IEEE P802.11
Wireless LANs

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| Proposed resolution for REVme LB258 comments |
| Date: 2022-01-26 |
| Author: |
| Name | Affiliation | Address | Phone | Email |
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##### This submission present proposed resolutions for the following 27 CIDs:

##### 1194, 1186, 1487, 1810, 2385, 2268, 2269, 2270, 2271, 2274, 2276, 2278, 2279, 2280, 2281, 2282, 2283, 2272, 2277, 2352, 1345, 1346, 2266, 2351, 2263, 1134, 1263.

##### The proposed changes are based on REVme/D1.0.

##### Revision history:

##### R0 – initial version

##### R1 – updated the status and resolution of selected CIDs based on the discussion on January 24, 2022.

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| CID | Clause | Page | Line | Comment | Proposed Change |
| 1194 | 11.42.2 | 3048 | 55 | "AUTHORIZATION DEENABLED" sould be "AUTHORIZATION UNENABLED" here and elsewhere since that's what it indicates and "deenabled" is not a real word. | As suggested. |

***Discussion:***

At 3048.55 in subclause 11.42.2 of D1.0:



As referred to Table 9-78 in D1.0:



Direction from the discussion on January 24:

* Both “DEENABLED” and “UNENABLED” are not real words. DISENABLED is a more appropriate choice.
* Difference between “UNENABLED” and “DISENABLED”?
* Follow-up with Joe L. on “DEENABLED”, “UNENABLED”, and “DISENABLED”.
* If change is needed, don’t limit to the term “Authorization deenabled”.
* See if Peter E and Rich K. have any comment.

***Proposed resolution:***

Revised.

Agree with the commenter for the proposed change.

Note to the commenter: The main reason “Revised” rather than “Accepted” is considered because of the additional locations are provided in this proposed resolution.

Instruction to REVme editors:

Replace “DEENABLED” with “UNENABLED” at 1082.37, 3048.55, 3048.57, and 3050.28 in D1.0.

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| --- | --- | --- | --- | --- | --- |
| CID | Clause | Page | Line | Comment | Proposed Change |
| 1186 | B.4.3 | 4931 | 6 | HE STA operating in 5 and/or 6 GHz band should be either of CFHE20 or CFHE80, so I think O.8 in the Status for CFHE20 is not appropriate. Also, :M or :O is missing in the Status for CFHE80. | Change the Status description for CFHE20 to "CFIndepSTA AND (CFHE5G OR CFHE6G):O".Change the Status description for CFHE80 to "(CFHE5G OR CFHE6G) AND (NOT CFHE20):M". |

***Discussion:***

At 4931.6 in D1.0:



The following is the proposed changes from the commenter:

For CFHE20:

CFIndepSTA AND (CFHE5G OR CFHE6G):O

For CFHE80:

(CFHE5G OR CFHE6G) AND (NOT CFHE20):M

A recap of the following definitions in clause 3.2 in D1.0:





**Option 1 (following the commenter’s proposed resolution):**

Accepted.

Note to the Editors

For CFHE20:

replace “CFIndepSTA AND CFHE:O.8”

with “CFIndepSTA AND (CFHE5G OR CFHE6G):O” at 4931.6 in D1.0.

For CFHE80:

Replace “CFAP AND CFHE”

with “ (CFHE5G OR CFHE6G) AND (NOT CFHE20):M” at 4931.12 in D1.0.

Remove “CFIndepSTA AND CHHE” at 4931.15 in D1.0.

**Option 2:**

Revised.

For CFHE20:

replace “CFIndepSTA AND CFHE:O.8”

with “CFIndepSTA AND (CFHE5G OR CFHE6G):O” at 4931.6 in D1.0.

For CFHE80:

Replace “CFAP AND CFHE”

with “CFAP AND (CFHE5G OR CFHE6G) AND (NOT CFHE20):M” at 4931.12 in D1.0.

Replace “CFIndepSTA AND CFHE”

with “CFIndepSTA AND (CFHE5G OR CFHE6G) AND (NOT CFHE20):M” at 4931.15 in D1.0.

Action item resulting from the January 24th teleconference:

- Reassigned to PHY

- Youhan is willing to take this comment.

***Proposed resolution:***

TBD subject to the Task Group discussion.

