

# **TECHNICAL SPECIFICATION**

#### **FOR**

# UMTS BASE STATIONS AND RELATED EQUIPMENT ISSUED BY

**BOTSWANA TELECOMMUNICATIONS AUTHORITY** 

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# Technical Specification for UMTS Base Stations and related equipment

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#### Scope

This specification applies to all UMTS Base Stations and related equipment to be used 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.

### **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

# **Spectrum Allocation**

The following frequency bands have been allocated for use by UMTS base stations and related equipment in Botswana: 1900 - 1920 MHz, 1920—1980 MHz, 2110 – 2170 MHz and 2010 – 2025 MHz.

## Safety and EMC requirements

The following specifications shall be applied:

TS0001: Safety and EMC requirements of radio and telecommunications terminal equipment.

# **Technical requirements**

The following specifications shall be applied.

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

#### ETSI EN 301 489-23 (2010-10)

Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 23: Specific conditions for IMT-2000 CDMA Direct Spread (UTRA) Base Station (BS) radio, repeater and ancillary equipment

#### ETSI EN 301 908-1 (2011-05)

IMT cellular networks; Harmonized EN covering the essential requirements of article 3.2 of the R&TTE Directive; Part 1: Introduction and common requirements

#### **ETSI EN 301 908-3**

IMT cellular networks; Harmonized EN covering the essential requirements of article 3.2 of the R&TTE Directive; Part 3: CDMA Direct Spread (UTRA FDD) Base Stations (BS)

#### ETSI EN 301 908-7

Electromagnetic compatibility and Radio spectrum Matters (ERM); Base Stations (BS), Repeaters and User Equipment (UE) for IMT-2000 Third-Generation cellular networks; Part 7: Harmonized EN for IMT-2000, CDMA TDD (UTRA TDD) (BS) covering essential requirements of article 3.2 of the R&TTE Directive

#### ETSI EN 301 908-11

IMT cellular networks; Harmonized EN covering the essential requirements of article 3.2 of the R&TTE Directive; Part 11: CDMA Direct Spread (UTRA FDD) (Repeaters)

Where no issue or revision number is quoted along with the title of a technical specification, the latest published version should be used.

### **Additional requirements**

The present document is intended to cover the provisions of Directive 1999/5/EC [i.2] (R&TTE Directive), article 3.2, which states that "radio equipment shall be so constructed that it effectively uses the spectrum allocated to terrestrial/space radio communications and orbital resources so as to avoid harmful interference."

No additional requirements exist for UMTS base stations and related equipment at this time other than the need to obtain a license from BTA for the operation of such equipment.

# **Obtaining Technical standards**

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ETSI technical standards may be obtained free of charge for individual use from the ETSI web site. <a href="www.etsi.org">www.etsi.org</a>