IEEE P802.11
Wireless LANs

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| GEN AdHoc CID 2446-2645-2699 |
| Date: 2019-07-18 |
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Abstract

Proposed Comment Resolutions for CID 2446, 2645, and 2699.

After Discussion in a REVmd meeting, it was observed that these comments needed to explicity list the locations of the changes being suggested. This submission attempts to list the specific locations of change relative to REVmd D2.2 for CID 2699 and 2645 but is specific to REVmd D2.1 for CID 2446.

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| 2446 | We need to be clear about what MCSs we are talking about, so we qualify them as "HT-MCS", "VHT-MCS", "TVHT-MCS" and so on. Except in a few places. There are about 20 "HT MCS"s | Change "HT MCS" to "HT-MCS" throughout (note this covers "VHT MCS" and "TVHT MCS") | Gen Submission Required | GEN: 2019-05-11 14:27:44Z - status set to: Submission RequiredSee 11-19/0838 - identify locations for putting "-" |

**Discussion:**

The proposal to move forward with a change from “without Hyphen” to “with a Hyphen” was made during the May 802 Wireless interim.

There are 860 locations with “HT MCS” including VHT MCS and TVHT MCS with and without hyphen.

Please note however, that on D2.1-p2468.23 - CID 1400 – the “Proposed Change” indicated with hyphen, but the Resolution indicated to incorporate without hyphen.

See Doc 11-18/669r14:

"The use of “HT-MCS” (with the hyphen) seems to be limited to “Basic HT-MCS Set” (the fieldname), however. The usage is “HT MCS” where the “HT” is an adjective."

**Proposed Resolution:**

Revised; Incorporate the proposed resolution changes for CID 2446 in doc 11-19/0838r0 <> which addresses the commenters proposed changes and gives the explicit change instructions.

**Proposed Resolution Changes For CID 2446:**

(D2.1 page/line numbers)

Change to include Hyphen at the following locations:

758.48 (HT MCS - title Clause 19.5 reference)

921.14 (HT MCS - title Clause 19.5 reference)

923.23 (HT MCS - title Clause 19.5 reference)

923.46 (TVHT MCS - in Table 21-46 title references)

923.47 (TVHT MCS - in Table 21-53 title references)

923.47 (TVHT MCS)

923.60 (TVHT MCS - in Table 22-30 title reference)

923.61 (TVHT MCS - in Table 22-33 title reference)

923.63 (TVHT MCS)

924.13 (TVHT MCS - in Table 22-34 title reference)

924.14 (TVHT MCS - in Table 22-37 title reference)

924.15 (TVHT MCS)

924.31 (HT MCS - title Clause 19.5 reference)

924.41 (TVHT MCS - in Table 22-37 title reference)

924.42 (TVHT MCSs - Title Clause 22.5 (Parameters for TVHT MCSs))

1157.29 (HT MCSs)

1157.34 (HT MCS - title Clause 19.5 reference)

1167.20 (HT MCSs)

1742.39 (HT MCS - title Clause 19.5 reference)

11742.60 (HT MCSs)

1751.60 ("HT MCSs plus the set of <VHT MCS, NSS>")

1752.07 (HT MCS - title Clause 19.5 reference)

1752.27 (HT MCS - title Clause 19.5 reference)

1752.35 (HT MCS - title Clause 19.5 reference)

1753.06 (HT MCS - title Clause 19.5 reference)

1753.14 (HT MCS - title Clause 19.5 reference)

1764.56 (HT MCS)

1764.59 (HT MCS)

1753.59 (HT MCS - title Clause 19.5 reference)

1768.37 (HT MCSs)

1768.20 (HT MCS)

1768.25 (HT MCS)

1777.04 (HT MCS - title Clause 19.5 reference)

2216.48 (HT MCS)

2216.49 (HT MCS)

2217.01 (HT MCS)

2217.62 (HT MCS)

2316.63 (HT MCS)

2468.22 (HT MCSs) (CID 1400)

2954.24 (HT MCS - title Clause 19.5 reference)

2954.27 (HT MCS - title Clause 19.5 reference)

2970.55 (HT MCS - title Clause 19.5 reference)

2994.53 (HT MCS - title Clause 19.5 reference)

3017.33 (HT MCS - title Clause 19.5 reference)

3019.60 (HT MCS - title Clause 19.5 reference)

3047.17 (HT MCSs - Clause 19.5 title.)

3260.01 “Table 22-26 (TVHT MCSs for TVHT\_MODE\_1, NSS = 1)” reference

3260.02 “VHT MCSs - title Table 22-37 (TVHT MCSs for TVHT\_MODE\_4C and TVHT\_MODE\_4N, NSS = 4)

3260.04 “(in 22.5 (Parameters for TVHT MCSs)”.

