



CITC Technical Specification

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Specification for Detection of Movement Equipment, Tanks Level Probing Radar Applications and Ancillary Equipment (Radiodetermination Applications)

Issued by The Communications and Information Technology Commission of Saudi Arabia in accordance with article 89 of the Telecommunications Bylaw.

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Scope

This document applies to Detection of Movement Equipment, Tanks Level Probing Radar Applications and Ancillary Equipment (Radiodetermination Applications).

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 <http://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.

Entry into force

This specification shall enter into force on 10/01/2010 G

Frequency of operation

Following table is showing information on frequency bands, maximum output power and applicable specification for use by detection of movement applications:

Frequency band	Maximum Output Power or Magnetic Field	ETSI Standard
2400 – 2483.5 MHz	25 mW	EN 300 440
9200 – 9500 MHz	25 mW	EN 300 440
9500 - 9975 MHz	25 mW	EN 300 440
10.5 – 10.6 GHz	500 mW	EN 300 440
13.4 – 14.0 GHz	25 mW	EN 300 440
24.05 – 24.25 GHz	100 mW	EN 300 440

Following table is showing information on frequency bands, maximum output power and applicable specification for use by Tank Level Probing Radar (TLPR):

Frequency Band	Power or Magnetic Field	ETSI Standard
4.5 – 7.0 GHz	-41.3 dBm/MHz*	EN 302 372
8.5 - 10.6 GHz	-41.3 dBm/MHz*	EN 302 372
24.05 - 27.00 GHz	-41.3 dBm/MHz*	EN 302 372
57 - 64 GHz	-41.3 dBm/MHz*	EN 302 372
75 - 85 GHz	-41.3 dBm/MHz*	EN 302 372

(*) The power limit is the radiated emission outside an enclosed tank structure. The maximum emission inside an enclosed tank structure is written in EN 302 372.

Proof of compliance

It is recommended 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.

Technical requirements

Testing should be carried out to ensure compliance with the following specifications:

EN 300 440-2

Electromagnetic compatibility and Radio spectrum Matters (ERM); Short Range Devices; radio equipment to be used in the 1 GHz to 40 GHz frequency range; Part 2: Harmonized EN under Article 3.2 of the R&TTE directive.

EN 302 372-2

Electromagnetic compatibility and Radio spectrum Matters (ERM); Short Range Devices (SRD); Equipment for Detection and Movement; Tanks Level Probing Radar (TLPR) operating in the frequency bands 5.8, 10, 25, 61 and 77 GHz; Part 2: Harmonized EN 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 301 489-3

Electromagnetic compatibility and Radio spectrum Matters (ERM); Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 3: Specific conditions for Short Range Devices (SRD) operating on frequencies between 9 kHz and 40 GHz.

If no issue or revision number is quoted along with the title of a technical specification, the latest published version should be used.

General

In addition to meeting the above requirements, all equipment must comply with the requirement of CITC specifications GEN001, be safe and must not adversely affect other electrical equipment.

Additional requirements

There are no additional requirements exist for the use of radio interfaces used in detection of movement applications.

Obtaining technical standards

ETSI technical standards may be obtained free of charge for individual use from the ETSI website www.etsi.org.

Network information (only for network interfaces)

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

Document history

Description	Status	Date
	Issue 1	11/03/2006 G
	Issue 2	10/01/2010 G