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| CID | Clause | Page | Line | Comment | Proposed Change |
| 1487 | 11.52 | 3082 | 11 | "beacon protection is enabled on thetransmission of Beacon frames." -- it can't be enabled for anything else, by definition | Change to "beacon protection is enabled." |

***Discussion:***

At 3082.11 in D1.0:



The following is a recap of the definition of dot11BeaconProtectionEnabled at 5237.11 in D1.0:



Discussion on January 24:

First SP:

* Option 1: Accepted. (That is, to delete “on the transmission of Beacon frames”)
* Option 2: Revised. Delete “to indicate that beacon protection is enabled on the transmission of Beacon frames”
* Option 3: Rejected.
* Option 4: Abstain

SP: 2/2/2/5

Need to check the definitions of S1G and DMG beacons, before considering either Option 1 or Option 2.

Reassign to MAC.

***Proposed resolution:***

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| CID | Clause | Page | Line | Comment | Proposed Change |
| 1810 | 12.4.7.4 | 3118 | 51 | The wording could be made more straightforward and consistent | Change the second para to "An SAE Commit message shall include a Finite Cyclic Group field (see 9.4.1.42 (Finite Cyclic Group field)) indicating a group, a Scalar field (see 9.4.1.39 (Scalar field)) containing the scalar, and an FFE field containing the element (see 9.4.1.40 (FFE field)). If the SAE Commit message is in response to an Anti-Clogging Token field request (see 12.4.7.6 (Status codes)), an Anti-Clogging Token field shall be included (see 9.4.1.38 (Anti-Clogging Token field)). When the PWE is derived using the hash-to-element method, the Anti-Clogging Token field is encapsulated in an Anti-Clogging Token Container element; otherwise, the Anti-Clogging Token field is included in the frame outside of an element as described in Table 9-41 (Presence of fields and elements in Authentication frames). If a password identifier is used in generation of the password element (PWE) a Password identifier element shall be included and the identifier shall be encoded as a UTF-8 string in the Identifier portion of the element (see 9.4.2.216 (Password Identifier element)). If an SAE Commit message with status code set to SAE\_HASH\_TO\_ELEMENT is being sent in response to rejection of a previous SAE Commit message with status code set to UNSUPPORTED\_FINITE\_CYCLIC\_GROUP, the group that was rejected shall be appended, after the rejected groups from previous attempts if any, to the Rejected Groups field of the Rejected Groups element (see 9.4.2.246 (Rejected Groups element)). Each rejected group shall be represented using the ordering conventions of 9.2.2 (Conventions). If an SAE Commit message with status code set to SAE\_HASH\_TO\_ELEMENT is being sent and any groups have been rejected during the current SAE session, the Rejected Groups element shall be present, otherwise it shall not be present. " |

***Discussion:***

At 3118.51 in D1.0:

An SAE Commit message shall consist of a Finite Cyclic Group field (9.4.1.42 (Finite Cyclic Group field)) indicating a group, a Scalar field (9.4.1.39 (Scalar field)) containing the scalar, and an FFE field containing the element (9.4.1.40 (FFE field)). If the SAE Commit message is in response to an Anti-Clogging Token field request (see 12.4.7.6 (Status codes)), the Anti-Clogging Token field is present (see 9.4.1.38 (Anti-Clogging Token field)). When the PWE is derived using the hash-to-element method, the Anti-Clogging Token field is encapsulated in an Anti-Clogging Token Container element; otherwise, the Anti-Clogging Token field is included in the frame outside of an element as described in Table 9-69 (Presence of fields and elements in Authentication frames). If a password identifier is used in generation of the password element (PWE) the Password identifier element shall be present and the identifier shall be encoded as a UTF-8 string in the Identifier portion of the element (see 9.4.2.216 (Password Identifier element)). If an SAE Commit message with status code set to SAE\_HASH\_TO\_ELEMENT is being sent in response to rejection of a previous SAE Commit message with status code set to UNSUPPORTED\_FINITE\_CYCLIC\_GROUP, the group that was rejected shall be appended, after the rejected groups from previous attempts if applicable, to the Rejected Groups field of the Rejected Groups element. Each rejected group shall be represented as an unsigned 16-bit integer using the bit ordering conventions of 9.2.2 (Conventions).