3260.8 “Table 22-26 (TVHT MCSs for TVHT\_MODE\_1, NSS = 1)”

3260.8 “Table 22-29 (TVHT MCSs for TVHT\_MODE\_1, NSS = 4)”

3260.11 “Table 22-30 (TVHT MCSs for TVHT\_MODE\_2C and TVHT\_MODE\_2N, NSS = 1)”

3260.12 “Table 22-33 (TVHT MCSs for TVHT\_MODE\_2C and TVHT\_MODE\_2N, NSS = 4) show”

3260.13 “Table 22-34 (TVHT MCSs for TVHT\_MODE\_4C and TVHT\_MODE\_4N, NSS = 1)”

3260.13 “Table 22-34 (TVHT MCSs for TVHT\_MODE\_4C and TVHT\_MODE\_4N, NSS = 1)”

3260.14 “Table 22-37 (TVHT MCSs for TVHT\_MODE\_4C and TVHT\_MODE\_4N, NSS = 4)”

3284.49 “Parameters for TVHT MCSs” – title clause 22.5

3248.53 and 3248.54 - “in Table 22-26 (TVHT MCSs for TVHT\_MODE\_1,

NSS = 1) to(#240) Table 22-37 (TVHT MCSs for TVHT\_MODE\_4C and TVHT\_MODE\_4N, NSS = 4).”

3285.42 Table reference - “Table 22-26 (TVHT MCSs for TVHT\_MODE\_1, NSS = 1)”

3285.42 Table reference “Table 22-37 (TVHT MCSs for TVHT\_MODE\_4C and TVHT\_MODE\_4N, NSS = 4)”

3285.44 “define TVHT MCSs not only”

3285.45 “In the case of TVHT MCSs for MU”

3286.3 Table name – “Table 22-26—TVHT MCSs for TVHT\_MODE\_1, *NSS* = 1”

3286.35 Table name – “Table 22-27—TVHT MCSs for TVHT\_MODE\_1, *NSS* = 2”

3287.1 Table name – “Table 22-28—TVHT MCSs for TVHT\_MODE\_1, *NSS* = 3”

3287.34 Table name – “Table 22-29—TVHT MCSs for TVHT\_MODE\_1, *NSS* = 4

3288.1 Table name –“Table 22-30—TVHT MCSs for TVHT\_MODE\_2C and TVHT\_MODE\_ 2N, NSS = 1”

3288.33 Table name – “Table 22-31—TVHT MCSs for TVHT\_MODE\_2C and TVHT\_MODE\_2N, NSS = 2”

3289.1 Table name – “Table 22-32—TVHT MCSs for TVHT\_MODE\_2C and TVHT\_MODE\_2N, NSS = 3”

3289.33 Table name – “Table 22-33—TVHT MCSs for TVHT\_MODE\_2C and TVHT\_MODE\_2N, NSS = 4”

3290.1 Table name – “Table 22-34—TVHT MCSs for TVHT\_MODE\_4C and TVHT\_MODE\_4N, NSS = 1”

3290.33 Table name – “Table 22-35—TVHT MCSs for TVHT\_MODE\_4C and TVHT\_MODE\_4N, NSS = 2”

3291.1 Table name – “Table 22-36—TVHT MCSs for TVHT\_MODE\_4C and TVHT\_MODE\_4N, NSS = 3”

3291.33 Table Name – “Table 22-37—TVHT MCSs for TVHT\_MODE\_4C and TVHT\_MODE\_4N, NSS = 4”

3667.40, 3667.48, 3667.55, 3667.63, 3668.12, 3668.20, 3668.28, 3668.35, 3668.45, 3668.55, 3669.12, 3669.23, 3669.33, 3669.44, 3669.54, 3670.12, 3670.23, 3670.30, 3670.40, 3670.48, 3670.56, 3670.62, 3671.12, 3671.20, 3671.27, 3671.35, 3671.43, 3671.50, 3671.57, 3671.65, 3672(8 locations), 3673 (8 locations), 3674 (8 locations), 3675 (8 locations), 3676 (8 locations), 3677 (8 locations), and 3678.12 - Reference to table “19.3.5 (Modulation and coding scheme (MCS)), 19.5 (Parameters for HT MCSs)”

3743.60, 3744 (12 locations), 3745 (12 locations), 3746 (12 locations), 3747.9 and 3747.14 - Reference to table “22.5 (Parameters for TVHT MCSs)”

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| 2645 | "byte" is ambiguous (could be <>8 bits) | Change "byte" to "octet" (allowing for plural) throughout except in J.1.1, J.2.2, J.11.2 | Gen Submission Required | GEN: 2019-05-24 15:35:05Z - status set to: Submission Required - Jon to provide suggested locations.GEN: 2019-05-24 15:33:26Z - There are about 10 occurances prior to annex J.GEN: 2019-03-12 05:31:22Z - status set to: Discuss |

**Discussion**:

Durring the 5/24 Telecon the direction to make the change seemed agreeable.

It was suggested that there are about 10 occurances prior to annex J.

