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Based on the results of a public consultation held under Section 130 of the Act No. 127/2005 Coll., on electronic communications and on amendment to certain related acts (The Electronic Communications Act), as amended (hereinafter "the Act") and under the Act No. 500/2004 Coll., the Administrative Regulations, as amended, and on the basis of the decision of the Council of the Czech Telecommunications Office (hereinafter "the Office") under Section 107(9)(b)(2) of the Act and in order to implement Sections 9 and 12 of the Act, the Office as the appropriate state administration body under Section 108(1)(b) of the Act hereby issues this Measure of General Nature

General Authorisation No. VO-R/10/07.2021-8 for the use of radio frequencies and for the operation of short range devices.

# Article 1 Introductory provisions

The device operating conditions<sup>1</sup>),<sup>2</sup>) related to the use of radio frequencies and to the operation of transmitting radio equipment of short range devices<sup>3</sup>) (hereinafter the "device") by natural persons or legal entities (hereinafter the "user") are laid down in the Act and in this General Authorisation under Section 10(1) of the Act.<sup>4</sup>)

### Article 2 Common specific conditions

The specific conditions related to Section 10(1)(m) are as follows:

- (1) The user can use radio frequencies and operate the device without an individual authorisation for the use of radio frequencies under conditions defined in Articles 3 to 15 for individual types of the devices.
- (2) The devices may be operated only with a built-in antenna or an antenna prescribed by the manufacturer.<sup>5</sup>) The devices shall not be operated with additional high-frequency power amplifiers and/or with frequency converters.

1) Sections 73 and 74 of the Act.

European harmonized standards referred to in particular articles of this General Authorisation, applied under Act No. 90/2016 Coll., on conformity assessment of products when made available on the market, and Government Order No. 426/2016 Coll., on the assessment of conformity of radio equipment when made available on the market. The ETSI standards are available at www.etsi.org.

<sup>3)</sup> The term Short Range Device (SRD) is used for a device typically with low level of harmful interference due to low transmitting power and thus communicating in short range. The use of radio frequencies by Short Range Devices is not considered as radiocommunication service in the meaning of Chapter 1, Section III. (Radiocommunication services) of the Frequency Band Allocations Plan (National Table of Frequency Allocations) of 29 November 2017, Annex to the Decree No. 105/2010 Coll., as amended.

<sup>&</sup>lt;sup>4</sup>) This General Authorisation is based on the harmonisation documents of the European Commission and the European Conference of Postal and Telecommunications Administrations (CEPT) listed in Annex 1.

<sup>5)</sup> Section 3(d) of the Act No. 90/2016 Coll., on conformity assessment of products when made available on the market.

- (3) The devices are operated on shared frequencies.
- (4) The devices shall not cause harmful interference to the stations of radiocommunication services which use the radio frequencies according to the Frequency Band Allocations Plan and have no protection from the harmful interference caused by these stations. They also have no protection from the harmful interference caused by other devices which have already been put into operation. Interference issues, if any, are settled by a mutual agreement of users.
  - (5) The devices may be neither electrically nor mechanically modified.
- (6) Unless indicated otherwise, the values of the radiated power, alternatively of the magnetic field intensity or spectral density, occupied bandwidth and duty cycle specified in this General Authorisation are the maximal values and shall not be exceeded in any operating mode of the equipment. Nevertheless, lower values can be used.
- (7) In case the occupied bandwidth is not defined for the given category of device and indicated frequency band, the entire stated frequency band can be used for transfer of signals. In case that the duty cycle<sup>6</sup>) for given category of device and indicated frequency band is not defined, the duty cycle up to 100% can be used.
- (8) The adjacent frequency bands stated in this General Authorisation can be used as a single frequency band under condition that the specific conditions valid for all these adjacent bands are fulfilled.

# Article 3 Specific conditions for non-specified short range devices

(1) According to this Article, all kinds of devices which fulfil the technical conditions as specified for a given frequency band can be operated regardless of their use or purpose. The typical usages include, for example, telemetry, tele-command, alarms or data transmission in general.

#### (2) The technical parameters of the devices are:

Ref.	Frequency band	Radiated power, or magnetic field intensity	Occupied bandwidth	Duty cycle <sup>6</sup> )	Other conditions according to Paragraph	Harmonized standard <sup>7</sup> )
а	13.553–13.567 MHz	10 mW e.r.p.			9	300 330
b	26.957–27.283 MHz	10 mW e.r.p.			9	
b1	26.995; 27.045; 27.095; 27.145; 27.195 MHz	100 mW e.r.p.	10 kHz	0.1%	9	
С	40.66–40.7 MHz	10 mW e.r.p.			9	
d	138.2–138.45 MHz	10 mW e.r.p.		1.0%		300 220
е	169.4–169.475 MHz	500 mW e.r.p.	50 kHz	1.0%		
e1	169.4–169.4875 MHz	10 mW e.r.p.		Paragraph 7 or 0.1%	7	

buty cycle is the ratio of time when the device transmits actively in any one-hour period, unless it is indicated otherwise in the relevant Article. Detailed definition of duty cycle can be found in ERC-REC 70-03<sup>4</sup>) and in harmonised standards<sup>2</sup>).

<sup>&</sup>lt;sup>7</sup>) The full headings of the ETSI standards are listed in Annex 2.

e2 e3	169.4875–169.5875 MHz 169 5875–169.8125 MHz 433.05–434.79 MHz	10 mW e.r.p.  10 mW e.r.p.  10 mW e.r.p.  1 mW e.r.p.; for wideband		Paragraph 7 or during 6:00–24:00 0.001% and during 0:00–6:00 0.1% Paragraph 7 or 0.1%	7 7 3, 9	
f1	433.05–434.79 MHz	channels of width > 250 kHz power spectral density is limited to -13 dBm/10 kHz			3, 8	
f2	433.04–434.79 MHz	10 mW e.r.p.	25 kHz		3, 8	
g	863.0–870.0 MHz	25 mW e.r.p.	see Paragraph 4	Paragraph 4, 7 or 0.1%8)	3, 4, 7, 8 (FHSS <sup>9</sup> ))	
g1	862.0-863.0 MHz	25 mW e.r.p.	350 kHz	0,1%	3, 8	300 220
g2	863.0–870.0 MHz	25 mW e.r.p.; spectral density is limited to – 4.5 dBm/100 kHz (see Paragraph 5)		Paragraph 5, 7 or 0.1%8)	3, 5, 7, 8 (DSSS <sup>9</sup> ) – see Paragraph 5)	
g3	863.0–870.0 MHz	25 mW e.r.p.	see Paragraph 6	Paragraph 6, 7 or ≤ 0.1% <sup>8</sup> )	3, 6, 7, 8	
g4	863.0–870.0 MHz	25 mW e.r.p.		Paragraph. 7 or 1,0%8)	3, 7	
<i>g</i> 5	868.0–868.6 MHz	25 mW e.r.p.		Paragraph 7 or 1.0%8)	3, 7, 8	
g6	868.7–869.2 MHz	25 mW e.r.p.		Paragraph 7 or 0.1%8)	3, 7, 8	
g7	869.4–869.65 MHz	500 mW e.r.p.	25 kHz <sup>10</sup> )	Paragraph 7 or 10%8)	3, 7, 8	
g8	869.7–870.0 MHz	5 mW e.r.p.			3, 7, 8	
g9	869.7–870.0 MHz	25 mW e.r.p.		Paragraph 7 or 0.1%8)	3, 7, 8	
h1	870–875.8 MHz	25 mW e.r.p.	600 kHz	1%	3, 8	
h2	870–876 MHz	25 mW e.r.p.	200 kHz	0.1%	3, 8	
i1	915–921 MHz	25 mW e.r.p.	200 kHz	0.1%	3, 8	
i2	915.2–920.8 MHz	25 mW e.i.r.p., see Paragraph 10	600 kHz, see Paragraph 10	1%	3, 8, 10	

The duty cycle is not limited when using LBT technology, (Listen Before Talk – transmission only on request based on reception).
 Frequency Hopping Spread Spectrum, FHSS; Direct Sequence Spread Spectrum, DSSS.
 The entire frequency band can also be used as one channel for the transmission of high-speed data.

