هيئة الاتصالات والفضاء والتقنية
Communications, Space & Technology Commission

CST Technical Specification

Specification for VSAT Terminals and Ancillary Equipment

Document Number:	RI026
Revision:	Issue 04
Date:	Feb 2024

This technical specification is issued by The Communications, Space and Technology Commission in the Kingdom of Saudi Arabia in accordance with the provisions of the Communications and Information Technology Act issued by Royal Decree No. (M/106) dated 02/11/1443 AH and its bylaw, and the Commission's regulation.

Communications, Space and Technology Commission (CST)

Kingdom of Saudi Arabia - P.O Box 75606 – Riyadh 11588

Telephone:	+ 966 1 14618000
Fax:	+ 966 1 14618120
E-mail:	info@cst.gov.sa
Website:	www.cst.gov.sa

Document History Table

Version	Issue Date	Description
Issue 1	March 2006	
Issue 2	January 2010	
Issue 3	July 2021	
Issue 4	Feb 2024	

Table of contents

1- Scope

1-1 This specification applies VSAT terminals and ancillary equipment.

1-2 The very small aperture terminal or VSAT service is a bidirectional communication technology offering a sattelite based communication between ground based mobile terminals often used for the transfer of video and audio data between a mobile station in a vehicle and a central broadcasting stations.

2- Enforcement

2-1 This specification shall enter into force from issue date.

2-2 Any previous version of this technical specification is withdrawn.

3- General Requirements

3-1 All equipment must comply with the requirement of CST specification GEN001, be safe and must not adversely affect other electrical equipment.

3-2 All telecommunications and radio terminal equipment must comply with the relevant technical specifications established by CST. In addition, such equipment may be subject to regulations for Declaration of Conformity or registration. Please visit www.CST.gov.sa for details.

3-3 If more than one interface type is offered by a piece of equipment, each interface must meet the applicable technical specifications.

3-4 It is mandatory that test reports are obtained from a laboratory that has been accredited by a body that is a member of the ILAC Mutual Recognition Arrangement.

4- Limits and conditions

Testing should be carried out to ensure compliance with the listed specifications.

Frequency band	Max Output Power or Magnetic Field	Usage	Standard	Comments
Subject to licensing	Subject to licensing	Fixed Satellite Services (FSS)	EN 301 426 EN 301 489-12	
Subject to licensing	Subject to licensing	VSAT	EN301 443 EN 301 489-12	

5- Licensing Requirements

5-1 A spectrum license is required.

5-2 Obtaining one of the following permits is required for the general category license:

5-2-1 Provisioning of Telecommunication Services Over Non-terrestrial Networks (NTN)

5-2-2 Provisioning of Operation Services of Non-terrestrial Networks (NTN)

6- Additional Requirements

There is no additional requirements for this technical specification.

7- References

The following referenced documents are indispensable for the application of this document. If no issue or revision number is quoted along with the title of a technical specification or standard, the latest published version should be used.

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 301 443

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.

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 301 489-1

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).