

**MINISTER OF ECONOMIC AFFAIRS AND INFORMATION TECHNOLOGY
REGULATION**

2023 No.

Amendment of Regulation No. 96 of the Minister of Economic Affairs and Communications of 7 October 2011 ‘Conditions for using radio frequencies and technical requirements for radio equipment exempt from a frequency authorisation’

The Regulation is established on the basis of § 20(1) of the Electronic Communications Act.

Regulation No 96 of the Minister of Economic Affairs and Communications of 7 October 2011 ‘Conditions for using radio frequencies and technical requirements for radio equipment exempt from a frequency authorisation’ is amended as follows:

1) The text “and amended by Directive (EU) 2022/2380 of the European Parliament and of the Council (OJ C 315, 7.12.2022, p. 30–43)” is added in the legislative note of the Regulation after the text “(OJ C 212, 22.08.2018, p. 1–122)”;

2) Annexes 1, 3–12 and 14–19 to the Regulation are introduced in a new wording (attached).

(signed digitally)

Tiit Riisalo

Minister of Economic Affairs and Information Technology

(signed digitally)

Ahti Kuningas

Secretary General

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Land mobile service

1.1. CB27 radio equipment

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	CB radio	CB27 Voice and data transmission
	3	Radio frequency band	Tx/Rx 26,960-27,410 kHz	Excluding radio frequency channels with a centre frequency of: 26.995 MHz 27.045 MHz 27.095 MHz 27.145 MHz 27.195 MHz
	4	Channel spacing	10 kHz	
	5	Modulation/bandwidth used	SSB Angular modulation DSB	
	6	Duplex/simplex communication. Duplex gap	Simplex	
	7	Transmission power / power density	E.R.P. 4 W Angular Modulation E.R.P. 4 W (rms) DSB AM E.R.P. 12 W (PEP) SSB	
	8	Conditions of use of the channel	–	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the ECA	No	
	11	Basis for planning radio frequencies	–	
I n f o r m a t i v	12	Planned changes	–	
	13	References to documents	CEPT/ECC/DEC/(11)03 EN 300 433-1 EN 300 433-2 EN 301 489-1 EN 301 489-13 EN 62311 EN 62368-1 Radio frequency plan	

e p a rt			pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

1.2. Canine remote sensing system at the frequencies of 155.45 MHz and 155.475 MHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Tracking systems	Remote dog tracking system Data transmission
	3	Radio frequency band	Tx/Rx 155.45 MHz Tx/Rx 155.475 MHz	
	4	Channel spacing	25 kHz	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.I.R.P. 2 W	
	8	Conditions of use of the channel	–	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the ECA	No	
	11	Basis for planning radio frequencies	–	
I n f o r m a t i v e p a r t	12	Planned changes	–	
	13	References to documents	EN 300 390 EN 301 489-1 EN 301 489-5 EN 62311 EN 62368-1 Radio Frequency Plan on the basis of § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

1.3. TETRA terminal in the 380-399.9 MHz frequency band

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Operative service radio network	TETRA system
	3	Radio frequency band	Tx 380-389.9 MHz Rx 390-399.9 MHz	AGA: a) 384.8–385 MHz; b) 394.8–395 MHz. DMO: a) 380–380.15 MHz; b) 385–386 MHz; c) 390–390.15 MHz; c) 395–396 MHz
	4	Channel spacing	25 kHz	
	5	Modulation/bandwidth used	$\pi/4$ -shifted DQPSK	
	6	Duplex/simplex communication. Duplex gap	Duplex (10 MHz)	
	7	Transmission power/power density	Maximum allowed nominal power 1 W (DMO, AGA) Maximum allowed nominal power 30 W	
	8	Conditions of use of the channel	–	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the ECA	No	
	11	Basis for planning radio frequencies	–	
I n f o r m a t i v e p a r t	12	Planned changes	–	
	13	References to documents	CEPT/ERC/DEC/(01)19 (DMO) CEPT/ECC/DEC/(06)05 (BUT) CEPT/ECC/DEC/(08)05 EN 301 489-1 EN 301489-5 EN 302 561 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
p a r t	15	Notes	–	

1.4. Land mobile service terminal in the 410-430 MHz frequency band

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Land mobile communication	
	2	Application	Land mobile service	
	3	Radio frequency band	Tx/Rx 410-430 MHz	
	4	Channel spacing	Channel width 1.4 MHz Channel width 3 MHz Channel width 5 MHz	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	Maximum allowed in-block E.I.R.P. 23 dBm	
	8	Conditions of use of the channel	In accordance with CEPT/ECC/DEC(19)02	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the ECA	No	
	11	Basis for planning radio frequencies	CEPT/ECC/DEC(19)02	
I n f o r m a t i v e p a r t	12	Planned changes	–	
	13	References to documents	CEPT/ECC/DEC/(19)02 EN 300 086 EN 300 296 EN 301 166 EN 301 908-1 EN 50360 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

1.5. PMR/DPMR 446 radio equipment in the 446 MHz frequency band

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Land mobile communication	
	2	Application	PMR/PAMR	PMR/DPMR 446 Voice and data transmission
	3	Radio frequency band	Tx/Rx 446-446.2 MHz	
	4	Channel spacing	6.25 kHz 12.5 kHz	Centre frequency of the first RF channel according to channel spacing 446.003125 MHz; or 446.00625 MHz
	5	Modulation/bandwidth used	Angular modulation PMR Digital modulation DPMR	
	6	Duplex/simplex communication. Duplex gap	Simplex	
	7	Transmission power/power density	e.r.p. 0.5 W Only an integrated antenna can be used	
	8	Conditions of use of the channel	PMR: 1) the equipment has to operate in the reception mode; 2) maximum transmitter time-out time: 180 s; 3) a device that does not operate in “press and speak” mode, must use Voice Activation Switch (VOX); DPMR: time-out time of the transmitter 180 s	
	9	Frequency authorisation regime	No frequency authorisation	
	10		No	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2017/1483 (EU) 2022/180 CEPT/ECC/DEC/(15)05 EN 300113 EN 301 166 EN 301 489-1 EN 301 489-5 EN 62368-1 EN 303405 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains the valid Technical Annex of the Decision 2017/1483
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

1.6. Land mobile service terminal in the 450 MHz frequency band

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Land mobile service	
	3	Radio frequency band	Tx 452.5-457.5 MHz Rx 462.5-467.5 MHz	
	4	Channel spacing	Channel width 1.4 MHz Channel width 3 MHz Channel width 5 MHz	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	Duplex (10 MHz)	
	7	Transmission power/power density	Maximum average in-block power 23 dBm	
	8	Conditions of use of the channel	–	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the ECA	No	
	11	Basis for planning radio frequencies	–	
I n f o r m a t i v e p a r t	12	Planned changes	–	
	13	References to documents	CEPT/ECC/DEC/(19)02 CEPT/ECC/DEC/(22)01 EN 301 489-1 EN 301 489-52 EN 301 908-1 EN 301 908-2 EN 301 908-4 EN 301 908-6 EN 301 908-9 EN 301 908-13 EN 301 908-16 EN 301 908-25 EN 60215 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

1.7. MFCN terminal in the 700 MHz frequency band

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communications other than mobile aeronautical communications	
	2	Application	Mobile/fixed communications networks (MFCN)	
	3	Radio frequency band	Tx 703-733 MHz Rx 758-788 MHz	
	4	Channel spacing	Width of allocated frequency blocks is 5 MHz	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	Duplex (55 MHz)	
	7	Transmission power/power density	Maximum allowed output power of 23 dBm (mobile and portable terminals) E.I.R.P. 23 dBm (locally installed terminals)	In accordance with Commission Decision (EU) 2017/899
	8	Conditions of use of the channel	In accordance with Commission Decision (EU) 2017/899	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the ECA	No	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	(EU) 2016/687 (EU) 2017/899 CEPT/ECC/DEC/(22)01 EN 301 489-1 EN 301 489-52 EN 301 908-13 EN 301 908-1 EN 301 908-2 EN 301 908-4 EN 301 908-6 EN 301 908-9 EN 301 908-16 EN 301 908-25 EN 50360 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

1.8. MFCN terminal in the 800 MHz frequency band

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communications other than mobile aeronautical communications	
	2	Application	Mobile/fixed communications networks (MFCN)	
	3	Radio frequency band	Rx 791-821 MHz Tx 832-862 MHz	
	4	Channel spacing	Width of allocated frequency blocks is 5 MHz	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	Duplex (41 MHz)	
	7	Transmission power/power density	E.I.R.P. 23 dBm (locally installed terminals) Maximum allowed output power of 23 dBm (mobile and portable terminals)	In accordance with Commission Decision 2010/267/EU
	8	Conditions of use of the channel	In accordance with Commission Decision 2010/267/EU	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the ECA	No	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2010/267/EU CEPT/ECC/DEC/(09)03 CEPT/ECC/DEC/(22)01 EN 301 489-1 EN 301 489-52 EN 301 908-1 EN 301 908-13 EN 301 908-2 EN 301 908-4 EN 301 908-6 EN 301 908-9 EN 301 908-16 EN 301 908-25 EN 50360 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

1.9. MFCN terminals in the 900 MHz and 1800 MHz frequency bands

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Mobile/fixed communications networks (MFCN)	
	3	Radio frequency band	Tx 880–915 MHz Rx 925–960 MHz Tx 1710–1785 MHz Rx 1805–1880 MHz	
	4	Channel spacing	Channel raster 200 kHz (GSM, UMTS) Channel raster 100 kHz (LTE)	
	5	Modulation/bandwidth used	GMSK 8-PSK (GSM) QPSK, 16QAM, 64QAM (UMTS) DPSK, QPSK, 16 QAM, 64 QAM, 256 QAM (LTE)	
	6	Duplex/simplex communication. Duplex gap	Duplex 45 MHz 95 MHz	
	7	Transmission power/power density	Maximum allowed nominal power 39 dBm (GSM) Maximum allowed nominal power 24 dBm (UMTS) Maximum allowed output power 23 dBm (LTE)	
	8	Conditions of use of the channel	In accordance with Commission Decision (EU) 2022/173	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the ECA	No	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	(EU) 2022/173 CEPT/ECC/DEC/(06)13 CEPT/ECC/DEC/(22)01 EN 301 489-1 EN 301 489-7 EN 301 489-52 EN 301 511 EN 301 502 EN 301 908-1 EN 301 908-2 EN 301 908-4 EN 301 908-6 EN 301 908-9 EN 301 908-13 EN 301 908-16 EN 301 908-25 EN 50360 EN 62368-1	

			Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

1.10. MCV system in the 900 MHz and 1800 MHz frequency bands

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Mobile communication services on board vessels (MCV)	Allowed to be used in maritime areas away from the coast farther than 2 nautical miles from the baseline of the territorial sea.
	3	Radio frequency band	Tx 880–915 MHz Rx 925–960 MHz Tx 1710–1785 MHz Rx 1805–1880 MHz	
	4	Channel spacing	Channel raster 200 kHz	
	5	Modulation/bandwidth used	GMSK 8-PSK	
	6	Duplex/simplex communication. Duplex gap	Duplex 45 MHz 95 MHz	
	7	Transmission power/power density	Maximum allowed output power 0 dBm; maximum allowed terminal output power on board a vessel: (1800 in the MHz radio frequency band) maximum allowed output power 5 dBm; maximum allowed terminal output power on board a vessel: (900 in the MHz radio frequency band)	Maximum permissible radiated power density of the ship's base station measured outside the shipboard by a measuring antenna of 0 dBi reference power –80 dBm/200 kHz
	8	Conditions of use of the channel	TMEDA Techniques to mitigate interference used in the access to and use of the channels of the vessel GSM system shall ensure at least the same result as with the following interference mitigation measures established in the ETSI GSM standards TS 144 018 and TS 144 008: 1) GSM sensitivity and disconnection threshold in the sea area, at a distance of 2–3 nautical miles from the baselines of the territorial sea, must be greater than or equal to –70 dBm/200 kHz and at 3–12 nautical miles from the baselines of the territorial sea greater than or equal to –75 dBm / 200 kHz 2) discontinuous transmission	In accordance with Commission Decision (EU) 2017/191 A vessel base station is allowed to use only indoor antennae in maritime areas 2 to 12 nautical miles from the baseline of territorial sea.

			of the vessel GSM system shall be activated in the MCV system uplink direction; 3) the timing advance value of the vessel base station shall be set to minimal	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the ECA	No	
	11	Basis for planning radio frequencies	–	
I n f o r m a t i v e p a r t	12	Planned changes	–	
	13	References to documents	2010/166/EC (EU) 2017/191 CEPT/ECC/DEC/(08)08 EN 301 489-1 EN 301 489-7 EN 301 489-8 EN 301 502 EN 301 511 EN 301 908-1 EN 301 908-2 EN 301 908-3 EN 301 908-11 EN 50360 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	<i>The sea area shall be determined using the <u>terms</u> within the meaning of the Maritime Borders Act.</i> The meaning of territorial sea has been defined in the United Nations Convention on the Law of the Sea	

1.11. On-board LTE and 5G system in the 1800 MHz and 2600 MHz frequency bands

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Mobile communication services on board vessels (MCV)	Allowed to be used in maritime areas away from the coast farther than 4 nautical miles from the baseline of the territorial sea
	3	Radio frequency band	Tx 1710-1785 MHz Rx 1805-1880 MHz Tx 2500-2570 MHz Rx 2620-2690 MHz	
	4	Channel spacing	Allocated width of frequency bands 5 MHz duplex	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	Duplex 95 MHz 120 MHz	
	7	Transmission power/power density	Maximum allowed nominal power 0 dBm	Vessel support station emission on deck shall be less than or equal to –98 dBm / 5 MHz (–120 dBm / 15 kHz)
	8	Conditions of use of the channel	Between 4 and 12 nautical miles from the baseline, the minimum required strength of the received signal in the cell shall be greater than or equal to: –83 dBm / 5 MHz (–105 dBm / 15 kHz). The public terrestrial mobile network selection timer is 10 minutes. The preset timing parameter is specified accordingly. The cell size of the MCV antenna system is 400 m. Radio Resource Control Standby Release Timer is 2 seconds	In accordance with Commission Decision (EU) 2017/191 MCV transmission centre frequency shall not be aligned with terrestrial network transmitters.
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the ECA	No	
	11	Basis for planning radio frequencies	–	
I n f	12	Planned changes	–	
	13	References to documents	2010/166/EC (EU) 2017/191	

o r m a t i v e p a r t			CEPT/ECC/DEC/(08)08 EN 301 489-1 EN 301 908-1 EN 301 489-50 EN 301 908-13 EN 301 908-14 EN 301 908-15 EN 301 908-20 EN 301 908-24 EN 301 908-25 EN 50385 EN 60215 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	<i>The sea area shall be determined using the <u>terms</u> within the meaning of the Maritime Borders Act.</i> The meaning of territorial sea has been defined in the United Nations Convention on the Law of the Sea	

1.12. MCA systems in the 1800 MHz and 2100 MHz frequency bands

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Mobile communication services on aircraft (MCA)	Allowed to be used at a height of 3000 m from the ground and higher
	3	Radio frequency band	Tx 1710–1785 MHz Rx 1805–1880 MHz Tx 1920–1980 MHz Rx 2110–2170 MHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	Duplex 95 MHz 190 MHz	
	7	Transmission power/power density	–	In accordance with Commission Decision 2008/294/EC. Until January 2026, attempts to connect to the UMTS network at frequencies shall be blocked 925–960 MHz and 2110–2170 MHz
	8	Conditions of use of the channel	In accordance with Commission Decisions 2008/294/EC and 2013/654/EU	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the ECA	No	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2008/294/EC 2013/654/EU (EU) 2020/667 CEPT/ECC/DEC/(06)07 EN 301 489-1 EN 301 489-7 EN 301 489-8 EN 301 502 EN 301 511 EN 301 908-1 EN 301 908-2 EN 301 908-3 EN 301 908-11 EN 301 908-13 EN 301 908-14	

			EN 301 908-15 EN 301 908-24 EN 301 908-25 EN 302 480 EN 50360 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

1.13. MFCN terminal in the 1900 MHz frequency band

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Mobile/fixed communications networks (MFCN)	
	3	Radio frequency band	Tx/Rx 1900.2–1920 MHz	TDD
	4	Channel spacing	Channel raster 200 kHz	
	5	Modulation/bandwidth used	QPSK 8-PSK 64QAM 16QAM	
	6	Duplex/simplex communication. Duplex gap	Duplex (TDD)	
	7	Transmission power/power density	Maximum allowed nominal power 24 dBm	
	8	Conditions of use of the channel	CDMA	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the ECA	No	
	11	Basis for planning radio frequencies	–	
I n f o r m a t i v e p a r t	12	Planned changes	–	
	13	References to documents	CEPT/ECC/DEC/(22)01 EN 301 489-1 EN 301 489-52 EN 301 908-6 EN 301 908-1 EN 50360 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
p a r t	15	Notes	–	

1.14. MCV system in the 1900 MHz and 2100 MHz frequency bands

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Mobile communication services on board vessels (MCV)	Allowed to be used in maritime areas away from the coast farther than 2 nautical miles from the baseline of the territorial sea
	3	Radio frequency band	Tx 1920–1980 MHz Rx 2110–2170 MHz	
	4	Channel spacing	Allocated width of frequency bands 5 MHz duplex	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	Duplex (190 MHz)	
	7	Transmission power/power density	Maximum allowed output power 0 dBm / 5 MHz Maximum allowed terminal output power on board a vessel	Vessel support station emission on deck shall be less than or equal to –102 dBm / 5 MHz
	8	Conditions of use of the channel	Between 2 and 12 nautical miles from the baseline, the minimum required strength of the received signal in the comb is greater than or equal to –87 dBm/5 MHz. The public terrestrial mobile network selection timer is 10 minutes. The preset timing parameter is specified accordingly The cell size of the MCV antenna system is 600 m. Radio Resource Control Standby Release Timer is 2 seconds	In accordance with Commission Decision (EU) 2017/191 Only the use of internal antennae is allowed at vessel-BS in maritime areas 2 to 12 nautical miles from the baseline of the territorial sea. MCV transmission centre frequency shall not be aligned with terrestrial network transmitters.
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the ECA	No	
	11	Basis for planning radio frequencies	–	
I n f o r m	12	Planned changes	–	
	13	References to documents	2010/166/EC (EU) 2017/191 (EU) 2020/667 CEPT/ECC/DEC/(08)08 EN 301 489-1	

a t i v e p a r t			EN 301 489-50 EN 301 908-1 EN 301 908-2 EN 301 908-3 EN 301 908-11 EN 50385 EN 60215 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	<i>The sea area shall be determined using the <u>terms</u> within the meaning of the Maritime Borders Act.</i> The meaning of territorial sea has been defined in the United Nations Convention on the Law of the Sea	

1.15. MFCN terminal in the 2100 MHz frequency band

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Mobile/fixed communications networks (MFCN)	
	3	Radio frequency band	Tx 1920–1980 MHz Rx 2110–2170 MHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	Duplex (190 MHz)	
	7	Transmission power/power density	Maximum allowed nominal power 24 dBm	
	8	Conditions of use of the channel	In accordance with Commission Decision 2012/688/EU and (EU) 2020/667	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the ECA	No	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2012/688/EU (EU) 2020/667 CEPT/ECC/DEC/(06)01 CEPT/ECC/DEC/(22)01 EN 301 489-1 EN 301 489-52 EN 301 908-1 EN 301 908-2 EN 301 908-4 EN 301 908-6 EN 301 908-9 EN 301 908-13 EN 301 908-16 EN 301 908-25 EN 50360 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

1.16. DECT device in the 1880–1900 MHz frequency band

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Land mobile communication	
	2	Application	Wireless telephone	DECT voice and data transmission
	3	Radio frequency band	Tx/Rx 1880–1900 MHz	
	4	Channel spacing	1728 kHz	
	5	Modulation/bandwidth used	GFSK (Gaussian Frequency Shift Keying)	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.I.R.P. 26 dBm isotropic antenna E.I.R.P. 30 dBm directional antenna E.R.P. 250 mW (24 dBm)	
	8	Conditions of use of the channel	TDMA	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the ECA	No	
	11	Basis for planning radio frequencies	–	
I n f o r m a t i v e p a r t	12	Planned changes	–	
	13	References to documents	91/287/EEC CEPT/ERC/DEC/(94)03 CEPT/ERC/DEC/(98)22 EN 301 406 EN 301 489-1 EN 301 489-6 EN 50360 EN 62368-1 Radio Frequency Plan on the basis of § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

