هيئة الاتصالات وتقنية المعلومات
Communications and Information Technology Commission

CITC Technical Specification

Document Number: RI049
Revision: Issue 3
Date: 15/12/2018 G

Specification for Road Transport, Traffic Telematics and Intelligent Transport Systems

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

Communications and Information Technology Commission
Alnakheel Quarter
Riyadh

Telephone: + 966 11 461 8000
Fax: + 966 11 461 8120
E-mail: info@citc.gov.sa
Website: www.citc.gov.sa

Contents

This document comprises the following sections:

Scope 2
Entry into force 2
Frequency of operation 3
Proof of compliance 3
Technical requirements 3
Additional requirements 4
Obtaining technical standards 4
Network information (only for network interfaces) 5
Document history 5

Scope

This document applies to Road Transport, Traffic Telematics and Intelligent Transport Systems, including Automotive Short Range Radars.

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 15/12/2018 G.

Frequency of operation

The following table is showing information on frequency bands, maximum output power and applicable specifications:

Frequency band	Maximum Output Power or Magnetic Field	ETSI Standard
5.795 – 5.805 GHz	2 W e.i.r.p 8 W e.i.r.p. (Note 1)	EN 300 674
5.805 – 5.815 GHz	2 W e.i.r.p 8 W e.i.r.p. (Note 1)	EN 300 674 ES 200 674
24.05 – 24.25 GHz	≤ 20 dBm e.i.r.p.	EN 302 858
63 – 64 GHz	40 dBm e.i.r.p.	EN 302 686
76 – 77 GHz (Note 2)	55 dBm peak e.i.r.p.	EN 301 091
77 – 81 GHz	55 dBm peak e.i.r.p.	EN 302 264

Note 1: The use of 8 W e.i.r.p. is subject to individual radio license for each equipment installation..

Note 2: Fixed transportation infrastructure radars have to be of a scanning nature in order to limit the illumination time and ensure a minimum silent time to achieve coexistence with automotive radar systems.

Proof of compliance

It is required 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 as appropriate:

EN 300 674-2
Electromagnetic compatibility and Radio spectrum Matters (ERM); Road Transport and Traffic Telematics (RTTT); Dedicated Short Range Communication (DSRC) transmission equipment (500 kbit/s / 250 kbit/s) operating in the 5,8 GHz Industrial, Scientific and Medical (ISM) band; Part 2: Harmonized EN under Article 3.2 of the R&TTE Directive.

EN 301 091-2
Electromagnetic compatibility and Radio spectrum Matters (ERM); Road Transport and Traffic Telematics (RTTT) radar equipment operating in the

76 GHz to 77 GHz range; Part 2: Harmonized EN covering essential requirements of article 3.2 of the R&TTE directive.

EN 302 858
Electromagnetic compatibility and Radio spectrum Matters (ERM); Road Transport and Traffic Telematics (RTTT); Automotive radar equipment operating in the 24,05 GHz up to 24,25 GHz or 24,50 GHz frequency range; Part 2: Harmonized EN covering the essential requirements of article 3.2 of the R&TTE Directive

EN 302 686
Intelligent Transport Systems (ITS); Radiocommunications equipment operating in the 63 GHz to 64 GHz frequency band; Harmonized EN covering the essential requirements of article 3.2 of the R&TTE Directive

EN 302 264 - 2
Short Range Devices; Transport and Traffic Telematics (TTT);Short Range Radar equipment operating in the 77 GHz to 81 GHz band; Part 2: Harmonized EN covering the essential requirements of 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 requirements of CITC specifications GEN001, be safe and must not adversely affect other electrical equipment.

Additional requirements

A licence must be obtained before equipment of this type can be used.

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	29/09/2008 G
	Issue 3	15/12/2018 G