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Information technology – UPnP device architecture – Part 17-13: Quality of Service Device Control Protocol – Level 3 – Quality of Service Device Service – Underlying Technology Interfaces

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INFORMATION TECHNOLOGY – UPNP DEVICE ARCHITECTURE –

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FOREWORD

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International Standard ISO/IEC 29341-17-13 was prepared by UPnP Forum Steering committee[1], was adopted, under the fast track procedure, by subcommittee 25: Interconnection of information technology equipment, of ISO/IEC joint technical committee 1: Information technology.

The list of all currently available parts of the ISO/IEC 29341 series, under the general title *Information technology – UPnP device architecture*, can be found on the IEC web site.

This International Standard has been approved by vote of the member bodies, and the voting results may be obtained from the address given on the second title page.

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1 UPnP Forum Steering committee, UPnP Forum, 3855 SW 153rd Drive, Beaverton, Oregon 97006 USA. See also "Introduction".

IMPORTANT – The "colour inside" logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this publication using a colour printer.

1 Overview and Scope

This service definition addendum contains recommendations for implementing interfaces between the UPnP QosDevice Service and various lower transport layers. Its purpose is to ensure that implementers of these interfaces use consistant mapping of methods and parameters from UPnP to the lower layers.

1.1 Referenced Specifications

Unless explicitly stated otherwise herein, implementation of the mandatory provisions of any standard referenced by this specification shall be mandatory for compliance with this specification.

1.1.1 Normative References

This clause lists the normative references used in this document and includes the tag inside square brackets that is used for each sub reference:

[QD 3] *UPnP QosDevice:3* Service Document. Available at: http://www.upnp.org/specs/qos/UPnP-qos-QosDevice-v3-Service-20081130.pdf Latest version available at: http://www.upnp.org/specs/qos/UPnP-qos-QosDevice-v3-Service.pdf

[DEVICE] - *UPnP Device Architecture, version 1.0*.

[IANA] - IANA Interface Type (IANAifType)-MIB http://www.iana.org/assignments/ianaiftype-mib

1.1.2 Informative References

This clause lists the informative references used in this document and includes the tag inside square brackets that is used for each sub reference:

[Qos Architecture] – UPnP Qos Architecture:3 Document Available at: http://www.upnp.org/specs/qos/UPnP-qos-Architecture-v3-20081130.pdf Latest version available at: http://www.upnp.org/specs/qos/UPnP-qos-Architecture-v3.pdf

[Annex_G] – IEEE 802.1Q-2005, Annex G, IEEE Standard for Information technology - Telecommunications and information exchange between systems – IEEE Standard forLocal and metropolitan area networks - Virtual Bridged Local Area Networks, 2005.

2 (Normative) Requirements on the QosDevice Service and interactions that are specific for the Underlying Network Technologies

This addendum provides requirements for the *QosDevice* Service that are specific to particular Underlying Network Technologies. It is expected that these UPnP *QosDevice* Services will run directly on top of Layer 2 MAC/PHYs. QosDevice Services MAY also run on top of higher layer mechanisms . Both of these Layer 2 and higher layer mechanisms will be referred to as L2 technologies and *QosDevice* Service interactions with the L2 technologies. The described technologies were among those considered during development of UPnP-QoS v3.

Given the map in the Mapping Table defined in the appropriate L2 technology subclause below, if a an optional parameter is omitted in the active TSPEC and there is a UPnP-QoS default value, the *QosDevice* Service MUST use the UPnP-QoS default value (in preference to the L2 default value).

If UPnP-QoS v3 is implemented on an L2 technology that is not defined in this addendum, a clause based on the template provide in Annex B of *QosDevice* Service [QD 3] MUST be completed. The purpose of this requirement is to ensure interoperability between products from different manufacturers.

The clauses below assume that the referenced specifications are available to the reader for terminology and functional definition.