



**SLOVENSKI STANDARD**  
**SIST EN 300 422-2 V1.2.2:2008**  
**01-december-2008**

**BUXca Yý U**  
**PSIST EN 300 422-2:2001**

9`Y\_lfca U[ bYfbUnXfi y`fj cgh]b`nUXYj Yj`nj Yn]`nfUX]`g\_`ja`gdY\_lfca`fØFAŁ!  
6fYny] b]`a`[\_fcZb]j`ZY\_j Yb bYa`cVa`c`f`cX`&`A<n`Xc`"; <n!`&"XY.  
<Ufa`cb]n]fUb]9Bž\_]nUYa UV]ghj YbY`nU hYj Y`YbU`"&X]fY\_hj Y`F/`HH9

Electromagnetic compatibility and Radio spectrum Matters (ERM) - Wireless microphones in the 25 MHz to 3 GHz frequency range - Part 2: Harmonized EN covering essential requirements of Article 3.2 of the R&TTE Directive

**iteh STANDARD PREVIEW**  
**(standards.iteh.ai)**

<https://standards.iteh.ai/catalog/standards/sist/932af1cb-71b1-4c49-9e90-6cd6de6e5b9d/sist-en-300-422-2-v1-2-2-2008>

**Ta slovenski standard je istoveten z: EN 300 422-2 Version 1.2.2**

**ICS:**

|           |   |  |
|-----------|---|--|
| 33.060.99 | Druga oprema za radijske komunikacije   | Other equipment for radiocommunications  |
| 33.100.01 | Elektromagnetna združljivost na splošno | Electromagnetic compatibility in general |
| 33.160.50 | Pribor                                  | Accessories                              |

**SIST EN 300 422-2 V1.2.2:2008**      **en**

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

SIST EN 300 422-2 V1.2.2:2008

<https://standards.iteh.ai/catalog/standards/sist/932af1cb-71b1-4c49-9e90-6cd6de6e5b9d/sist-en-300-422-2-v1-2-2-2008>

# ETSI EN 300 422-2 V1.2.2 (2008-03)

---

*Harmonized European Standard (Telecommunications series)*

**Electromagnetic compatibility  
and Radio spectrum Matters (ERM);  
Wireless microphones  
in the 25 MHz to 3 GHz frequency range;  
Part 2: Harmonized EN covering essential requirements  
of article 3.2 of the R&TTE Directive**

---

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST EN 300 422-2 V1.2.2:2008](https://standards.iteh.ai/catalog/standards/sist/932af1cb-71b1-4c49-9e90-6cd6de6e5b9d/sist-en-300-422-2-v1-2-2-2008)

<https://standards.iteh.ai/catalog/standards/sist/932af1cb-71b1-4c49-9e90-6cd6de6e5b9d/sist-en-300-422-2-v1-2-2-2008>



## Reference

---

REN/ERM-TG17WG3-008-2

## Keywords

---

audio, radio, radio MIC, testing

**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

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

SIST EN 300 422-2 V1.2.2:2008

<https://standards.iteh.ai/catalog/standards/sist/932af1cb-71b1-4c49-9e90-6cd6defe5b2c/ETSI-ERM-TG17WG3-008-2-v1-2-2-2008>

**Important notice**

Individual copies of the present document can be downloaded from:

<http://www.etsi.org>

The present document may be made available in more than one electronic version or in print. In any case of existing or perceived difference in contents between such versions, the reference version is the Portable Document Format (PDF). In case of dispute, the reference shall be the printing on ETSI printers of the PDF version kept on a specific network drive within ETSI Secretariat.

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

<http://portal.etsi.org/tb/status/status.asp>

If you find errors in the present document, please send your comment to one of the following services:

[http://portal.etsi.org/chaicor/ETSI\\_support.asp](http://portal.etsi.org/chaicor/ETSI_support.asp)

---

**Copyright Notification**

No part may be reproduced except as authorized by written permission.  
The copyright and the foregoing restriction extend to reproduction in all media.

© European Telecommunications Standards Institute 2008.  
All rights reserved.

**DECT™**, **PLUGTESTS™**, **UMTS™**, **TIPHON™**, the TIPHON logo and the ETSI logo are Trade Marks of ETSI registered for the benefit of its Members.