The proposed change from the commenter is shown below for your convenience:

An SAE Commit message shall ~~consist of~~ include a Finite Cyclic Group field (see 9.4.1.42 (Finite Cyclic Group field)) indicating a group, a Scalar field (see 9.4.1.39 (Scalar field)) containing the scalar, and an FFE field containing the element (see 9.4.1.40 (FFE field)). If the SAE Commit message is in response to an Anti-Clogging Token field request (see 12.4.7.6 (Status codes)), ~~the~~ an Anti-Clogging Token field ~~is present~~ shall be included (see 9.4.1.38 (Anti-Clogging Token field)). When the PWE is derived using the hash-to-element method, the Anti-Clogging Token field is encapsulated in an Anti-Clogging Token Container element; otherwise, the Anti-Clogging Token field is included in the frame outside of an element as described in Table 9-41 (Presence of fields and elements in Authentication frames). If a password identifier is used in generation of the password element (PWE) ~~the~~ a Password identifier element shall be ~~present~~ included and the identifier shall be encoded as a UTF-8 string in the Identifier portion of the element (see 9.4.2.216 (Password Identifier element)). If an SAE Commit message with status code set to SAE\_HASH\_TO\_ELEMENT is being sent in response to rejection of a previous SAE Commit message with status code set to UNSUPPORTED\_FINITE\_CYCLIC\_GROUP, the group that was rejected shall be appended, after the rejected groups from previous attempts if ~~applicable~~ any, to the Rejected Groups field of the Rejected Groups element (see 9.4.2.246 (Rejected Groups element)). Each rejected group shall be represented ~~as an unsigned 16-bit integer~~ using the ~~bit~~ ordering conventions of 9.2.2 (Conventions). If an SAE Commit message with status code set to SAE\_HASH\_TO\_ELEMENT is being sent and any groups have been rejected during the current SAE session, the Rejected Groups element shall be present, otherwise it shall not be present.

\*The table number is Table 9-69, not Table 9-41, in D1.0.

Discussion on January 24:

* The original proposal was from 21/1130
* Reassigned to SEC. Volunteer: Mark Rison.

***Proposed resolution:***

TBD subject to the Task Group discussion.

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| CID | Clause | Page | Line | Comment | Proposed Change |
| 2385 | 26.4.1 | 4143 | 35 | "and is processed according to the procedure defined in 26.4.2 (Acknowledgment context in a Multi-STA BlockAck frame)" appers in every bullet,so it may move to the main text to avoid to repeat it multiple times. | as in comment |

***Discussion:***

At 4143.35 in D1.0:



***Proposed resolution:***

Revised.

At 4143.35 in D1.0, replace “, and is processed according to the procedure defined in 26.4.2 (Acknowledgment content in a Multi-STA BlockAck frame.” with “.”.

At 4143.42 in D1.0, replace “, and is processed according to the procedure defined in 26.4.2 (Acknowledgment content in a Multi-STA BlockAck frame.” with “.”.

At 4143.49 in D1.0, replace “, and is processed according to the procedure defined in 26.4.2 (Acknowledgment content in a Multi-STA BlockAck frame.” with “.”.

At 4143.52, add a new paragraph “If the BA Information field is addressed to the STA, it is processed according to the procedure defined in 26.4.2 (Acknowledgment content in a Multi-STA BlockAck frame).”.

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| CID | Clause | Page | Line | Comment | Proposed Change |
| 2268 | 27.3.12.10 | 4437 | 17 | The equation on L17 is extending over the page margin. | Please insert a line break after "for" so that the equation does not extend over the page margin |
| 2269 | 27.3.13 | 4448 | 46 | The equation on L46 is extending over the page margin. | Please insert a line break after "," |
| 2270 | 27.3.13 | 4449 | 46 | The equation on L46 is extending over the page margin. | Please insert a line break after "for" |
| 2271 | 27.3.13 | 4448 | 4 | The equation on L4 is extending over the page margin. | Please insert a line break after "," |
| 2274 | 27.4.3 | 4497 | 14 | The equation on L14 and L17 is extending over the page margin. | Please insert a line break after "of" and after "1" on L14 and L17 |
| 2276 | 28.5.5.2 | 4641 | 29 | The equation on L29 is extending over the page margin. | Please insert a line break so that the equation fits within the margins. |
| 2278 | 28.5.9.5.6 | 4666 | 6 | The equations on P4666 extend over the page margins. | Please insert line breaks so that the equations fits within the margins. |
| 2279 | 28.5.10.4.2 | 4674 | 20 | The equation on L20 is extending over the margins | Please insert a line break so that the equation fits within the margins. |
| 2280 | 28.5.10.4.4.3 | 4682 | 19 | The equation on L19 is extending over the margins | Please insert a line break so that the equation fits within the margins. |
| 2281 | 28.5.11.1.1 | 4687 | 5 | The equation on L5 is extending over the margins | Please insert a line break so that the equation fits within the margins. |
| 2282 | 28.6.9.3.7 | 4719 | 2 | The equation on L2 is extending over the margins | Please insert a line break so that the equation fits within the margins. |
| 2283 | 28.6.11.1.1 | 4728 | 8 | The equation on L8 is extending over the margins | Please insert a line break so that the equation fits within the margins. |
| 2272 | 27.3.19.1 | 3357 | 42 | Figure 27-47 extends over the page margin | Please scale Figure 27-47 so that it fits to the page margin. Please apply the same change to Figures 27-41 P27-48 and 27-49 P4458, 27-50 P4459, 27-51 P4460, 27-52 P4461, 27-54 and 27-55 P4477, 27-56 and 27-57 P4478, 27-58 P4480, 27-59 P4481, 27-60 and 27-61 P4482, 27-62 P4483, 27-63 P4484, |
| 2277 | 28.5.9.2.2.2 | 4649 | 59 | Figure 28-17 extends over the page margin | Please adjust Figure 28-17 so that it fits to within the margins. Please apply the same change to Figures 28-18 and 28-19 on P4650, 28-21, 28-22, 28-23 on P4651, 28-24, 28-25, 28-26 on P4652, 28-27, 28-28, 28-29 on P4653, 28-35 and 28-36 P4731, 28-45 and 28-46 on P4746. |

