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Part 20-1: Audio video device control protocol - Level 4 - Audio video architecture

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Introduction

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Date: xx/xx/20xx	Document: ISO/DIS xxxx
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1	2	(3)	4	5	(6)	(7)
MB	Clause No./ Subclause No./Annex (e.g. 3.1)	Paragraph/ Figure/ Table/Note	Type of comment	Comment (justification for change) by the MB	Proposed change by the MB	Secretariat observations on each comment submitted
	3.1	Definition 1	ed	Definition is ambiguous and needs clarifying.	Amend to read '...so that the mains connector to which no connection...'	
	6.4	Paragraph 2	te	The use of the UV photometer as an alternative cannot be supported as serious problems have been encountered in its use in the UK.	Delete reference to UV photometer.	



DRAFT INTERNATIONAL STANDARD ISO/IEC 29341-20-1

Attributed to ISO/IEC JTC 1 by the Central Secretariat (see page iii)

Voting begins on
2015-09-03

Voting terminates on
2015-12-03

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PUBLICLY AVAILABLE SPECIFICATION PROCEDURE

Information technology — UPnP Device Architecture

Part 20-1:

Audio video device control protocol — Level 4 — Audio video architecture

Technologies de l'information — Architecture de dispositif UPnP —

Partie 20-1

ICS 35.200

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The ballot on the transposition of a PAS into an International Standard follows the JTC 1 PAS procedures contained in the JTC 1 Supplement, F.3.

Reflecting the importance of the PAS process, the JTC 1 secretariat shall also inform JTC 1 national bodies and Liaison Organisations, and those organisations authorized to be PAS submitters, of the initiation of any PAS ballot, the results of the ballot, and the identity of the JTC 1 subcommittee which will be responsible for any future work.

For ballot, JTC 1 National Bodies and the PAS Submitter shall receive both the PAS to be transposed and the accompanying Explanatory Report. During the ballot JTC 1 members may propose changes to the PAS. These can be resolved with the PAS Submitter after completion of the ballot.

The period for combined DIS voting shall be five months. In order to be accepted the DIS must be supported by 75 % of the votes cast (abstention is not counted as a vote) and by two-thirds of the P-members voting of JTC 1.

In the case of a failure of the ballot, JTC 1 shall make known to the Submitter the reasons which have led to the negative result. Based on this information, the Submitter may choose to re-submit a modified specification as a new PAS submission.

Once the Draft International Standard has been approved by JTC 1, it shall progress to the approval stage (FDIS).

UPnP AV Architecture:2

For UPnP Version 1.0

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Date: March 31, 2013

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1 Scope

1.1 Introduction

This document describes the overall UPnP AV Architecture, which forms the foundation for the UPnP AV Device and Service templates. The AV Architecture defines the general interaction between UPnP control points and UPnP AV devices. It is independent of any particular device type, content format, and transfer protocol. It supports a variety of devices such as TVs, VCRs, CD/DVD players/jukeboxes, settop boxes, stereos systems, MP3 players, still-image cameras, camcorders, electronic picture frames (EPFs), and the PC. The AV Architecture allows devices to support different types of formats for the entertainment content (such as MPEG2, MPEG4, JPEG, MP3, Windows Media Architecture (WMA), bitmaps (BMP), NTSC, PAL, ATSC, etc.) and multiple types of transfer protocols (such as IEC-61883/IEEE-1394, HTTP GET, RTP, HTTP PUT/POST, TCP/IP, etc.). The following clauses describe the AV Architecture and how the various UPnP AV devices and services work together to enable various end-user scenarios.

1.2 Goals

The UPnP AV Architecture was explicitly defined to meet the following goals:

- To support arbitrary transfer protocols and content formats.
- To enable the AV content to flow directly between devices without any intervention from the control point.
- To enable control points to remain independent of any particular transfer protocol and content format. This allows control points to transparently support new protocols and formats.
- Scalability, i.e. support of devices with very low resources, especially memory and processing power as well as full-featured devices.
- Synchronized playback to multiple rendering devices.
- Access Control, Content Protection, and Digital Rights Management.

1.3 Non-Goals

The UPnP AV Architecture does not enable any of the following:

- Two-way Interactive Communication, such as audio and video conferencing, Internet gaming, etc.

2 Normative references

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.

[1] *AVTransport:3*, UPnP Forum, December, 31, 2010.

Available at: <http://www.upnp.org/specs/av/UPnP-av-AVTransport-v3-Service-20101231.pdf>.

Latest version available at: <http://www.upnp.org/specs/av/UPnP-av-AVTransport-v3-Service.pdf>.

[2] *ContentDirectory:4*, UPnP Forum, December, 31, 2010.

Available at: <http://www.upnp.org/specs/av/UPnP-av-ContentDirectory-v4-Service-20101231.pdf>.

Latest version available at: <http://www.upnp.org/specs/av/UPnP-av-ContentDirectory-v4-Service.pdf>.

[3] *ConnectionManager:3*, UPnP Forum, December, 31, 2010.

Available at: <http://www.upnp.org/specs/av/UPnP-av-ConnectionManager-v2-Service-20101231.pdf>.

Latest version available at: <http://www.upnp.org/specs/av/UPnP-av-ConnectionManager-v3-Service.pdf>.

[4] *MediaRenderer:3*, UPnP Forum, December, 31, 2010.

Available at: <http://www.upnp.org/specs/av/UPnP-av-MediaRenderer-v3-Device-20101231.pdf>.

Latest version available at: <http://www.upnp.org/specs/av/UPnP-av-MediaRenderer-v3-Device.pdf>.

[5] *MediaServer:4*, UPnP Forum, December, 31, 2010.

Available at: <http://www.upnp.org/specs/av/UPnP-av-MediaServer-v4-Device-20101231.pdf>.

Latest version available at: <http://www.upnp.org/specs/av/UPnP-av-MediaServer-v4-Device.pdf>.

[6] *RenderingControl:3*, UPnP Forum, December, 31, 2010.

Available at: <http://www.upnp.org/specs/av/UPnP-av-RenderingControl-v3-Service-20101231.pdf>.

Latest version available at: <http://www.upnp.org/specs/av/UPnP-av-RenderingControl-v3-Service.pdf>.

[7] *ScheduledRecording:2*, UPnP Forum, December, 31, 2010.

Available at: <http://www.upnp.org/specs/av/UPnP-av-ScheduledRecording-v2-Service-20101231.pdf>.

Latest version available at: <http://www.upnp.org/specs/av/UPnP-av-ScheduledRecording-v2-Service.pdf>.

3 Terms, definitions, symbols and abbreviations

For the purposes of this document, the terms and definitions given in [1] and the following apply:

3.1

AVT

AVTransport Service

3.2

CDS

ContentDirectory Service

3.3

CM

ConnectionManager Service

3.4

MR

MediaRenderer Device

3.5

MS

MediaServer Device

3.6

RCS

RenderingControl Service