j	2400–2483.5 MHz	25 mW e.i.r.p.	9	
k	5725–5875 MHz	25 mW e.i.r.p.	9	300 440
1	24.0–24.25 GHz	100 mW e.i.r.p.	9	300 440
m	57–64 GHz	100 mW e.i.r.p., transmitting output power 10 dBm	9	
m1	61.0–61.5 GHz	100 mW e.i.r.p.	9	305 550
n	122–123 GHz	100 mW e.i.r.p.	9	
o	244–246 GHz	100 mW e.i.r.p.	9	

- (3) The devices in the frequency bands f, f1, f2, g, g1 to g9 shall not be used for the transmission of analogue audio signals except for the transmission of voice. The devices in the frequency bands f1, f2, g6 can be used for the transmission of voice, subject to implementation of advanced techniques mitigating interference.
- (4) In the frequency band g, the devices with FHSS modulation with the occupied band width of  $\leq$  100 kHz can be operated, whereas occupied band width of 100 kHz enabling partial division to 50 kHz or 25 kHz is preferred. Duty cycle applies to the entire transmission in the given band and it can be increased up to 1% for devices operated only in the 865–868 MHz frequency band.
  - (5) In the frequency band g2, it is allowed to operate:
- the devices with DSSS modulation or other wideband modulation except for FHSS without restriction of occupied bandwidth; for these devices the spectral power density is limited to 4.5 dBm/100 kHz in case of using the entire frequency band, to +6.2 dBm/100 kHz in case of using only the 865–868 MHz frequency sub-band and to +0.8 dBm/100 kHz in case of using only the 865–870 MHz;
- the narrowband devices with the occupied bandwidth ≤ 100 kHz. Duty cycle relates to the entire transmission in the given band and it can be increased up to 1% only for devices operated only in the 865–868 MHz frequency sub-band.
- (6) In the frequency band g3, the narrowband devices with the occupied bandwidth of  $\leq 100$  kHz can be operated, whereas the occupied bandwidth of 100 kHz enabling partial division to 50 kHz or 25 kHz is preferred.
- (7) In the frequency bands e1, e2, e3, g, g2 to g9, the techniques for access to the spectrum and to mitigate interference, which provide at least an equal effect as the techniques described in harmonized standards,<sup>2</sup>) shall be used; or it is possible to use the indicated maximum values of the duty cycle.
- (8) Transmission of digital video information is not allowed in the bands f1, f2, f6. The transmission of analogue video information is not allowed in the bands g to i2.
- (9) The frequency bands *a*, *b*, *c*, *f*, *j*, *k*, *l*, *m*, *n*, *o* may be used also for industrial, scientific and medical purpose (the so-called ISM bands), i.e. the use of radio frequencies for purposes other than information transmission, e.g. technological heating, lighting, cooking, scientific experiments etc. The harmful interference, which thus arises, shall be minimized.
- (10) In the frequency band i2, the channels with mean frequencies of 916.3 MHz, 917.5 MHz, 918.7 MHz and 919.9 MHz can be used with parameters: max. e.r.p. = 100 mW, occupied bandwidth  $\leq$  400 kHz.

# Article 4 Specific conditions for Transport and Traffic Telematics (TTT<sup>11</sup>))

(1) This Article relates only to devices used in the area of railway transport or in road, shipping or air transport depending on relevant technical restrictions and also the devices for traffic management, navigation, mobility management and inside intelligent transportation systems (ITS). They are used typically as interface among different modes of transport, for communication between vehicles (e.g. communication car-to-car), communication between vehicles and fixed placements (e.g. car-to-infrastructure) and for communication between system and users as well.

#### (2) The technical parameters of the devices are:

Ref.	Frequency band	Radiated power	Other conditions	Harmonized standard <sup>7</sup> )
а	984–7484 kHz	9 dBμA/m at the distance of 10 m	railway devices of EUROBALISE system; transmission only after reception of signal from train; spectral mask according to standard 302 608 <sup>7</sup> )	302 608
b	7.3–23.0 MHz	–7 dBμA/m at the distance of 10 m	railway devices of EUROLOOP system; transmission only in presence of train	302 609
С	27.09–27.1 MHz	42 dBμA/m at the distance of 10 m	railway devices of EUROBALISE, EUROLOOP system; spectral mask according to standard 302 6087)	302 608
d	2447.0; 2448.5; 2450.0; 2451.5; 2453.0 MHz	500 mW e.i.r.p.	railways device of AVI system; transmission only in presence of train	300 761
e1	5.795–5.805 GHz	2 W or 8 W e.i.r.p. <sup>12</sup> )	transmission into vehicles, in particular for toll systems, occupied bandwidth 5 MHz or 10 MHz <sup>13</sup> )	300 674
e2	5.805–5.815 GHz	2 W or 8 W e.i.r.p. <sup>12</sup> )	occupied bandwidth 5 MHz or 10 MHz <sup>13</sup> )	300 674
еЗ	5.855–5.875 GHz	33 dBm e.i.r.p., 23 dBm/MHz density e.i.r.p. and range of Transmit Power Control (TPC) 30 dB	car-to-car, car-to-infrastructure and infrastructure-to-car systems only; see Paragraph 4	302 571
e4	5.875–5.905 GHz	2 W e.i.r.p. see Paragraph 5; the spectral density is limited to 23 dBm/MHz	Intelligent transportation systems; see Paragraph 4	302 571
f1	24.05–24.075 GHz	100 mW e.i.r.p.		
f2	24.075–24.15 GHz	0.1 mW e.i.r.p.		302 858
f3	24.075–24.15 GHz	100 mW e.i.r.p. see Paragraph 5	automotive radars; see Paragraph 4	

<sup>&</sup>lt;sup>11</sup>) Transport and Traffic Telematics, TTT.

12) The data transmission at 1 Mbit/s with power of 8 W is allowed pursuant to the standard. The data transmission at 500 kbit/s downlink and 250 kbit/s uplink with power of 2 W is allowed pursuant to the standard.

<sup>&</sup>lt;sup>13</sup>) For channel spacing of 5 MHz, the following channels are recommended: 5797.5 MHz, 5802.5 MHz, 5807.5 MHz and 5812.5 MHz; for channel spacing of 10 MHz, the following channels are recommended: 5800 MHz and 5810 MHz.

f4	24.15–24.25 GHz	100 mW e.i.r.p.		302 858
f5	21.65–24.25 GHz	see Paragraph 3	only automotive radars in vehicles registered in the EU member states, before 30 June 2013; see Paragraph 3	302 288
f6	24.25–24.495 GHz	20 dBm e.i.r.p. see Paragraph 6	automotive radars; see Paragraphs 4 and 5	
f7	24.25–26.65 GHz	see Paragraph 3	only automotive radars in vehicles registered in EU member states before 31 December 2017; see Paragraph 3	302 288
g	63–64 GHz	40 dBm e.i.r.p.	car-to-car, car-to-infrastructure and infrastructure-to-car systems; only devices made available on the market before 1 January 2020	302 686
g1	63.72–65.88 GHz	40 dBm e.i.r.p.	car-to-car, car-to-infrastructure and infrastructure-to-car systems	302 686
h1	76–77 GHz	55 dBm e.i.r.p. (peak power) and 50 dBm e.i.r.p. (mean power); 23.5 dBm e.i.r.p. (mean power) for pulse radars	land automotive systems and infrastructure systems	301 091
h2	76–77 GHz	30 dBm e.i.r.p. (peak power) and mean spectral power density 3 dBm/MHz	obstacle detection systems for rotorcraft use; <sup>14</sup> ) duty cycle ≤ 56% during 1 second	303 360
i	77–81 GHz	55 dBm e.i.r.p. (peak power); spectral power density –3 dBm/MHz, outside vehicle – 9 dBm/MHz	land automotive systems	302 264

- (3) The frequency bands f5 and f7 are used as follows: for the ultra-wide band (UWB) short range automotive radar equipment with the maximum mean power density of -41.3 dBm/MHz of effective isotropic radiated power (e.i.r.p.) and with the peak power density of 0 dBm/50 MHz e.i.r.p., except for frequencies lower than 22 GHz, where the maximum mean density is limited to -61.3 dBm/MHz e.i.r.p. The radio spectrum in the 24.05-24.25 GHz frequency band is defined for the narrowband transmission mode/component consisting of an unmodulated carrier wave with the maximum peak power of 20 dBm/MHz e.i.r.p. and with a duty cycle not exceeding 10% for transmission with the peak level higher than -10 dBm e.i.r.p. The transmission in the 23.6- 4.0 GHz frequency band under the angle of 30° or more over the horizontal level shall be attenuated at least by 25 dB for vehicle short range radar equipment made available on the market before the year 2010 and at least by 30 dB for the equipment made available on the market later on.
- (4) In the bands e3, e4, f3 and f6, the mitigation techniques which provide at least an equal effect as the techniques described in harmonized standards<sup>2</sup>) shall be used.
- (5) The order of frequencies in the e4 band is based on blocks of 10 MHZ size and begins at the lower border of the band on frequency 5 875 MHz. The individual parts of this band can be utilized as follows:
- Sub-band 5 875-5 915 MHz is designated preferentially for ITS applications in the road transport:
- Sub-band 5 915-5 925 MHz is designated preferentially for Urban Rail ITS applications; the

