2. the last name, first name and address of the holder of the document for admission to participate in the amateur service, and
3. the location of the fixed amateur station.

(3) In the case of remote-controlled or automatic amateur stations with a call sign assigned in accordance with section 13(1), the Bundesnetzagentur can publish the basic characteristics for spectrum use.

(4) Consent may be withheld to entry in the list of call signs. Withholding of consent must be submitted to the Bundesnetzagentur in writing or electronically. The Bundesnetzagentur shall inform radio amateurs in a timely and appropriate manner of their right to withhold consent. Irrespective of the content of withheld consent, the list will include all assigned call signs together with the names of the holders and, in the case of amateur stations as referred to in section 13, the locations.

Section 16 General technical and operational conditions for amateur stations

(1) Amateur stations must be installed and maintained in compliance with generally recognised technical standards.

(2) The general technical and operational conditions set out in Annex 1 to this Ordinance apply to the use of the frequency bands for the amateur service. The Bundesnetzagentur can, upon application, grant exemptions for a limited period of time for special experimental and technical-scientific studies to be carried out with an amateur station. These exemptions can be made subject to additional requirements and conditional on the assignment of an additional call sign.

(3) An amateur station may be connected to telecommunications networks. The provisions of telecommunications law must be observed. Connections to telecommunications networks via a remote-controlled amateur station as referred to in section 13 may only be established by the holder of the call sign for the amateur station.

(4) Unwanted amateur emissions must be limited to a minimum. Necessary reference levels for radio equipment as referred to in section 2(1) para 1 of the Radio Equipment Act of 27 June 2017 (Federal Law Gazette I page 1947), as amended by Article 52 of the Act of 23 June 2021 (Federal Law Gazette I page 1858), will be published in the Bundesnetzagentur's Official Gazette after consultation with the parties concerned.

(5) Radio amateurs shall submit technical documentation on the transmitting equipment and a sketch showing the on-site arrangement of their fixed antenna system when required by the Bundesnetzagentur.

(6) In the case of adjustments and measurements at amateur stations, suitable measures must be taken to effectively prevent the free radiation of signals.

(7) Amateur radio traffic must be in plain language. The international amateur code and common international operational abbreviations are deemed plain language.

(8) Transmission methods must allow reconstruction of transmitted content with generally available technology or with relevant knowledge and skills. Amateur radio traffic may not be encoded or encrypted to conceal the content; this does not apply to control signals for earth and space stations in the amateur-satellite service or to control signals (including unattended operation) from other remote-controlled or automatic stations.

(9) The emission of misleading signals, continuous carriers and transmissions similar to broadcasts as well as the use of international distress, urgency and safety signals of the maritime mobile and aeronautical mobile services is not permitted.

(10) Radio amateurs shall take appropriate measures to prevent misuse of their amateur stations.

Section 17 Interference and measures in the case of interference

(1) The Bundesnetzagentur can require the operator of an amateur station to cooperate in identifying and investigating causes of interference or in clarifying technical issues. It can in particular require the radio amateur to record and submit, in writing or electronically, information on the operation of their amateur station and to carry out test emissions during interference investigations to allow the evaluation of interference scenarios using measurements.

(2) The Bundesnetzagentur can order the operator of an amateur station to block certain frequency bands, reduce the transmitter power or take other suitable measures until conclusion of the identification and investigation of interference within the meaning of subsection (1).

(3) The provisions of the Electromagnetic Compatibility Act of 14 December 2016 (Federal Law Gazette I page 2879), as last amended by Article 51 of the Act of 23 June 2021 (Federal Law Gazette I page 1858), and of the Radio Equipment Act of 27 June 2017 (Federal Law Gazette I page 1947), as last amended by Article 52 of the Act of 23 June 2021 (Federal Law Gazette I page 1858) remain unaffected.

Section 18 (deleted)

Section 19 Transitional arrangements

(1) The following applies to amateur radio licences issued prior to the entry into force of this Ordinance:

1. class 3 amateur radio licences are deemed equivalent to class E amateur radio licences within the meaning of this Ordinance;
2. all other amateur radio licences issued are deemed equivalent to class A amateur radio licences within the meaning of this Ordinance.

