

SLOVENSKI STANDARD

SIST EN 62944:2018

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Avdio, video in večpredstavnostni sistemi in oprema - Digitalna dostopnost televizije - Funkcionalne specifikacije (IEC 62944:2016)

Audio, video and multimedia systems and equipment - Digital television accessibility - Functional specifications (IEC 62944:2016)

Barrierefreiheit des digitalen Fernsehens - Funktionale Festlegungen (IEC 62944:2016)

Systèmes et équipements audio, vidéo et multimedia - Accessibilité à la télévision numérique - Spécifications fonctionnelles (IEC 62944:2016)

Ta slovenski standard je istoveten z: EN 62944:2017

ICS:

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|-----------|--------------------------|----------------------|
| 33.160.25 | Televizijski sprejemniki | Television receivers |
|-----------|--------------------------|----------------------|

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EUROPEAN STANDARD
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EN 62944

June 2017

ICS 11.180.99; 33.160.01; 35.240.95

English Version

**Audio, video and multimedia systems and equipment - Digital
television accessibility - Functional specifications
(IEC 62944:2016)**

Systèmes et équipements audio, vidéo et multimédia -
Accessibilité à la télévision numérique - Spécifications
fonctionnelles
(IEC 62944:2016)

Barrierefreiheit des digitalen Fernsehens - Funktionale
Festlegungen
(IEC 62944:2016)

This European Standard was approved by CENELEC on 2017-01-20. 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.

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

EN 62944:2017**European foreword**

The text of document 100/2640/CDV, future edition 1 of IEC 62944, prepared by Technical Area 16 “Active assisted living (AAL), accessibility and user interfaces” of IEC/TC 100 “Audio, video and multimedia systems and equipment” was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62944:2017.

The following dates are fixed:

- latest date by which the document has to be (dop) 2017-12-16
implemented at national level by
publication of an identical national
standard or by endorsement
- latest date by which the national (dow) 2020-06-16
standards conflicting with the
document have to be withdrawn

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Endorsement notice

The text of the International Standard IEC 62944:2016 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60118-4:2014

NOTE Harmonized as EN 60118-4:2015.

ISO 7731:2003

NOTE Harmonized as EN ISO 7731:2008.

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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 1 When an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

| <u>Publication</u> | <u>Year</u> | <u>Title</u> | <u>EN/HD</u> | <u>Year</u> |
|--------------------|-------------|--|--------------|-------------|
| IEC 62731 | 2013 | Text-to-speech for television - General requirements | EN 62731 | 2013 |
| ISO 7001 | 2007 | Graphical symbols_ - Public information symbols | - | - |
| ISO 24500 | 2010 | Ergonomics_ - Accessible design_ - Auditory signals for consumer products | EN ISO 24500 | 2010 |
| ISO 24501 | 2010 | Ergonomics - Accessible design - Sound pressure levels of auditory signals for consumer products | EN ISO 24501 | 2010 |
| ISO 24503 | 2011 | Ergonomics - Accessible design - Tactile dots and bars on consumer products | EN ISO 24503 | 2011 |

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IEC 62944

Edition 1.0 2016-12

INTERNATIONAL STANDARD

**Audio, video and multimedia systems and equipment – Digital television
accessibility – Functional specifications**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**AUDIO, VIDEO AND MULTIMEDIA SYSTEMS AND EQUIPMENT –
DIGITAL TELEVISION ACCESSIBILITY – FUNCTIONAL SPECIFICATIONS****FOREWORD**

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International Standard IEC 62944 has been prepared by technical area 16: Active assisted living (AAL), accessibility and user interfaces, of IEC technical committee 100: Audio, video and multimedia systems and equipment.

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

| CDV | Report on voting |
|--------------|------------------|
| 100/2640/CDV | 100/2795/RVC |

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

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

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

A bilingual version of this publication may be issued at a later date.

