

RO-IR 04

TECHNICAL REGULATION

for the radio interface

concerning railway applications

98/34/EC Notification number: 2014/600/RO

1. Basic considerations

The Radio Equipment and Telecommunications Terminal Equipment Directive 1999/5/EC (R&TTE Directive) was implemented in Romania (RO) by Government Decision No. 130/2015.

This technical regulation contains the necessary equipment parameters for the licence exemption short range devices specifically intended for use on railways in the specified frequency bands and considers especially compliance with Articles 3.2, 4.1, 6 and 7.2 of Directive 1999/5/EC.

Nothing in this Technical Regulation shall preclude the need for equipment placed on the market in Romania to comply with Directive 1999/5/EC.

The obligations arising from Directive 98/34/EC of the European Parliament and of the Council of 22 June 1998 laying down a procedure for the provision of information in the field of technical standards and regulations and of rules on Information Society services (OJ L 204 p. 37), as amended by Directive 98/48/EC of the European Parliament and of the Council of 20 July 1998 (OJ L 217 p. 18), have been met.

All Romanian Technical Regulations notified under Directive 1998/34/EC will be published and will be made available free of charge from the ANCOM web-site at:

http://www.ancom.org.ro/en/interface-regulations-_2723

2. Radio Interface Specifications

Railway applications

Frequency band	Annex
27.090 – 27.100 MHz	RO-IR 04–01
76 – 77 GHz	RO-IR 04–02

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, *Eurobalise/ Euroloop* means the wayside transmission unit that uses the magnetic transponder technology.

Its main function is to transmit and/or receive signals through the air gap. The Eurobalise/ Euroloop is a single device mounted on the track, which communicates with a train passing over it.

For the purpose of this technical regulation, *magnetic transponder technology* means the method that uses magnetic coupling in the air gap between a transmitter and a receiver for conveying data and energy.

For the purpose of this technical regulation, *non-interference and non-protected basis* means 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 device is allowed on a non-interference and non-protected basis provided that such device meets the conditions set out in Annexes.

ROMANIA	Radio Interface Specification	SRD / Railway applications	RO-IR 04-01	Edition 1/ 2014
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	Nr	Parameter	Description	Comments
Normative part	1	Radiocommunication Service	Mobile	
	2	Application	Short Range Devices / Railway applications	<i>Balise tele-powering and down-link (train to ground) systems including Eurobalise and activation of the Loop / Euroloop.</i>
	3	Frequency band	27.090 – 27.100 MHz Center frequency is 27.095 MHz	
	4	Channelling	-	
	5	Modulation / Occupied bandwidth	-	
	6	Direction / Separation	-	
	7	Transmit power / Power density	42 dBμA/m at 10 meters	
	8	Channel access and occupation rules	-	
	9	Authorisation regime	Licence exemption	
	10	Additional essential requirements	-	
	11	Frequency planning assumptions	-	
Informative part	12	Planned changes	-	
	13	Reference	EN 302 608; ERC/REC 70-03; Decision 1999/569/EC	
	14	Notification number	2014/600/RO	
	15	Remarks	-	

ROMANIA	Radio Interface Specification	SRD / Railway applications	RO-IR 04-02	Edition 1/ 2014
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	Nr	Parameter	Description	Comments
Normative part	1	Radiocommunication Service	Mobile	
	2	Application	Short Range Devices / Railway applications	<i>Obstruction/Vehicle detection via radar Sensor at railway level crossings</i>
	3	Frequency band	76 - 77 GHz	
	4	Channelling	-	
	5	Modulation / Occupied bandwidth	-	
	6	Direction / Separation	-	
	7	Transmit power / Power density	55 dBm peak equivalent isotropic radiated power (e.i.r.p.) and 50 dBm mean e.i.r.p. for systems others than pulse radars 55 dBm peak e.i.r.p. and 23,5 dBm mean e.i.r.p. for pulse radars	
	8	Channel access and occupation rules	-	
	9	Authorisation regime	Licence exemption	
	10	Additional essential requirements	-	
	11	Frequency planning assumptions	-	
Informative part	12	Planned changes	-	
	13	Reference	EN 301 091; ERC/REC 70-03	
	14	Notification number	2014/600/RO	
	15	Remarks	-	