

## CST Technical Specification

# Specification for Satellite Interactive Terminals (SIT), Satellite User Terminals (SUT) and Ancillary Equipment

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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.

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**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 .....	4
2- Enforcement.....	4
3- General Requirements.....	5
4- Limits and conditions .....	5
5- Licensing Requirements .....	6
6- Additional Requirements.....	6
7- References .....	7

## 1- Scope

- 4-1 This specification applies to Satellite Interactive Terminals (SIT) and Satellite User Terminals (SUT) and ancillary equipment.
- 4-2 The Satellite Interactive and User Terminals are bidirectional terminals for the communication via satellite. The terminals are either installed at fixed places or mobile.

## 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- 2-2 Any previous version of this technical specification is withdrawn.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](http://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
4.0 – 4.2 GHz	Subject to licensing	SIT/SUT equipment	EN 301 459 EN 301 360 EN 301 489-12	
5.725 – 7.075 GHz	Subject to licensing	SIT/SUT equipment	EN 301 459 EN 301 360 EN 301 489-12	
10.7 – 13.25 GHz	Subject to licensing	SIT/SUT equipment	EN 301 459 EN 301 360 EN 301 489-12	
13.75 – 14.5 GHz	Subject to licensing	SIT/SUT equipment	EN 301 459 EN 301 360	

			EN 301 489-12	
<b>17.3 – 18.4 GHz</b>	Subject to licensing	SIT/SUT equipment	EN 301 459 EN 301 360 EN 301 489-12	
<b>17.7 – 20.2 GHz</b>	Subject to licensing	SIT/SUT equipment	EN 301 459 EN 301 360 EN 301 489-12	
<b>27.5 – 30.0 GHz</b>	Subject to licensing	SIT/SUT equipment	EN 301 459 EN 301 360 EN 301 489-12	

## 5- Licensing Requirements

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 301 459**

Satellite Earth stations and Systems (SES); Harmonised EN for Satellite Interactive Terminal (SIT) and Satellite User Terminals (SUT) transmitting towards satellites in geostationary orbit in the 29.5 – 30.0 GHz frequency bands covering essential requirements under article 3.2 of the R&TTE directive.

### **EN 301 360**

Satellite Earth stations and Systems (SES); Harmonised EN for Satellite Interactive Terminal (SIT) and Satellite User Terminals (SUT) transmitting towards satellites in geostationary orbit in the 27.5 – 29.5 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).

