

<b>STN</b>	<b>Elektromagnetická kompatibilita (EMC) norma na rádiové zariadenia a služby</b> <b>Časť 12: Osobitné podmienky pre koncové stanice s veľmi malou apertúrou, družicové interaktívne zemské stanice pracujúce vo frekvenčnom rozsahu medzi 4 GHz a 30 GHz v pevnej družicovej službe (FSS)</b> <b>Harmonizovaná norma pre elektromagnetickú kompatibilitu</b>	<b>STN</b> <b>EN 301 489-12</b> <b>V3.2.1</b>  87 1489
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ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 12: Specific conditions for Very Small Aperture Terminal, Satellite Interactive Earth Stations operated in the frequency ranges between 4 GHz and 30 GHz in the Fixed Satellite Service (FSS); Harmonised Standard for ElectroMagnetic Compatibility

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

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 05/22

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# ETSI EN 301 489-12 V3.2.1 (2021-11)



**ElectroMagnetic Compatibility (EMC)  
standard for radio equipment and services;  
Part 12: Specific conditions for Very Small Aperture  
Terminal, Satellite Interactive Earth Stations operated  
in the frequency ranges between 4 GHz and 30 GHz  
in the Fixed Satellite Service (FSS);  
Harmonised Standard for ElectroMagnetic Compatibility**

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**Reference**REN/ERM-EMC-404

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F-06921 Sophia Antipolis Cedex - FRANCE

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Tel.: +33 4 92 94 42 00 Fax: +33 4 93 65 47 16

Siret N° 348 623 562 00017 - APE 7112B  
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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.6] 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.5].

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 12 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:	19 November 2021
Date of latest announcement of this EN (doa):	28 February 2022
Date of latest publication of new National Standard or endorsement of this EN (dop/e):	31 August 2022
Date of withdrawal of any conflicting National Standard (dow):	31 August 2023

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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 specifies technical characteristics and methods of measurement for the Earth Stations (ESs) operating in the frequency ranges between 3,625 GHz and 30 GHz in the Fixed Satellite Service (FSS) bands, and associated ancillary equipment in respect of ElectroMagnetic Compatibility (EMC).

Technical specifications related to the antenna port and emissions from the enclosure port of the Earth Stations (ESs) are not included in the present document. Such technical specifications are found in the relevant product standards for the effective use of the radio spectrum, see table 1.

Emissions requirements in the present document are only specified for frequencies above 9 kHz.

**Table 1: Radio Technologies in the scope of the present document**

Technology	ETSI Standard
VSAT for Transmit-only, transmit/receive or receive-only satellite Earth Stations operating in the 11/12/14 GHz frequency bands.	ETSI EN 301 428 [i.7]
ES for Satellite News Gathering Transportable Earth Stations (SNG TESSs) operating in the 11 GHz to 12 GHz and 13 GHz to 14 GHz frequency bands.	ETSI EN 301 430 [i.8]
VSAT for Transmit-only, transmit-and-receive, receive-only satellite Earth Stations operating in the 4 GHz to 6 GHz frequency bands.	ETSI EN 301 443 [i.9]
ES for Satellite Interactive Terminals (SIT) and Satellite User Terminals (SUT) transmitting towards satellites in geostationary orbit in the 29,5 GHz to 30 GHz frequency bands.	ETSI EN 301 459 [i.10]
Satellite Interactive Terminals (SIT) and Satellite User Terminals (SUT) transmitting towards satellites in geostationary orbit, operating in the 27,5 GHz to 29,5 GHz frequency bands.	ETSI EN 301 360 [i.11]
ES for Earth Stations On Mobile Platforms (ESOMP) transmitting towards satellites in geostationary orbit, operating in the 27,5 GHz to 30 GHz frequency bands.	ETSI EN 303 978 [i.12]

Definitions of the type of Earth Stations (ESs) operating in the frequency ranges between 3,625 GHz and 30 GHz in the Fixed Satellite Service (FSS) covered by the present document are given in annex B. The environmental classification used in the present document is as stated in ETSI EN 301 489-1 [1].

NOTE: The relationship between the present document and essential requirements of article 3.1(b) of Directive 2014/53/EU [i.5] is given in annex A.

## 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.

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

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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] Void.

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- [i.1] Void.
- [i.2] Void.
- [i.3] ERC/DEC(00)08: "ERC Decision of 19 October 2000 on the use of the band 10.7 - 12.5 GHz by the fixed service and Earth stations of the broadcasting-satellite and fixed-satellite Service (space-to-Earth)".
- [i.4] Void.
- [i.5] 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.6] 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.7] ETSI EN 301 428: "Satellite Earth Stations and Systems (SES); Harmonized EN for Very Small Aperture Terminal (VSAT); Transmit-only, transmit/receive or receive-only satellite earth stations operating in the 11/12/14 GHz frequency bands covering essential requirements under article 3.2 of the R&TTE directive".
- [i.8] ETSI EN 301 430: "Satellite Earth Stations and Systems (SES); Harmonised Standard for Satellite News Gathering Transportable Earth Stations (SNG TES) operating in the 11 GHz to 12 GHz/13 GHz to 14 GHz frequency bands covering the essential requirements of article 3.2 of the Directive 2014/53/EU".
- [i.9] ETSI EN 301 443: "Satellite Earth Stations and Systems (SES); Harmonised Standard for Very Small Aperture Terminal (VSAT); Transmit-only, transmit-and-receive, receive-only satellite earth stations operating in the 4 GHz and 6 GHz frequency bands covering the essential requirements of article 3.2 of the Directive 2014/53/EU".
- [i.10] ETSI EN 301 459: "Satellite Earth Stations and Systems (SES); Harmonised Standard for Satellite Interactive Terminals (SIT) and Satellite User Terminals (SUT) transmitting towards satellites in geostationary orbit, operating in the 29,5 GHz to 30,0 GHz frequency bands covering the essential requirements of article 3.2 of the Directive 2014/53/EU".
- [i.11] ETSI EN 301 360: "Satellite Earth Stations and Systems (SES); Harmonised Standard for Satellite Interactive Terminals (SIT) and Satellite User Terminals (SUT) transmitting towards satellites in geostationary orbit, operating in the 27,5 GHz to 29,5 GHz frequency bands covering the essential requirements of article 3.2 of the Directive 2014/53/EU".
- [i.12] ETSI EN 303 978: "Satellite Earth Stations and Systems (SES); Harmonised Standard for Earth Stations on Mobile Platforms (ESOMP) transmitting towards satellites in geostationary orbit, operating in the 27,5 GHz to 30,0 GHz frequency bands covering the essential requirements of article 3.2 of the Directive 2014/53/EU".
- [i.13] ITU Radio Regulations (2020).

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