



CITC Technical Specification

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Specification for Navigation (Air) Equipment

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 Navigation (Air).

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 specifications:

Frequency band	Maximum Output Power or Magnetic Field	ETSI Standard
1.25 – 1,35 GHz 2,7 – 2,9 GHz 9,0 – 9,2 GHz	n.d.	Ground-radar equipment
1030 MHz	90 dBm	Secondary-radar equipment
328,6 – 335,4 MHz	n.d.	Glide path transmitter
960 – 1215 MHz	n.d.	Distance Measurement Equipment (DME)
108.0 – 117,975 MHz	n.d.	Rotating beacon
255-526,5 kHz	n.d.	Non-directional beacon (NDB)

75 MHz	n.d.	Marker Beacon
108,000 – 117,975 MHz	n.d.	Ground Based Augmentation System (GBAS)
108.000 – 111,975 MHz	n.d.	Localizer course
5031,0 – 5090,7 MHz	n.d.	Microwave Landing System

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

ITU Radio Regulations edition 2008

Recommendation ITU-R SM.329-10

Spurious Emissions.

Recommendation ITU-R M.1177-3

Techniques for measurement of spurious emissions of radar systems.

ICAO

Annex 10 to the Convention on International Civil Aviation,
Volume IV: Surveillance Radar and Collision Avoidance Systems.

ICAO

Annex 10 to the Convention on International Civil Aviation,
Volume I und V.

ICAO

Manual on Testing of Radio Navigation Aids, Doc 8071.

EUROCAE ED 52

MPS for conventional and Doppler VHF omni-range
(C VOR and D VOR) (ground equipment).

EUROCAE ED 53A

MOPS for microwave landing system (MLS) (ground equipment).

EUROCAE ED 57

MOPS for Distance Measuring Equipment (DME/N and DME/P)
(ground equipment)".

EUROCAE ED-114

MOPS for a Ground Based Augmentation System (GBAS) ground
facility to support CAT I approach and landing.

General

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

Additional requirements

A licence must be obtained before this kind of equipment can be used in the Kingdom. This licence will detail conditions of use and any additional requirements which must be met.

Obtaining technical standards

ITU Recommendations, ICAO documents and Eurocae standards obtained at cost from www.itu.int, www.icao.int and www.eurocae.org respectively.

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	10/01/2010 G