

**MINISTRY OF INFORMATION AND
COMMUNICATIONS**

**SOCIALIST REPUBLIC OF VIETNAM
Independence – Freedom – Happiness**

No.: 18/2018/TT-BTTTT

Hanoi, December 20, 2018

CIRCULAR
AMENDING AND SUPPLEMENTING A NUMBER OF CONTENTS OF THE CIRCULAR
NO. 46/2018/TT-BTTTT DATED DECEMBER 26, 2018 OF THE MINISTER OF
INFORMATION AND COMMUNICATIONS PROVIDING RADIO DEVICES THAT TO
BE EXEMPTED LICENSE OF RADIO FREQUENCY REGISTRATION AND
ACCOMPANYING TECHNICAL AND OPERATIONAL CONDITIONS

Pursuant to the Law on radio frequency dated November 23, 2009;

Pursuant to Government's Decree No. 17/2017/ND-CP dated February 17, 2017 defining the functions, tasks, powers and organizational structure of Ministry of Information and Communications;

Pursuant to Decision No. 71/2013/QĐ-TTg dated November 21, 2013 by the Prime Minister promulgating the Plan for national radio spectrum amended and supplemented by Decision No. 02/2017/QĐ-TTg dated January 17, 2017 of Prime Minister;

Upon the request of Director of the Authority of Radio Frequency Management,

The Minister of Information and Communications issued the Circular amending and supplementing a number of contents of the Circular No. 46/2016/TT-BTTTT dated December 26, 2016 of Minister of Information and Communications promulgates the list of license-exempt radio devices and accompanying technical and operational conditions.

Article 1. Amending and supplementing a number of contents of the Circular No. 46/2016/TT-BTTTT promulgates the list of license-exempt radio devices and accompanying technical and operational conditions.

1. Amending Clause 1, 5, 7, 11 and 15 of Article 2 as below:

a. Amending Clause 1 as below:

“1. Short Range Device is the radio transmitter or transceiver which provides either unidirectional or bidirectional communication and have low capability of causing harmful interference to other radio equipment. Types of Short Range Devices listed at No. 1 of Appendix 1 issued together this Circular”.

b. Amending Clause 5 as below:

“5. RFID – Radio Frequency Identification

RFID uses radio waves to automatically identify and track goods, people or animals and have other applications. The RFID system includes two main different components which are connected to each other by means of radio interface:

- Radio Frequency Tag has an electronic chip with or without power source and is attached to the object to be identified. Information about the identified object shall be stored on the electronic

chip.

- The radio frequency reader (RF Reader) transmits the signal at a determined frequency to activate the RF tag and the RF Tag transmits the signal. The RF reader shall receive and transmit response from the RF tag to the data processing system.

RFID is used in the fields of distribution, transportation and retailing, health care services, traffic or used in mobile applications (example smart advertisements). RFID device specified in this Circular excluding Electronic toll Connection Equipment using RFID Technology with frequency band 920-923 MHz with output power over 500mW ERP.”

c. Amending Clause 7 as below:

“7. Wireless Audio Device

Wireless Audio Device includes devices that use radio waves to transmit sound in a short distance. Some typical Wireless Audio devices: Wireless lavalier microphone, wireless handset microphone, wireless earphones, personal FM transmitter, hearing aids.

Short-range wireless audio device specified in this Circular does not include wireless audio transmission equipment operating in frequency band 470-694 MHz with output power over 30mW ERP serving professional activities in the field of radio and television.

d. Amending Clause 11 as below:

“11. Wireless Video Transmitter/Transceiver

Wireless Video Transmitter is used to send image data (or image data and audio) to the processing system by means of radio interface.

Typical of Wireless Video Transmitters: wireless webcam, wireless camera and wireless video transmitters through computer USB port.”

d. Amending Clause 15 as below:

“15. Automotive Radar or Radar Sensor or Road transport and Traffic Telematics are short-range radar that is used in traffic communication applications (road or rail) such as cruise control, detection, warning and avoidance of collisions between vehicles and surrounding objects.

