IEEE P802.11  
Wireless LANs

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| D1.0 Comment Resolution – CID 2668 | | | | |
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| Author(s): | | | | |
| Name | Affiliation | Address | Phone | email |
| Youhan Kim | Qualcomm | 1700 Technology Drive  San Jose, CA 95110 |  | [youhan.kim@qca.qualcomm.com](mailto:youhan.kim@qca.qualcomm.com) |
| Allert van Zelst | Qualcomm | Straatweg 66-S | +31 346 259663 | [allert@qaulcomm.com](mailto:allert@qaulcomm.com) |

##### Comments are based on 11ac D1.0. Proposed resolutions are based on 11ac D1.1. Changes indicated by a mixture of Word track-changes and instructions. For equation changes, Latex notation is sometimes used. E.g. a\_{xyz}^b denotes axyzb

Following CID is covered in this document:

2668

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| **CID** | **Page** | **Clause** | **Comment** | **Proposed Change** | **Resolution** |
| 2668 | 47.40 | 8.4.1.40 | Suppose an AP received a VHT Operating Mode field with 'Rx Nss'=2 and 'Max Nss for SU Present'=0. But the AP has never received a VHT Operating Mode field with 'Max Nss for SU Present'=1. What is the max Nss the AP can use to transmit a beamformed packet to the STA using beamforming steering matrix computed from feedback with feedback type=1? | Please clarify. | AGREE IN PRINCIPLE. See11/1302 |

**Discussion:**

If a STA did not receive any VHT Operating Mode Notification frame, then the Support Channel Width Set and RX MCS Map in the VHT Capabilities Info field provides the information on the supported channel width and the maximum number of spatial streams the STA can receive (max. Rx Nss). However, it is unclear on what values should be assumed for the maximum number of spatial streams the STA can receive in a single user beamformed transmission using MU type feedback (max. Rx Nss TxBF). We propose that max. Rx Nss TxBF shall be assumed to be equal to max. Rx Nss unles a VHT Operating Mode Notifcation frame is transmitted to change the value.

**Proposed Text Changes:**

**8.4.1.49 VHT Operating Mode field**

Add a paragraph at P50L53 (D1.1) as follows:

Table 8-ac12—Subfield values of the VHT Operating Mode field

|  |  |
| --- | --- |
| **Field** | **Description** |
| Channel Width | If Max Nss For SU Present is set to 0, indicates the supported channel  width:  Set to 0 for 20 MHz  Set to 1 for 40 MHz  Set to 2 for 80 MHz  Set to 3 for 160 MHz or 80+80 MHz  Reserved if Max Nss For SU Present is set to 1. |
| Rx Nss | The maximum number of spatial streams the STA can receive interpreted according to the Max Nss For SU Present setting:  Set to 0 for *NSS* = 1  Set to 1 for *NSS* = 2  …  Set to 7 for *NSS* = 8 |
| Max Nss For SU  Present | Set to 0 if Rx Nss indicates the supported number of spatial streams.  Set to 1 if Rx Nss indicates the maximum number of spatial streams the beamformee can receive in a single user beamformed transmission when feedback type = 1 (as defined in Table 8-ac4 (Subfields of the VHT MIMO Control field)) was used to calculate the Beamforming steering matrix.  A beamformer may ignore this threshold if SU type feedback is  used to form a single user beamformed transmission.(#3438) |

If a STA has not received any VHT Operating Mode Notification frame with Max Nss For SU Present set to 1 from a beamformee, then the STA shall assume that the maximum number of spatial streams the beamformee can receive in an SU beamfored transmission based on feedback type = 1 is equal to the supported number of spatial streams of the beamformee.