IEEE P802.11  
Wireless LANs

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| Comment resolutions for miscellaneous CIDs in clause 10 | | | | |
| Date: 2020-03-01 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | email |
| Alfred Asterjadhi | Qualcomm Inc. | 5775 Morehouse Dr, San Diego, CA 92109 | +1-858-658-5302 | aasterja@qti.qualcomm.com |
| Abhishek Patil | Qualcomm Inc. |  |  |  |
| George Cherian | Qualcomm Inc. |  |  |  |

Abstract

This submission proposes resolutions for multiple comments related to TGax D6.0 with the following CIDs (5 CIDs):

* 24021, 24135, 24170, 24275, 24423

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** | **Commenter** | **P.L** | **Comment** | **Proposed Change** | **Resolution** |
| 24021 | Seok, Yongho | 279.49 | "Other eligible modulation classes covers HT and VHT cases with any data rate.  It means that adding a new entry of {HE, any data rate} is not necessary. Because it is covered by the existing last entry." | Remove a new entry of {HE, any data rate} from Table 10-19 (Rate and modulation class of a final transmission in a TXOP). | Accepted |
| 24135 | Rolfe, Benjamin | 266.08 | "and the Control subfields included shall be supported by the receiving STAs" may not mean what you mean it to mean. As written it places a requirement on receiving STAL to support all possible Control subfileds, or to know what it will be sent beforehand (at implementation time). What I think is meant is that the transmtted frame should contain only control subfields that the recepient has declared it does support. | clarify e.g. change to "and the frame shall contain only Control subfields known to be supported by the receiving STAs". | Revised –  Agree in principle with the comment. Proposed resolution addresses the comment inline with the proposed change however with a different text organization.  TGax editor: Please replace “and the Control subfields included shall be supported by the receiving STAs” with “and the included Control subfields shall be those that are supported by the receiving STAs”. |
| 24170 | Kandala, Srinivas |  | The response control frame rates have not been specified when HE ER SU PPDU (with or without DCM) . The tricky situation is what a non-AP STA should use when it recieves HE SU PPDU with high power. I think it should be able to send HE ER SU PPDU, but that means the Duraiton/ID field (and TXOP duration) in HE ER SU PPDU should reflect correctly. In general it looks like there are some holes in the protocol | Discuss and if needed incorporate the necessary additions | Rejected –  It is not clear why the reception of a high powered HE SU PPDU would need to be responded to with an ER SU PPDU. Technically it would be the case when the PPDU is received at low power and the STA has generally an even lower power compared to the STA that sent the frame. There have already been discussions on allowing ER SU PPDUs for control response frames and as a result to those discussions several rules have been added to the standard that covers these use cases. Please refer to this contribution regarding some initial details on this aspect:  <https://mentor.ieee.org/802.11/dcn/16/11-16-1419-00-00ax-mcs-nss-bw-ppdu-selection-for-11ax.pptx>  and to rules defined in 26.15.2 (PPDU selection) for the rules that have been added for how to select the PPDU (non-HT/HE versus HE ER SU PPDU) and the rules defined in 26.15.3 (MCS, NSS, BW and DCM selection) for how to select the MCS (which includes the 106-RU and DCM). Hence no further changes are needed. |
| 24275 | Levy, Joseph | 288.34 | I am very confused how a STA that is not an S1G STA and is not an HE STA could have dot11TWTOptionActivated equal to true. Wasn't TWT introduced for S1G operation and extended for HE operation? How can a STA that doesn't support S1G or HE features support TWT operation? | Delete the paragraph: "A STA that is not an S1G STA and is not an HE STA and with dot11TWTOptionActivated equal to true and that operates in the role of TWT requesting STA shall set the TWT Requester Support subfield to 1 in all Extended Capabilities elements that it transmits. A STA that is not an S1G STA and is not an HE STA and with dot11TWTOptionActivated equal to true and that operates in the role of TWT responding STA shall set the TWT Responder Support subfield to 1 in all Extended Capabilities elements that it transmits." | Rejected –  The comment fails to identify a technical issue and is asking a question. A STA that doesn’t support S1G or HE features can indicate that it does support TWT by setting to 1 the TWT Requester Support or the TWT Responder Support (depending on which role it does support) subfield in the Extended Capabilities element it transmits. Hence, this way it is possible for example for a VHT STA to indicate that it supports TWT. The proposed change is proposing to remove the paragraph that actually enables this which is contrary to the intention. |
| 24423 | RISON, Mark | 265.61 | [Resubmission of comment withdrawn on D5.0] CID 20481. An HE STA conforming to the present amendment will have to ignore a Control field with Control ID above 6 anyway. So it is not necessary to specify that the payload has to be all-ones | In Table 10-11a--Conditions for including Control subfield variants delete "and Control Information subfield equal to all 1s and  whose content can be ignored by the HE recipient STA" | Rejected –  The comment fails to identify a technical issue. Having a pre-defined sequence (all ones as the name states) simplifies the sequence generation and the sequence parsing. There is no technical reason to allow the payload to have any possible value. |

**Discussion: *None.***

* Termination of TXOP

**TGax Editor: *Change the table below of this subclause as follows (#CID 24021):***

|  |  |
| --- | --- |
| * Rate and modulation class of a final transmission in a TXOP | |
| Modulation class and data rate of immediately preceding frame in TXOP | Rate and modulation class of final transmission |
| DSSS or HR/DSSS with long preamble, data rate > 1 Mb/s | 1 Mb/s DSSS |
| HR/DSSS with short preamble, data rate > 2 Mb/s | 2 Mb/s HR/DSSS short preamble |
| Other eligible modulation classes, ~~data rate > 6 Mb/s~~ except 6 Mb/s OFDM | 6 Mb/s OFDM |

**10.8 HT Control field operation**

**TGax Editor: *Change the paragraph below of this subclause as follows (#CID 24135):***

An HE STA that transmits a frame containing an A-Control subfield shall include at least one Control subfield in the A-Control subfield and the included Control subfields shall be those that are supported by the receiving STAs unless the Control ID subfield is 15.*(#24135)*