1.17. MFCN terminal in the 2.3 GHz frequency band

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Land mobile communication	
	2	Application	Mobile/fixed communications networks (MFCN)	
	3	Radio frequency band	Tx/Rx 2300–2390 MHz	
	4	Channel spacing	5 Widths of allocated blocks in MHz	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	Duplex (TDD)	
	7	Transmission power/power density	E.I.R.P. 25 dBm for stationary devices, total radiated power (TRP) 25 dBm for mobile devices	
	8	Conditions of use of the channel	–	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the ECA	No	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	CEPT/ECC/DEC/(14)02 CEPT/ECC/DEC/(22)01 EN 301 489-1 EN 301 489-52 EN 301 908-1 EN 301 908-2 EN 301 908-4 EN 301 908-6 EN 301 908-9 EN 301 908-13 EN 301 908-16 EN 301 908-25 EN 50360 EN 62368-1 ETSI TR 102 837 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

1.18. MFCN terminal in the 2.5 GHz frequency band

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communications other than mobile aeronautical communications	
	2	Application	Mobile/fixed communications networks (MFCN)	
	3	Radio frequency band	Tx 2500–2570 MHz Tx/Rx 2570–2620 MHz Rx 2620–2690 MHz	
	4	Channel spacing	Width of allocated frequency blocks is 5 MHz	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	Duplex 120 MHz	
	7	Transmission power/power density	E.I.R.P. 35 dBm/5 MHz Stationarily fixed and installed terminal (contains ATPC range). Total radiated power (TRP) 31 dBm/5 MHz portable and mobile terminal	
	8	Conditions of use of the channel	In accordance with Commission Decisions 2008/477/EC and (EU) 2020/636	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the ECA	No	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2008/477/EC (EU) 2020/636 CEPT/ECC/DEC/(05)05 CEPT/ECC/DEC/(22)01 EN 301 489-1 EN 301 489-24 EN 301 908-1 EN 301 908-2 (FDD) EN 301 908-4 EN 301 908-6 EN 301 908-9 EN 301 908-13 EN 301 908-16 EN 301 908-19 (TDD) EN 301 908-25 EN 50360 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	

	15	Notes	–	
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1.19. MFCN terminal in the 3.6 GHz frequency band

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communications other than mobile aeronautical communications	
	2	Application	Mobile/fixed communications networks (MFCN)	
	3	Radio frequency band	Tx/Rx 3410–3800 MHz	In accordance with Commission Decision (EU) 2019/235
	4	Channel spacing	Width of allocated frequency blocks is 5 MHz	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	Duplex (TDD)	
	7	Transmission power/power density	Maximum E.I.R.P. spectral density 25 dBm/MHz (portable terminal)	In accordance with Commission Decision (EU) 2019/235
	8	Conditions of use of the channel	–	In accordance with Commission Decision (EU) 2019/235
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the ECA	No	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2008/411/EC 2014/276/EL (EU) 2019/235 CEPT/ECC/DEC/(11)06 CEPT/ECC/DEC/(22)01 EN 301 489-1 EN 301 489-52 EN 301 908-13 EN 301 908-6 EN 301 908-9 EN 301 908-25 EN 62368-1 EN 50360 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

1.20. Intelligent transport system in the 5875–5935 MHz frequency band

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Intelligent transport system	
	3	Radio frequency band	Tx/Rx 5875–5935 MHz	At frequencies 5915–5925 MHz is the priority rail intelligent transport system (ITS) At frequencies 5925–5935 Only rail ITS can be used in MHz
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.I.R.P. 33 dBm Maximum E.I.R.P. spectral density 23 dBm/MHz	
	8	Conditions of use of the channel	The equipment shall use technologies to access spectrum and mitigate interference, which ensure results at least equal to the technologies described in the harmonised standards based on Directive 2014/53/EC. Automatic transmit power control (TPC) to the extent of at least 30 dBm shall be applied to each device	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the ECA	No	
	11	Basis for planning radio frequencies	–	
I n f o r m a t i v e p	12	Planned changes	–	
	13	References to documents	(EU) 2020/1426 CEPT/ECC/REC/(08)01 CEPT/ECC/DEC/(08)01 EN 301489-1 EN 301489-3 EN 302571 EN 50371 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	

a rt	15	Notes	—	
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1.21. MFCN terminal in the 26 GHz frequency band

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communications other than mobile aeronautical communications	
	2	Application	Mobile/fixed communications networks (MFCN)	
	3	Radio frequency band	Tx/Rx 24.3–27.1 GHz	
	4	Channel spacing	Allocation of frequency blocks with a width of 200 MHz or multiples thereof	For more efficient use of the frequency band, the width of blocks in adjacent areas may be lower (50 MHz or 100 MHz or 150 MHz).
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	Duplex (TDD)	
	7	Transmission power/power density	Maximum TRP for terminals outside the frequency band (between 23.6 GHz and 24.0 GHz) –29 dBW (measured bandwidth 200 MHz)	In accordance with Commission Decisions (EU) 2019/784 and (EU) 2020/590
	8	Conditions of use of the channel	In accordance with Commission Decisions (EU) 2019/784 and (EU) 2020/590	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the ECA	No	
	11	Basis for planning radio frequencies	–	
I n f o r m a t i v e p a r t	12	Planned changes	Maximum permissible out-of-band (at 23.6–24.0 GHz) radiated power (TRP) from 1 January 2024 –35 dBW (measured bandwidth 200 MHz)	In accordance with Commission Decision (EU) 2020/590
	13	References to documents	(EU) 2019/784 (EU) 2020/590 CEPT/ECC/DEC/(18)06 CEPT/ECC/DEC/(22)01 EN 301 489-1 EN 301 489-52 EN 301 908-1 EN 301 908-9 EN 301 908-16 EN 301 908-25 EN 55035 EN 60215	

			EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

1.22. Intelligent transport system in the 63.72–65.88 GHz frequency band

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Intelligent transport system	
	3	Radio frequency band	Tx/Rx 63.72–65.88 GHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.I.R.P. 40 dBm	
	8	Conditions of use of the channel	–	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the ECA	No	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	(EU) 2019/1345 (EU) 2022/180 CEPT/ECC/DEC/(09)01 EN 301 489-1 EN 302 686 EN 50371 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

Satellite communication

3.1. PLB in the 121.5 MHz and 406 MHz radio frequency bands

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile satellite communication	
	2	Application	PLB	Personal use emergency position-indicating radio beacon in the Cospas-Sarsat system
	3	Radio frequency band	Tx/Rx 121.5 MHz Tx/Rx 406-406.1 MHz	121.5 MHz (<i>homing device</i>)
	4	Channel spacing	121.5 MHz – compliance ITU-R M-690 406–406.1 MHz – compliant with C/S T.012	
	5	Modulation/bandwidth used	121.5 MHz, emission class A3X	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	121.5 MHz is the largest E.I.R.P. 100mW 406–406.1 MHz is a transmission power of 5W ± 2 dB (35–39 dBm) measured at a load of 50 ohms	
	8	Conditions of use of the channel	–	
	9	Frequency authorisation regime	No frequency authorisation	PLB has to be registered with a Cospas-Sarsat contact. The Estonian contact is JRCC Tallinn.
I n f o r m a	10	Essential requirements under § 120 ² (1) of the ECA	–	In accordance with Commission Decision 2005/631/EC
	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2005/631/EC ITU-R M.633 ITU-R M.690 EN 302152-1 EN 62311 EN 62368-1	

ti v e p a rt			C/S T.001 C/S T.007 C/S T.012 C/S T.018 Radio frequency plan on the basis of § 9(3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

3.2. Private satellite communication terminal in the radio frequency band below 1 GHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile satellite communication	
	2	Application	Mobile earth stations	Private satellite terminal. Data transmission
	3	Radio frequency band	Rx 137–138 MHz Tx 148–150.5 MHz Tx 399.9–400.05 MHz Rx 400.15–401 MHz	137–138 MHz (space to earth) 148.00–150.05 MHz (earth to space) 399.9 – 400.05 MHz (earth to space) 400.15–401 MHz (space to earth)
	4	Channel spacing	–	
	5	Modulation/bandwidth used	Narrowband FM/PM/PSK, BPSK, QPSK, GFSK, spread spectrum modulation	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	Set by operator CEPT/ERC/DEC/(99)06 based on Annex 2	
	8	Conditions of use of the channel	Set by operator CEPT/ERC/DEC/(99)06 based on Annex 2	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	CEPT/ERC/DEC/(99)06 EN 301 489-1 EN 301 489-20 EN 301 721 EN 50385 EN 62368-1 Radio Frequency Plan on the basis of § 9(3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	Works via a non-geostational communication satellite.	

3.3. Satellite communication terminal in the 1.5 GHz and 1.6 GHz frequency bands

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile satellite communication	
	2	Application	Mobile earth stations	Voice and data transmission
	3	Radio frequency band	Tx/Rx 1518–1559 MHz Tx/Rx 1626.5–1660.5 MHz Tx/Rx 1668–1675 MHz	1518–1559 MHz (space to earth) 1626.5–1660.5 MHz (earth to space) 1668–1675 MHz (earth to space)
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	–	
	8	Conditions of use of the channel	In the radio frequency band 1660.0–1660.5 Satellite communication terminal operating in MHz shall not cause radio interference to radio stations in the Radio Astronomy Service	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
	11	Basis for planning radio frequencies	–	
I n f o r m a t i v e p a r t	12	Planned changes	–	
	13	References to documents	CEPT/ECC/DEC/(04)09 EN 301 426 EN 301 444 EN 301 489-1 EN 301 489-20 EN 301 681 EN 50360 EN 62368-1 Radio Frequency Plan on the basis of § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	Functions via a geostationary communication satellite. EMS-MSSAT, Space Checker S-SMS, Thuraya, Inmarsat-B, Inmarsat-C, Inmarsat-D, Inmarsat-M,	

			Inmarsat-M4, Inmarsat mini-M, Inmarsat BGAN or any other satellite communication terminal operating in the 1.5/1.6 GHz frequency band	
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3.4. Private satellite communication terminal in the radio frequency band of 1.6 and 2.4 GHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile satellite communication	
	2	Application	Mobile earth stations	Voice and data transmission
	3	Radio frequency band	Tx/Rx 1610–1626.5 MHz Tx/Rx 2483.5–2500 MHz	1610–1626.5 MHz (earth to space) 1613.8–1626.5 MHz (space to earth) 2483.5–2500 MHz (space to earth)
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	Maximum E.I.R.P. mean value –3 dBW/4 kHz Maximum allowed E.I.R.P. –15 dBW/4 kHz	
	8	Conditions of use of the channel	–	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	CEPT/ECC/DEC/(09)02 CEPT/ECC/DEC/(12)01 EN 301 441 EN 301 489-1 EN 301 489-20 EN 50360 EN 62368-1 Radio Frequency Plan on the basis of § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	Works via a communication satellite	

3.5. Portable satellite communication terminal in the 1.6 GHz frequency band

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile satellite communication	
	2	Application	Mobile earth stations	Portable satellite terminal. Unidirectional data transmission. Voice communication not allowed
	3	Radio frequency band	Tx/Rx 1613.8–1626.5 MHz	Earth to space
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.I.R.P. 30 dBm – maximum allowed E.I.R.P.	
	8	Conditions of use of the channel	Duty cycle must not exceed 1 %. Unwanted radiation must not exceed the limits set out in Table 1 of Annex 1 to the ITU-R Recommendation M1343	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	CEPT/ECC/DEC/(09)04 EN 301 489-1 EN 50360 EN 62368-1 ITU-R M.1343 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	Works via a communication satellite	

3.6. Private satellite communication terminal in the radio frequency band of 1.9 and 2.1 GHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile satellite communication	
	2	Application	Mobile earth stations	Voice and data transmission
	3	Radio frequency band	Tx 1980–2010 MHz Rx 2170–2200 MHz	1980–2010 MHz (earth to space) 2170–2200 MHz (space to earth)
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	Duplex (190 MHz)	
	7	Transmission power/power density	–	
	8	Conditions of use of the channel	–	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
	11	Basis for planning radio frequencies	–	
I n f o r m a t i v e p a r t	12	Planned changes	–	
	13	References to documents	2007/98/EC CEPT/ECC/DEC/(06)09 EN 301 442 EN 301 489-1 EN 301 489-20 EN 302 574-2 EN 302 574-3 EN 50360 EN 62368-1 Radio Frequency Plan on the basis of § 9(3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	Works via a communication satellite or a stationary complementary ground-based component (CGC).	

3.7. Satellite communication ESV terminal in the 4 GHz and 6 GHz frequency bands

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Fixed satellite communications	
	2	Application	Satellite Communications ESV Terminal	
	3	Radio frequency band	Tx/Rx 3700–4200 MHz Tx/Rx 5925–6425 MHz	5925–6425 MHz (earth to space) 3700–4200 MHz (space to earth)
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	–	
	8	Conditions of use of the channel	In accordance with ITU RR Res. 902 (WRC-03) and ITU RR No. 5.457A (WRC-15)	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	CEPT/ECC/DEC/(05)09 EN 301 447 EN 301 843-1 EN 301 843-6 EN 50385 EN 62368-1 Radio Frequency Plan on the basis of § 9(3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	The ESV terminal is a satellite earth station installed on board a water craft that operates via a geostationary communication satellite.	

3.8. Satellite communication AES terminal in the 11, 12 and 14 GHz frequency bands

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile satellite communication	
	2	Application	Satellite Communications AES Terminal	
	3	Radio frequency band	Tx/Rx 10.7–11.7 GHz Tx/Rx 12.5–12.75 GHz Tx/Rx 14–14.5 GHz	14–14.5 GHz (earth to space) 10.7–11.7 MHz (space to earth) 12.5–12.75 MHz (space to earth)
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	Maximum allowed E.I.R.P. 50 dBW	
	8	Conditions of use of the channel	In conformity with the basic requirements of ITU-R recommendation M.1643 concerning the prevention of radio interference	
	9	Frequency authorisation regime	No frequency authorisation	AES terminals shall be authorised in accordance with the procedure established in the country of registration of the aircraft.
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	CEPT/ECC/DEC/(05)11 EN 301 489-1 EN 302 186 EN 50385 EN 62368-1 Radio Frequency Plan on the basis of § 9(3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	Works via a geostationary communication satellite	

3.9. Transportable satellite communication terminal in the SNG frequency band 11-12/14 GHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Fixed satellite communications	
	2	Application	Satellite communication system for the temporary transmission of news (SNG)	SNG Television and audio signal transmission
	3	Radio frequency band	Tx/Rx 10.7-11.7 GHz Tx/Rx 12.5-12.75 GHz Tx/Rx 12.75-13.25 GHz Tx/Rx 13.75-14.5 GHz	10.7–11.7 MHz (space to earth) 12.5–12.75 MHz (space to earth) 12.75–13.25 GHz (in the Earth-Space direction) 13.75–14.5 GHz (in the Earth-Space direction)
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	–	
	8	Conditions of use of the channel	–	The use of antennae with a diameter of up to 5 m is allowed
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
	11	Basis for planning radio frequencies	–	
I n f o r m a t i v e p a r t	12	Planned changes	–	
	13	References to documents	CEPT/ERC/REC 13-03 EN 50385 EN 301 430 EN 301 489-1 EN 301 489-12 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	Works via a geostationary communication satellite	

3.10. Satellite communication ESV terminal in the 11, 12 and 14 GHz frequency bands

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Fixed satellite communications	
	2	Application	Satellite Communications ESV Terminal	
	3	Radio frequency band	Tx/Rx 10.7–11.7 GHz Tx/Rx 12.5–12.75 GHz Tx/Rx 14–14.5 GHz	14–14.5 GHz (in the Earth-Space direction) 10.7–11.7 MHz (space to earth) 12.5–12.75 MHz (space to earth)
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	–	
	8	Conditions of use of the channel	–	The use of antennae with a diameter starting from 0.6 m is allowed
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	CEPT/ECC/DEC/(05)10 EN 301 843-1 EN 301 843-6 EN 302 340 EN 50385 EN 62368-1 Radio Frequency Plan on the basis of § 9(3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	A satellite earth station installed on board a water craft and operated by means of a communication satellite.	

3.11. Satellite terminals (HEST) in the 10, 14, 19 and 29 GHz radio frequency bands

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Fixed satellite communications	
	2	Application	Fixed earth stations	Analogue and digital communications. HEST (<i>high E.I.R.P. satellite terminals</i>) high/low equivalent isotropic radiated power satellite terminals
	3	Radio frequency band	Tx/Rx 10.7–12.75 GHz Tx/Rx 14–14.25 GHz Tx/Rx 19.7–20.2 GHz Tx/Rx 29.5–30 GHz	10.7–12.75 MHz (space to earth) 14–14.50 GHz (earth to space) 19.70–20.20 MHz (space to earth) 29.5–30 GHz (earth to space)
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.I.R.P. 60 dBW	If the antenna of the satellite terminal uses several transmitters simultaneously or the transmitter emits several carrier signals, the radiated power of the satellite terminal shall not exceed the maximum E.I.R.P. value set.
	8	Conditions of use of the channel	–	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
	11	Basis for planning radio frequencies	–	
I n f o r m a t i	12	Planned changes	–	
	13	References to documents	CEPT/ECC/DEC/(06)03 EN 301 428 EN 301 459 EN 301 489-1 EN 301 489-12 EN 50385 EN 62368-1	

v e p a r t			Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	Works via a geostationary communication satellite	

3.12. Satellite AES terminal in the 11-13 GHz radio frequency band

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Fixed satellite communications	
	2	Application	Satellite Communications AES Terminal	
	3	Radio frequency band	Tx/Rx 10.7–12.75 GHz Tx/Rx 12.75–13.25 GHz	10.7–12.75 MHz (space to earth) 12.75–13.25 GHz (earth to space)
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	Maximum allowed E.I.R.P. 50 dBW	
	8	Conditions of use of the channel	–	
	9	Frequency authorisation regime	No frequency authorisation	AES terminals shall be authorised in accordance with the procedure established in the country of registration of the aircraft.
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	CEPT/ECC/DEC/(19)04 EN 301 489-1 EN 302 186 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

3.13. Satellite Terminal (GSO ESIM) in the 11–12 and 14 GHz frequency bands

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Fixed satellite communications	
	2	Application	Satellite terminal (GSO ESIM)	GSO ESIM – Geostationary Orbit Earth Stations In-Motion
	3	Radio frequency band	Tx/Rx 10.7–12.75 GHz Tx/Rx 14–14.5 GHz	10.7–12.75 MHz (space to earth) 14–14.5 GHz (earth to space)
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	Maximum allowed E.I.R.P. 54.5 dBW	
	8	Conditions of use of the channel	The device is controlled by a network controller (<i>NFC – Network Control Facility</i>)	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	CEPT/ECC/DEC/(18)04 EN 301 489-1 EN 302977 EN 302448 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

3.14. Satellite communication terminals (NGSO ESIM) in the 11-12 and 14 GHz frequency bands

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Fixed satellite communications	
	2	Application	Satellite communication terminal (NGSO ESIM)	NGSO ESIM – Non-Geostationary Communication Satellite Mediation Terminal (Non-Geostationary Orbit Earth Stations In-Motion)
	3	Radio frequency band	Tx/Rx 10.7–12.75 GHz Tx/Rx 14–14.5 GHz	10.7–12.75 MHz (space to earth) 14–14.5 GHz (earth to space)
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	Maximum allowed E.I.R.P. 54.5 dBW	
	8	Conditions of use of the channel	The device is controlled by a network controller (NFC – Network Control Facility)	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	CEPT/ECC/DEC/(18)05 EN 301 489-1 EN 303 980 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

3.15. Stationary satellite earth stations in the 11–12 and 14 GHz frequency bands

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Fixed satellite communications	
	2	Application	Fixed earth stations	
	3	Radio frequency band	Tx/Rx 10.7–12.75 GHz Tx/Rx 14–14.5 GHz	10.7–12.75 MHz (space to earth) 14–14.5 GHz (earth to space)
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	Maximum allowed E.I.R.P. 60 dBW	
	8	Conditions of use of the channel	The device is controlled by a network control facility (<i>NFC</i>)	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
	11	Basis for planning radio frequencies	–	
I n f o r m a t i v e p a r t	12	Planned changes	–	
	13	References to documents	CEPT/ECC/DEC/(17)04 EN 301 489-1 EN 303 980 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	The local earth station operates via a non-geostational communication satellite.	

3.16. Satellite communication VSAT terminal in the 11 GHz and 14 GHz frequency bands

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Fixed satellite communications	
	2	Application	Satellite VSAT terminal	VSAT — Very Small Aperture Terminal
	3	Radio frequency band	Tx/Rx 10.7-11.7 GHz Tx/Rx 14.25-14.5 GHz	10.7–11.7 MHz (space to earth) 14.25–14.5 GHz (in the Earth-Space direction)
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	Maximum allowed E.I.R.P. 50 dBW	
	8	Conditions of use of the channel	The use of antennae with a diameter of up to 3.8 m is allowed	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	CEPT/ECC/DEC/(03)04 EN 301428 EN 301 489-1 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	The terminal operates via geostationary communication satellite.	

