IEEE P802.11
Wireless LANs

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| Proposed resolution to CID 4398 and 4399 |
| Date: 2023-07-03 |
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Abstract

This submission proposes resolutions to CID 4398 and 4399, related to HE-SIG-A.

* CID: 4398, 4399

Baseline documents: TGme D3.0.

Revisions:

* Rev 0: Initial version of the document. Use D3.0 as baseline spec text.

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

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

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

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| **CID** | **Clause Number** | **Page** | **Line** | **Comment** | **Proposed Change** | **Resolution** |
| 4398 | 27.3.11.7.2 | 4072 | 48 | The HE sounding NDP is a variant of the HE SU PPDU. Thus, the contents of HE-SIG-A shall be based on HE-SIG-A field of an HE SU PPDU and HE ER SU PPDU. However, it is not clear what will be the value of some bits, e.g. HE-MCS, DCM, Spatial Reuse, Coding, LDPC Extra Symbol Segment, STBC, Pre-FEC Padding Factor, PE Disambiguity, and Doppler. Certain combination is not allowed in the HE SU PPDU, e.g. BW > 20MHz and Coding = 0. The receiver shall ingore those bits? | Please clarify. | **Rejected**:It is working currently. Don’t want to add new requirement.  |

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| **CID** | **Clause Number** | **Page** | **Comment** | **Proposed Change** | **Resolution** |
| 4399 | 27.3.11.7.2 | 4077 | In the description of Bandwidth field in HE-SIG-A field of an HE MU PPDU, value 6 and value 7 are not clear. In the description, it says no more than two adjacent 20 MHz subchannels are punctured across 160 MHz. What is maximum puncturing bandwidth? 40 MHz or (non contiguous) 80 MHz? Then, following is allowed?E.g. Value 7. P20 is in 4th 20MHz. 1 means puncturing. [1 1 x x x x 1 1]. | Please clarify. | **Revised**:As value 6 punctures only secondary 20 MHz and zero to two 20 MHz in secondary 80 MHz. Thus, there is no confusion.However, for value 7, it is not clear whether 80 MHz puncturing is possible. For example, 40 MHz puncturing in primary 80 MHz and 40 MHz puncturing in secondary 80 MHz. Since no more than two adjacent 20 MHz subchannels are punctured across 160 MHz, potential puncturing pattern is [x x 1 1 1 1 x x], [1 1 x x 1 1 x x], and [x x 1 1 x x 1 1] where x means puncturing and 1 means no puncturing. To be clear, we can add a sentence saying maximum 4 20 MHz subchannels can be punctured.*Adopt proposed change #1 in doc 11-23/1011r0.* |

***Proposed Change #1***

***Modify Description of Bandwidth field in Table 27-20 as follows.***

Set to 0 for 20 MHz.

Set to 1 for 40 MHz.

Set to 2 for 80 MHz non-preamble puncturing mode.

Set to 3 for 160 MHz and 80+80 MHz non-preamble puncturing mode.

If the HE-SIG-B Compression field is 0:

Set to 4 for preamble puncturing in 80 MHz, where in the preamble the only punctured subchannel is the secondary

20 MHz channel.

Set to 5 for preamble puncturing in 80 MHz, where in the preamble the only punctured subchannel is one of the two 20 MHz subchannels in secondary 40 MHz channel.

Set to 6 for preamble puncturing in 160 MHz or 80+80 MHz, where in the preamble the only punctured subchannels are the secondary 20 MHz channel and zero to two of the 20 MHz subchannels in the secondary 80 MHz channel. If two of the 20 MHz subchannels in the secondary 80 MHz channel are punctured, these are either the lower two or the higher two. No more than two adjacent 20 MHz subchannels are punctured across 160 MHz.

Set to 7 for preamble puncturing in 160 MHz or 80+80 MHz, where in the preamble the only punctured subchannels are zero, one or both of the 20 MHz subchannels in the secondary 40 MHz channel and zero to two of the 20 MHz subchannels in the secondary 80 MHz channel; at least one 20 MHz subchannel is punctured. If two of the 20 MHz subchannels in the secondary 80 MHz channel are punctured, these are either the lower two or the higher two. No more than two adjacent 20 MHz subchannels are punctured across 160 MHz. Maximum four 20 MHz subchannels are punctured across 160 MHz.

If the HE-SIG-B Compression field is 1, then values 4–7 are reserved.