

RO-IR SRD-03

TECHNICAL REGULATION

for the radio interface

on wideband data transmission devices

(previous coding RO-IR 03 - RO-IR 03-01, RO-IR 03-04a, RO-IR 03-04b, RO-IR 03-04c, RO-IR 03-05 and RO-IR 03-06 specifications)

1. Basic Considerations

Directive 2014/53/EU of the European Parliament and of the Council of 16 April 2014 on the harmonization of the laws of the Member States relating to the making available on the market of radio equipment and repealing Directive 1999/5/EC 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 license-exempt use of radio spectrum by short-range devices intended for wideband data transmission 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.

Nothing in this technical regulation shall preclude 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, p. 1–15).

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

2. Radio Interface Specifications

Wideband data transmission devices

Frequency band	Annex
863 – 868 MHz	RO-IR SRD-03-01
916.4 – 919.4 MHz	RO-IR SRD-03-02
2 400 – 2 483.5 MHz	RO-IR SRD-03-03
57 – 71 GHz	RO-IR SRD-03-04a, RO-IR SRD-03-04b, RO-IR SRD-03-04c

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

For the purpose of this technical regulation, *category of short-range devices* means a group of short-range or networked short-range devices that use spectrum with similar technical spectrum access mechanisms or based on common usage scenarios.

The category of *wideband data transmission devices* covers radio devices that use wideband modulation techniques to access the spectrum. Typical uses include wireless access systems such as radio local area networks (WAS/RLAN) or wideband SRD in data networks.

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

For the purpose of this technical regulation, *mean equivalent isotropically radiated power* (*e.i.r.p.*) means e.i.r.p. during the transmission burst which corresponds to the highest power, if power control is implemented.

For the purpose of this technical regulation, *duty cycle* means the ratio, expressed as a percentage, of $\Sigma(Ton)/(Tobs)$ where *Ton* is the "on" time of a single transmitter device and *Tobs* is the observation period. *Ton* is measured in an observation frequency band (*Fobs*). Unless otherwise specified in this technical annex, *Tobs* is a continuous one hour period and *Fobs* is the applicable frequency band in this technical annex.

For the purpose of this technical regulation, *non-interference and non-protected* means that no harmful interference may be caused to any radio communication service and that no claim may be made for protection of these devices against interference originating from radio communication services.

The use of radio spectrum by short-range devices is permitted on a non-interference and non-protected basis provided that such equipment meets the conditions set out in the Annex.

3. Document History:

Edition	Changes
Edition 1/2014	Notification number according to Directive 98/34/EC: 2014/599/RO.
Edition 2/2018 (06.08.2018)	<p>Update according to Commission Implementing Decision (EU) 2017/1483 amending Decision 2006/771/EC on harmonization of the radio spectrum for use by short-range devices and repealing Decision 2006/804/EC: RO-IR 03-01, RO-IR 03-04, as well as introducing RO-IR 03-05 (863 – 868 MHz frequency band);</p> <p>Update of the legal framework according to Point 1 – „Basic considerations” and reference documents (line 13);</p> <p>Formal changes according to TCAM-RSC model of November 2017.</p>
Edition 3/2020 (23.12.2020)	<p>Update of the legal framework according to Point 1 – „Basic considerations” and definitions to Point 2 - “Specifications for radio interface”;</p> <p>Update according to Commission Implementing Decision (EU) 2019/1345 amending Decision 2006/771/EC updating harmonized technical conditions in the area of radio spectrum use for short-range devices:</p> <ul style="list-style-type: none"> • RO-IR 03-01 ÷ RO-IR 03-03 and RO-IR 03-05; • RO-IR 03-04 has been repealed (57-66 GHz frequency band); • New technical specifications have been introduced: RO-IR 03-04a, RO-IR 03-04b and RO-IR 03-04c (57-71 GHz frequency band); <p>Update according to Commission Implementing Decision (EU) 2018/1538 of 11 October 2018 on the harmonization of radio spectrum for use by short-range devices within the 874-876 and 915-921 MHz:</p> <ul style="list-style-type: none"> • A new technical specification has been introduced: RO-IR 03-06; <p>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).</p>