<sup>&</sup>lt;sup>14)</sup> Rotorcrafts are defined by international aviation regulations as EASA CS-27 and CS-29 (or JAR-27 and JAR-29 for previous certificate).

utilization for ITS in road transport in the sub-ban is limited only to applications using connectivity between infrastructure and car with respect to that this use must not cause harmful interference of the Urban Rail ITS;

- Sub-band 5 925-5 935 MHz is designated only for Urban Rail ITS applications.
- (6) In the band *f6*, the maximal duty cycles and ranges of the frequency modulation apply pursuant to harmonized standards.<sup>2</sup>) The radiated power is limited as follows: 20 dBm e.i.r.p. (the radars oriented in the direction of driving, duty cycle 5.6%/s/25 MHz); 16 dBm e.i.r.p. (the radars oriented against the direction of driving, duty cycle 2.3%/s/25 MHz); –11 dBm e.i.r.p. (other radars in the sub-band 24.25–24.495 GHz, duty cycle 0.25%/s/25 MHz; –8 dBm e.i.r.p. (other radars in the sub-band 24.495–24.5 GHz, duty cycle 1.5%/s/25 MHz).

# Article 5 Specific conditions for tracking and data collection equipment

(1) According to this Article, devices used for tracking and detection of persons and items including emergency detection of buried victims and valuable items and for remote measuring devices <sup>15</sup>) and data collection can be operated only. The Paragraph 3 applies to a data transfer into and from non-implantable medical devices for the purpose of monitoring, diagnosing, and treating patients in healthcare facilities or patient's home as prescribed by authorised healthcare professionals. Frequencies designated to data networks for tracking and data collection are indicated in Article 15.

#### (2) The technical parameters of the devices for tracking and data collection are:

Ref.	Frequency band	Radiated power, or magnetic field intensity	Other conditions	Harmonized standard <sup>7</sup> )
а	442.2–450 kHz	7 dBμA/m /10 m	devices for detection of people and collision avoidance	300 330
b	456.9–457.1 kHz	7 dBμA/m /10 m	devices designated only for emergency detection of buried victims and valuable items	300 718
С	169.4–169.475 MHz	500 mW e.r.p.	measuring devices only; <sup>15</sup> ) occupied bandwidth 50 kHz, duty cycle <sup>6</sup> ) 10%	300 220

### (3) The technical parameters of the devices for medical data collection are:

Ref.	Frequency band	Radiated power, or magnetic field intensity	Other conditions	Harmonized standard <sup>7</sup> )
d	430–440 MHz	–50 dBm/100 kHz <sup>16</sup> ) e.r.p. and simultaneously – 40 dBm/10 MHz <sup>16</sup> )	UPL-WMCE devices only <sup>17</sup> )	
e1	2483.5–2500 MHz	10 mW e.i.r.p.	MBANS devices only; <sup>18</sup> ) dutycycle <sup>6</sup> ) < 2% see Paragraphs 3, 4	303 203
e2	2483.5–2500 MHz	1 mW e.i.r.p.	MBANS devices only; <sup>18</sup> ) duty cycle <sup>6</sup> ) < 10% see Paragraphs 3, 4	303 203

(3) The frequency bands e1, e2 are designated for MBANS<sup>18</sup>) operated inside buildings (indoor use), modulated bandwidth is  $\leq 3$  MHz. The frequency band e1 is designated for the

<sup>17</sup>) Ultra-Low Power Wireless Medical Capsule Endoscopy, ULP-WMCE.

<sup>15)</sup> The term "measuring devices" is understood as the radio devices, parts of two-way radiocommunication systems, which enable remote monitoring, measurement and data transfer in the framework of intelligent networks infrastructure, e.g. networks for distribution of electricity, gas and water.

<sup>&</sup>lt;sup>16</sup>) The value is measured outside of the patient's body.

Medical Body Area Network Systems, MBANS – the radio network in proximity of patient's body used for data collection from sensors, which monitor his/her vital functions including transferring this data for monitoring or processing.

operation of MBANS<sup>18</sup>) devices in health-care facilities, the frequency band *e2* is designated for the operation of MBANS<sup>18</sup>) devices in homes of the patients.

(4) In the frequency bands *e1* and *e2* the devices shall use the techniques of access to the spectrum and mitigation of interference, which provide at least an equal effect as the techniques described in harmonized standards.<sup>2</sup>)

# Article 6 Specific conditions for radiodetermination equipment

- (1) According to this Article, devices used for determining the position, velocity and/or other characteristics of an object, or for obtaining of information relating to these parameters by means of radio waves propagation can be operated only. This Article does not apply to devices using point-to-point or point-to-multipoint communications.<sup>19</sup>)
  - (2) The technical parameters of the devices for radiodetermination are:

Ref.	Frequency band	Radiated power, or magnetic field intensity	Other conditions	Harmonized standard <sup>7</sup> )
а	9200–9975 MHz	25 mW e.i.r.p.		
b	13.4–14.0 GHz	25 mW e.i.r.p.		300 440
С	17.1–17.3 GHz	+26 dBm e.i.r.p.	see Paragraph 5	

(3) Technical parameters of the tanks level probing radars are:

Ref.	Frequency band	Radiated power, or magnetic field intensity	Other conditions according to Paragraph	Harmonized standard <sup>7</sup> )
g	4.5–7.0 GHz	+24 dBm e.i.r.p.	5, 6	302 372
h	6.0–8.5 GHz	7 dBm/50 MHz peak e.i.r.p. and –33 dBm/MHz mean e.i.r.p.	5	302 729
i	8.5–10.6 GHz	+30 dBm e.i.r.p.	5, 6	302 372
j1	24.05–26.5 GHz	26 dBm/50 MHz peak e.i.r.p. and –14 dBm/MHz mean e.i.r.p.	5	302 729
j2	24.05–27 GHz	43 dBm e.i.r.p.	6	302 372
k1	57–64 GHz	35 dBm/50 MHz peak e.i.r.p. and –2 dBm/MHz mean e.i.r.p.	6	302 729
k2	57–64 GHz	43 dBm e.i.r.p.	6	302 372
11	75–85 GHz	34 dBm/50 MHz peak e.i.r.p. and -3 dBm/MHz mean e.i.r.p.	6	302 729
12	75–85 GHz	43 dBm e.i.r.p.	6	302 372

<sup>&</sup>lt;sup>19</sup>) See Annex 6 of Recommendation ERC/REC 70-03 – Relating to the use of Short Range Devices (SRD), as amended.

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(4) Technical parameters of the ultra-wideband radars designated for imaging of the structure of walls and Earth's surface (GPR/WPR) are:

Ref.	Frequency band	Maximum spectral density e.i.r.p.	Max. peak radiated power	Harmonized standard <sup>7</sup> )
m	30–230 MHz	–65 dBm/MHz	–44.5 dBm/120 kHz (e.r.p.)	
n	230–1000 MHz	–60 dBm/MHz	-37.5 dBm/120 kHz (e.r.p.)	
0	1000–1600 MHz	in the sub-bands 1164–1215 MHz and 1559–1610 MHz: –75 dBm/kHz; in other sub-bands: –65 dBm/MHz	–30 dBm/MHz (e.i.r.p.)	
p	1600–3400 MHz	–51.3 dBm/MHz	-30 dBm/MHz (e.i.r.p.)	302 066
q	3400–5000 MHz	–41.3 dBm/MHz	–30 dBm/MHz (e.i.r.p.)	
r	5000–6000 MHz	–51.3 dBm/MHz	–30 dBm/MHz (e.i.r.p.)	
S	> 6000 MHz	–65 dBm/MHz	–30 dBm/MHz (e.i.r.p.)	