3.17. Satellite Communications Terminal (ESOMP NGSO) in the 17–27 GHz and 28–30 GHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Fixed satellite communications	
	2	Application	Satellite terminal (NGSO ESOMP)	Works in a non-geostatic (NGSO) FSS satellite system. Satellite terminals to be installed on a vehicle with a small directional antenna for broadband communications services.
	3	Radio frequency band	Rx 17.3-20.2 GHz Tx 27.5-27.8285 GHz Tx 28.4445-28.9485 GHz Tx 29.5-30 GHz	17.3–20.2 MHz (space to earth) 27.5–27.8285 GHz (in the Earth-Space direction) 28.4445–28.9485 GHz (in the Earth-Space direction) 29.5–30 GHz (in the Earth-Space direction)
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.I.R.P. 70 dBW In accordance with Annex 1 to the ECC Decision CEPT/ECC/DEC/(15)04	ESOMP satellite terminal capacity in the airport area for road vehicles E.I.R.P. 52.4 dBW, for aircrafts E.I.R.P. 58.4 dBW
	8	Conditions of use of the channel	In accordance with Annex 2 to the ECC Decision CEPT/ECC/DEC/(15)04	
	9	Frequency authorisation regime	No frequency authorisation	For use in aircraft or water craft, an ESOMP terminal has to be authorised according to the procedure established in the country of registration of the aircraft or water craft.
I n f o r	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	CEPT/ECC/DEC/(15)04 EN 301 489-1 EN 301 489-12 EN 303 979	

m a t i v e p a r t			EN 50385 EN 62368-1 Radio Frequency Plan on the basis of § 9(3) of the Electronic Communications Act	
	14	Notification number	2023/yyy/EE	
	15	Notes	Equipment installed in aircraft, vessels or road vehicles or mobile equipment used during movement or temporary stops.	

3.18. Satellite Communications Terminal (ESOMP GSO) in the 17–27 GHz and 28–30 GHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Fixed satellite communications	
	2	Application	Satellite terminal (GSO ESOMP)	Satellite terminals for geostationary (GSO) satellite broadband communications services to be installed on a vehicle with a small directional antenna.
	3	Radio frequency band	Tx/Rx 17.3-20.2 GHz Tx/Rx 27.5-27.8285 GHz Tx/Rx 28.4445-28.8365 GHz Tx/Rx 29.4525-30 GHz	17.3–20.2 MHz (space to earth) 27.5–27.8285 GHz (in the Earth-Space direction) 28.445–28.8365 GHz (in the Earth-Space direction) 29.4525–30 GHz (in the Earth-Space direction)
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	Maximum allowed E.I.R.P. 60 dBW Maximum allowed E.I.R.P. 58.4 dBW (aircraft ESOMPs within the aerodrome) Maximum allowed E.I.R.P. 52.4 dBW (aircraft ESOMPs within the aerodrome)	
	8	Conditions of use of the channel	In accordance with ECC Decision CEPT/ECC/DEC/(13)01: - Section 4 of Annex 2 (ESOMP in aircraft); - Section 5 of Annex 2 (ESOMP in vessels).	
	9	Frequency authorisation regime	No frequency authorisation	For use in aircraft or water craft, an ESOMP terminal has to be authorised according to the procedure established in the country of registration of the aircraft or water craft.
	10	Essential requirements under § 120 ² (1) of the	None	

I n f o r m a t i v e p a r t		Electronic Communications Act (ECA)		
	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	CEPT/ECC/DEC/(13)01 EN 301 489-1 EN 301 489-12 EN 303 978 EN 50385 EN 62368-1 Radio Frequency Plan on the basis of § 9(3) of the Electronic Communications Act	
	14	Notification number	2023/yyy/EE	
	15	Notes	Equipment installed in aircraft, vessels or road vehicles or mobile equipment used during movement or temporary stops.	

Non-specific short-range devices

4.1. Non-specific short range devices at frequencies 6765–6795 kHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Non-specific short-range devices	
	3	Radio frequency band	Tx/Rx 6765-6795 kHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	Maximum magnetic field strength 42 dBµA/m at a distance of 10 m	
	8	Conditions of use of the channel	–	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the ECA	No	
	11	Basis for planning radio frequencies	–	
I n f o r m a t i v e p a r t	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 300 330 EN 301 489-1 EN 301 489-3 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	Telemetry, remote control, surveillance, signalling, data transmission and similar devices	

4.2. Non-specific short range devices at frequencies 13.553–13.567 MHz

N o r m a t i v e P a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Non-specific short-range devices	
	3	Radio frequency band	Tx/Rx 13,553-13,567 kHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.R.P. 10 mW	
	8	Conditions of use of the channel	–	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e P a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 300 330 EN 301 489-1 EN 301 489-3 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	Telemetry, remote control, surveillance, signalling, data transmission and similar devices	

4.3. Non-specific short range devices at frequencies 26.957–27.283 MHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Non-specific short-range devices	
	3	Radio frequency band	Tx/Rx 26,957-27,283 kHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.R.P. 10 mW	
	8	Conditions of use of the channel	–	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the ECA	No	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 300 220-2 EN 301 489-1 EN 301 489-3 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	Telemetry, remote control, surveillance, signalling, data transmission and similar devices	

4.4. Non-specific short-range device in the 27 MHz frequency band

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Non-specific short-range devices	
	3	Radio frequency band	Tx/Rx 26,990-27,000 kHz Tx/Rx 27,040-27,050 kHz Tx/Rx 27,090-27,100 kHz Tx/Rx 27,140-27,150 kHz Tx/Rx 27,190-27,200 kHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.R.P. 100 mW	
	8	Conditions of use of the channel	Maximum duty cycle 0.1%	Model control equipment may operate without a limited duty cycle.
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
	11	Basis for planning radio frequencies	–	
I n f o r m a t i v e p a r t	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 300 220-2 EN 301 489-1 EN 301 489-3 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

4.5. Non-specific short range devices at frequencies 40.66–40.70 MHz

N o r m a t i v e P a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Non-specific short-range devices	
	3	Radio frequency band	Tx/Rx 40.66-40.7 MHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.R.P. 10 mW	
	8	Conditions of use of the channel	–	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e P a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 300 220-2 EN 301 489-1 EN 301 489-3 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	Telemetry, remote control, surveillance, signalling, data transmission and similar devices	

4.6. Non-specific short range devices at frequencies 49.5–50.0 MHz

N o r m a t i v e P a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Non-specific short-range devices	Video transmission is not allowed
	3	Radio frequency band	Tx/Rx 49.5-50 MHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.R.P. 10 mW	
	8	Conditions of use of the channel	–	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e P a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	EN 300 220-2 EN 301 489-1 EN 301 489-3 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	Telemetry, remote control, surveillance, signalling, data transmission and similar devices	

4.7. Non-specific short range devices at frequencies 138.20–138.45 MHz

N o r m a t i v e P a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Non-specific short-range devices	Video transmission is not allowed
	3	Radio frequency band	Tx/Rx 138.2-138.45 MHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.R.P. 10 mW	
	8	Conditions of use of the channel	Spectrum access and interference mitigation techniques shall be used, the efficiency of which is at least equal to the efficiency of the techniques described in the harmonised standards adopted on the basis of Directive 2014/53/EC. Instead, the duty cycle of 1.0% may also be used.	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the ECA	No	
	11	Basis for planning radio frequencies	–	
I n f o r m a t i v e P a r t	12	Planned changes	–	
	13	References to documents	CEPT/ERC/REC 70-03 EN 300 220-2 EN 301 489-1 EN 301 489-3 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyyy/EE	
	15	Notes	Telemetry, remote control, surveillance, signalling, data transmission and similar devices	

4.8. Non-specific short range devices at frequencies 169.4–169.475 MHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Non-specific short-range devices	
	3	Radio frequency band	Tx/Rx 169.4-169.475 MHz	
	4	Channel spacing	50 kHz	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.R.P. 500 mW	
	8	Conditions of use of the channel	Duty cycle 1 %	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 300 220-2 EN 301 489-1 EN 301 489-3 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

4.9. Non-specific short range devices at frequencies 169.4000–169.4875 MHz

N o r m a t i v e P a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Non-specific short-range devices	
	3	Radio frequency band	Tx/Rx 169.4-169.4875 MHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.R.P. 10 mW	
	8	Conditions of use of the channel	Spectrum access and interference mitigation techniques shall be used, the efficiency of which is at least equal to the efficiency of the techniques described in the harmonised standards adopted on the basis of Directive 2014/53/EC. Instead, the duty cycle of 0.1% may also be used.	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 300 220-2 EN 301 489-1 EN 301 489-3 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

4.10. Non-specific short range devices at frequencies 169.4875–169.5875 MHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Non-specific short-range devices	
	3	Radio frequency band	Tx/Rx 169.4875-169.5875 MHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.R.P. 10 mW	
	8	Conditions of use of the channel	Spectrum access and interference mitigation techniques shall be used, the efficiency of which is at least equal to the efficiency of the techniques described in the harmonised standards adopted on the basis of Directive 2014/53/EC. Maximum duty cycle is 0.001%	Between 00:00 a.m. and 06.00 local time, the maximum duty cycle may be 0.1 %
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
	11	Basis for planning radio frequencies	–	
I n f o r m a t i v e p a r t	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 300 220-2 EN 301 489-1 EN 301 489-3 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

4.11. Non-specific short range devices at frequencies 169.5875–169.8125 MHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Non-specific short-range devices	
	3	Radio frequency band	Tx/Rx 169.5875-169.8125 MHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.R.P. 10 mW	
	8	Conditions of use of the channel	Spectrum access and interference mitigation techniques shall be used, the efficiency of which is at least equal to the efficiency of the techniques described in the harmonised standards adopted on the basis of Directive 2014/53/EC. Instead, the duty cycle of 0.1% may also be used.	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 300 220-2 EN 301 489-1 EN 301 489-3 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

4.12. Non-specific short range devices at frequencies 173.20–173.35 MHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Non-specific short-range devices	Animal marking equipment only
	3	Radio frequency band	Tx/Rx 173.2-173.35 MHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	Maximum allowed impulse power at the carrying frequency 1 mW	
	8	Conditions of use of the channel	–	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	EN 300 220-2 EN 301 489-1 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

4.13. Non-specific short range devices at frequencies 433.05–434.79 MHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Non-specific short-range devices	Audio and video transmission is not allowed
	3	Radio frequency band	Tx/Rx 433.05-434.79 MHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.R.P. 1 mW Power spectral density in the case of modulation bandwidth in excess of 250 kHz -13 dBm / 10 kHz	
	8	Conditions of use of the channel	Speech transmission is allowed, if additional interference mitigation techniques are taken	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 300 220-2 EN 301 489-1 EN 301 489-3 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	Telemetry, remote control, surveillance, signalling, data transmission and similar devices	

4.14. Non-specific short range devices at frequencies 433.05–434.79 MHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Non-specific short-range devices	Analogue audio and video transmission is not allowed. Speech transmission is allowed.
	3	Radio frequency band	Tx/Rx 433.05-434.79 MHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.R.P. 10 mW	
	8	Conditions of use of the channel	Maximum duty cycle 10%	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 300 220-2 EN 301 489-1 EN 301 489-3 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	Telemetry, remote control, surveillance, signalling, data transmission and similar devices	

4.15. Non-specific short range devices at frequencies 434.04–434.79 MHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Non-specific short-range devices	Audio and video transmission is not allowed
	3	Radio frequency band	Tx/Rx 434.04-434.79 MHz	
	4	Channel spacing	25 kHz	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.R.P. 10 mW	
	8	Conditions of use of the channel	Maximum duty cycle 100 %. Speech transmission is allowed, if additional interference mitigation measures are taken	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 EN 300 220-2 EN 301 489-1 EN 301 489-3 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	Telemetry, remote control, surveillance, signalling, data transmission and similar devices	

4.16. Non-specific short range devices at frequencies 444.45 MHz and 444.55 MHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Non-specific short-range devices	Remote meter readers
	3	Radio frequency band	Tx/Rx 444.45 MHz Tx/Rx 444.55 MHz	
	4	Channel spacing	25 kHz	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.R.P. 500 mW	
	8	Conditions of use of the channel	–	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	EN 300 220-2 EN 301 489-1 EN 301 489-3 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	Telemetry, remote control, surveillance, signalling, data transmission and similar devices	

4.17. Non-specific short range devices at frequencies 862–863 MHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Non-specific short-range devices	
	3	Radio frequency band	Tx/Rx 862-863 MHz	
	4	Channel spacing	Transmission channel width less than or equal to 350 kHz	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.R.P. 25 mW	
	8	Conditions of use of the channel	Duty cycle up to 0.1 %	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 50385 EN 301 489-1 EN 301 489-3 EN 300 220-2 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

4.18. Non-specific short range devices at frequencies 863–865 MHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Non-specific short-range devices	Analogue video transmission is not allowed
	3	Radio frequency band	Tx/Rx 863-865 MHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.R.P. 25 mW	
	8	Conditions of use of the channel	Spectrum access and interference mitigation techniques shall be used, the efficiency of which is at least equal to the efficiency of the techniques described in the harmonised standards adopted on the basis of Directive 2014/53/EC. Instead, the duty cycle of 0.1% may also be used.	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2006/771/EC CEPT/ERC/REC 70-03 (EU) 2019/1345 (EU) 2022/180 EN 300 220-2 EN 301 489-1 EN 301 489-3 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	Telemetry, remote control, surveillance, signalling, data transmission and similar devices	

4.19. Non-specific short range devices at frequencies 865–868 MHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Non-specific short-range devices	Analogue video transmission is not allowed
	3	Radio frequency band	Tx/Rx 865-868 MHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.R.P. 25 mW	
	8	Conditions of use of the channel	Spectrum access and interference mitigation techniques shall be used, the efficiency of which is at least equal to the efficiency of the techniques described in the harmonised standards adopted on the basis of Directive 2014/53/EC. Instead, the duty cycle of 1% may also be used.	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 300 220-2 EN 301 489-1 EN 301 489-3 EN 62368-1 EN 50385 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	Telemetry, remote control, surveillance, signalling, data transmission and similar devices	

4.20. Non-specific short range devices at frequencies 868.0–868.6 MHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Non-specific short-range devices	Analogue video transmission is not allowed
	3	Radio frequency band	Tx/Rx 868-868.6 MHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.R.P. 25 mW	
	8	Conditions of use of the channel	Spectrum access and interference mitigation techniques shall be used, the efficiency of which is at least equal to the efficiency of the techniques described in the harmonised standards adopted on the basis of Directive 2014/53/EC. Instead, the duty cycle of 1% may also be used.	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
	11	Basis for planning radio frequencies	–	
I n f o r m a t i v e p a r t	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 300 220-2 EN 301 489-1 EN 301 489-3 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	Telemetry, remote control, surveillance, signalling, data transmission and similar devices	

4.21. Non-specific short range devices at frequencies 868.7–869.2 MHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Non-specific short-range devices	Analogue video transmission is not allowed
	3	Radio frequency band	Tx/Rx 868.7-869.2 MHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.R.P. 25 mW	
	8	Conditions of use of the channel	Spectrum access and interference mitigation techniques shall be used, the efficiency of which is at least equal to the efficiency of the techniques described in the harmonised standards adopted on the basis of Directive 2014/53/EC. Instead, the duty cycle of 0.1% may also be used.	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 300 220-2 EN 301 489-1 EN 301 489-3 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	Telemetry, remote control, surveillance, signalling, data transmission and similar devices	

4.22. Non-specific short range devices at frequencies 869.4–869.65 MHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Non-specific short-range devices	Analogue video transmission is not allowed
	3	Radio frequency band	Tx/Rx 869.4-869.65 MHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.R.P. 500 mW	
	8	Conditions of use of the channel	Spectrum access and interference mitigation techniques shall be used, the efficiency of which is at least equal to the efficiency of the techniques described in the harmonised standards adopted on the basis of Directive 2014/53/EC. Instead, the duty cycle of 10% may also be used.	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
	11	Basis for planning radio frequencies	–	
I n f o r m a t i v e p a r t	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 300 220-2 EN 301 489-1 EN 301 489-3 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	Telemetry, remote control, surveillance, signalling, data transmission and similar devices	

4.23. Non-specific short range devices at frequencies 869.7–870 MHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Non-specific short-range devices	Analogue video transmission is not allowed
	3	Radio frequency band	Tx/Rx 869.7-870 MHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.R.P. 5 mW	
	8	Conditions of use of the channel	–	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 300 220-2 EN 301 489-1 EN 301 489-3 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	Telemetry, remote control, surveillance, signalling, data transmission and similar devices	

4.24. Non-specific short range devices at frequencies 869.7–870 MHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Non-specific short-range devices	Analogue video transmission is not allowed
	3	Radio frequency band	Tx/Rx 869.7-870 MHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.R.P. 25 mW	
	8	Conditions of use of the channel	Spectrum access and interference mitigation techniques shall be used, the efficiency of which is at least equal to the efficiency of the techniques described in the harmonised standards adopted on the basis of Directive 2014/53/EC. Instead, the duty cycle of 1% may also be used.	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 300 220-2 EN 301 489-1 EN 301 489-3 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	Telemetry, remote control, surveillance, signalling, data transmission and similar devices	

4.25. Non-specific short range devices at frequencies 870–876 MHz

N o r m a t i v e P a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Non-specific short-range devices	
	3	Radio frequency band	Tx/Rx 870-876 MHz	
	4	Channel spacing	600 kHz -	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.R.P. 25 mW	
	8	Conditions of use of the channel	Duty cycle 1 %	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e P a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	CEPT/ERC/REC 70-03 EN 300 220-2 EN 301 489-1 EN 301 489-3 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	Telemetry, remote control, surveillance, signalling, data transmission and similar devices	

4.26. Non-specific short range devices at frequencies 915–921 MHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Non-specific short-range devices	
	3	Radio frequency band	Tx/Rx 915-921 MHz	
	4	Channel spacing	600 kHz except for 916.3 MHz, 917.5 MHz, 918.7 MHz and 919.9 MHz where the channel bandwidth is 400 kHz	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.R.P. 25 mW	
	8	Conditions of use of the channel	Duty cycle 1 %	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	CEPT/ERC/REC 70-03 EN 300220-2 EN 301489-1 EN 301489-3 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	Telemetry, remote control, surveillance, signalling, data transmission and similar devices	

4.27. Non-specific short range devices at frequencies 2400–2483.5 MHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Non-specific short-range devices	
	3	Radio frequency band	Tx/Rx 2400-2483.5 MHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.I.R.P. 10 mW	
	8	Conditions of use of the channel	–	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 300440 EN 301 489-1 EN 301 489-3 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	Telemetry, remote control, surveillance, signalling, data transmission and similar devices	

4.28. Ultra wideband (UWB) device at frequencies 3.1–4.8 GHz and 6–9 GHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Ultra wideband (UWB) devices	Non-specific UWB device The device shall not cause interference to other radio services, and the device is not protected from interference caused by other radio equipment. Used indoors. In the event of outdoor use of the device, it shall not be attached to fixed equipment, infrastructure or a fixed external antenna Use on air vehicles is not permitted
	3	Radio frequency band	Tx/Rx 3100-4800 MHz Tx/Rx 6000-9000 MHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	Maximum allowed E.I.R.P. spectral density is provided in Table 1.	In accordance with Decision (EU) 2019/785
	8	Conditions of use of the channel	The relevant interference mitigation techniques are provided in Table 1.	In accordance with Decision (EU) 2019/785
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	(EU) 2019/785 CEPT/ECC/DEC/(06)04 CEPT/ERC/REC 70-03 EN 301 489-1 EN 301 489-33 EN 302 500-2 EN 50385 EN 62368-1 Radio frequency plan	-

p a rt			pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	Equipment using ultra wideband (UWB) technology involves short range devices able to transfer data by radiating and receiving radio frequency electromagnetic waves dispersed in a radio frequency band wider than 50 MHz, which may overlap with frequencies assigned to other radio communication services.	

