

High Definiton (HD) recording link guidelines

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NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 62546:2010 sisaldab Euroopa standardi EN 62546:2009 ingliskeelset teksti.

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**High Definition (HD) recording link guidelines
(IEC 62546:2009)**

Lignes directrices relatives
aux liaisons dédiées à l'enregistrement
Haute Définition (HD)
(CEI 62546:2009)

Leitfaden für eine Schnittstelle
zur HD-Aufzeichnung
(IEC 62546:2009)

This European Standard was approved by CENELEC on 2009-10-01. 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.

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CENELEC

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

Central Secretariat: Avenue Marnix 17, B - 1000 Brussels

Foreword

The text of document 100/1470/CDV, future edition 1 of IEC 62546, prepared by technical area 9: Audio, video and multimedia applications for end-user network, of IEC TC 100, Audio, video and multimedia systems and equipment, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 62546 on 2009-10-01.

The following dates were fixed:

- latest date by which the EN has to be implemented
at national level by publication of an identical
national standard or by endorsement (dop) 2010-07-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2012-10-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 62546:2009 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 referenced documents are indispensable for the application 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.

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 62481-1 | 2007 | Digital living network alliance (DLNA) home networked device interoperability guidelines - Part 1: Architecture and protocols | - | - |
| IEC 62481-2 | - ¹⁾ | Digital living network alliance (DLNA) home networked device interoperability guidelines - Part 2: DLNA media formats | - | - |
| ETSI TR 101 211 | 2004 ²⁾ | Digital Video Broadcasting (DVB); Guidelines - on implementation and usage of Service Information (SI) | - | - |

¹⁾ Undated reference.

²⁾ ETSI TR 101 211:2004 is superseded by ETSI TR 101 211:2009.

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INTRODUCTION

With the global introduction of High definition (HD) TV services, receivers, and consumer recording equipment, the need has arisen for a universal recording interface to connect receivers and recorders.

This International Standard presents a comprehensive proposal for this interface including content protection [2][3]¹. The proposal – intended as a guideline – leverages existing standards IEC 62481-1, and [4] in the field, ensuring interoperability between receivers and recorders.



NOTE * HDMI (High-Definition Multimedia Interface)² is a digital interface for the connection between source device and monitor provided by HDMI Licensing, LLC.

Figure 1 – High definition reception and recording

The starting point for the proposal is an in-home configuration depicted in Figure 1. The assumption is that both the receiver (e.g. STB) as well as the recorder (e.g. BD-recorder) are connected to the display via an HDMI interface [4]. The proposed recording interface connects the recorder to the receiver and carries compressed signals only. Obviously, the receiver functionality can be integrated into the display.

The proposed interface recognises the fact that a large amount of content will be made available in the form of a Pay-TV and thus be protected via a Conditional Access (CA) system. The required CA functionality is assumed to be contained in the receiver.

¹ Figures in square brackets refer to the Bibliography.

² HDMI is the trade name of a product supplied by HDMI Licensing, LLC. This information is given for the convenience of users of this document and does not constitute an endorsement by IEC of the product named.

HIGH DEFINITION (HD) RECORDING LINK GUIDELINES

1 Scope

This International Standard specifies the communication protocol between a TV receiver and a video recorder which are connected through a digital interface.

2 Normative references

The following referenced documents are indispensable for the application 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 62481-1:2007, *Digital living network alliance (DLNA) home networked device interoperability guidelines – Part 1: Architecture and protocols*

IEC 62481-2, *Digital living network alliance (DLNA) home networked device interoperability guidelines – Part 2: DNLA media formats*

ETSI TR 101 211:2004, *Digital Video Broadcasting (DVB); Guidelines on Implementation and usage of Service Information (SI)-V1.6.1*

3 Terms, definitions and abbreviations

3.1 Terms and definitions

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

3.1.1 content

video, audio or subtitles data which is intended to be delivered to and consumed by a user

3.1.2 content protection

control of access and usage of content through rules and rights

3.1.3 receiver

device with a digital broadcast reception capability which may have a storage for recording content, for example STB

3.1.4 recorder

device capable of recording digital content on to a storage medium (removable or non-removable or both), for example BD-recorder

3.2 Abbreviations

For the purposes of this document, the following abbreviations apply.

| | |
|-----|------------------------------|
| CDS | Content Directory Service |
| CEC | Consumer Electronics Control |