IEEE P802.11
Wireless LANs

|  |
| --- |
| Proposed Comment Resolution for MAC CIDs |
| Date: 2021-11-04 |
| Author(s): |
| Name | Company | Address | Phone | email |
| Stephen MCCANN | Huawei Technologies Co., Ltd | Southampton, UK |  | stephen.mccann@ieee.org  |

Abstract

This document proposes comment resolutions for the following CIDs:

11, 82, 136, 138, 147, 148, 149, 150, 159, 227, 234, 241, 251, 289, 290, 318, 343, 359, 366, 374, 392, 429, 434, 439, 446, 449, 524, 545, 564, 566, 572 and 591.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **CID** | **Page** | **Line** | **Clause** | **Comment** | **Proposed Change** | **Resolution** |
| 290 | 773 | 24 | 9.2.1 | "A MAC header, which comprises frame control, duration, address, optional sequence controlinformation, optional QoS Control information (QoS Data frames only), and optional HT Controlfields (+HTC frames only);" -- the MAC header doesn't contain duration for PS-Polls | Change to "A MAC header, which comprises frame control, optional duration (not in PS-Poll frames), address, optional sequence controlinformation, optional QoS Control information (QoS Data frames only), and optional HT Controlfields (+HTC frames only);" | Revised: Change the cited text to "A MAC header, which comprises frame control, optional duration (not in PS-Poll frames), address, optional sequence controlinformation, optional QoS Control information (only in QoS Data frames), and optional HT Control fields (only in +HTC frames);" |

**Discussion**

Editorial changes “(only in QoS Data frames)” and “(only in +HTC frames)”.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 545 | 2402 | 62 | 11.22.5.2 | "home realm information" is not defined. The authentication is forwarded based on NAI realm included in the EAP Identity Response. | Change "home realm information" to "NAI realm" | Accepted. |

**Discussion**

This is ok, as “home realm information” is only used once and it is not defined.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 289 | 1202 | 23 | 9.4.2.68.5 | "The Supported Operating Classes Element field contains the Supported Operating Classes element, asdefined in 9.4.2.53 (Supported Operating Classes element)." -- that can't be right. It would mean the subelement would have essentially duplicate element IDs and lengths | Change to "The Supported Operating Classes Element field contains a Supported Operating Classes element, asdefined in 9.4.2.53 (Supported Operating Classes element), excluding the Element ID and Length fields." | Accepted. |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 392 | 1222 | 56 | 9.4.2.78 | "the BSS Idle capability" -- no such capability is defined | Change to "BSS max idle period management" | Accepted. |
| 318 | 2139 | 26 | 11.1.4.3.6 | "listen to a full Beacon frame" -- the concept of full v empty/half-full Beacon frames is not defined | Delete "full " | Accepted. |
| 251 | 1105 | 30 | 9.4.2.28 | "Table 9-155--Default EDCA Parameter Set element parameter valuesif dot11OCBActivated is false or the STA is a non-sensor STA" should be "and" not "or" | Change to "Table 9-155--Default EDCA Parameter Set element parameter valuesif dot11OCBActivated is false and the STA is not a sensor STA" | Accepted. |
| 564 | 844 | 15 | 9.3.3.1 | There are a number of problems with the sentences that begin "In an MMPDU..." at the cited location and at the end of the paragraph.1. Poor grammar: In what sense is the maximum MMPDU size \*in\* the MMPDU?2. In the first sentence, it is not clear why "one or more" is needed; if one or more refers to fragmentation and retries why is that relevant?3. In Table 9-25, both VHT PPDU and S1G PPDU have notes to indicate that the size is specified in this subclause. So non-VHT PPDU in the first sentence is incomplete (should include S1G PPDU). And the reference to Table 9-25 in the second sentence is obfuscation since Table 9.25 just refers back to this subclause. | Change the first sentence to read "The maximum size of an MMPDU that is not carried in a VHT or S1G PPDU is defined in Table 9-25."Change the second sentence to read "The maximum size of an MMPDU that is carried in a VHT or S1G PPDU (in whole or in part) is the maximum MPDU size supported by the recipient or, if there is more than one recipient, the smallest of the maximum MPDU sizes supported by the recipients less the shortest Management frame MAC header and FCS." | Revised: Change the sentence at P844L15, starting “In an MMPDU…” to "The maximum size of an MMPDU that is not carried in a VHT or S1G PPDU is defined in Table 9-25."Change the sentence at P844L19 starting “in an MMPDU…” to "The maximum size of an MMPDU that is carried in one or more VHT or S1G PPDUs (in whole or in part) is the maximum MPDU size supported by the recipient or, if there is more than one recipient, the smallest of the maximum MPDU sizes supported by the recipients less the shortest Management frame MAC header and FCS." |

