

# INTERNATIONAL STANDARD



**Digital living network alliance (DLNA) home networked device interoperability  
guidelines –  
Part 9: HTTP Adaptive Delivery**



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INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

## DIGITAL LIVING NETWORK ALLIANCE (DLNA) HOME NETWORKED DEVICE INTEROPERABILITY GUIDELINES –

### Part 9: HTTP Adaptive Delivery

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International Standard IEC 62481-9 has been prepared under technical area 8: Multimedia home systems and applications for end-user network, of IEC technical committee 100: Audio, video and multimedia systems and equipment.

The text of this International Standard is based on the following documents:

CDV	Report on voting
100/2748/CDV	100/2891/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.

A list of all parts of IEC 62481 series, published under the general title *Digital Living Network Alliance (DLNA) home networked device interoperability guidelines*, can be found on the IEC website.

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

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- withdrawn,
- replaced by a revised edition, or
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## INTRODUCTION

Consumers are acquiring, viewing, and managing an increasing amount of digital media (photos, music, and video) on devices in the consumer electronics (CE), mobile, and personal computer (PC) domains. As such, they want to conveniently enjoy the content, regardless of the source, across different devices and locations in the home. The digital home vision integrates the internet, mobile, and broadcast networks through a seamless, interoperable network, which will provide a unique opportunity for manufacturers and consumers alike. In order to deliver on this vision, a common set of industry design guidelines is needed that allows vendors to participate in a growing marketplace, leading to more innovation, simplicity, and value for consumers. This document serves that purpose and provides vendors with the information needed to build interoperable networked platforms and devices for the digital home.

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# DIGITAL LIVING NETWORK ALLIANCE (DLNA) HOME NETWORKED DEVICE INTEROPERABILITY GUIDELINES –

## Part 9: HTTP Adaptive Delivery

### 1 Scope

This part of IEC 62481 specifies guidelines for the DLNA Adaptive Delivery using HTTP protocol.

The DLNA interoperability guidelines for Adaptive Delivery are based on ISO/IEC 23009-1:2014 standard and enables content authors to describe content in timed segments at various bit rates and media formats. Client rendering devices can select the appropriate timed segments (e.g. bit rate) based on network congestion to maintain smooth streaming of content for display.

### 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 62481-1-1:2017, *Digital living network alliance (DLNA) home networked device interoperability guidelines – Part 1-1: Architecture and protocols*

IEC 62481-2:2017, *Digital living network alliance (DLNA) home networked device interoperability guidelines – Part 2: Media format profiles*

IEC 62481-6-1:2017, *Digital living network alliance (DLNA) home networked device interoperability guidelines – Part 6-1: Remote user interface – HTML5*

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

IETF RFC 2616, *Hypertext Transfer Protocol – HTTP/1.1*, R. Fielding, UC Irvine, J. Gettys, Compaq/W3C, Mogul, Compaq, H. Frystyk, W3C/MIT, L. Masinter, Xerox, P. Leach, Microsoft, T. Berners-Lee  
<http://www.ietf.org/rfc/rfc2616.txt>

### 3 Terms, definitions, abbreviated terms and conventions

For the purposes of this document, the terms, definitions and abbreviated terms given in IEC 62481-1-1:2017, IEC 62481-2:2017, ISO/IEC 23009-1:2014 and the following apply.

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