

<b>STN</b>	<b>Elektromagnetická kompatibilita (EMC), norma na rádiové zariadenia a služby</b> <b>Časť 22: Osobitné podmienky na letecké pohyblivé a pevné rádiové zariadenia v pásme používané na zemi</b> <b>Harmonizovaná norma pre elektromagnetickú kompatibilitu</b>	<b>STN</b> <b>EN 301 489-22</b> <b>V2.1.1</b>  87 1489
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ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 22: Specific conditions for ground based aeronautical mobile and fixed radio equipment; Harmonised Standard for ElectroMagnetic Compatibility

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

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**ElectroMagnetic Compatibility (EMC)  
standard for radio equipment and services;  
Part 22: Specific conditions for ground based  
aeronautical mobile and fixed radio equipment;  
Harmonised Standard for ElectroMagnetic Compatibility**

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**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.

The present document is part 22 of a multi-part deliverable. Full details of the entire series can be found in part 1 [1].

National transposition dates	
Date of adoption of this EN:	8 October 2020
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Date of withdrawal of any conflicting National Standard (dow):	31 July 2022

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# 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 covers in respect of ElectroMagnetic Compatibility (EMC), the assessment of:

- 1) ground based aeronautical VHF radio communications equipment characterized by the following operating conditions:
  - a) operating in the frequency range 118 MHz to 136,975 MHz, at 8,33 kHz or 25 kHz channel spacing;
  - b) using DSB AM modulation;
- 2) ground-based UHF radio transmitters, receivers and transceivers for the UHF aeronautical mobile service characterized by the following operating conditions:
  - a) operating in the frequency range 225 MHz to 399,975 MHz at 12,5 kHz or 25 kHz channel spacing;
  - b) using DSB AM modulation;
- 3) VDL Mode 2 ground base station radio equipment operating in the frequency range 117,975 MHz to 137,000 MHz;
- 4) VDL Mode 4 ground base station radio equipment operating in the frequency range 112,000 MHz to 136,975 MHz.

NOTE: The relationship between the present document and essential requirements of article 3.1(b) of Directive 2014/53/EU [i.1] is given in Annex A.

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## 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.

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

- [1] ETSI EN 301 489-1 (V2.2.3) (11-2019): "ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements; Harmonised Standard for ElectroMagnetic Compatibility".
- [2] ETSI EN 301 841-1 (V1.4.1) (04-2015): "VHF air-ground Digital Link (VDL) Mode 2; Technical characteristics and methods of measurement for ground-based equipment; Part 1: Physical layer and MAC sub-layer".
- [3] ETSI EN 301 842-1 (V1.4.1) (04-2015): "VHF air-ground Digital Link (VDL) Mode 4 radio equipment; Technical characteristics and methods of measurement for ground-based equipment; Part 1: EN for ground equipment".
- [4] ETSI EN 300 676-1 (V1.5.2) (03-2011): "Ground-based VHF hand-held, mobile and fixed radio transmitters, receivers and transceivers for the VHF aeronautical mobile service using amplitude modulation; Part 1: Technical characteristics and methods of measurement".

- [5] ETSI EN 302 617 (V2.3.1) (07-2018): "Ground-based UHF radio transmitters, receivers and transceivers for the UHF aeronautical mobile service using amplitude modulation; Harmonised Standard for access to radio spectrum".

## 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] 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] ITU Radio Regulations (2016).
- [i.4] Recommendation ITU-T P.53: "Psophometer for use on telephone-type circuits".

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