### IEEE P802.11 Wireless LANs

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| Proposed Resolution of Remaining TBDs in 36.3.19.4.4 and 36.3.20.3 | | | | |
| Date: 2021-04-09 | | | | |
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Abstract

This document proposed resolutions of remaining TBDs in section 36.3.19.4.4 and 36.3.20.3 of D0.4.

Revisions:

* Rev 0: Initial version
* Rev 1: Add change #1, adding one more option for change #3

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 subsequent 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.***

**Discussion:**

**Propose:**

Proposed Changes:

## *Instruction to 11be Editor: Modify texts in the subclause 36.3.19.4.4 and 36.3.20.3 as follows.*

*Underline text is for addition, and strikeout text is for deletion.*

### 36.3.19.4.4 Transmitter modulation accuracy (EVM) test

Change #1, P445L11

For an EHT TB PPDU with an RU or MRU smaller than a 4x996-tone RU, additional transmit modulation accuracy test for the unoccupied subcarriers of the PPDU shall be performed. There are two cases, one with a single RU or a contiguous MRU and the other with a noncontiguous MRU.

In case of a single RU or a contiguous MRU, the transmit modulation accuracy test procedure for the unoccupied subcarriers of the PPDU is similar as in steps of the transmit modulation accuracy test procedure for the unoccupied subcarriers of the PPDU defined in 27.3.19.4.4 (Transmitter modulation accuracy (EVM) test) as follows.

Change #2, P446L37

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Change #3, P449L48

Option 1

In case of a noncontiguous MRU, the unused subcarrier error vector magnitude for the unoccupied subcarriers of the PPDU shall be met the restrictions in section 36.3.19.1.2 (Additional restrictions of preamble puncturing for EHT PPDU).

Option 2

In case of a noncontiguous MRU, the transmit modulation accuracy test procedure for the unoccupied subcarriers of the PPDU is performed by constructing the overall relative constellation error staircase mask in the following manner. First, each noncontiguous MRU consists of two portions where each portion has an RU or multiple RUs. Figure xx-y1 (An illustration of 2×996+484-tone MRU) shows an example of noncontiguous 2×996+484-tone MRU where the lower portion and upper portion have 2×996-tone RU and 484-tone RU, respectively.



**Figure xx-y1 – An illustration of 2×996+484-tone MRU**

The portion interim relative constellation error mask is placed on each of the portions based on the relative constellation error staircase masks of both portions. Then, for 26-tone RU indices smaller than the lower portion of the noncontiguous MRU and for 26-tone RU indices larger than the upper portion of the noncontiguous MRU, the higher value of the two interim masks shall be taken as the overall relative constellation error mask value. For the 26-tone RU indices in between the lower and the upper portion of the noncontiguous MRU, the overall relative constellation error mask shall be less than max(ε, -38) dB. Figure xx-y2 (An illustration of relative constellation error mask for a 2×996+484-tone MRU) shows an example of a relative constellation error mask for a MRU of 2×996+484-tone RU with 484-tone RU hole between two portions where the lower portion and upper portion have 2×996-tone RU and 484-tone RU, respectively.



Figure xx-y2- **An illustration of relative constellation error mask for a 2×996+484-tone MRU**



Option 3

In case of a noncontiguous MRU, the transmit modulation accuracy test procedure for the unoccupied subcarriers of the PPDU is performed by constructing the overall relative constellation error staircase mask in the following manner. First, treat noncontiguous MRU as a large RU/MRU which does not have an unmodulated portion in between of each portion of frequency. For example, 2x996+484-tone MRU is treated as 3x996-tone MRU, and find the average unused subcarrier error vector magnitude for each unoccupied 26-tone RU based on the large RU/MRU. Then, replace the unmodulated portion in between of each portion of frequency to max(ε, -38) dB.

Change #4, P451L48

### 36.3.20.3 Adjacent channel rejection

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| * Minimum required adjacent and nonadjacent channel rejection levels | | | |
| Modulation | Rate (*R*) | Adjacent channel rejection (dB) | Nonadjacent channel rejection (dB) |
| 20/40/80/160/320 MHz channel | 20/40/80/160/320 MHz channel |
| … |  |  |  |
| 4096-QAM | 3/4 | –17 | –1 |
| 4096-QAM | 5/6 | –20 | –4 |
| BPSK-DCM (EHT-MCS 15) | 1/2 | 16 | 32 |
| BPSK-DCM (EHT-MCS 14) | 1/2 | 16 | 32 |