IEEE P802.11
Wireless LANs

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| CR for 35.2.1.2 |
| Date: 2023-10-17 |
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Abstract

This submission proposes comments resolution of the following 6 CIDs received for TGbe LB275:

CIDs:

19071, 19567, 19608, 19667, 19870, 19872

Revisions:

* Rev 0: Initial version of the document.

***TGbe editor: The baseline for this document is IEEE 802.11be D4.1***

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.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **CID** | **Commenter** | **Clause**  | **P.L** | **Comment** | **Proposed Change** | **Resolution** |
| 19071 | Pei Zhou | 35.2.1.2.2 | 484.23 | The first bullet and the second bullet talk about the similar condition, i.e., there is only one User Info field with AID12 = 1~2006. | Suggest to merge the first and the second bullets into one bullet. | RejectedCurrent expression is clearer. The first bullet says only one User Info field exists, and it is not a Special User Info field (AID12 not equal to 2007). The second bullet says the only User Info field exists is the one with AID12 being set to a value from 1 to 2006.If one follows the proposed change to merge the two bullets into one, it may create a misunderstanding that not only one (not many) User Info field with AID12 set to a value from 1 to 2006 is contained, but a Special User Info field is also allowed to be carried. |
| 19567 | Yonggang Fang | 35.2.1.2.2 | 484.50 | Need to clarify that the AP shall not transmit any PPDU to the non-AP EHT STA within the allocated time. | Please add "to the non-AP EHT STA" before within the allocated time ... | RejectedAfter transmitting an MU-RTS Trigger frame with Triggered TXOP Sharing Mode subfield equal to 1 to a non-AP EHT STA, the AP shall not transmit PPDU to “any STA”, i.e., it is not limited to only the non-AP EHT STA. |
| 19608 | Xiaofei Wang | 35.2.1.2.2 | 484.26 | It is not clear whether the MU-RTS TXS frame should be addressed to the associated STA or not (only the user info field should be addressed to the associated STA). This needs to be clarified | as in comment | RejectedThe text clearly shows the User Info field shall be addressed to an associated non-AP STA.P492L22 in IEEE802.11be Draft 4.1: “*The User Info field shall be addressed to an associated non-AP STA (i.e., AID12 subfield is set to a value in the range 1 to 2006).*” |
| 19667 | Dana Ciochina | 35.2.1.2.2 | 485.07 | If the AP, that obtains the shared TXOP, has also data to transmit during an immediately coming R-TWT, then the TXOP duration and allocation should be such that they also fit the rules in 35.8.4, e.g., the allocation duration However, there is no note or reference within this chapter about this. | In the context of the first bullet "The medium is determined to be idle by the CS mechanism at the end of the allocated time in which case it may transmit PIFS after the end of the allocated time." there can be an addition: If the transmission start is within an R-TWT SP, the PPDU shall contain data corresponding to the DL R-TWT TID. | RejectedThe rule of transmit PPDU within RTWT SP is clear. Doesn’t need to repeat in Triggered TXOP sharing procedure.See P625L31 in IEEE802.11be draft 4.1: “An EHT AP with dot11RestrictedTWTOptionImplemented set to true as a TXOP holder shall ensure the TXOP ends before the start time of any active R-TWT SP advertised by itself as specified in 35.8.3 (R-TWT announcement) unless the remaining portion of TXOP falling within the R-TWT SP is used for the delivery of DL frames of R-TWT DL TID(s) or to solicit the UL frames of R-TWT UL TID(s).” |
| 19870 | Ming Gan | 35.2.1.2.2 | 484.17 | P2P buffer report is still missing for now. | Add the buffer report for P2P case, so an AP knows how to do the scheduling. | RevisedAgree with the commenter. A P2P buffer report mechanism is introduced to solve this issue.For a resource request for TXOP sharing, the following requested parameters are needed: medium time, BW, and TID. The medium time requested is the requested resource based on the BW. The BW gives the maximal bandwidth that the TXOP sharing will be used for. The AP can decide the priority to allocate its medium time based on the TID and other information.TGbe editor to make changes in 11-23/1796r0 under CID 19870 |
| 19872 | Yunbo Li | 35.2.1.2.2 | 484.17 | lack of a P2P buffer report mechanism in current spec, so AP will hard to determine when to send MU-RTS TXS TF with Triggered TXOP Sharing Mode subfield equal to 2 to an associated STA for P2P transmission. | add the P2P buffer report mechanism | RevisedAgree with the commenter. A P2P buffer report mechanism is introduced to solve this issue.For a resource request for TXOP sharing, the following requested parameters are needed: medium time, BW, and TID. The medium time requested is the requested resource based on the BW. The BW gives the maximal bandwidth that the TXOP sharing will be used for. The AP can decide the priority to allocate its medium time based on the TID and other information.TGbe editor to make changes in 11-23/1796r0 under CID 19870 |

