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Radioutrustningar – Mätmetoder för digitala nät – Prestandaegenskaper hos nät för marksänd digital multimedia

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

Som svensk standard gäller europastandarden EN 62553:2013. Den svenska standarden innehåller den officiella engelska språkversionen av EN 62553:2013.

Nationellt förord

Europastandarden EN 62553:2013

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 62553, First edition, 2012 - Methods of measurement for digital network - Performance characteristics of terrestrial digital multimedia transmission network**

utarbetad inom International Electrotechnical Commission, IEC.

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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)

This European Standard was approved by CENELEC on 2013-01-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Management Centre: Avenue Marnix 17, B - 1000 Brussels

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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Endorsement notice

The text of the International Standard IEC 62553:2012 was approved by CENELEC as a European Standard without any modification.

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.

<u>Publication</u>	<u>Year</u>	<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	2007	Information technology - Generic coding of moving pictures and associated audio information: Systems	-	-
+ A1	2007			
+ A2	2008			
+ A3	2009			
+ A4	2009			
+ A5	2011			
+ A6	2011			
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

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 television 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*

TS 101 191, *Digital video broadcasting (DVB); DVB mega-frame for Single Frequency Network (SFN) synchronization*

TR 102 377, *Digital Video Broadcasting (DVB); DVB-H Implementation Guidelines*

ARIB STD-B31, *Transmission system for digital terrestrial television broadcasting*