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STN	**Družicové zemské stanice a systémy (SES). Harmonizovaná norma na pohyblivé družicové zemské stanice (MES) poskytujúce prenos dát nízkou prenosovou rýchlosťou, okrem leteckých pohyblivých družicových zemských staníc, pracujúce vo frekvenčných pásmach 11/12/14 GHz, vzťahujúca sa na základné požiadavky podľa článku 3.2 smernice 2014/53/EÚ.**	**STN EN 301 427 V2.1.1** 87 1427

Satellite Earth Stations and Systems (SES); Harmonised Standard for low data rate Mobile satellite Earth Stations (MES) except aeronautical mobile satellite earth stations, operating in the 11/12/14 GHz frequency bands covering the essential requirements of article 3.2 of the Directive 2014/53/EU

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. 02/17

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Contents

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Foreword

This Harmonised European Standard (EN) has been produced by ETSI Technical Committee Satellite Earth Stations and Systems (SES).

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 [3].

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:	16 May 2016
Date of latest announcement of this EN (doa):	31 August 2016
Date of latest publication of new National Standard or endorsement of this EN (dop/e):	28 February 2017
Date of withdrawal of any conflicting National Standard (dow):	28 February 2018

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).

"**must**" and "**must not**" are **NOT** allowed in ETSI deliverables except when used in direct citation.

Introduction

The present document is part of a set of standards developed by ETSI and is designed to fit in a modular structure to cover all radio equipment under the RE Directive [3]. The modular structure is shown in ETSI EG 201 399 [i.1].

Figure 1: Void

The present document is based on ETSI TBR 027 [i.2].

The requirements have been selected to ensure an adequate level of compatibility with other radio services. The levels, however, do not cover extreme cases which may occur in any location but with a low probability of occurrence.

The present document may not cover those cases where a potential source of interference which is producing individually repeated transient phenomena or a continuous phenomenon is present, e.g. a radar or broadcast site in the near vicinity. In such a case it may be necessary to use special protection applied to either the source of interference, or the interfered part or both.

The present document does not contain any requirement, recommendation or information about the installation of the MES.

The determination of the parameters of the user earth stations using a given geostationary satellite for the protection of the spectrum allocated to that satellite, is considered to be under the responsibility of the satellite operator or the satellite network operators.

1 Scope

The present document applies to Mobile Earth Stations (MES), except aeronautical mobile earth stations, which have the following characteristics:

- The MES are operating in one or more frequency ranges of the Fixed Satellite Service (FSS):
  - 10,70 GHz to 11,70 GHz (space to earth);
  - 12,50 GHz to 12,75 GHz (space to earth);
  - 14,00 GHz to 14,25 GHz (earth to space).

Because the transmissions from the MES to the Satellite in the 14,00 GHz to 14,25 GHz band fall under a secondary allocation, the transmissions should not cause harmful interference to primary services (e.g. the Fixed Satellite Service (FSS)) and at the same time cannot claim protection from harmful interference from those services.

- The MES may be either:
  - a Land Mobile Earth Station (LMES) radio equipment; and/or
  - a Maritime Mobile Earth Station (MMES) radio equipment not providing those distress and safety functions required by the International Maritime Organization (IMO).
- These LMESs could be either vehicle mounted or portable equipment.
- These MMESs are installable equipment on ships.
- The MES could consist of a number of modules including a keyboard interface to the user.
- The MES use linear polarization.
- The MES operate through a geostationary satellite at least 3° away from any other geostationary satellite operating in the same frequency band and covering the same area.
- The antenna of the MES may be omnidirectional or directional with a means of tracking the satellite.
- The MES are operating as part of a satellite network used for the distribution and/or exchange of information between users.
- The MES are controlled and monitored by a Network Control Facility (NCF). The NCF is outside the scope of the present document.

The present document applies to the MES with its ancillary equipment and its various terrestrial ports, and when operated within the boundary limits of the operational environmental profile declared by the manufacturer.

The present document is intended to cover the provisions of Directive 2014/53/EU [3] (RE Directive) article 3.2, which states 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".

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 RE Directive [3] may apply to equipment within the scope of the present document.

NOTE: A list of such ENs is included on the ETSI web site.

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 http://docbox.etsi.org/Reference.

NOTE: While any hyperlinks included in this clause were valid at the time of publication, ETSI cannot guarantee their long term validity.

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

[1] Void.

[2] CISPR 16-1 (07-2007): "Specification for radio disturbance and immunity measuring apparatus and methods; Part 1: Radio disturbance and immunity measuring apparatus".

[3] 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 (RE Directive).

2.2 Informative 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.

NOTE: While any hyperlinks included in this clause were valid at the time of publication, ETSI cannot guarantee their long term validity.

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] ETSI EG 201 399: "Electromagnetic compatibility and Radio spectrum Matters (ERM); A guide to the production of Harmonized Standards for application under the Radio & Telecommunication Terminal Equipment Directive 1999/5/EC (R&TTE) and a first guide on the impact of the Radio Equipment Directive 2014/53/EU (RED) on Harmonized Standards".

[i.2] ETSI TBR 027: "Satellite Earth Stations and Systems (SES); Low data rate Land Mobile satellite Earth Stations (LMES) operating in the 11/12/14 GHz frequency bands".

[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.