***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**

***TGbe editor: Please make the following changes in Table 9-25 (Control ID subfield values) : (#19870)***

Table 9-25—Control ID subfield values

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|

|  |
| --- |
| Control ID value |

 |

|  |
| --- |
| Meaning |

 |

|  |
| --- |
| Length of the Control Information subfield (bits) |

 |

|  |
| --- |
| Content of the Control Information subfield |

 |
| … | … | … | … |
| 10 | P2P Buffer Status Report (P2P BSR) | 16 | See 9.2.4.7.12 (P2P BSR Control) |
| 11-14 | Reserved |  |  |
| 15 |

|  |
| --- |
| Ones need expansion surely (ONES) |

 | 26 |

|  |
| --- |
| Set to all 1s |

 |

***TGbe editor: add the following subclause in subcaluse 9.2.4.7 (Control subfield variants of an A-Control subfield) (#19870)***

9.2.4.7.12 P2P BSR Control

The Control Information subfield in a P2P BSR Control subfield contains information related to the required medium time for TXOP sharing for a STA transmitting the buffered frames to its P2P peer STA (see 35.2.1.3 Triggered TXOP sharing procedure). The format of the subfield is shown in [Figure 9-x (Control Information subfield format in a P2P BSR Control subfield)](#bookmark2)

 B0 B3 B4 B6 B7 B13 B14 B15

|  |  |  |  |
| --- | --- | --- | --- |
| TID | Channel Width | Required Medium Time | Reserved |

 Bits: 4 3 7 2

 [Figure 9-x Control Information subfield format in a P2P BSR Control subfield](#bookmark2)

The TID subfield indicates the TID whose medium time is requested.

The Channel Width subfield defined in Table 9-y (Channel Width subfield) indicates the maximal bandwidth of the P2P link that corresponds to the link on which the P2P BSR Control subfield is transmitted.

The Required Medium Time subfield indicates the required medium time in unit of 256 microseconds, requested for TXOP sharing on the link on which the P2P BSR Control subfield is transmitted based on the channel width specified by the Channel Width subfield.

Table 9-y — Channel Width subfield

|  |  |
| --- | --- |
| Value | Meaning |
| 0 | 20 MHz |
| 1 | 40 MHz |
| 2 | 80 MHz |
| 3 | 160 MHz |
| 4 | 320 MHz |
| 5 to 7 | Reserved |

***TGbe editor: add the following paragraphs in 35.2.1.2.3 (Non-AP STA behaviour):*** ***(#19870)***

35.2.1.2.3 Non-AP STA behavior

If a non-AP STA with dot11EHTTXOPSharingTFOptionImplemented equal to true received the EHT Capabilities element with the Triggered TXOP Sharing Mode 2 Support subfield in the EHT Capabilities element equal to 1 from its associated AP, the non-AP STA may deliver a P2P BSR Control subfield to its associated AP to assist the AP in allocating resources for TXOP sharing operation.

After receiving the soliciting BSRP Trigger frame, a non-AP STA with dot11EHTTXOPSharingTFOptionImplemented equal to true may transmit a QoS Null frame with P2P BSR Control subfield as defined in 9.2.4.7.12 (P2P BSR Control).

When associated with an AP from which the EHT Capabilities element with the Triggered TXOP Sharing Mode 2 Support subfield in the EHT Capabilities element equal to 1 is received, a non-AP STA with dot11EHTTXOPSharingTFOptionImplemented equal to true may deliver QoS Null/Data frame with P2P BSR Control subfield as defined in 9.2.4.7.12 (P2P BSR Control) that is not carried in EHT TB PPDU or HE TB PPDU.

The required time duration in a P2P BSR Control subfield applies on the link that the P2P BSR Control subfield is transmitted.

NOTE 3 — When a non-AP STA reports a P2P BSR Control subfield to its associated AP, if the value of TID subfield in the P2P BSR Control subfield matches with the TID of an established SCS stream, the report of P2P BSR Control subfield does not change the parameters of the SCS stream.

***End of change***