### IEEE P802.11Wireless LANs

|  |
| --- |
| 11be D0.3 Comment Resolution on 36.3.11.8.6 |
| Date: 2021-02-25 |
| Author(s): |
| Name | Affiliation | Address | Phone | email |
| Lei Huang | OPPO |  |  | huang.lei1@oppo.com |
| Ross Jian Yu | Huawei |  |  |  |
|  |  |  |  |  |

Abstract

This submission proposes resolutions on the following 13 CIDs related to EHT-SIG encoding and modulation for 11be D0.3.

CIDs: 1629, 2812, 2813, 2814, 3066, 3067, 3108, 3109, 3307, 3308, 3309, 3310, 3311

#

Revision Notes

|  |  |
| --- | --- |
| R0 | Initial revision |
| R1 | Updated according to Ross Yu’s comments |
|  |  |
|  |  |
|  |  |

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 D0.3 Draft. This introduction is not part of the adopted material.

***Editing instructions formatted like this are intended to be copied into the TGbe D0.3 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.***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **CID** | **Page. Line** | **Clause** | **Comment** | **Proposed Change** | **Resolution** |
| 1629 | 276.12 | 36.3.11.8.6 | In Figure 36-46 to 36-50, clarify which case has one User field and which case has zero User field. | See the comment. | Revised Agreed in principle. **TGbe editor**: please make changes as shown in doc 11-21/0322r1 under all headings that include CID 1629 |
| 2812 | 271.37 | 36.3.11.8.6 | Is (36-20) for one 80 MHz segment or full BW? Better to make it consistent with e.g. (36-18) | See comment. | RejectedAgreed that time-domain waveforms for U-SIG and EHT-SIG should be defined in a consistent manner. Time-domain waveforms (27-16) and (27-21) for HE-SIG-A and HE-SIG-B in 11ax are defined for each frequency segment, which is for full BW in case of adjacent channel aggregation. Similarly, since 11be does not support non-adajcent channel aggregation, time-domain waveforms for U-SIG and EHT-SIG should be defined for full BW. Notice that (36-20) in 11be D0.3 has already been defined for full BW, and thus no changes need to be made. |
| 2813 | 273.55 | 36.3.11.8.6 | "a 160 MHz PPDU contains four EHT-SIG content channels" On page 242L20 it says "The EHT-SIG field of an EHT MU PPDU that is 40 MHz or wider contains two EHT-SIG content channels". The term content channel is used inconsistently here. | Make consistent. | Revised Agreed that this text should be updated to make it clear that the EHT-SIG field of a 160 MHz EHT MU PPDU contains two EHT-SIG content channels for each of two 80 MHz frequency subblocks. **TGbe editor**: please make changes as shown in doc 11-21/0322r1 under all headings that include CID 2813 |
| 2814 | 274.51 | 36.3.11.8.6 | "a 320 MHz PPDU contains eigth EHT-SIG content channels" On page 242L20 it says "The EHT-SIG field of an EHT MU PPDU that is 40 MHz or wider contains two EHT-SIG content channels". The term content channel is used inconsistently here. | Make consistent. | Revised Agreed that this text should be updated to make it clear that the EHT-SIG field of a 320 MHz EHT MU PPDU contains two EHT-SIG content channels for each of four 80 MHz frequency subblocks. **TGbe editor**: please make changes as shown in doc 11-21/0322r1 under all headings that include CID 2814 |
| 3066 | 270.41 | 36.3.11.8.6 | Suggest to separate the description for EHT sounding NDP to make it more clear. | e.g. for EHT soudning nDP the common field include one code block in each CC. for EHT-SIG of OFDMA transmission, the common field includes one or two code blocks. | Revised agreed in principle. **TGbe editor**: please make changes as shown in doc 11-21/0322r1 under all headings that include CID 3066 |
| 3067 | 271.52 | 36.3.11.8.6 | N\_U-SIG definition is missing | add the definition of N\_U-SIG = 2 or write explicitly as p\_n+4 | Revised agreed in principle. Similar to time domain waveform (27-21) defined for HE-SIG-B, it is preferrable to write explicitly as $p\_{n+4}$ in (36-20) defined for EHT-SIG.**TGbe editor**: please make the following changes at P271L52 of 11be D0.3:Replace $p\_{n+2+N\_{U-SIG}}$ by $p\_{n+4}$ in (36-20) |
| 3108 | 272.45 | 36.3.11.8.6 | "For EHT-SIG for OFDMA transmission and non-OFDMA transmission to multiple users, from Equation (36-20) and 36.3.11.8.2 (EHT-SIG content channels), a 20 MHz PPDU contains one EHT-SIG content channel as shown in Figure 36-41 (EHT-SIG content channel for a 20 MHz PPDU for OFDMA transmission and non-OFDMA transmission to multiple users)". It is hard to understand the sentence. "For EHT-SIG for OFDMA ..." reads weird, and "from Equation (36-20) and 36.3.11.8.2 (EHT-SIG content channels), ...." is hard to interpret. Please modify the sentence for better understanding. Same comment applies to the following paragraphs related to Figure 36-42, 36-43, 36-44, 36-45. | Replace the sentence with "For OFDMA transmission and non-OFDMA transmission to multiple users, a 20MHz PPDU contains one EHT-SIG content channel as shown in Figure 36-41 (...), by referring to Equation (36-20) and 36.3.11.8.2 (EHT-SIG content channels),". | Revised agreed in principle.**TGbe editor**: please make changes as shown in doc 11-21/0322r1 under all headings that include CID 3108.  |
| 3109 | 276.06 | 36.3.11.8.6 | "For EHT-SIG for non-OFDMA transmission to a single user or EHT sounding NDP" reads weird. Change to "For non-OFDMA transmission to a single user or EHT sounding NDP". Same comment applies to the following paragraphs related to Figure 36-47, 36-48, 36-49, 36-50 | As in comment | Revised agreed in principle.**TGbe editor**: please make the following changes at P276L1, P276L6, P276L19, P276L35, P277L1, and P278L1 of 11be D0.3:* Delete “EHT-SIG for” from “For EHT-SIG for non-OFDMA transmission to a single user or EHT sounding NDP”
 |
| 3307 | 273.46 | 36.3.11.8.6 | "PPDU BW subfield" should be BW subfield (or field as in Table 36-19) | as in comment | Revised agreed in principle.**TGbe editor**: please make the following changes at P273L45 of 11be D0.3:* change “PPDU BW subfield” to “BW subfield”
 |
| 3308 | 274.41 | 36.3.11.8.6 | "PPDU BW subfield" should be BW subfield (or field as in Table 36-19) | as in comment | Revised agreed in principle.**TGbe editor**: please make the following changes at P274L41 of 11be D0.3:* change “PPDU BW subfield” to “BW subfield”
 |
| 3309 | 274.30 | 36.3.11.8.6 | mismatch between DUP arrows and tone ranges for the same content channel. For example, DUP is shown in 80MHz freq subblock 1 but tome ranges cover both subblock 1 and subblock 2 | as in comment | Rejected Each EHT-SIG content channel within an 80 MHz frequency subblock is able to contain RU allocation information outside the 80 MHz frequency subblock. |
| 3310 | 275.43 | 36.3.11.8.6 | mismatch between DUP arrows and tone ranges for the same content channel. For example, DUP is shown in 80MHz freq subblock 1 but tome ranges cover subblock 1, subblock 2 to subblock 4 | as in comment | RejectedEach EHT-SIG content channel within an 80 MHz frequency subblock is able to contain RU allocation information outside the 80 MHz frequency subblock. |
| 3311 | 274.54 | 36.3.11.8.6 | "PPDU BW subfield" should be BW subfield (or field as in Table 36-19) | as in comment | Revised agreed in principle.**TGbe editor**: please make the following changes at P275L54 of 11be D0.3:* change “PPDU BW subfield” to “BW subfield”
 |