**3GPP™** is a Trade Mark of ETSI registered for the benefit of its Members and of the 3GPP Organizational Partners.

# Contents

|   |           |
|---|-----------|
| Intellectual Property Rights .....  | 4         |
| Foreword.....   | 4         |
| Introduction .....  | 4         |
| 1 Scope .....   | 5         |
| 2 References .....  | 5         |
| 2.1 Normative references .....  | 6         |
| 2.2 Informative references.....   | 6         |
| 3 Definitions, symbols and abbreviations .....  | 6         |
| 3.1 Definitions .....   | 6         |
| 3.2 Symbols.....  | 6         |
| 3.3 Abbreviations .....   | 6         |
| 4 Technical requirements specifications .....   | 6         |
| 4.1 Environmental profile.....  | 6         |
| 4.2 Conformance requirements .....  | 7         |
| 4.2.1 Frequency stability.....  | 7         |
| 4.2.1.1 Definition .....  | 7         |
| 4.2.1.2 Limit.....  | 7         |
| 4.2.1.3 Conformance.....  | 7         |
| 4.2.2 Rated Output Power.....   | 7         |
| 4.2.2.1 Definition .....  | 7         |
| 4.2.2.2 Limit.....  | 7         |
| 4.2.2.3 Conformance.....  | 7         |
| 4.2.3 Necessary bandwidth .....   | 7         |
| 4.2.3.1 Definition .....  | 7         |
| 4.2.3.2 Limit.....  | 7         |
| 4.2.3.3 Conformance.....  | 7         |
| 4.2.4 Spurious emissions .....  | 7         |
| 4.2.4.1 Definition .....  | 7         |
| 4.2.4.2 Limit.....  | 7         |
| 4.2.4.3 Conformance.....  | 8         |
| 4.3 Receiver requirements.....  | 8         |
| 4.3.1 Spurious emissions .....  | 8         |
| 4.3.1.1 Definition .....  | 8         |
| 4.3.1.2 Limit.....  | 8         |
| 4.3.1.3 Conformance.....  | 8         |
| 5 Testing for compliance with technical requirements.....   | 8         |
| 5.1 Environmental conditions for testing .....  | 8         |
| 5.2 Interpretation of the measurement results .....   | 8         |
| 5.3 Essential radio test suites.....  | 9         |
| 5.3.1 Transmitter test suites .....   | 9         |
| 5.3.1.1 Frequency stability .....   | 9         |
| 5.3.1.2 Rated Output Power .....  | 9         |
| 5.3.1.3 Necessary bandwidth .....   | 9         |
| 5.3.1.4 Spurious emissions.....   | 9         |
| 5.3.2 Receiver test suites.....   | 9         |
| 5.3.2.1 Spurious emissions.....   | 9         |
| <b>Annex A (normative): HS Requirements and conformance Test specifications Table (HS-RTT).....</b> | <b>10</b> |
| <b>Annex B (informative): The EN title in the official languages .....</b>                          | <b>12</b> |
| History .....   | 14        |

---

## Intellectual Property Rights

IPRs essential or potentially essential to the present document 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 (<http://webapp.etsi.org/IPR/home.asp>).

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.

---

## Foreword

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

The present document has been produced by ETSI in response to a mandate from the European Commission issued under Council Directive 98/34/EC [3] (as amended) laying down a procedure for the provision of information in the field of technical standards and regulations.

The present document is intended to become a Harmonized Standard, the reference of which will be published in the Official Journal of the European Communities referencing the Directive 1999/5/EC of the European Parliament and of the Council of 9 March 1999 on radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity ("the R&TTE Directive") [2].

Technical specifications relevant to Directive 1999/5/EC [2] are given in annex A.

The present document is part 2 of a multi-part deliverable. Full details of the entire series can be found in part 1 EN 300 422-1 [1].

National regulations on maximum power output will apply.

### National transposition dates

|  |                  |
|--|------------------|
| Date of adoption of this EN:   | 14 March 2008    |
| Date of latest announcement of this EN (doa):  | 30 June 2008     |
| Date of latest publication of new National Standard or endorsement of this EN (dop/e): | 31 December 2008 |
| Date of withdrawal of any conflicting National Standard (dow):                         | 31 December 2009 |

---

## Introduction

The present document is part of a set of standards developed by ETSI and is designed to fit in a modular structure to cover all radio and telecommunications terminal equipment within the scope of the R&TTE Directive. The modular structure is shown in EG 201 399 [4].

---

# 1 Scope

The present document applies to equipment operating on radio frequencies between 25 MHz and 3 GHz, using analogue, digital and hybrid (using both analogue and digital modulation) modulation. The present document does not apply to radio microphones or in ear monitoring equipment employing Time Division Multiple Access (TDMA) modulation.

The present document applies to the following radio equipment types:

- 1) professional hand held radio microphones;
- 2) professional body worn radio microphones;
- 3) in ear monitoring systems, etc.;
- 4) consumer radio microphones;
- 5) tour guide systems;
- 6) Assistive Listening Devices (Aids for the handicapped).

The maximum power recommended for equipment covered by the present document is 250 mW (erp below 1 GHz and eirp above 1 GHz).

The present document is intended to cover the provisions of Directive 1999/5/EC (R&TTE Directive) [2],

Article 3.2, which states that "..... radio equipment shall be so constructed that it effectively uses the spectrum allocated to terrestrial/space radio communications and orbital resources so as to avoid harmful interference".

In addition to the present document, other ENs that specify technical requirements in respect of essential requirements under other parts of Article 3 of the R&TTE Directive may apply to equipment within the scope of the present document.

