



# **TECHNICAL SPECIFICATION**

**FOR**

**DIGITAL TERRESTRIAL TELEVISION  
BROADCASTING SYSTEM (DVB-T2)**

**ISSUED BY**

**BOTSWANA COMMUNICATIONS REGULATORY  
AUTHORITY**

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# Technical Specification for Digital Terrestrial Television Broadcasting System (DVB-T2)

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## Scope

This specification applies to all digital terrestrial television broadcasting systems (DVB-T2) to be used in Botswana

## Entry into Force

This specification shall enter into force on 15/01/2016

## Document History

<b>Description</b>	<b>Status</b>	<b>Date</b>
Digital Terrestrial Television Broadcasting System (DVB-T2)	Original V1	11/12/2015

## Spectrum Allocation

The following frequency band has been allocated for use of digital terrestrial television broadcasting systems (DVB-T2) in Botswana:  
VHF: 174 to 230 MHz, UHF: 470 to 862 MHz

## Health, Safety, and Generic Emissions

The following universal specifications shall be applied.

**TS0001:** Health, Safety and Generic Emissions of Radio and Telecommunications Terminal Equipment

## Technical, Spectrum and EMC Requirements

The following specifications shall be applied.

**ETSI EN 300 429:** Informative Reference Document - Digital Video Broadcasting (DVB); Framing structure, channel coding and modulation for cable systems

**ETSI EN 300 468:** Normative Reference Document - "Digital Video Broadcasting (DVB); Specification for Service Information (SI) in DVB systems"

**ETSI EN 300 744:** Normative Reference Document - Digital Video Broadcasting (DVB); Framing structure, channel coding and modulation for digital terrestrial television

**ETSI EN 301 489-14 V 1.2.1:** Electromagnetic compatibility and Radio Spectrum Matters (ERM); Electro Magnetic Compatibility (EMC) standard for radio equipment and services; Part 14: Specific conditions for analogue and digital terrestrial TV broadcasting service transmitters  
EMC for terrestrial TV broadcast transmitters

**ETSI EN 302 296 V1.1.1:** Electromagnetic compatibility and Radio Spectrum Matters (ERM); Transmitting equipment for the digital television broadcast service, Terrestrial (DVB-T); Harmonized EN under article 3.2 of the R&TTE Directive. Transmitting equipment for digital television broadcast service

**ETSI EN 302 296-2 V1.2.1:** Electromagnetic compatibility and Radio Spectrum Matters (ERM); Transmitting equipment for the digital television broadcast service, Terrestrial (DVB-T); Part 2: Harmonized EN covering the essential requirements of article 3.2 of the R&TTE Directive. Transmitting equipment for digital television broadcast service

**ETSI EN 302 755 V1.4.1(2015-07):** Digital Video Broadcasting (DVB); Frame structure channel coding and modulation for a second generation digital terrestrial broadcasting system (DVB-T2)

**ETSI TS 101 162:** Normative Reference - Digital Video Broadcasting (DVB); Allocation of identifiers and codes for Digital Video Broadcasting (DVB) systems

**ETSI TS 102 606:** Normative Reference Document - "Digital Video Broadcasting (DVB); Generic Stream Encapsulation (GSE) Protocol"

**ETSI TS 102 773 V1.3.1 (Jan 2012):** Informative Reference Document - DVB-T2 modulator interface

**ETSI TS 102 831:** Normative Reference Document - "Digital Video Broadcasting (DVB); Implementation guidelines for a second generation digital terrestrial television broadcasting system (DVB-T2)"

**ETSI TS 102 992:** Normative Reference - Digital Video Broadcasting (DVB); Structure and modulation of optional transmitter signatures (T2-TX-SIG) for use with the DVB-T2 second generation digital terrestrial television broadcasting system

**ISO/IEC 13818-1:** Normative Reference Document - "Information technology - Generic coding of moving pictures and associated audio information: Systems"

**ISO/IEC 14496:** Informative Reference Document - Coding of audio-visual objects (MPEG-4)

**Important Note:** The revision numbers of the documents given in the approval standard are the minimum standards that apply. Should updated versions of these documents be published, the latest version will always apply. This also applies to documents where no revision number is currently quoted

## **Additional Requirements**

Additional requirements exist for the use of Digital terrestrial television broadcasting system (DVB-T2) at this time. 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)

CENELEC, IEC and CISPR standards may be obtained at cost from, or through [www.cenelec.org](http://www.cenelec.org) and from [www.iec.ch](http://www.iec.ch) respectively.