



# **TECHNICAL SPECIFICATION**

**FOR**

**GSM BASE STATION AND ANCILLARY EQUIPMENT**

**ISSUED BY**

**BOTSWANA TELECOMMUNICATIONS AUTHORITY**

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# Technical Specification for GSM Base Station and ancillary equipment

## Contents

.....	Scope
.....	3
Entry into force.....	3
Document History.....	3
Spectrum Allocation.....	3
Safety and EMC requirements.....	3
Technical requirements.....	3
Additional requirements.....	4

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## Scope

This specification applies to any equipment which offers a GSM interface, including base stations and other related applications using the GSM air interface, for example WLL, 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 GSM base stations and ancillary equipment in Botswana: 925 – 959 MHz and 1805 – 1880 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.

**ETS 300 342-2**

Radio Equipment and Systems (RES); Electromagnetic Compatibility (EMC) for European digital cellular telecommunications system (GSM 900 MHz and DCS 1 800 MHz); Part 2: Base station radio and ancillary equipment meeting Phase 1 GSM requirements

**ETS 300 342-3**

Electromagnetic compatibility and Radio spectrum Matters (ERM); Electromagnetic Compatibility (EMC) for European cellular telecommunications system (GSM 900 MHz and DCS 1 800 MHz); Part 3: Base station radio and ancillary equipment and repeaters meeting Phase 2 GSM requirements

**ETSI 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 301 489-8**

Electromagnetic compatibility and Radio spectrum Matters (ERM); Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 8: Specific conditions for GSM base stations

**ETSI EN 301 502 (2010-10)**

Global System for Mobile communications (GSM); Harmonized EN for Base Station Equipment covering the essential requirements of article 3.2 of the R&TTE Directive

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**

Additional requirements exist for the use of GSM base stations and ancillary equipment. A licence must be obtained before equipment of this type can be used in Botswana. 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 web site. [www.etsi.org](http://www.etsi.org)