IEEE P802.11
Wireless LANs

|  |
| --- |
| Proposed resolution for miscellaneous comments on initial SA ballot on D4.0: Part 3 |
| Date: 2023-11-13 |
| Author: |
| Name | Affiliation | Address | Phone | Email |
| Edward Au | Huawei Technologies | Ottawa, Ontario, Canada |  | edward.ks.au@gmail.com  |

#####

##### This submission present proposed resolutions for the following 18 ED2 CIDs:

Clause 9: 6284, 6291, 6148, 6149, 6091, 6003, 6288, 6024

Clause 11: 6156, 6155, 6099, 6090, 6313, 6172, 6023, 6069

Annex C: 6318, 6063

##### The proposed changes are based on REVme/D4.0.

##### Revision history:

##### R0 – Initial version

##### R1 – Updated proposed resolutions of the following CIDs: 6284, 6291, 6288, 6090, 6313, 6069

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | Clause | Page | Line | Comment | Proposed Change |
| 6284 | 9 |  |  | Various references to "48-bit MAC address" duplicate figures and should lose the "48-bit" (e.g.1155.58) | As it says in the comment |

***Proposed resolution for CID 6284:***

Revised.

* At 1150.37: Replace “the rest of this field is set to MAC\_ADDR[42:47] of the 48-bit MAC address of this neighbor STA” with “the rest of this field is set to MAC\_ADDR[42:47] of the MAC address of this neighbor STA”.
* At 1155.58: Replace “The MCCAOP Owner field, if present, indicates the 48-bit MAC address of the MCCAOP owner” with “The MCCAOP Owner field, if present, indicates the MAC address of the MCCAOP owner”.
* At 1156.28: Replace “The Mesh Gate Address field is represented as a 48-bit MAC address and is set to the MAC address of the mesh gate” with “The Mesh Gate Address field is set to the MAC address of the mesh gate”.
* At 1157.26: Replace “The Root Mesh STA Address field is represented as a 48-bit MAC address and is set to the MAC address of the root mesh STA” with “The Root Mesh STA Address field is set to the MAC address of the root mesh STA”.
* At 1158.53: Replace “The Originator Mesh STA Address field is represented as a 48-bit MAC address and is set to the originator MAC address” with “The Originator Mesh STA Address field is represented as a MAC address and is set to the originator MAC address”.
* At 1158.61: Replace “This field is present only if the AE subfield in the Flags field is set to 1 and is represented as a 48-bit MAC address” with “This field is present only if the AE subfield in the Flags field is set to 1 and is set to a MAC address”.
* At 1159.51: Replace “The Target Address field is represented as a 48-bit MAC address” with “The Target Address field is set to a MAC address”.
* At 1160.57: Replace “or target proxy mesh gate and is represented as a 48-bit MAC address” with “or target proxy mesh gate and is represented as a MAC address”.
* At 1161.2: Replace “and is represented as a 48-bit MAC address” with “and is represented as a MAC address”.
* At 1161.13: Replace “The Originator Mesh STA Address field is represented as a 48-bit MAC address” with “The Originator Mesh STA Address field is represented as a MAC address”.
* At 1162.17: Replace “The Destination Address field is represented as a 48-bit MAC address” with “The Destination Address field is represented as a MAC address”.
* At 1162.27: Replace “and is represented as a 48-bit MAC address” with “and is represented as a MAC address”.
* At 1162.61: Replace “The PXU Originator MAC Address field is represented as a 48-bit MAC address” with “The PXU Originator MAC Address field is represented as a MAC address”.
* At 1163.51: Replace “The External MAC Address subfield is represented as a 48-bit MAC address” with “The External MAC Address subfield is represented as a MAC address”.
* At 1163.59: Replace “The Proxy MAC Address subfield is represented as a 48-bit MAC address” with “The Proxy MAC Address subfield is represented as a MAC address”.
* At 1164.29: Replace “The PXU Recipient MAC Address is represented as a 48-bit MAC address” with “The PXU Recipient MAC Address is represented as a MAC address”.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | Clause | Page | Line | Comment | Proposed Change |
| 6291 | 9 |  |  | "in the Table x-yy" should not have an article (e.g. 4x for 9-yy) | Remove the spurious "the"s |

***Proposed resolution for CID 6291:***

Revised.

Delete “the” from “the Table” at 646.28, 810.1, 842.60, 1234.60, 3113.46.

Delete “the” from “the Figure” at 3117.12, 3349.26.