Table 1. Interference mitigation techniques

Radio frequency band (GHz)	Maximum mean E.I.R.P. spectral density (dBm/MHz)	Maximum peak E.I.R.P. density (dBm/50 MHz)
Less than 1.6	-90.0	-50.0
1.6 to 2.7	-85.0	-45.0
2.7 to 3.4	-70.0 or —41.3 using LDC ¹ or DAA ²	-36.0 or 0
3.4 to 3.8	– 80.0 or —41.3 using LDC ¹ or DAA ²	-40.0 or 0
3.8 to 4.8	-70.0 or —41.3 using LDC ¹ or DAA ²	-30.0 or 0
4.8 to 6.0	-70.0	-30.0
6.0 to 8.5	-41.3	0.0
8.5 to 9	-65.0 or -41.3 using DAA ²	-25.0 or 0
9 to 10.6	-65.0	-25.0
More than 10.6	-85.0	-45.0

¹ Frequencies 3.1–4.8 GHz. The Alarm Reduction Method ‘Short duty cycle’ and its limitations are described in harmonised standard EN 302 065-1

² Frequencies 3.1–4.8 GHz and 8.5–9 GHz. The detection and avoidance method and its limitations are described in harmonised standard EN 302 065-1

4.29. Non-specific short range devices at frequencies 5725–5875 MHz

N o r m a t i v e P a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Non-specific short-range devices	
	3	Radio frequency band	Tx/Rx 5725-5875 MHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.I.R.P. 25 mW	
	8	Conditions of use of the channel	–	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e P a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 300440 EN 301 489-1 EN 301 489-3 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	Telemetry, remote control, surveillance, signalling, data transmission and similar devices	

4.30. Non-specific short range devices at frequencies 24–24.25 GHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Non-specific short-range devices	
	3	Radio frequency band	Tx/Rx 24-24.25 GHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.I.R.P. 100 mW	
	8	Conditions of use of the channel	–	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the ECA	No	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 300440 EN 301 489-1 EN 301 489-3 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	Traffic radar and devices for telemetry, remote control, surveillance, signalling, data transmission and similar	

4.31. Non-specific short range devices at frequencies 33.4–36 GHz

N o r m a t i v e P a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Non-specific short-range devices	Traffic radar only
	3	Radio frequency band	Tx/Rx 33.4-36 GHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.I.R.P. 50 mW power density 5 cm from radiator 2 mW/cm ²	
	8	Conditions of use of the channel	–	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	EN 300 440 EN 301 489-1 EN 301 489-3 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

4.32. Non-specific short range devices at frequencies 57–64 GHz

N o r m a t i v e P a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Non-specific short-range devices	
	3	Radio frequency band	Tx/Rx 57-64 GHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.I.R.P. 100 mW Maximum allowed output power 10 mW Maximum E.I.R.P. spectral density 13 dBm/MHz	
	8	Conditions of use of the channel	–	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e P a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 301489-1 EN 302567 EN 305 550-2 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	Telemetry, remote control, surveillance, signalling, data transmission and similar devices	

4.33. Non-specific short range devices at frequencies 61–61.5 GHz

N o r m a t i v e P a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Non-specific short-range devices	
	3	Radio frequency band	Tx/Rx 61-61.5 GHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.I.R.P. 100 mW	
	8	Conditions of use of the channel	–	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e P a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 301 489-1 EN 305 550-2 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	Telemetry, remote control, surveillance, signalling, data transmission and similar devices	

4.34. Non-specific short range devices at frequencies 122–122.25 GHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Non-specific short-range devices	
	3	Radio frequency band	Tx/Rx 122-122.25 GHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.I.R.P. 10 dBm/250 MHz; -48 dBm/MHz for slope angle > 30°	Measure RMS with detector, sampling time up to 1 ms
	8	Conditions of use of the channel	–	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 301 489-1 EN 305 550-2 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	Telemetry, remote control, surveillance, signalling, data transmission and similar devices	

4.35. Non-specific short range devices at frequencies 122.25–123 GHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Non-specific short-range devices	
	3	Radio frequency band	Tx/Rx 122.25-123 GHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.I.R.P. 100 mW	
	8	Conditions of use of the channel	–	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 301 489-1 EN 305 550-2 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	Telemetry, remote control, surveillance, signalling, data transmission and similar devices	

4.36. Non-specific short range devices at frequencies 244–246 GHz

N o r m a t i v e P a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Non-specific short-range devices	
	3	Radio frequency band	Tx/Rx 244-246 GHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.I.R.P. 100 mW	
	8	Conditions of use of the channel	–	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e P a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 301 489-1 EN 305 550-2 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	Telemetry, remote control, surveillance, signalling, data transmission and similar devices	

Observation, pursuit and data collection systems

5.1. Human detection and collision avoidance system at frequencies 442.2 to 450 kHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Tracking and data acquisition systems	
	3	Radio frequency band	Tx/Rx 442.2-450 kHz	
	4	Channel spacing	150 4	
	5	Modulation/bandwidth used	Unmodulated signal with continuous waveform	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	Maximum magnetic field strength 7 dBuAm at a distance of 10 m	
	8	Conditions of use of the channel	–	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2001/148/EC 2006/771/EÜ (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 300 718-1 EN 300 718-2 EN 301 489-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

5.2. Emergency search device for buried victim and valuables at frequencies 456.9-457.1 kHz

N o r m a t i v e P a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Tracking and data acquisition systems	
	3	Radio frequency band	Tx/Rx 456.9-457.1 kHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	Unmodulated signal with continuous waveform	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	Maximum magnetic field strength 7 dBuAm at a distance of 10 m	
	8	Conditions of use of the channel	–	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the ECA	ESS Section 120 ² (1)(5)	In accordance with Decision 2001/148/EC
I n f o r m a t i v e P a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2001/148/EC 2006/771/EÜ (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 300 718-1 EN 300 718-2 EN 301 489-1 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

5.3. Observation, surveillance and data collection system device at frequencies 169.4–169.475 MHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Tracking and data acquisition systems	Meter reading system devices
	3	Radio frequency band	Tx/Rx 169.4-169.475 MHz	
	4	Channel spacing	50 kHz	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.R.P. 500 mW	
	8	Conditions of use of the channel	Maximum duty cycle 10%	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	CEPT/ECC/DEC/(05)02 CEPT/ERC/REC 70-03 EN 300 220-2 EN 301 489-3 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

5.4. Low Power (ULP) Wireless Medical Capsulescopy Devices

N o r m a t i v e P a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Tracking and data acquisition systems	
	3	Radio frequency band	Tx/Rx 430-440 MHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	10 MHz	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	e.r.p. – 50 dBm/100 kHz at the same time as the total power limit Total radiated power (TRP) – 40 dBm/10 MHz	The limits are extracorporeal
	8	Conditions of use of the channel	–	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	(EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 301 489-1 EN 301 489-3 EN 303 520 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

5.5. Observation, surveillance and data collection system device at frequencies 865–868 MHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Tracking and data acquisition systems	
	3	Radio frequency band	Tx/Rx 865-868 MHz	
	4	Channel spacing	200 kHz	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	Permitted frequency ranges: 865.6–865.8 MHz; 866.2–866.4 MHz; 866.8–867.0 MHz; 867.4–867.6 MHz;
	7	Transmission power/power density	E.R.P. 500 mW	Adaptive Power Control (APC) shall be capable of power reduction of up to 5 mW.
	8	Conditions of use of the channel	Duty cycle 2.5 % and adaptive power control (APC)	Access point duty cycle up to 10 %
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	(EU) 2022/180 CEPT/ERC/REC 70-03 EN 300 220-2 EN 301 489-1 EN 301 489-3 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

5.6. Observation, surveillance and data collection system device at frequencies 870–875.6 MHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Tracking and data acquisition systems	
	3	Radio frequency band	Tx/Rx 870-875.6 MHz	
	4	Channel spacing	200 kHz	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.R.P. 500 mW	All mobile network nodes shall be under the control of Master NAP. Adaptive Power Control (APC) shall be capable of power reduction up to 5 mW
	8	Conditions of use of the channel	Duty cycle 2.5 % and adaptive power control (APC)	Access point duty cycle up to 10 %
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	(EU) 2018/1538 CEPT/ERC/REC 70-03 EN 300 220-2 EN 301 489-1 EN 301 489-3 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

5.7. Observation, surveillance and data collection system device at frequencies 917.3–918.9 MHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Tracking and data acquisition systems	
	3	Radio frequency band	Tx/Rx 917.3-918.9 MHz	Permitted frequency ranges: 917.3–917.7 MHz 918.5–918.9 MHz
	4	Channel spacing	200 kHz	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.R.P. 500 mW	All mobile network nodes shall be under the control of Master NAP. Adaptive Power Control (APC) shall be capable of power reduction up to 5 mW
	8	Conditions of use of the channel	Duty cycle 2.5 % and adaptive power control (APC)	Access point duty cycle up to 10 %
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	CEPT/ERC/REC 70-03 EN 300 220-2 EN 301 489-1 EN 301 489-3 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

5.8. Medical body area system (MBANS)

N o r m a t i v e P a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Medical body area system (MBANS)	For indoor use only in medical institutions
	3	Radio frequency band	Tx/Rx 2483.5-2500 MHz	
	4	Channel spacing	3 MHz	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.I.R.P. 1 mW	
	8	Conditions of use of the channel	Operating cycle 10 % and equipment shall use an adequate spectrum allocation mechanism (e.g. LBT and AFA)	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 301 489-1 EN 301 489-3 EN 303203 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

5.9. Medical body area system MBANS at frequencies 2483.5–2500 MHz

N o r m a t i v e P a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Medical body area network system (MBANS)	For indoor use at patient's home only
	3	Radio frequency band	Tx/Rx 2483.5-2500 MHz	
	4	Channel spacing	3 MHz	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.I.R.P. 10 mW	
	8	Conditions of use of the channel	Operating cycle 2 % and equipment shall use an adequate spectrum allocation mechanism (e.g. LBT and AFA)	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 301 489-1 EN 301 489-3 EN 303203 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

5.10. Wireless industrial equipment for monitoring and data collection at frequencies 5725-5875 MHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Tracking and data acquisition systems	
	3	Radio frequency band	Tx/Rx 5725-5875 MHz	
	4	Channel spacing	1–20 MHz	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.I.R.P. 400 mW APC (Adaptive Power Control), also DFS and DAA shall be used. APC may reduce the power ≤ 25 mW E.I.R.P.	
	8	Conditions of use of the channel	DFS has to be used at frequencies 5725–5850 MHz to ensure protection of radio location services (weather radar), including radars which use frequency hopping. DAA has to be used as follows: 1) for ITS protection at frequencies 5855–5875 MHz; 2) for BFWA protection at frequencies 5725–5875 MHz; 3) For the protection of TTT applications between 5795 MHz and 5815 MHz	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	CEPT/ERC/REC 70-03 EN 301 489-1 EN 301 489-3 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	Wireless links in industrial environments, including surveillance and employee	

a rt			communication, wireless sensors and drives	
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5.11. Location tracking systems at frequencies 6–9 GHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Ultra wideband (UWB) devices	Location tracking systems Type 1 (LT1). The device shall not cause interference to other radio services, and the device is not protected from interference caused by other radio equipment. Used indoors. In the event of outdoor use of the device, it shall not be attached to fixed equipment, infrastructure or a fixed external antenna Use on air vehicles is not permitted
	3	Radio frequency band	Tx/Rx 6000-9000 MHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	Maximum allowed E.I.R.P. spectral density is provided in Table 1.	In accordance with Decision (EU) 2019/785
	8	Conditions of use of the channel	The relevant interference mitigation techniques are provided in Table 1.	In accordance with Decision (EU) 2019/785
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	(EU) 2019/785 CEPT/ECC/DEC/(06)04 EN 301 489-1 EN 301 489-33 EN 302 065 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the	

p a r t			ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	LT1 are systems intended for tracking the general location of persons and objects. The systems can be used without a frequency authorisation	

Table 1. Interference mitigation techniques

Radio frequency band (GHz)	Maximum mean E.I.R.P. spectral density (dBm/MHz)	Maximum peak E.I.R.P. spectral density (dBm / 50 MHz)
Less than 1.6	-90.0	-50.0
1.6 to 2.7	-85.0	-45.0
2.7 to 3.1	-70.0	-36.0
3.1 to 3.4	-70.0	-36.0
3.4 to 3.8	-80.0	-40.0
3.8 to 4.8	-70.0	-30.0
4.8 to 6	-70.0	-30.0
6.0 to 8.5	-41.3	0.0
8.5 to 9	-65.0 or -41.3 using DAA ¹	-25.0 or 0
9 to 10.6	-65.0	-25.0
More than 10.6	-85.0	-45.0

¹The detection and avoidance method and its limitations are described in harmonised standard EN 302 065-2

Broadband data transmission systems

6.1. Broadband data transmission systems at 863-868 MHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Broadband data transmission systems	
	3	Radio frequency band	Tx/Rx 863-868 MHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	600 kHz to 1 MHz
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.R.P. 25 mW	
	8	Conditions of use of the channel	Spectrum access and interference mitigation techniques shall be used, in addition to a duty cycle of 10 % of access points and 2.8 % of the remaining network equipment.	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 300 220-2 EN 301 489-1 EN 301 489-3 EN 50385 EN 62368-1 Radio frequency plan	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345

p a rt			pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

6.2. Broadband data transmission systems at 915.8-919.4 MHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Broadband data transmission systems	
	3	Radio frequency band	Tx/Rx 915.8-919.4 MHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	600 kHz to 1 MHz
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.R.P. 25 mW	
	8	Conditions of use of the channel	Spectrum access and interference mitigation techniques shall be used, in addition to a duty cycle of 10 % of access points and 2.8 % of the remaining network equipment.	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2018/1538 (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 300 220-2 EN 301 489-1 EN 301 489-3 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

6.3. Broadband data transmission system at frequencies 2400–2483.5 MHz

N o r m a t i v e P a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Broadband data transmission systems	WAS/RLAN
	3	Radio frequency band	Tx/Rx 2400-2483.5 MHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.I.R.P. 100 mW power spectral density 100 mW/100 kHz E.I.R.P. (when modulated by frequency hopping). Maximum power spectral density 10 mW/MHz E.I.R.P. (if other modulation methods are used).	
	8	Conditions of use of the channel	Spectrum access and interference mitigation techniques shall be used, the efficiency of which is at least equal to the efficiency of the techniques described in the harmonised standards adopted on the basis of Directive 2014/53/EC.	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e P a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 300 328 EN 301 489-1 EN 301 489-17 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

6.4. Broadband data transmission system at frequencies 5150–5350 MHz and 5470–5725 MHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communications other than mobile aeronautical communications	
	2	Application	Broadband data transmission systems	WAS/RLAN
	3	Radio frequency band	Tx/Rx 5150-5350 MHz Tx/Rx 5470-5725 MHz	5150–5250 MHz only allowed indoors, including vehicle cabins. 5170–5250 MHz for authorised drones. 5250–5350 MHz allowed indoors only. Installation on vehicles is not allowed. 5470–5725 MHz allowed indoors and outdoors. Installation on drones is not allowed. Installation on road vehicles is allowed if under control of a stationary WAS/RLAN device operating in top-mode and equipped with a DFS function
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.I.R.P. 200 mW (radio frequencies 5470–5725 MHz, when installed in road vehicles) E.I.R.P. 1 W power spectral density up to 50 mW/1 MHz E.I.R.P. (radio frequencies 5470–5725 MHz) E.I.R.P. 200 mW power spectral density 10 mW/1 MHz E.I.R.P. (radio frequencies 5150–5350 MHz) E.I.R.P. 40 mW in road vehicles and train wagons which damp radio signals below 12 dB (radio frequencies 5150- 5250 MHz)	

	8	Conditions of use of the channel	In radio frequency bands 5250–5350 MHz and 5470–5725 MHz shall comply with the following requirements: 1) the device shall employ an automatic transmit power control technique (minimum power reduction 3 dB); 2) the maximum mean E.I.R.P. must be reduced and the corresponding spectral density limit must be reduced by 3 dB; or 3) a radio interference mitigation technique shall be used in accordance with Annex 1 to ITU-R recommendation M.1652.	The frequency band 5600–5650 MHz shall not cause radio interference to meteorological radars. Use in large aircraft (except multi-engine helicopters), except in the frequency band 5600–5650 MHz, permitted until 31 December 2028 with a maximum mean equivalent isotropic radiated power (EIRP) of 100 mW for in-band emissions
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
I n f o r m a t i v e p a r t	13	References to documents	(EU) 2022/179 CEPT/ECC/DEC/(04)08 EN 301 489-1 EN 301 489-17 EN 301 893 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

6.5. Broadband data transmission system at frequencies 5945–6425 MHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communications other than mobile aeronautical communications	
	2	Application	Broadband data transmission systems	WAS/RLAN
	3	Radio frequency band	Tx/Rx 5945-6425 MHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.I.R.P. 200 mW and average E.I.R.P. spectral density not exceeding 10 dBm/MHz indoors E.I.R.P. 25 mW and average E.I.R.P. spectral density not exceeding 1 dBm/MHz indoors, or not exceeding 10 dBm/MHz for a narrow bandwidth (below 20 MHz) signal (minimum 15 channels)	Trains and planes with metallic glazing are considered as indoors. Use on drones is not permitted
	8	Conditions of use of the channel	Radio spectrum sharing methods shall be used	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	(EU) 2021/1067 CEPT/ECC/DEC/(20)01 EN 301 489-1 EN 301 489-17 EN 303687 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

6.6. Broadband data transmission system at frequencies 57–71 GHz

N o r m a t i v e P a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Broadband data transmission systems	
	3	Radio frequency band	Tx/Rx 57-71 GHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.I.R.P. 40 dBm power spectral density 23 dBm/MHz E.I.R.P. fixed mounted outdoor unit is not allowed E.I.R.P. 40 dBm power spectral density 23 dBm/MHz e.i.r.p and maximum transmit power of 27 dBm measured from antenna connector(s)	E.I.R.P. 55 dBm power spectral density of 38 dBm/MHz E.I.R.P. and antenna amplification of at least 30 dBi and may only be used with fixed external antennae
	8	Conditions of use of the channel	Spectrum access and interference mitigation techniques shall be used, the efficiency of which is at least equal to the efficiency of the techniques described in the harmonised standards adopted on the basis of Directive 2014/53/EC.	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
	11	Basis for planning radio frequencies	–	
I n f o r m a t i v e P a r t	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 EN 301 489-1 EN 301 489-17 EN 302 567 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

Railway communication systems

7.1. Railway communication system device at frequencies 984–7484 kHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Railway communication system devices	Eurobalise system device
	3	Radio frequency band	Tx/Rx 984-7484 kHz	Centre frequency 4234 kHz
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	Maximum magnetic field strength 9 dBuA/m at a distance of 10 m	
	8	Conditions of use of the channel	Maximum duty cycle 1.0%	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the ECA	No	
	11	Basis for planning radio frequencies	–	
I n f o r m a t i v e p a r t	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 301 489-1 EN 301 489-3 EN 302 608 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	The Terms of Use apply only to Eurobalise data transmission in the presence of trains using the 27 MHz band for activation	

7.2. Railway communication system devices at frequencies 7.3–23 MHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Railway communication system devices	Euroloop system device.
	3	Radio frequency band	Tx/Rx 7300-23,000 kHz	Centre frequency 13.547 MHz
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	Maximum magnetic field strength -7 dBuAm at a distance of 10 m	Maximum field strength shall be measured in the 10 kHz frequency band at any 200 m section of Euroloop.
	8	Conditions of use of the channel	Antenna restrictions shall be implemented in accordance with harmonised standards adopted pursuant to Directive 2014/53/EU.	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the ECA	No	
	11	Basis for planning radio frequencies	–	
I n f o r m a t i v e p a r t	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 301 489-1 EN 301 489-3 EN 302 609 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	The Terms of Use apply only to Euroloop data transmission in the vicinity of trains using the 27 MHz band for activation	

7.3. Railway communication system device at frequencies 27.09–27.1 MHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Railway communication system devices	Activation of Eurobalise system equipment and downlink (in the direction of rolling stock rail).
	3	Radio frequency band	Tx/Rx 27,090-27,100 kHz	Centre frequency 27.095 MHz
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	Maximum magnetic field strength 42 dBuA/m at a distance of 10 m	
	8	Conditions of use of the channel	-	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the ECA	No	
	11	Basis for planning radio frequencies	–	
I n f o r m a t i v e p a r t	12	Planned changes	–	
	13	References to documents	CEPT/ERC/REC 70-03 EN 301 489-1 EN 301 489-3 EN 302 608 EN 50385 EN 62368-1 Radio Frequency Plan on the basis of § 9(3) of the Electronic Communications Act	
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

7.4. Railway communication system devices at frequencies 76–77 GHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Railway communication system devices	Radar for the detection or blocking of vehicles at railway crossings
	3	Radio frequency band	Tx/Rx 76-77 GHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.I.R.P. 55 dBm mean E.I.R.P. 50 dBm and pulsed radar mean E.I.R.P. 23.5 dBm	
	8	Conditions of use of the channel	–	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the ECA	No	
	11	Basis for planning radio frequencies	–	
I n f o r m a t i v e p a r t	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 301 489-1 EN 301 489-3 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

Transport and traffic telematics systems

8.1. UWB devices installed in road and rail vehicles at frequencies 3.1–4.8 GHz and 6–9 GHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Ultra wideband (UWB) devices	UWB devices installed in road and rail vehicles. The device shall not cause interference to other radio services, and the device is not protected from interference caused by other radio equipment. Used indoors. In case of outdoor use of the device it shall not be attached to fixed equipment, infrastructure or a fixed external antenna
	3	Radio frequency band	Tx/Rx 3100-4800 MHz Tx/Rx 6000-9000 MHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	Maximum allowed E.I.R.P. spectral density is provided in Table 1.	In accordance with Decision (EU) 2019/785
	8	Conditions of use of the channel	The relevant interference mitigation techniques are provided in Table 1.	In accordance with Decision (EU) 2019/785
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the ECA	No	
	11	Basis for planning radio frequencies	–	
I n f o r	12	Planned changes	–	
	13	References to documents	(EU) 2019/785 EN 301 489-1 EN 301 489-33 EN 302 065	

m a t r i x			EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

Table 1. Interference mitigation techniques

Radio frequency band (GHz)	Maximum mean E.I.R.P. spectral density (dBm/MHz)	Maximum peak E.I.R.P. spectral density (dBm / 50 MHz)
Less than 1.6	-90.0	-50.0
1.6 to 2.7	-85.0	-45.0
2.7 to 3.1	-70.0	-36.0
3.1 to 3.4	-70.0 or 41.3 using LDC ¹ + e.l. ⁴ or -41.3 using TPC ³ + DAA ² + e.l. ⁴	-36.0 or ≤ 0 or ≤ 0
3.4 to 3.8	-80.0 or 41.3 using LDC ¹ + e.l. ⁴ or -41.3 using TPC ³ + DAA ² + e.l. ⁴	-40.0 or ≤ 0 or ≤ 0
3.8 to 4.8	-70.0 or 41.3 using LDC ¹ + e.l. ⁴ or -41.3 using TPC ³ + DAA ² + e.l. ⁴	-30.0 or ≤ 0 or ≤ 0
4.8 to 6	-70.0	-30.0
6.0 to 8.5	-53.3 or 41.3 using LDC ¹ + e.l. ⁴ or -41.3 using TPC ³ +e.l. ⁴	-13.3 or ≤ 0 or ≤ 0
8.5 to 9	-65.0 or 41.3 using LDC ¹ + e.l. ⁴ or -41.3 using TPC ³ + DAA ² + e.l. ⁴	-25.0 or ≤ 0 or ≤ 0
9 to 10.6	-65.0	-25.0
More than 10.6	-85.0	-45.0

¹ The Alarm Reduction Method ‘Short duty cycle’ and its limitations are described in harmonised standard EN 302 065-3

² The detection and avoidance method and its limitations are described in harmonised standard EN 302 065-3

³ The detection and avoidance method and its limitations are described in harmonised standard EN 302 065-3

⁴ Maximum mean E.I.R.P. (exterior limit (e.l.)) outside vehicle ≤ -53.3 dBm/MHz is mandatory. e.l. has been described in harmonised standard EN 302 065-3.

