IEEE P802.11
Wireless LANs

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| D1.0 Comment Resolution – Equation Errors |
| Date: Sep. 19 2011 |
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Abstract

This document provides resolutions for CIDs 3450, 3635, 3661.

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| **CID** | **Page** | **Clause** | **Comment** | **Proposed Change** | **Resolution** |
| 3450 | 174.08 | 22.3.10.12 | The equation reference "22.68" is wrong. | Please fix. | AGREE. See in 11/1284r0 |

<Discussion>

Even though what the commenter pointed out is right, it seems more appropriate to include 40MHz case in the subsequent sentence as well because Equation (22-87) can cover all the BW cases depending on the value of *N20MHz* in it. Note that we also need to update the phase rotation parameter corresponding to 40MHz case, that is, [*1 j*] which is defined in Equation (22-11).

*Dk* defined in the original equation (22-87) is wrong because it is not properly defined for VHT.

Apply this change after applying the change for CID 2285 in document 11/1128r1.

**TGac editor: modify the D1.1 text from P194L28, as follows**

For a 40 MHz non-HT duplicate transmission(Ed), the Data field(#449) shall be as defined by Equation (20-61).

For 80 MHz 160 MHz non-HT duplicate transmissions(Ed), the Data field(#449) shall be as defined by Equation (22-87).

*



(#635)(#384)where

 and  are defined in 22.3.8.1.4 (L-SIG definition)(#384)

*Pk* and *pn* are defined in 17.3.5.10 (OFDM modulation)(Ed)

*Dk*,*n* is defined in Eq. (22-22) (Ed)

 is defined in Equations (22-12) and (22-13)

 represents the cyclic shift for transmitter chain  with a value given in Table 22-8 (Cyclic shift values for L-STF, L-LTF, L-SIG and VHT-SIG-A fields of the packet)(#1557)

(#635) has the value given in Table 22-7 (Value of tone scaling factor)

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| **CID** | **Page** | **Clause** | **Comment** | **Proposed Change** | **Resolution** |
| 3635 | 175.34 | 22.3.11.1 | SNRj should be SNRk,j as in 11/0699r1 response | change as the comment | AGREE. See in 11/1284r0. |
| 3661 | 175.34 | 22.3.11.1 | SNRj should be SNRk,j as the 11/0699r1 response | change as the comment | AGREE. See in 11/1284r0. |

<Discussion>

SNR can be dependent on subcarrier *k* as well as beamformee *j* for MU-MIMO because per-tone SNR is used in MU-MIMO beamforming. So, *SNRk,j* seems more appropriate because this paragraph is describing MU-MIMO.

FYI, the same parameter is already described in D1.0 as *SNRk,j* by comment resolution based on D0.1 (See 11/0699r1).

While SNR is also depending on space-time stream *i*, I don’t think we should insist on inserting this subscript here, too.

**TGac editor: modify the D1.1 text from P195L51, as follows**

The MU-MIMO steering matrix  can be determined(#460) by the beamformer using the beamforming feedback matrices for subcarrier *k* from beamformee *j*, *Vk,j,* and SNR information for subcarrier *k* from beamformee *j*, *SNRk,j*, where *(#132)j*=*1,2,…,Nu*.