

RO-IR UWB-04

TECHNICAL REGULATION

for the radio interface

concerning automotive Short Range Radars (SRR)

operating in the 24 GHz range radio spectrum band

Notification number according to Directive 98/34/EC: 2012/214/RO

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 of automotive Short Range Radars (SRR) operating in the 24 GHz range radio spectrum band 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

Automotive Short Range Radars (SRR)

Frequency band	Annex
21.65 – 26.65 GHz	RO-IR UWB-04

For the purpose of this Technical Regulation, *equipment using ultra-wideband (UWB) technology* means equipment incorporating, as an integral part or as an accessory, a technology for short-range radiocommunication, involving the intentional generation and transmission of radio-frequency energy that spreads over a frequency band wider than 50 MHz, which may overlap several frequency bands allocated to radiocommunication services;

For the purpose of this Technical Regulation, *automotive short-range radar (SRR) equipment* means equipment providing road vehicle-based radar functions for collision mitigation and traffic safety applications;

For the purpose of this Technical Regulation, *24 GHz range radio spectrum band* means the 24.15 GHz +/- 2.50 GHz frequency band;

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 automotive short-range radar (SRR) equipment operating in the 24 GHz range radio spectrum band is allowed 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 1.1/2012	Notification number according to Directive 98/34/EC: 2012/214/RO.
Edition 2/2018 (10.08.2018)	Update of the legal framework according to Point 1 – „Basic considerations“; Formal changes according to TCAM-RSC model of November 2017.

	Nr	Parameter	Description	Comments
Normative part	1	Radiocommunication Service	Mobile	
	2	Application	Short Range Devices / UWB applications/ Automotive Short Range Radars (SRR)	
	3	Frequency band	21.65 – 26.65 GHz	<i>Harmonisation of the 24 GHz range radio spectrum band for the time-limited use by automotive short-range radar equipment (Decision 2011/485/EU amending Decision 2005/50/EC). The 24 GHz range radio spectrum band shall remain so available until the date of 30 June 2013 for the frequency between 21.65 and 24.25 GHz and 1 January 2018 for the frequency between 24.25 and 26.65 GHz. However, the date of 1 January 2018 shall be extended by 4 years for automotive short-range radar equipment mounted on motor vehicles for which a type-approval application has been submitted pursuant to Article 6 Paragraph (6) of Directive 2007/46/EC of the European Parliament and of the Council and was approved before 1 January 2018.</i>
	4	Channeling (channel distribution)	-	
	5	Modulation/Occupied bandwidth	-	
	6	Direction/Separation	-	
	7	Transmit power / Power density	The 24 GHz range radioelectric spectrum shall be available for the ultra-wide band part of automotive short-range radar equipment with a maximum mean power density of -41.3 dBm/MHz equivalent isotropic radiated power (e.i.r.p.) and peak power density of 0 dBm/50 MHz e.i.r.p., except for frequencies below 22 GHz, where the maximum mean power density shall be limited to -61.3 dBm/MHz e.i.r.p.	<i>The 24.05–24.25 GHz radio spectrum band is designated for the narrow-band emission mode/component, which may consist of an unmodulated carrier, with a maximum peak power of 20 dBm e.i.r.p. and a duty cycle limited to 10 % for peak emissions higher than - 10 dBm e.i.r.p. Emissions within the 23.6–24.0 GHz band that appear at least 30° above the horizontal plane shall be attenuated by at least 25 dB for automotive short-range radar equipment placed on the market before 2010 and thereafter by at least 30 dB.</i>
	8	Channel occupation and access rules	-	
	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	-	
Informative part	12	Planned changes		
	13	Reference	EN 302 288; Decision 2011/485/EU amending Decision 2005/50/EC; ECC/DEC/(04)10; ERC/REC 70-03	
	14	Notification number	2012/214/RO	
	15	Remarks	-	