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RO-IR 02

TECHNICAL REGULATION

for the radio interface

concerning Tracking, Tracing and Data Acquisition Devices

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.

This technical regulation contains the requirements for the use of licence exempt short range devices intended for tracking, tracing and data acquisition in the specified frequency bands and considers especially compliance with the provisions of Article 3 Paragraph 2 and Articles 6, 7 and 8 of Directive 2014/53/EU.

Nothing in this technical regulation shall preclude the need for equipment placed 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 have been met (OJ L 241, 17.9.2015, p. 1-15).

All Romanian technical regulations for the radio interfaces notified under Directive (EU) 2015/1535 will be published and will be made available on National Authority for Management and Regulation in Communications of Romania (ANCOM) web-site at: http://www.ancom.org.ro/reglementari-interfete_2723.

2. Radio Interface Specifications

Tracking, Tracing and Data Acquisition Devices

Frequency band	Annex
169.4 – 169.475 MHz	RO-IR 02-01
2 483.5 – 2 500 MHz	RO-IR 02–02a; RO-IR 02–02b

For the purpose of this technical regulation, *Short-Range Device (SRD)* means radio transmitters which provide either unidirectional or bidirectional communication and which transmit over a short distance at low power.

For the purpose of this technical regulation, *the metering device category* covers radio devices that are part of bidirectional radio communications systems which allow remote monitoring, measuring and transmission of data in smart grid infrastructures, such as electricity, gas and water.

For the purpose of this technical regulation, *the acquisition of medical data devices* category covers the transmission of non-voice data to and from non-implantable medical devices for the purpose of monitoring, diagnosing and treating patients in medical units and at their homes.

For the purpose of this technical regulation, MBANS (Medical Body Area Network Systems), used for the acquisition of medical data are those systems intended for use in medical units and at patients' homes. These are low power radio systems used for the transmission of non-voice data to and from medical devices for the purpose of monitoring, diagnosing and treating patients, as determined by appropriately qualified medical practitioners and defined exclusively in the context of medical applications.

For the purpose of this technical regulation, the cycle of use is defined as the ratio expressed as a percentage, between $\Sigma(Ton)/(Tobs)$, where Ton is the operating time of a single radio transmitter 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 of this technical regulation.

For the purpose of this technical regulation, *non-interference and non-protected basis* means the interdiction that no harmful interference may be caused to any radio communications service and that no claim may be made for 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.

Edition	Changes
Edition 1/2014	Notification number according to Directive 98/34/EC: 2014/598/RO.
	Update according to 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: RO-IR 02-01 and were added RO-IR 02-02a and RO-IR 02-02b (2 483.5 – 2 500 MHz frequency band);
Edition 2/2018 (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 (January 2018 version) published according to Article 1 Paragraph 3 of Commission Decision 2000/299/EC (http://ec.europa.eu/docsroom/documents/26843): RO-IR 02-01; Formal changes according to TCAM-RSC model of November 2017.

3. Document history:

ROMANIA			SRD / Short Range Devices for Tracking, Tracing and Data Acquisition	RO-IR 02-01	Edition 2/2018
	Nr Parameter		Description	Comments	
	1	Radiocommunication Service	Mobile		
	2	Application	Short Range Devices / Short Range Devices for Tracking, Tracing and Data Acquisition		
			Meter reading		
	3	Frequency band	169.4 – 169.475 MHz	Harmonised radio spectrum for use by short-range devices (Implementing Decision (EU) 2017/1483 amending Decision 2006/771/EC on the harmonization of radio frequencies spectrum for the use of short range devices and repealing Decision 2006/804/EC)	
part	4	Channeling (channel distribution)	Max 50 kHz		
tive	5	Modulation/Occupied bandwidth	-		
Normative	6	Direction/Separation	-		
Ň	7	Transmit power / Power density	500 mW effective radiated power (e.r.p.)		
	8	Channel occupation and access rules	Duty cycle limit: 10%		
	9	Authorisation regime	Licence 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 300 220-4; ECC/DEC/(05)02; Implementing Decision (EU) 2017/1483 amending Decision 2006/771/EC on the harmonization of radio frequencies spectrum for the use of short range devices and repealing Decision 2006/804/EC; ERC/REC 70-03		
nfor	14	Notification number	-		
ä	15	Remarks	-		

F1- RTIR Edition:1; Revision:1

ROMANIA	Radio Interface Specification	SRD / Short Range Devices for Tracking, Tracing and Data Acquisition	RO-IR 02-01a	Edition 2/2018
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	Nr	Parameter	Description	Comments
Normative part	1	Radiocommunication Service	Mobile	
	2	Application	Short Range Devices / Short Range Devices for Tracking, Tracing and Data Acquisition	This set of conditions applies only to MBANS used in closed spaces within medical units
	3	Frequency band	2 483.5 – 2 500 MHz	Harmonised radio spectrum for use by short-range devices (Implementing Decision (EU) 2017/1483 amending Decision 2006/771/EC on the harmonization of radio frequencies spectrum for the use of short range devices and repealing Decision 2006/804/EC)
	4	Channeling (channel distribution)	-	
	5	Modulation/Occupied bandwidth	≤ 3 MHz	
	6	Direction/Separation	-	
	7	Transmit power / Power density	1 mW equivalent isotropic radiated power (e.i.r.p.)	
	8	Channel occupation and access rules	Techniques to access spectrum and mitigate interference that provide at least equivalent performance to the techniques described in the harmonised standards adopted under Directive 2014/53/EU shall be used. In addition, $a \le 10$ % usage cycle applies.	
	9	Authorisation regime	Licence 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 303 203; Implementing Decision (EU) 2017/1483 amending Decision 2006/771/EC on the harmonization of radio frequencies spectrum for the use of short range devices and repealing Decision 2006/804/EC ; ERC/REC 70-03	
nfor	14	Notification number	-	
1	15	Remarks	-	

F1- RTIR Edition:1; Revision:1

ROMANIA		Radio Interface Specification	SRD / Short Range Devices for Tracking, Tracing and Data Acquisition	RO-IR 02-01b	Edition 2/2018
Nr Parameter		Parameter	Description	Comments	
	1	Radiocommunication Service	Mobile		
	2	Application	Short Range Devices / Short Range Devices for Tracking, Tracing and Data Acquisition	This set of conditions applies only to MBANS used in close spaces at patient's home	
	3	Frequency band	2 483.5 – 2 500 MHz	Harmonised radio spectrum for use by short-range devices (Implementing Decision (EU) 2017/1483 amending Decision 2006/771/EC on the harmonization of radio frequencies spectrum for the use of short range devices and repealing Decision 2006/804/EC)	
	4	Channeling (channel distribution)	-		
Normative part	5	Modulation/Occupied bandwidth	≤ 3 MHz		
	6	Direction/Separation	-		
mati	7	Transmit power / Power density	10 mW e.i.r.p.		
Norn	8	Channel occupation and access rules	Techniques to access spectrum and mitigate interference that provide at least equivalent performance to the techniques described in the harmonised standards adopted under Directive 2014/53/EU shall be used. In addition, $a \le 2$ % usage cycle applies.		
	9	Authorisation regime	Licence 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 303 203; Implementing Decision (EU) 2017/1483 amending Decision 2006/771/EC on the harmonization of radio frequencies spectrum for the use of short range devices and repealing Decision 2006/804/EC ; ERC/REC 70-03		
nfor	14	Notification number	-		
Ħ	15	Remarks	-		

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