CITC Technical Specification

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Specification for TETRA Base Stations and Ancillary 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.
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Scope

This document applies to TETRA Base Stations and Ancillary 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 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>350 MHz - 370 MHz (Up-link)</td>
<td>Nominal power of BS transmitters</td>
<td>EN 303 035</td>
</tr>
<tr>
<td>380 MHz - 385 MHz (Up-link)</td>
<td></td>
<td>EN 300 392</td>
</tr>
<tr>
<td>385 MHz . 390 MHz (Up-link)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>410 MHz – 420 MHz (Up-link)</td>
<td>40 W (Power Class 1)</td>
<td></td>
</tr>
<tr>
<td>450 MHz – 460 MHz (Up-link)</td>
<td>25 W (Power Class 2)</td>
<td></td>
</tr>
<tr>
<td>870 MHz – 876 MHz (Up-link)</td>
<td>15 W (Power Class 3)</td>
<td></td>
</tr>
<tr>
<td>350 MHz - 370 MHz (Downlink)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>390 MHz – 395 MHz (Downlink)</td>
<td>10 W (Power Class 4)</td>
<td></td>
</tr>
<tr>
<td>395 MHz – 399.99 MHz (Downlink)</td>
<td>6,3 W (Power Class 5)</td>
<td></td>
</tr>
<tr>
<td>420 MHz – 430 MHz (Downlink)</td>
<td>4 W (Power Class 6)</td>
<td></td>
</tr>
<tr>
<td>460 MHz – 470 MHz (Downlink)</td>
<td>2,5 W (Power Class 7)</td>
<td></td>
</tr>
<tr>
<td>915 MHz – 921 MHz (Downlink)</td>
<td>1,6 W (Power Class 8)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 W (Power Class 9)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0,6 W (Power Class 10)</td>
<td></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

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

**EN 303 035-1**

**EN 303 035-2**
Terrestrial Trunked Radio (TETRA); Harmonised EN for TETRA equipment covering essential requirements under article 3.2 of the R&TTE Directive;
Part 2: Direct Mode Operation.
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 301 489-18  
Electromagnetic compatibility and Radio spectrum Matters (ERM);  
Electromagnetic Comp ability (EMC) standard for radio equipment and services; Part 18: Specific conditions for Terrestrial Trunked Radio (TETRA) equipment.

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 specification GEN001, be safe and must not adversely affect other electrical equipment.

Additional requirements  
Additional requirements exist for the use of TETRA base stations and ancillary equipment. A licence must be obtained before equipment of this type can be used in the Kingdom. This licence will detail conditions of use and any additional requirements which must be met.

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

<table>
<thead>
<tr>
<th>Description</th>
<th>Status</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Issue 1</td>
<td>11/03/2006 G</td>
<td></td>
</tr>
<tr>
<td>Issue 2</td>
<td>10/01/2010 G</td>
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