IEEE P802.11  
Wireless LANs

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| LB242 comment resolution | | | | |
| Date: 2019-07-15 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | email |
| Solomon Trainin | Qualcomm |  |  | strainin@qti.qualcomm.com |
|  |  |  |  |  |

Abstract

Resolution of comments 5033, 5034, 5039, 5042, 5043, 5061, 5063.

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| **CID** | **Commenter** | **Page** | **Line** | **Clause** | **Comment** | **Proposed Change** | **Resolution** |
| 5033 | Mark Hamilton | 316.00 | 38 | 5.2.5.2 | How does the user of the MAC SAP know if a SAR agreement has been established? Without knowing this, it can't know the maximum MSDU size that it can .request. | Add two new transmission status parameters, "SAR agreement active" and "SAR agreement inactive". Add to the end of the sentence in 5.2.5.1, ", or to indicate a change of status of SAR agreement with the peer MAC." Add after the sentence in 5.2.5.3, "The MA-UNITDATA-STATUS.indication primitive can also be generated unsolicited to indicate to the LLC sublayer entity or bridge port the initial or changed status of a SAR agreement with the MAC peer that is currently servicing the provided destination address." Add after the sentence in 5.2.5.4, "In the case of an unsolicited indication of SAR agreement status, the LLC sublayer or bridge port can update its maximum MSDU size for the indicated destination address." | **Reject**  SAR is established as part of the BA agreement by the MLME-ADDBA primitives. There is no unsolicited change of SAR agreement status. SAR status is kept as long the BA agreement exists. |
| 5034 | Mark Hamilton | 753.00 | 7 | B.4.34.1 | There is no PICS statement for the segmentation and reassembly feature | Add a PICS statement for support of segmentation and reassembly. Presumably, "CFEDMG: O". | **Revised**  See below in the document |
| 5039 | Robert Stacey | 96.00 | 8 | 9.3.1.8.1 | Identify the new fields (No Memory Kept, Memory Configuration Tag) as applicable to EDMG STAs and reserved for non-EDMG STAs. | Change each paragraph to "The <blah> subfield is used by an EDMG STA ... The <blah> subfield is reserved if transmitted by a non-EDMG STA." | **Accept** |
| 5042 | Robert Stacey | 100.00 | 23 | 9.3.1.23 | Don't create a new mapping for integer to AC; use existing mapping. | Delete Table 4 and change "The encoding of the Preferred AC subfield is shown in Table 4." to "The Preferred AC subfield is encoded as the AC index (ACI) defined in Table 9-154. | **Accept** |
| 5043 | Robert Stacey | 100.00 | 21 | 9.3.1.23 | "lowest AC" has no meaning | Change to "lowest priority AC" | **Accept** |
| 5061 | Yunsong Yang | 211.00 | 17 | 9.6.31 | Having reviewed the resolutions to previous comments CIDs 4474-4475, agree that the 4 new MIMO BF action frames can be added under the Unprotetced DMG category so that they can be used as Class 1 frames. However, the creation for the Protected Dual of Unprotetced DMG category is still not warranteed, because there is already a robust DMG category. The 8 new protected frames added under the the Protected Dual of Unprotetced DMG category can be added under the DMG category to achieve the same result. The baseline standard uses S1G vs. Unprotected S1G, and WNM vs. Unprotected WNM. As the use of PMF becomes more and more popular, if 11ay can stick to DMG vs. Unprotected DMG (instead of having 3 categories), implementation can be made consistent across the board and less interoperability issues should be expected as a result. | Delete 9.6.31 and the action category of Protected Dual of Unprotected DMG from the draft. Add the 8 new protected DMG action frames defined in Table 38 to Table 9-456 (DMG Action field values), and add 8 new subclauses under 9.6.19 (DMG Action frame details) to describe each of the 8 new protected DMG action frames. An example text for these subclauses can be as follows: "9.6.19.<x> Protected <XXXX> frame format The Protected <XXXX> frame is an Action frame of category DMG and is defined to allow robust STA-STA communication of the same information that is conveyed in the <XXXX> frame that is not robust (see 9.6.21.1 (Unprotected DMG Action field)). The Action field of the Protected <XXXX> frame has the same format as the Action field of the unprotected <XXXX> frame (see 9.6.21.<y> (XXXX frame format)), except that the Order 2 item is the DMG Action field, which is defined in 9.6.19.1 (DMG Action field), instead of the Unprotected DMG Action field."  