

CST Technical Specification

Specification for Earth Stations in Motion

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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

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1- Scope

- 1-1 This specification applies to Satellite Earth Stations and Systems.
- 1-2 Earth stations and systems are used to establish a communication link between any non-stationary platform and a satellite.

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- 2-2 Any previous version of this technical specification is withdrawn.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
27.5 – 30.0 GHz	10mW ERP	Satellite Earth Stations and Systems	EN 303 978 EN 301 489-20	Earth to space
17.30 – 20.20 GHz	2mW ERP	Satellite Earth Stations and Systems	EN 303 978 EN 301 489-20	Space to earth

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 EN 303 978

Satellite Earth Stations and Systems (SES); Harmonised Standard for Earth Stations on Mobile Platforms (ESOMP) transmitting towards satellites in geostationary orbit, operating in the 27,5 GHz to 30,0 GHz frequency bands covering the essential requirements of article 3.2 of the Directive 2014/53/EU

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 301 489-20

ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 20: Specific conditions for Mobile Earth Stations (MES) used in the Mobile Satellite Services (MSS); Harmonised Standard covering the essential requirements of article 3.1(b) of Directive 2014/53/EU