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# Elektromagnetická kompatibilita (EMC), norma na rádiové zariadenia a služby

Časť 19: Osobitné podmienky na pohyblivé zemské stanice určené len na príjem (ROMES) pracujúce v pásme 1,5 GHz a poskytujúce dátovú komunikáciu a prijímače GNSS pracujúce v pásme RNSS poskytujúce údaje o polohe, navigácii a časovaní Harmonizovaná norma pre elektromagnetickú

kompatibilitu

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ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 19: Specific conditions for Receive Only Mobile Earth Stations (ROMES) operating in the 1,5 GHz band providing data communications and GNSS receivers operating in the RNSS band providing positioning, navigation, and timing data; 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. 03/23

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ElectroMagnetic Compatibility (EMC)
standard for radio equipment and services;
Part 19: Specific conditions for Receive Only Mobile
Earth Stations (ROMES) operating in the 1,5 GHz band
providing data communications and GNSS receivers operating
in the RNSS band providing positioning, navigation,
and timing data;

Harmonised Standard for ElectroMagnetic Compatibility

#### Reference

### REN/ERM-EMC-406

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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 19 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:	30 August 2022		
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# Modal verbs terminology

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## 1 Scope

The present document covers the assessment of Receive Only Mobile Earth Stations (ROMES) and Global Navigation Satellite System (GNSS) receivers in respect of electromagnetic compatibility.

ROMES operate in the Land Mobile Satellite Service (LMSS) space to earth bands, 1 518 MHz to 1 559 MHz, allocated by the ITU Radio Regulations [i.3]. ROMES operate as part of a satellite system providing one way data communications.

Global Navigation Satellite System (GNSS) receivers operate in either or both of the space to earth RNSS frequency bands of 1 164 MHz to 1 300 MHz and 1 559 MHz to 1 610 MHz defined as "A radiodetermination-satellite service used for the purpose of radionavigation" (article 1.43 of ITU Radio Regulations [i.3]) with the ability to receive any GNSS (e.g. Galileo, Global Positioning System (GPS), BeiDou (BDS), GLObal NAvigation Satellite System (GLONASS), Space Based Augmentation Systems (SBAS)).

Technical specifications related to the antenna port and emissions from the enclosure port of ROMES and GNSS 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 in table 1.

Table 1: Radio Technologies in Scope of the present document

Technology	ETSI Standard
ROMES	ETSI EN 300 487 [i.4]: "Satellite Earth Stations and Systems (SES); Harmonised Standard for
	Receive-Only Mobile Earth Stations (ROMES) providing data communications operating in the 1,5 GHz
	frequency band; Radio Frequency (RF) specifications covering the essential requirements of article 3.2
	of the Directive 2014/53/EU".
GNSS	ETSI EN 303 413 [i.5]: "Satellite Earth Stations and Systems (SES); Global Navigation Satellite System
	(GNSS) receivers; Radio equipment operating in the 1 164 MHz to 1 300 MHz and 1 559 MHz to
	1 610 MHz frequency bands; Harmonised Standard covering the essential requirements of article 3.2
	of Directive 2014/53/EU".

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

The present document specifies the applicable test conditions, performance assessment and performance criteria for ROMES, GNSS and associated ancillary equipment.

ROMESs and GNSS can have several configurations, including:

- vehicular equipment;
- portable equipment;
- fixed equipment;
- a number of modules including a display/control interface to the user.

The performance criteria used in the present document require that the satellite communications system of which the ROMES and GNSS is a part provides reliable delivery of data or messages.

The environmental classification and the emission and immunity requirements used in the present document are as stated in ETSI EN 301 489-1 [1], except for any special conditions included in the present document.

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.

### 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".

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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] ETSI EN 300 487 (V2.1.2) (11-2016): "Satellite Earth Stations and Systems (SES); Harmonised Standard for Receive-Only Mobile Earth Stations (ROMES) providing data communications operating in the 1,5 GHz frequency band; Radio Frequency (RF) specifications covering the essential requirements of article 3.2 of the Directive 2014/53/EU".
- [i.5] ETSI EN 303 413 (V1.2.1) (04-2021): "Satellite Earth Stations and Systems (SES); Global Navigation Satellite System (GNSS) receivers; Radio equipment operating in the 1 164 MHz to 1 300 MHz and 1 559 MHz to 1 610 MHz frequency bands; Harmonised Standard for access to radio spectrum".

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