2. Amending, supplementing the content of Article 4 as below:

“1. The radio devices in the List is exempted a license of radio frequency registration and must satisfy general requirements specified in Article 5 herein and corresponding technical and operational conditions mentioned in Appendix 2-19 enclosed herewith.

2. Short Range Devices in the List but does not satisfy general requirements about frequency conditions and technical conditions specified in this Circular shall not be used in Vietnam.

3. Short-range Devices can operate at different output power or different frequency bands or have a wide range of operating frequencies, in some cases not in accordance with the provisions of the Circular, Organizations or Individual only allowed to use, manufacture, import for using in Vietnam when setting up fixed parameters of operating frequencies and output power according to the provisions of this Circular. Related organizations and individuals shall take full responsibility if they install parameters on the operating frequency and output power which are inconsistent with the provisions of this Circular.”

3. Supplementing Clause 1a of Article 6 about Transitional clause as below:

“1a. Related Organizations and Individuals use, manufacture, import for using in Vietnam Radio

Frequency Identification Devices (RFID) that operating 866-868 MHz band before effective day of this Circular shall continue to be used but must be immediately stopped when causing harmful interference to radio equipment which has a license to use radio frequency.”

Article 2. Amending and supplementing the Annexes of Circular No. 46/2016/TT-BTTTT as Annex A attached to this Circular.

Article 3: Implementation

1. This Circular shall take effect as from February 12, 2019.
2. Chief of Office, Director of the Authority of Radio Frequency Management, heads of affiliates of Ministry of Information and Communications, and relevant organizations and individuals shall implement this Circular.
3. In the course of implementation, if any problem arises, organizations and individuals should promptly report it to the Ministry of Information and Communications (Authority of Radio Frequency) for guidance or consideration, amendment and supplement.

To:

- Prime Minister, Deputy Prime Ministers (for report);
- Office of the General Secretary;
- Office of the Party Central Committee;
- Office of the President;
- Congress office;
- The Government's Ministries and ministerial-level agencies;
- The Supreme People's Procures of Viet Nam;
- The Supreme People's Court;
- State Audit Office of Viet Nam;
- People's Committees of provinces and centrally-run cities;
- Department of Information and Communication of provinces and centrally-run cities;
- Ministry of Information and Communications: ministers and deputy ministers, affiliated agencies and units, e-Portal;
- Department of Legal Document Inspection - Ministry of Justice;
- Announcement;
- Government Portal;
- Save: VT, CTS.250.

**THE MINISTER OF
INFORMATION AND
COMMUNICATIONS**

NGUYEN MANH HUNG

APPENDIX A

**AMENDING, SUPPLEMENTING A NUMBER OF APPENDIXES OF CIRCULAR
NO.46/2016/TT-BTTTT**

(Enclosed with Circular No.18/2018/TT-BTTTT dated December 20th 2018 by Minister of Information and Communication)

1. Amending point 1.13 Appendix 1 and supplement point 1.15 Appendix 1 as followings:

NO	Type of radio device
1.13	Radar device used in traffic
1.15	Short range device used in connection between ships and railways.

2. Supplementing No.3a, 6a, 8a, 10a, 20a, 41a, 51a and amending No. 39, 54 và 55 at Appendix 2 as followings:

a) Supplementing No.3a, 6a, 8a, 10a, 20a, 41a, 51a as following:

No	Frequency Band	Type of radio device or application	Main emission	Spurious emission
	A	B	C	D
3a.	148,5 ÷ 190 kHz	Inductive Loop (used in medical)	≤ 30 dBμA/m at distance of 10 m	According to spurious emission limit 1
	148,5 ÷ 190 kHz	Inductive Loop	≤ -15 dBμA/m at distance of 10 m (inspurious emission bandwidth 10 kHz)	According to spurious emission limit 1
6a.	3.234 ÷ 5.234 kHz	Short range device used in connection between ships and railways	≤ 9 dBμA/m do at distance of 10 m	According to spurious emission limit 1a
8a.	10.200 ÷ 11.000 kHz	Inductive Loop	≤ 9 dBμA/m at distance of 10 m	According to spurious emission limit 1
10a.	26.957 ÷ 27.283 kHz	Short range device used in connection between ships and railways	≤ 42 dBμA/m at distance of 10 m	According to spurious emission limit 1a
20a.	121,5 MHz	Radio float device with emergency position indicator (EPIRB) (equipped with radio navigation	≤ 100 mW ERPEP (Effective peak emission power)	According to spurious emission limit 11