- (5) In the frequency bands c and g to l2, the techniques of access to the spectrum and mitigation of interference, which provide at least an equal effect as the techniques described in harmonized standards<sup>2</sup>) shall be used.
- (6) The frequency bands g, i, j2, k2, l2 are reserved only for tank level probing radars<sup>20</sup>) placed in metal, or ferro-concrete tanks, or similar constructions made from material with comparable attenuation characteristics. The indicated maximal power value is valid for devices placed inside closed tank and corresponds to spectral density 41.3 dBm/MHz e.i.r.p. outside of a testing tank with 500 litres volume.

# Article 7 Specific conditions for alarms

- (1) This Article relates only to devices using radio communication for indicating an alarm at the distant place (alarm systems), or social alarm systems which enable reliable communication for persons in distress. It covers devices with low duty cycle and high reliability which, due to rules setting low total usage of spectrum, can provide highly reliable access to the spectrum and transfers in shared bands.
  - (2) The technical parameters of the devices are:

Ref.	Frequency band	Radiated power	Occupied bandwidth	Duty cycle <sup>6</sup> )	Harmonized standard <sup>7</sup> )
a1	169.48125 MHz	500 mW e.r.p.	12.5 kHz	1% (it does not apply to	
a2	169.59375 MHz	500 mW e.r.p.	12.5 kHz	the social alarm systems)	300 220
b	868.6–868.7 MHz	10 mW e.r.p.	25 kHz <sup>10</sup> )	1%	
С	869.2–869.25 MHz	10 mW e.r.p.	25 kHz	0.1%	
d	869.25-869.3 MHz	10 mW e.r.p.	25 kHz	0.1%	300 220

<sup>&</sup>lt;sup>20</sup>) Tank Level Probing Radar, TLPR.

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е	869.3–869.4 MHz	10 mW e.r.p.	25 kHz	1%
f	869.65-869.7 MHz	25 mW e.r.p.	25 kHz	10%

(3) The frequency band c is reserved only for devices which are part of the social alarm<sup>21</sup>) systems.

#### Article 8

## Specific conditions for equipment for telecommand of cranes, forest machines and other machinery

- (1) This Article applies only to devices for telecommand of cranes, forest machines, industrial scales, railway sidings and for similar use.
  - (2) The technical parameters of the devices are as follows:

Ref.	Frequency band	Radiated power	Occupied bandwidth	Harmonized standard <sup>7</sup> )
а	172.525 MHz; 172.575 MHz; 173.650 MHz; 173.950 MHz	100 mW o r n	12.5 kHz	300 220
b	430.0–430.45 MHz	100 mW e.r.p.		300 220

# Article 9 Specific conditions for equipment with inductive loop

- (1) This Article relates only to devices using magnetic field and devices with inductive loop for short range communication. Typical use of these devices includes car immobilizers, animal identification, alarm systems with inductive loop, cable detection, waste management, personal identification, wireless voice links, access control, proximity sensors, anti-theft systems including radio frequency anti-theft induction systems, data transfer to handheld devices, automatic article identification, wireless control systems and automatic road tolling.
  - (2) Only the inductive loop can be used as the device's external antenna.
- (3) The radio emission of the device with inductive loop in immediate vicinity of the inductive loop is not considered as interference in the sense of the Act.
  - (4) The technical parameters of the devices are:

Ref.	Frequency band	Magnetic field intensity	Other conditions	Harmonized standard <sup>7</sup> )
а	100 Hz – 9 kHz	82 dBμA/m at the distance of 10 m	Antenna size < 1/20 λ	303 348 303 447 303 454 303 660
b	9–90 kHz	72 dBµA/m at the distance of 10 m		
С	90–119 kHz	42 dBμA/m at the distance of 10 m		300 330 303 447
d	119–135 kHz	z 66 dBµA/m at the distance of 10 m		303 447
d1	135–140 kHz	42 dBμA/m at the distance of 10 m		

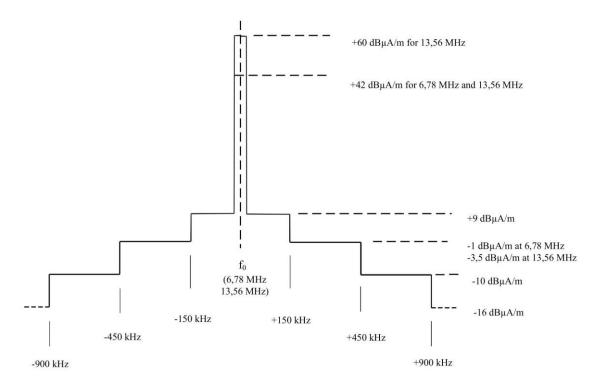
<sup>&</sup>lt;sup>21</sup>) The term "social alarm" is understood as the radiocommunication system which allows reliable communication for a person in distress in confined area to initiate a call for help. The typical use of social alarm includes help to elderly or disabled persons.

d2	140–148.5 kHz	37.7 dBμA/m at the distance of 10 m		300 330
е	148.5–1600 kHz	−5 dBµA/m at the distance of 10 m		300 330 302 536
f	1600–5000 kHz	-15 dBµA/m at the distance of 10 m	see Paragraph 7	300 330
f1	1900–2100 kHz	5 dBµA/m at the distance of 10 m		200 220
f2	3155–3400 kHz	13.5 dBµA/m at the distance of 10 m		300 330
g	5–30 MHz	−20 dBµA/m at the distance of 10 m	see Paragraph 7	
h	6765–6795 kHz	42 dBμA/m at the distance of 10 m	see Paragraph 8	200 220
i	7400–8800 kHz	9 dBµA/m at the distance of 10 m		300 330
j	10.2–11.0 MHz	9 dBμA/m at the distance of 10 m		
k	13.553–13.567 MHz	42 dBμA/m at the distance of 10 m	see Paragraph 8	202
k1	13.553–13.567 MHz	60 dBμA/m at the distance of 10 m	only devices of Electronic Article Surveillance; <sup>22</sup> ) see Paragraph 8	300 330 302 291

- (5) The occupied bandwidth is not prescribed; the entire band can be used.
- (6) For devices with built-in loop antenna, or with loop antenna prescribed by the manufacturer with an area of  $0.05~\text{m}^2$  to  $0.16~\text{m}^2$ , the indicated magnetic field strength value shall be reduced by  $10 \times \log$  (area/0.16 m²); if the area of the loop antenna is smaller than  $0.05~\text{m}^2$ , the magnetic field intensity shall be reduced by 10~dB.
- (7) In the frequency bands f, g, the indicated maximum magnetic field strength relates to the width of the 10 kHz frequency segment. For devices operated in a segment wider than 10 kHz, the total maximum intensity while maintaining the above stated condition shall be -5 dB $\mu$ A/m at the distance of 10 m.
- (8) The devices transmitting in the frequency bands *h*, *k*, *k*1 can radiate in the sub-bands 5.88–7.68 MHz and 12.66–14.46 MHz with magnetic field intensity values at the distance of 10 m as follows:

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<sup>&</sup>lt;sup>22</sup>) Electronic Article Surveillance, EAS.



Article 10 Specific conditions for wireless audio transmission

(1) This Article, relates only to wireless devices for audio transmission which includes, e.g. wireless microphones for professional and consumer usage, wireless loudspeakers, wireless headphones, earpieces (assistive listening devices, i.e. radiocommunication systems which enhance perception of hearing to the hearing-impaired persons), fishing digital receivers, communication means in vehicles or connection links used at concerts. These devices are using radio frequencies with high duty cycle / continuous transmission and rely on low latency.

