IEEE P802.11  
Wireless LANs

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| |  |  |  |  |  | | --- | --- | --- | --- | --- | | D2.0 Comment Resolution on U-SIG Part 1 | | | | | | Date: 2022-07-08 | | | | | | Author(s): | | | | | | Name | Affiliation | Address | Phone | email | | Alice Chen | Qualcomm |  |  | alicel@qti.qualcomm.com | | Sameer Vermani | Qualcomm |  |  | svverman@qti.qualcomm.com | | Mahmoud Kamel | InterDigital |  |  | Mahmoud.Kamel@InterDigital.com | |  |  |  |  |  | |  |  |  |  |  | |  |  |  |  |  | |

Abstract

This submission proposes resolutions for the following comments on P802.11be D2.0: Comments in 36.3.12.7.

NOTE – Set the Track Changes Viewing Option in the MS Word to “All Markup” to clearly see the proposed text edits.

**Revision History:**

R0: Initial version. Resolve CIDs 10378, 10830, 10938, 11285, 11354, 11356, 11357, 12020, 12201, 12584, 12585, 12847.

R1: Remove CID 12847 and revise resolution to CID 11285.

R2: Revise resolutions to CIDs 10378, 10830, 12584.

# CID 10378, 10830, 10938, 11354, 11356, 11357, 12201, 12584, 12585

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| **CID** | **Clause** | **Page.Line** | **Comment** | **Proposed Change** | **Resolution** |
| 10830 | 36.3.12.7.2 | 642.29 | Even though EHT ER PPDU is not defined in 11be, EHT STA can use the HE ER PPDU for the range extension and robust transmission. so. to clarify it, it is better to change ER PPDU with EHT ER PPDU. | As in the comment. | Revised.  Agree to the comment that we need to make it clear. Instead of directly using the phrase “EHT ER PPDU”, we prefer to revise it to another phrase with the same meaning.  Instruction to editor: Change “while not defining an ER PPDU” to “while not defining an ER PPDU with the PHY Version Identifier field in the U-SIG equal to 0 (EHT)”. |
| 12201 | 36.3.12.7.2 | 645.16 | Appears to be an extra parentheses | Remove the extra parentheses | Accepted. |
| 12584 | 36.3.12.7.2 | 645.52 | Can the value of EHT-SIG MCS vary in different 80 MHz frequency subblock? Better to indicate clearly. | As in comment. | Revised.  Instead of clarifying in each subfield whether the content may vary in different 80 MHz frequency subblocks, we have a few paragraphs at the beginning to clarify for all. Please see P642L62-P643L11. A short answer to the question in the comment is No. As indicated in NOTE 3 in P643L10-11, “Only the Punctured Channel Information field might have different values between different 80  MHz frequency subblocks in an EHT MU PPDU with TXVECTOR parameter EHT\_PPDU\_TYPE equal to 0.” For better clarity, we will promote “NOTE 2” and “NOTE 3” into the main paragraph.  Instruction to editor: In P643L6-L7, remove “NOTE 2—” and combine this sentence into the previous paragraph. In P643L10-L11, remove “NOTE 3—” and combine this sentence into the previous paragraph. |
| 10378 | 36.3.12.7.2 | 646.52 | It's better to change "DL MU-MIMO (non-OFDMA)" into "DL non-OFDMA (MU-MIMO)". The reason is that if we see the subclause EHT-SIG, the introduction is divided into "OFDMA transmission" and "non-OFDMA transmission". To be consistent, it is better to use OFDMA and non-OFDMA to describe it. In addition, this will be consistent with the first row of this table, where classification "DL OFDMA" is used and the MIMO related information is also given in the bracket. | Change "DL MU-MIMO (non-OFDMA)" into "DL non-OFDMA (MU-MIMO)" | Revised.  Agree to the comment that we could make the change for consistency. Slightly revise the proposed change.  Instruction to editor: Change “DL MU-MIMO (non-OFDMA)” to “DL non-OFDMA MU-MIMO”. |
