ICS 33.060.30, 33.070.40 SLOVENSKÁ TECHNICKÁ NORMA Február 2017

STN	**Družicové zemské stanice a systémy (SES). Harmonizovaná norma na pohyblivé zemské stanice (MES) poskytujúce dátovú komunikáciu s nízkou bitovou rýchlosťou (LBRDC), využívajúce družice s nízkou obežnou dráhou (LEO), pracujúce pod 1 GHz, pokrývajúca základné požiadavky podľa článku 3.2 smernice 2014/53/EÚ.**	**STN EN 301 721 V2.1.1** 87 1721

Satellite Earth Stations and Systems (SES); Harmonised Standard for Mobile Earth Stations (MES) providing Low Bit Rate Data Communications (LBRDC) using Low Earth Orbiting (LEO) satellites operating below 1 GHz frequency band 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. 01/17

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ETSI EN 301 721 V2.1.1 (2016-05)

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Harmonised Standard for Mobile Earth Stations (MES) providing Low Bit Rate Data Communications (LBRDC) using Low Earth Orbiting (LEO) satellites operating below 1 GHz frequency band covering the essential requirements of article 3.2 of the Directive 2014/53/EU**

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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.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 [7].

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:	12 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).

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Introduction

ETSI has designed a modular structure for the standards. Each standard is a module in the structure. The modular structure is shown in ETSI EG 201 399 [i.1].

Figure 1: Void

The present document is based on ETSI EN 300 721 [6].

The requirements of the present document have been selected to ensure an adequate level of compatibility with other radio services.

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

The determination of the parameters of the user earth stations using a given satellite constellation for the protection of the spectrum allocated to that satellite constellation, 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) providing Low Bit Rate Data Communications (LBRDC) using Low Earth Orbiting (LEO) satellites and which have the following characteristics:

- the MES could be a Based MES (BMES), a Vehicle mounted MES (VMES), or a Portable MES (PMES);
- the MESs operate through satellites in Low Earth Orbit (LEO) as part of a network providing Low Bit Rate Data Communications (LBRDC);
- these radio equipment types are capable of operating in all or any part of the frequency bands given in table 1.

Table 1: Frequency ranges

MES Transmit frequencies and Service allocations (MHz)		MES Receive frequencies and Service allocations (MHz)	
148 to 149,9	MSS	137 to 137,025	MSS
149,9 to 150,05	LMSS	137,025 to 137,175	MSS
235 to 322	MSS	137,175 to 137,825	MSS
335,4 to 399,9	MSS	137,825 to 138	MSS
399,9 to 400,05	LMSS	235 to 322	MSS
		335,4 to 399,9	MSS
		400,15 to 401	MSS

The present document is intended to cover the provisions of Directive 2014/53/EU [7] (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 [7] may apply to equipment within the scope of the present document.

NOTE 1: A list of such ENs is included on the ETSI web site.

NOTE 2: The MESs are controlled and monitored by a Network Control Facility (NCF). The NCF is outside the scope of the present document.

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] IEC Publication 60068-2-1 (2007): "Environmental testing - Part 2: Tests. Tests A: Cold".

[3] IEC Publication 60068-2-2 (2007): "Environmental testing - Part 2: Tests. Tests B: Dry heat".

[4] IEC Publication 60068-2-64 (2008): "Environmental testing - Part 2-64: Tests - Test Fh: Vibration, broadband random and guidance".

[5] Void.

[6] ETSI EN 300 721 (V1.2.2) (07-1999): "Satellite Earth Stations and Systems (SES); Mobile Earth Stations (MES) providing Low Bit Rate Data Communications (LBRDC) using Low Earth Orbiting (LEO) satellites operating below 1 GHz".

[7] 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.

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.

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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] ETSI EG 201 399 (V3.1.1): "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] 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.