***Discussion:***

For the margins the commenter pointed out for these 14 CIDs, these refer to a paragraph margin, not a page margin.

When a draft standard is sent to IEEE SA Publication Editor for publication, the Publication Editor may adjust any figure, table, or equation for readability purpose. It is the reason why these equations and figures are extended over the paragrapgh margins.

***Proposed resolution for CIDs 2268, 2269, 2270, 2271, 2274, 2276, 2278, 2279, 2280, 2281, 2282, 2283:***

Rejected.

When a draft standard is sent to IEEE SA Publication Editor for publication, the Publication Editor may adjust any figure, table, or equation for readability purpose. It is the reason why the equation is extended over the paragrapgh margin.

***Proposed resolution for CIDs 2272 and 2277:***

Rejected.

When a draft standard is sent to IEEE SA Publication Editor for publication, the Publication Editor may adjust any figure, table, or equation for readability purpose. It is the reason why the figure is extended over the paragrapgh margin.

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| CID | Clause | Page | Line | Comment | Proposed Change |
| 2352 | 28.3.3.3.2.3 | 4574 |  | This paragraph is a duplication of the paragraph described in P4573L42-49 | Remove this paragraph. |

***Discussion:***

At 4573.42 in subclause 28.3.3.3.2.2 (Definition for EDMG control mode) PPDU in D1.0:



At 4574.15 in subclause 28.3.3.3.2.3 (Definition for EDMG SC mode and EDMG OFDM mode PPDUs) in D1.0:



The two paragraphs are identical but the first one refers to the PPDU transmission for EDMG control mode PPDU, while the second one refers to the PPDU transmission for EDMG SC mode and EDMG OFDM mode PPDUs that are different. One alternative is to move the description to the General subclause.



Option 1:

Rejected.

The paragraph at 4574.15 in D1.0 cannot be removed. Otherwise, there is no definition of PPDU transmission for EDMG SC mode and EDMG Control mode PPDUs.

Option 2:

Revised.

Move the paragraph at 4573.42 to the end of the subclause 28.3.3.3.2.1 (General) at 4573.54 in D1.0.

Remove the paragraph 4574.15 in D1.0.

***Proposed resolution:***

Rejected.

The paragraph at 4574.15 in D1.0 cannot be removed. Otherwise, there is no definition of PPDU transmission for EDMG SC mode and EDMG Control mode PPDUs.

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| CID | Clause | Page | Line | Comment | Proposed Change |
| 1345 | 27.1.2 | 4290 | 39 | Typo (colon should be a comma) | Should read as "Depending on the PPDU format, these STAs support a mixture of HE, Clause 21 ..." |
| 1346 | 27.1.2 | 4290 | 45 | Typos (extra text) | Should read as "A 20-MHz-only non-AP HE STA supports a mixture of HE, Clause 21, ...) |
| 2266 | 27.1.2 | 4290 | 46 | The "TAs support a mixture of HE: " seems to be a copy paste error. | Remove "TAs support a mixture of HE:" |

***Discussion:***

NOTE – these 3 CIDs are moved from offline review (22/0175r0) based on a comment I received offline from Mark Rison.

At 4290.39 in D1.0:



***Proposed resolution for CID 1345:***

Revised.

At 4290.39 in D1.0, replace “a mixture of HE:” with “a mixture of Clause 27 (High-efficiency (HE) PHY specification),”

***Proposed resolution for CIDs 1346 and 2266:***

Revised.

