

INTERNATIONAL STANDARD



**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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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.

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

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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 consistent mapping of methods and parameters from UPnP to the lower layers.

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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 for Local 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 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.