STN	Rozhlasové prijímače Časť 1: Generické požiadavky a metódy merania	STN EN 303 345-1 V1.1.1
		87 3345

Broadcast Sound Receivers; Part 1: Generic requirements and measuring methods

Táto norma obsahuje anglickú verziu európskej normy. This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 12/19

Obsahuje: EN 303 345-1 V1.1.1:2019

# ETSI EN 303 345-1 V1.1.1 (2019-06)



Broadcast Sound Receivers;
Part 1: Generic requirements and measuring methods



# Reference DEN/ERM-TG17-151

Keywords broadcast, digital, radio, receiver

#### **ETSI**

650 Route des Lucioles F-06921 Sophia Antipolis Cedex - FRANCE

Tel.: +33 4 92 94 42 00 Fax: +33 4 93 65 47 16

Siret N° 348 623 562 00017 - NAF 742 C Association à but non lucratif enregistrée à la Sous-Préfecture de Grasse (06) N° 7803/88

#### Important notice

The present document can be downloaded from: <u>http://www.etsi.org/standards-search</u>

The present document may be made available in electronic versions and/or in print. The content of any electronic and/or print versions of the present document shall not be modified without the prior written authorization of ETSI. In case of any existing or perceived difference in contents between such versions and/or in print, the prevailing version of an ETSI deliverable is the one made publicly available in PDF format at <a href="https://www.etsi.org/deliver">www.etsi.org/deliver</a>.

Users of the present document should be aware that the document may be subject to revision or change of status.

Information on the current status of this and other ETSI documents is available at <a href="https://portal.etsi.org/TB/ETSIDeliverableStatus.aspx">https://portal.etsi.org/TB/ETSIDeliverableStatus.aspx</a>

If you find errors in the present document, please send your comment to one of the following services: https://portal.etsi.org/People/CommiteeSupportStaff.aspx

#### **Copyright Notification**

No part may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm except as authorized by written permission of ETSI.

The content of the PDF version shall not be modified without the written authorization of ETSI.

The copyright and the foregoing restriction extend to reproduction in all media.

© ETSI 2019. All rights reserved.

**DECT**<sup>™</sup>, **PLUGTESTS**<sup>™</sup>, **UMTS**<sup>™</sup> and the ETSI logo are trademarks of ETSI registered for the benefit of its Members. **3GPP**<sup>™</sup> and **LTE**<sup>™</sup> are trademarks of ETSI registered for the benefit of its Members and of the 3GPP Organizational Partners.

oneM2M<sup>™</sup> logo is a trademark of ETSI registered for the benefit of its Members and of the oneM2M Partners.

**GSM**® and the GSM logo are trademarks registered and owned by the GSM Association.

## Contents

Histor	y		20
	x C (informative):	Change History	
Anne	x B (informative):	Measurement set-up for electrical methods during radiated test	ing18
Anne	x A (informative):	A fibre-optic link for receiver testing	16
5.3.5.2	Digital (DAE	3 and DRM) adjacent channel selectivity and blocking measurements	15
5.3.5.1		M and FM) adjacent channel selectivity and blocking measurements	
5.3.5		l selectivity and blocking measurement methods	
5.3.4.2		B and DRM) sensitivity measurements	
5.3.4.1	<u> </u>	M and FM) sensitivity measurements	
5.3.4	•	urement methods	
5.3.3		ement set-up for conducted testing	
5.3.2		ment set-up for radiated testing	
5.3.1		s of measurement.	
5.3		ement	
5.2		measurement results	
5 5.1		ce with technical requirementslitions for testing	
5			
4.2.2		frequency bands	
4.2.1	•		
4.1		ements	
4.1		ils specificationsle	
4	Tachnical requiremen	its specifications	o
3.3			
3.2			
3.1		Jinoois and abore viations	
3	Definition of terms s	ymbols and abbreviations	7
2.2	Informative reference	ces	6
2.1	Normative reference	98	6
2	References		6
1	Scope		6
Moda	l verbs terminology		5
Forew	ord		4
Intelle	ectual Property Rights		4
Intalla	votual Droporty Dighta		1

### Intellectual Property Rights

#### **Essential patents**

IPRs essential or potentially essential to normative deliverables may have been declared to ETSI. The information pertaining to these essential IPRs, if any, is publicly available for **ETSI members and non-members**, and can be found in ETSI SR 000 314: "Intellectual Property Rights (IPRs); Essential, or potentially Essential, IPRs notified to ETSI in respect of ETSI standards", which is available from the ETSI Secretariat. Latest updates are available on the ETSI Web server (https://ipr.etsi.org/).

