



Recommendation ITU-R SM.1682-1
(09/2011)

**Methods for measurements on digital
broadcasting signals**

SM Series
Spectrum management



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Foreword

The role of the Radiocommunication Sector is to ensure the rational, equitable, efficient and economical use of the radio-frequency spectrum by all radiocommunication services, including satellite services, and carry out studies without limit of frequency range on the basis of which Recommendations are adopted.

The regulatory and policy functions of the Radiocommunication Sector are performed by World and Regional Radiocommunication Conferences and Radiocommunication Assemblies supported by Study Groups.

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ITU-R policy on IPR is described in the Common Patent Policy for ITU-T/ITU-R/ISO/IEC referenced in Annex 1 of Resolution ITU-R 1. Forms to be used for the submission of patent statements and licensing declarations by patent holders are available from <http://www.itu.int/ITU-R/go/patents/en> where the Guidelines for Implementation of the Common Patent Policy for ITU-T/ITU-R/ISO/IEC and the ITU-R patent information database can also be found.

Series of ITU-R Recommendations

(Also available online at <http://www.itu.int/publ/R-REC/en>)

Series	Title
BO	Satellite delivery
BR	Recording for production, archival and play-out; film for television
BS	Broadcasting service (sound)
BT	Broadcasting service (television)
F	Fixed service
M	Mobile, radiodetermination, amateur and related satellite services
P	Radiowave propagation
RA	Radio astronomy
RS	Remote sensing systems
S	Fixed-satellite service
SA	Space applications and meteorology
SF	Frequency sharing and coordination between fixed-satellite and fixed service systems
SM	Spectrum management
SNG	Satellite news gathering
TF	Time signals and frequency standards emissions
V	Vocabulary and related subjects

Note: This ITU-R Recommendation was approved in English under the procedure detailed in Resolution ITU-R 1.

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RECOMMENDATION ITU-R SM.1682-1

Methods for measurements on digital broadcasting signals*

(Question ITU-R 214/1)

(2004-2011)

Scope

Due to the progressive introduction of digital broadcasting systems and taking account of their complexity it is important that monitoring services dispose with guidance on measuring the digital broadcasting signals, in view to be able to enforce the rules and license conditions.

The ITU Radiocommunication Assembly,

considering

- a) that digital audio and video broadcasting systems are being introduced progressively;
- b) that administrations may set rules and/or licence conditions for the use of these systems;
- c) that the monitoring service may be tasked for the enforcement of these rules and/or licence conditions;
- d) that due to the complexity of these systems, guidance on measuring these systems is needed,

recommends

1 that if a monitoring service has to measure the following parameters of digital broadcasting signals:

- frequency and bandwidth;
- power and field strength;
- extraction of transmitter identification and determination of type of service;
- sound and picture quality;
- quality of transmitted signal;
- coverage;
- RF channel characteristics;
- other technical parameters,

these measurements should be carried out as described in Annex 1.

* This Recommendation should be brought to the attention of Radiocommunication Study Group 6.