IEEE P802.11
Wireless LANs

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| Proposed resolution for CID 4505 |
| Date: 2020-05-27 |
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##### This submission present a resolution for CID 4505. The proposed changes are based on REVmd/D3.3 and prepared based on the changes proposed by Mark Rison in his contribution 20/0435r3.

##### Revision history:

##### R0 – initial version

##### R1 – resolution is revised based on the comments received during the May 27th CRC call.

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| CID | Clause | Page | Line | Comment | Proposed Change |
| 4505 | 11.41 |  |  | We now have two Operating Mode Notification frames (9.6.22.4 and 9.6.29.3). So which is intended when the spec talks of "the Operating Mode Notification frame"? | In 9.6.29.3 prepend "CMMG " to "Operating Mode Notification". At the top of 11.41 add "In this subclause, references to an Operating Mode Notification frame or element should be understood as referring to a CMMG Operating Mode Notification frame or element, when transmitted or received by a CMMG STA." |

***Discussion:***

Per the discussion in the May 8th TGmd CRC call,

*MAC: 2020-05-08 15:50:21Z - Assign to Edward AU. In the direction of 11-20/0435, but find the locations that need the added "CMMG", instead of making a global statement, if possible.*

**Proposed resolution:**

**Revised**

***Instruction to editors: In subclause 9.4.1.63 (CMMG Operating Mode field), changes the first paragraph at 978.63 as follows:***

The CMMG Operating Mode field is present in the CMMG Operating Mode Notification frame (see 9.6.29.3 (Operating Mode Notification frame format(11aj))) andCMMG Operating Mode Notification element (see 9.4.2.231 (CMMG Operating Mode Notification element(11aj))).

***Instruction to editors: In Table 9-523 (CMMG Action field values) in subclause 9.6.29.1 (CMMG Action field) at 1684.38:***

For the value of 2, change “Operating Mode Notification” to “CMMG Operating Mode Notification”.

***Instruction to editors: In subclause 9.6.29.3 (Operating Mode Notification frame format) at 1685.13, modify the subclause and the table caption as follows:***

**9.6.29.3 CMMG Operating Mode Notification frame format(11aj)**

The CMMG Operating Mode Notification frame (#2568)is used to notify STAs that the transmitting STA is changing its operating channel width, the maximum number of spatial streams it can receive, or both.

In the context of CMMG STAs, references to an Operating Mode Notification frame or element should be understood as referring to a CMMG Operating Mode Notification frame or element, respectively.

The Action field of the CMMG Operating Mode Notification frame contains the information shown in Table 9-523 (Operating Mode Notification frame Action field format(#4252)(11aj)).

**Table 9-523—CMMG Operating Mode Notification frame Action field format**

***Instruction to editors: In subclause 9.4.2.231 (CMMG Operating Mode Notification element), change the last paragraph at 1457.1 as follows:***

The CMMG Operating Mode field is defined in 9.4.1.63 (CMMG Operating Mode field(11aj)).

***Instruction to editors: In subclause 10.6.8.4 (Rate selection for individually addressed Data and Management frames transmitted by CMMG STAs), update the contents of the fifth paragraph from 1784.37 to 1785.10 as follows:***

A Data frame or Management frame for SC and OFDM MIMO transmission shall be sent using any data rate, MCS, or <CMMG MCS, NSS> tuple subject to the following constraints:

— (#1456)A STA shall not transmit a frame using a rate or MCS that is not supported by the receiver STA, as reported in any Supported Rates and BSS Membership Selectors element, Extended Supported Rates and BSS Membership Selectors element, or Supported MCS Set field in the Management frames transmitted by the receiver STA.

 — A STA shall not transmit a frame using a <CMMG MCS, NSS> tuple that is not supported by the receiver STA, as reported in any Supported CMMG MCS and NSS Set field in the Management frames transmitted by the receiver STA.

 — If at least one CMMG Operating Mode field with the Rx NSS Type subfield equal to 0 was received from the receiver STA:

 — A STA shall not transmit a frame with the number of spatial streams greater than that indicated in the Rx NSS subfield in the most recently received CMMG Operating Mode field with the Rx NSS Type subfield equal to 0 from the receiver STA.

 — (#1456)A STA shall not transmit a frame using a value for the CH\_BANDWIDTH parameter of the TXVECTOR that is not supported by the receiver STA, as reported in any CMMG Capabilities element received from the intended receiver.

 — (#1456)A STA that is a member of a BSS shall not transmit a frame using a value for the CH\_BANDWIDTH parameter of the TXVECTOR that is not permitted for use in the BSS, as reported in the most recently received CMMG Operation element with the following exceptions:

 — Transmissions on a TDLS off-channel link follow the rules described in 11.21 (Tunneled direct-link setup)

 — Transmissions by a CMMG STA on a TDLS link follow the rules described in 11.21 (Tunneled direct-link setup).

 — If at least one CMMG Operating Mode field with the Rx NSS Type subfield equal to 0 was received from the receiver STA:

 — A STA shall not transmit a frame using a value for the TXVECTOR parameter

 CH\_BANDWIDTH that is not supported by the receiver STA as reported in the most recently received CMMG Operating Mode field with the Rx NSS Type subfield equal to 0 from the receiver STA(#1456).