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# **RO-IR 01**

## **TECHNICAL REGULATION**

for the radio interface

concerning non-specific Short-Range Devices (SRDs)

#### **1. Basic considerations**

Directive 2014/53/EU of the European Parliament and of the Council of 16 April 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of radio equipment and repealing Directive 1999/5/EC was implemented in national legislation by Government Decision No. 740/2016 on making available on the market of radio equipment with subsequent amendments and completions.

This technical regulation contains the requirements for the radio spectrum usage by the license exempted non-specific short-range devices in the specified frequency bands and considers compliance, especially with the provisions of Article 3 Paragraph 2, and Articles 6-8 of Directive 2014/53/EU.

This technical regulation does not exclude the obligation for the radio equipment placed on the market or made available on the market in Romania to comply with Directive 2014/53/EU.

The obligations arising from Directive (EU) 2015/1535 of the European Parliament and of the Council of 9 September 2015 laying down a procedure for the provision of information in the field of technical regulations and of rules on Information Society services are met in this regulation (OJ L 241, 17.9.2015, pages 1–15).

All Romanian technical regulations for the radio interfaces notified under Directive 2015/1535 shall be published and made available on National Authority for Management and Regulation in Communications (ANCOM) web-site at: http://www.ancom.ro/reglementari-interfete\_2723.

Frequency band	Annex
442.2 – 450 kHz	RO-IR 01-01
456.9 – 457.1 kHz	RO-IR 01–02
13 553 – 13 567 kHz	RO-IR 01–03
26 957 – 27 283 kHz	RO-IR 01–04
26 990 – 27 000 kHz	RO-IR 01–05
27 040 – 27 050 kHz	RO-IR 01–06
27 090 – 27 100 kHz	RO-IR 01–07
27 140 – 27 150 kHz	RO-IR 01–08
27 190 – 27 200 kHz	RO-IR 01–09
40.66 – 40.70 MHz	RO-IR 01–10
138.20 – 138.45 MHz	RO-IR 01–11
169.4 – 169.475 MHz	RO-IR 01–12
169.4 – 169.4875 MHz	RO-IR 01–13
169.4875 – 169.5875 MHz	RO-IR 01–14
169.5875 – 169.8125 MHz	RO-IR 01–15
433.05 – 434.79 MHz	RO-IR 01–16a; RO-IR 01–16b
434.04 – 434.79 MHz	RO-IR 01–17
862 – 863 MHz	RO-IR 01-18

### 2. Radio Interface Specifications

#### **Non-specific SRDs**

863 – 865 MHz	RO-IR 01–19
865 – 868 MHz	RO-IR 01–20a; RO-IR 01-20b
868 – 868.6 MHz	RO-IR 01–21
868.7 – 869.2 MHz	RO-IR 01–22
869.4 – 869.65 MHz	RO-IR 01–23
869.7 – 870 MHz	RO-IR 01–24a; RO-IR 01–24b
874 – 874.4 MHz	RO-IR 01-25
917.3 – 918.9 MHz	RO-IR 01-26
917.4 – 919.4 MHz	RO-IR 01-27
2 400 – 2 483.5 MHz	RO-IR 01–28
5 725 – 5 875 MHz	RO-IR 01–29
24 – 24.15 GHz	RO-IR 01–30
24.15 – 24.25 GHz	RO-IR 01–31
57 – 64 GHz	RO-IR 01–32
61 – 61.5 GHz	RO-IR 01–33
122 – 122.25 GHz	RO-IR 01–34a
122.25 – 123 GHz	RO-IR 01-34b
244 – 246 GHz	RO-IR 01–35

For the purpose of this technical regulation, *Short-Range Device (SRD)* means a radio device which provides unidirectional or bidirectional communication, and which receives and/or transmits signals over a short distance and at low power.

*The category of short-range devices, non-specific,* covers all kinds of radio devices, regardless of the application or the purpose, which fulfill the technical conditions specified for a given frequency band. Typical uses include telemetry, telecommand, alarms, data transmissions in general and other applications.

For the purpose of this technical regulation, *a network access point* in a data network is a fixed terrestrial short-range device that works as a connection point for the other short-range devices in the data network to services platforms located outside the data network. The term "data network" refers to several short-range devices that represent the components of the network, including the access point to the network and the radio connections application between them, as well.

For the purpose of this technical regulation, the *operating cycle* is defined as the ratio, expressed as a percentage, between  $\Sigma(Ton)$  and (Tobs), where *Ton* is the operating time («on») of a single radio transmitter device and *Tobs* is the observation period. *Ton* is measured in a frequency observation band (*Fobs*). Unless otherwise specified in this technical regulation, *Tobs* represents an one hour uninterrupted period and *Fobs* is the applicable frequency band in this technical regulation.

For the purpose of this technical regulation, *non-interference and non-protected* means that it is not allowed to cause any harmful interference to radio communications services and that it shall not be claimed the protection of these devices against harmful interference originating from radio communications services.

The use of radio spectrum by short-range devices is allowed on a non-interference and non-protected basis provided that such devices meet the conditions set out in the Annexes below.

### 3. Document history:

Edition	Changes
Edition 1/2014	Notification number according to Directive 98/34/EC: 2014/597/RO.
	Update according to Commission Implementing Decision (EU) 2017/1483 amending Decision 2006/771/EC on harmonizing the radio spectrum for the use of short-range devices and repealing Decision 2006/804/EC:
Edition 2/2018	<ul> <li>RO-IR 01-01 ÷ RO-IR 01-31, except RO-IR 01-11 and RO-IR 01-26;</li> <li>RO-IR 01-02 was repealed (frequency band 6 765-6 795 kHz);</li> <li>New technical specifications were added: RO-IR 01-19b, RO-IR 01-30a, RO-IR 01-30b;</li> </ul>
(06.08.2018)	Update of the legal framework according to Point 1 – "Basic considerations" and reference documents (row 13); Update according to the list of Class 1 radio equipment subclasses (version of January 2018) published according to Article 1 Paragraph 3 of Commission Decision 2000/299/EC (http://ec.europa.eu/docsroom/documents/26843): RO-IR 01-01; Formal changes according to TCAM-RSC pattern of November 2017.
	Update of the legal framework according to Point $1 - "Basic considerations" and definitions to Point 2 - "Specifications for radio interface";$
Edition 3/2020	<ul> <li>Update according to Commission Implementing Decision (EU) 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions for the use of radio spectrum for short-range devices : <ul> <li>The following frequency bands were added, being renumbered the technical specifications:</li> <li>442.2-450 kHz (RO-IR 01-01);</li> <li>862-863 MHz (RO-IR 01-18);</li> </ul> </li> <li>The rest of the technical specifications were updated and renumbered.</li> </ul>
(23.12.2020)	Update according to Commission Implementing Decision (EU) 2018/1538 of 11 October 2018 on the harmonisation of radio spectrum for use by short- range devices within the 874-876 and 915-921 MHz frequency bands: • The following frequency bands have been introduced: 874-874.4 MHz (RO-IR 01-25); 917.3-918.9 MHz (RO-IR 01-26); 917.4-919.4 MHz (RO-IR 01-27);
	Update according to the list of Class 1 radio equipment subclasses (version of January 2020) published according to Article 1 Paragraph 3 of Commission Decision 2000/299/EC (https://ec.europa.eu/docsroom/documents/40361).

