IEEE P802.11
Wireless LANs

|  |
| --- |
| 11ax D4.0 comment and resolution for Annex Z and Sub clause 27.3.4 |
| Date: 2019-09-12 |
| Author(s): |
| Name | Affiliation | Address | Phone | Email |
| Tianyu Wu | Apple |  |  | tianyu@apple.com |

Abstract

This document proposes comment resolutions to the following CIDs (4 CIDs) for TGax D4.3:

20895 20898 21431 21434

Revisions:

* Rev 0: Initial version of the document. Use 11ax D4.3 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 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.***

**CID 20895, 20898**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **CID** | **P.L** | **Comment** | **Proposed Change** | **Resolution** |
| 20895 | 743.05 | Re CID 16067: the resolution doesn't address the comment. There should be an example with STA-ID 2046 because (a) need to show what the other User field subfields are set to and (b) need to show how the result maps to actual RUs (with some missing) | Add an example where non-MU-MIMO RUs are skipped over (i.e. unused) by using STA-ID 2046 | **Reject.**The spec should avoid excessive examples. There are lots of different combinations in HE-SIG-B and spec should pick a few examples to deliver the information such as HE-SIG-B content and bit order etc. STAID 2046 is not a very special case worth an example. Any STAID in existing examples that allocated to an non-MU-MIMO RU can be replaced by 2046 and change all other bits in the user field to reserved bit. It’s easy to figure out the HE-SIG-B with STAID 2046 based on existing examples.  |
| 20898 | 743.17 | "In this annex, 0s are used for padding and the padding is not included in all the HE-SIG-B bit sequence forillustration simplicity. The minimum padding is added to make the two HE-SIG-B content channels equal inlength and an integer number of 4 bits. Hexadecimal notation is used to represent the entire content of eachHE-SIG-B content channel. The hexadecimal numbers are also in the order of transmission." -- has technical issues: (a) the spec does not define "minimum padding" (b) it is not clear what "padding is not included in all" means (c) it is not clear what the last sentence means (what is the order of transmission of 0x1234?) | As it says in the comment | **Revise.** Agree in principle that some clarification text in annex Z helps. HE-SIG-B padding need to pad to OFDM symbol boundary, and the actual number of padding bits need to be calculated based on the number of HE-SIG-B content bits and MCS level for HE-SIG-B. But since in this annex, we focus on the content of HE-SIG-B, for simplicity, we did not specify the MCS and we did not calculate the exact number of padding bits.***TGax Editor*:** Please make changes to IEEE P802.11ax D4.3 according to the proposed text changes as resolution to CID 20898 in 11-19/1560r0 |

***TGax Editor: Change the text in P777L17 of D4.3 as follows:***

***Z.1 General***

In this annex, we use a number of examples to illustrate the content of HE-SIG-B content channels.

HE-SIG-B content channels are padded to the same length and to the OFDM symbol boundary as illustrated in 27. 3.10.8.5. For illustration simplicity, the examples do not show thonly include padding bits ~~0s are used for padding, and padding is not included in all the HE-SIG-B bit sequences, for illustration simplicity. Minimum padding is added,~~ to make the two HE-SIG-B content channels equal in length and an integer number of 4 bits. All the padding bits are set to 0.

In the following examples, the binary bit sequence of each HE-SIG-B field is ordered in transmission order. For the entire content of each HE-SIG-B content channel, binary sequences are converted to ~~H~~hexadecimal to save the space. ~~notation is used ot represent the entire content of each HE-SIG-B content channel. The hexadecimal numbers are also in the order of transmission.~~ (#20898)

**CID 21431, 21434**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **CID** | **P.L** | **Comment** | **Proposed Change** | **Resolution** |
| 21431 | 489.37 | Missing sentence | Before the sentence about HE-SIG-B add the following sentence "In the HE MU PPDU the HE-SIG-A field is not repeated." | **Accept.**  |
| 21434 | 491.27 | The title of Figure 27-12 and the text referring to that figure say the figure is about "Number of 20 MHz channels occupied by the pre-HE modulated fields in an HE TB PPDU", however, it is not clear looking at the figure, that this figure describes the number of 20-MHz channels occupied. After checking with others they said that the message is in the Legend in the figure. Maybe this could be more clear. | Fix the figure with a figure so that it more clear how it illustrates "The Number of 20-MHz channels occupied." | **Reject.**  The figure uses different color to indicate RUs that need different number of 20MHz channels for pre-HE modulated fields and includes clear explaination in the legend. It looks clear enough to deliver the information. The commenter failed to provide valid solution to this comment.  |

***Spec text related to CID 21431***



**References:**