8.2. Transport and traffic telematics system device at frequencies 5795–5815 MHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Transport and traffic telematics systems	
	3	Radio frequency band	Tx/Rx 5795-5815 MHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.I.R.P. 2 W	
	8	Conditions of use of the channel	Spectrum access and interference mitigation techniques shall be used, the efficiency of which is at least equal to the efficiency of the techniques described in the harmonised standards adopted on the basis of Directive 2014/53/EC.	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the ECA	No	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 EN 300 674-2-1 EN 300 674-2-2 EN 301 489-1 EN 301 489-3 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

8.3. Transport and traffic telematics system device at frequencies 5855–5875 MHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Transport and traffic telematics systems	
	3	Radio frequency band	Tx/Rx 5855-5875 MHz	
	4	Channel spacing	Width of allocated frequency blocks is 10 MHz	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.I.R.P. 33 dBm Maximum E.I.R.P. spectral density 23 dBm/MHz	Automatic power control (TPC) of radio transmission equipment shall be 30 dB
	8	Conditions of use of the channel	Spectrum access and interference mitigation techniques shall be used, the efficiency of which is at least equal to the efficiency of the techniques described in the harmonised standards adopted on the basis of Directive 2014/53/EC.	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the ECA	No	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	(EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 CEPT/ECC/REC/(08)01 EN 301 489-1 EN 301 489-3 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

8.4. UWB equipment in aircraft at frequencies 6–8.5 GHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Ultra wideband (UWB) devices	UWB equipment in aircraft. The device shall not cause interference to other radio services, and the device is not protected from interference caused by other radio equipment. Used indoors. In the event of outdoor use of the device, it shall not be attached to fixed equipment, infrastructure or a fixed external antenna
	3	Radio frequency band	Tx/Rx 6000-8500 MHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	Maximum allowed E.I.R.P. spectral density is provided in Table 2.	In accordance with Decision (EU) 2019/785
	8	Conditions of use of the channel	The relevant interference mitigation techniques are provided in Table 2.	In accordance with Decision (EU) 2019/785
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the ECA	No	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	(EU) 2019/785 CEPT/ECC/DEC/(12)03 EN 301 489-1 EN 301 489-33 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	On-board an aircraft – means the use of radio connection for in-air communications within the aircraft.	

Table 2. Interference mitigation techniques

Radio frequency band (GHz)	Maximum mean E.I.R.P. spectral density (dBm/MHz)	Maximum peak E.I.R.P. density (dBm/50 MHz)	Requirements for interference mitigation methods
Less than 1.6	-90	-50	
1.6 to 2.7	-85	-45	
2.7 to 3.4	-70	-36	
3.4 to 3.8	-80	-40	
3.8 to 6	-70	-30	
6 to 6.65	-41.3	0	
6.65 to 6.6752	-62.3	-21	The 21 dB level shall be applied to achieve: -62.3 dBm/MHz ¹
6.6752 to 8.5	-41.3	0	7.25 to 7.75 GHz (FSS and <i>MetSat</i> (7.45 to 7.55 GHz) protection) ^{1, 2} 7.75 to 7.9 GHz (<i>MetSat</i> Protection) ^{1,3}
8.5 to 10.6	-65.0	-25	
More than 10.6	-85.0	-45.0	

¹ Alternative interference mitigation techniques provide equivalent protection if a shielded illuminator is used, which could be the solution

² 7.25–7.75 GHz (Fixed Satellite Service) and 7.45–7.55 GHz (radio-meteorology) protection: $-51.3 - 20 \cdot \log_{10}(10 \text{ [km]} / x \text{ [km]})$ (dBm/MHz) for altitudes of more than 1000 m, where x is the aircraft altitude from the ground in kilometres, and -71.3 dBm/MHz at an altitude of 1000 m or less from the ground.

³ 7.75–7.9 GHz (radio-meteorology) protection: $-44.3 - 20 \cdot \log_{10}(10 \text{ [km]} / x \text{ [km]})$ (dBm/MHz) for altitudes of more than 1000 m, where x is the aircraft altitude from the ground in kilometres, and -64.3 dBm/MHz at an altitude of 1000 m or less from the ground.

8.5. Transport and traffic telematics system device at frequencies 21.65–26.65 GHz.

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Transport and traffic telematics systems	Vehicle radar (SRR)
	3	Radio frequency band	Tx/Rx 21.65-26.65 GHz	UWB component for radio frequencies 21.65–26.65 GHz Narrowband component for radio frequencies 24.05–24.25 GHz
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.I.R.P. 20 dBm narrowband component (maximum peak power) E.I.R.P. -41.3 dBm/MHz UWB component and 0 dBm/50 MHz peak power spectral density E.I.R.P.	
	8	Conditions of use of the channel	At least 30 dB shall be attenuated for signals emitted by an SRR in the 23.6 to 24.0 GHz frequency band which are emitted at or above the horizontal plane by at least 30 dB. In the case of peak E.I.R.P. higher than -10 dB the duty cycle is up to 10 %	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the ECA	No	
	11	Basis for planning radio frequencies	–	
I n f o r m a t i v e p a r t	12	Planned changes	SRR frequencies are scheduled from 77–81 GHz under CEPT/ECC/DEC/(04)03.	SRR working at radio frequencies 24.25–26.65 GHz, which are installed in motor vehicles that have been granted a type-approval under Article 6.6 of Directive 2007/46/EC before 1 January 2018, may be introduced until 1 January 2022.
	13	References to documents	2005/50/EC (EU) 2017/2077	

			CEPT/ECC/DEC/(04)10 CEPT/ERC/REC 70-03 EN 301 489-1 EN 301 489-3 EN 302 288-2 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

8.6. Transport and traffic telematics system device at frequencies 24.05–24.25 GHz

N o r m a t i v e P a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Transport and traffic telematics systems	Vehicle radar (SRR)
	3	Radio frequency band	Tx/Rx 24.05-24.25 GHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.I.R.P. 100 mW in the 24.075–24.150 GHz frequency band if the conditions for using the Channel are met E.I.R.P. 0.1 mW for the 24.075–24.150 GHz radio frequency band E.I.R.P. 100 mW for the 24.050–24.075 GHz radio frequency band; and 24.150–24.250 GHz	
	8	Conditions of use of the channel	In the radio frequency band 24.075–24.150 Spectrum access and interference mitigation techniques shall be used, the efficiency of which is at least equal to the efficiency of the techniques described in the harmonised standards adopted on the basis of Directive 2014/53/EC. The SRRs used on roads are subject to dwell time limits established in the harmonised standard.	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the ECA	No	
	11	Basis for planning radio frequencies	–	
I n f o r m a t i v e	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 301 489-1 EN 301 489-3 EN 302 288-2 EN 50385 EN 62368-1 Radio frequency plan pursuant to	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345

p a rt			§ 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

8.7. Transport and traffic telematics system device at frequencies 76–77 GHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Transport and traffic telematics systems	Vehicle radars and road communication system devices
	3	Radio frequency band	Tx/Rx 76-77 GHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.I.R.P. 55 dBm and mean E.I.R.P. 50 dBm E.I.R.P. 23.5 dBm for pulse radar	
	8	Conditions of use of the channel	-	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the ECA	No	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 301 489-1 EN 301 489-3 EN 301091-2 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

8.8. Obstacle detection radars for rotorcraft between 76 GHz and 77 GHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Transport and traffic telematics systems	
	3	Radio frequency band	Tx/Rx 76-77 GHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	Maximum allowed E.I.R.P. 30 dBm power density 3 dBm/MHz	
	8	Conditions of use of the channel	Duty cycle up to 56 %	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the ECA	No	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	(EU) 2019/1345 (EU) 2022/180 CEPT/ECC/DEC/(16)01 CEPT/ERC/REC 70-03 EN 301 489-1 EN 301 489-3 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

8.9. Transport and traffic telematics system device at frequencies 77–81 GHz

N o r m a t i v e P a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Transport and traffic telematics systems	Vehicle radar
	3	Radio frequency band	Tx/Rx 77-81 GHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	Maximum E.I.R.P. spectral density of -3 dBm/MHz and the corresponding peak of 55 dBm E.I.R.P. Maximum E.I.R.P. spectral density of -9 dBm/MHz power spectral density outside of an operating vehicle radare	
	8	Conditions of use of the channel	–	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the ECA	No	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2004/545/EC CEPT/ERC/REC 70-03 CEPT/ECC/DEC/(04)03 EN 301 489-1 EN 301 489-3 EN 302 264 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

Radio sensors

9.1. Apparatus for nuclear magnetic resonance at frequencies 100 Hz-130 MHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Radio sensors	The device shall be separated from the external environment.
	3	Radio frequency band	Tx/Rx 0.1-130,000 kHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	At frequencies from 100 Hz to 148 kHz: Maximum magnetic field strength 10 m at 46 dBuA/m at 100 Hz, with frequency decreasing by 10 dB per decade. For frequencies from 148 – 5000 kHz: maximum magnetic field strength -15 dBuA/m at a distance of 10 m For frequencies from 5 – 30 MHz: maximum magnetic field strength -5 dBuA/m at a distance of 10 m For frequencies from 30 – 130 MHz: maximum e.r.p. -36 dBm outside the housing	
	8	Conditions of use of the channel	–	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	

	11	Basis for planning radio frequencies	–	
I n f o r m a t i v e p a r t	12	Planned changes	–	
	13	References to documents	(EU) 2022/180 CEPT/ERC/REC 70-03 EN 301 489-1 EN 301 489-3 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	The interface determines the nuclear magnetic resonance (<i>MR</i>) device parameters, magnetic resonance imaging/tomography (<i>MRI/T</i>) not covered by this interface	

9.2. Surface sounding radar (GPR) and wall sounding radar (WPR) at frequencies from 30 MHz to 12.4 GHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Radio sensors	GPR device, WPR device
	3	Radio frequency band	Tx/Rx 30-12,400 MHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	mean spectral density – 75 dBm/kHz Operating in RNSS radio spectrum bands 1164–1215 MHz and 1559–1610 MHz is the maximum permitted E.I.R.P. The highest values of signals radiated to the surrounding environment provided in Table 1 are allowed	
	8	Conditions of use of the channel	The equipment shall have a deactivation device, which switches on when the equipment is not used in accordance with requirements. The deactivation device shall ensure at least equivalent performance to the deactivation device described in the harmonised standard adopted under Directive 2014/53/EC	GPR and WPR devices shall be designed to operate in contact with the ground or wall or in close proximity thereof and send the radiation produced directly into the ground or wall.
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	CEPT/ECC/DEC/(06)08 CEPT/ERC/REC 70-03 EN 301 489-1 EN 301 489-33 EN 302 066 EN 62368-1 Radio frequency plan	

v e p a r t			pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	A GPR is an electromagnetic field interference sensor intended for use on the ground or at heights of up to 1 m above the ground in order to obtain images of underground objects or establish the physical properties of soil; A WPR is an electromagnetic field interference sensor intended for locating objects inside walls or establishing the physical properties of walls. For the purposes of this section, a wall is an actual structure, bridge side, mine wall or other structure with a sufficient density and thickness to absorb most of the energy radiated by a wall probing radar.	

Table 1. Maximum values of signals emitted into ambient environments

Radio frequency band	Maximum mean E.I.R.P. spectral density (dBm/MHz)	Maximum peak E.I.R.P. density
below 230 MHz	-65.0	-42.35 dBm/120 kHz
230 to 1,000 MHz	-60.0	-35.35 dBm/120 kHz
1,000 to 1,600 MHz	-65.0	-30 dBm/MHz
1600 to 3400 MHz	-51.3	-30 dBm/MHz
3400 to 5000 MHz	-41.3	-30 dBm/MHz
5000 to 6000 MHz	-51.3	-30 dBm/MHz
above 6000 MHz	-65.0	-30 dBm/MHz

9.3. UWB machine for power tools at frequencies from 2.2 – 8.5 GHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Radio sensors	Fixed (Application A, protecting the user) and non-locally installed (Application B breakthrough prevention). The device shall not cause interference to other radio services, and the device is not protected from interference caused by other radio equipment. Used indoors. In case of outdoor use of the device it shall not be attached to fixed equipment, infrastructure or a fixed external antenna.
	3	Radio frequency band	Tx/Rx 2200-8500 MHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	The maximum values of the signal emitted to the ambient environment in the table are allowed.	In accordance with Decision (EU) 2019/785
	8	Conditions of use of the channel	The relevant interference mitigation techniques are provided in Table 2.	In accordance with Decision (EU) 2019/785
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	(EU) 2019/785 CEPT/ECC/DEC/(07)01 EN 301 489-1 EN 301 489-33 EN 302 435-2 EN 302 498-2 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	

p a r t	14	Notification number	2023/yyy/EE	
	15	Notes	–	

Table 2. Maximum values of signals emitted into ambient environments

Radio frequency band	Fixed installation (Application A)		Non-fixed installation (Application B) Maximum mean E.I.R.P. spectral density
	Maximum mean E.I.R.P. spectral density (–90° to –20° and 30° to 90°)	Maximum mean E.I.R.P. spectral density on horizontal level (–20 to 30° increase)	
below 1.73 GHz	–85 dBm/MHz		–85 dBm/MHz
1.73 to 2.2 GHz	–65 dBm/MHz	–70 dBm/MHz	–70 dBm/MHz
2.2 to 2.5 GHz	–50 dBm/MHz		–50 dBm/MHz
2.5 to 2.69 GHz	–65 dBm/MHz ¹	–70 dBm/MHz	–65 dBm/MHz ^{1 and 2}
2.69 to 2.7 GHz	–55 dBm/MHz	–75 dBm/MHz	–70 dBm/MHz ³
2.7 to 2.9 GHz	–50 dBm/MHz	–70 dBm/MHz	–70 dBm/MHz
2.9 to 3.4 GHz	–50 dBm/MHz	–70 dBm/MHz	–70 dBm/MHz ¹
3.4 to 3.8 GHz	–50 dBm/MHz	–70 dBm/MHz	–50 dBm/MHz ^{2 and 3}
3.8 to 4.8 GHz	–50 dBm/MHz		–50 dBm/MHz
4.8 to 5 GHz	–55 dBm/MHz	–75 dBm/MHz	–55 dBm/MHz ^{2 and 3}
5 to 5.25 GHz	–50 dBm/MHz		–50 dBm/MHz
5.25 to 5.35 GHz	–50 dBm/MHz	–60 dBm/MHz	–60 dBm/MHz
5.35 to 5.6 GHz	–50 dBm/MHz		–50 dBm/MHz
5.6 to 5.65 GHz	–50 dBm/MHz	–65 dBm/MHz	–65 dBm/MHz
5.65 to 5.725 GHz	–50 dBm/MHz	–60 dBm/MHz	–60 dBm/MHz
5.725 to 8.5 GHz	–50 dBm/MHz		–50 dBm/MHz
8.5 to 10.6 GHz	–65 dBm/MHz		–65 dBm/MHz
above 10.6 GHz	–85 dBm/MHz		–85 dBm/MHz

Tip e.i.r.p. (dBm), measured with a shaving width of 50 MHz, is less than the limit obtained by adding a conversion factor (25 dB) to the maximum mean of e.i.r.p.

^{1 1} The devices using the “listen before talk” mechanism (described in the harmonised standard EN 302 498-2) are allowed to operate in the 2.5–2.69 GHz and 2.9–3.4 GHz frequency bands with the maximum mean E.I.R.P. spectral density of –50 dBm/MHz. Table shows the technical requirements for the peak power threshold value of the “listen before talk” mechanism to ensure protection for the following radio communication services:

Radio frequency band	Radio communication service protected	Peak power threshold value
2.5–2.69 GHz	Terrestrial mobile communication service	–50 dBm/MHz
2.9–3.4 GHz	Radio determination	–7 dBm/MHz

² In order to protect radio communication characteristics, a non-fixed installation (Application B) shall fulfil the conditions applicable to total radiated power spectral density:

- a) at frequencies 2.5–2.69 GHz and 4.8–5 GHz, the total radiated power spectral density shall be 10 dB lower than the maximum E.I.R.P. spectral density;
- b) at frequencies 3.4–3.8 GHz the whole radiation power spectral density shall be 5 dB lower than the maximum E.I.R.P. spectral density

³The duty cycle limit is 10 % per second

9.4. UWB device for analysis of building materials at frequencies 2.2–8 GHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Radio sensors	The device shall not cause interference to other radio services, and the device is not protected from interference caused by other radio equipment. Used indoors. In the event of outdoor use of the device, it shall not be attached to fixed equipment, infrastructure or a fixed external antenna
	3	Radio frequency band	Tx/Rx 2200-8000 MHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	Is shown in Table 3	In accordance with Decision (EU) 2019/785
	8	Conditions of use of the channel	Is shown in Table 3	In accordance with Decision (EU) 2019/785
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	(EU) 2019/785 CEPT/ECC/DEC/(07)01 CEPT/ERC/REC 70-03 EN 301 489-1 EN 301 489-33 EN 302 435-2 EN 302 498-2 EN 62368-1 Radio Frequency Plan on the basis of § 9(3) of the Electronic Communications Act	
	14	Notification number	2023/yyy/EE	
	15	Notes	UWB building material analysis equipment is a field interference sensor intended	

			for locating objects inside the structure of a building or determining the physical properties of building materials.	
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Table 3. Technical Requirements

Technical requirements for contact-based devices (the transmitter switches only in direct contact with the test material) for material detecting devices using ultra-wideband technology:		
Frequency range	Peak spectral density (EIRP)	Peak radiated power (EIRP 50 MHz bandwidth)
$f \leq 1.73$ GHz	-85 dBm/MHz ¹	-45 dBm
$1.73 < f \leq 2.2$ GHz	-65 dBm/MHz	-25 dBm
$2.2 < f \leq 2.5$ GHz	-50 dBm/MHz	-10 dBm
$2.5 < f \leq 2.69$ GHz	-65 dBm/MHz ^{1 and 2}	-25 dBm
$2.69 < f \leq 2.7$ GHz ⁴	-55 dBm/MHz ³	-15 dBm
$2.7 < f \leq 2.9$ GHz	-70 dBm/MHz ¹	-30 dBm
$2.9 < f \leq 3.4$ GHz	-70 dBm/MHz ^{1, 6 and 7}	-30 dBm
$3.4 < f \leq 3.8$ GHz ⁴	-50 dBm/MHz ^{2, 6 and 7}	-10 dBm
$3.8 < f \leq 4.8$ GHz	-50 dBm/MHz ^{6 and 7}	-10 dBm
$4.8 < f \leq 5.0$ GHz ⁴	-55 dBm/MHz ^{2 and 3}	-15 dBm
$5.0 < f \leq 6.0$ GHz	-50 dBm/MHz	-10 dBm
$6.0 < f \leq 8.5$ GHz	-41.3 dBm/MHz ⁵	0 dBm
$8.5 < f \leq 9.0$ GHz	-65 dBm/MHz ⁷	-25 dBm
$9.0 < f \leq 10.6$ GHz	-65 dBm/MHz	-25 dBm
$F > 10.6$ GHz	-85 dBm/MHz	-45 dBm

