

RO-IR 07

TECHNICAL REGULATION

for the radio interface

concerning alarm systems

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 license exempted radio spectrum usage by the short-range devices intended for alarm systems including social alarm systems 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 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.org.ro/reglementari-interfete> 2723.

2. Radio Interface Specifications

Alarm Systems (low duty cycle/high reliability devices)

Frequency band	Annex
868.6 – 868.7 MHz	RO-IR 07–01
869.2 – 869.25 MHz	RO-IR 07–02
869.25 – 869.3 MHz	RO-IR 07–03
869.3 – 869.4 MHz	RO-IR 07–04
869.65 – 869.7 MHz	RO-IR 07–05

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 covers low duty cycle/high reliability devices, as well.

For the purpose of this technical regulation, the *low duty cycle/high reliability device* category includes radio devices that rely on low overall spectrum usage and on spectrum access rules which are specific for this low duty cycle, in order to ensure an extremely reliable spectrum access and transmissions in shared bands. Typical applications include *alarm systems* which use radio communications for indicating an alert condition at a distant location and *social alarm systems* which allow persons in distress to have a reliable communication.

An *alarm system* is a device which uses radio communications to indicate an alert to a system or a person, as the primary functionality at a remote location when a problem or a specific situation occurs. Radio alarms include social alarms and alarms for security and safety.

Social alarms devices are reliable radiocommunication systems that allow to initiate a call for assistance to persons in danger within a closed area. Typical uses of social alarms include assisting the elderly or persons with disabilities.

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 and *Tobs* is the observation period. *Ton* is measured in an observation frequency band (*Fobs*). Unless otherwise specified in this technical regulation, *Tobs* represents a one hour uninterrupted interval and *Fobs* is the frequency band indicated 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 service 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: 2014/603/RO.
Edition 2/2018 (06.08.2018)	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; Update of the legal framework according to Point 1 – „Basic considerations“; Formal changes according to TCAM-RSC pattern of November 2017.
Edition 3/2020 (23.12.2020)	Update according to Commission Implementing Decision (EU) 2019/1345 amending Decision 2006/771/EC updating harmonised technical conditions in the area of radio spectrum use for short-range devices: <ul style="list-style-type: none"> • Updating of some definitions and terms. Update of the legal framework according to Point 1 – „Basic considerations“ and reference documents (row 13).

ROMANIA	Radio Interface Specification	SRD / Alarm systems	RO-IR 07-01	Edition 3/2020
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	Nr	Parameter	Description	Comments
Normative Part	1	Radiocommunication Service	Mobile	
	2	Application	Short Range Devices / Alarm systems	<i>This set of usage conditions applies exclusively to alarm systems.</i>
	3	Frequency band	868.6 – 868.7 MHz	<i>Harmonised radio spectrum for use by short-range devices (Commission Implementing Decision (EU) 2019/1345 amending Decision 2006/771/EC updating harmonised technical conditions in the area of radio spectrum use for short-range devices)</i>
	4	Channeling (channel distribution)	25 kHz The entire frequency band may also be used as a single channel for high-speed data transmission	
	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: 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	-	
Informative Part	12	Planned changes	-	
	13	Reference	EN 300 220-3-2; EN 303 406; Commission Implementing Decision (EU) 2019/1345 amending Decision 2006/771/EC updating harmonised technical conditions in the area of radio spectrum use for short-range devices; ERC/REC 70-03	
	14	Notification number	-	
	15	Remarks	-	

F1- RTIR Edition:1; Revision:1

ROMANIA	Radio Interface Specification	SRD / Alarm systems	RO-IR 07-02	Edition 3/2020
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	Nr	Parameter	Description	Comments
Normative Part	1	Radiocommunication Service	Mobile	
	2	Application	Short Range Devices / Alarm systems	<i>This set of usage conditions applies exclusively to social alarm systems.</i>
	3	Frequency band	869.2 – 869.25 MHz	<i>Harmonised radio spectrum for use by short-range devices (Commission Implementing Decision (EU) 2019/1345 amending Decision 2006/771/EC updating harmonised technical conditions in the area of radio spectrum use for short-range devices)</i>
	4	Channeling (channel distribution)	25 kHz	
	5	Modulation/Occupied bandwidth	-	
	6	Direction/Separation	-	
	7	Transmit power / Power density	10 mW 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	-	
Informative Part	12	Planned changes	-	
	13	Reference	EN 300 220-3-1; Commission Implementing Decision (EU) 2019/1345 amending Decision 2006/771/EC updating harmonised technical conditions in the area of radio spectrum use for short-range devices; ERC/REC 70-03	
	14	Notification number	-	
	15	Remarks	-	

