

STN	<p>Pozemná pohyblivá služba Rádiové zariadenia na použitie v pagingovej službe pracujúce v kmitočtovom pásme od 25 MHz do 470 MHz Harmonizovaná norma vzťahujúca sa na základné požiadavky článku 3.2 Smernice 2014/53/EU</p>	<p>STN EN 300 224 V2.1.1</p>
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**Land Mobile Service;
Radio Equipment for use in a Paging Service
operating within the frequency range 25 MHz - 470 MHz;
Harmonised Standard covering the essential requirements
of article 3.2 of Directive 2014/53/EU**

Reference

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Foreword

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

The present document has been prepared under the Commission's standardisation request C(2015) 5376 final [i.2] to provide one voluntary means of conforming to the essential requirements of Directive 2014/53/EU 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.1].

Once the present document is cited in the Official Journal of the European Union under that Directive, compliance with the normative clauses of the present document given in table A.1 confers, within the limits of the scope of the present document, a presumption of conformity with the corresponding essential requirements of that Directive and associated EFTA regulations.

National transposition dates	
Date of adoption of this EN:	26 June 2017
Date of latest announcement of this EN (doa):	30 September 2017
Date of latest publication of new National Standard or endorsement of this EN (dop/e):	31 March 2018
Date of withdrawal of any conflicting National Standard (dow):	31 March 2019

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 [ETSI Drafting Rules](#) (Verbal forms for the expression of provisions).

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1 Scope

The present document applies to on-site and wide area paging equipment, operating in the frequency range of 25 MHz to 470 MHz.

An on-site paging system is a privately owned and operated wireless communication system, used in a restricted and predefined area, with the primary function to alert and/or inform ambulant people. The air interface of the system, using a single radio channel, comprises at least one transmitter. The system may be extended to include a return, or talk-back frequency. Mainly used for call acknowledgement, this frequency may also be used to supply some of the features of a mobile radio service, or other two-way radio services, without the need to use a separate system.

Covering a larger geographical area, a wide-area system is typically associated with large organizations such as emergency services and may include additional radio facilities and utilize different a frequency for return messaging, which is outside the scope of the present document. These features should be tested against the relevant standard.

The present document specifies technical characteristics and methods of measurements for the following equipment types:

- 1) base station transmitters and transcoders, with or without an external 50 Ω antenna connector;
- 2) base station receivers, with a permanent 50 Ω connector;
- 3) paging receiver, with or without an external 50 Ω antenna connector.

These radio equipment types are capable of operating in all or any part of the frequency bands given in table 1.

Table 1: Radiocommunications service frequency bands

Radiocommunications service frequency bands	
Transmit	25 MHz to 470 MHz
Receive	25 MHz to 470 MHz
NOTE: Frequencies and frequency bands, used for on-site paging equipment, are not harmonised throughout the community. The frequency band 47 MHz to 47,25 MHz and operating frequencies or operating bands within 440 MHz to 470 MHz, are recommended by CEPT/ECC in Report 25 [i.5].	

The existence of a Harmonised Standard does not imply the availability of the above frequency spectrum for the particular types of equipment covered by the present document.

The present document covers the essential requirements of article 3.2 of Directive 2014/53/EU under the conditions identified in annex A and contains requirements to demonstrate that "... *Radio equipment shall be so constructed that it both effectively uses and supports the efficient use of radio spectrum in order to avoid harmful interference*" [i.1].

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 Radio Equipment Directive [i.1] may apply to equipment within the scope of the present document.

2 References

2.1 Normative references

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

Not applicable.

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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] Commission Implementing Decision C(2015) 5376 final of 4.8.2015 on a standardisation request to the European Committee for Electrotechnical Standardisation and to the European Telecommunications Standards Institute as regards radio equipment in support of Directive 2014/53/EU of the European Parliament and of the Council.
- [i.3] ETSI EN 300 793 (V1.1.1): "Electromagnetic compatibility and Radio Spectrum Matters (ERM); Land mobile service; Presentation of equipment for type testing".
- [i.4] ETSI TS 103 052 (V1.1.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Radiated measurement methods and general arrangements for test sites up to 100 GHz".
- [i.5] CEPT/ERC Report 25 (June 2016): "The European Table of Frequency Allocations and Applications in the Frequency Range 8.3 kHz to 3000 GHz".
- [i.6] Recommendation ITU-T O.41 (1994): "Psophometer for use on telephone-type circuits".
- [i.7] ETSI TR 100 028 (V1.4.1) (12-2001) (all parts): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Uncertainties in the measurement of mobile radio equipment characteristics".
- [i.8] IEC 60489-3: "Radio equipment used in mobile services. Methods of measurement for receivers for A3E or F3E emissions".
- [i.9] ANSI C63.5 (2006): "American National Standard for Calibration of Antennas Used for Radiated Emission Measurements in Electro Magnetic Interference".

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