IEEE P802.11
Wireless LANs

|  |
| --- |
| Proposed resolution for miscellaneous LB270 comments |
| Date: 2022-11-15 |
| 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 14 CIDs:

##### 3403, 3279, 3210, 3452, 3062, 3198, 3197, 3022, 3065, 3125, 3127, 3132, 3142, 3188

##### The proposed changes are based on REVme/D2.0.

##### Revision history:

##### R0 – initial version

##### R1 – Update per the discussion on 15 November 2022

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | Clause | Page | Line | Comment | Proposed Change |
| 3403 | 11.12 |  |  | "matches its own" -- delete the "own" | Delete "own" at 2535.27, 3679.52, 3681.2, 1915.10, 2535.21/43, 3024.4, 3074.54/56 |

***Discussion:***

**At 1915.10:**

If the HC has no more STAs to poll and it has no more Data, Management, BlockAckReq, or BlockAck frames to send, it may reset the NAVs of all QoS STAs in the BSS by sending a QoS CF-Poll frame with the RA matching ***its own*** MAC address and with the Duration/ID field set to 0.

**At 2535.21:**

A dependent STA receiving a DSE Deenablement frame with the RequesterSTAAddress field matching the enabling STA with which it last attempted enablement and the ResponderSTAAddress field matching ***its own*** MAC address shall change its enablement state with the enabling STA to unenabled and set all fields of its DSE Registered Location Information field (see 9.4.2.51 (DSE Registered Location element)) to 0.

**At 2535.27:**

A dependent STA shall return a DSE measurement report in response to a DSE measurement request if the request is received from the AP with which it is associated or the enabling STA with which it last attempted enablement and the ResponderSTAAddress field matches ***its own*** MAC address.

**At 2535.43:**

A dependent STA receiving a DSE Power Constraint frame with the RequesterSTAAddress field matching the enabling STA with which it last attempted enablement and the ResponderSTAAddress field matching ***its own*** MAC address shall constrain its transmit power to be less than or equal to the maximum transmit power level specified for the current channel in the Country element minus the local power constraint specified in the DSE Power Constraint frame.

**At 3024.4:**

The mesh STA shall check that the Mesh ID element and Mesh Configuration element of the Mesh Peering Confirm frame match ***its own*** mesh STA configuration as specified in 14.2.3 (Mesh profile) and 14.2.4 (Mesh STA configuration).

**At 3074.54:**

The mesh STA receives an individually addressed frame with a destination address not matching ***its own*** MAC address for which it has no forwarding information.

**At 3074.56:**

The mesh STA receives an individually addressed frame with a destination address not matching ***its own*** MAC address and dot11MeshForwarding is false.

**At 3679.52:**

Additionally, when a STA detects an S1G\_SHORT or S1G\_LONG PPDU with a Partial AID field of its SIG field indicating a partial AID or COLOR value that matches ***its own*** partial AID or BSSID, the PHY shall issue a PHY-CCA.indication(BUSY, {primary2}) for the remaining duration of the PPDU as indicated in its preamble.

**At 3681.2:**

Additionally, when a STA detects an S1G\_SHORT or S1G\_LONG PPDU with a Partial AID field of its SIG field indicating a partial AID or COLOR value that matches ***its own*** partial AID or BSSID, the PHY shall issue a PHY-CCA.indication(BUSY, {primary2}) for the remaining duration of the PPDU as indicated in its preamble.

***Proposed resolution for CID 3403:***

Accepted.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | Clause | Page | Line | Comment | Proposed Change |
| 3279 | 30 |  |  | "using contiguous 13 subcarriers" should be "using 13 contiguous subcarriers" (2x) | Change at 4579.55 and 4603.60 |

***Discussion:***

**At 4579.55:**

The multicarrier signal should be generated using ***contiguous 13 subcarriers***, centered within a 20 MHz channel, with a subcarrier spacing of 312.5 kHz and the center subcarrier (#1131)being null.

