CITC Technical Specification

Document Number: RI090
Revision: Issue 1
Date: 10/01/2010 G

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.

Communications and Information Technology Commission
King Fahad Highway
Riyadh

Telephone: + 966 1 461 8050
Fax: + 966 1 461 8150
E-mail: info@citc.gov.sa
Website: www.citc.gov.sa

This publication is a translation. In case of divergence; the original Arabic text shall prevail.
Contents

This document comprises the following sections:

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

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:

<table>
<thead>
<tr>
<th>Frequency band</th>
<th>Maximum Output Power or Magnetic Field</th>
<th>ETSI Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.25 – 1.35 GHz</td>
<td>n.d.</td>
<td>Ground-radar equipment</td>
</tr>
<tr>
<td>2.7 – 2.9 GHz</td>
<td>n.d.</td>
<td></td>
</tr>
<tr>
<td>9.0 – 9.2 GHz</td>
<td>n.d.</td>
<td></td>
</tr>
<tr>
<td>1030 MHz</td>
<td>90 dBm</td>
<td>Secondary-radar equipment</td>
</tr>
<tr>
<td>328.6 – 335.4 MHz</td>
<td>n.d.</td>
<td>Glide path transmitter</td>
</tr>
<tr>
<td>960 – 1215 MHz</td>
<td>n.d.</td>
<td>Distance Measurement Equipment (DME)</td>
</tr>
<tr>
<td>108.0 – 117.975 MHz</td>
<td>n.d.</td>
<td>Rotating beacon</td>
</tr>
<tr>
<td>255-526.5 kHz</td>
<td>n.d.</td>
<td>Non-directional beacon (NDB)</td>
</tr>
<tr>
<td>Frequency Range</td>
<td>Frequency Limits</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------</td>
<td>------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>75 MHz</td>
<td>n.d.</td>
<td>Marker Beacon</td>
</tr>
<tr>
<td>108,000 – 117,975 MHz</td>
<td>n.d.</td>
<td>Ground Based System (GBAS)</td>
</tr>
<tr>
<td>108,000 – 111,975 MHz</td>
<td>n.d.</td>
<td>Localizer course</td>
</tr>
<tr>
<td>5031.0 – 5090.7 MHz</td>
<td>n.d.</td>
<td>Microwave Landing System</td>
</tr>
</tbody>
</table>

**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 I und V.

**ICAO**


**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 CITC 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

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

<table>
<thead>
<tr>
<th>Description</th>
<th>Status</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Issue 1</td>
<td></td>
<td>10/01/2010 G</td>
</tr>
</tbody>
</table>