Delete “the” from “the Equation” at 3939.9.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | Clause | Page | Line | Comment | Proposed Change |
| 6148 | 9.4.2.23.4 | 985 | 12 | "The meaning of the value in the PTKSA/GTKSA Replay Counter subfield is defined in Table 9-189" should be "The meaning of the value in the PTKSA Replay Counter subfield is defined in Table 9-189" | As it says in the comment |
| 6149 | 9.4.2.23.4 | 985 | 17 | Table 9-189—PTKSA/GTKSA/TPKSA replay counters usage is referred to in the context of PTKSAs and GTKSAs, but not in the context of TPKSAs | Delete the "/TPKSA"s from the caption and the cells |

***Discussion:***

As referred to 9.4.2.23.4 (as shown in the snapshot below), the commenter is correct that the phrase “/GTKSA” should be deleted at 985.14 because (a) the description about bits 2 and 3 is dedicated to the PTSKA Replay Counter; and (b) the meaning of the value in the GTKSA Replay Counter is described at 985.33. The commenter is also correct that TPKSA should be removed from the table.



***Proposed resolution for CID 6148:***

Accepted.

***Proposed resolution for CID 6149:***

Accepted.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | Clause | Page | Line | Comment | Proposed Change |
| 6091 | 9.3.4.3 | 751 | 10 | [HP] Missing closing parenthesis | Add closing paren. |

***Discussion:***

As referred to 751.10, the commenter is correct that the closing parenthesis is missing.



***Proposed resolution for CID 6091:***

Accepted.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | Clause | Page | Line | Comment | Proposed Change |
| 6003 | 9.4.2.259 | 1405 | 5 | Fix typo | replace BBSID with BSSID. |

***Discussion:***

As referred to 1405.5, the commenter is correct that “BBSID” is a typo that should be replaced by “BSSID”:



***Proposed resolution for CID 6003:***

Accepted.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | Clause | Page | Line | Comment | Proposed Change |
| 6024 | 9.2.4.6.5 | 614 | 56 | MDR comments: "Will” should not be used. There are a group of comments from MDR need a group discussion: (references are based on D3.0). P609, L56: “)The CMMG NDP Announcement subfield of the CMMG variant HT Control field indicates a CMMG NDP will may be transmitted (according to the rules described in 10.32 (CMMG beamforming)). It is set to 1 to indicate that an NDP follows; otherwise, it is set to 0.” P1321, L51: “The Header Compression element is used by a STA to inform its intended receiver regarding the frame header fields that will to be compressed and that it needs to store.” P1391, L5: “and the new BSS color that will to take effect after the BSS color change” P1260, L16: “The assignment of the cache identifier is outside the scope of the standard but its value must be is unique per Authenticator” P1866, L52: “The MSDU in the MA-UNITDATA.request.primitive must shall start with the octets specified in the LLC Header Copy field.” | See as comment. |

***Discussion:***

For the first instance identified by the commenter, it is located at 614.54 in D4.0:



* The correct subclause should be 10.36.1 (NDP rules)
* The words “a CMMG NDP will be transmitted” may be confusing because a CMMG NDP will be transmitted only if the CMMG NDP Announcement subfield is set to 1.
* **Suggest to combine the two sentences from 614.54 to 614.57 as follows: “The CMMG NDP Announcement subfield of the CMMG variant HT Control field is set to 1 to indicate that a CMMG NDP frame will follow (according to the rules described in 10.36.1 (NDP rules)); otherwise, the subfield is set to 0.”**

For the second instance identified by the commenter, it is located at 1266.15 in D4.0 but there is no use of “will”:



For the third instance identified by the commenter, it is located at 1327.51 in D4.0, replace “will be compressed” with “are compressed”.



For the fourth sentence identified by the commenter, it is located at 1397.5 in D4.0, replace “advertise an upcoming BSS color change and the new BSS color that will take effect after the BSS color change” with “advertise an upcoming BSS color change and the corresponding new BSS color”.



For the last sentence identified by the commenter, it is located at 1874.25 in D4.0 but there is no use of “will”:



***Proposed resolution for CID 6024:***

Revised.

