IEEE P802.11
Wireless LANs

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| Proposed Draft Text for Link latency measurement and report in MLO  |
| Date: 2020 – 09 - 01  |
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Abstract

This submission proposes text of D0.1 for the SFD MAC topic, Link latency measurement and report in MLO

Revisions:

- Rev 0: Initial version of the document.

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**Discussion:**

The texts is prepared for the following motion.

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| MAC | Link latency measurement and report in MLO | Frank Hsu | Akira Kishida, Xin Zuo, Dibakar Das | ON HOLD |  | Motion 119, SP#110 |

802.11be supports to define a mechanism so that an EHT AP MLD can provide information about traffic conditions of each link (e.g., DL transmit Delay, BSS load).

* Signaling details is TBD.

[Motion 119, #SP110, [3] and [178]]

***TGbe editor: Please add a subclause in 9.4.2 as follows***

9.4.2.x Link Latency Measurement and Report element

The Link Latency Measurement and Report element contains information reported from an AP operating on a specific link about the statistics of MSDUs entering the MAC of the AP and the transmit delay of MSDUs transmitted on the link. The element format is defined in Figure x-xx0 (Link Latency Measurement and Report element). This element may be used by a STA to select a proper AP operating on a specific link to associate with or be used by network analysis to compare link latency performance among different links of an AP MLD.

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|  |  |  |  |  |  |  |  |  |  |
|  | Element ID | Length | Element ID Extension | Link ID | Measurement Duration  | Average DL TransmitDelay  | 95th Percentile DL Transmit Delay | TBDfields | OptionalSubelements |
| Octets: | 1 | 1 | 1 | 1 | 2 | 1 | 1 | TBD | Variable |

Figure x.xx0 Link Latency Measurement and Report element format

The Element ID and Length fields are defined in 9.4.2.1. (General).

The Element ID Extension field is defined in 9.4.2.1.

The Link ID is defined in the TBD section.

The Measurement Duration field is set to the duration where the statistics reported in the element was measured, in units of TUs.

The Average DL Transmit Delay field is an unsigned integer in units of TUs indicating the average transmit delay, which is rounded to the nearest integer, of all successfully transmitted DL MSDUs on the link during the measurement duration. Transmit delay is defined in 9.4.2.21.11 (Transmit Stream/Category Measurement report).

The 95th Percentile DL Transmit Delay field indicates the transmit delay rounded to the nearest unsigned integer in units of TU that during the measurement duration, 95 percent of the transmit delay of all successfully transmitted DL MSDUs falls below.

Additional fields are TBD.

The Optional Subelements field contains zero or more subelements. The subelement format and ordering of subelements are defined in 9.4.3 (Subelements).

Optional Subelement field is TBD.