**At 4603.60:**

SymLDROn and SymHDROn should be generated using ***contiguous 13 subcarriers***, centered within a

20 MHz channel, with a subcarrier spacing of 312.5 kHz and the center subcarrier being null.

***Proposed resolution for CID 3279:***

Accepted.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | Clause | Page | Line | Comment | Proposed Change |
| 3210 | AC | 5795 | 54 | "Example 3 in AC-2" should be "Example 3 in Table AC-2", and at 5796.61 "AC-2" should be "Table AC-2" | As it says in the comment |

***Discussion:***

**At 5795.54:**

***Example 3 in AC-2 (Example Values for the Sequence SLDR used for the Construction of the 4 μs duration MC-OOK On Symbol(11ba))*** is found to provide good performance through exhaustive search among the OFDM symbols with BPSK modulation.

**At 5796.61:**

For the LDR WUR-Data field, which is constructed from 4 μs duration MC-OOK symbols, Table AC-4

(Recommended CSD values for the WUR-Data field with WUR LDR(11ba)) provides recommended CSD values for one to eight transmit antennas, for each of the three recommended MC-OOK symbols from ***AC-2 (Example Values for the Sequence SLDR used for the Construction of the 4 μs duration MC-OOK On Symbol(11ba))***.

***Proposed resolution for CID 3210:***

Accepted.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | Clause | Page | Line | Comment | Proposed Change |
| 3452 | E.2.7 | 5523 | 1 | "Regulatory ClientEIRP PSD" should be lowercase clie**nt** | As it says in the comment |

***Discussion:***

**At 5523.1:**

Maximum Transmit Power Category subfield = Default; Unit interpretation = ***Regulatory Client***

***EIRP PSD***

Throughout the subclause E.2.7, the term “Regulatory client EIRP PSD” is used.

***Proposed resolution for CID 3452:***

Accepted

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | Clause | Page | Line | Comment | Proposed Change |
| 3062 | B.4.24.1 | 4792 | 30 | The reference for DMG-M2 (Signaling of DMG operation) is incorrect. | Change the reference "9.4.2.127.7 (TDD Capability Information field(11ay))" to "9.4.2.128 (DMG Operation element)" |

***Discussion:***

At 4792.30:



As referred to the table of contents, the DMG operation is presented in 9.4.2.128, not 9.4.2.127.



***Proposed resolution for CID 3062:***

Accepted.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | Clause | Page | Line | Comment | Proposed Change |
| 3198 | 11.21.4.1 | 2574 | 22 | What is "the essDetectionInterval value"? | Change to "the ESS detection interval" |
| 3197 | 11 |  |  | "ESS Detection Interval" should be "ESS detection interval" when not followed by "field" | Change at 2566.55, 2570.37, 2576.36 |

***Discussion:***

**At 2566.55:**

The non-AP STA shall determine loss of connection to the AP that issued the Event Request frame when it has not detected any Beacon frames from the AP for a period no less than the ***ESS Detection Interval***.

**At 2570.37:**

The non-AP STA shall determine loss of connection to the AP that issued the Diagnostic Request frame when it has not detected any Beacon frames from the AP for a period no less than the ***ESS Detection Interval***.

**At 2574.22:**

The non-AP STA fails to detect any Beacon frames, belonging to the same ESS that originally configured the non-AP STA, for the period specified by ***the essDetectionInterval value*** included in the Location Parameters element transmitted in the Location Configuration Request frame.

As referred to 9.4.2.70.2, the Location Parameters element contain a Location subelement called Location Indication Parameters that has an ESS Detection Interval field.



**At 2576.36:**

The ***ESS Detection Interval***defines how often the STA should check for beacons transmitted by one or more APs belonging to the same ESS that configured the STA.

***Proposed resolution for CID 3198:***

Accepted.

***Proposed resolution for CID 3197:***

Accepted.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | Clause | Page | Line | Comment | Proposed Change |
| 3022 | 11.21.15 | 2602 | 54 | Fix the field name (see P987L6). Also on P2603L11, the same field name should have first letters upper case (per style guide). | Fix the field name (see P987L6). Also on P2603L11, the same field name should have first letters upper case (per style guide). |

***Discussion:***

**At 987.6:**



**At 2603.11:**

A non-AP STA that supports channel usage and has the TWT Requester Support subfield set to 1 in the HE Capabilities element, that it transmits, may negotiate an off-channel TWT schedule with its associated AP, for setting up a noninfrastructure network on an off-channel, by transmitting a Channel Usage Request frame that includes TWT Elements field if the AP has the ***off-channel TWT scheduling support bit*** set to 1 in the Extended Capabilities element.

