IEEE P802.11
Wireless LANs

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| SB0 Clause 22 CIDs |
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| Author(s): |
| Name | Affiliation | Address | Phone | email |
| Nihar Jindal | Broadcom Corp. |  |  | njindal@broadcom.com |
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Abstract

This document proposes resolutions for the following CIDs: 10128, 10129, 10130, 10100, 10103, 10099, 10146

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| **CID** | **Commenter** | **Clause** | **Page** | **Line** | **Comment** | **Proposed Change** | **Resolution** |
| 10128 | Inoue, Yasuhiko | 22.3.11.1 | 303 | 39 | N\_{STS,u} is not used but referred in Equation (22-101). | Detele P303L39. Instead, add the reference for N\_{TX} as follows:"N\_{TX} is defined in Table 22-6 (Frequently used parameters). | **Discussion:** The term N\_STS,u is actually used in 303 p. 25 so I believe it should be retained in the table below eq 22-101. However, the commenter is correct that it would be helpful to add N\_TX to the table. **Proposed Resolution:** Revised. Abve 303 L39 add the line: "N\_TX is defined in Table 22-6 (Frequently used parameters)." |
| 10129 | Inoue, Yasuhiko | 22.3.11.2 | 304 | 15 | "j" in "(0 \leq j \leq N\_{user})" should be revsed to u. | As in comment. | **Discussion:**The commenter is correct that this “j” should be “u”. On 304.11 there is also a term V\_{k,j} which should be V\_{k,u}. On 304.11 and 303.65 there are also terms phi(k) and psi(k) which should be replaced with phi(k,u) and psi(k,u), respectively, since these refer to quantization of a particular user’s channel (“u”) on a particular subcarrier (“k”).**Resolution:** Revised. Change “j” to “u” on 304.15 and change “V\_{k,j}” to “V\_{k,u}” on 304.11. On 304.11 and 303.65 replace phi(k) and psi(k) with phi(k,u) and psi(k,u), respectively.. |
| 10130 | Inoue, Yasuhiko | 22.3.11.4 | 304 | 59 | "VHT-LTF symbols in the MU transmission" should be revised to "VHT-LTF symbols in the VHT MU PPDU". | As in comment. | **Discussion:** The terms "MU transmission" and "MU PPDU" are both used throughout clause 22 to refer to a MU packet, so either seems appropriate here. However, a few lines above this the term "MU PPDU" is used to refer to the MU packet, and therefore making the change would add consistency.  **Proposed Resolution:** Accepted |
| 10100 | Schelstraete, Sigurd | 22.3.10.1 | 280 | 62 | Scrambling is also on per-user basis | Replace "the encoding process shall happen on a per-user basis" with "the scrambling and encoding process shall happen on a per-user basis" | **Discussion:** The commenter is correct that scrambling is also performed per-user. In fact, the entire process from scrambling all the way through constellation mapping (including channel coding, stream and segment parsing, and interleaving) is performed on a per-user basis. Neither "encoding process" nor the suggested "scrambling and encoding process" term is sufficiently clear in this regard, so it seems appropriate to revise this term to something more precise.  **Proposed Resolution:** Replace "the encoding process" with "the data processing, from scrambling to constellation mapping (inclusive),". |
| 10103 | Schelstraete, Sigurd | 22.3.11.4 | 305 | 1 | Correct field name in VHT-SIG-A | Replace "NSTS in VHT-SIG-A" with "MU NSTS field in VHT-SIG-A" | **Propsed Resolution**: Accepted. |
| 10099 | Schelstraete, Sigurd | 22.3.10.1 | 280 | 21 | Use clear reference for N\_SYM | Replace line with "N\_SYM is given by Equation (22-67) | **Discussion:** There is an earlier reference to N\_SYM which points to 22-67 for MU PPDU’s and 22-111 for SU PPDU’s. The equation under question covers SU and MU, so the reference in question should also be to both equations.**Propsed Resolution**: Replace line with “N\_SYM is the number of symbols in the Data field, and is given by Equation (22-111) for a VHT SUPPDU, and by Equation (22-67) for a VHT MU PPDU.” |
| 10146 | Adachi, Tomoko | 22.3.11.1 | 303 | 9 | Will there be a case in DL-MU-MIMO beamforming where the space-time streams are divided between one STA? If even transmitting to a single STA is somehow allowed, I don't think "divided" is not a proper word for that case. | Change the description to have consistency with the definition of MU-MIMO. | **Discussion:** An MU PPDU with only a single recipient is allowed. However, a single STA can only occupy a single position within an MU frame (due to the definition of group ID), so multiple streams cannot be "divided" between one STA. The commenter is correct that "divided" is not a particularly precise description of MU transmissions. In an MU transmission the total number of space time streams is divided into up to 4 sets, with the 1st set intended for reception at the 1st STA in intended MU group, the 2nd set intended for reception at the 2nd STA in the group, etc. **Proposed Resolution:** Change "the space-time streams are divided between one or more STAs" to "disjoint subsets of the space-time streams are intended for reception at different STAs".  |