



TECHNICAL SPECIFICATION

FOR

**SAFETY AND EMC REQUIREMENTS OF RADIO AND
TELECOMMUNICATIONS TERMINAL EQUIPMENT**

ISSUED BY

BOTSWANA TELECOMMUNICATIONS AUTHORITY

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Technical Specification for Safety and EMC Requirements of Radio and Telecommunications Terminal Equipment

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Scope

This specification applies to any radio and telecommunications terminal equipment, which is offered for sale in Botswana.

Where terminal equipment supports more than one interface type, each interface must meet the requirements applicable to it. It may therefore be necessary to make reference to additional specifications.

Where compliance with a European Norm(s) is required, the issue or version used should be the latest to have been published in the Official Journal of the European Community (OJEC) and be recognised as providing “presumption of conformity” under the European R&TTE Directive. Where internationally recognised equivalent standards are applied, the latest published version of the standard should be used

Entry into force

This specification shall enter into force on 01/12/12.

Document History

Description	Status	Date
First issue of type approval guidelines	Draft	2005
Second issues of type approval guidelines	Current	2007
Third issue of type approval	Revision 1	2012

Technical requirements

Radio and telecommunications terminal equipment shall comply with the (those) standard(s) from the list below which are applicable to the product in question. Please refer to BTA in the event that no applicable standard is listed.

Safety

Electrical:

EN 60950 or IEC 60950

Safety of information technology equipment

Radio and SAR:

EN 50360

Product standard to demonstrate the compliance of mobile phones with the basic restrictions related to human exposure to electromagnetic fields (300 MHz - 3 GHz)

EN 50364

Limitation of human exposure to electromagnetic fields from devices operating in the frequency range 0 Hz to 10 GHz, used in Electronic Article Surveillance (EAS), Radio Frequency Identification (RFID) and similar applications

EN 50371

Generic standard to demonstrate the compliance of low power electronic and electrical apparatus with the basic restrictions related to human exposure to electromagnetic fields (10 MHz - 300 GHz) - General public

EN 60215

Safety requirements for radio transmitting equipment

Optical and Laser:

EN 60825-1 or IEC 60825-1

Safety of laser products

Part 1: Equipment classification, requirements and user's guide

EN 60825-2 or IEC 60825-2

Safety of laser products --

Part 2: Safety of optical fibre communication systems

EMC

EN 55022 or CISPR 22

Information technology equipment - Radio disturbance characteristics - Limits and methods of measurement

EN 55024 or CISPR 24

Information technology equipment - Immunity characteristics - Limits and methods of measurement

EN300 386

Electromagnetic compatibility and Radio spectrum Matters (ERM); Telecommunication network equipment; Electro Magnetic Compatibility (EMC) requirements

ETSI EN 300 386-2

Electromagnetic compatibility and Radio spectrum Matters (ERM);
Telecommunication network equipment; Electro Magnetic
Compatibility (EMC) requirements; Part 2: Product family standard

EN 61000-3-2 IEC 61000-3-2

Part 3-2: Limits - Limits for harmonic current emissions (equipment
input current up to and including 16 A per phase)

EN 61000-3-3 IEC 61000-3-3

Part 3-3: Limits — Limitation of voltage changes, voltage
fluctuations and flicker in public low-voltage supply systems, for
equipment with rated current 16A per phase and not subject to
conditional connection

EN 61000-3-11 or IEC 61000-3-11

Part 3-11: Limits - Limitation of voltage changes, voltage
fluctuations and flicker in public low-voltage supply systems -
Equipment with rated current ≤ 75 A and subject to conditional
connection

EN 61000-6-1 or IEC 61000-6-1

Part 6-1: Generic standards - Immunity for residential, commercial
and light-industrial environments

EN 61000-6-2 or IEC 61000-6-2

Part 6-2: Generic standards - Immunity for industrial environments

EN 61000-6-3 or IEC 61000-6-3

Part 6-3: Generic standards - Emission standard for residential,
commercial and light-industrial environments

EN 61000-6-4 or IEC 61000-6-4

Part 6-4: Generic standards - Emission standard for industrial
environments

Obtaining Technical standards

ETSI technical standards may be obtained free of charge for individual
use from the ETSI web site. www.etsi.org

CENELEC, IEC and CISPR standards may be obtained at cost from, or
through www.cenelec.org and from www.iec.ch respectively.

Information on the status of standards may also be obtained from these
web sites. Latest status of European Norms may be found via
<http://europa.eu.int>