ROMANIA Radio Interface Specification SF		Radio Interface Specification	SRD / Non-specific Short-Range Devices	RO-IR 01-01	Edition 3/2020
	Nr	Parameter	Description	Comments	
	1	Radiocommunication Service	Mobile		
	2	Application	Short-Range Devices / Non-specific Short-Range Devices	This set of usage conditions applies exclusively to person detection and collision avoidance devices.	
	3	Frequency band	442.2 – 450 kHz	Harmonised radio spectrum for use by short-range devices (Commission Implenting Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short- range devices)	
ť	4	Channeling (channel distribution)	Channel spacing $\geq$ 150 Hz		
ive Part	5	Modulation/Occupied bandwidth	-		
Normativ	6	Direction/Separation	-		
	7	Transmit power / Power density	7 dBµA/m at 10 m		
	8	Channel occupation and access rules			
	9	Authorization regime	License exemption		
	10	Additional essential requirements (According to Article 3 Paragraph 3 o 2014/53/EU Directive)	5 - F		
	11	Assumptions on spectrum planning	-		
	12	Planned changes	-		
Informative Part	13	Reference	EN 300 330; Commission Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices; ERC/REC 70-03		
Infor	14	Notification number	-		
н	15	Remarks	-		

ROMANIA R		Radio Interface Specification	SRD / Non-specific Short-Range Devices	RO-IR 01-02 Edition 3/202	
	Nr	Parameter	Description	Comments	
	1	Radiocommunication Service	Mobile		
	2	Application	Short-Range Devices / Non-specific Short-Range Devices	This set of usage conditions applies exclusively to devices for emergency detection of buried victims and valuables.	
	3	Frequency band	456.9 – 457.1 kHz Center frequency is 457 kHz	Harmonised radio spectrum for use by short-range devices (Commission Implenting Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short range devices)	
	4	Channeling (channel distribution)	-		
/e Part	5	Modulation/Occupied bandwidth	Continuous wave (CW)- no modulation		
Normative	6	Direction/Separation	-		
Nori	7	Transmit power / Power density	7 dBµA/m at 10 m		
	8	Channel occupation and access rules			
	9	Authorization regime	License exemption		
	10	Additional essential requirements (According to Article 3 Paragraph 3 o 2014/53/EU Directive)	Application of Article 3 Paragraph 3 Letter g, ensuring access to emergency services according to Decision 2001/148/EC on the application of Article 3 Paragraph 3 letter e of Directive 1999/5/EC for avalanche light signals		
	11	Assumptions on spectrum planning	-		
L.	12	Planned changes	-		
Informative Part	13	Reference	EN 300 718; Commission Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices; ERC/REC 70-03		
nfor	14	Notification number	-		
н	15	Remarks	-		

ROMANIA	adio Interface Specification	SRD / Non-specific Short-Range Devices	RO-IR 01-03	Edition 3/2020
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	Nr	Parameter	Description	Comments
	1	Radiocommunication Service	Mobile	
	2	Application	Short-Range Devices / Non-specific Short-Range Devices	
	3	Frequency band	13 553 – 13 567 kHz	Harmonised radio spectrum for use by short-range devices (Commission Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices)
	4	Channeling (channel distribution)	-	
e Part	5	Modulation/Occupied bandwidth	-	
Normative Part	6	Direction/Separation	-	
Nor	7	Transmit power / Power density	10 mW effective radiated power (e.r.p.)	
	8	Channel occupation and access rules	-	
	9	Authorization regime	License exemption	
	10	Additional essential requirements (According to Article 3 Paragraph 3 of 2014/53/EU Directive)	-	
	11	Assumptions on spectrum planning	-	
L.	12	Planned changes	-	
Informative Part	13	Reference	EN 300 330; Commission Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices; ERC/REC 70-03	
infor	14	Notification number	-	
	15	Remarks	-	
		Edition:1: Povision:1		•

ROMANIA         Radio Interface Specification         SRD / Non-specific Short-Range Devices         RO-IR 01-	
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Nr	Parameter	Description	Comments
1	Radiocommunication Service	Mobile	
2	Application	Short-Range Devices / Non-specific Short-Range Devices	
3	Frequency band	26 957 – 27 283 kHz	Harmonised radio spectrum for use by short-range devices (Commission Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices)
4	Channeling (channel distribution)	-	
5	Modulation/Occupied bandwidth	-	
6	Direction/Separation	-	
7	Transmit power / Power density	10 mW effective radiated power (e.r.p.)	
8	Channel occupation and access rules	-	
9	Authorization regime	License exemption	
10	Additional essential requirements (According to Article 3 Paragraph 3 of 2014/53/EU Directive)	-	
11	Assumptions on spectrum planning	-	
12	Planned changes	-	
13	Reference	EN 300 220-2; EN 300 330; Commission Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices; ERC/REC 70-03	
14	Notification number	-	
15	Remarks	-	
	1 2 3 4 5 6 7 8 9 10 11 11 12 13 13	1Radiocommunication Service2Application3Frequency band4Channeling (channel distribution)5Modulation/Occupied bandwidth6Direction/Separation7Transmit power / Power density8Channel occupation and access rules9Authorization regime10Additional essential requirements (According to Article 3 Paragraph 3 of 2014/53/EU Directive)11Assumptions on spectrum planning12Planned changes13Reference14Notification number	1Radiocommunication ServiceMobile2ApplicationShort-Range Devices / Non-specific Short-Range Devices3Frequency band26 957 - 27 283 kHz4Channeling (channel distribution)-5Modulation/Occupied bandwidth-6Direction/Separation-7Transmit power / Power density10 mW effective radiated power (e.r.p.)8Channel occupation and access rules-9Authorization regimeLicense exemption10Additional essential requirements (According to Article 3 Paragraph 3 of 2014/53/EU Directive)-11Assumptions on spectrum planning-13ReferenceEN 300 220-2; EN 300 330; Commission Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices; ERC/REC 70-0314Notification number-

ROMANIA	Radio Interface Specification	SRD / Non-specific Short-Range Devices	RO-IR 01-05	Edition 3/2020
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	Nr	Parameter	Description	Comments
	1	Radiocommunication Service	Mobile	
	2	Application	Short-Range Devices / Non-specific Short-Range Devices	
	3	Frequency band	26 990 – 27 000 kHz	Harmonised radio spectrum for use by short-range devices (Commission Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices)
Part	4	Channeling (channel distribution)	-	
Normative Part	5	Modulation/Occupied bandwidth	-	
rmat	6	Direction/Separation	-	
No	7	Transmit power / Power density	100 mW effective radiated power (e.r.p.)	
	8	Channel occupation and access rules	Operating cycle limit: 0.1%	Model control devices (see RO-IR 08-01) may operate without operating cycle restrictions.
	9	Authorization regime	License exemption	
	10	Additional essential requirements (According to Article 3 Paragraph 3 of 2014/53/EU Directive)	-	
	11	Assumptions on spectrum planning	-	
ų	12	Planned changes	-	
Informative Part	13	Reference	EN 300 220-2; Commission Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices; ERC/REC 70-03	
infor	14	Notification number	-	
н	15	Remarks	-	

ROMANIA	Radio Interface Specification	SRD / Non-specific Short-Range Devices	RO-IR 01-06	Edition 3/2020
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	Nr	Parameter	Description	Comments
	1	Radiocommunication Service	Mobile	
	2	Application	Short-Range Devices / Non-specific Short-Range Devices	
	3	Frequency band	27 040 – 27 050 kHz	Harmonised radio spectrum for use by short-range devices (Commission Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices)
ť	4	Channeling (channel distribution)	-	
Normative Part	5	Modulation/Occupied bandwidth	-	
mati	6	Direction/Separation	-	
Nori	7	Transmit power / Power density	100 mW effective radiated power (e.r.p.)	
	8	Channel occupation and access rules	Operating cycle limit: 0.1%	Model control devices (see RO-IR 08-01) may operate without operating cycle restrictions.
	9	Authorization regime	License exemption	
	10	Additional essential requirements (According to Article 3 Paragraph 3 of 2014/53/EU Directive)	-	
	11	Assumptions on spectrum planning	-	
t t	12	Planned changes	-	
Informative Part	13	Reference	EN 300 220-2; Commission Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices; ERC/REC 70-03	
nfor	14	Notification number	-	
F	15	Remarks	-	