Edition	Changes
<p>Edition 4/2022 (11.10.2022)</p>	<p>Update according to Commission Implementing Decision (EU) 2022/172 amending Commission Implementing Decision (EU) 2018/1538 on the harmonization of radio spectrum for use by short-range devices within the 874-876 and 915-921 MHz frequency bands.</p> <p>Update according to Commission Implementing Decision (EU) 2022/180 amending Decision 2006/771/EC as regards the update of harmonized technical conditions in the area of radio spectrum use for short-range devices.</p> <ul style="list-style-type: none"> • Update of reference documents (line 13) and definitions point 2 • Renumbering technical specifications following the separation of RO-IR 03 in RO-IR SRD-03 and RO-IR RLAN <p>The history of 863-868 MHz, 917.4-919.4 MHz, 2400-2483.5 MHz and 57-71 GHz frequency band is available in RO-IR 03 technical regulation for the radio interface on wideband data transmission devices, the 3rd edition.</p>
<p>Edition 5/2025 (22.12.2025)</p>	<p>Update according to Commission Implementing Decision (EU) 2025/105 amending Decision 2006/771/EC updating harmonised technical conditions in the area of radio spectrum use for short-range devices and repealing Implementing Decision 2014/641/EU on harmonised technical conditions of radio spectrum use by wireless audio programme making and special events equipment in the Union.</p> <p>Commission Implementing Decision (EU) 2025/650 amending Implementing Decision (EU) 2018/1538 as regards the update of harmonised technical conditions for short-range devices within the 874-876 and 915-921 MHz frequency bands:</p> <ul style="list-style-type: none"> • At RO-IR SRD-03-02, the 917.4-919.4 MHz frequency band has been changed and has become 916.4-919.4 MHz.

ROMANIA	Radio Interface Specification	SRD / Wideband data transmission devices	RO-IR SRD-03-01	Edition 5/2025
---------	-------------------------------	--	-----------------	----------------

	No.	Parameter	Description	Comments
Normative Part	1	Radiocommunication Service	Mobile	
	2	Application	Proximity radio device (short-range) / Wideband data transmission devices	<i>This set of usage conditions is only available for wideband SRDs in data networks.</i>
	3	Frequency band	863 – 868 MHz	<i>Harmonised radio spectrum for use by short-range devices (Commission Implementing Decision (EU) 2025/105 amending Decision 2006/771/EC updating harmonised technical conditions in the area of radio spectrum use for short-range devices and repealing Implementing Decision 2014/641/EU on harmonized technical conditions of radio spectrum use by wireless audio programme making and special events equipment in the Union)</i>
	4	Channeling (channel distribution)	-	
	5	Modulation/Occupied bandwidth	Bandwidth: > 600 kHz and ≤ 1 MHz	
	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 spectrum and mitigate interference that provide an appropriate level of performance to comply with the essential requirements of Directive 2014/53/EU shall be used. If relevant techniques are described in 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, performance at least equivalent to these techniques shall be ensured. Duty cycle: ≤ 10% for network access points; Duty cycle: ≤ 2.8% otherwise.	
	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 304 220; Commission Implementing Decision (EU) 2025/105 amending Decision 2006/771/EC updating harmonised technical conditions in the area of radio spectrum use for short-range devices and repealing Implementing Decision 2014/641/EU on harmonised technical conditions of radio spectrum use by wireless audio programme making and special events equipment in the Union; ERC/REC 70-03	

	14	Notification number	-	
	15	Remarks	-	

F1- RTIR

Edition:1; Revision:1

ROMANIA	Radio Interface Specification	SRD / Wideband data transmission devices	RO-IR SRD-03-02	Edition 5/2025
---------	-------------------------------	--	-----------------	----------------

