

CITC Technical Specification

Specification for Mobile Satellite Service (MSS) terminals operating at frequencies above 1 GHz and ancillary equipment

Document Number: RI023

Revision: Issue 03

Date: 02/03/2021

Issued by The Communications and Information Technology Commission of Saudi Arabia in accordance with article 84 of the Telecommunications Bylaw.

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Scope

This specification applies to Mobile Satellite Service (MSS) terminals operating at frequencies above 1 GHz and ancillary equipment.

The MSS is a radio communication service between mobile stations located on the earth and one or more space stations.

Enforcement

This specification shall enter into force on 01/06/2021.

Any previous version of this technical specification is withdrawn.

General Requirements

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

All telecommunications and radio terminal equipment must comply with the relevant technical specifications established by CITC. In addition, such equipment may be subject to regulations for Declaration of Conformity or registration. See www.citc.gov.sa for details.

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

Further information on the characteristics and presentation of network interfaces can be found by visiting operator's website.

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.

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 |
|------------------------|------------------------------------|------------------------|---|----------------|
| 1.518 - 1.559 GHz | Subject to licensing | Ground based MSS | EN 301 426 EN 301 444 EN 301 489-20 | Broadcast only |
| 1.6138 – 1.6100 GHz | Subject to licensing | Ground based MSS | EN 301 426 EN 301 444 EN 301 489-20 | Broadcast only |

| 1.668 – 1.675 GHz | Subject to licensing | Ground based MSS | EN 301 426 EN 301 444 EN 301 489-20 | Broadcast only |
|----------------------|-------------------------|------------------------|---|----------------|
| 1.98 – 2.01 GHz | Subject to licensing | Ground based MSS | EN 302 574 EN 301 489-20 | Broadcast only |
| 2.17 – 2.20 GHz | Subject to licensing | Ground based MSS | EN 302 574 EN 301 489-20 | Broadcast only |
| 14.0 – 14.5 GHz | Subject to licensing | Ground based MSS | EN 301 427 EN 301 489-20 | Broadcast only |

Licensing Requirements

An operator and spectrum license is required to use this service.

Additional Requirements

There is no additional requirements for this technical specification.

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 301 427

Satellite Earth stations and Systems (SES); Harmonised EN for low data rate land mobile satellite earth stations (LMES) operating in the 11/12/14 GHz frequency bands covering essential requirements under Article 3(2) of the R&TTE directive.

EN 301 444

Satellite Earth stations and Systems (SES); Harmonised EN for Land Mobile Earth Stations (LMES) operating in the 1.5 GHz and 1.6 GHz bands providing voice and /or data communications covering essential requirements under article 3.2 of the R&TTE directive.

EN 302 574-1

Satellite Earth Stations and Systems (SES); Harmonised Standard for Mobile Earth Stations (MES) operating in the 1 980 MHz to 2 010 MHz (earth-to-space) and 2 170 MHz to 2 200 MHz (space-to-earth) frequency bands covering the essential requirements of article 3.2 of the Directive

2014/53/EU; Part 1: Complementary Ground Component (CGC) for wideband systems

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 and Radio spectrum Matters (ERM); Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 20: Specific condition for Mobile Earth Stations (MES) used in the Mobile Satellite Services (MSS).

History

For reference, the latest versions of the technical specifications are published on the CITC website www.citc.gov.sa.

| Description | Status | Date |
|-------------|---------|------------|
| | Issue 1 | 11/03/2006 |
| | Issue 2 | 10/01/2010 |
| | Issue 3 | 02/03/2021 |