###  **IEEE P802.11Wireless LANs**

|  |
| --- |
| LB271 CR for 9.3.1.22.1 |
| Date: 2023-03-12 |
| Author(s): |
| Name | Affiliation | Address | Phone | Email |
| Yanjun Sun | Qualcomm |  |  |  |
| Alfred Asterjadhi |  |  |  |  |
| Steve Shellhammer |  |  |  |  |
| George Cherian |  |  |  |  |
| Abhishek Patil |  |  |  |  |
| Youhan Kim |  |  |  |  |
| Bin Tian |  |  |  |  |
| Duncan Ho |  |  |  |  |
| Gaurang Naik |  |  |  |  |
| Abdel Karim Ajami |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

**Abstract**

This submission proposes resolutions for the following 18 CIDs for TGbe LB271:

* 15251,15897,17426,15500,17424,17425,17902,16247,17427,17428,17429,15722,15501,15758,16655,18303,15898,16644

**Revisions:**

* Rev 0: Initial version of the document.
* Rev 1: Update resolution for 16247,

***TGbe editor: Please note Baseline is 11me D2.1 and 11be D3.0***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| CID | Commenter | Clause | Page | Comment | Proposed Change | Resolution |
| 15251 | JINYOUNG CHUN | 9.3.1.22.1 | 169.56 | Delete ', and' at the end of the sentence. | as comment | Accepted |
| 15897 | Xiaofei Wang | 9.3.1.22.1 | 169.56 | missing reference or floating words ", and ." | filling the missing reference or remove words | RevisedAgree with the commenter in principle.Tgbe editor, please delete ', and', same as the resolution for CID 15251 above. |
| 17426 | Brian Hart | 9.3.1.22.1 | 169.56 | Rogue tailing "and " | Delete | RevisedAgree with the commenter in principle.Tgbe editor, please delete ', and', same as the resolution for CID 15251 above. |
| 15500 | Chaoming Luo | 9.3.1.22.1 | 169.46 | The following text in 11me should also be updated by 11be: "An HE AP sets the UL HE-SIGA2 Reserved subfield to all 1s." | Change to: An non-EHT HE AP sets the UL HE-SIGA2 Reserved subfield to all 1s. | Accepted |
| 17424 | Brian Hart | 9.3.1.22.1 | 169.08 | Improper use of "which" in a defining clause | "A Trigger frame that is not" | Accepted |
| 17425 | Brian Hart | 9.3.1.22.1 | 169.11 | Improper singular | "that are not TB PPDUs" or "that are not TB PPDU transmissions" | RevisedAgree with the commenter in principle.Tgbe editor please add “s” to end of “TB PPDU” |
| 17902 | Kazuto Yano | 9.3.1.22.1 | 169.55 | One of three parentheses just after "Special User Info field" is unnecessary. | Please remove it. | Accepted |
| 16247 | Stephen McCann | 9.3.1.22.1 | 170.60 | typo "a NSTR" | Change "a NSTR" to "an NSTR". There are several other locations with the same issue. | RevisedTgbe editor please replace “a NSTR” with “an NSTR” throughout the draft |
| 17427 | Brian Hart | 9.3.1.22.1 | 169.64 | P169L64-P170L6 is procedural | Move P169L64-P170L6 to a MAC clause and insert a note here alluding to these behaviuors and a xref to the MAC clause. | RevisedAgree with the commenter in principle. Some corresponding normative text has been added to D3.0 as follows: 1) “An EHT AP shall not transmit a Trigger frame that solicits both an HE TB PPDU and an EHT TB PPDU” in 35.5.2.2.4; and 2) “An EHT AP shall not assign an AID value of 2007 to any STA or non-AP MLD.” in 35.15.1. So we only need to add normative text for “A non-EHT HE AP does not transmit a Trigger frame with the EHT variant User Info field or the Special User Info field, whereas an EHT AP can transmit a Trigger frame with any variant of the User Info field.” In subclauses 26.5.2.1 and 35.5.2.1Tgbe editor please implement changes as shown in doc 11-23/0400r0 tagged as #17427 |
| 17428 | Brian Hart | 9.3.1.22.1 | 170.10 | "the Bxx" reads badly. | Remove "the" before Bnn, 4x in this para. Also, if possible, convert these bit positions to subfield names | RevisedAgree with the commenter in principle. "the" before Bnn has been removed. It has been discussed whether to convert these bits to subfields names. As these bits have different meanings for HE variant and EHT variant Common Info and User Info fields, the group has decided to use the bit positions for succinct text. Tgbe editor please implement changes as shown in doc 11-23/0400r0 tagged as #17428 |
| 17429 | Brian Hart | 9.3.1.22.1 | 170.41 | P170L41-48 is procedural | Move P170L41-48 to a MAC clause and insert a note here alluding to these behaviuors and a xref to the MAC clause. | RevisedAgree with the commenter in principleTgbe editor please implement changes as shown in doc 11-23/0400r0 tagged as #17429 |
| 15722 | Yapu Li | 9.3.1.22.1 | 170.45 | "If B54 in the Common Info field is equal to 1, an EHT AP does not set B55 in the Common field set to 0.". This sentence contradicts the last two rows in the table 9-45c. | Clarify the conditions of this sentence | RevisedThis sentence is correct as it only specifies behavior on the AP side. A non-AP EHT STA may still support all the rows in the table.To briefly recap the past discussions: The last two rows were initially inserted for A-PPDU. Although the group has decided not to support A-PPDU in 11be, some members still prefer to keep the last two rows for two reasons: 1) the non-AP side so that they could be triggered by a next-generation AP, and 2) for the stability of the spec text.To avoid confusion, we propose to add a NOTE to clarify that the last two rows are only for an non-AP EHT STA.Tgbe editor please implement changes as shown in doc 11-23/0400r0 tagged as #15722 |