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AUDIO, VIDEO AND MULTIMEDIA SYSTEMS AND EQUIPMENT – DIGITAL TELEVISION ACCESSIBILITY – FUNCTIONAL SPECIFICATIONS

1 Scope

This document specifies a set of principles and considerations for digital television products in support of older people and persons with disabilities in addition to mainstream users. The effect of following the principles and considerations as set out in this document is to ensure that the widest range of users can access, understand and use digital television products. These principles and considerations cover four main user profiles such as individuals with hearing impairments, individuals with sight impairments, individuals with mobility impairments and individuals with cognitive impairments.

This document applies to consumer solutions whose primary function is to receive digital television, such as integrated digital televisions, set top boxes, digital television recorders and equivalent products and devices (see Annex D). All these solutions are referred to as digital television solutions throughout this document. The standard does not cover solutions that support digital television as a secondary function (for instance gaming consoles or computers with digital receiver cards). However, much of the content also provides for future solutions and/or implementations. This document does not cover delivery, unpacking, secure installation on a stand or wall mounting or first time connection of the power and signals.

2 Normative references (standards.iteh.ai)

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 62731:2013, *Text-to-speech for television – General requirements*

ISO 7001:2007, *Graphical symbols – Public information symbols*

ISO 24500:2010, *Ergonomics – Accessible design – Auditory signals for consumer products*

ISO 24501:2010, *Ergonomics – Accessible design – Sound pressure levels of auditory signals for consumer products*

ISO 24503:2011, *Ergonomics – Accessible design – Tactile dots and bars on consumer products*

3 Terms, definitions and abbreviated terms

3.1 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

3.1.1**access service**

additional or alternative content associated with a television programme, intended to make the programme accessible to specific users

EXAMPLE Audio/video description for blind and partially sighted people, captioning/subtitling for deaf and hard of hearing people and/or for delivery to different language audiences, signed programmes for sign language users, etc.

3.1.2**high definition****HD**

video resolution, typically in the range of 720 to 1 080 vertical lines

3.1.3**standard definition****SD**

video resolution, typically in the range of 480 to 576 vertical lines

3.1.4**electronic program guide****EPG**

on screen application that provides users with scheduling information for current and upcoming programming

3.1.5**safe area**

area of the television picture that can be seen on the great majority of television screens

Note 1 to entry: See ST 2046-1:2009, RP 218-2002 and FCC 79.101 (12).

3.1.6**text-to-speech****TTS**

solution that converts textual content to the audible content speech, often implemented with a speech synthesizer system

3.1.7**audio description****AD**

verbal depiction of key visual elements in media and live productions

Note 1 to entry: See 6.2.2.

3.1.8**high visibility interface**

user interface that allows the user to change the presentation rules in order to improve visibility

3.1.9**wand remote control**

remote control that moves an on screen pointer by aiming it at the screen

3.1.10**companion device**

device connected to a digital television solution with the intention to provide a connected experience and interactivity across both

Note 1 to entry: Such devices include a smartphone, tablet or laptop.

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Note 2 to entry: Also known as "second screen (device)" or "secondary device".

3.1.11

smartphone

mobile phone with additional advanced features commonly found on computers, with Internet access in addition to the voice channel and with the ability to install applications to extend and customise its properties and abilities

3.1.12

companion screen app

companion screen application

application running on a companion device, interacting with a digital television solution and providing access to the same or additional content and/or programme guides

3.1.13

Internet protocol

IP

principle communications protocol that essentially establishes the Internet

3.1.14

Internet protocol television

IPTV

digital television product that receives programming over the Internet or from a source that uses IP to deliver video

3.1.15

application programming interface

API

specification for software to use and interact with a system or platform

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3.2 Abbreviated terms

| | |
|-------|---------------------------------------|
| AD | Audio Description |
| API | Application Programming Interface |
| ASR | Automatic Speech Recognition |
| EPG | Electronic Program Guide |
| FCC | Federal Communications Commission |
| HbbTV | Hybrid Broadcast Broadband TeleVision |
| HD | High Definition |
| IP | Internet Protocol |
| IPTV | Internet Protocol Television |
| NFC | Near Field Communication |
| SD | Standard Definition |
| SPL | Sound Pressure Level |
| TTS | Text-To-Speech |
| UI | User Interface |
| USB | Universal Serial Bus |
| WPS | Wi-Fi Protected Setup |
| xHCI | eXtensible Host Controller Interface |