ROMANIA	Radio Interface Specification	SRD / Non-specific Short-Range Devices	RO-IR 01-07	Edition 3/2020
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	Nr	Parameter	Description	Comments
	1	Radiocommunication Service	Mobile	
	2	Application	Short-Range Devices / Non-specific Short-Range Devices	
	3	Frequency band	27 090 – 27 100 kHz	Harmonised radio spectrum for use by short-range devices (Commission Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices)
Part	4	Channeling (channel distribution)	-	
Normative Part	5	Modulation/Occupied bandwidth	-	
mat	6	Direction/Separation	-	
Nor	7	Transmit power / Power density	100 mW effective radiated power (e.r.p.)	
	8	Channel occupation and access rules	Operating cycle limit: 0.1%	Model control devices (see RO-IR 08-01) may operate without operating cycle restrictions.
	9	Authorization regime	License exemption	
	10	Additional essential requirements (According to Article 3 Paragraph 3 of 2014/53/EU Directive)	-	
	11	Assumptions on spectrum planning	-	
t	12	Planned changes	-	
Informative Part	13	Reference	EN 300 220; Commission Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices; ERC/REC 70-03	
infor	14	Notification number	-	
н	15	Remarks	-	

ROMANIA	Radio Interface Specification	SRD / Non-specific Short-Range Devices	RO-IR 01-08	Edition 3/2020
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	Nr	Parameter	Description	Comments
	1	Radiocommunication Service	Mobile	
	2	Application	Short-Range Devices / Non-specific Short-Range Devices	
	3	Frequency band	27 140 – 27 150 kHz	Harmonised radio spectrum for use by short-range devices (Commission Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices)
art	4	Channeling (channel distribution)	-	
ve P	5	Modulation/Occupied bandwidth	-	
Normative Part	6	Direction/Separation	-	
Nor	7	Transmit power / Power density	100 mW effective radiated power (e.r.p.)	
	8	Channel occupation and access rules	Operating cycle limit: 0.1%	Model control devices (see RO-IR 08-01) may operate without operating cycle restrictions.
	9	Authorization regime	License exemption	
	10	Additional essential requirements (According to Article 3 Paragraph 3 of 2014/53/EU Directive)	-	
	11	Assumptions on spectrum planning	-	
t.	12	Planned changes	-	
Informative Part	13	Reference	EN 300 220-2; Commission Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices ; ERC/REC 70-03	
nfor	14	Notification number	-	
Ē	15	Remarks	-	

ROMANIA	Radio Interface Specification	SRD / Non-specific Short-Range Devices	RO-IR 01-09	Edition 3/2020
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	Nr	Parameter	Description	Comments
	1	Radiocommunication Service	Mobile	
	2	Application	Short-Range Devices / Non-specific Short-Range Devices	
	3	Frequency band	27 190 – 27 200 kHz	Harmonised radio spectrum for use by short-range devices (Commission Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices)
t	4	Channeling (channel distribution)	-	
e Pa	5	Modulation/Occupied bandwidth	-	
Normative Part	6	Direction/Separation	-	
Norr	7	Transmit power / Power density	100 mW effective radiated power (e.r.p.)	
	8	Channel occupation and access rules	Operating cycle limit: 0.1%	Model control devices (see RO-IR 08-01) may operate without operating cycle restrictions.
	9	Authorization regime	License exemption	
	10	Additional essential requirements (According to Article 3 Paragraph 3 of 2014/53/EU Directive)	-	
	11	Assumptions on spectrum planning	-	
Informative Part	12	Planned changes	-	
	13	Reference	EN 300 220-2; Commission Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices; ERC/REC 70-03	
nfor	14	Notification number	-	
	15	Remarks	-	

	Nr	Parameter	Description	Comments
	1	Radiocommunication Service	Mobile	
	2	Application	Short-Range Devices / Non-specific Short-Range Devices	
	3	Frequency band	40.66 – 40.70 MHz	Harmonised radio spectrum for use by short-range devices (Commission Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices )
	4	Channeling (channel distribution)	-	
Part	5	Modulation/Occupied bandwidth	-	
Normative Part	6	Direction/Separation	-	
Nor	7	Transmit power / Power density	10 mW effective radiated power (e.r.p.)	
	8	Channel occupation and access rules	-	
	9	Authorization regime	License exemption	
	10	Additional essential requirements (According to Article 3 Paragraph 3 of 2014/53/EU Directive)	-	
	11	Assumptions on spectrum planning	-	
ч	12	Planned changes	-	
Informative Part	13	Reference	EN 300 220-2; Commission Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices; ERC/REC 70-03	
nfor	14	Notification number	-	
Ħ	15	Remarks	-	

ROMANIA         Radio Interface Specification         SRD / Non-specific Short-Range Devices         RO-IR 01-11         Edition
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Nr	Parameter	Description	Comments
1	Radiocommunication Service	Mobile	
2	Application	Short-Range Devices / Non-specific Short-Range Devices	
3	Frequency band	138.20 – 138.45 MHz	
4	Channeling (channel distribution)	-	
5	Modulation/Occupied bandwidth	-	
6	Direction/Separation	-	
7	Transmit power / Power density	10 mW e.r.p.	
8	Channel occupation and access rules	Duty cycle limit: 1%	Using a duty cycle, a mitigation technique for harmful interference of LBT type (Listen Before Talk) or another equivalent mitigation technique, it shall not be user-dependent/adaptable and shall be guaranteed by appropriate technical means. For LBT devices without AFA (Adaptive Frequency Agility) or equivalent techniques, a duty cycle limit shall be applied. For any type of frequency agility device, the duty cycle limit applies to total transmission, unless LBT or an equivalent technique is used.
9	Authorization regime	License exemption	
10	Additional essential requirements (According to Article 3 Paragraph 3 of 2014/53/EU Directive)	-	
11	Assumptions on spectrum planning	-	
12	Planned changes	-	
13	Reference	EN 300 220-2; ERC/REC 70-03	
14	Notification number	2014/597/RO	
15	Remarks	-	
	1 2 3 4 5 6 7 8 8 9 10 11 12 13 14 15	1Radiocommunication Service2Application3Frequency band4Channeling (channel distribution)5Modulation/Occupied bandwidth6Direction/Separation7Transmit power / Power density8Channel occupation and access rules9Authorization regime10Additional essential requirements (According to Article 3 Paragraph 3 of 2014/53/EU Directive)11Assumptions on spectrum planning12Planned changes13Reference14Notification number	1Radiocommunication ServiceMobile2ApplicationShort-Range Devices / Non-specific Short-Range Devices3Frequency band138.20 – 138.45 MHz4Channeling (channel distribution)-5Modulation/Occupied bandwidth-6Direction/Separation-7Transmit power / Power density10 mW e.r.p.8Channel occupation and access rulesDuty cycle limit: 1%9Authorization regimeLicense exemption10Additional essential requirements (According to Article 3 Paragraph 3 of 2014/53/EU Directive)-11Assumptions on spectrum planning-12Planned changes-13ReferenceEN 300 220-2; ERC/REC 70-0314Notification number2014/597/RO15Remarks-

ROMANIA	Radio Interface Specification	SRD / Non-specific Short-Range Devices	RO-IR 01-12	Edition 3/2020
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	Nr	Parameter	Description	Comments
	1	Radiocommunication Service	Mobile	
Part	2	Application	Short-Range Devices / Non-specific Short-Range Devices	
	3	Frequency band	169.4 – 169.475 MHz	Harmonised radio spectrum for use by short-range devices (Commission Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices)
	4	Channeling (channel distribution)	Max. 50 kHz	
	5	Modulation/Occupied bandwidth	-	
tive	6	Direction/Separation	-	
Normative Part	7	Transmit power / Power density	500 mW effective radiated power (e.r.p.)	
No	8	Channel occupation and access rules	Operating cycle limit: 1% For measuring devices (see RO-IR 02-01), operating cycle limit is 10%.	
	9	Authorization regime	License exemption	
	10	Additional essential requirements (According to Article 3 Paragraph 3 of 2014/53/EU Directive)	-	
	11	Assumptions on spectrum planning	-	
	12	Planned changes	-	
Informative Part	13	Reference	EN 300 220-2; Commission Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices; ECC/DEC/(05)02; ERC/REC 70-03	
nfor	14	Notification number	-	
Ē	15	Remarks	-	