		feature at 121,5 MHz)		
41a.	1795 ÷ 1800 MHz	Wireless Audio Devices	≤ 20 mW EIRP; ≤ 50 mW EIRP (wireless audio devices put on shirt)	According to spurious emission limit 2
51a.	24 ÷ 24,25 GHz	Radar devices used in traffic	≤ 100 mW EIRP	According to spurious emission limit 7

b) Amending No.39, 54 and 55 as followings:

No	Frequency Band	Type of radio device or application	Main emission	Spurious emission
	A	B	C	D
39.	918 ÷ 923 MHz	Radio Frequency Identification (RFID)	≤ 500 mW ERP	According to spurious emission limit 2
54.	76 ÷ 77 GHz	Radar devices used in traffic	≤ 316,23 W EIRP (in bandwidth 50 MHz)	According to spurious emission limit 7
55.	77 ÷ 81 GHz	Radar devices used in traffic	≤ 316,23 W EIRP (in bandwidth 50 MHz) and ≤ 0,5 mW/MHz EIRP	According to spurious emission limit 7

3. Articles 2 of Appendix 2 are supplemented by following point 2.1a and 2.11:

a) Supplementing point 2.1a of Appendix 2 as followings:

“2.1a Spurious emission limit 1a:

Frequency (f)	Limit (at distance of 10m)
9 kHz ≤ f < 150 kHz	44 dBμA/m at 9 kHz and reduce to 19 dBμA/m at 150 kHz.
150 kHz ≤ f < 30 MHz	54 dBμA/m at 150 kHz and reduce to 4 dBμA/m at 30 MHz.
30 MHz ≤ f < 1 GHz	79 dBμV/m at 30 MHz and reduce to 54 dBμV/m at 1 GHz.

b) Supplementing point 2.11 of Appendix 2 as followings:

“2.11 Spurious emission limit 11:

Frequency (f)	Limit
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108 MHz $\leq f \leq$ 137 MHz; 156 MHz $\leq f \leq$ 162 MHz; 406, 0 MHz $\leq f \leq$ 406,1 MHz; 450 MHz $\leq f \leq$ 470 MHz.	-16 dBm (25 μ W)
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4. Removing 866 \div 868 MHz frequency band with corresponding technical and operational conditions at Appendix 2 and Appendix 6.

5. Removing the Note (*) at Appendix 2.

6. Removing the Note (*) at Appendix 2.

7. Supplementing 1795 \div 1800 MHz frequency band with corresponding technical and operational conditions at Appendix 8 as followings:

Frequency band	Main emission	Spurious emission
1795 \div 1800 MHz	\leq 20 mW EIRP; \leq 50 mW EIRP (wireless audio devices put on shirt)	According to spurious emission limit 2

8. Amending Appendix 15 name and add 24 \div 24,25 GHz band with corresponding technical and operational conditions at Appendix 15 as followings:

a) Amending Appendix 15 as “**TECHNICAL AND OPERATIONAL CONDITIONS APPLIED TO LICENSE-EXEMPT RADAR DEVICE USED IN TRAFFIC**”.

b) Supplementing 24 \div 24,25 GHz frequency band with corresponding technical and operational conditions as followings:

Frequency band	Main emission	Spurious emission
24 \div 24,25 GHz	\leq 100 mW EIRP	According to spurious emission limit 7

9. Supplementing 148,5 \div 190 kHz, 10.200 \div 11.000 kHz frequency bands with corresponding technical and operational conditions at Appendix 16 as followings:

