

STN	Navigačný radar používaný na vnútrozemských vodných trasách Harmonizovaná norma vzťahujúca sa na základné požiadavky podľa článku 3.2 smernice 2014/53/EÚ	STN EN 302 194 V2.1.1 87 2194
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Navigation radar used on inland waterways; Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU

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

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HARMONISED EUROPEAN STANDARD

**Navigation radar used on inland waterways;
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.3] 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	
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Modal verbs terminology

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1 Scope

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

- 1) X band Radar and its associated primary navigational display intended for the navigation of vessels on inland waterways subject to the requirements of the Central Commission for the Navigation on the Rhine (CCNR) and the Danube Commission (DC).

The present document contains the minimum technical, operational and functional requirements, describes the tests and the conditions under which the tests take place in order to establish that the equipment meets these minimum requirements.

Additional facilities, which may be provided on this equipment, e.g. Inland ECDIS functions, automatic steering functions or additional interfaces, are not covered by the present document, and other appropriate standards may apply.

The installation of radar equipment intended for the navigation on inland waterways is subject to additional conditions which are described in annex E.

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

Table 1: Radio navigation service frequencies

	Radio navigation service frequencies
Transmit	9 300 MHz to 9 500 MHz
Receive	9 300 MHz to 9 500 MHz

The present document covers the essential requirements of article 3.2 of Directive 2014/53/EU [i.1] under the conditions identified in annex A.

2 References

2.1 Normative references

References are specific, identified by date of publication and/or edition number or version number. Only the cited version applies.

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- [1] ITU Radio Regulation (2016).
- [2] IMO Resolution A.278 (VIII) (1973): "Symbols for controls on marine navigational radar equipment".
- [3] IEC EN 60945:2002 (Edition 4): "Maritime navigation and radiocommunication equipment and systems - General requirements - Methods of testing and required test results".
- [4] Recommendation ITU-R M.1177-4 (04-2011): "Techniques for measurement of unwanted emissions of radar systems".
- [5] ISO 25862:2009: "Ships and marine technology - Marine magnetic compasses, binnacles and azimuth reading devices".

2.2 Informative references

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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] Void.
- [i.3] 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.4] ETSI TR 100 028-1: "Electromagnetic compatibility and Radio spectrum Matters (ERM); Uncertainties in the measurement of mobile radio equipment characteristics; Part 1".
- [i.5] ETSI TR 100 028-2: "Electromagnetic compatibility and Radio spectrum Matters (ERM); Uncertainties in the measurement of mobile radio equipment characteristics; Part 2".
- [i.6] Recommendation ITU-R M.824-2: "Technical parameters of radar beacons (RACONS)".
- [i.7] Recommendation ITU-R SM.328-10: "Spectra and bandwidth of emissions".
- [i.8] Recommendation ITU-R SM.1541-1: "Unwanted emissions in the out-of-band domain".
- [i.9] Recommendation ITU-R SM.329-8: "Unwanted emissions in the spurious domain".
- [i.10] "Regional Arrangement on the Radiocommunication Service for Inland Waterways (RAINWAT)"; Bucaresti, 14 October 2014".
- [i.11] ZKR 1989-II-34 (1990): "Regulations regarding the minimum requirements and test conditions for rate of turn indicators used for inland waterways navigation. (Vorschriften betreffend die Mindestanforderungen und Prüfbedingungen für Wendegeschwindigkeitsanzeiger für die Binnenschifffahrt)".

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