ROMANIA	Radio Interface Specification	SRD / Non-specific Short-Range Devices	RO-IR 01-13	Edition 3/2020
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	Nr	Parameter	Description	Comments
	1	Radiocommunication Service	Mobile	
Normative Part	2	Application	Short-Range Devices / Non-specific Short-Range Devices	
	3	Frequency band	169.4 – 169.4875 MHz	Harmonised radio spectrum for use by short-range devices (Commission Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short- range devices)
	4	Channeling (channel distribution)	-	
	5	Modulation/Occupied bandwidth	-	
	6	Direction/Separation	-	
	7	Transmit power / Power density	10 mW effective radiated power (e.r.p.)	
	8	Channel occupation and access rules	Operating cycle limit: 0.1%	
	9	Authorization regime	License exemption	
	10	Additional essential requirements (According to Article 3 Paragraph 3 of 2014/53/EU Directive)	-	
	11	Assumptions on spectrum planning	-	
Ļ	12	Planned changes	-	
Informative Part	13	Reference	EN 300 220-2; Commission Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices; ECC/DEC/(05)02; ERC/REC 70-03	
	14	Notification number	-	
Ē	15	Remarks	-	

ROMANIA	Radio Interface Specification	SRD / Non-specific Short-Range Devices	RO-IR 01-14	Edition 3/2020
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	Nr	Parameter	Description	Comments
	1	Radiocommunication Service	Mobile	
Normative Part	2	Application	Short-Range Devices / Non-specific Short-Range Devices	
	3	Frequency band	169.4875 – 169.5875 MHz	Harmonised radio spectrum for use by short-range devices (Commission Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices)
	4	Channeling (channel distribution)	-	
	5	Modulation/Occupied bandwidth	-	
	6	Direction/Separation	-	
rma	7	Transmit power / Power density	10 mW effective radiated power (e.r.p.)	
Ñ	8	Channel occupation and access rules	Operating cycle limit: 0.001%	Between 00.00 and 6.00 AM local time, a 0.1% operating cycle limit may be used.
	9	Authorization regime	License exemption	
	10	Additional essential requirements (According to Article 3 Paragraph 3 of 2014/53/EU Directive)	-	
	11	Assumptions on spectrum planning	-	
t t	12	Planned changes	-	
Informative Part	13	Reference	EN 300 220-2; Commision Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices; ECC/DEC/(05)02; ERC/REC 70-03	
nfor	14	Notification number	-	
н	15	Remarks	-	

ROMANIA	Radio Interface Specification	SRD / Non-specific Short-Range Devices	RO-IR 01-15	Edition 3/2020
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	Nr	Parameter	Description	Comments
Normative Part	1	Radiocommunication Service	Mobile	
	2	Application	Short-Range Devices / Non-specific Short-Range Devices	
	3	Frequency band	169.5875 – 169.8125 MHz	Harmonised radio spectrum for use by short-range devices (Commision Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices)
	4	Channeling (channel distribution)	-	
	5	Modulation/Occupied bandwidth	-	
	6	Direction/Separation	-	
lorm	7	Transmit power / Power density	10 mW effective radiated power (e.r.p.)	
Z	8	Channel occupation and access rules	Operating cycle limit: 0.1%	
	9	Authorization regime	License exemption	
	10	Additional essential requirements (According to Article 3 Paragraph 3 of 2014/53/EU Directive)	-	
	11	Assumptions on spectrum planning	-	
LL LL	12	Planned changes	-	
Informative Part	13	Reference	EN 300 220-2; Commision Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices; ECC/DEC/(05)02; ERC/REC 70-03	
nfor	14	Notification number	-	
Ĥ	15	Remarks	-	

ROMANIA	Radio Interface Specification	SRD / Non-specific Short-Range Devices	RO-IR 01-16a	Edition 3/2020
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	Nr	Parameter	Description	Comments
Ŧ	1	Radiocommunication Service	Mobile	
	2	Application	Short-Range Devices / Non-specific Short-Range Devices	
	3	Frequency band	433.05 – 434.79 MHz	Harmonised radio spectrum for use by short-range devices (Commision Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices)
	4	Channeling (channel distribution)	-	
	5	Modulation/Occupied bandwidth	-	
e Part	6	Direction/Separation	-	
Informative Part Normative	7	Transmit power / Power density	1 mW effective radiated power (e.r.p.) and -13 dBm/10 kHz power density for modulation with a bandwidth greater than 250 kHz	
	8	Channel occupation and access rules		Voice applications are allowed if advanced mitigation techniques are used. Other audio and video applications are excluded.
	9	Authorization regime	License exemption	
	10	Additional essential requirements (According to Article 3 Paragraph 3 of 2014/53/EU Directive)	-	
	11	Assumptions on spectrum planning	-	
	12	Planned changes	-	
	13	Reference	EN 300 220-2; Commision Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices; ERC/REC 70-03	
nfor	14	Notification number	-	
Ĥ	15	Remarks	-	

ROMANIA	Radio Interface Specification	SRD / Non-specific Short-Range Devices	RO-IR 01-16b	Edition 3/2020
ROMANIA	Radio Interface Specification	SKD / Non-specific Short-Range Devices	RO-1R 01-16D	Edition 3/2020

	Nr	Parameter	Description	Comments
	1	Radiocommunication Service	Mobile	
	2	Application	Short-Range Devices / Non-specific Short-Range Devices	
	3	Frequency band	433.05 – 434.79 MHz	Harmonised radio spectrum for use by short-range devices (Commision Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices)
	4	Channeling (channel distribution)	-	
ť	5	Modulation/Occupied bandwidth	-	
Normative Part	6	Direction/Separation	-	
Norma	7	Transmit power / Power density	10 mW effective radiated power (e.r.p.)	
	8	Channel occupation and access rules	Duty cycle limit: 10%	
	9	Authorization regime	License exemption	
	10	Additional essential requirements (According to Article 3 Paragraph 3 of 2014/53/EU Directive)	-	
	11	Assumptions on spectrum planning	-	
Informative Part	12	Planned changes	-	
	13	Reference	EN 300 220-2; Commision Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices; ERC/REC 70-03	
nfor	14	Notification number	-	
Ē	15	Remarks	-	

ROMANIA         Radio Interface Specification         SRD / Non-specific Short-Range Devices         RO-IR 01-17         Edition 3	
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	Nr	Parameter	Description	Comments
	1	Radiocommunication Service	Mobile	
	2	Application	Short-Range Devices / Non-specific Short-Range Devices	
	3	Frequency band	434.04 – 434.79 MHz	Harmonised radio spectrum for use by short-range devices (Commision Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices)
	4	Channeling (channel distribution)	-	
Part	5	Modulation/Occupied bandwidth	-	
tive	6	Direction/Separation	-	
Normative Part	7	Transmit power / Power density	10 mW effective radiated power (e.r.p.)	
	8	Channel occupation and access rules	Operating cycle limit:100% subject to a channel spacing of up to 25 kHz.	Voice applications are allowed if advanced mitigation techniques are used. Other audio and video applications are excluded.
	9	Authorization regime	License exemption	
	10	Additional essential requirements (According to Article 3 Paragraph 3 of 2014/53/EU Directive)	-	
	11	Assumptions on spectrum planning	-	
	12	Planned changes	-	
Informative Part	13	Reference	EN 300 220-2; Commision Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices; ERC/REC 70-03	
nfor	14	Notification number	-	
н	15	Remarks	-	

ROMANIA	Radio Interface Specification	SRD / Non-specific Short-Range Devices	RO-IR 01-18	Edition 3/2020
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	Nr	Parameter	Description	Comments
	1	Radiocommunication Service	Mobile	
			Short-Range Devices / Non-specific Short-Range Devices	
	2	Application	Short-Kange Devices / Non-specific Short-Kange Devices	
	3	Frequency band	862 – 863 MHz	Harmonised radio spectrum for use by short-range devices (Commission Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices)
	4	Channeling (channel distribution)	-	
Part	5	Modulation/Occupied bandwidth	Bandwidth $\leq$ 350 kHz	
Ð	6	Direction/Separation	-	
Normativ	7	Transmit power / Power density	25 mW effective radiated power (e.r.p.)	
	8	Channel occupation and access rules	Operating cycle limit: 0.1%.	
	9	Authorization regime	License exemption	
	10	Additional essential requirements (According to Article 3 Paragraph 3 of 2014/53/EU Directive)	-	
	11	Assumptions on spectrum planning	-	
ы	12	Planned changes	-	
Informative Part	13	Reference	EN 300 220; Commission Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices; ERC/REC 70-03	
nfor	14	Notification number	-	
Ā	15	Remarks	-	