**Discussion**

Added “one or more VHT or S1G PPDUs” to the 2nd change.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 11 | 839 | 1 | 9.3.2.1.2 | There is a reference to IEEE 802.1CQ, which is a not approved document and in fact it does not define what the text says about the reference. | The text should refer to IEEE 802c-2017. | Accepted. |
| 566 | 1810 | 60 | 10.23.2.8 | With the resolution to comment #2610 in REVmd, an error was introduced: "a PPDU containing one or more blah frames" is not the same as "an A-MPDU containing one or more blah frames" the the PPDU might be a non-HT PPDU in the first instance (if it has one frame) but not in the second istance (because a non-HT PPDU cannot carry an A-MPDU). | Correct the error here. A VHT Compressed Beamforming frame can be sent in a non-HT PPDU or as an S-MPDU . | Rejected:The comment fails to identify changes in sufficient detail so that the specific wording of the changes that will satisfy the commenter can be determined. |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 82 | 909 | 28 | 9.4.1.2 | Bitwidth of the Max SP Length subfield is incorrect. | Replace "1", the bitwidth of the Max SP Length subfield, with "2". | Accepted. |
| 227 | 1316 | 50 | 9.4.2.152 | Per Figure 9-599--MMS Control field format, the Single AID subfield is b2 [xxgc] | Change B3 to B2 in Table 9-269--Single AID subfield definition | Accepted. |
| 234 | 1075 | 29 | 9.4.2.21.13 | What's the differencebetween Map Type = 0, Map URL ftp://myMap.com/maps/locale.svg andMap Type = 4, Map URL ftp://myMap.com/maps/locale.svg ? | After the para at the referenced location add a "NOTE---Other Map Type field values are intended for use when the Map URL field value does not have a file extension that allows the type of map to be determined." | Accepted. |
| 241 | 2756 | 2 | 14.5.1 | "An authenticated mesh peering includes a mesh peering, corresponding mesh TKSA, and thetwo mesh STAs mesh GTKSAs." is not clear and not grammatical | Add an apostrophe after " STAs" | Accepted. |
| 446 | 1813 | 35 | 10.23.2.9 | "2) An SU PPDU or a VHT MU PPDU carrying a single MSDU, a single MMPDU, a singleA-MSDU, or a single A-MPDU3) A VHT MU PPDU carrying A-MPDUs to different users (a single A-MPDU to each user)" -- need to cover other PHYs' MU PPDUs | Change to "2) An SU PPDU or an MU PPDU carrying a single MSDU, a single MMPDU, a singleA-MSDU, or a single A-MPDU3) An MU PPDU carrying A-MPDUs to different users (a single A-MPDU to each user)" | Revised. Change to “2) An SU PPDU or MU PPDU carrying a single MSDU, single MMPDU, single A-MSDU, or single A-MPDU3) An MU PPDU carrying A-MPDUs to different users (a single A-MPDU to each user)" |