(2) The technical parameters of the devices are:

Ref.	Frequency band	Radiated power	Occupied bandwidth	Other conditions	Harmonized standard <sup>7</sup> )
а	27.415–27.915 MHz	10 mW e.r.p.	50 kHz		
b1	36.4–36.65 MHz	10 mW e.r.p.	50 kHz		
b2	36.65–38.0 MHz	2 mW e.r.p.	50 kHz	microphones for hearing- impaired and earpieces only	300 422 301 357
<i>b</i> 3	38.0–38.5 MHz	10 mW e.r.p.	200 kHz		
С	87.5–108 MHz	50 nW e.r.p.	200 kHz		300 422 301 357
d1	169.4–169.475 MHz	500 mW e.r.p.	50 kHz	microphones for hearing- impaired and earpieces only	
d2	169.4875–169.5875 MHz	500 mW e.r.p.	50 kHz	microphones for hearing- impaired and earpieces only	300 422
e1	173.3 MHz	50 mW e.r.p.	75 kHz	microphones for hearing- impaired and earpieces only	301 357
e2	173.965–174.015 MHz	2 mW e.r.p.	50 kHz	microphones for hearing- impaired and earpieces only	
f	174–216 MHz	50 mW e.r.p.		see Paragraph 3	

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g	470–694 MHz	50 mW e.r.p.		see Paragraph 3	
i	733–758 MHz	50 mW e.r.p.	see Paragraph 4		
j	786–789 MHz	12 mW e.r.p.		see Paragraph 4	
k1	823–826 MHz	20 mW e.i.r.p.; microphones carried on body 50 mW e.i.r.p.		see Paragraph 5	
k2	826–832 MHz	100 mW e.i.r.p.	see Paragraph 5		
1	863–865 MHz	10 mW e.r.p.			
11	864.8–865 MHz	10 mW e.r.p.	50 kHz	narrow band audio devices <sup>23</sup> )	300 220
m	1785–1804.8 MHz	20 mW e.i.r.p.; microphones carried on body 50 mW e.i.r.p.	see Paragraph 5		300 422 300 357

- (3) The frequency bands *f*, *g*, are preferentially reserved for television broadcasting. Wireless microphones in these bands shall not cause interference to the reception of television signal and they cannot claim protection from interference caused by the television signal.
- (4) The frequency bands *i*, *j* are preferentially reserved for mobile service terrestrial systems able to provide wireless wideband services of electronic communications (mobile networks). Wireless microphones in these bands must not interfere with the operation of these systems and cannot claim protection from interference by the mobile service's signal.
- (5) The conditions for range of spectral block edge masks<sup>24</sup>) valid for devices ensuring programme making and special events<sup>25</sup>) in duplex separation for FDD<sup>26</sup>) mode in the framework of the bands *k1*, *k2,m* are defined in Commission Implementing Decision No. 2014/641/EU of 1 September 2014 on harmonized technical conditions of radio spectrum use by wireless audio programme making and special events equipment (PSME) in the Union.

### Article 11 Specific conditions for radiofrequency identification equipment

(1) This Article relates only to devices for radiofrequency identification (Radio Frequency Identification, RFID) which are tag- and interrogator-based radio communications systems consisting of radio devices (tags) attached to animate or inanimate items and of transmitter / receiver units (interrogators) which activate the tags and receive data back. Typical usage of these devices includes tracking and identification of items, e.g. for Electronic Article Surveillance, <sup>22</sup>) and collecting and transmitting data relating to items equipped with labels to which the tags are attached, which may be either battery-less, battery assisted, or battery powered. The responses from the tag are validated by its interrogator and passed to its host system.

<sup>25</sup>) Programme making and special events, PMSE.

<sup>&</sup>lt;sup>23</sup>) The "narrow band audio devices" mean baby monitors, door systems, etc.

<sup>&</sup>lt;sup>24</sup>) Block edge mask, BEM.

<sup>&</sup>lt;sup>26</sup>) Frequency-Division Duplexing, FDD – the duplex with frequency division.

(2) The technical parameters of the devices are:

Ref.	Frequency band	Radiated power / Magnetic field intensity	Occupied bandwidth	Duty cycle <sup>6</sup> )	Other conditions according to Paragraph	Harmonized standard <sup>7</sup> )
а	400–600 kHz	-8 dBµA/m at the distance of 10 m				
b	13.553–13.567 MHz	60 dBµA/m at the distance of 10 m				300 330
b1	11.81–14.46 MHz	see Paragraph 3			3	
С	865–868 MHz	2 W e.i.r.p.	200 kHz		4, 5, 6, 9	
c1	865–868 MHz	100 mW e.r.p.	200 kHz	see Paragraph 5	7, 8, 9	302 208
c2	865.6-867.6 MHz	2 W e.r.p.	200 kHz		7, 8, 9	302 200
сЗ	867.6–868 MHz	500 mW e.r.p.	200 kHz		7, 8, 9	
d	916.3 MHz, 917.5 MHz, 918.7 MHz	4 W e.r.p.	400 kHz		6, 9	
e1	2446–2454 MHz	500 mW e.i.r.p.				300 440 300 761
e2	2446–2454 MHz	4 W e.i.r.p.		15% in any period of 200 ms	10	300 440

- (3) The spectral mask according to ČSN EN 300 330 applies for devices in the frequency band *b*. This allows to use also frequencies from the band *b*1 with output limits according to this mask.
- (4) Transmission of interrogators in band *c* with 2 W e.r.p is allowed only in four channels with mean frequencies 865.7 MHz, 866.3 MHz, and 867.5 MHz.
- (5) The maximal time of continuous transmission of the interrogator on one channel in frequency band c must not exceed 4 s and the time between two transmission periods on the same channel must be at least 100 ms.
- (6) Transmission in frequency band c and d is possible only if necessary, to make a needed operation, i.e. provided there are RFID labels (tags) present.
- (7) Only equipment made available on the market in the EU member states before 1 January 2018 shall be operated in frequency bands *c1* to *c3*.
- (8) There are 15 channels specified in frequency bands c1 to c3 whose means are set by the formula 864.9 MHz + (0.2 MHz × the channel number). The device can be operated in more partial frequency bands (c1 to c3).
- (9) In frequency bands *c*, *c*1, *c*2, *c*3, *d*, the techniques of access to spectrum and interference mitigation described in European standards<sup>2</sup>) shall be used.

(10) The frequency band *e2* is reserved for use inside buildings only. At the same time, it shall be ensured that at the distance of 10 m from the outer edge of the building, any transmission shall not exceed the equivalent of the electromagnetic field intensity that would be recorded for a device with a radiated power of 500 mW e.i.r.p. located outside the building, if it was measured at the same distance. In case of a complex of buildings (e.g. shops in a shopping mall), the condition of electromagnetic field intensity shall be fulfilled at the distance of 10 m from the border of an area belonging to one user. The device shall use the technology of frequency hopping<sup>27</sup>) for interference mitigation.

### Article 12 Specific conditions for medical implants

- (1) According to this Article, it is possible to operate only active medical implants. This category of devices includes the radio part of active implantable medical devices which are intended for complete or partial implanting to human or animal body by surgical intervention, or by medication, and alternatively peripheral part of these devices.
  - (2) The technical parameters of the devices are:

Ref.	Frequency band	Radiated power / Magnetic field intensity	Duty cycle <sup>6</sup> )	Occupied bandwidth	Other conditions	Harmonized standard <sup>7</sup> )
а	9–315 kHz	30 dBμA/m /10 m	10%	-		302 195
b	315–600 kHz	–5 dBμA/m /10 m	10%	-	for veterinary implants only <sup>28</sup> )	302 536
С	12.5–20 MHz	–7 dBμA/m /10 m I a bandwidth of 10 kHz	10%	-	for veterinary implants only; <sup>28</sup> ) for transmission inside of buildings only	300 330
d	30.0–37.5 MHz	1 mW e.r.p.	10%	-	for Ultra Low Power medical membrane implants for measurement of blood pressure <sup>29</sup> )	302 510
e1	401–402 MHz	25 μW e.r.p.	see Paragraph 3	25 kHz		
e2	402–405 MHz	25 μW e.r.p.		25 kHz, see Paragraph 4	for active implantable medical means only <sup>29</sup> )	301 839 302 537
e3	405–406 MHz	25 μW e.r.p.	see Paragraph 3	25 kHz		
f	2483.5–2500 MHz	10 mW e.i.r.p.	10%	1 MHz	for active implantable medical means only; <sup>29</sup> ) see Paragraph 5	301 559

- (3) The frequency bands e1, e3 are intended only for data transfer devices among active implantable medical devices<sup>29</sup>) and / or devices carried on body and other devices placed outside of the human body and used to transfer individual physiologic data about a patient which are not seen as critical in terms of time. Individual transmitters can combine the adjacent channels for enlargement of the bandwidth up to 100 kHz. The techniques of access to the spectrum and of interference mitigation, which provide at least equivalent effect as the techniques described in the harmonised standards,<sup>2</sup>) shall be used. Alternatively, a duty cycle  $\leq$  0.1% may also be used.
- (4) In the frequency band e2, the individual transmitters can combine the adjacent channels for enlargement of the bandwidth up to 300 kHz. Other techniques of access to the

<sup>&</sup>lt;sup>27</sup>) Frequency Hopping Spread Spectrum (FHSS).