	No.	Parameter	Description	Comments
Normative Part	1	Radiocommunication Service	Mobile	
	2	Application	Proximity radio device (short-range) / Wideband data transmission devices	<i>This set of usage conditions is only available for wideband SRDs in data networks. All nomadic and mobile devices within the data network shall be controlled by a master network access point.</i>
	3	Frequency band	916.4 – 919.4 MHz	<i>Harmonised radio spectrum for use by short-range devices (Commission Implementing Decision (EU) 2025/650 amending Implementing Decision (EU) 2018/1538 as regards the update of harmonised technical conditions for short-range devices within the 874-876 and 915-921 MHz frequency bands)</i>
	4	Channeling (channel distribution)	-	
	5	Modulation/Occupied bandwidth	Bandwidth: > 600 kHz and ≤ 1 MHz	
	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 spectrum and mitigate interference that provide an appropriate level of performance to comply with the essential requirements of Directive 2014/53/EU shall be used. If relevant techniques are described in 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, performance at least equivalent to these techniques shall be ensured. Duty cycle: ≤ 10 % for network access points. Duty cycle: ≤ 2.8 % otherwise.	
	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 304 220; Commission Implementing Decision (EU) 2025/650 amending Implementing Decision (EU) 2018/1538 as regards the update of harmonised technical conditions for short-range devices within the 874-876 and 915-921 MHz frequency bands; ERC/REC 70-03	
	14	Notification number	-	
	15	Remarks	-	

F1- RTIR

Edition:1; Revision:1

ROMANIA	Radio Interface Specification	SRD / Wideband data transmission devices	RO-IR SRD-03-03	Edition 5/2025
----------------	--------------------------------------	---	------------------------	-----------------------

	No.	Parameter	Description	Comments
Normative Part	1	Radiocommunication Service	Mobile	
	2	Application	Proximity radio device (short-range) / Wideband data transmission devices	
	3	Frequency band	2 400 – 2 483.5 MHz	<i>Harmonised radio spectrum for use by short-range devices (Commission Implementing Decision (EU) 2025/105 amending Decision 2006/771/EC updating harmonised technical conditions in the area of radio spectrum use for short-range devices and repealing Implementing Decision 2014/641/EU on harmonised technical conditions of radio spectrum use by wireless audio programme making and special events equipment in the Union).</i>
	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.) and 100 mW/100 kHz e.i.r.p. density applies when frequency hopping modulation is used; 10 mW/MHz e.i.r.p. density applies when other types of modulation are used.	
	8	Channel occupation and access rules	Techniques to access spectrum and mitigate interference that provide an appropriate level of performance to comply with the essential requirements of Directive 2014/53/EU shall be used. If relevant techniques are described in harmonised standards or parts thereof the references of which have been published in the Official Journal of the European Union under Directive 2014/53/EU, performance at least equivalent to 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	-	
Informative Part	12	Planned changes	-	
	13	Reference	EN 300 328; Commission Implementing Decision (EU) 2025/105 amending Decision 2006/771/EC updating harmonised technical conditions in the area of radio spectrum use for short-range devices and repealing Implementing Decision 2014/641/EU on harmonised technical conditions of radio spectrum use by wireless audio programme making and special events equipment in the Union; ERC/REC 70-03	
	14	Notification number	-	
	15	Remarks	-	

ROMANIA	Radio Interface Specification	SRD / Wideband data transmission devices	RO-IR SRD-03-04a	Edition 5/2025
---------	-------------------------------	--	------------------	----------------

	No.	Parameter	Description	Comments
Normative Part	1	Radiocommunication Service	Mobile	
	2	Application	Proximity radio device (short-range) / Wideband data transmission devices Fixed outdoor installations are excluded.	
	3	Frequency band	57 – 71 GHz	<i>Harmonised radio spectrum for use by short-range devices (Commission Implementing Decision (EU) 2025/105 amending Decision 2006/771/EC updating harmonised technical conditions in the area of radio spectrum use for short-range devices and repealing Implementing Decision 2014/641/EU on harmonised technical conditions of radio spectrum use by wireless audio programme making and special events equipment in the Union).</i>
	4	Channeling (channel distribution)	-	
	5	Modulation/Occupied bandwidth	-	
	6	Direction/Separation	-	
	7	Transmit power / Power density	40 dBm e.i.r.p. and 23 dBm/MHz e.i.r.p. density	
	8	Channel occupation and access rules	Techniques to access spectrum and mitigate interference that provide an appropriate level of performance to comply with the essential requirements of Directive 2014/53/EU shall be used. If relevant techniques are described in 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, performance at least equivalent to 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	-	
Informative Part	12	Planned changes	-	
	13	Reference	EN 302 567 (for the 57-66 MHz) frequency band; EN 303 722; EN 303 753; Commission Implementing Decision (EU) 2025/105 amending Decision 2006/771/EC updating harmonised technical conditions in the area of radio spectrum use for short-range devices and repealing Implementing Decision 2014/641/EU on harmonised technical conditions of radio spectrum use by wireless audio programme making and special events equipment in the Union; ERC/REC 70-03	
	14	Notification number	-	