At 4290.46 in D1.0, replace “a mixture of HE, TAs support a mixture of HE:” with “a mixture of Clause 27 (High-efficiency (HE) PHY specification),”

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| CID | Clause | Page | Line | Comment | Proposed Change |
| 2351 | 28.3.3.2.2 | 4565 |  | should clarify in which DMG mode the L-STF defined in 20.4.3.1.2 (Short Training field) and in 20.3.6.2 (Short Training field) is used. | The sentence could be modified as "For an EDMG control mode PPDU, the L-STF is the same as the Short Training field used by DMG Control PPDUs defined in 20.4.3.1.2 (Short Training field). For other types of EDMG PPDUs, the L-STF is the same as the Short Training field used by DMG SC PPDUs defined in 20.3.6.2 (Short Training field)." |

***Discussion:***

NOTE – this CID is moved from offline review (22/0175r0) based on a comment I received offline from Mark Rison.

At 4565.20 in D1.0:



The proposed change suggested by the commenter is copied here for convenience:

For an EDMG control mode PPDU, the L-STF is the same as the Short Training field used by DMG Control PPDUs defined in 20.4.3.1.2 (Short Training field). For other types of EDMG PPDUs, the L-STF is the same as the Short Training field used by DMG SC PPDUs defined in 20.3.6.2 (Short Training field).

***Proposed resolution:***

Accepted.

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| CID | Clause | Page | Line | Comment | Proposed Change |
| 2263 | 19.1.4 | 3534 | 28 | PPDU should be plural | Replace "PPDU" with "PPDUs" |

***Discussion:***

NOTE – this CID is moved from offline review (22/0175r0) based on a comment I received offline from Mark Rison.

At 3534.28 in D1.0:



Agree with the commenter that PPDU should be PPDUs at 3534.28.

As per Mark’s offline comment, he asked the last bullet still says “HT PPDUs of this format” at 3534.38, which is not directly related to this CID.

***Proposed resolution:***

Revised.

At 3534.28 in D1.0, replace “PPDU” with “PPDUs”.

At 3534.38 in D1.0, replace “HT PPDUs of this format” with “PPDUs of this format”.

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| CID | Clause | Page | Line | Comment | Proposed Change |
| 1134 | 30.3.2 | 4884 | 27 | "The WUR Basic PPDU format is defined for the 20 MHz channel bandwidth. Figure 30-1 (WUR Basic PPDU format(11ba)) shows the WUR Basic PPDU format." Does not seem to read right. | Replace cited text with "The WUR Basic PPDU format,for 20 MHz channel bandwidth, is shown in Figure 30-1 (WUR Basic PPDU format(11ba))." |

***Discussion:***

NOTE – this CID is moved from offline review (22/0175r0) based on a comment I received offline from Mark Rison.

At 4884.27 in D1.0:



The proposed change suggested by the commenter is copied here for convenience:

The WUR Basic PPDU format, for 20 MHz channel bandwidth, is shown in Figure 30-1 (WUR Basic PPDU format(11ba)).

As per Mark’s comment, he points out that “here's a WUR Basic PPDU format for 20M only, but proposed wording implies there is a WUR Basic PPDU format for other bandwidths”.

As referred to subclause 4.3.17 (Wake-up radio (WUR) AP and WUR non-AP STA) in D1.0, WUR Basic PPDU are transmitted and received on a 20 MHz channel only.

***Proposed resolution:***

Rejected.

The WUR Basic PPDU format is defined for the 20 MHz channel bandwidth only. The proposed change suggested by the commenter may imply that the WUR Basic PPDU format applies also for other bandwidths.

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| CID | Clause | Page | Line | Comment | Proposed Change |
| 1263 | 12.6.20 | 3186 | 11 | In a few location in the draft "equals true" is still used to describe the state of a MIB variable. The preferred way to state this is "is true" not "equals true". There are still 3 locations where this unpreferred wording is used. | Replace "equals true" with "is true" (three locations: 3186.11, 3186.20, 3186.24 ) |

***Discussion:***

NOTE – this CID is moved from offline review (22/0175r0) based on a comment I received offline from Mark Rison.

At 3186.11:



As per Mark’s offline comment, he asked the last bullet still says “there's also an "equals false" at 3186.16”, which is not directly related to this CID.

***Proposed resolution:***

Revised.

Replace “equals true” with “is true” at 3186.11, 3186.20, and 3186.24 in D1.0.

Replace “equals false” with “is false” at 3186.16 in D1.0.