<sup>&</sup>lt;sup>28</sup>) The transmission devices, placed inside the animal body, which transmit data for the purpose of performing diagnostic functions and/or medical treatment.

<sup>&</sup>lt;sup>29</sup>) Within the Active Implantable Medical Devices definition in the Council Directive 90/385/EEC, as amended.

spectrum or interference mitigation including bandwidths greater than 300 kHz can be used, on condition that they provide at least equivalent effect as the techniques described in harmonised standards<sup>2</sup>) for ensuring compatible operation with other users, particularly with meteorological radiosondes.

(5) In the frequency band f, the master peripheral units can be used only inside buildings. During their operation, the techniques of access to the spectrum and interference mitigation, which provide at least equivalent effect as the techniques described in harmonised standards<sup>2</sup>) shall be used. The entire frequency band may be dynamically used also as a sole channel for high speed data transfer.

#### Article 13

## Specific conditions for remote control of acoustic information equipment for visually challenged persons

- (1) This Article relates only to the command devices for remote control of acoustic information devices for visually challenged persons which serve for remote control of small stationary acoustic orientation beacons or of small digital voice beacons located at orientation points in cities, which are important for visually challenged persons, e.g. at entrances to the underground, hospitals, social care facilities, at bus stops and railway stations, airports, or to activate the information systems located in the means of public transport.
  - (2) The technical parameters of the devices are:

Ref.	Frequency	Radiated power	Occupied bandwidth	Command duration	Harmonized standard <sup>7</sup> )
а	86.79 MHz	10 mW e.r.p.	20 kHz	maximum 100 ms	300 220

# Article 14 Specific conditions for equipment using Ultra Wide Band technology

- (1) This Article relates only to the devices using ultra-wideband technology (UWB). This means the devices where an integral part or accessory includes a technology for short range radio communication which incorporates intentional generation and transmission of high-frequency energy spread over a frequency range wider than 50 MHz, which may overlap several frequency bands allocated to different radiocommunication services.
- (2) The technical parameters of devices for general use of ultra-wideband technologies, devices for location tracking, devices built into road and rail vehicles, and devices aboard of an aircraft are:

Ref.	Frequency band	Maximum mean e.i.r.p. density / 1 MHz	Maximum peak e.i.r.p. density / 50 MHz	Other conditions	Harmonized standard <sup>7</sup> )
а	≤ 1600 MHz	–90 dBm	–50 dBm		
b	1600–2700 MHz	–85 dBm	–45 dBm		302 065–1
С	2700–3400 MHz	–70 dBm	–36 dBm	see Paragraph 4	302 065–1 302 065–2 302 065–3
d	3400–3800 MHz	-80 dBm	-40 dBm	see Paragraph 4	
е	3800–4200 MHz	–70 dBm	–30 dBm	see Paragraph 4	

f	4200–4800 MHz	–70 dBm	–30 dBm	see Paragraph 4	
g	4800–6000 MHz	–70 dBm	–30 dBm		200 005 4
h1	6000–8500 MHz	– 41.3 dBm	0 dBm	except devices in road and rail vehicles; see Paragraphs 4, 5, 6	302 065–1 302 065–2 302 065–3
h2	6000–8500 MHz	– 53.3 dBm	–13.3 dBm	except devices in	
i	8.5–10.6 GHz	−65 dBm	−25 dBm	see Paragraph 4	
j	≥ 10.6 GHz	–85 dBm	–45 dBm		

- (3) The technical parameters of material structure sensing devices, including a device to analyse building materials, shall comply with the conditions of Article 5 of Annex to Commission Decision No. 2019/785/EU.4)
- (4) The devices can also transmit with the maximum mean e.i.r.p. density -41.3 dBm/MHz and the maximum peak e.i.r.p. density 0 dBm measured in range of 50 MHz width when using additional techniques of interference mitigation which are described in relevant harmonized standards, and in the sub-bands of radio spectrum specified in table:

	Mitigating interference technique					
	LDC <sup>30</sup> )	DAA <sup>31</sup> )	TPC <sup>32</sup> )	TPC <sup>32</sup> ) + DAA <sup>31</sup> )		
equipment for general use of ultra-wide band technologies	3100–4800 MHz	3100–4800 MHz 8500–9000 MHz	_	_		
equipment for location tracking	_	8500–9000 MHz	_	_		
equipment built into road and rail vehicles under fulfilment of limit in exterior according to standard <sup>7</sup> )	3100–4800 MHz 6000–8500 MHz	_	6000–8500 MHz	3100–4800 MHz 8500–9000 MHz		

- (5) The devices aboard of an aircraft can transmit in the sub-band 6650–6675.2 MHz only with the maximum mean e.i.r.p. density -62.3 dBm/MHz and the maximum peak e.i.r.p. density -21 dBm measured in range of 50 MHz width.
- (6) The devices aboard of an aircraft shall limit the radiated power in the sub-band 7.25-7.9 GHz in accordance with Commission Decision No. 2014/702/EU.4)

#### Article 15 Specific conditions for short range devices in data networks

- (1) According to this Article, the short range devices can be operated only within data networks under the control of network access points if these devices are an integral part of the network.33)
  - (2) The technical parameters of the devices are:

<sup>&</sup>lt;sup>30</sup>) Low duty cycle, based on standard 302 065–1, 302 065–3.<sup>7</sup>)

<sup>&</sup>lt;sup>31</sup>) Detect and avoid, based on standard 302 065–1, 302 065–2, 302 065–3.7)

Transmit power control, based on standard 302 065–3.7)

A network access point in the data network is a fixed terrestrial short range device which works as a point for connection of other short range devices in the data network to the service platforms located outside of the data network. The data network means the network components, i.e. several short range devices including the network access point, and the wireless connection between them.

				Duty c	ycle6)		Harmonize
Ref.	Ref. Frequency band	Radiated power	Occupied bandwidth	for network access points	for other cases	Other conditions	d standard <sup>7</sup> )
a1	863.0–868.0 MHz	25 mW e.r.p.	1 MHz	10%	2.8%		304 220
a2	865.6–865.8 MHz 866.2–866.4 MHz 866.8–867.0 MHz 867.4–867.6 MHz	500 mW e.r.p.	200 kHz	10%	2.5%	for data monitoring and collecting only; see Paragraph 4	303 659
аЗ	870–874.4 MHz	500 mW e.r.p.	200 kHz	10%	2.5%	for data monitoring and collecting only; see Paragraphs 4, 5	303 204
b1	915.8–919.4 MHz	25 mW e.r.p.	1 MHz	10%	2.8%	see Paragraphs 4, 5	303 659 304 220
b2	917.3–917.7 MHz 918.5–918.9 MHz	500 mW e.r.p.	200 kHz	10%	2.5%	for data monitoring and collecting only; see Paragraphs 4, 5	303 659

- (3) The operated devices shall use techniques for access to the spectrum and interference mitigation, which provide at least an equal effect to the techniques described in harmonized standards.<sup>2</sup>) Alternatively, the operation with indicated maximum duty cycle can be used.
- (4) In the frequency bands a2, a3, b1, b2, the adaptive power control,<sup>34</sup>) which is able to decrease the power to  $\leq 5$  mW, is required. Alternatively, other technique of interference mitigation, which provides at least an equivalent level of spectrum compatibility shall be used.
- (5) In frequency bands a3, b1, b2, all mobile terminals must be under control of the network.

### Article 16 Final provision

Also, any equipment which the Office decided to approve or to recognize pursuant to Section 10 of the Act No. 151/2000 Coll., on Telecommunications and on Amendment to Other Acts, as amended, is considered to be complying with requirements of the Government Order No. 426/2016 Coll., on the assessment of conformity of radio equipment when made available on the market, provided that such equipment was made available on the market before 1 April 2003.

### Article 17 Repealing Provisions

This is to repeal General Authorisation No. VO-R/10/03.2021-4 for the use of radio frequencies and for operating short range devices of 30 March 2021, published in Issue 4/2021 of the Telecommunications Bulletin.

### Article 18 Effect

This General Authorisation comes into effect on 1 September 2021.

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<sup>&</sup>lt;sup>34</sup>) Adaptive Power Control, APC.