Frequency band	Main emission	Spurious emission	Other conditions
148,5 \div 190 kHz	\leq 30 dB μ A/m at distance of 10m.	According to spurious emission limit 1	- Used in medical information field. - Devices must be guaranteed to operate with Duty cycle no more

			than 10%
148,5 ÷ 190 kHz	≤ -15 dB μ A/m at distance of 10m (in bandwidth 10 kHz)	According to spurious emission limit 1	
10.200 ÷ 11.000 kHz	≤ 9 dB μ A/m at distance of 10m	According to spurious emission limit 1	

10. Supplementing Appendix 16A as following:

“APPENDIX 16A

TECHNICAL AND OPERATIONAL CONDITIONS APPLIED TO SHORT RANGE DEVICE USED IN CONNECTION BETWEEN SHIPS AND RAILWAYS

(Enclosed with Circular No.46/2016/TT-BTTTT dated December 26th 2016 by Minister of Information and Communication)

Frequency band	Phát xạ chính	Phát xạ giả	Other conditions
3.234 ÷ 5.234 kHz	≤ 9 dB μ A/m at distance of 10m	According to spurious emission limit 1a	- Used in the field of railway information, connection between ships and railways. - Devices must be guaranteed to operate with Duty cycle no more than 10%.
26.957 ÷ 27.283 kHz	≤ 42 dB μ A/m at distance of 10m	According to spurious emission limit 1a	- Used in the field of railway information, connection between ships and railways. - Center frequency is 27,095 MHz.

11. Amending and supplementing Appendix 19 as below:

“Appendix 19

**TECHNICAL AND OPERATIONAL CONDITIONS APPLIED TO RADIO DEVICES
USED FOR MARINE SAFETY AND RESCUE PURPOSES**

*(Enclosed with the Circular No. 46/2016/TT-BTTTT dated December 26, 2016 by Minister of
Information and Communications*

Frequency band	Main emission	Spurious emission	Type of radio device	Other conditions
156.025 ÷ 162.025 MHz (*)	≤ 7,7 W ERP (12,5 W EIRP)	According to spurious emission limit 9	Automatic Identification System (AIS). (**)	Organizations, individuals using device are responsible for setting, providing related identification information and data according to the regulations of the law.
406,0 ÷ 406,1 MHz	≤ 12,2 W ERP	<p>≥ 20 dBc at frequency offset from ± 3 kHz to ± 7 kHz in comparison to center frequency of carrier frequency;</p> <p>≥ 30 dBc at frequency offset from ± 7 kHz to ± 12 kHz in comparison to center frequency of carrier frequency;</p> <p>≥ 35 dBc at frequency offset from ± 12 kHz to ± 24 kHz in comparison to center frequency of carrier frequency;</p>	Emergency Position Indicating Radio Beacon (EPIRB). (**)	<p>Organizations, individuals using device are responsible for setting, providing related identification information and data according to the regulations of the law.</p> <p>- Emission method on 121.5MHz frequency: A3X. This frequency band is used for radio navigation purpose supporting for EPIRB device</p>

		≥ 40 dBc at frequency offset of -24 kHz in comparison to center frequency of carrier frequency to 406,0 MHz frequency and at frequency offset of at frequency offset of +24 kHz in comparison to center frequency of carrier frequency to 406,1 MHz frequency.		
121,5 MHz	≤ 100 mW ERPEP	According to spurious emission limit 11		
9200 ÷ 9500 MHz	≥ 400 mW EIRP	Not applicable	Search and Rescue Radar Transponder (SART). ^(**)	
161,9625 ÷ 161,9875 MHz; 162,0125 ÷ 162,0375 MHz	$\leq 7,7$ W ERP (12,5 W EIRP)	According to spurious emission limit 10	AIS Search and Rescue Radar Transponder (AIS-SART) ^(**)	

^(*): International default operating frequency: AIS1 (161.9625 ÷ 161.9875 MHz), AIS2 (162.0125 ÷ 162.0375 MHz).

^(**): In case organizations, individuals needs to be granted a radio frequency use licenses for EPIRB, AIS, SART, AIS-SART equipment, the procedures for granting radio frequency use licenses shall be carried out in accordance with law.