Technical requirements for contactless devices (the transmitter will only be switched on close to the test material and directed towards the test material) for material detecting devices using ultra-wideband technology:		
Frequency range	Peak spectral density (EIRP)	Peak radiated power (EIRP (with a bandwidth of 50 MHz))
$f \leq 1.73$ GHz	-85 dBm/MHz ¹	-60 dBm
$1.73 < f \leq 2.2$ GHz	-70 dBm/MHz	-45 dBm
$2.2 < f \leq 2.5$ GHz	-50 dBm/MHz	-25 dBm
$2.5 < f \leq 2.69$ GHz	-65 dBm/MHz ^{1 and 2}	-40 dBm
$2.69 < f \leq 2.7$ GHz ⁴	-70 dBm/MHz ³	-45 dBm
$2.7 < f \leq 2.9$ GHz	-70 dBm/MHz ¹	-45 dBm
$2.9 < f \leq 3.4$ GHz	-70 dBm/MHz ^{1, 6 and 7}	-45 dBm
$3.4 < f \leq 3.8$ GHz ⁴	-70 dBm/MHz ^{2, 6 and 7}	-45 dBm
$3.8 < f \leq 4.8$ GHz	-50 dBm/MHz ^{6 and 7}	-25 dBm
$4.8 < f \leq 5.0$ GHz ⁴	-55 dBm/MHz ^{2 and 3}	-30 dBm
$5.0 < f \leq 5.25$ GHz	-55 dBm/MHz	-30 dBm
$5.25 < f \leq 5.65$ GHz	-50 dBm/MHz	-25 dBm
$5.65 < f \leq 5.725$ GHz	-65 dBm/MHz	-40 dBm
$5.725 < f \leq 6.0$ GHz	-60 dBm/MHz	-35 dBm
$6.0 < f \leq 8.5$ GHz	-41.3 dBm/MHz ⁵	0 dBm
$8.5 < f \leq 9.0$ GHz	-65 dBm/MHz ⁷	-25 dBm
$9.0 < f \leq 10.6$ GHz	-65 dBm/MHz	-25 dBm
$F > 10.6$ GHz	-85 dBm/MHz	-45 dBm

Technical Requirements for Material Detecting Devices LBT (Listen Before Talk) Mechanism		
Frequency range	Identifiable radio service	Radiated Power Thresholds

1.215 < f ≤ 1.4 GHz	Radio Detection Service	+8 dBm/MHz
1.61 < f ≤ 1.66 GHz	Mobile satellite service	-43 dBm/MHz
2.5 < f ≤ 2.69 GHz	Mobile Land Communications Service	-50 dBm/MHz
2.9 < f ≤ 3.4 GHz	Radio Detection Service	-7 dBm/MHz

Additional requirements for radar detection: continuous listening and automatic shut-off in the relevant frequency band within 10 ms if the threshold value is exceeded (see table with LBT mechanism). A minimum of 12 seconds of silence is required for continuous listening before the transmitter is reactivated. This silence, during which only the LBT receiver has been activated, shall be ensured even after the device has been switched off.

¹ Equipment using LBT (*Listen Before Talk*) —listen before and then talk) the mechanism is permitted to be used in the 1.215-1.73 GHz spectral peak (EIRP) band of -70 dBm/MHz and in the 2.5 GHz to 2.69 GHz and 2.7 to 3.4 GHz spectral density peak (EIRP) bands -50 dBm/MHz and a peak radiated power (EIRP) of -10 dBm/50 MHz. The LBT mechanism is defined in ETSI standard EN 302 065-4 V1.1.1 clauses 4.5.2.1, 4.5.2.2 and 4.5.2.3. Alternative mitigation techniques may be used if they ensure at least equivalent performance and radio spectrum protection to ensure compliance with the relevant essential requirements of Directive 2014/53/EU and the technical requirements of this Decision.

² In order to protect radio services, non-fixed installations shall comply with the following requirements for the total radiated power:

in the 2.5 – 2.69 GHz and 4.8 – 5 GHz frequency bands, the total radiated power spectral density shall be 10 dB less than the peak spectral density (EIRP);

in the 3.4 – 3.8 GHz frequency band, the total radiated power spectral density shall be 5 dB less than the peak spectral density (EIRP).

³ In order to protect the Radio Astronomy Service (RAS) frequency ranges 2.69 GHz – 2.7 GHz and 4.8 – 5 GHz, the total radiated power spectral density shall be less than -65 dBm/MHz.

⁴ Duty cycle limitation of up to 10 % per second.

⁵ Fixed installations for outdoor use are not permitted.

⁶ Equipment using the ‘low duty cycle’ mitigation technique (LDC), permitted to use in the frequency band with a peak spectral density (EIRP) of 3.1 GHz to 4.8 GHz -41.3 dBm/MHz and peak radiated power (EIRP) of 0 dBm (at 50 MHz bandwidth). The LDC mitigation technique and its limits are defined in ETSI standard EN 302 065-1 clauses 4.5.3.1, 4.5.3.2 and 4.5.3.3. Alternative mitigation techniques may be used if they ensure at least equivalent performance and radio spectrum protection in order to comply with the relevant essential requirements of Directive 2014/53/EU and the technical requirements of this Decision.

⁷ Devices using Detect and Avoid (DAA) are permitted to operate in the frequency bands 3.1 – 4.8 GHz and 8.5 – 9 GHz with a maximum peak spectral density (EIRP) of 41.3 dBm/MHz and a peak radiated power (EIRP) of 0 dBm (50 MHz band). The DAA interference mitigation technique and its limits are defined in ETSI standard EN 302 065-1 V2.1.1 clauses 4.5.1.1, 4.5.1.2 and 4.5.1.3. Alternative interference mitigation techniques may be used if they ensure at least equivalent performance and radio spectrum protection to ensure compliance with the relevant essential requirements of Directive 2014/53/EU and the technical requirements of this Decision.

9.5. Radio determination equipment at frequencies 2400-2483.5 MHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Radio sensors	Motion sensors
	3	Radio frequency band	Tx/Rx 2400-2483.5 MHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.I.R.P. 25 mW	
	8	Conditions of use of the channel	–	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 <i>CEPT/ECC/DEC/(18)03</i> CEPT/ERC/REC 70-03 EN 300440 EN 301 489-1 EN 301 489-3 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

9.6. Location tracking application for emergency and catastrophic situations between 3.1 and 4.8 GHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Radio sensors	The device shall not cause interference to other radio services, and the device is not protected from interference caused by other radio equipment.
	3	Radio frequency band	Tx/Rx 3100-4800 MHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	Is shown in Table 4	
	8	Conditions of use of the channel	Is shown in Table 5	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	CEPT/ECC/REC/(11)10 CEPT/ERC/REC 70-03 EN 301 489-1 EN 301 489-33 EN 302 065 EN 50385 EN 62368-1 Radio frequency plan on the basis of § 9(3) of the Electronic Communications Act	
	14	Notification number	2023/yyy/EE	
	15	Notes	To monitor fire-fighters and other emergency service personnel working in dangerous situations.	

Table 4. Transmission power/power density

Frequency band [GHz]	Maximum mean E.I.R.P. spectral density [dBm/MHz]	Biggest tip E.I.R.P. (50 in the MHz band) [dBm]
Less than 1.6	-90	-50
1.6–2.7	-85	-45
2.7–3.1	-70	-36
3.1–3.4 ¹	-70	-36
3.4–4.2 ²	-21.3	20
4.2–4.8 ²	-41.3	0
4.8–10.6	-70	-30
More than 10.6	-85	-45

¹ In the 3.1 to 3.4 GHz frequency band, systems using detect and avoid (DAA) alarm reduction method as defined in Recommendation CEPT/ECC/DEC/(06)04 may be operated using the highest mean E.I.R.P. spectral density of -41.3 dBm/MHz and the highest peak E.I.R.P. (50 MHz band) of 0 dBm. A duty cycle of up to 5% per second per transmitter shall also be used.

² A duty cycle of up to 5% per second per transmitter shall be used.

Table 5. Conditions of use of the channel

The frequency band may only be used by publicly registered services. The national administration may ask for user logs of the system. For the use of the system as a fixed installation (e.g. at the training site), the administration may impose additional requirements. Separation distances for the training site recommended for the protection of radio communication services:		
Service	Distance for outdoor use	Distance for indoor use
UWB: 3.4–4.2 GHz	20 km (in the case of 5° disconnection of the antenna)	5 km (in the case of 5° disconnection of the antenna)
FSS: 3.4–4.2 GHz Earth stations using an antenna with a diameter of 1.2 to 1.8 m	19 km	7 km
FSS: 3.4–4.2 GHz rest and MSS Earth Stations	12,3 km	3,5 km
MFCN 3.4–4.2 GHz	20 km	5 km
Aviation navigation 4.2–4.4 GHz	It is recommended that training areas be avoided in the vicinity of airports. Maximum mean E.I.R.P. spectral density -47.3 dBm/MHz	
UWB: 4.4–4.8 GHz	15 km (2 km for 5° antenna disconnection)	4 km (500 m antenna for 5° disconnection)
FSS: 4.5–4.8 GHz Earth stations using an antenna with a diameter of 1.2 to 1.8 m	2 km	500 m
FSS: 4.5–4.8 GHz rest and MSS Earth Stations	1 km	200 m

9.7. Position monitoring systems (LT2) between 3.1 and 4.8 GHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Radio sensors	Location tracking systems Type 2 (LT2). The device shall not cause interference to other radio services, and the device is not protected from interference caused by other radio equipment.
	3	Radio frequency band	Tx/Rx 3100-4800 MHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	Is shown in Table 6	
	8	Conditions of use of the channel	Is shown in Table 7	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
	11	Basis for planning radio frequencies	–	
I n f o r m a t i v e p a r t	12	Planned changes	–	
	13	References to documents	CEPT/ECC/REC/(11)09 CEPT/ERC/REC 70-03 EN 301 489-1 EN 301 489-33 EN 302 065 EN 50385 EN 62368-1 Radio Frequency Plan on the basis of § 9(3) of the Electronic Communications Act	
	14	Notification number	2023/yyy/EE	
	15	Notes	LT2 are systems intended for tracking the general location of persons and objects. The systems can be used without a frequency authorisation	

Table 6. Transmission power/power density

Frequency band [GHz]	Maximum mean E.I.R.P. spectral density [dBm/MHz]	Maximum peak E.I.R.P. (50 MHz band) [dBm]
Less than 1.6	-90	-50
1.6–2.7	-85	-45
2.7–3.4	-70 ¹	-36
3.4–4.8	-41.3 ²	0
4.8–10.6	-70	-30
More than 10.6	-85	-45

¹ In the 3.1 to 3.4 GHz frequency band, systems using detect and avoid (DAA) alarm reduction method as defined in Recommendation CEPT/ECC/DEC/(06)04 may be operated using the highest mean E.I.R.P. spectral density of -41.3 dBm/MHz and the highest peak E.I.R.P. (50 MHz band) of 0 dBm. A duty cycle of up to 5 % per second and a maximum sequential transmission time of 25 ms shall also be used.

² A duty cycle of up to 5 % per second per transmitter and a maximum sequential transmission time of 25 ms shall be used. In addition:

- Mobile and fixed indoor terminals shall use a duty cycle of 1.5 % per minute or an analogous mitigation method.
- Fixed outdoor terminals in the 4.2 – 4.4 GHz frequency band shall limit the mean spectral density of E.I.R.P. to -47.3 dBm/MHz above 30° above the horizon

Table 7. Conditions of use of the channel

Recommended measures for the protection of radio communication services. Administrations may establish sensitive areas and measures on a need-by-demand basis.	
Service	Action
UWB: 3.4–4.2 and 4.4–4.8 GHz	Separation distance of 20 km in the direction of the main beam and 2 km in the side beam direction, reducing power by 10 dB can be reduced to 5 km and 500 m respectively
FSS: 3.4-4.2 and 4.5-4.8 GHz	Separation distance 2.6 km
WiMaz: 3.4–3.8 GHz	35 m
Aviation Navigation 4.2 – 4.4 GHz	Separation distance from airports 13 km. In addition, a mean E.I.R.P. spectral density of up to -47.3 dBm/MHz shall be used for mobile terminals in sensitive areas

9.8. Radio determination equipment at frequencies 4.5–7 GHz. 8.5–10.6 GHz. 24.05–27 GHz, 57–64 GHz and 75–85 GHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Radio sensors	Tanks level probing radars (TLPR)
	3	Radio frequency band	Tx/Rx 4500-7000 MHz Tx/Rx 8500-10,600 MHz Tx/Rx 24.05-27 GHz Tx/Rx 57-64 GHz Tx/Rx 75-85 GHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	The allowed radiated power values of TLPR are provided in Table 8.	
	8	Conditions of use of the channel	Spectrum access and interference mitigation techniques shall be used, the efficiency of which is at least equal to the efficiency of the techniques described in the harmonised standards adopted on the basis of Directive 2014/53/EC.	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
	11	Basis for planning radio frequencies	–	
I n f o r m a t i v e p a r t	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 301489-1 EN 301489-3 EN 302 372 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

Table 8. Permitted radiated powers of TLPR

Radio frequency band	Maximum power spectral density in a closed tank (dBm)
4.5 - 7.0 GHz	24
8.5 - 10.6 GHz	30
24.05 - 27.00 GHz	43
57 - 64 GHz	43
75 - 85 GHz	43
The power spectral density values given in the table correspond to the spectral density –41.3 dBm/MHz E.I.R.P. outside the 500 litre test container	

9.9. Radio determination equipment at frequencies 6–8.5 GHz, 24.05–26.5 GHz, 57–64 GHz and 75–85 GHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Radio sensors	Level probing radars (LPR)
	3	Radio frequency band	Tx/Rx 6000-8500 MHz Tx/Rx 24.05-26.5 GHz Tx/Rx 57-64 GHz Tx/Rx 75-85 GHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.I.R.P. The allowed radiated power values of LPR are provided in Table 9.	
	8	Conditions of use of the channel	Automatic transmit power control, requirements for antenna and other spectrum access and interference mitigation techniques shall be used, the efficiency of which is at least equal to the efficiency of the techniques described in the harmonised standards adopted on the basis of Directive 2014/53/EC.	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
	11	Basis for planning radio frequencies	–	
I n f o r m a t i v e p a	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ECC/DEC/(11)02 CEPT/ERC/REC 70-03 EN 301 489-1 EN 301489-3 EN 302 729 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345

rt	14	Notification number	2023/yyy/EE	
	15	Notes	LPR equipment is used for measuring the level of granules and liquids in industrial areas	

Table 9. Permitted radiated powers of LPR

Radio frequency band	Maximum mean E.I.R.P. spectral density (dBm/MHz)	Maximum peak E.I.R.P. (dBm/50MHz)
6.0 - 8.5 GHz	-33	+7
24.05–26.5 GHz	-14	+26
57 - 64 GHz	-2	+35
75 - 85 GHz	-3	+34

9.10. Radio determination equipment at frequencies 9200-9975 MHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Radio sensors	
	3	Radio frequency band	Tx/Rx 9200-9975 MHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.I.R.P. 25 mW	
	8	Conditions of use of the channel	–	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	CEPT/ERC/REC 70-03 EN 300440 EN 301489-1 EN 301489-3 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
p a r t	15	Notes	Motion sensors, security equipment and other similar devices, which use radio waves for determining the location, speed or other parameters of an object.	

9.11. Radio determination equipment at frequencies 13.4–14 MHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Radio sensors	
	3	Radio frequency band	Tx/Rx 13.4-14 GHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.I.R.P. 25 mW	
	8	Conditions of use of the channel	–	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	CEPT/ERC/REC 70-03 EN 300440 EN 301489-1 EN 301489-3 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
p a r t	15	Notes	Motion sensors, security equipment and other similar devices, which use radio waves for determining the location, speed or other parameters of an object.	

9.12. Radio determination equipment at frequencies 17.1-17.3 GHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Radio sensors	GBSAR Only the use of ground-based systems is allowed.
	3	Radio frequency band	Tx/Rx 17.1-17.3 GHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.I.R.P. 26 dBm	
	8	Conditions of use of the channel	Spectrum access and interference mitigation techniques shall be used, the efficiency of which is at least equal to the efficiency of the techniques described in the harmonised standards adopted on the basis of Directive 2014/53/EC.	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2022/180 (EU) 2019/1345 CEPT/ERC/REC 70-03 EN 300440 EN 301 489-1 EN 301 489-3 EN 303661 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

9.13. Radio determination equipment at frequencies 24.05-24.25 GHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Radio sensors	Motion sensors, security equipment and other similar devices
	3	Radio frequency band	Tx/Rx 24.05-24.25 GHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.I.R.P. 100 mW	
	8	Conditions of use of the channel	–	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2006/771/EC 2011/829/EU (EU) 2022/180 CEPT/ERC/REC 70-03 EN 300 440 EN 301 489-1 EN 301 489-3 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2011/829/EU contains the applicable technical annex to Decision 2006/771/EC
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

9.14. Radio determination equipment at frequencies 76-77 GHz

N o r m a t i v e P a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Radio sensors	HD-GBSAR
	3	Radio frequency band	Tx/Rx 76-77 GHz	
	4	Channel spacing	—	
	5	Modulation/bandwidth used	—	
	6	Duplex/simplex communication. Duplex gap	—	
	7	Transmission power/power density	Maximum mean E.I.R.P. 48 dBm	Maximum mean E.I.R.P. spectral density 18 dBm/MHz
	8	Conditions of use of the channel	A distance of at least 50 m from the equipment of transport and traffic telematics and railway communication systems. Out-of-band radiation between 71 and 76 GHz and 81-86 GHz shall be less than -22 dBm/10 MHz E.I.R.P. shall not be emitted in the protection zones for radio astronomy in Annex 1 of CEPT/ECC/DEC(21)02. Shall use the detection and avoidance (DAA) technology set out in Annex 2 of CEPT/ECC/DEC(21)02	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
	11	Basis for planning radio frequencies	—	
	12	Planned changes	—	
	13	References to documents	CEPT/ERC/REC 70-03 CEPT/ECC/DEC/(21)02 EN 301 489-1 EN 301 489-3 EN 303661 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	—	

9.15. Radio determination equipment at frequencies 116-260 GHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Radio sensors	Surveillance radar, radio sensor for automation of production (in shielded environments) [RDI(S)], (containers) level sounding apparatus [(T)LPR)], contour detection and locking radar
	3	Radio frequency band	Tx/Rx 116-260 GHz	
	4	Channel spacing	—	
	5	Modulation/bandwidth used	—	
	6	Duplex/simplex communication. Duplex gap	—	
	7	Transmission power/power density	Maximum E.I.R.P. mean of 10 dBm mobile or hand-held radar at frequencies 122.25–130 GHz and 134–148.5 GHz Maximum E.I.R.P. mean of 20 dBm for slope angles exceeding 12 dBm; stationary surveillance radar at frequencies 122.25–130 GHz and 134–148.5 GHz E.I.R.P. 31 dBm radio sensor for automation of production at frequencies 174.8 GHz to 182 GHz, 185 to 190 GHz; and 231.5–250 GHz E.I.R.P. 37 dBm level sounding device 116–148.5 GHz, 167–182 GHz, 231.5–250 GHz E.I.R.P. 42 dBm level sounding device 116–148.5 GHz, 167–182 GHz, 231.5–250 GHz E.I.R.P. 15 dBm contour detection and fixation radar 116 to 148.5 GHz, 167–182 GHz, 231.5–250 GHz	For additional restrictions, specifications and limitations for automating the production of shielded environments for radio sensors, see CEPT/ECC/DEC/(22)03
	8	Conditions of use of the	Conditions of use of the	

		channel	channel are given in CEPT/ECC/DEC/(22)03	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
	11	Basis for planning radio frequencies	–	
I n f o r m a t i v e p a r t	12	Planned changes	–	
	13	References to documents	CEPT/ECC/DEC/(22)03 EN 301 489-1 EN 301 489-3 EN 305 550-2 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