**Discussion**

Small editorial update, per the editors style of lists

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 449 | 2183 | 15 | 11.2.6 | "back immediately when the frame exchange sequence ends" should be "back immediately after the frame exchange sequence ends" | As it says in the comment | Accepted. |
| 343 | 2166 | 30 | 11.2.3.12 | "if a Data or QoS Null frame with an EOSP subfield equal to 1" should be "if a QoS Data or QoS Null frame with an EOSP subfield equal to 1", and the precedence is still ambiguous | Change to "if a QoS Data or QoS Null frame, with an EOSP subfield equal to 1, is received" | Accepted. |
| 524 |  |  | 9.6.7 | "The optionalsubelements are ordered by nondecreasing subelement ID." (2x) -- just extend 9.4.3 ("Subelements within an element are ordered by nondecreasing Subelement ID.") to cover subelements in a frame and refer to that | In 9.4.3 change "Subelements within an element are ordered by nondecreasing Subelement ID." to "Subelements within an element and subelements in a field outside of an element are in each case ordered by nondecreasing Subelement ID."In 9.6.7.37 and in 9.6.7.38 change "The Optional Subelements field contains zero or more subelements, each consisting of a 1-octet Subelement ID field, a 1-octet Length field, and a variable-length Data field, as defined in 9.4.3 (Subelements). The optional subelements are ordered by nondecreasing subelement ID." to "The Optional Subelements field contains zero or more subelements, The subelement format and ordering of subelements are defined in 9.4.3 (Subelements)." | Accepted. |
| 147 | 811 | 50 | 9.2.5.1 | "All times are calculated in microseconds" is a false statement, per two paragraphs later (where it is calculated in multiples of 40 us). | Change to "Unless stated otherwise, all times are calculated ..." | Accepted. |
| 148 | 811 | 64 | 9.2.5.1 | Redundancy in the "rounded up" text. It is stated clearly at P811.50. | Delete the sentence "If a calculated duration is not a multiple...". Same thing at P812.10, and P831.13. | Accepted. |
| 149 | 812 | 1 | 9.2.5.1 | Redundancy in the "results in a negative value" text. It is stated clearly at P811.52. | Delete the sentence "If a calculated duration results in a negative ...". Same thing at P812.11. | Accepted. |
| 150 | 1704 | 52 | 10.3.2.3.3 | CMMG and CDMG also include LAST\_RSSI in PLCP headers, but they are not covered in the SIFS subclause of clause 10. | Add ", CDMG STA or CMMG STA" after "DMG STA". | Accepted. |
| 159 | 1802 | 60 | 10.23.2.2 | 10.23.2.2 "EDCA backoff procedure" is where the details of a transmission failure/success are described, but it uses the phrase "has not failed" instead of success. Confusing for those trying to find what "successful transmission" means. | Change "has not failed" to "is considered to be a successful transmission". Also, change "transmission failure" to "transmission failure or success" in the introductory clause at P1802.40. | Revised: At P1802L60, change "has not failed" to "is considered to be a successful transmission".At P1802L40 change "transmission failure" to "transmission success or failure or success"  |
| 136 | 1823 | 19 | 10.23.3.3 | "Remaining TXOP duration" is not a clear combination of those words. Also, this is just long and confusing. Suggest rewording. | Replace"The STA shall not initiate transmission of a frame unless the transmission and any acknowledgment or other immediate response expected from the peer MAC entity are able to complete prior to the end of the remaining TXOP duration. All transmissions, including response frames, within the polled TXOP are considered to be the part of the TXOP, and the HC shall account for these when setting the TXOP limit."with"The STA shall not initiate transmission of a frame unless the transmission and any acknowledgment or other immediate response expected from the peer MAC entity are able to complete within the polled TXOP, and the HC shall account for these when setting the TXOP limit." | Accepted. |
| 138 | 855 | 53 | 9.3.3.6 | As in the Request frame, BSSMaxIdlePeriod can only \_optionally\_ be present, since it cannot be included if it is zero. | Change "present" to "optionally present". Same thing at P862.27. | Accepted. |
| 359 | 774 | 33 | 9.2.2 | "Values specified in decimal are coded in natural binary unless otherwise stated. " -- how does natural binary differ from unnatural binary? | Delete the cited sentence | Accepted. |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 366 | 1476 | 62 | 9.4.5.21 | "The Currency Code field is a 3-octet string (e.g., "USD") representing an ISO 4217 currency numeric code." -- well, does it use "USD" or "840" for the US dollar? | Change "numeric" to "alpha" | Revised: Change “numeric” to “alphabetic or numeric” |

**Discussion**

Currency codes are defined by ISO 4217 and can be either numeric (e.g. “840”) or alphabetic (e.g. “USD”). Therefore the phrase “alphabetic or numeric” is more appropriate.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 439 | 2120 | 54 | 11.1.3.1 | "STAs expect to receive Beacon frames at a nominal rate." -- only non-AP STAs (and only ones that are associated) expect this. Ditto "In a PBSS, STAs" a few lines later | Change to "Non-AP STAs in a BSS that is not a PBSS (other than STAs in an IBSS of which they are the only member)" and "Non-AP STAs in a PBSS" | Accepted. |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 429 | 2203 | 62 | 11.3.5.1 | " and enables it to exchange Class 3 frames" is already stated a few lines above | Delete the cited text | Accepted. |
| 434 | 2294 | 45 | 11.10.19 | " multicast group address" should be " multicast-group address" | Fix in 11.10.19. In C.3 change "Multicast Group address indicates the MAC address of the multicast group " to "Indicates the multicast-group address of the multicast group " (2x) | Accepted. |
| 374 | 2367 | 9 | 11.21.16.2 | "When the Last Sequence Control field in the DMS Response frame is not supported at a DMS provider (i.e.,the sequence number value is not provided in the field), and a group addressed MSDU that has sent using bothindividually addressed and group addressed frame transmission, termination of the DMS stream by the DMS providermight result in a DMS recipient receiving undetectable duplicate MSDUs that are not filtered out by the MAC." is grammatically broken | Change to "When the Last Sequence Control field in the DMS Response frame is not supported at a DMS provider (i.e.,the sequence number value is not provided in the field), and a group addressed MSDU has been sent using bothindividually addressed and group addressed frame transmission, termination of the DMS stream by the DMS providermight result in a DMS recipient receiving undetectable duplicate MSDUs that are not filtered out by the MAC." | Accepted. |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 572 | 1473 | 5 | 9.4.5.15 | What does the phrase "IEEE 802.11 access network" mean? | Add the following definition to clause 3.2: "IEEE 802.11 access network: a network that provides access to an external network reachable via the BSS." | Accepted. |
| 591 | 1483 |  | 9.4.5.10 | A list of EAP methods can be advertised in NAI Realm ANQP-element, however some/many EAP deployments do not use ANQP. Lack of info on supported EAP methods results in STA UIs displaying misleading/confusing info to users when there are no preconfigured credentials (or attempt to use preconfigured credentials fails) | Consider a means to efficiently indicate list of EAP methods without requiring ANQP query (e.g. in beacons/probes) | Rejected:The comment fails to identify changes in sufficient detail so that the specific wording of the changes that will satisfy the commenter can be determined. |