| 10938 | 36.3.12.7.2 | 646.55 | In Table 36-29, the entry for UL/DL=0 (DL) and PPDU Type And Compression Mode = 3 has a note saying "Validate" but it is used to differentiate EHT ER for my understanding. Same is true for UL/DL=1 (UL) | Suggest to put in Note field (for both entries) "Validate (to differentiate from EHT ER USIG)" or similar | Rejected.  Disagree to the comment that regardless of UL/DL field value, PPDU Type And Compression Mode = 3 is used to differentiate EHT ER. Regardless of UL/DL field value, PPDU Type And Compression Mode = 3 is simply an unused mode that we need to set to “Validate” in order to terminate an EHT STA’s reception of the PPDU. An ER preamble is not one of the modes that is indicated using a combination of the UL/DL and PPDU Type And Compression Mode fields. The U-SIG field of an ER preamble is identified based on its 4-symbol structure with QBPSK modulation on the 2nd symbol without ambiguity. |
| 12585 | 36.3.12.7.2 | 650.48 | The term of 'above table' is not clear. Replace it with 'Table 36-30' to avoid ambiguity. | As in comment. | Accepted. |
| 11354 | 36.3.12.7.2 | 651.02 | After "The version independent bits are B0-B19" Add "in the U-SIG-1" | as in the comment | Revised.  Agree to the comment that the bits need to be clarify. Slightly revised the proposed change in the comment to be consistent to P643L14.  Instruction to editor: After “The version independent bits are B0-B19”, add “of U-SIG-1 field.” |
| 11356 | 36.3.12.7.2 | 654.02 | After "The version independent bits are B0-B19" Add "in the U-SIG-1" | as in the comment | Revised.  Agree to the comment that the bits need to be clarify. Slightly revised the proposed change in the comment to be consistent to P643L14.  Instruction to editor: After “The version independent bits are B0-B19”, add “of U-SIG-1 field.” |
| 11357 | 36.3.12.7.2 | 654.45 | Do we want to have a "Validate" bit in ER preamble | as in the comment | Rejected.  There is no need to define a Validate field in the ER preamble. Validate field values serve to indicate whether to continue reception of a PPDU at an EHT STA. The purpose of a validate field is to achieve early termination at devices that do not support a feature. If there is no EHT ER PPDU, then there is no other option to EHT devices but to terminate reception when an ER preamble is detected. So, there is no need to have validate bits to achieve this. Just the fact that it is an ER PPDU gives the devices an option to terminate reception if they want to. When receiving the U-SIG field of an ER preamble, an EHT STA’s behavior of terminating the reception of the PPDU is defined in P642L30-38. And the U-SIG field of an ER preamble is identified based on its 4-symbol structure with QBPSK modulation on the 2nd symbol without ambiguity. |

# CID 11285, 12020

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| **CID** | **Clause** | **Page.Line** | **Comment** | **Proposed Change** | **Resolution** |
| 11285 | 36.3.12.7.3 | 656.22 | "The first two OFDM symbols carry the same coded bits, and the last two OFDM symbols also carry the same coded bits" could be mistakingly interpreted as saying that the last two OFDM symbols carry the same bits as the first two symbols. | Clarify: "the coded bits on the first two symbols are identical. The coded bits on the last two symbols are identical" | Revised.  Agree to the comment and slightly revise the proposed change.  Instruction to editor: Change the sentence "The first two OFDM symbols carry the same coded bits, and the last two OFDM symbols also carry the same coded bits." to "The coded bits of the first OFDM symbol are identical to the coded bits of the second OFDM symbol, and the coded bits of the third OFDM symbol are identical to the coded bits of the fourth OFDM symbol." |
| 12020 | 36.3.12.7.3 | 656.47 | Change "symbole" to "symbol". | As in comment. | Accepted. |