And on P206L4, in Table 9-484, remove the Reserved rows and insert the 4 new unprotected DMG action frames beginning from value 2, instead of value 4. On P120L16, in Figure 9-547, rename the "Protected DMG Dual Support subfield" to "Protected DMG Operations Support subfield". On P121L3, change the sentence to read: "The Protected DMG Operations Support subfield is set to 1 to indicate that the STA supports the protected DMG action frames as described in 12.6.19.<xx> to 12.6.19.<yy>. Otherwise, it is set to 0." On P395, remove the text inserted under 12.6.20. Insert a new subcluase under clause 11, entitled "Protected DMG Operations" with the following text:" "When performing the DMG operations described in 11.28 (DMG beamformed link and BSS maintenance) to 11.31 (Spatial sharing and interference mitigation for DMG STAs), 11.37 (DMG beamforming), and 11.53 (TDD channel access operation), if management frame protection is negotiated and both STAs set the Protected DMG Operations Support field in the RSNXE that they transmit to 1, the STAs shall -- use Protected Announce, Protected BRP, Protected Link Measurement Request, Protected Link Measurement Report, Protected MIMO BF Setup, Protected MIMO BF Poll, Protected MIMO BF Feedback, and Protected MIMO BF Selection frames, instead of Announce, BRP, Link Measurement Request, Link Measurement Report, MIMO BF Setup, MIMO BF Poll, MIMO BF Feedback, and MIMO BF Selection frames, respectively, -- discard any unprotected Announce, BRP, Link Measurement Request, Link Measurement Report, MIMO BF Setup, MIMO BF Poll, MIMO BF Feedback, or MIMO BF Selection frames received from the peer STA, with which management frame protection is negotiated. STAs that exchange Protected Announce, Protected BRP, Protected Link Measurement Request, Protected Link Measurement Report, Protected MIMO BF Setup, Protected MIMO BF Poll, Protected MIMO BF Feedback, or Protected MIMO BF Selection frame shall follow the rules defined in 12.6.19 (Protection of robust Management frames). When management frame protection is not negotiated or the Protected DMG Operations Support field in the RSNXE transmitted by either STA is set to 0, the STAs shall not use any of the Protected Announce, Protected BRP, Protected Link Measurement Request, Protected Link Measurement Report, Protected MIMO BF Setup, Protected MIMO BF Poll, Protected MIMO BF Feedback, and Protected MIMO BF Selection frames." | **Reject**  The proposed new solution does not allow keeping the action fields equal that belong to Protected DMG and DMG. It contradicts with the commenter previous suggestions made to the draft D3.0. The references made by the commenter of the known solutions to be used: “S1G vs. Unprotected S1G, and WNM vs. Unprotected WNM” are irrelevant for the discussed case. The frames under S1G and frames under Unprotected S1G are different and the same is true about WNM vs. Unprotected WNM. |
| 5063 | Yunsong Yang | 376.00 | 1 | 11.25.1.2 | TGay defined a number of new action frames under the existing and new action categories. However, the default QMF policies for these new action frames are not defined in Table 11-17 - Default QMF policy. Then, by default, they will use access category AC\_BE as their default QMF policies. For this draft to be complete, TGay need to check whether all new action frames defined in this draft should use access category AC\_BE as their default QMF policies. If not, add their default policies in Table 11-17. | Determine whether all new action frames defined in this draft should use access category AC\_BE as their default QMF policies. If not, add their default policies in Table 11-17. | **Revised**  See below in the document |

CID 5034

Discussion: agree with the commenter’s proposal to add the PICS statement

***TGay editor, in the subclause B.4.24.1 DMG MAC features append as follows:***

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| DMG M23 | Segmentation and Reassembly (SAR) | 10.72 DMG segmentation and reassembly operation | CFEDMG: O | Yes  No   N/A  |

CID 5063

Discussion: Agree with the commenter’s proposal to add default QMF policies in Table 11-17.

***TGay editor, modify in the Table 11-17—Default QMF policy***

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| Unprotected DMG | 1101 | 20 | 0-1 and 4-7 | AC\_VO |

***TGay editor, append two new lines in the Table 11-17—Default QMF policy***

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| --- | --- | --- | --- | --- |
| Protected Dual of Unprotected DMG Action | 1101 | 33 | 0-1 and 4-7 | AC\_VO |
| Protected Dual of Unprotected DMG Action | 1101 | 33 | 2, 3 | AC\_BE |

**References:**

IEEE P802.11ay/D4.0, June 2019