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Consumer terminal function for access to IPTV and open internet multimedia services - Part 2-2: HTTP adaptive streaming

EESTI STANDARDI EESSÕNA

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English Version

Consumer terminal function for access to IPTV and open internet
multimedia services -
Part 2-2: HTTP adaptive streaming
(IEC 62766-2-2:2016)

Fonction des terminaux grand public pour l'accès aux
services IPTV et multimédias de l'internet ouvert -
Partie 2-2: Diffusion en flux adaptatif sur HTTP
(IEC 62766-2-2:2016)

Verbraucher Endgeräte Funktion für den Zugriff auf IPTV
und offene Internet Multimedia Dienstleistungen -
Teil 2-2: Anpassungsfähiger HTTP Datenstrom
(IEC 62766-2-2:2016)

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European Committee for Electrotechnical Standardization
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European foreword

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Endorsement notice

The text of the International Standard IEC 62766-2-2:2016 was approved by CENELEC as a European Standard without any modification.

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INTRODUCTION

The IEC 62766 series is based on a series of specifications that was originally developed by the OPEN IPTV FORUM (OIPF). They specify the user-to-network interface (UNI) for consumer terminals to access IPTV and open internet multimedia services over managed or non-managed networks as defined by OIPF.

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CONSUMER TERMINAL FUNCTION FOR ACCESS TO IPTV AND OPEN INTERNET MULTIMEDIA SERVICES –

Part 2-2: HTTP adaptive streaming

1 Scope

This part of IEC 62766 specifies media formats for adaptive unicast content streaming over HTTP.

Two HTTP adaptive streaming formats are specified. The first is based entirely on MPEG DASH. The second is the OIPF “HTTP adaptive streaming” (HAS) format, which is based upon 3GPP’s release 9 adaptive HTTP streaming (AHS) format, with some profiling and extensions to add the features of media components and support for MPEG-2 transport stream content segment format. The latter format was specified before MPEG DASH had been published. It is retained due to usage in some legacy applications.

2 Normative references

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 62766-1¹, *Consumer terminal function for access to IPTV and open Internet multimedia services – Part 1: General*

IEC 62766-2-1, *Consumer terminal function for access to IPTV and open Internet multimedia services – Part 2-1: Media formats*

IEC 62766-3, *Consumer terminal function for access to IPTV and open Internet multimedia services – Part 3: Content metadata*

IEC 62766-4-1², *Consumer terminal function for access to IPTV and open Internet multimedia services – Part 4-1: Protocols*

IEC 62766-5-1³, *Consumer terminal function for access to IPTV and open Internet multimedia services – Part 5-1: Declarative application environment*

IEC 62766-6⁴, *Consumer terminal function for access to IPTV and open Internet multimedia services – Part 6: Procedural application environment*

IEC 62766-7⁵, *Consumer terminal function for access to IPTV and open Internet multimedia services – Part 7: Authentication, content protection and service protection*

1 Under preparation. Stage at the time of publication: IEC/CDV 62766-1:2015

2 Under preparation. Stage at the time of publication: IEC/CDV 62766-4-1:2015

3 Under preparation. Stage at the time of publication: IEC/CDV 62766-5-1:2015

4 Under preparation. Stage at the time of publication: IEC/CDV 62766-6:2015

5 Under preparation. Stage at the time of publication: IEC/CDV 62766-7:2015

ISO/IEC 13818-1:2014, *Information technology – Generic coding of moving pictures and associated audio information – Part 1: Systems*

ISO/IEC 14496-12:2012, *Information technology – Coding of audio-visual objects – Part 12: ISO base media file format*

ISO/IEC 23001-7:2015, *Information technology – MPEG systems technologies – Part 7: Common encryption in ISO base media file format files*

ISO/IEC 23009-1:2014, *Information technology – Dynamic adaptive streaming over HTTP (DASH) – Part 1: Media presentation description and segment formats*

ISO 639 (all parts), *Codes for the representation of names of languages*

ETSI TS 101 154 V1.11.1 (2012-11), *Digital Video Broadcasting (DVB); Specification for the use of Video and Audio Coding in Broadcasting Applications based on the MPEG-2 Transport Stream*

3GPP TS 26.234 V9.3.0 (2010-06), *Transparent end-to-end Packet-switched Streaming Service (PSS) Protocols and codecs (Release 9)*

3GPP TS 26.244 V9.2.0 (2010-06), *Transparent end-to-end packet switched streaming service (PSS), 3GPP file format (3GP) (Release 9)*

3GPP TS 26.247 V10.1.0 (2011-11), *Transparent end-to-end Packet-switched Streaming Service (PSS), Progressive Download and Dynamic adaptive streaming over HTTP (3GP-DASH) (Release 10)*

Marlin Developer Community, *Marlin adaptive streaming Specification – Simple Profile, Version 1.0, July 2011, available at <<http://www.marlin-community.com/develop/downloads>>*

Marlin Developer Community, *Marlin adaptive streaming Specification – Full Profile, Version 1.0, August 2011, available at <<http://www.marlin-community.com/develop/downloads>>*

3 Terms, definitions and abbreviated terms

3.1 General

The terms and definitions specified in 3.2 apply to the OIPF HAS format specified in Clause 6. Where MPEG DASH defines the same terms in ISO/IEC 23009-1 the DASH definitions apply to the specification of DASH usage in Clause 5.

3.2 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 62766-1 and the following 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>

3.2.1 content

instance of audio, video, audio-video information, or data