IEEE P802.11
Wireless LANs

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| Text modification on HE-SIG-B |
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Abstract

The submission provides text proposal related to HE-SIG-B field.

* CID3095 was mistakenly approved without any resolution in doc 11-17-0288-02.
* CID10060 was approved with the resolution that applied to only 28.3.10.8.1 to 28.3.10.8.3.
* Text proposal based on 11ax D1.3.

Revisions:

* Rev 0: Initial version of the document.
* Rev 1: Separate CID3095 and CID10060 into the different documents, 17/0946 and 17/1109 (new), respectively.

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 TGax Draft. This introduction is not part of the adopted material.

***Editing instructions formatted like this are intended to be copied into the TGax Draft (i.e. they are instructions to the 802.11 editor on how to merge the text with the baseline documents).***

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

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| **CID** | **P.L** | **Comment** | **Proposed Change** | **Resolution** |
| 3095 | 295.23 | There is no terms called Multi-BSSID | Suggest changing the sentence as follows: "For an AP belonging to Multiple BSSID set, the STAID for broadcast to a specific BSS will follow the group addressed AID assignment in the TIM according to the existing rules for TIM assignment in a Multiple BSSID set." Similarly, suggest changing the next bullet to: "For an AP belonging to multiple BSSID set, the STAID for broadcast to all BSS of the AP is et to 2047" | Revised.Agreed in principle.The definition of Multi-BSSID is shown in 27.11.1 (STA\_ID\_LIST) chapter and to avoid duplication, the detail description on STA-ID field is moved to 27.11.1 (STA\_ID\_LIST). 11-bit STA-ID has been the requirement of 11a/b/g/n/ac/ax. Since the longer STA-ID does not give more useful information for 11ax STA, “11 LSBs” is added before the original “AID”.TGax Editor: make changes according to this document 11-17-0946-01-00ax CRs on 28.3.10.8.4 and 28.3.10.8.5. |

**Discussion**

Clean up the repeated texts in STA-ID field because the same description has been existed in subcluse 27.11.1 STA\_ID\_LIST.

**Changes to Section 28.3.10.8.5**

***To TGax editor:*** ***P383L06*** *replace the current text with the proposed changes below.*

***------------- Begin Text Changes ---------------***

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| Table 28-24 - Fields of the User field for a non-MU-MIMO allocation |
| Bit | Field | Number of bits | Description |
| B0-B10 | STA-ID | 11 | Set to a value of element indicated from TXVECTOR parameter STA\_ID\_LIST (see 27.11.1 (STA\_ID\_LIST)). (#3095) |
| B11-B13 | NSTS | 3 | Number of spatial streams.Set to the number of space time streams minus 1. |
| B14 | Tx Beamforming | 1 | Use of transmit beamforming.Set to 1 if a beamforming steering matrix is applied to the waveform in an SU transmission.Set to 0 otherwise. |
| B15-B18 | MCS | 4 | Modulation and coding schemeSet to *n* for MCS*n*, where *n* = 0, 1 ,2 …., 11Values 12 to 15 are reserved |
| B19 | DCM | 1 | Indicates whether or not dual carrier modulation is used.Set to 1 to indicate that the payload of the corresponding user of the HE MU PPDU is modulated with dual carrier modulation for the MCS.Set to 0 indicates that the payload of the PPDU is not modulated with dual carrier modulation for the MCS. |
| B20 | Coding | 1 | Indicates whether BCC or LDPC is used.Set to 0 for BCCSet to 1 for LDPC |
| NOTE—Integer fields are transmitted in unsigned binary format, LSB first, where the LSB is in the lowest numbered bit position. |

The User field for a STA in an MU-MIMO allocation contains the fields shown in Table 28-25 - Fields of the User field for an MU-MIMO allocation .

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| Table 28-25 - Fields of the User field for an MU-MIMO allocation  |
| Bit | Field | Number of bits | Description |
| B0-B10 | STA-ID | 11 | Set to a value of element indicated from TXVECTOR parameter STA\_ID\_LIST (see 27.11.1 (STA\_ID\_LIST)). |
| B11-B14 | Spatial Configuration | 4 | Indication for the number of spatial streams for a STA in an MU-MIMO allocation. See Spatial Configuration field encoding . |
| B15-B18 | MCS | 4 | Modulation and coding scheme.Set to n for MCS*n*, where *n* = 0, 1, 2,…..11Values 12 to 15 are reserved |
| B19 | DCM | 1 | Indicates whether or not dual carrier modulation is used.Set to 1 to indicate that the payload of the corresponding user of the HE MU PPDU is modulated with dual carrier modulation for the MCS.Set to 0 indicates that the payload of the PPDU is not modulated with dual carrier modulation for the MCS. |
| B20 | Coding | 1 | Indicates whether BCC or LDPC is used.Set to 0 for BCCSet to 1 for LDPC |
| NOTE—Integer fields are transmitted in unsigned binary format, LSB first, where the LSB is in the lowest numbered bit position. |

***------------- End Text Changes ---------------***

**Changes to Section 27.11.1 STA\_ID\_LIST**

***To TGax editor:*** ***P264L44*** *replace the current text with the proposed changes below.*

***------------- Begin Text Changes ---------------***

Each element of the TXVECTOR parameter STA\_ID\_LIST identifies the STA or group of STAs that is the recipient of an RU in the HE MU PPDU. If an RU is intended for a single non-AP STA, then the STA\_ID\_LIST element for that RU is set to the 11 LSBs of the AID of the STA receiving the PSDU contained in that RU. If an RU is intended for no user, then the STA\_ID\_LIST element for that RU is set to 2046. If an RU is intended for an AP, then the STA\_ID\_LIST contains only one element that is set to the 11 LSBs of the AID of the non-AP STA transmitting the PPDU. If an RU is intended for a group of STAs then the STA\_ID\_LIST element is set as follows:

* For an AP with dot11MultiBSSIDActivated equal to false, if the RU is intended for more than one STA in the BSS, the STA\_ID\_LIST element is set to 0. The AP may include only one element with this value in a DL MU PPDU.
* For an AP with dot11MultiBSSIDActivated equal to true, if the RU is intended for more than one STA in any of its BSSs, the STA\_ID\_LIST element is set to partial virtual bitmap value assigned for the group addressed frame (see 9.4.2.6 (TIM element)). The AP may include only one element for each BSSID of the multiple BSSID set in the HE MU PPDU, and the number of such elements shall not exceed the maximum number of BSSs of the multiple BSSID set. (#3095)
* For an AP with dot11MultiBSSIDActivated equal to true, if the RU is intended for more than one STA on all its BSSs, the STA\_ID\_LIST element is set to 2047. The AP may include only one element with this value in a DL MU PPDU.

***------------- End Text Changes ---------------***