

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE



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**High definition (HD) recording link guidelines**

**Lignes directrices pour les liaisons d'enregistrement haute définition (HD)**



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## HIGH DEFINITION (HD) RECORDING LINK GUIDELINES

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

CDV	Report on voting
100/1470/CDV	100/1558/RVC

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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] <sup>1</sup>. The proposal – intended as a guideline – leverages existing standards IEC 62481-1, and [4] in the field, ensuring interoperability between receivers and recorders.



IEC 1338/09

NOTE \* HDMI (High-Definition Multimedia Interface)<sup>2</sup> 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.

<sup>1</sup> Figures in square brackets refer to the Bibliography.

<sup>2</sup> 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