IEEE P802.11
Wireless LANs

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| Review of miscellaneous CIDs |
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|  |  |  |  |  |

Abstract

This document discusses CIDS 5018, 5019, 5020, 6477, 6821, 6640, 6782.

CID 166**CIDs 5018, 5019 and 5020**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 5018 | 22.3.10.6 | 2522 | 14 | In Equation 22-72, there is a minor error on the range of K.k = 0, 1, ..., N\_Block\*N\_ES\*s - 1k = N\_Block\*N\_ES\*s, ..., N\_CBPSS - 1's' should be 'S' (capital S). | Replace "N\_Block\*N\_ES\*s" with "N\_Block\*N\_ES\*S" in Equation 22-72. |
| 5019 | 22.3.10.6 | 2522 | 23 | In Equation 22-73, there is a minor error on the range of K.k = 0, 1, ..., N\_Block\*N\_ES\*s - 1k = N\_Block\*N\_ES\*s, ..., N\_CBPSS - 1's' should be 'S' (capital S). | Replace "N\_Block\*N\_ES\*s" with "N\_Block\*N\_ES\*S" in Equation 22-73. |
| 5020 | 22.3.10.6 | 2522 | 42 | In Line 42, there is a minor error on the definition of K'.k' = k - N\_Block\*N\_ES\*s's' should be 'S' (capital S). | Replace "N\_Block\*N\_ES\*s" with "N\_Block\*N\_ES\*S" in Line 42. |

Note that these three CIDs were accepted earlier. However, it looks like the proposed change is not correct.

Equations (2-72) and (2-73) deal with N\_CBPSS (i.e. coded number of bits per symbol and per spatial stream). The index k in (22-72) and (22-73) runs from 0 to N\_CBPSS-1. If we consider the case where M=0 (see 22-71), which is true in all but a few cases, we have:

N\_CBPS = N\_block\*N\_ES\*S

And thus:

N\_CBPSS = N\_CBPS/N\_SS = N\_block\*N\_ES\*S/N\_SS = N\_block\*N\_ES\*s

So lowercase s looks correct.

**Proposed resolution:**

Reject 5018, 5019 and 5020.

**CID 6477**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 6477 |  |  |  | aRxPHYStartDelay is an implementation-dependent quantity, not something which is fixed for a given PHY | Change 534.28 to "The delay, in microseconds, from start of the PPDU at the antenna to the PHY-RXSTART.indication primitive." Change 2187.52, 2214.37, 2274.23, 2287.20, 2382.46, 2453.35 to "Implementation dependent" |

The parameter “aRxPHYStartDelay” is used in normative requirements, e.g. on page 1260:



Note that in this case “aRxPHYStartDelay” may logically be a parameter that describes the receiver of the frame, while the wait requirement is on the transmitter.

The waiting requirement would become quite meaningless if “aRxPHYStartDelay” could take any value by virtue of being implementation dependent.

**Proposed resolution:**

Reject

**CID 6821**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 6821 |  |  |  | In Clause 22 have "Set to 1 if a beamforming steering matrix is applied to the waveform in an SU transmission as described in 20.3.11.11.2 (Spatial mapping)." and "Set to 1 if a Beamforming steering matrix is applied to the waveform in an SU transmission as described in 20.3.11.11.2 (Spatial mapping)" i.e. ref to Clause 20, not Clause 22 spatial mapping. Ditto Clause 23. Also why uppercase "Beamforming"? | Refer to the correct subclause in 22 (and 23); fix the case of "beamforming" |

Although there is no explicit mention of page and line numbers, the comment likely applies to the following locations:

P2464L11:



P2504L46:



P2595L38:



The reason for the reference to Clause 20.3.11.11.2 is that this is (or used to be) the only place with some discussion on the term “Beamforming Steering Matrix” (see page 2345 Line 15). However, with the incorporation of the 11ac Amendment into the full text, the term “Beamforming Steering Matrix” is now included in the definition section as well. As such, reference to this section is no longer needed, since interested readers can look up the term “beamforming steering matrix” in the definition section (see page 9, Line 5).

**Proposed resolution:**

Revised – remove reference to 20.3.11.11.2.

Also change “Beamforming steering matrix” to “beamforming steering matrix”

**CID 6640**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 6640 | 7.3 | 543 | 28 | PHY-TXBUSY is missing from Table 7-2 at 544.8 and its parameters from Table 7-3 at 544.34 | Add the missing information |

Table 7-2 is shown below:



A list of primitives can be seen below:



If the intention of Table 7-2 is to capture all service primitives mentioned in section 7.3.5, several entries are missing, namely:

* PHY\_DATA
* PHY-TXHEADEREND
* PHY\_TXBUSY

As such, Table 7-2 and Table 7-3 should be updated accordingly.

**Proposed resolution:**

Agreed in principle – need detailed text proposal for final resolution.

**CID 6782**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 6782 |  |  |  | It says "Transmission of HT PPDU with" and "Transmission of HT PPDU is" | Change "PPDU" to "PPDUs" in both cases |

Although there is no explicit mention of page and line numbers, the comment likely applies to the following locations:

Page 2616, Line 12:



Page 2597, Line 62



The proposed change is of editorial nature and looks correct.

**Proposed resolution:**

Accept