#### **Explanatory Memorandum**

To implement Sections 9 and 12 of the Act, the Office issues General Authorisation No. VO-R/10/07.2021-8 for the use of radio frequencies and for the operation of short range devices (hereinafter the "General Authorisation").

This General Authorisation is based on the principles set out in the Act and on the frequency plans and harmonisation objectives of the European Union, and it replaces General Authorisation No. VO-R/10/12.2019-9, repealed by Article 17 of this General Authorisation.

Article 2 contains the specific conditions of operation of short range devices which are specified for individual categories of equipment and for individual frequency bands of radio frequencies in Articles 3 to 15. These conditions are based on harmonization documents of the European Commission and the European Conference of Postal and Telecommunication Administrations (CEPT), listed in Annex 1, as well as on requirements resulting from radio spectrum management, or, more precisely, from requirements for ensuring the use of the radio spectrum without interference.

Based on this General Authorisation, it is possible to operate also short range devices for broadband data transmission which fulfil the requirements stated in Articles 3 to 15, including the requirement to assess conformity with the indicated harmonized standard, regarding that the General Authorisation No. VO-R/12/03.2021-3 for the use of radio frequencies and for the operation of equipment for broadband data transmission in the bands 2.4 GHz to 71 GHz, as amended, is designated for the broadband data transmission by equipment of higher power and/or equipment conforming to different standards.

After publication of General Authorisation No. VO-R/10/03.2021-4, the Office received inputs from the public requesting the utilisation of the 733–758 MHz range by short range devices for wireless sound transmission. The Office considered these inputs as well as the currently available information related to the short-term outline of future development in the mobile service. Further, it assessed the current utilisation of the 694–790 MHz band by terrestrial systems able to provide wireless wideband services of electronic communications and with regard to the estimated development, it decided to allow the requested utilisation of the 733–758 MHz range by short range devices for wireless sound transmission. For these reasons, the Office made in this Measure of General Nature the following change compared to the General Authorisation No. No. VO-R/10/03.2021-4 within the meaning of Section 12 of the Act:

- 1. In the Article 10(2), the frequency band *i* was added for 733–758 MHz frequencies with the radiated power 50 mW e.r.p. In relation to this, the following bands *i* to *l* were relabelled.
- 2. In the Article 10, new Paragraph 4 was added laying down, that wireless microphones must not interfere the operation of mobile service's systems and cannot claim protection from their signal on frequencies in the band preferentially reserved for the mobile service, similarly to frequencies in the band preferentially reserved for the broadcasting service.

The Article 16 sets the possibility of operating equipment made available on the market before 1 April 2003.

The Article 17 repeals General Authorisation VO-R/10/03.2021-4.

The Article 18 lays down the effect of this General Authorisation pursuant to Section 124(2) of the Act.

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Based on the Section 130 of the Act and in accordance with the Rules of the Czech Telecommunication Office for consultation at the discussion site (hereinafter "Rules"), the Office published on 3 June 2021 its draft Measure of General Nature laying down the General Authorisation No. VO-R/10/xx.2021-y for the use of radio frequencies and for the operation of short range devices, and the call for comments at the discussion site. Within the public consultation, the Office received only two comments over a period of one month, which are but not in line with the Rules. Thus, the Office didn't settle these comments. One comment welcomed

the return of band i (733–758 MHz). Second comment, which was not reasoned, proposed to add a duty cycle to the value of max. 1% in Article 3(2) band b (unspecified short range devices in the 26.957–27.283 MHz band). The Office states, that by accepting this proposal, it would set stricter conditions for utilisation of radio frequencies and for operation of short range devices than set in the Commission Implementing Decision (EU) 2019/1345 of 2 August 2019, what is not acceptable.

On behalf of the Council of the Czech Telecommunication Office

Hana Továrková Chair of the Council of the Czech Telecommunication Office <signed> The General Authorisation is based on these harmonisation documents:

#### 1. European Commission documents

No.	Name	Article of General Authorisation
2014/53/EU	Directive of the European Parliament and of the Council of 16 April 2014 on the harmonization of the laws of the Member States relating to the making available on the market of radio equipment and repealing Directive 1999/5/EC.	3–14
(EU) 2017/207	Commission Implementing Decision of 10 November 2017 amending Decision 2005/50/EC on the harmonization of the 24 GHz range radio spectrum band for the time limited use by automotive short range radar equipment in the Community, as amended Commission Decision 2011/485/EU.	4
2019/1345/EU	Commission Implementing Decision (EU) 2019/1345 of 2 August 2019 amending Decision 2006/771/EC updating harmonised technical conditions in the area of radio spectrum use for short-range devices.	3–7, 9–12, 15
2014/641/ EU	Commission Implementing Decision of 1 September 2014 on harmonized technical conditions of radio spectrum use by wireless audio programme making and special events equipment (PMSE) in the Union.	10
2019/785/EU	Commission Implementing Decision (EU) 2019/785 of 14 May 2019 on the harmonisation of radio spectrum for equipment using ultra-wideband technology in the Union and repealing Decision 2007/131/EC	14
2018/1538/EU	Commission Implementing Decision of 11 October 2018 on harmonization of radio spectrum use for use by short-range devices within the 874–876 and 915–921 MHz frequency bands.	11, 15
(EU) 2020/1426	Commission Implementing Decision (EU) 2020/1426 of 7 October 2020, on the harmonised use of radio spectrum in the 5.875-5.935 MHz frequency band for safety-related applications of intelligent transport systems (ITS) and repealing Decision 2008/671/EC	4

# 2. European Conference of Postal and Telecommunications Administrations (CEPT) documents

No.	Name	Article of General Authorisation
ERC/REC 70-03	Recommendation - Relating to the use of Short Range Devices (SRD), version of 23 October 2020.	3–7, 9–12, 14, 15
ERC/DEC/(01)17	Decision amended on 9 December 2011, on harmonized frequencies, technical characteristics and exemption from individual licensing of Ultra Low Power Active Medical Implant (ULP-AMI) communication systems operating in the frequency band 401-406 MHz on a secondary basis.	12
ECC/DEC/(04)03	Decision on the frequency band 77-81 GHz to be designated for the use of for the use of Automotive Short Range Radars (SRR).	4
ECC/DEC/(04)10	Decision amended on 1 June 2012, on the frequency bands to be designated for the temporary introduction of Automotive Range Radars (SRR).	4
ECC/DEC/(11)09	Recommendation amended on 22 May 2015, on UWB Location Tracking Systems TYPE 2 (LT2).	14
ECC/DEC/(05)02	Decision amended on 5 July 2019, on the use of the band 169.4- 69.8125 MHz.	3, 5, 7, 10
ECC/DEC/(06)04	Decision amended on 8 March 2019, on the harmonized conditions for devices using Ultra-Wideband (UWB) technology in bands below 10.6 GHz.	14
ECC/DEC/(06)08	Decision amended on 26 October 2019, on the conditions for use of the radio spectrum by Ground-and Wall-Probing Radar (GPR/WPR) imaging systems.	6
ECC/DEC/(12)03	Decision on the harmonized conditions for UWB applications onboard aircraft.	14

ECC/DEC/(11)02	Decision amended on 5 July 2019, on industrial Level Probing Radars (LPR) operating in frequency bands 6-8.5 GHz, 24.05-26.5 GHz, 57- 4 GHz and 75-85 GHz.	6
ECC/DEC/(07)01	Decision amended on 8 March 2019, on Specific Material Sensing devices using UWB technology.	14
ECC/DEC/(09)01	Decision amended on 5 July 2019, on harmonized use of the 63.72–5.88 GHz frequency band for Intelligent Transport Systems (ITS).	4
ECC/DEC/(16)01	Decision on the harmonized frequency band 76–77 GHz, technical characteristics, exemption from individual licensing and free carriage and use of obstacle detection radars for rotorcraft use.	