* At 614.54: Replace “The CMMG NDP Announcement subfield of the CMMG variant HT Control field indicates that a CMMG NDP will be transmitted (according to the rules described in 10.32 (CMMG beamforming)). It is set to 1 to indicate that an NDP follows; otherwise, it is set to 0” with “The CMMG NDP Announcement subfield of the CMMG variant HT Control field is set to 1 to indicate that a CMMG NDP frame will follow (according to the rules described in 10.36.1 (NDP rules)); otherwise, the subfield is set to 0.”
* At 1327.51: replace “will be compressed” with “are compressed”.
* At 1397.5: replace “advertise an upcoming BSS color change and the new BSS color that will take effect after the BSS color change” with “advertise an upcoming BSS color change and the corresponding new BSS color”.

Note to the commenter:

• As per the Editor’s style, “will” can be used when stating future fact, and using any other tense dilutes the intended meaning

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | Clause | Page | Line | Comment | Proposed Change |
| 6156 | 11.2.3.6 | 2397 | 3 | "If the SP is to end after a Management, a QoS Null frame is used to indicate this." should be "If the SP is to end after a Management frame, a QoS Null frame is used to indicate this." | As it says in the comment |

***Discussion:***

Agree with the commenter that it is “a Management frame”, not “a Management”.

******

***Proposed resolution for CID 6156:***

Accepted.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | Clause | Page | Line | Comment | Proposed Change |
| 6155 | 11.22.3.2.4 | 2642 | 3 | "responding SA" should be "responding STA" | As it says in the comment |

***Discussion:***

Agree with the commenter that it is “responding STA”, not “responding SA”.



***Proposed resolution for CID 6155:***

Accepted.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | Clause | Page | Line | Comment | Proposed Change |
| 6099 | 11.19.1 | 2561 | 43 | [HP] Typo in MLME-GETTFSTIME.request | Change to MLME-GETTSFTIME.request |

***Discussion:***

Agree with the commenter that it is a typo. There is no “MLME-GET**TFS**TIME.request”. It should be “MLME-GET**TSF**TIME.request” (c.f., Table 6-1).





***Proposed resolution for CID 6099:***

Accepted.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | Clause | Page | Line | Comment | Proposed Change |
| 6090 | 11.8.8.2 | 2496 | 48 | Since OCVC stands for "operating channel validation capable", it feels a bit strange to indicate "OCVC capability". We have addressed other instances of this during the REVme effort by deleting "capability" (including the one at the beginning of this very sentence), but it looks like one instance was missed. | At P2496 L48, Replace "OCVC capability" with "OCVC". |

***Discussion:***

Agree with the commenter to replace “OCVC capability” with “OCVC”.



I also received an offline comment that “OCVC capability” should be replaced by “OCVC” at 2411.44.

***Proposed resolution for CID 6090:***

Revised.

Replace "OCVC capability" with “OCVC” at 2462.44, 2548.5, 3091.55, 3093.33, 3094.14 in D4.1

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | Clause | Page | Line | Comment | Proposed Change |
| 6313 | 11 |  |  | Figure 11-59--Forward path of OCT messages based on OCT parameters has .req not .request etc. Ditto Figure 11-60--Return path of OCT messages based on OCT parameters(#2085). Ditto .ind in Figure 25-39--Typical Rx state machine | As it says in the comment |

***Discussion:***

For Figure 11-59 as shown below, there are appearances of .req and .ind that should be replaced by “.request” and “.indication”, respectively.



For Figure 11-60 as shown below, there are appearance of .req, .ind, .rsp, and .cfm that should be replaced by “.request”, “.indication”, “response”, and “confirm”, respectively.



Similar fixed are required for Figure 25-39.

***Proposed resolution for CID 6313:***

Revised.

At 2715.7, replace “.req” with “.request”.

At 2715.7, replace “.ind” with “.indication”.

At 2715.12, replace “.req” with “.request”.

At 2715.13, replace “.ind” with “.indication”.

At 2715.38, replace “.cfm” with “.confirm”.

At 2715.38, replace “.rsp” with “.response”.

At 2715.44, replace “.ind” with “.indication”.

At 2715.44, replace “.req” with “.request”.