**Proposed Resolution:**

**Proposed Resolution: Revised; Incorporate the proposed resolution changes for CID 2645 in doc 11-19/0838r0 <> which addresses the commenters proposed changes and gives the explicit change instructions.**

**Proposed resolution changes for CID 2645:**

Change byte(s) to octet(s) at the following locations D2.2:

 P1542.5 – “the SSID/Short SSID field contains the 4-byte Short SSID”

 ~~P2569.32 (2 locations) - “2-byte by 2-byte subset of the full AES S-box table”~~

 ~~P2570.9 - “second half of table is byte-reversed version of first!”~~

 P3231.33 - “262 140 bytes (see NOTE 3)”

 P3231.34 - “524 284 bytes (see NOTE 3)”

 P3231.36 - “2 097 148 bytes (see NOTE 3 and NOTE 4)”

 P3452.37 in Figure 24-8- “Get PSDU octet decrement bytes in CW decrement length”

 P3482.25 – “The data field contains Length = 512 bytes.”

|  |  |  |  |  |
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| 2699 | The Frame, CF-End +CF-Ack, is not completely deleted from the draft.See the followings:-10.28.2 pp.ll 1867.58-11.3.3 pp.ll 2194.41πÇÇa) Class 1 frames 1) Control frame x)-B.4.4.2 pp.ll 3565.28πÇÇFT17-B.4.4.2 pp.ll 3572.62πÇÇFR17 | Search for "CF-End +CF-Ack" and delete the corresponding phrase, item, or row and renumber if needed. | Submission Required | GEN: 2019-03-12 02:17:53Z - status set to: Submission Required |

Discussion:

This CID was assigned to Tomoko Adachi, she provided the following proposed instructions via Email.

Note there are garbage characters in the comment.

The comment should read:

“The Frame, CF-End +CF-Ack, is not completely deleted from the draft.

See the followings:

-10.28.2 pp. ll 1867.58

-11.3.3 pp. ll 2194.41　a) Class 1 frames 1) Control frame x)

-B.4.4.2 pp. ll 3565.28　FT17

-B.4.4.2 pp. ll 3572.62　FR17”

Proposed Resolution:

Revised:  Incorporate the proposed resolution changes for CID 2699 in doc 11-19/0838r0 <> which addresses the commenters proposed changes and gives the explicit change instructions.

**CID 2699 Proposed Resolution Changes:**

***TGmd Editor: Change the second paragraph in 10.28.2 of P802.11REVmd D2.2 as follows:***

**10.28.2 Protection mechanism for non-ERP receivers**

…

In the case of a BSS composed of only ERP STAs, but with knowledge of a neighboring co-channel BSS having NonERP traffic, the AP might need protection mechanisms to protect the BSS’s traffic from interference. This provides propagation of NAV to all attached STAs and all STAs in a neighboring co-channel BSS within range by messages sent using rates contained in the BSSBasicRateSet parameter. The frames that propagate the NAV throughout the BSS include RTS/CTS/Ack frames, all Data frames with the More Fragments field equal to 1, all Data or Management frames sent in response to PS-Poll frame that are not proceeded in the frame exchange sequence by a Data frame with the More Fragments field equal to 1, (M53)and CF-End frames~~, and CF-End +CF-Ack frames~~.

…

***TGmd Editor: Change the fifth paragraph in 11.3.3 of P802.11REVmd D2.2 as follows:***

**11.3.3 Frame filtering based on STA state**

…

The frame classes are defined as follows:

              a) Class 1 frames

                            1) Control frames

                                          i) RTS

                                          ii) CTS

                                          iii) DMG Clear to send (DMG CTS)

                                          iv) Ack

                                          v) Grant

                                          vi) SSW

                                          vii) SSW-Feedback

                                          viii) SSW-Ack

                                          ix) Grant Ack

                                          x) ~~CF-End +CF-Ack~~

~~xi)~~ CF-End

xi~~i~~) In an IBSS and in a PBSS when dot11RSNAActivated is false, Block Ack (BlockAck)

 xii~~i~~) In an IBSS and in a PBSS when dot11RSNAActivated is false, Block Ack Request (BlockAckReq)

2) Management frames

…

***TGmd Editor: Change the first paragraph in 11.19 of P802.11REVmd D2.2 as follows:***

**11.19 STAs communicating Data frames outside the context of a BSS**

When dot11OCBActivated is true in a STA:

a) Synchronization, authentication, association, and frame classes as defined in 11.1 (Synchronization) and 11.3 (STA authentication and association) are not used. Data confidentiality as defined in Clause 12 (Security) is not used. The STA may send Action frames and, if the STA maintains a TSF Timer, Timing Advertisement frames.

b) The STA may send Control frames, except those of subtype PS-Poll~~,~~ and CF-End~~, and CF-End +CFAck~~.

c) The STA may send Data frames of subtype Data, Null, QoS Data, and QoS Null.

d) The STA shall set the BSSID field in all Management and Data frames to the wildcard BSSID value.

…

***TGmd Editor: For FT17 change column two to “Reserved” and delete the text in the next 3 cells (3-4-5). in B.4.4.2 of P802.11REVmd D2.2***

***TGmd Editor: For FR17 change column two to “Reserved” and delete the text in the next 3 cells (3-4-5). in B.4.4.2 of P802.11REVmd D2.2* References:**