NOTE: A list of such ENs is included on the web site <https://standards.iteh.ai/catalog/standards/sist/932af1cb-71b1-4c49-9e90-6cd6de6e5b9d/sist-en-300-422-2-v1-2-2-2008> <http://www.newapproach.org>.

---

# 2 References

References are either specific (identified by date of publication and/or edition number or version number) or non-specific.

- For a specific reference, subsequent revisions do not apply.
- Non-specific reference may be made only to a complete document or a part thereof and only in the following cases:
  - if it is accepted that it will be possible to use all future changes of the referenced document for the purposes of the referring document;
  - for informative references.

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

For online referenced documents, information sufficient to identify and locate the source shall be provided. Preferably, the primary source of the referenced document should be cited, in order to ensure traceability. Furthermore, the reference should, as far as possible, remain valid for the expected life of the document. The reference shall include the method of access to the referenced document and the full network address, with the same punctuation and use of upper case and lower case letters.

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

## 2.1 Normative references

The following referenced documents are indispensable for the application of the present document. For dated references, only the edition cited applies. For non-specific references, the latest edition of the referenced document (including any amendments) applies.

- [1] ETSI EN 300 422-1 (V1.3.2): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Wireless microphones in the 25 MHz to 3 GHz frequency range; Part 1: Technical characteristics and methods of measurement".

## 2.2 Informative references

- [2] Directive 1999/5/EC of the European Parliament and of the Council of 9 March 1999 on radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity (R&TTE Directive).
- [3] 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.
- [4] ETSI EG 201 399: "Electromagnetic compatibility and Radio spectrum Matters (ERM); A guide to the production of candidate Harmonized Standards for application under the R&TTE Directive".
- [5] ETSI TR 100 028: "Electromagnetic compatibility and Radio spectrum Matters (ERM); Uncertainties in the measurement of mobile radio equipment characteristics".
- [6] ETSI TR 102 215: "Electromagnetic compatibility and Radio spectrum Matters (ERM); Recommended approach, and possible limits for measurement uncertainty for the measurement of radiated electromagnetic fields above 1 GHz".

ITIH STANDARD PREVIEW  
(standards.iteh.ai)

---

## 3 Definitions, symbols and abbreviations

<https://standards.iteh.ai/catalog/standards/sist/932af1cb-71b1-4c49-9e90-6cd6de6e5b9d/sist-en-300-422-2-v1-2-2-2008>

### 3.1 Definitions

For the purposes of the present document, the terms and definitions given in EN 300 422-1 [1] apply.

### 3.2 Symbols

For the purposes of the present document, the symbols given in EN 300 422-1 [1] apply.

### 3.3 Abbreviations

For the purposes of the present document, the abbreviations given in EN 300 422-1 [1] apply.

---

## 4 Technical requirements specifications

### 4.1 Environmental profile

The technical requirements of the present document apply under the environmental profile for operation of the equipment, which shall be declared by the supplier. The equipment shall comply with all the technical requirements of the present document at all times when operating within the boundary limits of the declared operational environmental profile.



## 4.2 Conformance requirements

### 4.2.1 Frequency stability

#### 4.2.1.1 Definition

This shall be as defined in EN 300 422-1 [1], clause 3.1.

#### 4.2.1.2 Limit

The transmitter frequency error limit shall be as stated in EN 300 422-1 [1], clause 8.1.3.

#### 4.2.1.3 Conformance

Conformance tests as defined in clause 5.3.1.1 shall be carried out.

### 4.2.2 Rated Output Power

#### 4.2.2.1 Definition

This shall be as defined in EN 300 422-1 [1], clause 3.1.

#### 4.2.2.2 Limit

The rated output power shall be as stated in EN 300 422-1 [1], clause 8.2.3.

#### 4.2.2.3 Conformance

Conformance tests as defined in clause 5.3.1.2 shall be carried out.

### 4.2.3 Necessary bandwidth

#### 4.2.3.1 Definition

This shall be as defined in EN 300 422-1 [1], clause 3.1.

#### 4.2.3.2 Limit

The necessary bandwidth limit shall be as stated in EN 300 422-1 [1], clause 8.3.1.2 for analogue systems and clause 8.3.2.2 for digital systems.

#### 4.2.3.3 Conformance

Conformance tests as defined in clause 5.3.1.3 shall be carried out.

### 4.2.4 Spurious emissions

#### 4.2.4.1 Definition

This shall be as defined in EN 300 422-1 [1], clause 3.1.

#### 4.2.4.2 Limit

The spurious emissions limit shall be as stated in EN 300 422-1 [1], clause 8.4.3.

**iTeh STANDARD PREVIEW**  
(standards.iteh.ai)

SIST EN 300 422-2 V1.2.2:2008  
<https://standards.iteh.ai/catalog/standards/sist/932af1cb-71b1-4c49-9e90-6cd6de6e5b9d/sist-en-300-422-2-v1-2-2-2008>