Pursuant to the ETSI IPR Policy, no investigation, including IPR searches, has been carried out by ETSI. No guarantee can be given as to the existence of other IPRs not referenced in ETSI SR 000 314 (or the updates on the ETSI Web server) which are, or may be, or may become, essential to the present document.

#### **Trademarks**

The present document may include trademarks and/or tradenames which are asserted and/or registered by their owners. ETSI claims no ownership of these except for any which are indicated as being the property of ETSI, and conveys no right to use or reproduce any trademark and/or tradename. Mention of those trademarks in the present document does not constitute an endorsement by ETSI of products, services or organizations associated with those trademarks.

### **Foreword**

This European Standard (EN) has been produced by ETSI Technical Committee Electromagnetic compatibility and Radio spectrum Matters (ERM).

The present document is part 1 of a multi-part deliverable covering the requirements and measuring methods for broadcast sound receivers to meet the essential requirements of article 3.2 of Directive 2014/53/EU [i.1], as identified below:

- Part 1: "Generic requirements and measuring methods";
- Part 2: "AM broadcast sound service";
- Part 3: "FM broadcast sound service";
- Part 4: "DAB broadcast sound service";
- Part 5: "DRM broadcast sound service".

The test data files are contained in archive en\_30334501v010101p0.zip which accompanies the present document.

National transposition dates		
Date of adoption of this EN:	27 May 2019	
Date of latest announcement of this EN (doa):	31 August 2019	
Date of latest publication of new National Standard or endorsement of this EN (dop/e):	29 February 2020	
Date of withdrawal of any conflicting National Standard (dow):	28 February 2021	

5

# Modal verbs terminology

In the present document "shall", "shall not", "should", "should not", "may", "need not", "will", "will not", "can" and "cannot" are to be interpreted as described in clause 3.2 of the <u>ETSI Drafting Rules</u> (Verbal forms for the expression of provisions).

"must" and "must not" are NOT allowed in ETSI deliverables except when used in direct citation.

### 1 Scope

The present document specifies generic requirements and methods of measurements for devices, including the supplied antenna, that receive broadcast sound services, whether analogue or digital modulation is used to meet the essential requirements of article 3.2 of Directive 2014/53/EU [i.1]. Subsequent parts of this multi-part deliverable provide the necessary test signal configurations and limits for the different broadcast sound services. Multi-function devices may also fall under the requirements of other documents.

### 2 References

### 2.1 Normative references

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the referenced document (including any amendments) applies.

Referenced documents which are not found to be publicly available in the expected location might be found at <a href="https://docbox.etsi.org/Reference/">https://docbox.etsi.org/Reference/</a>.

NOTE: While any hyperlinks included in this clause were valid at the time of publication, ETSI cannot guarantee their long term validity.

The following referenced documents are necessary for the application of the present document.

- [1] CENELEC EN 55032:2015: "Electromagnetic compatibility of multimedia equipment Emission Requirements".
- [2] IEC 60315-1 (1988): "Methods of measurement on radio receivers for various classes of emission. Part 1: General considerations and methods of measurement, including audio-frequency measurements".
- [3] Recommendation ITU-R BS.468-4 (07/1986): "Measurement of audio-frequency noise voltage level in sound broadcasting".

### 2.2 Informative references

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the referenced document (including any amendments) applies.

NOTE: While any hyperlinks included in this clause were valid at the time of publication, ETSI cannot guarantee their long term validity.

The following referenced documents are not necessary for the application of the present document but they assist the user with regard to a particular subject area.

- [i.1] 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.
- [i.2] ETSI TR 100 028 (all parts): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Uncertainties in the measurement of mobile radio equipment characteristics".
- [i.3] ETSI TR 100 028-2: "Electromagnetic compatibility and Radio spectrum Matters (ERM); Uncertainties in the measurement of mobile radio equipment characteristics; Part 2".
- [i.4] ECA table in ERC report 25.

NOTE: Available at www.efis.dk.

7

- [i.5] CISPR 35: "Electromagnetic Compatibility of Multimedia equipment Immunity Requirements".
- [i.6] BBC Research & Development White Paper WHP 335: "A Fibre-Optic Link for Use During Receiver Testing".

NOTE: Available at <a href="http://downloads.bbc.co.uk/rd/pubs/whp/whp-pdf-files/WHP335.pdf">http://downloads.bbc.co.uk/rd/pubs/whp/whp-pdf-files/WHP335.pdf</a>.

# koniec náhľadu – text ďalej pokračuje v platenej verzii STN