IEEE P802.11  
Wireless LANs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Comment resolution for SS Allocation subfield | | | | |
| Date: 2017-01-17 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | email |
| Raja Banerjea | Qualcomm Inc. | 5775 Morehouse Drive,  San Diego, CA 92121 | +1 408-392-8728 | rajab@qti.qualcomm.com |
| Alfred Asterjadhi | Qualcomm Inc. | 5775 Morehouse Drive,  San Diego, CA 92121 | +1-858-658-5302 | aasterja@qti.qualcomm.com |
| George Cherian | Qualcomm Inc. | 5775 Morehouse Drive,  San Diego, CA 92121 | +1-858-651-6645 | gcherian@qti.qualcomm.com |

Abstract

This submission proposes resolutions for multiple comments related to TGax D1.0 with the following CIDs (9 CIDs):

* 3015,3016, 3165, 7487, 8660, 8661, 9262, 9263, 9633

Revisions:

* Rev 0: Initial version of the document.
* Rev 1: updated to D1.1

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.***

# PARS I (SS Allocation Table)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **CID** | **Commenter** | **P.L** | **Comment** | **Proposed Change** | **Resolution** |
| 3015 | 9.3.1.23 | 47.07 | The number of Spatial stream can't be 0. Therefore the number of spatial streams should be Nss-1. | Change "Number of Spatial Streams" to "NSS\_1" and define Nss\_1 as the Number of spatial streams -1. | Revised-  Agree in principle |
| 3016 | 9.3.1.23 | 47.07 | The starting spatial stream can't be 0. Therefore the Starting spatial stream should be -1. | Change "Starting Spatial Stream" to "Starting spatial stream -1" | Revised-  Agree in principle |
| 3165 | 9.3.1.23 | 47.07 | There is no descripton of the subfields within SS Allocation. | Add the description and encoding of the two subfields within SS Allocation subfiield. | Revised-  Agree in principle |
| 7487 | 9.3.1.23 | 47.15 | There is no description about the Starting Spatial Stream subfield and the Number of Spatial Streams subfield in the SS Alocation subfield | Add the following description after Figure 9-52f: "The Starting Spatial Stream subfield indicates the stream index of the first spatial stream of the HE trigger-based PPDU response of the STA identified by the AID12 subfield. The Number of Spatial Streams subfield indicates the number of spatial streams of the HE trigger-based PPDU response of the STA identified by the AID12 subfield | Revised-  Agree in principle |
| 8660 | 9.3.1.23 | 47.15 | Is it allowed to choose "Starting Spatial Stream" such that there are gaps in the total number of streams. E.g: Starting Spatial Stream=0, N\_SS=1 and Starting Spatial Stream=2, N\_SS=1. | Specify that there should be no gaps in the numbering of all the streams in an UL MU-MIMO transmission. | Revised-  Agree in principle |
| 8661 | 9.3.1.23 | 47.15 | Should "Starting Spatial Stream" value always be 0 for RU's that use "pure" OFDMA? | Clarify | Revised-  Agree in principle |
| 9262 | 9.3.1.23 | 47.07 | Encoding of the Starting Spatial Stream subfield should be specified. | Add the following sentence and table after Figure 9-52f: The encoding of the Starting Spatial Stream subfield is defined in Table 9-xx (Starting Spatial Stream subfield encoding). Table 9-xx - Starting Spatial Stream subfield encoding Value | Description 0 | 1st spatial stream 1 | 2nd spatial stream 2 | 3rd spatial stream 3 | 4th spatial stream 4 | 5th spatial stream 5 | 6th spatial stream 6 | 7th spatial stream 7 | 8th spatial stream | Revised-  Agree in principle |
| 9263 | 9.3.1.23 | 47.07 | Encoding of the Number Of Spatial Streams subfield should be specified. | Add the following sentence and table after Figure 9-52f: The encoding of the Number Of Spatial Streams subfield is defined in Table 9-xy (Number Of Spatial Streams subfield encoding). Table 9-xy - Number Of Spatial Streams subfield encoding Value | Description 0 | Nss=1 1 | Nss=2 2 | Nss=3 3 | Nss=4 4 | Nss=5 5 | Nss=6 6 | Nss=7 7 | Nss=8 | Revised-  Agree in principle |
| 9633 | 9.3.1.23 | 47.20 | On Figure 9-52f, the encoding mechanism of the Starting Spatial Stream and the Number Of Spatial Streams is missing. | As per comment. | Revised-  Agree in principle |

**Discussion: *None.***

**TGax Editor: *Change the table below of this subclause in D1.1 (48.8) as follows (#CID 3015, 3016, 3165, 7487, 8660, 8661, 9262, 9263, 9633 ):***

The SS Allocation subfield of the User Info field indicates the spatial streams of the HE trigger-based PPDU response of the STA identified by the AID12 subfield. The format of the SS Allocation subfield is defined in Figure 9-52f (SS Allocation subfield format).

|  |  |  |
| --- | --- | --- |
|  | B26 B28 | B29 B31 |
|  | Starting Spatial Stream | Number Of Spatial Streams |
| Bits: | 3 | 3 |
| * SS Allocation subfield format | | |

The Starting Spatial Stream subfield indicates the starting spatial stream, STARTING\_SS\_NUM, and is set to STARTING\_SS\_NUM – 1.

The Number Of Spatial Streams subfield indicates the number of spatial streams, NUM\_SS and is set to NUM\_SS – 1.

For UL OFDMA Starting Spatial Stream subfield shall be set to 0.