Alarm devices

10.1. Alarms at frequencies 868.6–868.7 MHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Alarm devices	Security and safety alarm device
	3	Radio frequency band	Tx/Rx 868.6-868.7 MHz	
	4	Channel spacing	25 kHz	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.R.P. 10 mW	
	8	Conditions of use of the channel	Maximum duty cycle 1.0%	The entire frequency range can be used as one channel for fast data transmission.
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 301 489-1 EN 301 489-3 EN 300 220-2 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

10.2. Alarms at frequencies 869.2–869.25 MHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Alarm device	Social alarm device
	3	Radio frequency band	Tx/Rx 869.2-869.25 MHz	
	4	Channel spacing	25 kHz	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.R.P. 10 mW	
	8	Conditions of use of the channel	Maximum duty cycle 0.1%	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 301 489-1 EN 301 489-3 EN 300 220-2 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

10.3. Alarms at frequencies 869.25–869.3 MHz

N o r m a t i v e P a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Alarm devices	Security and safety alarm device
	3	Radio frequency band	Tx/Rx 869.25-869.3 MHz	
	4	Channel spacing	25 kHz	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.R.P. 10 mW	
	8	Conditions of use of the channel	Maximum duty cycle 0.1%	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e P a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 300 220-2 EN 301 489-1 EN 301 489-3 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

10.4. Alarms at frequencies 869.3–869.4 MHz

N o r m a t i v e P a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Alarm devices	Security and safety alarm device
	3	Radio frequency band	Tx/Rx 869.3-869.4 MHz	
	4	Channel spacing	25 kHz	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.R.P. 10 mW	
	8	Conditions of use of the channel	Maximum duty cycle 1.0%	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e P a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 300 220-2 EN 301 489-1 EN 301 489-3 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

10.5. Alarms at frequencies 869.65–869.7 MHz

N o r m a t i v e P a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Alarm devices	Security and safety alarm device
	3	Radio frequency band	Tx/Rx 869.65-869.7 MHz	
	4	Channel spacing	25 kHz	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.R.P. 25 mW	
	8	Conditions of use of the channel	Maximum duty cycle 10%	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e P a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 300 220-2 EN 301 489-1 EN 301 489-3 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

Model controls

11.1. Model control devices in the 27 MHz frequency band

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Model controls	
	3	Radio frequency band	Tx/Rx 26,990-27,000 kHz Tx/Rx 27,040-27,050 kHz Tx/Rx 27,090-27,100 kHz Tx/Rx 27,140-27,150 kHz Tx/Rx 27,190-27,200 kHz	
	4	Channel spacing	—	
	5	Modulation/bandwidth used	—	
	6	Duplex/simplex communication. Duplex gap	—	
	7	Transmission power/power density	E.R.P. 100 mW	
	8	Conditions of use of the channel	—	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
	11	Basis for planning radio frequencies	—	
I n f o r m a t i v e p a r t	12	Planned changes	—	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 300 220-2 EN 301 489-1 EN 301 489-3 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	—	

11.2. Model control devices in the 35 MHz frequency band

N o r m a t i v e P a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Model controls	Only airborne model control devices
	3	Radio frequency band	Tx/Rx 34.995-35.225 MHz	
	4	Channel spacing	10 kHz	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.R.P. 100 mW	
	8	Conditions of use of the channel	–	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e P a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	CEPT/ERC/DEC/(01)11 CEPT/ERC/REC 70-03 EN 300 220-2 EN 301 489-1 EN 301 489-3 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
P a r t	15	Notes	–	

11.3. Model control devices in the 40 MHz frequency band

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Model controls	
	3	Radio frequency band	Tx/Rx 40.66-40.7 MHz	
	4	Channel spacing	10 kHz	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.R.P. 100 mW	
	8	Conditions of use of the channel	–	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	CEPT/ERC/DEC/(01)12 CEPT/ERC/REC 70-03 EN 300 220-2 EN 301 489-1 EN 301 489-3 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
p a r t	15	Notes	–	

11.4. UAS user equipment on the MFCN network in the 700 MHz frequency band

Normative part	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communications other than aeronautical mobile communication	
	2	Application	Unmanned Aerial Vehicle Systems (UAS)	Aircraft control and data communication on the MFCN network is permitted in coordination with the mobile network operator
	3	Radio frequency band	Tx 703-733 MHz Rx 758-788 MHz	
	4	Channel spacing	Width of allocated frequency blocks is 5 MHz	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	Duplex (55 MHz)	
	7	Transmission power/power density	Maximum allowed nominal power 23 dBm	In accordance with Commission Decision (EU) 2017/899
	8	Conditions of use of the channel	In accordance with Commission Decision (EU) 2017/899 and CEPT/ECC/DEC/(22)07	Shall not be used at altitudes below 30 m above the ground
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
Informative part	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	(EU) 2016/687 EN 301489-1 EN 301 908-1 EN 301 908-2 EN 301 908-4 EN 301 908-6 EN 301 908-9 EN 301 908-13 EN 301 908-16 EN 301 908-25 EN 301489-52 (EU) 2017/899 EN 50360 EN 62368-1 CEPT/ECC/DEC/(22)07 Radio frequency plan pursuant to § 9 (3) of the	

			ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

11.5. UAS user equipment on the MFCN network in the 800 MHz frequency band

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communications other than aeronautical mobile communication	
	2	Application	Unmanned Aerial Vehicle Systems (UAS)	Aircraft control and on-ground data communication using the Ground Electronic Communications Service (MFCN)
	3	Radio frequency band	Rx 791-821 MHz Tx 832-862 MHz	
	4	Channel spacing	Width of allocated frequency blocks is 5 MHz	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	Duplex (41 MHz)	
	7	Transmission power/power density	Maximum allowed nominal power 23 dBm	In accordance with Commission Decision 2010/267/EU
	8	Conditions of use of the channel	In accordance with Commission Decision 2010/267/EU and CEPT/ECC/DEC/(22)07	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
	11	Basis for planning radio frequencies	–	
I n f o r m a t i v e p a r t	12	Planned changes	–	
	13	References to documents	2010/267/EU CEPT/ECC/DEC/(09)03 CEPT/ECC/DEC/(22)07 EN 301 489-1 EN 301 489-52 EN 301 908-1 EN 301 908-2 EN 301 908-4 EN 301 908-6 EN 301 908-9 EN 301 908-13 EN 301 908-16 EN 301 908-25 EN 50360 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the	

			ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

11.6. UAS user equipment on the MFCN network in the 900 MHz and 1800 MHz frequency bands

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Unmanned Aerial Vehicle Systems (UAS)	Aircraft control and on-ground data communication using the Ground Electronic Communications Service (MFCN)
	3	Radio frequency band	Tx 880-915 MHz Rx 925-960 MHz Tx 1710-1785 MHz Rx 1805-1880 MHz	
	4	Channel spacing	Channel raster 200 kHz (GSM, UMTS) Channel raster 100 kHz (LTE)	
	5	Modulation/bandwidth used	GMSK 8-PSK (GSM) QPSK, 16QAM, 64QAM (UMTS) DPSK, QPSK, 16 QAM, 64 QAM, 256 QAM (LTE)	
	6	Duplex/simplex communication. Duplex gap	Duplex 45 MHz 95 MHz	
	7	Transmission power/power density	Maximum allowed nominal power 39 dBm (GSM) Maximum allowed nominal power 24 dBm (UMTS) Maximum allowed output power 23 dBm (LTE)	1710–1785 Out-of-band emission limit in MHz – 40 dBm/MHz
	8	Conditions of use of the channel	In compliance with Commission Decisions (EU) 2022/173 and CEPT/ECC/DEC/(22)07	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	(EU) 2022/173 CEPT/ECC/DEC/(06)13 CEPT/ECC/DEC/(22)07 EN 301 489-1 EN 301 489-7 EN 301 489-52 EN 301 502	

v e p a r t			EN 301 511 EN 301 908-1 EN 301 908-2 EN 301 908-4 EN 301 908-6 EN 301 908-9 EN 301 908-13 EN 301 908-16 EN 301 908-25 EN 50360 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

11.7. UAS user equipment on the MFCN network in the 2100 MHz frequency band

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Unmanned Aerial Vehicle Systems (UAS)	Aircraft control and on-ground data communication using the Ground Electronic Communications Service (MFCN)
	3	Radio frequency band	Tx 1920-1980 MHz Rx 2110-2170 MHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	Duplex (190 MHz)	
	7	Transmission power/power density	Maximum allowed nominal power 24 dBm	
	8	Conditions of use of the channel	In accordance with Commission Decisions 2012/688/EU and (EU) 2020/667 and CEPT/ECC/DEC/(22)07	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2012/688/EU (EU) 2020/667 CEP/ECC/DEC/(06)01 CEPT/ECC/DEC/(22)07 EN 301 489-1 EN 301 489-52 EN 301 908-1 EN 301 908-2 EN 301 908-4 EN 301 908-6 EN 301 908-9 EN 301 908-13 EN 301 908-16 EN 301 908-25 EN 50360 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	

	14	Notification number	2023/yyy/EE	
	15	Notes	–	

11.8. UAS user equipment on the MFCN network in the 2.5 GHz frequency band

Normative part	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communications other than aeronautical mobile communication	
	2	Application	Unmanned Aerial Vehicle Systems (UAS)	Aircraft control and on-ground data communication using the Ground Electronic Communications Service (MFCN)
	3	Radio frequency band	Tx 2500-2570 MHz Tx/Rx 2570-2620 MHz Rx 2620-690 MHz	
	4	Channel spacing	Width of allocated frequency blocks is 5 MHz	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	Duplex 120 MHz	
	7	Transmission power/power density	Total radiated power (TRP) 31 dBm/5 MHz	2500–2570 Limits for out-of-band emissions in the frequency bands from 2570 to 2620 MHz -50 dBm/MHz
	8	Conditions of use of the channel	In accordance with Commission Decisions 2008/477/EC and (EU) 2020/636 and CEPT/ECC/DEC/(22)07	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
Informative part	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2008/477/EC (EU) 2020/636 CEPT/ECC/DEC/(05)05 CEPT/ECC/DEC/(22)07 EN 301 489-1 EN 301 489-24 EN 301 908-1 EN 301 908-2 EN 301 908-4 EN 301 908-6 EN 301 908-9 EN 301 908-13	

rt			EN 301 908-16 EN 301908-19 EN 301 908-25 EN 50360 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	—	

Inductive devices

12.1. Inductive device at frequencies from 100 Hz to 9 kHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Inductive devices	
	3	Radio frequency band	Tx/Rx 0.1-9 kHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	Maximum magnetic field strength 82 dBuAm at a distance of 10 m	
	8	Conditions of use of the channel	Antenna size < 1/20 λ	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	CEPT/ERC/REC 70-03 EN 301 489-1 EN 301 489-3 EN 50364 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

12.2. Inductive devices at frequencies 9-90 kHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Inductive devices	
	3	Radio frequency band	Tx/Rx 9-90 kHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	Maximum magnetic field strength 72 dBuAm at a distance of 10 m	For frequencies above 30 MHz, it decreases to 3 dB/octav.
	8	Conditions of use of the channel	From external antennas, only a loop coil antenna is allowed.	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 300 330 EN 301 489-1 EN 301 489-3 EN 50364 EN 62368-1 Radio Frequency Plan on the basis of § 9(3) of the Electronic Communications Act	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

12.3. Inductive devices at frequencies 90-119 kHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Inductive devices	
	3	Radio frequency band	Tx/Rx 90-119 kHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	Maximum magnetic field strength 42 dB μ A/m at a distance of 10 m	
	8	Conditions of use of the channel	Of external antennas, only a loop coil antenna is allowed.	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 300 330 EN 301 489-1 EN 301 489-3 EN 50364 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

12.4. Inductive devices at frequencies 119-135 kHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Inductive devices	
	3	Radio frequency band	Tx/Rx 119-135 kHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	Maximum magnetic field strength 66 dBuAm at a distance of 10 m	For frequencies above 119 MHz, it decreases to 3 dB/octav.
	8	Conditions of use of the channel	Of external antennas, only a loop coil antenna is allowed.	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 300 330 EN 301 489-1 EN 301 489-3 EN 50364 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

12.5. Inductive devices at frequencies 135-140 kHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Inductive devices	
	3	Radio frequency band	Tx/Rx 135-140 kHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	Maximum magnetic field strength 42 dB μ A/m at a distance of 10 m	
	8	Conditions of use of the channel	Of external antennas, only a loop coil antenna is allowed.	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 300 330 EN 301 489-1 EN 301 489-3 EN 50364 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

12.6. Inductive devices at frequencies 140-148.5 kHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Inductive devices	
	3	Radio frequency band	Tx/Rx 140-148.5 kHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	Maximum magnetic field strength 37.7 dBuAm at a distance of 10 m	
	8	Conditions of use of the channel	Of external antennas, only a loop coil antenna is allowed.	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 300 330 EN 301 489-1 EN 301 489-3 EN 50364 EN 62368-1 Radio frequency plan on the basis of § 9(3) of the Electronic Communications Act	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

12.7. Inductive devices at frequencies 148.5-5000 kHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Inductive devices	
	3	Radio frequency band	Tx/Rx 148.5-5000 kHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	Maximum magnetic field strength at a distance of 10 m from an inductive device - 5 dBuA/m in a frequency band 10 kHz wide For frequency bands exceeding 10 kHz: Maximum magnetic field strength at a distance of 10 m from an inductive device - 15 dBuA/m in a frequency band 10 kHz wide	
	8	Conditions of use of the channel	Of external antennas, only a loop coil antenna is allowed.	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
	11	Basis for planning radio frequencies	–	
I n f o r m a t i v e p a r t	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 300 330 EN 301 489-1 EN 301 489-3 EN 50364 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

12.8. Inductive devices at frequencies 400-600 kHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Inductive devices	Only radio frequency identification devices (RFID)
	3	Radio frequency band	Tx/Rx 400-600 kHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	Maximum magnetic field strength 10 m at a distance of -5 dBuA/m for bands wider than 10 kHz (upon using a wider frequency band, use a bandwidth of at least 30 kHz); maximum magnetic field strength -8 dBuA/m at a distance of 10 m	
	8	Conditions of use of the channel	Of external antennas, only a loop coil antenna is allowed.	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 300 330 EN 301 489-1 EN 301 489-3 EN 50364 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

12.9. Inductive devices at frequencies 3155–3400 kHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Inductive devices	
	3	Radio frequency band	Tx/Rx 3155-3400 kHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	Maximum magnetic field strength 13.5 dBuAm at a distance of 10 m	
	8	Conditions of use of the channel	Of external antennas, only a loop coil antenna is allowed.	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 300 330 EN 301 489-1 EN 301 489-3 EN 50364 EN 62368-1 Radio frequency plan on the basis of § 9(3) of the Electronic Communications Act	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

12.10. Inductive devices at frequencies 5000-30,000 kHz

N o r m a t i v e o s a	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Inductive devices	
	3	Radio frequency band	Tx/Rx 5000-30,000 kHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	Maximum magnetic field strength at a distance of 10 m - 5 dBuA/m with the bandwidth of 10 kHz Maximum magnetic field strength at a distance of 10 m from an inductive device - 20 dBuA/m in a frequency band 10 kHz wide	
	8	Conditions of use of the channel	Of external antennas, only a loop coil antenna is allowed.	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 300 330 EN 301 489-1 EN 301 489-3 EN 50364 EN 62368-1 Radio frequency plan on the basis of § 9(3) of the Electronic Communications Act	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

12.11. Inductive devices at frequencies 6765-6795 kHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Inductive devices	
	3	Radio frequency band	Tx/Rx 6765-6795 kHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	Maximum magnetic field strength 42 dB μ A/m at a distance of 10 m	
	8	Conditions of use of the channel	–	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 300 330 EN 301 489-1 EN 301 489-3 EN 50364 EN 62368-1 Radio frequency plan on the basis of § 9(3) of the Electronic Communications Act	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

12.12. Inductive devices at frequencies 7400-8800 kHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Inductive devices	
	3	Radio frequency band	Tx/Rx 7400-8800 kHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	Maximum magnetic field strength 9 dBuA/m at a distance of 10 m	
	8	Conditions of use of the channel	–	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 300 330 EN 301 489-1 EN 301 489-3 EN 50364 EN 62368-1 Radio frequency plan on the basis of § 9(3) of the Electronic Communications Act	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

12.13. Inductive devices at frequencies 10.2-11 MHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Inductive devices	
	3	Radio frequency band	Tx/Rx 10,200-11,000 kHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	Maximum magnetic field strength 9 dBuA/m at a distance of 10 m	
	8	Conditions of use of the channel	–	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 300 330 EN 301 489-1 EN 301 489-3 EN 50364 EN 62368-1 Radio frequency plan on the basis of § 9(3) of the Electronic Communications Act	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

12.14. Inductive devices at frequencies 13.553-13.567 MHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Inductive devices	
	3	Radio frequency band	Tx/Rx 13,553-13,567 kHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	Maximum magnetic field strength 42 dBuA/m at a distance of 10 m	
	8	Conditions of use of the channel	–	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 300 330 EN 301 489-1 EN 301 489-3 EN 50364 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

12.15. RFID on frequencies 13,553 to 13.567 MHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Inductive devices	Radio Frequency Identification Device (RFID) only
	3	Radio frequency band	Tx/Rx 13,553-13,567 kHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	Maximum magnetic field strength 60 dB μ A/m at a distance of 10 m	
	8	Conditions of use of the channel	–	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 300 330 EN 301 489-1 EN 301 489-3 EN 50364 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

12.16. Inductive devices at frequencies 26.957-27.283 MHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Inductive devices	
	3	Radio frequency band	Tx/Rx 26,957-27,283 kHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	Maximum magnetic field strength 42 dBuA/m at a distance of 10 m	
	8	Conditions of use of the channel	–	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 EN 301 489-1 EN 301 489-3 EN 300330 EN 50364 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

Assistive listening devices (ALD)

14.1. Hearing aids for frequencies from 100 Hz to 9 kHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Assistive listening devices (ALD)	
	3	Radio frequency band	Tx/Rx 0.1-9 kHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	Maximum magnetic field strength 120 dBuAm at a distance of 10 m	
	8	Conditions of use of the channel	Inductive frame antenna systems for assistive listening devices. Antenna size $< 1/20 \lambda$	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the ECA	No	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	CEPT/ERC/REC 70-03 EN 300 422-2 EN 301489-1 EN 301489-3 EN 62368-1 EN 50385 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

14.2. Assistive listening devices at frequencies 169.4– 174 MHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Assistive listening devices (ALD)	
	3	Radio frequency band	Tx/Rx 169.4-174 MHz	
	4	Channel spacing	50 kHz	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.R.P. 10 mW	
	8	Conditions of use of the channel	–	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the ECA	No	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	(EU) 2022/180 CEPT/ERC/REC 70-03 EN 300 422-2 EN 301489-1 EN 301489-3 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

14.3. Hearing aids for frequencies 169.400-169.475 MHz and 169.4875 – 169.5875 MHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Assistive listening devices (ALD)	Hearing aids system Public Hearing Aids System
	3	Radio frequency band	Tx/Rx 169.4-169.475 MHz Tx/Rx 169.4875-169.5875 MHz	
	4	Channel spacing	50 kHz	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.R.P. 500 mW	
	8	Conditions of use of the channel	–	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the ECA	No	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/CECC/DEC/(05)02 CEPT/ERC/REC 70-03 EN 300 422-2 EN 301489-1 EN 301489-3 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

14.4. Assistive listening devices at frequencies 173.35– 174.77 MHz

N o r m a t i v e P a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Assistive listening devices (ALD)	
	3	Radio frequency band	Tx/Rx 173.35-174.77 MHz	
	4	Channel spacing	50 kHz	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.R.P. 2 mW	
	8	Conditions of use of the channel	–	In the radio frequency band 174–174.77 The possibility of radio interference by the broadcaster must be taken into account in MHz
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the ECA	No	
	11	Basis for planning radio frequencies	–	
I n f o r m a t i v e P a r t	12	Planned changes	–	
	13	References to documents	CEPT/ERC/REC 70-03 EN 300 422-2 EN 301489-1 EN 301489-3 EN 50385 EN 62368-1 Radio Frequency Plan on the basis of § 9(3) of the Electronic Communications Act	
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

14.5. Assistive listening devices at frequencies 173.965– 216 MHz

N o r m a t i v e P a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Assistive listening devices (ALD)	
	3	Radio frequency band	Tx/Rx 173.965-216 MHz	
	4	Channel spacing	50 kHz	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.R.P. 10 mW	
	8	Conditions of use of the channel	The mandatory threshold value is 35 dB μ V/m to ensure protection of a DAB (digital radio broadcasting) receiver located within 1.5 m from the assistive listening device (ALD). Provided that DAB signal strength measurements are made around the operating area of the ALD. The ALD device should operate in all situations at least 300 kHz away from the edge of the busy DAB channel	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the ECA	No	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	(EU) 2022/180 CEPT/ERC/REC 70-03 EN 300 422-2 EN 301489-1 EN 301489-3 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