Note that the style guideline does not impose any requirement on capitalization on bit.

***Proposed resolution for CID 3022:***

Revised.

At 987.6, replace “Off-channel TWT Scheduling Support” with “Off-Channel TWT Scheduling Support”.

At 2603.11, replace “off-channel TWT scheduling support bit” with “Off-Channel TWT Scheduling Support field”.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | Clause | Page | Line | Comment | Proposed Change |
| 3065 | 30.1 | 4579 | 36 | Missing period at end of sentence. | Add period. |

***Discussion:***

**At 4579.36:**

The WUR PHY is based on the PHY defined in Clause 17 (Orthogonal frequency division multiplexing

(OFDM) PHY specification)

***Proposed resolution for CID 3065:***

Accepted.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | Clause | Page | Line | Comment | Proposed Change |
| 3125 | 12.2.4 | 2781 | 17 | Missing space between words. | At P2781 L17, replace "anRSNA" with "an RSNA". |

***Discussion:***

**At 2781.17:**

It identifies the AP as ***anRSNA*** AP from the AP’s Beacon, DMG Beacon, Announce, Information Response, or Probe Response frames.

***Proposed resolution for CID 3125:***

Accepted

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | Clause | Page | Line | Comment | Proposed Change |
| 3127 | 12.2.2 | 2780 | 42 | The reference for the description of TKIP is pointing to an incorrectclause (CCMP). | At P2780 L42, replace "TKIP, described in 12.5.2" with "TKIP, described in12.3.4" |

***Discussion:***

**At 2780.42:**

RSNA security comprises the following algorithms and procedures:

— TKIP, described in ***12.5.2 (CTR with CBC-MAC protocol (CCMP))***

Agree with the commenter that TKIP is described in 12.3.4 (Temporal key integrity protocol (TKIP)), not 12.5.2.

***Proposed resolution for CID 3127:***

Accepted

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | Clause | Page | Line | Comment | Proposed Change |
| 3132 | 12.4.5.4 | 2820 | 61 | PWE stands for "password element"; not "password identifier", | At P2820 L61, replace "password identifier (PWE)" with "passwordidentifier". |

***Discussion:***

**At 2820.61:**

If the peer’s SAE Commit message contains a ***password identifier (PWE)***, the value of that identifier shall be used in construction of the PWE for this exchange. If a password identifier is present in the peer’s SAE Commit message and there is no password with the given identifier a STA shall fail authentication.

Note: As referred to subclause 3.4, PWE standards for PWE password element of an ECC group.

***Proposed resolution for CID 3132:***

Revised

Incorporate the changes for CID 3132 as shown in this document

Change the sentence at the identified location as follows:

If the peer’s SAE Commit message contains a P~~p~~assword I~~i~~dentifier element ~~(PWE)~~, ~~the value of that~~the identifier in that element shall be used in construction of the PWE for this exchange. If a password identifier is present in the peer’s SAE Commit message and there is no password with the given identifier a STA shall fail authentication.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | Clause | Page | Line | Comment | Proposed Change |
| 3142 | 10.23.2.12.1 | 1907 | 50 | "Thhe" must be "The". | Please fix the typo. |

***Discussion:***

At 1907.50:

NOTE—***Thhe*** timer is started at different times for DCF and EDCA.

***Proposed resolution for CID 3142:***

Accepted

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | Clause | Page | Line | Comment | Proposed Change |
| 3188 | B.4 | 4662 | 60 | FR45 "Clause 9" is not very precise | Give a more precise xref |

***Discussion:***

**At 4662.60:**



Agree that the reference is not precise. Subclauses 9.3.4.3 (S1G Beacon frame format) and 11.1.3 (Maintaining synchronization) are a better reference.

***Proposed resolution for CID 3188:***

Revised.

At 4662.60, replace “Clause 9 (Frame formats)” with “9.3.4.3 (S1G Beacon frame format), 11.1.3 (Maintaining synchronization)”.