ROMA		Radio Interface Specification	SRD / Non-specific Short-Range Devices	RO-IR 01-19	Edition 3/2020
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mmunication Service ion cy band	Mobile Short-Range Devices / Non-specific Short-Range Devices 863 – 865 MHz	Harmonised radio spectrum for use by short-range devices (Commission Implementing Decision 2019/1345 amending
cy band	863 – 865 MHz	
		Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices )
ing (channel distribution)	-	
ion/Occupied bandwidth	-	
n/Separation	-	
t power / Power density	25 mW effective radiated power (e.r.p.)	
occupation and access rules	Techniques to access radio spectrum and mitigate interference, ensuring an appropriate performance level to meet the essential requirements provided in Directive 2014/53/EU shall apply. If the relevant techniques are described in the harmonized standards (or parts thereof) the references of which have been published in the Official Journal of the European Union under Directive 2014/53/EU, a performance at least equivalent to the performance of these techniques shall be ensured. An operating cycle limit of 0.1% may also be used.	
zation regime	License exemption	
al essential requirements ing to Article 3 Paragraph 3 of 3/EU Directive)	-	
tions on spectrum planning	-	
changes	-	
ce	EN 300 220-2; Commission Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices; ERC/REC 70-03	
tion number	-	
5	-	
	/Separation power / Power density occupation and access rules ation regime al essential requirements ng to Article 3 Paragraph 3 of /EU Directive) ions on spectrum planning changes e ion number	//Separation       -         power / Power density       25 mW effective radiated power (e.r.p.)         occupation and access rules       Techniques to access radio spectrum and mitigate interference, ensuring an appropriate performance level to meet the essential requirements provided in Directive 2014/53/EU shall apply. If the relevant techniques are described in the harmonized standards (or parts thereof) the references of which have been published in the Official Journal of the European Union under Directive 2014/53/EU, a performance at least equivalent to the performance of these techniques shall be ensured.         ation regime       License exemption         at essential requirements ng to Article 3 Paragraph 3 of /EU Directive)       -         e       EN 300 220-2; Commission Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices; ERC/REC 70-03         ion number       -

ROMANIA	Radio Interface Specification	SRD / Non-specific Short-Range Devices	RO-IR 01-20a	Edition 3/2020
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	Nr	Parameter	Description	Comments
	1	Radiocommunication Service	Mobile	
	2	Application	Short-Range Devices / Non-specific Short-Range Devices	
	3	Frequency band	865 – 868 MHz	Harmonised radio spectrum for use by short-range devices (Commision Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices )
	4	Channeling (channel distribution)	-	
	5	Modulation/Occupied bandwidth	-	
	6	Direction/Separation	-	
art	7	Transmit power / Power density	25 mW effective radiated power (e.r.p.)	
Normative Part	8	Channel occupation and access rules	Techniques to access radio spectrum and mitigate interference, ensuring an appropriate performance level to meet the essential requirements provided in Directive 2014/53/EU shall apply. If the relevant techniques are described in the harmonized standards (or parts thereof) the references of which have been published in the Official Journal of the European Union under Directive 2014/53/EU, a performance at least equivalent to the performance of these techniques shall be ensured. An operating cycle limit of 1% may also be used.	
	9	Authorization regime	License exemption	
	10	Additional essential requirements (According to Article 3 Paragraph 3 of 2014/53/EU Directive)	-	
	11	Assumptions on spectrum planning	-	
t	12	Planned changes	-	
Informative Part	13	Reference	EN 300 220-2; Commision Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices; ERC/REC 70-03	
nfor	14	Notification number	-	
н	15	Remarks	-	

ROMANIA	Radio Interface Specification	SRD / Non-specific Short-Range Devices	RO-IR 01-20b	Edition 3/2020
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Nr	Parameter	Description	Comments
1	Radiocommunication Service	Mobile	
2	Application	Short-Range Devices / Non-specific Short-Range Devices	This set of usage conditions applies only to data networks.
3	Frequency band	865 – 868 MHz	Harmonised radio spectrum for use by short-range devices (Commission Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices)
4	Channeling (channel distribution)	-	
5	Modulation/Occupied bandwidth	Bandwidth: ≤ 200 kHz	
6	Direction/Separation	-	
7	Transmit power / Power density	500 mW effective radiated power (e.r.p.) Transmissions are allowed only in bands 865.6–865.8 MHz, 866.2– 866.4 MHz, 866.8–867.0 MHz and 867.4–867.6 MHz.	Adaptive power control (APC) is required. Alternatively, another mitigation technique having at least an equivalent level of spectrum compatibility.
8	Channel occupation and access rules	Techniques to access radio spectrum and mitigate interference, ensuring an appropriate performance level to meet the essential requirements provided in Directive 2014/53/EU shall apply. If the relevant techniques are described in the harmonized standards (or parts thereof) the references of which have been published in the Official Journal of the European Union under Directive 2014/53/EU, a performance at least equivalent to the performance of these techniques shall be ensured. Operating cycle limit: $\leq$ 10% for network access points Operating cycle limit: $\leq$ 2.5% in the other cases	
9	Authorization regime	License exemption	
10	Additional essential requirements (According to Article 3 Paragraph 3 of 2014/53/EU Directive)	-	
11	Assumptions on spectrum planning	-	
12	Planned changes	-	
13	Reference	EN 300 220-2; Commission Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices; ERC/REC 70-03	
14	Notification number	-	
15	Remarks	-	
	1 2 3 4 5 6 7 7 8 8 9 10 11 12 13 13	1       Radiocommunication Service         2       Application         3       Frequency band         4       Channeling (channel distribution)         5       Modulation/Occupied bandwidth         6       Direction/Separation         7       Transmit power / Power density         8       Channel occupation and access rules         9       Authorization regime         10       Additional essential requirements (According to Article 3 Paragraph 3 of 2014/53/EU Directive)         11       Assumptions on spectrum planning         12       Planned changes         13       Reference         14       Notification number	1       Radiocommunication Service       Mobile         2       Application       Short-Range Devices / Non-specific Short-Range Devices         3       Frequency band       865 - 868 MHz         4       Channeling (channel distribution)       -         5       Modulation/Occupied bandwidth       Bandwidth: ≤ 200 kHz         6       Direction/Separation       -         7       Transmit power / Power density       500 mW effective radiated power (e.r.p.) Transmissions are allowed only in bands 865.6-865.8 MHz, 866.2- 866.4 MHz, 866.8-867.0 MHz and 867.4-867.6 MHz.         8       Channel occupation and access rules       Techniques to access radio spectrum and mitigate interference, ensuring an appropriate performance level to meet the essential requirements provided in Directive 2014/53/EU and apply. If the elevant techniques are described in the harmonized standards (or parts thereof) the references of which have been published in the Operating cycle limit: ≤ 10% for network access points Operating cycle limit: ≤ 2.5% in the other cases         9       Authorization regime       License exemption         10       Additional essential requirements According to Article 3 Paragraph 3 of 2014/53/EU Directive 2014/53/EU         11       Assumptions on spectrum planning       -         12       Planned changes       -         13       Reference       EN 300 220-2; Commission Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the

