IEEE P802.11
Wireless LANs

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| Comment resolution for HCF |
| Date: 2017-07-10 |
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Abstract

This submission proposes resolutions for multiple comments related to TGax D1.0 with the following CIDs (5):

* 5374, 6034, 9863, 5861, 5853

Revisions:

* Rev 0: Initial version of the document

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 TGax Draft. This introduction is not part of the adopted material.

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

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

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| **CID** | **Page** | **Clause** | **Comment** | **Proposed Change** | **Resolution** |
| 5374 | 129.13 | 10.22.2 | It is not clear, what shall be done with LRC, SRC, CW[AC], etc, when a frame was transmitted several times with EDCA and then with UL OFDMA | Clarify | Rejected.What be done with LRC, SRC, CW is described in subclause 10.22.2.11 (Retransmit procedures) and 10.22.2.2 (EDCA backoff procedure) of P802.11ax D1.3 |
| 6034 | 133.64 | 10.22.2.8 | Please clarify can any number of buffer status reports and all required bandwidth query reports be triggered in a TXOP with TXOPLimit value 0. In general it could be a good principle to allow transmission of any number of Trigger frames soliciting a specific response type transmission in an AC with TXOPLimit set to 0. | Please add clarification are Trigger frames to solicit buffer status reports and bandwidth query allowed in a TXOP with TXOPLimit set to value 0. | Rejected.As described in subclause 10.22.2.8, a QoS Null frame can be caused to be transmitted with TXOP limit value 0. It means that a STA can response with any number of buffer status reports or all required bandwidth query report. |
| 9863 | 133.47 | 10.22.2.10 | In 10.22.2.10 of the baseline spec., rule for termination of TXOP is defined for all PPDU format cases. Here, a TXOP holder should transmit a short control frame as the final transmission in a TXOP to prevent 3rd party STA from invoking EIFS. However, in HE PPDU case, as the TXOP\_DURATION is indicated in the PHY header, there's no reason to have this rule unless TXOP\_DURATION field is set to all 1s. Clarification is needed for TXOP termination rule for HE PPDU format. | As in the comment. | Rejected.As described in subclause 10.22.2.10 in Draft P802.11REVmd\_D0.1, a HE TXOP holder doesn’t have to follow the rules in subcluase 10.22.2.10.If TXOP\_DURATION field is set to all 1s, a HE TXOP holder can transmit CF-End to terminate TXOP. However that operation is already described in baseline spec.  |
| 5861 | 133.31 | 10.22.2.8 | In 11ax, if the AP configures EDCA TXOP parameter by itself and it obtains a TXOP duration for DL/UL MU transmission, but without any restriction, the legacy STAs associated in the BSS and the OBSS (non-)AP STAs may suffer from starvation because of the excessive long TXOP duration.Especially in dense environment, the fairness problem of OBSS STAs can be critical when the TXOP duration is determined by only the AP without any restriction. Therefore the MU TXOP Limit should be defined.The MU TXOP Limit should be defined. Since the multi-TID aggregation should be permitted within not exceeded the MU TXOP Limit. E.g., the multi-TID aggregation should be permitted within not exceeded the MU TXOP limit. In addition, if the AP is a TXOP holder and it performs multi-TID aggregation and/or MU transmission, in this case the TXOP holder should not be exceeded the MU TXOP limit. | Define the MU TXOP Limit. | Rejected.Starvation of legacy OBSS AP/STA may not be serious because MU TXOP isn’t relatively much longer than SU TXOP. Also all MU transmission in 11ax has TXOP limit and TXOP limit can be manageable by an HE AP.  |
| 5853 | 152.20 | 27.2.3 | Basically, the HE STA enters the doze state outside trigger-enabled TWT SPs. In this case, HEMUEDCATimer doesn't need to countdown. | Add below sentence in P152P20 for clarification of HEMUEDCATimer."The HEMUEDCATimer[AC] should not countdown outside trigger-enabled TWT SPs." | Rejected.Operation in the outside of TWT SPs is not related with TWT operation. This is not a mandatory requirement and has no impact in the EDCA backoff procedure. |