

Irish Standard I.S. EN 62553:2013

Methods of measurement for digital network - Performance characteristics of terrestrial digital multimedia transmission network (IEC 62553:2012 (EQV))

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Methods of measurement for digital network -Performance characteristics of terrestrial digital multimedia transmission network

(IEC 62553:2012)

Méthodes de mesure applicables aux réseaux numériques -Caractéristiques de performance des réseaux de transmission numériques multimédia terrestres (CEI 62553:2012) Messverfahren für digitale Netze -Leistungskenndaten von terrestrischen digitalen Multimedia-Sendernetzen (IEC 62553:2012)

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EN 62553:2013

Foreword

The text of document 103/89/CDV, future edition 1 of IEC 62553, prepared by IEC/TC 103 "Transmitting equipment for radiocommunication" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62553:2013.

The following dates are fixed:

•	latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2013-10-01
•	latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2016-01-01

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Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

Publication	Year	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 62273-1	2007	Methods of measurement for radio transmitters - Part 1: Performance characteristics of terrestrial digital television transmitters	EN 62273-1	2007
ISO/IEC 13818-1 + A1 + A2 + A3 + A4 + A5 + A6	2007 2007 2008 2009 2009 2011 2011	Information technology - Generic coding of moving pictures and associated audio information: Systems	-	-
ETSI TR 101 190	-	Digital Video Broadcasting (DVB); Implementation guidelines for DVB terrestrial services; Transmission aspects	-	-
ETSI TS 101 191	-	Digital Video Broadcasting (DVB); DVB mega-frame for Single Frequency Network (SFN) synchronization	-	-
ETSI TR 102 377	-	Digital Video Broadcasting (DVB); DVB-H Implementation Guidelines	-	-
ARIB STD-B31	-	Transmission system for digital terrestrial television broadcasting	-	-

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Methods of measurement for digital network – Performance characteristics of terrestrial digital multimedia transmission network





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INTERNATIONAL ELECTROTECHNICAL COMMISSION



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METHODS OF MEASUREMENT FOR DIGITAL NETWORK -

Performance characteristics of terrestrial digital multimedia transmission network

FOREWORD

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International Standard IEC 62553 has been prepared by subcommittee IEC technical committee 103: Transmitting equipment for radiocommunication.

The text of this standard is based on the following documents:

CDV	Report on voting
103/89/CDV	103/106/RVC

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

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METHODS OF MEASUREMENT FOR DIGITAL NETWORK -

Performance characteristics of terrestrial digital multimedia transmission network

1 Scope

When a transmission network for digital terrestrial television broadcasting (DTTB) is being deployed, new networking technologies such as the Single Frequency Network (SFN) can be employed excelling the conventional analogue TV systems. However, new technical evaluation parameters are introduced for installing SFN systems. In addition new quality evaluation methods are also established in order to achieve stable and high-quality broadcasting services avoiding the cliff effect, which is one of the typical phenomena in the digital transmission that the signal quality is abruptly degraded when the received C/N becomes just lower than a specific value representing the system limit.

Given the background described above, this International Standard has the purposes of

- establishing measuring methods that enable the objective evaluation of the performance of transmission networks so as to make stable DTTB services a reality,
- establishing a technical baseline, such as a definition of technical terms, to standardize measuring methods.

The measurement methods described in this standard are intended for digital terrestrial television transmission network test and validation. The measurement methods for digital terrestrial transmitter are not included in this standard. These methods are described in IEC 62273-1.

This standard does not give any regulations and/or mandatory requirements. The specifications and requirements defined for each system have priority over this standard. However, there may be some cases where details are not specified in each individual specification or different systems should be evaluated under a common measurement method. The purpose of this standard is to provide a common technical baseline that makes measurement results comparable in all cases.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 62273-1:2007, Methods of measurement for radio transmitters – Performance characteristics of terrestrial digital televisiont transmitters

ISO/IEC 13818-1:2007, Information technology – Generic coding of moving pictures and associated audio information: Systems

Amendments 1 to 6

TR 101 190, Digital video broadcasting (DVB); implementation guidelines for DVB Terrestrial services;Transmission aspects



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