Radio frequency identification devices

15.1. Radio frequency identification devices at frequencies 865–868 MHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Radio Frequency Identification (RFID)	
	3	Radio frequency band	Tx/Rx 865-868 MHz	
	4	Channel spacing	200 kHz	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.R.P. 2 W RFID reading device for centre frequencies 865.7 MHz, 866.3 MHz, 866.9 MHz, 867.5 MHz, 200 kHz bandwidth E.R.P. -20 dBm RFID label, outside reading frequencies	
	8	Channel usage conditions	Spectrum access and interference mitigation techniques shall be used, the efficiency of which is at least equal to the efficiency of the techniques described in the harmonised standards adopted on the basis of Directive 2014/53/EC.	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180	Decision 2006/771/EC contains an existing technical annex to

r m a t i v e p a r t			CEPT/ERC/REC 70-03 EN 301 489-1 EN 301 489-3 EN 302 208 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

15.2. Radiofrequency identification device placed on the market before 2018 at frequencies 865–868 MHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Radio Frequency Identification (RFID)	
	3	Radio frequency band	Tx/Rx 865-868 MHz	
	4	Channel spacing	200 kHz -	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	e.r.p. 500 mW at frequencies 867.6–868 MHz e.r.p. 2 W at frequencies 865.6–867.6 MHz e.r.p. 100 mW at frequencies 865–865.6 MHz	
	8	Channel usage conditions	Devices placed on the market before the repeal of Commission Decision 2006/804/EC 31/12/2017	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 CEPT/ERC/REC 70-03 EN 301 489-1 EN 301 489-3 EN 302 208 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

15.3. Radio frequency identification devices at frequencies 915–921 MHz

N o r m a t i v e P a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Radio Frequency Identification (RFID)	Functions only near known RFID devices
	3	Radio frequency band	Tx/Rx 915-921 MHz	
	4	Channel spacing	400 kHz	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	e.r.p. 4 W RFID reading device for centre frequencies 916.3 MHz, 917.5 MHz, 918.7 MHz, 919.9 MHz, 400 kHz bandwidth E.R.P. -10 dBm RFID label, outside reading frequencies	
	8	Channel usage conditions	–	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	(EU) 2018/1538 CEPT/ERC/REC 70-03 EN 301 489-1 EN 301 489-3 EN 302 208 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

15.4. Radio frequency identification devices between 2446 MHz and 2454 MHz

N o r m a t i v e P a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Radio Frequency Identification (RFID)	
	3	Radio frequency band	Tx/Rx 2446-2454 MHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	FHSS	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.I.R.P. 500 mW up to 4 W. The device shall be equipped with automatic power control to reduce radiated power up to 500 mW when the device is used off-site.	When using the equipment indoors, radiation at 10 m from the outer wall of the building may not exceed the field strength generated at the same distance by an equivalent 500 mW radio frequency identification device. If the building consists of several possessions, such as shops in a shopping centre, <i>the limit of the user's possession in the building is taken as a basis of measurement</i>
	8	Channel usage conditions	Duty cycle up to 15 % over every 200 ms period.	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
	11	Basis for planning radio frequencies	–	
I n f o r m a t i v e P a r t	12	Planned changes	–	
	13	References to documents	CEPT/ERC/REC 70-03 EN 300 440 EN 301 489-1 EN 301 489-3 EN 50371 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

15.5. Radio frequency identification devices at frequencies 2446–2454 MHz

N o r m a t i v e P a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Radio Frequency Identification (RFID)	
	3	Radio frequency band	Tx/Rx 2446-2454 MHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.I.R.P. 500 mW	
	8	Channel usage conditions	Spectrum access and interference mitigation techniques shall be used, the efficiency of which is at least equal to the efficiency of the techniques described in the harmonised standards adopted on the basis of Directive 2014/53/EC.	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e P a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 300440 EN 301 489-1 EN 301 489-3 EN 50371 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

Active implantable medical equipment

16.1. Wireless medical equipment at frequencies 9–315 kHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Active implantable medical equipment	Active medical implant defined in Council Directive 90/385/EEC
	3	Radio frequency band	Tx/Rx 9-315 kHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	Maximum magnetic field strength 30 dBuAm at a distance of 10 m	
	8	Conditions of use of the channel	Maximum duty cycle 10%	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	90/385/EEC 2006/771/EÜ (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 301 489-1 EN 301 489-31 EN 302 195 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

16.2. Wireless medical equipment at frequencies 315–600 kHz

N o r m a t i v e P a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Active implantable medical equipment	Animal implants
	3	Radio frequency band	Tx/Rx 315-600 kHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	Maximum magnetic field strength -5 dBuAm at a distance of 10 m	
	8	Conditions of use of the channel	Maximum duty cycle 10%	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 301 489-1 EN 301 489-3 EN 302 536 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

16.3. Wireless medical equipment at frequencies 12.5-20 MHz

N o r m a t i v e P a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Active implantable medical equipment	Animal implant indoors
	3	Radio frequency band	Tx/Rx 12,500-20,000 kHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	Maximum magnetic field strength at a distance of 10 m – 7 dBuA/m with a bandwidth of 10 kHz	
	8	Conditions of use of the channel	Maximum duty cycle 10%	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 300 330 EN 301 489-1 EN 301 489-3 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

16.4. Wireless medical equipment at frequencies 30-37.5 MHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Active implantable medical equipment	Ultra-low-power membrane implant as defined in Council Directive 90/385/EEC for the measurement of blood pressure
	3	Radio frequency band	Tx/Rx 30-37.5 MHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.R.P. 1 mW	
	8	Conditions of use of the channel	Maximum duty cycle 10%	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	90/385/EEC 2006/771/EÜ (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 301 489-1 EN 301 489-31 EN 302 510 EN 50385 EN 62368-1 Radio Frequency Plan on the basis of § 9(3) of the Electronic Communications Act	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

16.5. Wireless medical device at frequencies 401-402 MHz and 405-406 MHz

Normative part	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Active implantable medical equipment	Systems for silent digital communication between active medical implants as defined in Directive 90/385/EEC. Body worn and other extracorporeal devices for the transmission of non time-critical physiological information related to patients.
	3	Radio frequency band	Tx/Rx 401-402 MHz Tx/Rx 405-406 MHz	
	4	Channel spacing	25 kHz	It is allowed to increase the channel spacing of individual transmitters to 100 kHz on account of adjacent channels
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.R.P. 25 uW	
	8	Conditions of use of the channel	Spectrum access and interference mitigation techniques shall be used, the efficiency of which is at least equal to the efficiency of the techniques described in the harmonised standards adopted on the basis of Directive 2014/53/EC. Instead, the duty cycle of 0.1 % may also be used.	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
Information	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	90/385/EEC 2006/771/EÜ (EU) 2019/1345 (EU) 2022/180	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345

m a t i v e p a r t			CEPT/ECC/DEC/(01)17 EN 301 489-1 EN 301 489-29 EN 302 537 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

16.6. Wireless medical equipment at frequencies 402–405 MHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Active implantable medical equipment	Active medical implants as defined in Directive 90/385/EEC
	3	Radio frequency band	Tx/Rx 402-405 MHz	
	4	Channel spacing	25 kHz	It is allowed to increase the channel spacing of individual transmitters to 300 kHz on account of adjacent channels
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.R.P. 25 uW	
	8	Conditions of use of the channel	Other spectrum access and interference mitigation techniques may be used, the efficiency of which is at least equal to the efficiency of the techniques described in the harmonised standards adopted on the basis of Directive 2014/53/EC, in order to ensure the simultaneous uninterrupted operation of other users, particularly meteorological radioprobes	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	90/385/EEC 2006/771/EÜ (EU) 2019/1345 (EU) 2022/180 CEPT/ECC/DEC/(01)17 EN 301 489-1 EN 301 489-27 EN 301 839 EN 50385 EN 62368-1	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345

p a r t			Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

16.7. Wireless medical equipment at frequencies 2483.5–2500.0 MHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Active implantable medical equipment	Active medical implants as defined in Directive 90/385/EEC Extracorporeal control devices can only be used indoors
	3	Radio frequency band	Tx/Rx 2483.5-2500 MHz	
	4	Channel spacing	1 MHz	For fast data transmission the whole frequency range can be used as one channel
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.I.R.P. 10 dBm	
	8	Conditions of use of the channel	Spectrum access and mitigation techniques shall be used that deliver at least equivalent performance to those described in harmonised standards adopted under Directive 2014/53/EU. Maximum duty cycle 10%	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the Electronic Communications Act (ECA)	None	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	90/385/EEC 2006/771/EÜ (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 301 489-1 EN 301 489-27 EN 301 559 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	

	15	Notes	–	
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Wireless audio devices

17.1. Wireless audio devices at frequencies 87.5–108 MHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Wireless audio and multimedia devices	Low power analogue FM transmitters
	3	Radio frequency band	Tx/Rx 87.5-108 MHz	
	4	Channel spacing	200 kHz	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.R.P. 50 nW	
	8	Conditions of use of the channel	–	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the ECA	No	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 301 357-2 EN 301 489-1 EN 301 489-9 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

17.2. Wireless audio devices at frequencies 863–865 MHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Wireless audio and multimedia devices	
	3	Radio frequency band	Tx/Rx 863-865 MHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.R.P. 10 mW	
	8	Conditions of use of the channel	–	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the ECA	No	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2006/771/EC (EU) 2019/1345 (EU) 2022/180 CEPT/ERC/REC 70-03 EN 301 357-2 EN 301 489-1 EN 301 489-9 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	Decision 2006/771/EC contains an existing technical annex to Decision (EU) 2019/1345
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

17.3. Wireless audio devices at frequencies 1795–1800 MHz

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Mobile communication	
	2	Application	Wireless audio and multimedia devices	
	3	Radio frequency band	Tx/Rx 1795-1800 MHz	
	4	Channel spacing	–	
	5	Modulation/bandwidth used	–	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	E.R.P. 20 mW	
	8	Conditions of use of the channel	–	
	9	Frequency authorisation regime	No frequency authorisation	
	10	Essential requirements under § 120 ² (1) of the ECA	No	
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	CEPT/ERC/REC 70-03 EN 301 357-2 EN 301 489-1 EN 301 489-9 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	–	

Maritime communication

18. Marine communication VHF hand-held radio station

N o r m a t i v e p a r t	No	Parameter	Description	Comments
	1	Radio communication service	Maritime mobile communication	
	2	Application	Maritime communication	
	3	Radio frequency band	Tx/Rx 156-162.025 MHz	
	4	Channel spacing	25 kHz or 12.5 kHz	
	5	Modulation/bandwidth used	Bandwidth not exceeding 25 kHz	
	6	Duplex/simplex communication. Duplex gap	–	
	7	Transmission power/power density	Maximum allowed E.I.R.P. 6 W	
	8	Conditions of use of the channel	In compliance with Annex 18 to the ITU Radio Regulations and Section 39(7) of the Maritime Safety Act	Marine communication VHF-use a handheld radio station for water safety purposes only
	9	Frequency authorisation regime	No frequency authorisation	MMS code issued by Consumer Protection and Technical Regulatory Authority
	10	Essential requirements under § 120 ² (1) of the ECA	Yes	In accordance with Commission Decision 2013/638/EU
I n f o r m a t i v e p a r t	11	Basis for planning radio frequencies	–	
	12	Planned changes	–	
	13	References to documents	2013/638/EU CEPT/ECC/DEC/(19)03 RR App. 18 EN 301 843-1 EN 301 843-2 EN 301178 EN 50385 EN 62368-1 Radio frequency plan pursuant to § 9 (3) of the ECA	
	14	Notification number	2023/yyy/EE	
	15	Notes	The means of communication at sea may be used by a person who has been trained and has a restricted operator’s	

			certificate or general operator's certificate or short strict certificate. A person who does not hold such certificates may use maritime means of communication only in the event of an emergency	
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**Explanations of the indications and abbreviations
of the Regulation and their equivalents in English**

Acronym	Meaning
AGA	õhk-maa-õhk-side <i>air-ground-air operation</i>
AES	õhusõiduki satelliitside maajaam <i>aircraft earth station</i>
AFA	adaptiivne sageduskanalite vahetus <i>Adaptive Frequency Agility</i>
ALD	kuuldeabi seadmed <i>assistive listening devices</i>
AM	amplituudmodulatsioon <i>amplitude modulation</i>
ATPC	võimsuse automaatjuhtimine <i>automatic transmit power control</i>
AVI	raudteeveeremi automaatne identifitseerimissüsteem <i>automatic vehicle identification for railways</i>
BTS	vastuvõtu-saate tugijaam <i>base transceiver station</i>
CEPT	Euroopa Postside- ja Telekommunikatsioonidministratsioonide Konverents <i>European Conference of Postal and Telecommunications Administrations</i>
CEPT/ECC/DEC CEPT/ERC/DEC	CEPTi Elektroonilise Side Komitee otsus
CEPT/ECC/REC CEPT/ERC/REC	CEPTi Elektroonilise Side Komitee soovitus
CGC	komplementaarne maakomponent <i>complementary ground component</i>
DAA	tuvasta ja väldi <i>detect and avoid</i>
DAB	digitaalne raadioringhääling <i>digital audio broadcasting</i>
DCAAS	dünaamiline kanali vältimise eraldussüsteem <i>dynamic channel avoidance assignment system</i>
DECT	raadiotelefonisüsteem <i>digital European cordless telecommunications</i>
DMO	otseühenduskanal <i>direct mode operation</i>
DPMR 446	ühiskasutusega sagedusalas 446 MHz töötav digitaalne raadiosidesüsteem <i>Digital Professional Mobile Radio 446</i>
DQPSK	diferentsiaalkvadratuur-faasmodulatsioon <i>differential quadrature phase shift keying</i>
DSB	kahe külgriba modulatsioon <i>double sideband modulation</i>
EAS	avariihäireseade

Acronym	Meaning
	<i>emergency alert system</i>
EL	Euroopa Liit <i>European Union</i>
EN	Euroopa standard <i>European standard</i>
ESIM/ESOMP	satelliitside terminal liikuval platvormil <i>earth stations in-motion</i> <i>earth stations on mobile platforms</i>
ESS	elektroonilise side seadus <i>electronic communications act</i>
ESV	veesõiduki pardale paigaldatav kosmoseside maajaam <i>earth station on board vessels</i>
ETSI	Euroopa Telekommunikatsiooni Standardite Instituut <i>European Telecommunications Standards Institute</i>
ETSI TR	ETSI tehniline raport <i>ETSI technical report</i>
EVS	Eesti standard <i>Estonian standard</i>
EÜ	Euroopa Ühendus <i>EC – European Community</i>
FDD	sagedustihendus dupleks <i>frequency division duplex</i>
FDMA	sagedusjaotuslik ühispöördus <i>frequency division multiple access</i>
FM	sagedusmodulatsioon <i>frequency modulation</i>
FHSS	sagedushüplusega hajaspektri modulatsioon <i>frequency hopping spread spectrum</i>
FSS	paikne satelliitside <i>fixed satellite service</i>
GBSAR	ehitise ja pinnase struktuuri sondeerimisseade <i>ground based synthetic aperture radar</i>
GFSK	Gaussi sagedusmodulatsioon <i>gaussian frequency shift keying</i>
GMSK	Gaussi miinimum-sagedusmodulatsioon <i>gaussian minimum shift keying</i>
GSM	mobiiltelefonisüsteem <i>global system for mobile communication</i>
GSM-R	raudtee mobiiltelefonisüsteem <i>GSM for railways</i>
GSO	geostatsionaarne orbiit <i>geostationary orbit</i>
GPR	pinnase sondeerimisradar <i>ground probing radar</i>
HEST	kõrge ekvivalentse isotroopse kiirgusvõimsusega satelliitside terminal <i>high e.i.r.p. satellite terminal</i>
ITU	Rahvusvaheline Telekommunikatsiooni Liit <i>International Telecommunication Union</i>
ITU-R	Rahvusvahelise Telekommunikatsiooni Liidu raadioside sektor <i>International Telecommunication Union Radiocommunication Sector</i>
JRCC	pääste- ja koordinatsioonikeskus <i>Joint Rescue Coordination Centre</i>

Acronym	Meaning
LAES	asukoha rakendus hädaabiteenistustele <i>location application for emergency services</i>
LBT	enne kuula ja siis räägi <i>listen before talk</i>
LEO	maalähedane orbiit <i>low earth orbit</i>
LT1	asukoha jälgimise süsteemid tüüp 1 <i>location tracking systems type 1</i>
LT2	asukoha jälgimise süsteemid tüüp 2 <i>location tracking systems type 2</i>
LTE	eel-4G-tehnoloogia <i>Long Term Evolution technology</i>
MBANS	patsiendi meditsiiniline jälgimissüsteem <i>medical body area network system</i>
MCA	mobiilside õhusõiduki pardal <i>mobile communication on aircraft</i>
MCV	mobiilside laevapardal <i>mobile communications on board vessel</i>
MFCN	maapealne elektroonilise sideteenuse osutamise süsteem <i>mobile/fixed communications networks</i>
MSOS	meresõiduohutuse seadus <i>Maritime Safety Act</i>
NCU	võrgu juhtplokk <i>network control unit</i>
NGSO	mitte-geostatsionaarne orbiit <i>non-geostationary orbit</i>
OFDM	ortogonaalne sagedustihendus <i>Orthogonal frequency-division multiplexing</i>
PEP	(raadiosaatja) tipp-mähisvõimsus <i>peak envelope power</i>
PLB	personaalne avarii-raadiopoi <i>personal location beacon</i>
PMR 446	ühiskasutusega sagedusalas 446 MHz töötav raadiosidesüsteem <i>Professional Mobile Radio 446</i>
PMR/PAMR	ametkondlik liikuv raadiosidesüsteem/piiratud avaliku juurdepääsuga liikuv raadiosidesüsteem <i>Professional Mobile Radio/Public Access Mobile Radio</i>
PMSE	programmitootmise ja erisündmuste edastamise traadita seadmed <i>programme making and special events applications</i>
PSK	faasimodulatsioon <i>phase shift keying</i>
Rx	vastuvõtusagedus <i>receiving frequency</i>
QAM	kvadratuur-amplituudmodulatsioon <i>quadrature amplitude modulation</i>
QPSK	kvadratuur-faasmodulatsioon <i>quadrature phase shift keying</i>
RAS	raadiojuurdepääsu süsteem <i>radio access system</i>
Res.	resolutsioon <i>resolution</i>
RFID	raadiosageduslik identifitseerimine

Acronym	Meaning
	<i>radio frequency identification</i>
RNSS	satelliitside raadionavigatsiooni teenistus <i>radio navigation satellite service</i>
RR	raadioeeskirjad <i>Radio Regulations</i>
SNG	satelliitsidesüsteem uudiste ajutiseks edastamiseks <i>satellite news gathering</i>
SOLAS	rahvusvaheline konventsioon inimeste ohutusest merel <i>International Convention for the Safety of Life at Sea</i>
SRR	sõidukiradar <i>automotive short range radar</i>
SSB	ühe külgriba modulatsioon <i>single side band</i>
TETRA	maapealne magistraal-mobiilsidevõrk <i>Terrestrial Trunked Radio</i>
TDD	aegtihendus dupleks <i>time division duplex</i>
TLPR	mahutite taseme sondeerimisseade <i>Tanks Level Probing Radar</i>
TPC	raadiosaateseadme võimsuse automaatjuhtimine <i>transmitter power control</i>
TRA-ECS	maapealsed süsteemid elektroonilise sideteenuse osutamiseks <i>Terrestrial Radio applications capable of providing electronic communications services</i>
TRP	kogu kiirgusvõimsus <i>total radiated power</i>
TS	tehniline spetsifikatsioon <i>technical specification</i>
Tx	saatesagedus <i>transmission frequency</i>
UAS	mehitamata õhusõidukite süsteem <i>unmanned aircraft system</i>
UMTS	universaalne mobiiltelefonisüsteem <i>universal mobile telecommunications system</i>
UWB	ultralairiba <i>ultra wideband</i>
VBTS	laevaparda vastuvõtu-saate tugijaam <i>vessel base transceiver station</i>
VOX	häälakeerimise lülitus <i>voice activation exchange</i>
WAS/RLAN	lairiba andmeedastussüsteemid, sealhulgas raadio-kohtvõrgud <i>wireless access systems including radio local area networks</i>
WIA	juhtmevabad tööstusseadmed <i>wireless industrial applications</i>
WiMAX	traadita interneti võrk <i>world interoperability for microwave access</i>
WLAM	lairiba madala aktiivsusega režiim <i>wideband low activity mode</i>
WPR	seina sondeerimisradar <i>wall probing radar</i>
WRC (WARC)	ülemaailmne raadioside konverents <i>World (Administrative) Radio Conference</i>

Acronym	Meaning
VSAT	väga väikse apertuuriga terminal very small aperture terminal