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Nr	Parameter	Description	Comments
1	Radiocommunication Service	Mobile	
2	Application	Short-Range Devices / Non-specific Short-Range Devices	
3	Frequency band	868 – 868.6 MHz	Harmonised radio spectrum for use by short-range devices (Commission Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices)
4	Channeling (channel distribution)	-	
5	Modulation/Occupied bandwidth	-	
6	Direction/Separation	-	
7	Transmit power / Power density	25 mW effective radiated power (e.r.p.)	
8	Channel occupation and access rules	Techniques to access radio spectrum and mitigate interference, ensuring an appropriate performance level to meet the essential requirements provided in Directive 2014/53/EU shall apply. If the relevant techniques are described in the harmonized standards (or parts thereof) the references of which have been published in the Official Journal of the European Union under Directive 2014/53/EU, a performance at least equivalent to the performance of these techniques shall be ensured. An operating cycle limit of 1% may also be used.	
9	Authorization regime	License exemption	
10	Additional essential requirements (According to Article 3 Paragraph 3 of 2014/53/EU Directive)	-	
11	Assumptions on spectrum planning	-	
12	Planned changes	-	
13	Reference	EN 300 220-2; Commission Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices; ERC/REC 70-03	
14	Notification number	-	
15	Remarks	-	
	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	1Radiocommunication Service2Application3Frequency band4Channeling (channel distribution)5Modulation/Occupied bandwidth6Direction/Separation7Transmit power / Power density8Channel occupation and access rules9Authorization regime10Additional essential requirements (According to Article 3 Paragraph 3 of 2014/53/EU Directive)11Assumptions on spectrum planning12Planned changes13Reference	1       Radiocommunication Service       Mobile         2       Application       Short-Range Devices / Non-specific Short-Range Devices         3       Frequency band       868 - 868.6 MHz         4       Channeling (channel distribution)       -         5       Modulation/Occupied bandwidth       -         6       Direction/Separation       -         7       Transmit power / Power density       25 mW effective radiated power (e.r.p.)         8       Channel occupation and access rules       Techniques to access radio spectrum and mitigate interference, ensuring an appropriate performance level to meet the essential requirements provided in Directive 2014/53/EU shall apply. If the relevant techniques are described in the harmonized standards (or parts thereof) the references of which have been published in the Official Journal of the European Union under Directive 2014/53/EU shall apply. If the relevant techniques shall be ensured.         9       Authorization regime       License exemption         10       Additional essential requirements According to Article 3 Paragraph 3 of 2014/53/EU binective)       -         11       Assumptions on spectrum planning       -         12       Planned changes       -         13       Reference       EN 300 220-2; Commission Implementing Decision 2019/1345 arendis application for the radio spectrum for use by short-range devices; ERC/REC 70-03         14       Notification

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ROMANIA		Radio Interface Specification	SRD / Non-specific Short-Range Devices	RO-IR 01-23	Edition 3/2020
	Nr	Parameter	Description	Comments	
	1	Radiocommunication Service	Mobile		
	2	Application	Short-Range Devices / Non-specific Short-Range Devices		
	3	Frequency band	869.40 – 869.65 MHz	Harmonised radio spectrum for a (Commission Implementing Deci Decision 2006/771/EC in order technical conditions of the radio spe devices)	sion 2019/1345 amending to update the harmonised
	4	Channeling (channel distribution)	-		
	5	Modulation/Occupied bandwidth	-		
ť	6	Direction/Separation	-		
ve Pai	7	Transmit power / Power density	500 mW effective radiated power (e.r.p.)		
Normative Part	8	Channel occupation and access rules	Techniques to access radio spectrum and mitigate interference, ensuring an appropriate performance level to meet the essential requirements provided in Directive 2014/53/EU shall apply. If the relevant techniques are described in the harmonized standards (or parts thereof) the references of which have been published in the Official Journal of the European Union under Directive 2014/53/EU, a performance at least equivalent to the performance of these techniques shall be ensured.		
			An operating cycle limit of 10% may also be used.		
	9	Authorization regime	License exemption		
	10	Additional essential requirements (According to Article 3 Paragraph 3 of 2014/53/EU Directive)	-		
	11	Assumptions on spectrum planning	-		
L.	12	Planned changes	-		
Informative Part	13	Reference	EN 300 220-2; Commission Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices; ERC/REC 70-03		
nfor	14	Notification number	-		
Ā	15	Remarks	-		

ROMANIA	Radio Interface Specification	SRD / Non-specific Short-Range Devices	RO-IR 01-24a	Edition 3/2020	I
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	Nr	Parameter	Description	Comments
	1	Radiocommunication Service	Mobile	
	2	Application	Short-Range Devices / Non-specific Short-Range Devices	
	3	Frequency band	869.7 – 870 MHz	Harmonised radio spectrum for use by short-range devices (Commission Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices)
	4	Channeling (channel distribution)	-	
e Part	5	Modulation/Occupied bandwidth	-	
Normative Part	6	Direction/Separation	-	
Ň	7	Transmit power / Power density	5 mW effective radiated power (e.r.p.)	
	8	Channel occupation and access rules		Voice applications are allowed if advanced mitigation techniques are used. Other audio and video applications are excluded.
	9	Authorization regime	License exemption	
	10	Additional essential requirements (According to Article 3 Paragraph 3 of 2014/53/EU Directive)	-	
	11	Assumptions on spectrum planning	-	
t	12	Planned changes	-	
Informative Part	13	Reference	EN 300 220-2; Commission Impelementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices; ERC/REC 70-03	
nfor	14	Notification number	-	
н	15	Remarks	-	

ROMANIA	Radio Interface Specification	SRD / Non-specific Short-Range Devices	RO-IR 01-24b	Edition 3/2020
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Nr	Parameter	Description	Comments
1	Radiocommunication Service	Mobile	
2	Application	Short-Range Devices / Non-specific Short-Range Devices	
3	Frequency band	869.7 – 870 MHz	Harmonised radio spectrum for use by short-range devices (Commission Impelementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices)
4	Channeling (channel distribution)	-	
5	Modulation/Occupied bandwidth	-	
6	Direction/Separation	-	
7	Transmit power / Power density	25 mW effective radiated power (e.r.p.)	
8	Channel occupation and access rules	Techniques to access radio spectrum and mitigate interference, ensuring an appropriate performance level to meet the essential requirements provided in Directive 2014/53/EU shall apply. If the relevant techniques are described in the harmonized standards (or parts thereof) the references of which have been published in the Official Journal of the European Union under Directive 2014/53/EU, a performance at least equivalent to the performance of these techniques shall be ensured. An operating cycle limit of 1% may also be used.	
9	Authorization regime	License exemption	
10	Additional essential requirements (According to Article 3 Paragraph 3 of 2014/53/EU Directive)	-	
11	Assumptions on spectrum planning	-	
12	Planned changes	-	
13	Reference	EN 300 220-2; Commission Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices; ERC/REC 70-03	
14	Notification number	-	
15	Remarks	-	
	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	1Radiocommunication Service2Application3Frequency band4Channeling (channel distribution)5Modulation/Occupied bandwidth6Direction/Separation7Transmit power / Power density8Channel occupation and access rules9Authorization regime10Additional essential requirements (According to Article 3 Paragraph 3 of 2014/53/EU Directive)11Assumptions on spectrum planning12Planned changes13Reference	1       Radiocommunication Service       Mobile         2       Application       Short-Range Devices / Non-specific Short-Range Devices         3       Frequency band       869.7 – 870 MHz         4       Channeling (channel distribution)       -         5       Modulation/Occupied bandwidth       -         6       Direction/Separation       -         7       Transmit power / Power density       25 mW effective radiated power (e.r.p.)         8       Channel occupation and access rules       Techniques to access radio spectrum and mitigate interference, ensuring an appropriate performance level to meet the essential requirements provided in Directive 2014/53/EU shall apply. If the relevant techniques are described in the harmonized standards (or parts thereof) the references of which have been published in the Official Journal of the European Union under Directive 2014/53/EU aperformance of these techniques shall be ensured.         9       Authorization regime       License exemption         10       Additional essential requirements (According to Article 3 Paragraph 3 of 2014/53/EU Directive)       -         11       Assumptions on spectrum planning       -         12       Planned changes       -         13       Reference       EN 300 220-2; Commission Implementing Decision 2019/1345 armeding Decision 2006/771/LC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices; ERC/REC 70-03