At 3826.9, replace “.Indication” with “.indication”

At 3826.51, replace “.ind” with “.indication” (twice appearances)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | Clause | Page | Line | Comment | Proposed Change |
| 6172 | 11.5.4 |  |  | "When a timeout of BlockAckTimeout is detected" -- undefined timeout. In fact all the wording around the BA agreement timeout is haphazard, and even the field name is sometimes wrong | In 10.25.2 change " The Buffer Size and Block Ack Timeout fields in the ADDBA Request frame are advisory" to " The Buffer Size and Block Ack Timeout Value fields in the ADDBA Request frame are advisory" and change "the block ack timeout that is used" to "the block ack agreement inactivity timeout that is used" In 10.25.4 change "within a duration of block ack timeout value" to "within the block ack agreement inactivity timeout" In 9.4.1.14 change "the timeout value for a block ack agreement" to "the inactivity timeout for a block ack agreement" In 11.5.4 change "When a timeout of BlockAckTimeout is detected" to "When a block ack agreement inactivity timeout occurs" In Table 9-221—Resource type code in RIC Descriptor element change "Block Ack Timeout field" to "Block Ack Timeout Value field" |

***Discussion:***

At 2482.26, the commenter proposed to replace “When a timeout of BlockAckTimeout is detected” to “When a block ack agreement inactivity timeout occurs”. It is correct that there is no “BlockAckTimeout” parameter, and the timeout is actually because of the block ack agreement inactivity.



At 771.13, the commenter proposed to replace “to indicate the timeout value for a block ack agreement” with “to indicate the inactivity timeout for a block ack agreement”.



At 1957.19, the commenter proposed to replace “the block ack timeout that is used” with “the block ack agreement inactivity timeout that is used”.



At 1962.9, the commenter proposed to replace “within a duration of block ack timeout value” to “within the block ack agreement inactivity timeout”.



As referred to Table 9-221, the commenter proposed to replace “Block Ack Timeout field” to “Block Ack Timeout Value field” at 1048.31. As per Figure 9-142 as shown below, “Block Ack Timeout Value field” is the correct field name.





At 1956.44, the commenter proposed to replace “The Buffer Size and Block Ack Timeout fields in the ADDBA Request frame are advisory” to “The Buffer Size and Block Ack Timeout Value fields in the ADDBA Request frame are advisory”.



***Proposed resolution for CID 6172:***

Accepted.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | Clause | Page | Line | Comment | Proposed Change |
| 6023 | 11.39 | 2745 | 6 | MDR comment: It seems to be an incorrect link “(see (NOTE-For operating mode…))” | See as comment. |

***Discussion:***

At 2745.6, there is an error in displaying the cross reference, which is 9.4.1.52 (Membership Status Array field).



For the words “NOTE–For operating mode between two HE STAs, the Rx NSS subfield indicates the maximum number of spatial streams at channel widths less than or equal to 80 MHz”, these are actually a NOTE prior to 9.4.1.52 as shown below.



***Proposed resolution for CID 6023:***

Revised.

At 2745.6, replace “(NOTE–For operating mode between two HE STAs, the Rx NSS subfield indicates the maximum number of spatial streams at channel widths less than or equal to 80 MHz.)” with “9.4.1.52 (Membership Status Array field)”.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | Clause | Page | Line | Comment | Proposed Change |
| 6069 | 11.7.6 | 2489 | 41 | Typo: "or" should be "of" in "A non-AP STA shall use a transmit power less than or equal to the minimum or the local maximum transmit power level and regulatory client maximum transmit power for the channel.(11ax)" | Try "A non-AP STA shall use a transmit power less than or equal to the minimum \*of\* the local maximum transmit power level and regulatory client maximum transmit power for the channel.(11ax)" |

***Discussion:***

At 2489.41:



***Proposed resolution for CID 6069:***

Accepted.

Note to the Editors: This resolution is the same as that of CID 6319 in 23/1751r1.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | Clause | Page | Line | Comment | Proposed Change |
| 6318 | C.3 |  |  | "removed from IEEE 802.11" is missing "Std" | As it says in the comment |

***Discussion:***

Agree with the commenter that “Std” is missing. In D4.0, there are 20 appearances.

***Proposed resolution for CID 6318:***

Revised.

Replace “removed from IEEE 802.11” with “removed from IEEE Std 802.11” at the following locations in D4.0:

4910.11, 4915.32, 4960.31, 4960.44, 4960.62, 4961.9, 4961.30, 4961.45, 4962.2, 4962.12,

4962.22, 4962.32, 4962.41, 4963.28, 4963.50, 4964.2, 4964.14, 4964.32, 4964.48, 5280.40.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | Clause | Page | Line | Comment | Proposed Change |
| 6063 | C.3 | 5428 | 41 | Typo "expiratin" | Change to "expiration" |

***Discussion:***

Agree with the commenter that it is a typo.

******

***Proposed resolution for CID 6063:***

Accepted.