(2) Subsection (1) applies accordingly to admissions to participate in the amateur service and to amateur radio authorisations issued prior to the entry into force of this Ordinance.

(3) Training call signs in the call sign series DN0AAA to DN8ZZZ will no longer be assigned one year after the entry into force of this Ordinance. Assigned training call signs in the above-mentioned series will remain valid until 31 December 2028.

Annex 1 Usage conditions for the frequency bands designated in the Spectrum Plan for the amateur service and the amateur-satellite service

(Source: Federal Law Gazette 2024 I No 175, pages 1-4)

On the basis of section 6 sentence 1 of the Amateur Radio Act of 23 June 1997 (Federal Law Gazette I page 1494), as last amended by Article 53 of the Act of 23 June 2021 (Federal Law Gazette I page 1858), the general technical and operational conditions for the use of spectrum for the amateur service and the amateur-satellite service are set out below:

(1) Remote-controlled and automatic amateur stations within the meaning of section 13(1) and (2) of this Ordinance may only be operated on the frequencies designated for these amateur stations in the call sign assignment. The maximum permitted radiated power for remote-controlled or automatic terrestrial amateur stations above 30 MHz is 50 watts (excluding unattended operation). In the case of continued mutual interference, the Bundesnetzagentur can order a reduction in power. This does not apply to the operation of permanent links; permission for the operation of these links in frequency bands above 1 GHz with a maximum radiated power of 1,000 watts ERP can be requested in duly justified cases. The holder of the call sign assignment must ensure that remote-controlled amateur stations can be closed down at any time.

(2) The occupied bandwidth of an amateur emission must be limited, in line with the state of the art, to that required for the class of emission used. The centre frequency of the amateur emissions must be selected so that the occupied bandwidth is within the frequency band allocated to the amateur service. Priority for radiocommunications on frequencies already occupied and priority for the amateur-satellite service and emissions from space stations in the amateur service must be taken into account.

(3) Radiocommunication services are divided into primary and secondary services. A primary service is a radiocommunication service whose stations can claim protection from interference from stations of secondary services, including stations to which frequencies have already been assigned. Protection from interference from stations of the same or another primary service can only be claimed by a station to which a frequency was assigned at an earlier date. A secondary service is a radiocommunication service whose stations may neither cause interference to stations of primary services nor claim protection from interference from such stations, irrespective of when frequencies are assigned to the stations of the primary services. Protection from interference from stations of the same or another secondary service can only be claimed by a station to which a frequency has been assigned at an earlier date.

(4) The frequency bands under A are subject to the regulations of the Spectrum Plan in addition to the special usage conditions set out in A and B.

A Synoptic table

No	Frequency band	Status ¹	Permissible frequency bands and maximum power ² for holders admitted to participate in the amateur service with a scope of authorisation of			Additional usage conditions according to B		
			class A	class E	class N			
1	2	3	4	5	6	7		
1	135.7-137.8 kHz	S	1 W ERP			1	2	10
2	472-479 kHz	S	1 W ERP			1		
3	1810-1850 kHz	P	750 W PEP	100 W PEP		3		
4	1850-1890 kHz	S	75 W PEP	75 W PEP		3	10	12 15
5	1890-2000 kHz	S	10 W PEP	10 W PEP		3	10	15
6	3500-3800 kHz	P	750 W PEP	100 W PEP		3		
7	5351.5-5366.5 kHz	S	9.14 W ERP			3		
8	7000-7200 kHz	P	750 W PEP			3	13	
9	10100-10150 kHz	S	150 W PEP			1	10	12
10	14000-14350 kHz	P	750 W PEP			3	13	