ROMANIA	Radio Interface Specification	SRD / Non-specific Short-Range Devices	RO-IR 01-25	Edition 3/2020
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	Nr	Parameter	Description	Comments
	1	Radiocommunication Service	Mobile	
	2	Application	Short-Range Devices / Non-specific Short-Range Devices	This set of usage conditions applies to data networks, exclusively. All devices in the data network are under the control of network access points.
	3	Frequency band	874 – 874.4 MHz (minimal central harmonized band)	Harmonised radio spectrum for use by short-range devices (Commission Implementing Decision (EU) 2018/1538 of 11 October 2018 on the harmonisation of radio spectrum for use by short-range devices within the 874-876 and 915-921 MHz frequency bands).
	4	Channeling (channel distribution)	-	
	5	Modulation/Occupied bandwidth	Bandwidth: ≤ 200 kHz	
	6	Direction/Separation	-	
Part	7	Transmit power / Power density	500 mW effective radiated power (e.r.p.)	Adaptive power control (APC) is required; alternatively, other mitigation techniques that achieve at least an equivalent level of spectrum compatibility are possible.
Normative Part	8	Channel occupation and access rules	Techniques to access radio spectrum and mitigate interference, ensuring an appropriate performance level to meet the essential requirements provided in Directive 2014/53/EU shall apply. If the relevant techniques are described in the harmonized standards or parts thereof the references of which have been published in the Official Journal of the European Union under Directive 2014/53/EU, a performance at least equivalent to the performance of these techniques shall be ensured. Operating cycle limit: $\leq$ 10 % for network access points. Operating cycle limit: 2.5 % in the other cases.	
	9	Authorization regime	License exemption	
	10	Additional essential requirements (According to Article 3 Paragraph 3 of 2014/53/EU Directive)	-	
	11	Assumptions on spectrum planning	-	
	12	Planned changes	-	
Informative Part	13	Reference	EN 300 220; EN 303 204; Commission Implementing Decision (EU) 2018/1538 of 11 October 2018 on the harmonisation of radio spectrum for use by short-range devices within the 874-876 and 915-921 MHz frequency bands	
[nfo	14	Notification number	-	
-	15	Remarks	-	

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	Nr	Parameter	Description	Comments
	1	Radiocommunication Service	Mobile	
	2	Application	Short-Range Devices / Non-specific Short-Range Devices	This set of usage conditions applies to data networks, exclusively. All devices in the data network are under the control of network access points.
	3	Frequency band	917.3 – 918.9 MHz	Harmonised radio spectrum for use by short-range devices (Commission Implementing Decision (EU) 2018/1538 of 11 October 2018 on the harmonisation of radio spectrum for use by short-range devices within the 874-876 and 915-921 MHz frequency bands).
	4	Channeling (channel distribution)	-	
	5	Modulation/Occupied bandwidth	Bandwidth: ≤ 200 kHz	
	6	Direction/Separation		
e Part	7	Transmit power / Power density	500 mW effective radiated power (e.r.p.) Transmissions are allowed only in bands 917.3- 917.7 MHz and 918.5- 918.9 MHz.	Adaptive power control (APC) is required; alternatively, other mitigation techniques that achieve at least an equivalent level of spectrum compatibility are possible.
Normative Part	8	Channel occupation and access rules	Techniques to access radio spectrum and mitigate interference, ensuring an appropriate performance level to meet the essential requirements provided in Directive 2014/53/EU shall apply. If the relevant techniques are described in the harmonized standards or parts thereof the references of which have been published in the Official Journal of the European Union under Directive 2014/53/EU, a performance at least equivalent to the performance of these techniques shall be ensured. Operating cycle limit: $\leq$ 10 % for network access points. Operating cycle limit: $\leq$ 2.5 % in the other cases.	
	9	Authorization regime	License exemption	
	10	Additional essential requirements (According to Article 3 Paragraph 3 of 2014/53/EU Directive)	-	
	11	Assumptions on spectrum planning	-	
4	12	Planned changes	-	
Informative Part	13	Reference	EN 300 220; EN 303 659; Commission Implementing Decision (EU) 2018/1538 of 11 October 2018 on the harmonisation of radio spectrum for use by short-range devices within the 874-876 and 915-921 MHz frequency bands; ERC/REC 70-03	
lforn	14	Notification number	-	
1	15	Remarks	-	

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	Nr	Parameter	Description	Comments
	1	Radiocommunication Service	Mobile	
	2	Application	Short-Range Devices / Non-specific Short-Range Devices	This set of usage conditions applies exclusively to ShortsRange Devices in the data networks. All devices in the data network are under the control of network access points.
	3	Frequency band	917.4 – 919.4 MHz (minimal central harmonized band)	Harmonised radio spectrum for use by short-range devices (Commission Implementing Decision (EU) 2018/1538 of 11 October 2018 on the harmonisation of radio spectrum for use by short-range devices within the 874-876 and 915-921 MHz frequency bands).
	4	Channeling (channel distribution)	-	
	5	Modulation/Occupied bandwidth	Bandwidth: ≤ 600 kHz	
Part	6	Direction/Separation	-	
ive	7	Transmit power / Power density	25 mW effective radiated power (e.r.p.)	
Normative Part	8	Channel occupation and access rules	Techniques to access radio spectrum and mitigate interference, ensuring an appropriate performance level to meet the essential requirements provided in Directive 2014/53/EU shall apply. If the relevant techniques are described in the harmonized standards or parts thereof the references of which have been published in the Official Journal of the European Union under Directive 2014/53/EU, a performance at least equivalent to the performance of these techniques shall be ensured. Operating cycle limit: $\leq 1 \%$	
	9	Authorization regime	License exemption	
	10	Additional essential requirements (According to Article 3 Paragraph 3 of 2014/53/EU Directive)	-	
	11	Assumptions on spectrum planning	-	
Ļ	12	Planned changes	-	
Informative Part	13	Reference	EN 300 220; EN 303 659; Commission Implementing Decision (EU) 2018/1538 of 11 October 2018 on the harmonisation of radio spectrum for use by short-range devices within the 874-876 and 915-921 MHz frequency bands	
nfor	14	Notification number	-	
н	15	Remarks	-	

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	Nr	Parameter	Description	Comments
	1	Radiocommunication Service	Mobile	
	2	Application	Short-Range Devices / Non-specific Short-Range Devices	
	3	Frequency band	2 400 – 2 483.5 MHz	Harmonised radio spectrum for use by short-range devices (Commission Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices)
4	4	Channeling (channel distribution)	-	
ve Par	5	Modulation/Occupied bandwidth	-	
Normative Part	6	Direction/Separation	-	
	7	Transmit power / Power density	10 mW equivalent isotropic radiated power (e.i.r.p.)	
	8	Channel occupation and access rules	-	
	9	Authorization regime	License exemption	
	10	Additional essential requirements (According to Article 3 Paragraph 3 of 2014/53/EU Directive)	-	
	11	Assumptions on spectrum planning	-	
	12	Planned changes	-	
Informative Part	13	Reference	EN 300 440; Commission Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices; ERC/REC 70-03	
infor	14	Notification number	-	
н	15	Remarks	-	

ROMANIA	Radio Interface Specification	SRD / Non-specific Short-Range Devices	RO-IR 01-29	Edition 3/2020
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	Nr	Parameter	Description	Comments
	1	Radiocommunication Service	Mobile	
	2	Application	Short-Range Devices / Non-specific Short-Range Devices	
	3	Frequency band	5 725 – 5 875 MHz	Harmonised radio spectrum for use by short-range devices (Commission Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices)
	4	Channeling (channel distribution)	-	
/e Part	5	Modulation/Occupied bandwidth	-	
Normative Part	6	Direction/Separation	-	
Ż	7	Transmit power / Power density	25 mW equivalent isotropic radiated power (e.i.r.p.)	
	8	Channel occupation and access rules	-	
	9	Authorization regime	License exemption	
	10	Additional essential requirements (According to Article 3 Paragraph 3 of 2014/53/EU Directive)	-	
	11	Assumptions on spectrum planning	-	
	12	Planned changes	-	
Informative Part	13	Reference	EN 300 440; Commission Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices; ERC/REC 70-03	
nfor	14	Notification number	-	
Ħ	15	Remarks	-	