**Discussion:** *None.*

**Propose:** Revised for CID 1629, 2813, 2814, 3066, 3108 per discussion and editing instructions in 11-21/0xxxr0.

***TGbe editor: Change the text on P270L41 as follows***

For OFDMA transmission, the Common field of each EHT-SIG content channel is included into one or two coded blocks. For EHT sounding NDP, the Common field of each EHT-SIG content channel is included into a single coded block. Each coded block shall be BCC encoded at rate *R* = 1/2. (#CID3066)

------------------------

***TGbe editor: Replace Figure 36-46 by the following figure*** (#CID1629)



***TGbe editor: Replace Figure 36-47 by the following figure*** (#CID1629)



***TGbe editor: Replace Figure 36-48 by the following figure*** (#CID1629)



***TGbe editor: Replace Figure 36-49 by the following figure*** (#CID1629)



***TGbe editor: Replace Figure 36-50 by the following figure*** (#CID1629)



------------------------

***TGbe editor: Change the text on P272L37 as follows***

For OFDMA transmission and non-OFDMA transmission to multiple users, a 20 MHz PPDU contains one EHT-SIG content channel as shown in Figure 36-41 (EHT-SIG content channel for a 20 MHz PPDU for OFDMA transmission and non-OFDMA transmission to multiple users) according to Equation (36-20) and 36.3.11.8.2 (EHT-SIG content channels). (#CID 3108)

***TGbe editor: Change the text on P272L53 as follows***

For OFDMA transmission and non-OFDMA transmission to multiple users, a 40 MHz PPDU contains two EHT-SIG content channels, each occupying a 20 MHz frequency segment as shown in Figure 36-42 (EHT-SIG content channel for a 40 MHz PPDU for OFDMA transmission and non-OFDMA transmission to multiple users) according to Equation (36-20) and 36.3.11.8.2 (EHT-SIG content channels). (#CID 3108)

***TGbe editor: Change the text on P273L15 as follows***

For OFDMA transmission and non-OFDMA transmission to multiple users, an 80 MHz PPDU contains two EHT-SIG content channels each of which is duplicated as shown in Figure 36-43 (EHT-SIG content channels and their duplication in an 80 MHz PPDU for OFDMA transmission and non-OFDMA transmission to multiple users) according to Equation (36-20) and 36.3.11.8.2 (EHT-SIG content channels). (#CID 3108)

***TGbe editor: Change the text on P273L53 as follows***

For OFDMA transmission and non-OFDMA transmission to multiple users, a 160 MHz PPDU contains two EHT-SIG content channels for each of two 80 MHz frequency subblocks, each of which is duplicated as shown in Figure 36-44 (EHT-SIG content channels and their duplication in a 160 MHz PPDU for OFDMA transmission and non-OFDMA transmission to multiple users) according to Equation (36-20) and 36.3.11.8.2 (EHT-SIG content channels). (#CID 2813, 3108)

***TGbe editor: Change the text on P274L49 as follows***

For OFDMA transmission and non-OFDMA transmission to multiple users, a 320 MHz PPDU contains two EHT-SIG content channels for each of four 80 MHz frequency subblocks, each of which is duplicated as shown in Figure 36-45 (EHT-SIG content channels and their duplication in a 320 MHz PPDU for OFDMA transmission and non-OFDMA transmission to multiple users) according to Equation (36-20) and 36.3.11.8.2 (EHT-SIG content channels). (#CID 2814, 3108)