



SLOVENSKI STANDARD

SIST EN 302 454-2 V1.1.1:2007

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9`Y_fca U[bYfbUnXfi y`1j cghf0A7L]b`nUXYj Yj`nj Yn]`n`fUX]`g_`ja`gdY_fca`f0FAŁ!
A YHcfc`cý_]`df]dca c_]`fA Yh5]XgŁ!`FUX]cgc bXY`nUi dcfUvc`j`ZY_j Yb bYa
cVa c`1`cX`%`*`*,`(``A<n`Xc`%`*`-\$`A<n!`&`XY.`<Ufa cb]n]fUb]9Bž_]`nUYa U
V]ghj YbY`nU H]j Y``YbU`" &X]fY_hj YF/ HH9

Electromagnetic compatibility and Radio spectrum Matters (ERM) - Meteorological Aids (Met Aids) - Radiosondes to be used in the 1 668,4 MHz to 1 690 MHz frequency range - Part 2: Harmonized EN covering essential requirements of article 3.2 of the R&TTE Directive

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ICS:

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33.060.99	Druga oprema za radijske komunikacije	Other equipment for radiocommunications
33.100.01	Elektromagnetna združljivost na splošno	Electromagnetic compatibility in general

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Harmonized European Standard (Telecommunications series)

**Electromagnetic compatibility
and Radio spectrum Matters (ERM);
Meteorological Aids (Met Aids);
Radiosondes to be used in the
1 668,4 MHz to 1 690 MHz frequency range;
Part 2: Harmonized EN covering essential requirements
of article 3.2 of the R&TTE Directive**

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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 (as amended) [3] 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 [1] 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").

The present document is part 2 of a multi-part deliverable, covering digitally modulated Radiosonde transmitters in the Meteorological Aids frequency band from 1 668,4 MHz to 1 690 MHz, as identified below:

Part 1: "Technical characteristics and test methods";

Part 2: "**Harmonized EN covering essential requirements of article 3.2 of the R&TTE Directive**".

Technical specifications relevant to Directive 1999/5/EC [1] are given in annex A.

National transposition dates

Date of adoption of this EN:	29 June 2007
Date of latest announcement of this EN (doa):	30 September 2007
Date of latest publication of new National Standard or endorsement of this EN (dop/e):	31 March 2008
Date of withdrawal of any conflicting National Standard (dow):	30 September 2010

Introduction

The present document is part of a set of standards designed to fit in a modular structure to cover all radio and telecommunications terminal equipment under the R&TTE Directive [1]. The modular structure is shown in EG 201 399.

1 Scope

The present document applies to Radiosondes in the Meteorological Aids service as described in the scope of EN 302 454-1 [2].

The present document is intended to cover the provisions of article 3.2 of Directive 1999/5/EC (R&TTE Directive) [1], 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".

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- 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.
- For a non-specific reference, the latest version applies.

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

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- [1] 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).
<https://standards.iteh.ai/catalog/standards/sist/fc39c339-2a2a-44a4-9903-aa649d0413e1/sist-en-302-454-2-v1-1-1-2007>
- [2] ETSI EN 302 454-1 (V1.1.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Meteorological Aids (Met Aids); Radiosondes to be used in the 1 668,4 MHz to 1 690 MHz frequency range; Part 1: Technical characteristics and test methods".
- [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 TR 100 028 (V1.4.1) (2001-12): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Uncertainties in the measurement of mobile radio equipment characteristics".

3 Definitions, symbols and abbreviations

3.1 Definitions

For the purposes of the present document, the terms and definitions given in the R&TTE Directive [1] and EN 302 454-1 [2] apply.

3.2 Symbols

For the purposes of the present document, the symbols given in EN 302 454-1 [2] apply.

3.3 Abbreviations

For the purposes of the present document, the abbreviations given in EN 302 454-1 [2] 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 Transmitter requirements

4.2.1 Frequency error

The following shall be met:

- The frequency error, as defined in EN 302 454-1 [2], clause 8.1.1, shall not exceed the limits given in EN 302 454-1 [2], clause 8.1.3.

This requirement applies to all transmitters.

4.2.2 Carrier power (conducted)

The carrier power (conducted), as defined in EN 302 454-1 [2], clause 8.2.1, shall not exceed the limits in EN 302 454-1 [2], clause 8.2.3.

This requirement applies to transmitters, which may be used without an integral or dedicated antenna.

4.2.3 Effective radiated power

The effective radiated power, as defined in EN 302 454-1 [2], clause 8.3.1, shall not exceed the limits given in EN 302 454-1 [2], clause 8.3.3.

This requirement applies to transmitters with an integral or dedicated antenna.

4.2.4 Transmission power spectral density

The transmission spectrum, as defined in EN 302 454-1 [2], clause 8.4.1, shall not exceed the limits in EN 302 454-1 [2], clause 8.4.3.

This requirement applies to all transmitters employing digital modulation.

4.2.5 Spurious emissions

The spurious emissions, as defined in EN 302 454-1 [2], clause 8.5.1, shall not exceed the limits given in EN 302 454-1 [2], clause 8.5.5.

This requirement applies to all transmitters employing digital modulation.

4.2.6 Frequency stability under low-voltage conditions

The frequency stability under low-voltage conditions, as defined in EN 302 454-1 [2], clause 8.6.1, shall comply conditions given in EN 302 454-1 [2], clause 8.6.3.

5 Testing for compliance with technical requirements

5.1 Essential radio test suites

5.1.1 Environmental conditions for testing

5.1.1.1 Normal and extreme test-conditions

Type tests shall be made under normal test conditions, and also, where stated, under extreme test conditions.

The test procedures shall be as specified in EN 302 454-1 [2], clauses 5.3 to 5.4.

5.1.1.2 Test power source

The test power source shall meet the requirements of EN 302 454-1 [2], clause 5.2.

5.1.2 Choice of samples for test suites

Measurement shall be performed, according to the present document, on samples of equipment defined in EN 302 454-1 [2], clauses 4.1.1 to 4.1.4.

5.1.3 Transmitter test suites

5.1.3.1 Frequency error (standards.iteh.ai)

The test specified in EN 302 454-1 [2], clause 8.1 shall be carried out.

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5.1.3.2 Carrier power (conducted)

The test specified in EN 302 454-1 [2], clause 8.2 shall be carried out.

This test suite applies to Radiosondes which may be used without an integral or dedicated antenna.

5.1.3.3 Effective radiated power

The test specified in EN 302 454-1 [2], clause 8.3 shall be carried out.

This test suite applies to Radiosondes with an integral or dedicated antenna.

5.1.3.4 Transmission power spectral density

The test specified in EN 302 454-1 [2], clause 8.4 shall be carried out.

This test suite applies to transmitters if the assigned frequency band is not divided into channels.

5.1.3.5 Spurious emissions

The test specified in EN 302 454-1 [2], clause 8.5 shall be carried out.

This test suite applies to all transmitters.