### Harmonized ETSI standards referred to in individual Articles of this General Authorisation

Harmonized E151 standards referred to in individual Articles of this General Author	
Harmonized standard	Article of General Authorisation
ČSN ETSI EN 300 220 – Electromagnetic compatibility and Radio spectrum Matters (ERM) – Short Range Devices (SRD) – Radio equipment to be used in the 25 MHz to 1 000 MHz frequency range with power levels ranging up to 500 mW.	3, 5, 7, 8, 10
ČSN ETSI EN 300 330 – Electromagnetic compatibility and Radio spectrum Matters (ERM) – Short Range Devices (SRD) – Radio equipment in the frequency range of 9 kHz to 25 MHz and inductive loop systems in the frequency range of 9 kHz to 30 MHz	3, 5, 9, 11, 12, 13
ČSN ETSI EN 300 422 – Electromagnetic compatibility and Radio spectrum Matters (ERM) – Wireless microphones operated in the 25 MHz to 3 GHz frequency range	10
ČSN ETSI EN 300 440 – Electromagnetic compatibility and Radio spectrum Matters (ERM) – Short Range Devices (SRD) – Radio equipment to be used in the 1 GHz to 40 GHz frequency range.	3, 6, 11
ČSN ETSI EN 300 674 – Electromagnetic compatibility and Radio spectrum Matters (ERM) – Road Transport and Traffic Telematics (RTTT) – Dedicated Short Range Communications (DSRC) transmission equipment (500 kbit/s / 250 kbit/s) operating in the 5.8 GHz Industrial, Scientific and Medical (ISM) band.	4
ČSN ETSI EN 300 718 – Electromagnetic Compatibility and Radio Spectrum Matters (ERM) – Avalanche Beacons; Transmitter-receiver systems	5
ČSN ETSI EN 300 761 – Electromagnetic compatibility and Radio spectrum Matters (ERM) – Short Range Devices (SRD) Automatic vehicle identification (AVI) for railways operating in the 2,45 GHz frequency range.	4, 11
ČSN ETSI EN 301 091 – Electromagnetic compatibility and Radio spectrum Matters (ERM) – Short Range Devices – Road Transport and Traffic Telematics (RTTT) – Radar equipment operating in the 76 GHz to 77 GHz range	4
ČSN ETSI EN 301 357 – Electromagnetic compatibility and Radio spectrum Matters (ERM) – Cordless audio devices in the range 25 MHz to 2000 MHz	10
ČSN ETSI EN 301 559 – Electromagnetic compatibility and Radio spectrum Matters (ERM) – Short Range Devices (SRD) – Low Power Active Medical Implants (LP-AMI) operating in the frequency range 2483.5 MHz to 2500 MHz	12
ČSN ETSI EN 301 839 – Electromagnetic compatibility and Radio spectrum Matters (ERM) – Ultra Low Power Active Medical Membrane Implants (ULP-AMI) and Peripherals operating in the frequency range 402 to 405 MHz	12
ČSN ETSI EN 302 065 – Electromagnetic compatibility and Radio spectrum Matters (ERM) – Ultra Wide Band technology (UWB) for communications purposes – Harmonised EN covering the essential requirements of article 3.2 of the R&TTE Directive – Part 1: Requirements for Generic UWB applications – Part 2: Requirements for UWB location tracking – Part 3: Requirements for UWB devices for ground based vehicular applications	14
ČSN ETSI EN 302 066 – Electromagnetic compatibility and Radio spectrum Matters (ERM) – Short Range Devices (SRD) – Ground- and Wall- Probing Radar applications (GPR/WPR).	6
ČSN ETSI EN 302 195 – Electromagnetic compatibility and Radio spectrum Matters (ERM) – Radio equipment in the frequency range 9 kHz to 315 kHz for Ultra Low Power Active Medical Implants (ULP-AMI) and accessories	12
ČSN ETSI EN 302 208 – Electromagnetic compatibility and Radio spectrum Matters (ERM) – Radio Frequency Identification Equipment operating in the band 865 MHz to 868 MHz with power levels up to 2 W	11
ČSN ETSI EN 302 264 – Electromagnetic compatibility and Radio spectrum Matters (ERM) – Short Range Devices – Road Transport and Traffic Telematics (RTTT) – Short Range Radar equipment operating in the 77 GHz to 81 GHz band	4
ČSN ETSI EN 302 288 – Electromagnetic compatibility and Radio spectrum Matters (ERM) – Short Range Devices – Road Transport and Traffic Telematics (RTTT) – Short range radar equipment operating in the 24 GHz range	4
ČSN ETSI EN 302 291 – Electromagnetic Compatibility and Radio spectrum Matters (ERM) – Short Range Devices (SRD) – Close Range Inductive Data Communication equipment operating at 13.56 MHz	9
ČSN ETSI EN 302 372 – Electromagnetic compatibility and Radio spectrum Matters (ERM) –	6

Short Range Devices (SRD) – Equipment for Detection and Movement – Tanks Level Probing Radar (TLPR) operating in the frequency bands 5.8 GHz, 10 GHz, 25 GHz, 61 GHz and 77 GHz	
ČSN ETSI EN 302 510 – Electromagnetic compatibility and Radio spectrum Matters (ERM) – Radio equipment in the frequency range 30 MHz to 37.5 MHz for Ultra Low Power Active Medical Membrane Implants and Accessories	12
ČSN ETSI EN 302 536 – Electromagnetic compatibility and Radio spectrum Matters (ERM) – Short Range Devices (SRD) – Radio equipment in the frequency range 315 kHz to 600 kHz	9, 12
ČSN ETSI EN 302 537 – Electromagnetic compatibility and Radio spectrum Matters (ERM) – Short Range Devices (SRD) – Low Power Active Medical Data Service Systems operating in the frequency range 401 MHz to 402 MHz and 405 MHz to 406 MHz	12
ČSN ETSI EN 302 571 – Intelligent Transport Systems (ITS) – Radiocommunications equipment operating in the 5 855 MHz to 5 925 MHz frequency band.	4
ČSN ETSI EN 302 608 – Electromagnetic compatibility and Radio spectrum Matters (ERM) – Short Range Devices (SRD) – Radio equipment for Eurobalise railway systems.	4
ČSN ETSI EN 302 609 – Electromagnetic compatibility and Radio spectrum Matters (ERM) – Short range devices (SRD) – Radio equipment for Euroloop railway systems.	4
ČSN ETSI EN 302 686 – Intelligent Transport Systems (ITS) – Radiocommunications equipment operating in the 63 GHz to 64 GHz frequency band	4
ČSN ETSI EN 302 729 – Electromagnetic compatibility and Radio spectrum Matters (ERM) – Short Range Devices (SRD) – Level Probing Radar (LPR) equipment operating in the frequency ranges 6 GHz to 8.5 GHz, 24.05 GHz to 26.5 GHz, 57 GHz to 64 GHz, 75 GHz to 85 GHz	6
ČSN ETSI EN 302 858 – Electromagnetic compatibility and Radio spectrum Matters (ERM) – Road Transport and Traffic Telematics (RTTT) – Automotive radar equipment operating in the 24,05 GHz up to 24,25 GHz or 24,50 GHz frequency range	4
ČSN ETSI EN 303 203 – Electromagnetic compatibility and Radio spectrum Matters (ERM) – Short Range Devices (SRD) – Medical Body Area Network Systems (MBANs) operating in the 2483.5 MHz to 2500 MHz range	5
ČSN ETSI EN 303 204 – Electromagnetic compatibility and Radio spectrum Matters (ERM) – Network Based Short Range Devices (SRD) – Radio equipment to be used in the 870 MHz to 876 MHz frequency range with power levels ranging up to 500 mW	15
ČSN ETSI EN 303 348 – Induction loop systems intended to assist the hearing impaired in the frequency range 10 Hz to 9 kHz	9
ČSN ETSI EN 303 360 – Short Range Devices – Transport and Traffic Telematics (TTT) – Radar equipment operating in the 76 GHz to 77 GHz range	4
ČSN ETSI EN 303 447 – Short Range Devices (SRD) – Inductive loop systems for robotic mowers in the frequency range 0 Hz to 148,5 kHz	9
ČSN ETSI EN 303 454 – Short Range Devices (SRD) – Metal and object detection sensors in the frequency range 1 kHz to 148,5 kHz	9
ETSI EN 303 659 (draft) – Short Range Devices (SRD) in Data Networks – Radio equipment to be used in the frequency ranges 865-868 MHz and 915-919.4 MHz	15
ETSI EN 303 660 (draft) – Radio equipment in frequency range below 9 kHz	9
ETSI EN 304 220 (draft) – Wideband data transmission SRD operating in the frequency range 25 MHz to 1 000 MHz	15
ČSN ETSI EN 305 550 – Electromagnetic compatibility and Radio spectrum Matters (ERM) – Short Range Devices (SRD) – Radio equipment to be used in the 40 GHz to 246 GHz frequency range.	3