IEEE P802.11  
Wireless LANs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 11be lb275 CR for clause 36.3.13.3 Coding | | | | |
| Date: 2023-09-12 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | Email |
| Yan Zhang | Apple |  |  | yan\_zhang1010@apple.com |

Abstract: This document contains proposed resolutions for comments in *Clauses 36.3.13.3* from 11be D4.0 with 3 CIDs below

|  |  |  |
| --- | --- | --- |
| ***Clause 36.3.13.3***  19013,19014,19018 |  | |
|  | |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 19013 | 36.3.13.3.6 | 827.45 | "The AP might select a value for the Pre-FEC Padding Factor field that differs from that derived from the  calculations described in 36.3.13.3.5 (Encoding process for an EHT MU PPDU)." This sentence reads like there is no restrictions on the indication of a factor which is not true. | suggest to remove this sentence | **Revised.**  UL length, Pre-FEC padding factor, LDPC extra symbol only determines how much data AP triggers STA to send. AP can set pre-FEC padding factor to any one of the values from 1-4, depending on how much data it wants from STA. So, there is not really a correct value for pre-FEC padding factor as in DL transmission. The statement is confusing and should be removed.  TGbe editor: Incorporate the changes in <https://mentor.ieee.org/802.11/dcn/23/11-23-1598-00-00be-11be-lb275-CR-for-Clause-36-3-13-3-coding.docx> |

be editor: please make changes *in D4.0 clause 36.3.13.3.6*

* On P827L45 (CID #19013):

NOTE—The AP might set the LDPC Extra Symbol Segment field to 1 regardless of the value derived from the calculations.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 19014 | 36.3.13.3.6 | 827.53 | "with initial parameters as follows:" BCC doesn't really needs the initial N\_sym and initial a factor. | This is for TB PPDU suggest to directly refer to N\_sym and a. | **Revised.**  Agree with commentor that and are not needed to calculate total number of data bits to transmit for BCC encoded TB PPDU. Instead, and can be directly used.  TGbe editor: Incorporate the changes in <https://mentor.ieee.org/802.11/dcn/23/11-23-1598-00-00be-11be-lb275-CR-for-Clause-36-3-13-3-coding.docx> |

be editor: please make changes *in D4.0 clause 36.3.13.3.6*

* On P827L53 (CID #19014):

For an EHT TB PPDU with BCC encoding, follow the EHT MU padding and encoding process as described in 36.3.13.3.5 (Encoding process for an EHT MU PPDU) with parameters set as follows:

* If the TXVECTOR parameter TRIGGER\_METHOD is TRIGGER\_FRAME, *a* is the pre-FEC padding factor indicated in the Pre-FEC Padding Factor subfield of the Common Info field in the Trigger frame, and is the common number of data OFDM symbols derived from the UL Length and Number Of EHT-LTF Symbols subfields of the Common Info field in the Trigger frame.
* If the TXVECTOR parameter TRIGGER\_METHOD is TRS, the parameters are set to and, where is the value of the UL Data Symbol subfield of the TRS Control subfield.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 19018 | 36.3.13.3.2 | 822.20 | If EHT-MCS 15 (BPSK-DCM with ) is used in a 106-tone RU, 242-tone RU, or 106+26-tone  MRU with BCC coding, then after every coded bits, one padding bit is added. The padding bit  may be set to any value | suggest to move this sentence to the encoding section. Otherwise, the post fec padding calculated in 36-65 may not be consistent with the description here in the last symbol. | **Revised.**  Agree with commentor this sentence is related to pre-FEC and post-FEC padding. For EHT-MCS15 used in 106-tone RU, 242-tone RU, or 106+26-tone  MRU, .  Adding one padding bit after every coded bits, should be done after BCC encoding, and before post-FEC padding. But post fec padding calculation in 36-65 is not affected by this procedure.  TGbe editor: Incorporate the changes in <https://mentor.ieee.org/802.11/dcn/23/11-23-1598-00-00be-11be-lb275-CR-for-Clause-36-3-13-3-coding.docx> |

be editor: please make changes *in D4.0 clause 36.3.13.3.2*

* On P822L20 (CID #19018):

Move the paragraph “If EHT-MCS 15 (BPSK-DCM with ) is used in a 106-tone RU, 242-tone RU, or 106+26-tone MRU with BCC coding, then after every coded bits, one padding bit is added. The padding bit may be set to any value.” from 36.3.13.3.2 BCC coding to 36.3.13.3.5 Encoding process for an EHT MU PPDU, after Equation (36-64).

For the users with BCC encoding, the number of pre-FEC padding bits is shown in Equation (36-64).

(36-64)

If EHT-MCS 15 (BPSK-DCM with ) is used in a 106-tone RU, 242-tone RU, or 106+26-tone MRU with BCC coding, then after every coded bits, one padding bit is added. The padding bit may be set to any value.

For each user with either LDPC or BCC encoding, the number of post-FEC padding bits in the last symbol is computed as in Equation (36-65). The values of the post-FEC padding bits are not specified and are left up to implementation.