	15	Remarks	-	
--	-----------	----------------	---	--

F1- RTIR

Edition:1; Revision:1

ROMANIA	Radio Interface Specification	SRD / Wideband data transmission devices	RO-IR SRD-03-04b	Edition 5/2025
---------	-------------------------------	--	------------------	----------------

	No.	Parameter	Description	Comments
Normative Part	1	Radiocommunication Service	Mobile	
	2	Application	Proximity radio device (short-range) / Wideband data transmission devices	
	3	Frequency band	57 – 71 GHz	<i>Harmonised radio spectrum for use by short-range devices (Commission Implementing Decision (EU) 2025/105 amending Decision 2006/771/EC updating harmonised technical conditions in the area of radio spectrum use for short-range devices and repealing Implementing Decision 2014/641/EU on harmonised technical conditions of radio spectrum use by wireless audio programme making and special events equipment in the Union)</i>
	4	Channeling (channel distribution)	-	
	5	Modulation/Occupied bandwidth	-	
	6	Direction/Separation	-	
	7	Transmit power / Power density	40 dBm e.i.r.p., 23 dBm/MHz e.i.r.p. density and maximum transmit power of 27 dBm at the antenna port or ports	
	8	Channel occupation and access rules	Techniques to access spectrum and mitigate interference that provide an appropriate level of performance to comply with the essential requirements of Directive 2014/53/EU shall be used. If relevant techniques are described in 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, performance at least equivalent to 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	-	
Informative Part	12	Planned changes	-	
	13	Reference	EN 302 567 (for the 57-66 MHz frequency band); EN 303 722; EN 303 753; Commission Implementing Decision (EU) 2025/105 amending Decision 2006/771/EC updating harmonised technical conditions in the area of radio spectrum use for short-range devices and repealing Implementing Decision 2014/641/EU on harmonised technical conditions of radio spectrum use by wireless audio programme making and special events equipment in the Union; ERC/REC 70-03	
	14	Notification number	-	

	15	Remarks	-	
--	-----------	----------------	---	--

F1- RTIR

Edition:1; Revision:1

ROMANIA	Radio Interface Specification	SRD / Wideband data transmission devices	RO-IR SRD-03-04c	Edition 5/2025
---------	-------------------------------	--	------------------	----------------

	No.	Parameter	Description	Comments
Normative Part	1	Radiocommunication Service	Mobile	
	2	Application	Proximity radio device (short-range) / Wideband data transmission devices This set of usage conditions is only available for fixed outdoor installations.	
	3	Frequency band	57 – 71 GHz	<i>Harmonised radio spectrum for use by short-range devices (Commission Implementing Decision (EU) 2025/105 amending Decision 2006/771/EC updating harmonised technical conditions in the area of radio spectrum use for short-range devices and repealing Implementing Decision 2014/641/EU on harmonised technical conditions of radio spectrum use by wireless audio programme making and special events equipment in the Union)</i>
	4	Channeling (channel distribution)	-	
	5	Modulation/Occupied bandwidth	-	
	6	Direction/Separation	-	
	7	Transmit power / Power density	55 dBm e.i.r.p., 38 dBm/MHz e.i.r.p. density and a transmit antenna gain ≥ 30 dBi	
	8	Channel occupation and access rules	Techniques to access spectrum and mitigate interference that provide an appropriate level of performance to comply with the essential requirements of Directive 2014/53/EU shall be used. If relevant techniques are described in 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, performance at least equivalent to 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	-	
Informative Part	12	Planned changes	-	
	13	Reference	EN 302 567 (for the 57-66 MHz frequency band); EN 303 722; EN 303 753; Commission Implementing Decision (EU) 2025/105 amending Decision 2006/771/EC updating harmonised technical conditions in the area of radio spectrum use for short-range devices and repealing Implementing Decision 2014/641/EU on harmonised technical conditions of radio spectrum use by wireless audio programme making and special events equipment in the Union; ERC/REC 70-03	
	14	Notification number	-	
	15	Remarks	-	