F1- RTIR Edition:1; Revision:1

ROMANIA	Radio Interface Specification	SRD / Alarm systems	RO-IR 07-03	Edition 3/2020
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	Nr	Parameter	Description	Comments
Normative Part	1	Radiocommunication Service	Mobile	
	2	Application	Short Range Devices / Alarm systems	<i>This set of usage conditions applies exclusively to alarm systems.</i>
	3	Frequency band	869.25 – 869.3 MHz	<i>Harmonised radio spectrum for use by short-range devices (Commission Implementing Decision (EU) 2019/1345 amending Decision 2006/771/EC updating harmonised technical conditions in the area of radio spectrum use for short-range devices)</i>
	4	Channeling (channel distribution)	25 kHz	
	5	Modulation/Occupied bandwidth	-	
	6	Direction/Separation	-	
	7	Transmit power / Power density	10 mW 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	-	
Informative Part	12	Planned changes	-	
	13	Reference	EN 300 220-3-2; EN 303 406; Commission Implementing Decision (EU) 2019/1345 amending Decision 2006/771/EC updating harmonised technical conditions in the area of radio spectrum use for short-range devices; ERC/REC 70-03	
	14	Notification number	-	
	15	Remarks	-	

F1- RTIR Edition:1; Revision:1

ROMANIA	Radio Interface Specification	SRD / Alarm systems	RO-IR 07-04	Edition 3/2020
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	Nr	Parameter	Description	Comments
Normative Part	1	Radiocommunication Service	Mobile	
	2	Application	Short Range Devices / Alarm systems	<i>This set of usage conditions applies exclusively to alarm systems.</i>
	3	Frequency band	869.3 – 869.4 MHz	<i>Harmonised radio spectrum for use by short-range devices (Commission Implementing Decision (EU) 2019/1345 amending Decision 2006/771/EC updating harmonised technical conditions in the area of radio spectrum use for short-range devices)</i>
	4	Channeling (channel distribution)	25 kHz	
	5	Modulation/Occupied bandwidth	-	
	6	Direction/Separation	-	
	7	Transmit power / Power density	10 mW e.r.p.	
	8	Channel occupation and access rules	Operating cycle limit: 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	-	
Informative Part	12	Planned changes	-	
	13	Reference	EN 300 220-3-2; EN 303 406; Commission Implementing Decision (EU) 2019/1345 amending Decision 2006/771/EC updating harmonised technical conditions in the area of radio spectrum use for short-range devices; ERC/REC 70-03	
	14	Notification number	-	
	15	Remarks	-	

F1- RTIR Edition:1; Revision:1

ROMANIA	Radio Interface Specification	SRD / Alarm systems	RO-IR 07-05	Edition 3/2020
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	Nr	Parameter	Description	Comments
Normative Part	1	Radiocommunication Service	Mobile	
	2	Application	Short Range Devices / Alarm systems	<i>This set of usage conditions applies exclusively to alarm systems.</i>
	3	Frequency band	869.65 – 869.7 MHz	<i>Harmonised radio spectrum for use by short-range devices (Commission Implementing Decision (EU) 2019/1345 amending Decision 2006/771/EC updating harmonised technical conditions in the area of radio spectrum use for short-range devices)</i>
	4	Channeling (channel distribution)	25 kHz	
	5	Modulation/Occupied bandwidth	-	
	6	Direction/Separation	-	
	7	Transmit power / Power density	25 mW e.r.p.	
	8	Channel occupation and access rules	Operating 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 300 220-3-2; EN 303 406; Commission Implementing Decision (EU) 2019/1345 amending Decision 2006/771/EC updating harmonised technical conditions in the area of radio spectrum use for short-range devices; ERC/REC 70-03	
	14	Notification number	-	
	15	Remarks	-	

F1- RTIR Edition:1; Revision:1