ROMAN	AIA	Radio Interface Specification	SRD / Non-specific Short-Range Devices	RO-IR 01-30	Edition 3/2020
	Nr	Parameter	Description	Comments	
	1	Radiocommunication Service	Mobile		
	2	Application	Short-Range Devices / Non-specific Short-Range Devices		
	3	Frequency band	24 – 24.15 GHz		
	4	Channeling (channel distribution)	-		
ų	5	Modulation/Occupied bandwidth	-		
ive Part	6	Direction/Separation	-		
Normative	7	Transmit power / Power density	100 mW e.i.r.p.		
Z	8	Channel occupation and access rules	-		
	9	Authorization regime	License exemption		
	10	Additional essential requirements (According to Article 3 Paragraph 3 of 2014/53/EU Directive)	-		
	11	Assumptions on spectrum planning	-		
e/	12	Planned changes			
Informative Part	13	Reference	EN 300 440; ERC/REC 70-03		
lforn Pa	14	Notification number	2014/597/RO		
L.	15	Remarks	-		

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	Nr	Parameter	Description	Comments
	1	Radiocommunication Service	Mobile	
	2	Application	Short-Range Devices / Non-specific Short-Range Devices	
	3	Frequency band	24.15 – 24.25 GHz	Harmonised radio spectrum for use by short-range devices (Commission Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices)
	4	Channeling (channel distribution)	-	
e Part	5	Modulation/Occupied bandwidth	-	
Normative Part	6	Direction/Separation	-	
Noi	7	Transmit power / Power density	100 mW equivalent isotropic radiated power (e.i.r.p.)	
	8	Channel occupation and access rules	-	
	9	Authorization regime	License exemption	
	10	Additional essential requirements (According to Article 3 Paragraph 3 of 2014/53/EU Directive)	-	
	11	Assumptions on spectrum planning	-	
	12	Planned changes	-	
Informative Part	13	Reference	EN 300 440; Commission Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices; ERC/REC 70-03	
nfor	14	Notification number	-	
F	15	Remarks	-	

ROMANIA	<b>Radio Interface Specification</b>	SRD / Non-specific Short-Range Devices	RO-IR 01-32	Edition 3/2020	I
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	Nr	Parameter	Description	Comments
	1	Radiocommunication Service	Mobile	
	2	Application	Short-Range Devices / Non-specific Short-Range Devices	
	3	Frequency band	57 – 64 GHz	Harmonised radio spectrum for use by short-range devices (Commission Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices)
	4	Channeling (channel distribution)	-	
Part	5	Modulation/Occupied bandwidth	-	
ative I	6	Direction/Separation	-	
Normative Part	7	Transmit power / Power density	100 mW equivalent isotropic radiated power (e.i.r.p.) and 10 dBm maximum transmit power	
	8	Channel occupation and access rules	-	
	9	Authorization regime	License exemption	
	10	Additional essential requirements (According to Article 3 Paragraph 3 of 2014/53/EU Directive)	-	
	11	Assumptions on spectrum planning	-	
<u>ب</u>	12	Planned changes	-	
Informative Part	13	Reference	EN 305 550; Commission Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices; ERC/REC 70-03	
nfor	14	Notification number	-	
Ĥ	15	Remarks	-	

ROMANIA	Radio Interface Specification	SRD / Non-specific Short-Range Devices	RO-IR 01-33	Edition 3/2020	l
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	Nr	Parameter	Description	Comments
	1	Radiocommunication Service	Mobile	
	2	Application	Short-Range Devices / Non-specific Short-Range Devices	
	3	Frequency band	61 – 61.5 GHz	Harmonised radio spectrum for use by short-range devices (Commision Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices)
	4	Channeling (channel distribution)	-	
e Part	5	Modulation/Occupied bandwidth	-	
Normative Part	6	Direction/Separation	-	
Nor	7	Transmit power / Power density	100 mW equivalent isotropic radiated power (e.i.r.p.)	
	8	Channel occupation and access rules	-	
	9	Authorization regime	License exemption	
	10	Additional essential requirements (According to Article 3 Paragraph 3 of 2014/53/EU Directive)	-	
	11	Assumptions on spectrum planning	-	
L	12	Planned changes	-	
Informative Part	13	Reference	EN 305 550; Commission Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices; ERC/REC 70-03	
nfor	14	Notification number	-	
Ĥ	15	Remarks	-	

ROMANIA	Radio Interface Specification	SRD / Non-specific Short-Range Devices	RO-IR 01-34a	Edition 3/2020
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	Nr	Parameter	Description	Comments
Part	1	Radiocommunication Service	Mobile	
	2	Application	Short-Range Devices / Non-specific Short-Range Devices	
	3	Frequency band	122 – 122.25 GHz	Harmonised radio spectrum for use by short-range devices (Commission Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices)
	4	Channeling (channel distribution)	-	
	5	Modulation/Occupied bandwidth	-	
Normative Part	6	Direction/Separation	-	
Nor	7	Transmit power / Power density	10 dBm /250 MHz equivalent isotropic radiated power (e.i.r.p.) and $-$ 48 dBm/MHz for a 30° elevation	
	8	Channel occupation and access rules	-	
	9	Authorization regime	License exemption	
	10	Additional essential requirements (According to Article 3 Paragraph 3 of 2014/53/EU Directive)	-	
	11	Assumptions on spectrum planning	-	
Informative Part	12	Planned changes	-	
	13	Reference	EN 305 550; Commision Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices; ERC/REC 70-03	
Infor	14	Notification number	-	
н	15	Remarks	-	

ROMANIA	Radio Interface Specification	SRD / Non-specific Short-Range Devices	RO-IR 01-34b	Edition 3/2020
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	Nr	Parameter	Description	Comments
e Part	1	Radiocommunication Service	Mobile	
	2	Application	Short-Range Devices / Non-specific Short-Range Devices	
	3	Frequency band	122.25 – 123 GHz	Harmonised radio spectrum for use by short-range devices (Commission Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices)
	4	Channeling (channel distribution)	-	
	5	Modulation/Occupied bandwidth	-	
Normative Part	6	Direction/Separation	-	
N	7	Transmit power / Power density	100 mW equivalent isotropic radiated power (e.i.r.p.)	
	8	Channel occupation and access rules	-	
	9	Authorization regime	License exemption	
	10	Additional essential requirements (According to Article 3 Paragraph 3 of 2014/53/EU Directive)	-	
	11	Assumptions on spectrum planning	-	
Informative Part	12	Planned changes	-	
	13	Reference	EN 305 550; Commision Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices; ERC/REC 70-03	
infor	14	Notification number	-	
Ē	15	Remarks	-	

ROMANIA	Radio Interface Specification	SRD / Non-specific Short-Range Devices	RO-IR 01-35	Edition 3/2020
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	Nr	Parameter	Description	Comments
Normative Part	1	Radiocommunication Service	Mobile	
	2	Application	Short-Range Devices / Non-specific Short-Range Devices	
	3	Frequency band	244 – 246 GHz	Harmonised radio spectrum for use by short-range devices (Commission Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices)
	4	Channeling (channel distribution)	-	
	5	Modulation/Occupied bandwidth	-	
	6	Direction/Separation	-	
	7	Transmit power / Power density	100 mW equivalent isotropic radiated power (e.i.r.p.)	
	8	Channel occupation and access rules	-	
	9	Authorization regime	License exemption	
	10	Additional essential requirements (According to Article 3 Paragraph 3 of 2014/53/EU Directive)	-	
	11	Assumptions on spectrum planning	-	
Informative Part	12	Planned changes	-	
	13	Reference	EN 305 550; Commission Implementing Decision 2019/1345 amending Decision 2006/771/EC in order to update the harmonised technical conditions of the radio spectrum for use by short-range devices; ERC/REC 70-03	
nfor	14	Notification number	-	
-	15	Remarks	-	