IEEE P802.11
Wireless LANs

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| Draft 1.1 Comment Resolutions for Section 22.2.2 |
| Date: 2011-09-20 |
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Abstract

This document proposes resolutions to CIDs 2204, 2346, 3723, 2351, 3596, 2206, 2051, and 2354.

The comments are copied from 11/907r7.

The resolutions are based on Draft P802.11ac\_D1.1 and Draft P802.11REVmb\_D10.1.

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| **CID** | **Page** | **Clause** | **Comment** | **Proposed Change** | **Resolution** |
| 2204 | 108.15 | 22.2.2 | It states "Allowed values depends on the value of the NON\_HT\_MODULATION parameter". In fact the values are the same for all valid values of NON\_HT\_MODULATION | Simply state "The allowed values are 6,9,12,18,24,36,48 and 54" | ACCEPT IN PRINCIPLE. Duplicate of CID 3389; already solved in Draft 1.1. |

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| **CID** | **Page** | **Clause** | **Comment** | **Proposed Change** | **Resolution** |
| 2346 | 107.47 | 22.2.2 | NON\_HT … clause 19 | NON\_HT … clause 17 [this is due to e.g. 22.2.4] | ACCEPT. See 11/1313r0. |

**Resolution:**

*Editor, change the line in the value field of parameter FORMAT in Table 22-1 as follows:*

NON\_HT indicates Clause 1~~7~~8 (Orthogonal frequency division multiplexing (OFDM) PHY specification)(#2050) or non-HT duplicated PPDU format. In this case, the modulation is determined by the NON\_HT\_MODULATION parameter.

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| **CID** | **Page** | **Clause** | **Comment** | **Proposed Change** | **Resolution** |
| 3723 | 108.12 | 22.2.2 | Why is L-length for VHT format not present ?  | Clarify ? | ACCEPT IN PRINCIPLE. See 11/1313r0. |

**Resolution:**

*Editor, in Table 22-1 add the following note to the value field of parameter L\_LENGTH and condition FORMAT is VHT:*

NOTE – the Length field of the L-SIG in VHT PPDUs is derived from the TXTIME parameter returned by the PLME-TXTIME.confirm primitive.

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| **CID** | **Page** | **Clause** | **Comment** | **Proposed Change** | **Resolution** |
| 2351 | 108.24 | 22.2.2 | Shouldn't "CHAN\_MAT\_TYPE/HT\_GF/MM be "see corresponding entry in table 19"? Ditto HT\_GF/MM for STBC, MCS, REC\_MCS, CH\_BANDWIDTH? | As in comment | ACCEPT IN PRINCIPLE. See 11/1313r0. |

**Discussion:**

This is already taken care of in Draft 1.1 for CHAN\_MAT\_TYPE, STBC, MCS, and REC\_MCS. CH\_BANDWIDTH still to be done.

**Resolution:**

*Editor, in Table22-1 for parameter CH\_BANDWIDTH, change the value field for condition FORMAT is HT\_MF or HT\_GF to*

See corresponding entry in Table 20-1.

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| **CID** | **Page** | **Clause** | **Comment** | **Proposed Change** | **Resolution** |
| 3596 | 109.32 | 22.2.2 | This line tells me that the compressed steering vectors are emitted with every received VHT PPDU. Is this necessary, seeing as only the NDP needs this. | Add some note indicating that it is mandatory for received NDP, optional otherwise. | ACCEPT IN PRINCIPLE. See 11/1313r0. |

**Discussion:**

We could solve it similar to how it is done for the delta SNR. Delta SNR is optional for a similar reason, although there it is mentioned that it is only present for a feedback frame, but this is questionable, because in this case the entire PSDU goes to the MAC and the MAC reads out the fields. I would say the delta SNR is present when receiving an NDP following an NDPA requesting MU feedback. So this needs to change.

Having said that, the issue with CHAN\_MAT\_TYPE is that other RXVECTOR entries rely on it being present. It seems better to add a enumerated type NONE and only set CHAN\_MAT\_TYPE to COMPRESSED\_SV when receiving an NDP and to NONE otherwise.

**Resolution:**

*Editor, in Table 22-1 change the value field of parameter DELTA\_SNR for condition FORMAT is VHT as follows:*

~~If receiving a beamforming feedback frame in which the Feedback Type subfield in the VHT MIMO Control field indicates(#3354) MU, c~~Contains a set of delta SNR values(#2352) for each space-time stream for a subset of the subcarriers as defined in 8.4.1.48 (MU Exclusive Beamforming Report field) if the Feedback Type subfield in the STA Info field for the STA in the NDPA preceeding a received NDP indicates(#3354) MU. Not present otherwise.

*Editor, in Table 22-1 change the value field of parameter CHAN\_MAT\_TYPE for condition FORMAT is VHT as follows:*

Set to COMPRESSED\_SV for a received and processed NDP. Set to NONE otherwise.

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| 2206 | 110.18 | 22.2.2 | replace "SNR per stream" by "SNR per spatial stream" |  | ACCEPT. See 11/1313r0. |

**Resolution:**

*Editor, in Table 22-1 change the following line in the value field for parameter SNR and condition FORMAT is VHT and CHAN\_MAT\_TYPE is COMPRESSED\_SV as follows*

Is a measure of the received SNR per spatial stream.

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| **CID** | **Page** | **Clause** | **Comment** | **Proposed Change** | **Resolution** |
| 2051 | 110.48 | 22.2.2 | The value of 1 indicates STBC is used and should be defined explicitly.  | Change "1 indicates N\_STS = 2N\_SS." to "1 indicates STBC is used (N\_STS = 2N\_SS)." | ACCEPT. See 11/1313r0. |

**Resolution:**

*Editor, in Table 22-1 change the following line in the value field for parameter STBC and condition FORMAT is VHT as follows*

1 indicates STBC is used (*NSTS*=2*NSS*).

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| **CID** | **Page** | **Clause** | **Comment** | **Proposed Change** | **Resolution** |
| 2354 | 110.55 | 22.2.2 | For clarity, replace " short GI is [not] used in the packet" by "short GI is [not] used in the Data field of the packet" | As in comment | ACCEPT IN PRINCIPLE. See 11/1313r0. |

**Resolution:**

*Editor, in Table 22-1 change the value field for parameter GI\_TYPE and condition FORMAT is HT\_MF, HT\_GF or VHT as follows*

Indicates whether a short guard interval is used in the ~~transmission~~Data field of the packet.

Enumerated type:

LONG\_GI indicates short GI is not used in the Data field of the packet.

SHORT\_GI indicates short GI is used in the Data field of the packet.