| 15501 | Chaoming Luo | 9.3.1.22.1 | 170.46 | This sentence conflicts with Table 9-45c. Table 9-45c says '10' for B54 and B55 is valid. In the history of this disucssion, '10' is for A-PPDU pending to Release 2, simply remove the MIB dot11EHTBaseLineFeaturesImplementedOnly in the text is not correct. Since it's nature that a BSS has both HE STAs and EHT STAs, it is important that AP should be able to simultaneously trigger HE TB PPDUs and EHT TB PPDUs from different STAs. | Add support for UL TB A-PPDU. | RevisedTo briefly recap the past discussions: The last two rows were initially inserted for A-PPDU. Although the group has decided not to support A-PPDU in 11be, some members still prefer to keep the last two rows for two reasons: 1) the non-AP side so that they could be triggered by a next-generation AP, and 2) for the stability of the spec text.To avoid confusion, we propose to add a NOTE to clarify that the last two rows are only for an non-AP EHT STA.Tgbe editor please implement changes as shown in doc 11-23/0400r0 tagged as #15722, same as above. |
| 15758 | Dong Guk Lim | 9.3.1.22.1 | 170.35 | EHT AP does not solicit both HE TB PPDU and EHT TB PPDU. And, A-PPDU also did not support in 11be. Thus, In table 9-45c, the 5th and 6th column don't need. Delete it. | As in comment | RevisedTo briefly recap the past discussions: The last two rows were initially inserted for A-PPDU. Although the group has decided not to support A-PPDU in 11be, some members still prefer to keep the last two rows for two reasons: 1) the non-AP side so that they could be triggered by a next-generation AP, and 2) for the stability of the spec text.To avoid confusion, we propose to add a NOTE to clarify that the last two rows are only for an non-AP EHT STA.Tgbe editor please implement changes as shown in doc 11-23/0400r0 tagged as #15722, same as above. |
| 16655 | Juan Fang | 9.3.1.22.1 | 170.35 | Last two rows in Table 9-45c is not aligning with the text "If B54 in the Common Info field is equal to 1, an EHT AP does not set B55 in the Common Info field set to 0" under the Table 9-45c | It's better to explain in which scenario we will have the combinations listed in the last two rows of Table 9-45c.change "If B54 in the Common Info field is equal to 1, an EHT AP does not set B55 in the Common Info field set to 0" to be "If B54 in the Common Info field is equal to 1, an EHT AP does not set B55 in the Common Info field to 0" | RevisedTo briefly recap the past discussions: The last two rows were initially inserted for A-PPDU. Although the group has decided not to support A-PPDU in 11be, some members still prefer to keep the last two rows for two reasons: 1) the non-AP side so that they could be triggered by a next-generation AP, and 2) for the stability of the spec text.To avoid confusion, we propose to add a NOTE to clarify that the last two rows are only for an non-AP EHT STA.Tgbe editor please implement changes as shown in doc 11-23/0400r0 tagged as #15722, same as above. |
| 18303 | kaiying Lu | 9.3.1.22.1 | 170.46 | "If B54 in the Common Info field is equal to 1, an EHT AP does not set B55 in the Common field set to 0." The corresponding combination in Table 9-45c should be disallowed accordingly. | As in comment. | RevisedTo briefly recap the past discussions: The last two rows were initially inserted for A-PPDU. Although the group has decided not to support A-PPDU in 11be, some members still prefer to keep the last two rows for two reasons: 1) the non-AP side so that they could be triggered by a next-generation AP, and 2) for the stability of the spec text.To avoid confusion, we propose to add a NOTE to clarify that the last two rows are only for an non-AP EHT STA.Tgbe editor please implement changes as shown in doc 11-23/0400r0 tagged as #15722, same as above. |
| 15898 | Xiaofei Wang | 9.3.1.22.1 | 170.35 | B54 = 1 and B55= 0 and User info field B39 = 1 (row 4) is EHT variant and solicits EHT TB PPDU, yet, the text says "If B54 in the Common Info field is equal to 1, an EHT AP does not set B55 in the Common field set to 0.", does this imply that only HE AP sets the bit to 1 to solicit EHT TB PPDU? This is not correct. If this is related to r1 r2 features, since there is no r2, please remove the row from the table. | as in comment | RevisedTo briefly recap the past discussions: The last two rows were initially inserted for A-PPDU. Although the group has decided not to support A-PPDU in 11be, some members still prefer to keep the last two rows for two reasons: 1) the non-AP side so that they could be triggered by a next-generation AP, and 2) for the stability of the spec text.To avoid confusion, we propose to add a NOTE to clarify that the last two rows are only for an non-AP EHT STA.Tgbe editor please implement changes as shown in doc 11-23/0400r0 tagged as #15722, same as above. |
| 16644 | Wookbong Lee | 9.3.1.22.1 | 170.35 | Last two rows in Table 9-45C are not supported by EHT STAs. As the paragraph below speciified that if B54 is equal to 1, EHT AP does not set B55 to 0. It is confusing to keep the last two rows in the table. | Remove last two rows in Table 9-45C | RevisedTo briefly recap the past discussions: The last two rows were initially inserted for A-PPDU. Although the group has decided not to support A-PPDU in 11be, some members still prefer to keep the last two rows for two reasons: 1) the non-AP side so that they could be triggered by a next-generation AP, and 2) for the stability of the spec text.To avoid confusion, we propose to add a NOTE to clarify that the last two rows are only for an non-AP EHT STA.Tgbe editor please implement changes as shown in doc 11-23/0400r0 tagged as #15722, same as above. |

