IEEE P802.11
Wireless LANs

|  |
| --- |
| [CR for clause 36.3.3] |
| Date: 2020-02-26 |
| Author(s): |
| Name | Affiliation | Address | Phone | email |
| Junghoon Suh | Huawei |  |  | junghoon.suh@huawei.com |
| Edward Au | Huawei |  |  | edward.ks.au@huawei.com |
| Sameer Vermani | Qualcomm |  |  | svverman@qti.qualcomm.com |
|  |  |  |  |  |
|  |  |  |  |  |

Abstract

This submission proposes resolutions for follwing 7 CIDs: 1307, 1308, 1554, and 3155. The proposed changes are based on IEEE 802.11be D0.3 [1].

Revisions:

* Rev 0: Initial version of the document.
* Rev 1: Update in the resolution of CID # 2788 and 3279
* Rev 2: Header Update and update on CID # 1329, 2788, 3279
* Rev 3: Removed CID 1329, 2788, and 3279

## CID 1307, 1308, 1329, 1554, 2788, 3155, 3279

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **CID** | **Page** | **Clause** | **Comment** | **Proposed Change** | **Resolution** |
| 1307 | 196.28 | 36.3.3 | This text is mostly good "The maximum total number of spatial streams (across all users) that is supported for the reception of an EHTMU PPDU is indicated by TBD field in EHT PHY capabilities and its minimum value is 4." | Convert this text to black, except with 4 replaced by 8 or more | RevisedTGbe Editor: Incorporate the changes in https://mentor.ieee.org/802.11/dcn/21/11-21-0334-03-00be-CR for clause 36.3.3.docx |
| 1308 | 197.23 | 36.3.3 | The requireemnt "The number of total spatial streams (summed over all users) is less than or equal to 8" is weak since it diminishes the value of a 16SS AP since the AP cannot rely on clients being available | Change 8 to 16 | Rejected The UL MU-MIMO is not beam-formed in R1, and the performance is heavily dependent on the MIMO detection algorithm at the RX side. It is reasonable to limit the total number of SS to 8. |
|  |  |  |  |  |  |
| 1554 | 196.29 | 36.3.3 | define the TBD | as in comment. | RevisedTGbe Editor: Incorporate the changes in https://mentor.ieee.org/802.11/dcn/21/11-21-0334-03-00be-CR for clause 36.3.3.docx |
|  |  |  |  |  |  |
| 3155 | 197.24 | 36.3.3 | A STA may not know the total spatial streams in UL MU-MIMO if it does not or cannot decode all the User fields in the Trigger frame.What is really meant here is that the STA shall support transmitting EHT TB PPDU with max. 8 EHT-LTF symbols. | Add at P197L24"- The number of EHT-LTF symbols is less than or equal to 8."Also, the same sentence should be added for UL OFDMA as well, though I could not easily find a good spot. I.e., the 11be draft should say somewhere that"An EHT non-AP STA shall support transmitting EHT TB PPDU with the number of EHT-LTF symbols less than or equal to 8." | Revised. The addition of “The number of EHT-LTF symbols is less than or equal to 8” is distorting the original intention of the sentence. It is because the number of LTFs is de-coupled from the N\_SS in the EHT.The sentence is revised in a way that made independent of the non-AP STA to accommodate the commenter’s opinion.TGbe Editor: Incorporate the changes in https://mentor.ieee.org/802.11/dcn/21/11-21-0334-03-00be-CR for clause 36.3.3.docx |
|  |  |  |  |  |  |

Propose :

***TGbe editor: please modify the senstence in P196L28 as follows and change the color of the sentence to Black***

The maximum total number of spatial streams (across all users) that is supported for the reception of an EHT MU PPDU is indicated by *Beamformee SS* subfield in EHT PHY capabilities and its minimum value is 4. (#1307, #1554)

***TGbe editor: please modify the senstence in P197L24 as follows***

A non-AP STA shall support transmitting an EHT TB PPDU using MU-MIMO where:

- The number of spatial streams allocated to the non-AP STA ranges from 1 to N, where N is the smaller of 4 and the maximum number of spatial streams supported by the non-AP STA for SU transmissions.

The number of total spatial streams (summed over all users) for the EHT TB PPDU across all the scheduled users using the MU-MIMO is less than or equal to 8. (#3155)

**References:**

**[1] 802.11be D0.3**