



United Arab Emirates



TECHNICAL SPECIFICATION

Requirements for Connection to Digital Leased Lines

Version 1.0

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Telecommunications Regulatory Authority (TRA)
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Technical Specification, EMC and Safety Requirements, Version 1.0, Issued 16 Month 2006

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1. Scope

This specification lists the safety and Electromagnetic Compatibility requirements applicable to all radio and telecommunications terminal equipment intended to be used in the UAE.

2. Definitions

Unless the context requires otherwise, the expressions and wordings appearing in Federal Law by Decree No. (3) of 2003 Regarding the Organisation of the Telecommunications Sector shall have the same meaning ascribed thereto in the above-mentioned Federal Law by Decree, and the following expression and wording shall have the following meanings assigned thereto:

ANSI	American National Standards Institute ¹
CENELEC	European Committee for Electro-technical Standardisation ²
CISPR	International Special Committee for Radio Interference ³
IEC	International Electro-technical Commission ⁴
ITU	International Telecommunications Union ⁵
ETSI	European Telecommunications Standards Institute ⁶

3. Technical Requirements

General

All equipment shall comply with TRA specification TS001 concerning safety and EMC performance.

¹ ANSI standards can be obtained from, <http://webstore.ansi.org>

² CENELEC standards can be obtained from, www.cenelec.org

³ CISPR standards can be obtained from, www.cenelec.org

⁴ IEC standards can be obtained from, www.iec.ch

⁵ ITU standards can be obtained from, www.itu.int

⁶ ETSI standards can be obtained from, www.etsi.org



Specific

Unless stated otherwise below, the latest published versions of the following standards shall apply, as applicable to the interfaces supported by the terminal:

E1, 2.048 Mbit/s

It is recognised that a number of largely equivalent specifications exist for terminal equipment offering connection to E1 120Ω 2.048 Mb/s services; it is also recognised that a great number of manufacturers continue to reference older ETSI specifications such as TBR 12 and TBR13 for unstructured and unstructured interfaces respectively. Thus compliance shall be required with the appropriate standard from the following:

ETSI TBR12 Business TeleCommunications (BTC);
2 048 Kbit/s digital unstructured leased lines (D2048U);
Attachment requirements for terminal equipment interface

ETSI TBR13 Business TeleCommunications (BTC);
2 048 Kbit/s digital structured leased lines (D2048S);
Attachment requirements for terminal equipment interface

ETSI EN 300 248 Access and Terminals (AT); 2 048 Kbit/s digital unstructured leased line (D2048U); Terminal equipment interface



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E3, 34 Mb/s

It is recognised that a number of largely equivalent specifications exist for terminal equipment that offers connection to E3 34Mbs services; it is also recognised that a great number of manufacturers continue to reference older ETSI specifications such as ETSI TBR 24 for this technology. Thus compliance shall be required with the appropriate standard from the following:

ETSI EN 300 689 Access and Terminals (AT); 34Mbit/s digital leased line (D34U and D34S) Terminal equipment interface

ETSI TBR24 Business TeleCommunications (BTC); 34 Mbit/s digital unstructured and structured leased lines (D34U and D34S); Attachment requirements for terminal equipment interface

Co-directional G.703

ITU-T Recommendation G.703

General aspects of digital transmission systems terminal equipments
Physical/Electrical characteristics of Hierarchical Digital Interfaces

Nx64 Kb/s

ETSI TBR 014 Business Telecommunications (BTC);
64 Kbit/s digital unrestricted leased line with octet integrity (D64U);
Attachment requirements for terminal equipment interface



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Including

ETSI TBR 014/A1 Business TeleCommunications (BTC);
64 Kbit/s digital unrestricted leased line with octet integrity (D64U);
Attachment requirements for terminal equipment interface

Or

ETSI EN 300 290 Access and Terminals (AT); 64 Kbit/s digital unrestricted leased
line with octet integrity (D64U); Terminal equipment interface