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. This introduction is 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).***

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

**9.3.1.22.1 General**

… …

***TGbe editor: Please delete P169L64-P170L6 in D3.0 add corresponding normative text in 35.5.2.1 as indicated below (track change enabled):***

(#17427)

… …

A User Info field that is addressed to a non-AP STA is either an HE variant or an EHT variant. The User Info field is an HE variant addressed to a non-AP EHT STA if (#17428) B39 of the User Info field is set to 0 and (#17428)B54 of the Common Info field is set to 1 in the Trigger frame; otherwise, it is an EHT variant. B39 of an HE variant User Info field is reserved for a non-EHT HE STA. B39 is set to 0 for an HE variant User Info field by an EHT AP, and is the PS160 subfield for an EHT variant User Info field. Table 9-45c (Valid combinations of B54 and B55 in the Common Info field, B39 in the User Info field, and solicited TB PPDU for- mat) defines valid combinations of (#17428)B54 and B55 in the Common Info field, (#17428)B39 in the User Info field, the presence of the Special User Info field in the Trigger frame, the variant of a User Info field, and the corresponding TB PPDU type.

**Table 9-45c—Valid combinations of B54 and B55 in the Common Info field, B39 in the User Info field, and solicited TB PPDU format**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Common Info field B54** | **Common Info field B55** | **User Info field B39** | **Presence of Special User Info field** | **User Info field variant** | **TB PPDU type** |
| 1 | 1 | 0 | No | HE variant | HE |
| 0 | 0 | 0 | Yes | EHT variant | EHT |
| 0 | 0 | 1 | Yes | EHT variant | EHT |
| 1 | 0 | 1 | Yes | EHT variant | EHT |
| 1 | 0 | 0 | Yes | HE variant | HE |

***TGbe editor: Please convert the following paragraph to a NOTE (track change enabled):***

(#17429)NOTE 1--For example, if an EHT AP sends a Trigger frame that intends to solicit an EHT TB PPDU with a 4996- tone RU from an EHT STA, then the AP sets B54 and B55 of the Common Info field to 0 and sets B39 to 1 in the User Info field addressed to the STA.

***TGbe editor: Please delete the following paragraph, add corresponding normative text in 35.5.2.1 as indicated below ; and insert a NOTE (track change enabled):***

(#17429)(#15722)NOTE 2—Although the last two rows in Table 9-45c (Valid combinations of B54 and B55 in the Common Info field, B39 in the User Info field, and solicited TB PPDU format) are not used by an EHT AP (see 35.5.2.1 (General)), a non-AP EHT STA might respond to a Trigger frame with B54 in the Common Info field equal to 1 and with B55 in the Common Info field equal to 0 based on the two rows.

**26.5.2 UL MU operation**

**26.5.2.1 General**

***TGbe editor: Please add the following paragraph to the end of this subclause (track change enabled):***

(#17427)A non-EHT HE AP shall not transmit a Trigger frame with an EHT variant User Info field or a Special User Info field.

**35.5.2 EHT UL MU operation**

**35.5.2.1 General**

***TGbe editor: Please add the following 3 paragraphs to the end of this subclause (track change enabled):***

(#17427)An EHT AP may transmit a Trigger frame with any variant of the User Info field.

(#17429)An EHT AP shall not set B55 in the Common field set to 0 while setting B54 in the Common Info field to 1 in a Trigger frame (see Table 9-45c (Valid combinations of B54 and B55 in the Common Info field, B39 in the User Info field, and solicited TB PPDU format)). If the bandwidth of a solicited EHT TB PPDU is less than 320 MHz, then B39 of the corresponding EHT variant User Info field in the Trigger frame shall be set to 0.