



# **TECHNICAL SPECIFICATION**

**FOR**

**RADIO BROADCASTING SYSTEMS; DIGITAL RADIO  
MONDIALE (DRM)**

**ISSUED BY**

**BOTSWANA COMMUNICATIONS REGULATORY  
AUTHORITY**

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# Technical Specification for Radio Broadcasting Systems; DRM

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Issued by:

**Botswana Communications Regulatory Authority**  
Plot 50671, Independence Avenue  
Private Bag 00495  
Gaborone

Tel: +267 395 7755, Fax: +267 395 7976  
Email: [info@bocra.org.bw](mailto:info@bocra.org.bw)  
Website: [www.bocra.org.bw](http://www.bocra.org.bw)

## Scope

This specification applies to all DRM systems 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>
Radio Broadcasting Systems; DRM	Original V1	11/12/2015

## Spectrum Allocation

The following frequency band has been allocated for use:

DRM30 transmitters operating in the harmonized LF, MF and HF terrestrial sound broadcast bands. DRM+ to operate in the FM terrestrial sound broadcast band and beyond. (Not yet included in the current broadcast frequency plan)

## Health, Safety, and Generic Emission

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 301 489-11 V 1.3.1:** Electromagnetic compatibility and Radio Spectrum Matters (ERM); Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 11: Specific conditions for terrestrial sound broadcasting service transmitters Multi-part EMC Standard, for radio equipment EN 301 489-XX (All parts)

**ETSI EN 302 245-1 V1.1.1:** Electromagnetic compatibility and Radio Spectrum Matters (ERM); Transmitting equipment for the Digital Radio Mondiale (DRM) broadcasting service Part 1: Technical characteristics and test methods

**ETSI EN 302 245-2 V1.1.1:** Electromagnetic compatibility and Radio Spectrum Matters (ERM); Transmitting equipment for the Digital Radio Mondiale (DRM) broadcasting service; Part 2: Harmonized EN under article 3.2 of the R&TTE Directive

**ETSI ES 201 980 V3.2.1 (2012-06):** Digital Radio Mondiale (DRM) System Specification  
<http://www.drm.org/wp-content/uploads/2013/09/DRM-guide-artwork-9-2013-1.pdf> DRM Introduction and Implementation Guide. Digital Radio Consortium

**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 DRM 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