No	Frequency band		Status ¹	Permissible frequency bands and maximum power ² for holders admitted to participate in the amateur service with a scope of authorisation of						Additional usage conditions according to B		
				class A			class E		class N			
1	2		3	4			5		6		7	
11	18068-18168	kHz	P	750	W	PEP					3	13
12	21000-21450	kHz	P	750	W	PEP	100 W	PEP			3	13
13	24890-24990	kHz	P	750	W	PEP					3	13
14	28-29.7	MHz	P	750	W	PEP	100 W	PEP	10 W	ERP	4	13
15	50-50.4	MHz	S	750	W	PEP					5	16
16	50.4-52	MHz	S	25	W	PEP					5	16
17	144-146	MHz	P	750	W	PEP	75 W	PEP	6.1 W	ERP	6	13
18	430-440	MHz	P	750	W	PEP	75 W	PEP	6.1 W	ERP	7	13
19	1240-1250	MHz	S	750	W	PEP	75 W	PEP			8	11 17
20	1250-1260	MHz	S	750	W	PEP	75 W	PEP			8	11 17
21	1260-1300	MHz	S	750	W	PEP	75 W	PEP			8	11 13 17
22	2320-2400	MHz	S	75	W	PEP	5 W	PEP			9	17
23	2400-2450	MHz	S	75	W	PEP	5 W	PEP			9	13 17
24	3400-3475	MHz	S	75	W	PEP	5 W	PEP			9	17
25	5650-5670	MHz	S	75	W	PEP	5 W	PEP			9	13 17
26	5670-5725	MHz	S	75	W	PEP	5 W	PEP			9	17
27	5725-5755	MHz	S	75	W	PEP	5 W	PEP			9	17
28	5755-5830	MHz	S	75	W	PEP	5 W	PEP			9	17
29	5830-5850	MHz	S	75	W	PEP	5 W	PEP			9	17
30	10-10.4	GHz	S	75	W	PEP	5 W	PEP			9	17
31	10.4-10.45	GHz	S	75	W	PEP	5 W	PEP			9	17
32	10.45-10.5	GHz	S	75	W	PEP	5 W	PEP			9	13 17
33	24-24.05	GHz	P	75	W	PEP	5 W	PEP			13	17
34	24.05-24.25	GHz	S	75	W	PEP	5 W	PEP			9	17
35	47-47.2	GHz	P	75	W	PEP	5 W	PEP			13	17
36	76-77.5	GHz	S	75	W	PEP	5 W	PEP			9	13 17
37	77.5-78	GHz	S	75	W	PEP	5 W	PEP			9	13 17
38	78-79	GHz	S	75	W	PEP	5 W	PEP			9	13 17

No	Frequency band		Status ¹	Permissible frequency bands and maximum power ² for holders admitted to participate in the amateur service with a scope of authorisation of						Additional usage conditions according to B		
				class A			class E		class N			
1	2		3	4			5		6	7		
39	79-81	GHz	S	75	W	PEP	5 W	PEP		9	13	17
40	122.25-123	GHz	S	75	W	PEP	5 W	PEP		9	17	
41	134-136	GHz	P	75	W	PEP	5 W	PEP		9	13	17
42	136-141	GHz	S	75	W	PEP	5 W	PEP		9	13	17
43	241-248	GHz	S	75	W	PEP	5 W	PEP		13	17	
44	248-250	GHz	P	75	W	PEP	5 W	PEP		13	17	
45	>275	GHz	–	–			–			14	17	

¹ P: amateur service is a primary service and S: amateur service is a secondary service, in accordance with the Spectrum Ordinance of 27 August 2013 (Federal Law Gazette I page 3326), as last amended by Article 1 of the Ordinance of 3 June 2021 (Federal Law Gazette I page 1372). The frequency bands marked “P” can also be allocated to other primary services at the same time.

