IEEE P802.11
Wireless LANs

|  |
| --- |
| Comments Resolution for Figure 10-1 |
| Date: 2021-03-10 |
| Author(s): |
| Name | Affiliation | Address | Phone | email |
| Yunbo Li | Huawei |  |  | liyunbo@huawei.com |
| Ming Gan |  |  |  |  |
| Yuchen Guo |  |  |  |  |
| Guogang Huang |  |  |  |  |
| Yiqing Li |  |  |  |  |
| Zhenguo Du |  |  |  |  |
| Rob Sun |  |  |  |  |
| Edward Au |  |  |  |  |
| Stephen McCann |  |  |  |  |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **CID** | **Commenter** | **Clause Number(C)** | **Page** | **Comment** | **Proposed Change** | **Resolution** |
| 1737 | Hanseul Hong | 10.2 | 81.06 | Add EHT PHY in Figure 10-1 | As in the comment | **Revised** Added EHT PHY as well as synchronized multi-link access (SMLA) which supported in EHT multi-link operation in to figure 10-1. In addition a new subclause describing (SMLA) is added to account for contention based modifications that address the non-STR MLD access to the medium.**TGbe editor please implement changes as shown in doc 11-21/0465r1**  |

1. **Introduction**

Interpretation of a Motion to Adopt

A motion to approve this submission means that the editing instructions and any changed or added material are actioned in the TGbe Draft. The introduction and the explanation of the proposed changes are not part of the adopted material.

***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).***

1. **Proposed spec text**

The baseline for this text is 802.11ax D8.0 and REVmd D4.0

**10.1 Introduction**

***TGbe editor: Change the following paragraph (from 802.11ax D8.0 ) as follows:***

The MAC functional description is presented in this clause. The architecture of the MAC sublayer, including the distributed coordination function (DCF), the hybrid coordination function (HCF), the mesh coordination function (MCF), the triggered UL access (TUA), the synchronized multi-link access (SMLA), and their coexistence in an IEEE 802.11 LAN are introduced in 10.2 (MAC architecture). These functions are expanded on in 10.3 (DCF), 10.23 (HCF), and 10.24 (Mesh coordination function (MCF)), 26.2 (HE channel access), and 35.3.13.6 (Start time sync PPDUs medium access). Fragmentation and defragmentation are defined in 10.4 (MSDU, A-MSDU, and MMPDU fragmentation) and 10.5 (MSDU, A-MSDU, and MMPDU defragmentation). Multirate support is addressed in 10.6 (Multirate support). A number of additional restrictions to limit the cases in which MSDUs are reordered or discarded are described in 10.7 (MSDU transmission restrictions). Operation across regulatory domains is defined in 10.22 (Operation across regulatory domains). The block ack mechanism is described in 10.25 (Block acknowledgment (block ack)). The No Ack mechanism is described in 10.26 (No Acknowledgment (No Ack)). The protection mechanism is described in 10.27 (Protection mechanisms). Rules for processing MAC frames are described in 10.28 (MAC frame processing).

**10.2 MAC architecture**

**10.2.1 General**

***TGbe editor: Replace Figure 10-1 (Non-DMG non-CMMG non-S1G STA MAC architecture) with the following:***

**Figure 10-1—Non-DMG non-CMMG non-S1G STA MAC architecture**

**10.2.4a Triggered uplink access (TUA)**

A non-AP HE STA supports trigger-based UL access methods. Triggered UL access (TUA) is used when an HE AP triggers one or more non-AP HE STAs to transmit HE TB PPDUs simultaneously. The optional UL OFDMA-based random access (UORA) additionally allows a non-AP HE STA to access one of a number of resource units designated for random access by the HE AP. See 26.5.2 (UL MU operation) and 26.5.4 (UL OFDMA-based random access (UORA)).

***TGbe editor: Insert a new subclause as follows after 10.2.4a:***

**10.2.4b Synchronized multi-link access (SMLA)**

A NSTR MLD supports synchronized multi-link access (SMLA) methods. SMLA is used when EHT STAs affiliated with a NSTR MLD operate on a NSTR link pair, contend for the WM to become TXOP holders and intend to align the start times of the PPDUs transmitted over the NSTR link pairs. See 35.3.13.6 (Start time sync PPDUs medium access).

**10.2.5 Combined use of DCF, HCF, TUA, and SMLA**

***TGbe editor: Change the following paragraph (from 802.11ax D8.0 ) as follows:***

The DCF, hybrid coordination function, TUA and SMLA are defined so they may operate within the same BSS. The HCF access methods (controlled and contention based) operate sequentially. Sequential operation allows the polled and contention based access methods to alternate, within intervals as short as the time to transmit a frame exchange sequence, under the rules defined in 10.23 (HCF).

***TGbe editor: add following definition in subcaluse 3.2***

**3.2 Definitions specific to IEEE 802.11**

Synchronized multi-link access (SMLA): An access mechanism by which multiple EHT STAs affiliated with a NSTR MLD operating on NSTR link pair(s), contend for the WM to become TXOP holders and align the start times of the PPDUs sent over the NSTR link pair(s).

***TGbe editor: add following definition in subcaluse 3.4***

SMLA synchronized multi-link access

***End of change***