IEEE P802.11
Wireless LANs

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| Proposed Spec TextQuality of Service for latency sensitive traffic |
| Date: 2021-01-01 |
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Abstract

This submission proposes spec text for Quality of Service for latency sensitive traffic to be incorporated into 801.11be D0.3

Revisions:

* Rev 0: Initial version of the document.

The text is based on the following motions:

An MLD AP may offer differentiated quality of service over different links.

[Motion 112, #SP49, [19] and [257]]

802.11be shall define a mechanism that differentiates low latency traffic from regular traffic and prioritizes the transmission of low latency traffic in R1.

[Motion 135, #SP225, [25] and [282]]

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| MAC | Quality of Service for latency sensitive traffic | Chunyu Hu, Frank Hsu, Dave Cavalcanti, Duncan Ho,  | Dibakar Das, BARON Stephane, VIGER Pascal, NEZOU Patrice, Thomas Handte, Sharan Naribole, Subir Das, Akhmetov Dmitry, Liuming Lu, Akira Kishida, Mohamed Abouelseoud, Orem Kedem, Xin Zuo, Chittabrata Ghosh, Payam Torab, Leif Wilhelmsson, Sebastian Max, Liangxiao Xin, Jonghun Han, Taewon Song, Mark Rison, Guogang Huang, Yonggang Fang | Basics (R1) | Uploaded:Presented:Straw Polled: | Motion 112, #SP49Motion 135, #SP225 |

***Editing instructions formatted like this are intended to be copied into the TGbe Draft (i.e. they are instructions to the 802.11 editor on how to merge the text with the baseline documents).***

***TGbe Editor: Editing instructions preceded by “TGbe Editor” are instructions to the TGbe editor to modify existing material in the TGbe draft. As a result of adopting the changes, the TGbe editor will execute the instructions rather than copy them to the TGbe Draft.***

***~~TGbe editor: Add new a subclause 35.3.x the following subclause and editing instructions at an appropriate location within the TGbe draft:~~***

**Note this section is deferred for now.**

**35.3.x Quality of service for latency sensitive traffic**

35.3.x.1. General

Traffic originating from many real time applications has stringent latency requirements including not only very low average and worst-case values, in the order of a few to tens of milliseconds, but also small jitter. Such traffic is referred as latency sensitive traffic in this subclause. To meet the requirements of such traffic as well as to optimize the network performance, an AP MLD may choose one or more links and provide differentiated quality of services over these links.

The mechanism by which differentiated QoS is provided over these links is defined in 35.x (Low latency operation).

***TGbe editor: Add new a subclause 35.x Low latency within clause 35 as follows:***

35. Extreme High Throughput (EHT) MAC specification

35.x. Low latency operation

35.x.1. General

Traffic originating from many real time applications has stringent latency requirements including not only very low average and worst-case values within certain reliability constraints, of the order of a few to tens of milliseconds, but also small jitter. Such traffic is referred as *latency sensitive traffic* in this subclause. Low latency operation described in this subclause reduces the average and worst-case latency, and jitter. This includes defining a QoS management mechanism to differentiate latency sensitive traffic from other traffic, and defining a mechanism to prioritize the transmission of the latency sensitive traffic.

35.x.2. Traffic differentiation

This subclause defines a mechanism that differentiates latency sensitive traffic from other traffic.

35.x.3. Prioritization

This subclause defines a mechanism that prioritizes the transmission of latency sensitive traffic.

**Straw Poll: Do you support to incorporate the proposed draft text in this document 11-21/34r3, page 3, to the TGbe Draft 0.4~~3~~?**

**Result: Yes/No/Abstain**