² PEP: peak envelope power (section 2 para 7); ERP: effective radiated power (section 2 para 8)

B Additional usage conditions

1. Maximum permitted occupied bandwidth of an amateur emission: 800 Hz.
2. The locations of operation must be notified to the Bundesnetzagentur in writing or electronically. The transmitting antenna must be sufficiently decoupled from other systems. If interference is caused to primary services, including services in adjacent bands, operation must be closed down.
3. Maximum permitted occupied bandwidth of an amateur emission: 2.7 kHz.
4. Maximum permitted occupied bandwidth of an amateur emission: below 29 MHz: 7 kHz; above 29 MHz: 40 kHz.
5. Amateur emissions may neither cause harmful interference to broadcast reception nor claim protection from emissions from the broadcasting service. Amateur emissions in the frequency band 50-52 MHz may not cause interference to wind profiler radars. They may not claim protection from emissions from these radars. Only emissions with horizontal polarisation are permitted. Use is restricted to fixed amateur stations. The holder of a call sign assignment in accordance with section 13 for a 50 MHz beacon must ensure that the radio beacon station can be closed down at any time when required to do so by telephone.
6. Maximum permitted occupied bandwidth of an amateur emission: 40 kHz.
7. Maximum permitted occupied bandwidth of an amateur emission: 2 MHz; in the case of amplitude-modulated television emissions: 7 MHz.
8. Maximum permitted occupied bandwidth of an amateur emission: 2 MHz; in the case of amplitude-modulated or digital television emissions: 7 MHz; and in the case of frequency-modulated television emissions: 18 MHz.

9. Maximum permitted occupied bandwidth of an amateur emission: 10 MHz; in the case of television emissions: 20 MHz.
10. The operation of remote-controlled amateur stations is not permitted, with the exception of amateur stations under unattended operation. Amateur radio contests may not be carried out in this frequency band.
11. In the sub-band 1247-1263 MHz, the radiated power is limited to a maximum of 3.05 watts ERP. The operation of remote-controlled and automatic amateur stations is not permitted in this band.
12. Maximum permitted radiated power for automatic amateur stations: 50 watts ERP.
13. The frequency bands 7000-7100 kHz, 14000-14250 kHz, 18068-18168 kHz, 21000-21450 kHz, 24890-24990 kHz, 28-29.7 MHz, 144-146 MHz, 24-24.05 GHz, 47-47.2 GHz, 134-136 GHz and 248-250 GHz may also be used for the amateur-satellite service as a primary service.
The frequency bands 435-438 MHz, 1260-1270 MHz, 2400-2450 MHz, 5650-5670 MHz, 5830-5850 MHz, 10.45-10.50 GHz, 76-81 GHz, 136-141 GHz and 241-248 GHz may also be used for the amateur-satellite service as a secondary service.
In the frequency bands 435-438 MHz, 1260-1270 MHz, 2400-2450 MHz and 5650-5670 MHz other secondary services have priority over the amateur-satellite service. Space stations in the amateur-satellite service operating in these frequency bands must be suitably equipped to allow the amateur emissions from the space stations to be controlled in the event of interference so that interference to other services in these bands can be eliminated immediately.
The use of the frequency bands 1260-1270 MHz and 5650-5670 MHz is limited to the Earth-to-space direction and the use of the frequency band 5830-5850 MHz is limited to the space-to-Earth direction.
14. The frequency bands 444-453 GHz, 510-546 GHz, 711-730 GHz, 909-926 GHz, 945-951 GHz and frequencies above 956 GHz may be used by the amateur service. Amateur stations may not claim protection from interference from other uses. The Bundesnetzagentur will lay down the usage conditions and publish them in its Official Gazette.
15. In derogation of the special usage conditions, the frequency bands 1850-1890 kHz and 1890-2000 kHz may be used at weekends by holders of a document for admission to participate in the amateur service with a class A scope of authorisation with a maximum transmit power of 750 watts PEP and by holders of a document for admission to participate in the amateur service with a class E scope of authorisation with a maximum transmit power of 100 watts PEP. In derogation of additional usage condition 10, amateur radio contests may be carried out at weekends.
16. Maximum permitted occupied bandwidth of an amateur emission: 12 kHz.
17. Permanent links of remote-controlled or automatic amateur stations may be operated with a radiated power up to 1,000 watts ERP in duly justified cases.

Annex 2 (deleted)