
TECHNICAL SPECIFICATION

Requirements for V-SAT Terminals and Ancillary Equipment

TS RE 021, Version 1.0

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1 General requirements

Technical specification has been prepared and approved by the Telecommunications Regulatory Authority (TDRA) based on the Telecommunication apparatus Type Approval Regime.

Several technical specifications may apply to the equipment. If equipment within the scope of this technical specification also incorporates functions that are covered by another technical specification, the relevant technical specification is applied to each function separately. The influence of one function on the other is taken into account.

2 Scope

This technical specification applies to V-SAT Equipment and Ancillary Equipment.

This technical specification defines minimum technical requirements for health and safety, electromagnetic compatibility, efficient use of radio spectrum and additional essential requirements based on the Telecommunication apparatus Type Approval Regime.

Unless the context requires otherwise, the expressions and wordings appearing in the Telecommunication apparatus Type Approval Regime shall have the same meaning described thereto.

3 Technical Requirements

3.1 Efficient use of radio spectrum

The equipment shall comply with allocated frequency bands given in the National Frequency Allocation Table (NFAT). The following frequency bands have been allocated for use by V-SAT transceiver equipment in L – band (1.5/1.6 GHz), C - band (4 GHz, 6 GHz) and Ku - band (11 GHz, 12 GHz and 14 GHz).

Frequencies within these bands will be assigned by TDRA as appropriate.

The equipment shall meet the requirements of following standard(s):

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- EN 301 426 Satellite earth stations and Systems (SES); Harmonised EN for low data rate land mobile satellite earth stations (LMES) operating in the 1.5/1.6 GHz frequency bands covering essential requirements under Article 3(2) of the R&TTE directive.
- EN 301 428 Satellite Earth stations and Systems (SES); Harmonised 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.
- EN 301 443 Satellite Earth stations and Systems (SES); Harmonised EN for Very Small Aperture Terminal (VSAT); Transmit-only, transmit-and-receive, receive-only satellite earth stations operating in the 4GHz and 6GHz frequency bands covering essential requirements under article 3.2 of the R&TTE directive.

3.2 Electromagnetic compatibility

The equipment shall meet the requirements of following standard(s):

- EN 301 489-1 Electromagnetic compatibility and Radio spectrum Matters (ERM); Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements.
- EN 301 489-12 Electromagnetic compatibility and Radio spectrum Matters (ERM); Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 12: Specific conditions for Very Small Aperture Terminal (VSAT), Satellite Interactive Earth Stations operated in the frequency ranges between 4GHz and 30GHz in the Fixed Satellite Service (FSS).

3.3 Health and safety

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The equipment shall meet the requirements of Technical specification TS HS 001.

3.4 Additional essential requirements

A licence must be obtained before equipment of this type can be used.

3.5 Validity of standards

If no issue or revision number is quoted along with the title of a standard, the valid edition should be used. The valid of the standard can be checked on:

- For EN standards:

http://ec.europa.eu/growth/single-market/european-standards/harmonised-standards/rte/index_en.htm;