

## **RO-IR 18**

### **TECHNICAL REGULATION**

**for the radio interface**

**concerning Assistive Listening Devices (ALD)**

## 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 Assistive Listening Devices 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

### Assistive Listening Devices (ALD)

Frequency band	Annex
169.4 – 169.475 MHz	RO-IR 18-01
169.4875 – 169.5875 MHz	RO-IR 18-02
169.4 – 174 MHz	RO-IR 18-03
173.965 – 216 MHz	RO-IR 18-04

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.

*The assistive listening device (ALD)* category covers radio communications systems that allow persons suffering from hearing disability to increase their listening capability. Typical systems include one or more radio transmitters and one or more radio receivers.

For the purpose of this technical regulation, *aids for the hearing impaired* are electro acoustic amplifiers including a microphone and a loudspeaker and having frequency response and dynamic determined characteristics specific to each type of hearing loss.

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.

### 3. Document history:

Edition	Changes
Edition 1/2014	Notification number according to Directive 98/34/EC: 2014/609/RO.
Edition 2/2018 (06.08.2018)	<p>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:</p> <ul style="list-style-type: none"><li>- RO-IR 18-01b and RO-IR 18-02b were repealed (there is no longer made any distinction between individual and public on hearing disability systems);</li><li>- 173.965–174.015 MHz frequency band was changed and becomes 173.965-216 MHz. Thus, RO-IR 18-04 was updated accordingly.</li></ul> <p>Update of the legal framework according to Point 1 – „Basic considerations” and reference documents (row 13).</p> <p>Formal changes according to TCAM-RSC model of November 2017.</p>

ROMANIA	Radio Interface Specification	SRD / Assistive Listening Devices	RO-IR 18-01	Edition 2/2018
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	Nr	Parameter	Description	Comments
Normative part	1	Radiocommunication Service	Mobile	
	2	Application	Short Range Devices / Assistive Listening Devices (ALD)	
	3	Frequency band	169.4 – 169.475 MHz	<i>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)</i>
	4	Channelling (channel distribution)	Max 50 kHz	
	5	Modulation / Occupied bandwidth	-	
	6	Direction / Separation	-	
	7	Transmit power / Power density	500 mW effective radiated power (e.r.p.)	
	8	Channel access and occupation rules	-	
	9	Authorisation regime	Licence exemption	
	10	Additional essential requirements (According to Article 3 Paragraph 3 of 2014/53/EU Directive)	-	
	11	Frequency planning assumptions	-	
Informative part	12	Planned changes	-	
	13	Reference	EN 300 422-4; ECC/DEC/(05)02; ERC/REC 70-03 ; 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.	
	14	Notification number	-	
	15	Remarks	-	

F1- RTIR Edition:1; Revision:1

ROMANIA	Radio Interface Specification	SRD / Assistive Listening Devices	RO-IR 18-02	Edition 2/2018
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	Nr	Parameter	Description	Comments
Normative part	1	Radiocommunication Service	Mobile	
	2	Application	Short Range Devices / Assistive Listening Devices (ALD)	
	3	Frequency band	169.4875 – 169.5875 MHz	<i>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)</i>
	4	Channelling (channel distribution)	Max 50 kHz	
	5	Modulation / Occupied bandwidth	-	
	6	Direction / Separation	-	
	7	Transmit power / Power density	500 mW effective radiated power (e.r.p.)	
	8	Channel access and occupation rules	-	
	9	Authorisation regime	Licence exemption	
	10	Additional essential requirements (According to Article 3 Paragraph 3 of 2014/53/EU Directive)	-	
	11	Frequency planning assumptions	-	
Informative part	12	Planned changes	-	
	13	Reference	EN 300 422-4; ECC/DEC/(05)02; ERC/REC 70-03; 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.	
	14	Notification number	-	
	15	Remarks	-	

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ROMANIA	Radio Interface Specification	SRD / Assistive Listening Devices	RO-IR 18-03	Edition 2/2018
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	Nr	Parameter	Description	Comments
Normative part	1	Radiocommunication Service	Mobile	
	2	Application	Short Range Devices / Assistive Listening Devices (ALD)	
	3	Frequency band	169.4 – 174 MHz	<i>On a tuning range basis</i>
	4	Channelling (channel distribution)	Max 50 kHz	
	5	Modulation / Occupied bandwidth	-	
	6	Direction / Separation	-	
	7	Transmit power / Power density	10 mW e.r.p.	
	8	Channel access and occupation rules	-	
	9	Authorisation regime	Licence exemption	
	10	Additional essential requirements (According to Article 3 Paragraph 3 of 2014/53/EU Directive)	-	
	11	Frequency planning assumptions	-	
Informative part	12	Planned changes	-	
	13	Reference	EN 300 422; ERC/REC 70-03	
	14	Notification number	2014/609/RO	
	15	Remarks	-	

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ROMANIA	Radio Interface Specification	SRD / Assistive Listening Devices	RO-IR 18-04	Edition 2/2018
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	Nr	Parameter	Description	Comments
Normative part	1	Radiocommunication Service	Mobile	
	2	Application	Short Range Devices / Assistive Listening Devices (ALD)	
	3	Frequency band	173.965 – 216 MHz  Based on the adjustment range. Devices will implement the entire frequency range beach based on the adjustment range.	<i>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)</i>
	4	Channelling (channel distribution)	50 kHz  The ALD device should operate in all situations at a distance of at least 300 kHz from the edge of the busy DAB channel.	
	5	Modulation / Occupied bandwidth	-	
	6	Direction / Separation	-	
	7	Transmit power / Power density	10 mW effective radiated power (e.r.p.)	<i>A threshold of 35 dBuV/m is required to ensure the protection of a DAB receiver located at 1.5 m from the ALD device, subject to the DAB signal power measurements performed around the ALD operating site.</i>
	8	Channel access and occupation rules	Techniques to access spectrum and mitigate interference that provide at least equivalent performance to the techniques described in harmonised standards adopted under Directive 2014/53/EU shall be used.	
	9	Authorisation regime	Licence exemption	
	10	Additional essential requirements (According to Article 3 Paragraph 3 of 2014/53/EU Directive)	-	
	11	Frequency planning assumptions	-	
Informative part	12	Planned changes	-	
	13	Reference	EN 300 422-4; 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	
	14	Notification number	-	
	15	Remarks	-	

F1- RTIR Edition:1; Revision:1