IEEE P802.11  
Wireless LANs

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| LB271: Misc CIDs | | | | |
| Date: July 05, 2023 | | | | |
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Abstract

This submission proposes resolutions for following 10 CIDs received for TGbe LB271:

15688, 16234, 17592, 17621, 17637, 16170, 18022, 17669, 17672, 17674, 16785

**Revisions:**

* Rev 0: Initial version of the document.
* Rev 1: Deferred CID 17592 and made live changes during the MAC adhoc call on 07/06

Interpretation of a Motion to Adopt

A motion to approve this submission means that the editing instructions and any changed or added material are actioned in the TGbe Draft. This introduction is not part of the adopted material.

***Editing instructions formatted like this are intended to be copied into the TGbe Draft (i.e. they are instructions to the 802.11 editor on how to merge the text with the baseline documents).***

***TGbe Editor: Editing instructions preceded by “TGbe Editor” are instructions to the TGbe editor to modify existing material in the TGbe draft. As a result of adopting the changes, the TGbe editor will execute the instructions rather than copy them to the TGbe Draft.***

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| --- | --- | --- | --- | --- | --- | --- |
| **CID** | **Commenter** | **Section** | **Pg.Ln** | **Comment** | **Proposed Change** | **Resolution** |
| 15688 | Oren Kedem | 9.3.3.2 | 858.10 | Oren Kedem | At the current there are several MBSSID/MLD configurations cannot be supported since beacon reach its maximum size. | **Rejected**  The comment fails to identify a technical issue that needs to be resolved. |
| 16234 | Stephen McCann | 9.4.1.75 | 219.54 | The figures 9-144I and 9-1002af are very similar. | Delete Figure 9-1002af on P269L53 and refer to Figure 9-144I. This will save 1 octet by not using Figure 9-1002af. | **Rejected**  Figure 9-1002af (STA Control field for the Priority Access Multi-Link element) presents the format of the STA Control field. The size of the STA Control field is 2 octets for all variants of the Multi-Link element. The common size keeps the format uniform and simplifies the parsing. |
| 17592 | Brian Hart | 9.4.2.236 | 247.06 | " the channel specified by the operating class" but an operating class cannot specify a channel | Try "If the operating class does not indicate a 320 MHz channel width ...". Ditto L14 | **Revised**  Agree with the commenter. The statements are cited as suggested.  **TGbe editor: please implement the changes shown in document 11-23/859r1 tagged as 17592.** |
| 17621 | Brian Hart | 9.4.2.312.2.3 | 256.17 | "support for XX operation" reads better than "support for "the XX operation". But this is not \*an\* MLD - this is support for \*the\* MLD described by this Basic ML element. | "The EMLSR Support subfield indicates support for EMLSR operation by the MLD that is identified by the MLD MAC Address field in the same Basic ML element." | **Revised**  Agree with the commenter. The cited statement is revised.  **TGbe editor: please implement the changes shown in document 11-23/859r1 tagged as 17621.** |
| 17637 | Brian Hart | 9.4.2.312.2.3 | 257.36 | Missing article | Try "an EMLSR link switch" | **Revised**  Agree with the commenter. The missing article is added.  **TGbe editor: please implement the changes shown in document 11-23/859r1 tagged as 17637.** |
| 16170 | Rojan Chitrakar | 9.4.2.312.2 | 259.56 | Directly reference bit number (B7) is risky, in case the format of the MLD capabilities field is changed, the bit position may change; also B7 refers to bit position within the MLD capabilities and operations subfield, not within the AP MLD Type Indication subfield. | Best if values of the the AP MLD Type Indication subfield can be used, e.g. value 0 indicates not a NSTR mobile AP MLD, 1 indicates NSTR mobile AP MLD and remaining values are reserved. If preference is to use the first bit of the subfield, change B7 to B0 of the AP MLD Type Indication subfield. | **Revised**  Agree with the commenter. Updated the text to refer to B0 of AP MLD Type Indication subfield.  **TGbe editor: please implement the changes shown in document 11-23/859r1 tagged as 16170.** |
| 18022 | Joseph Levy | 9,4,2,312,2,4 | 267.02 | There is no need to state that the subfields in the STA Info field appear in the same order as their corresponding presence subfields, as the order of these fields is provided in Figure 9-1002y. This is double specifying the format. | Delete: "The subfields in the STA Info field appear in the same order as their corresponding presence subfield in the STA Control field." | **Revised**  Agree with the commenter. The statement is deleted as suggested.  **TGbe editor: please implement the changes shown in document 11-23/859r1 tagged as 17633.** |
| 17669 | Brian Hart | 9.4.2.312.2.4 | 267.25 | "all 0s" is imprecise, and we prefer to avoid bit-level discussions for fields. | Try "The Pad subfield is set to 0". Ditto P292L24.5, P295L38 | **Revised**  Agree with the commenter in principle. The statements at the cited location is revised.  **TGbe editor: please implement the changes shown in document 11-23/859r1 tagged as 17669.** |
| 17672 | Brian Hart | 9.4.2.312.2.6 | 269.04 | " EDCA Parameter sets" is not a defined term nor does it map to anything defined since we have "(MU) EDCA Parameter Set", which doesn't apply because it has an initial caps "Set", and then we have "EDCA parameter set" which doesn't apply because it has a lowercase "parameter". | Based on 9.4.2.28, I think "EDCA parameter sets" or better "(MU) EDCA parameter sets" or best "(MU) EDCA Parameter Set elements" would all be an improvement. I think this issue isfound in many plaecs in the draft so please search/replace throughout | **Revised**  Agree with the commenter in principle.  **TGbe editor: Please replace “EDCA Parameter sets” by “EDCA parameter sets” (i.e., change to lowercase p) at the following locations in 11be D3.2:**   * **P115 L32** * **P116 L20** * **P117 L16** * **P118 L5** * **P291 L34** |
| 17674 | Brian Hart | 9.4.2.312.2.6 | 269.34 | "starts with" is too strong, since the subelement starts with an ID then Length | Try "The Data field of each PSPse start with ..." or better "The PSPse contains a ..." | **Revised**  Agree with the commenter in principle. The statement at the cited location is already revised as a resolution for CID 15370 and appears in D3.2. A similar issue exists in Clause 9.4.2.312.2.4, which is revised as per the commenter’s suggestion.  **TGbe editor: please implement the changes shown in document 11-23/859r1 tagged as 17674.** |
| 16785 | Mark RISON | 35.3.4.3 | 494.38 | "either a Beacon, Probe Response or FILS Discovery frame transmitted by an AP (reporting AP) and the frame carries" -- wonky grammar | Change to "a Beacon, Probe Response or FILS Discovery frame transmitted by an AP (reporting AP), where the frame carries". Ditto at line 46 "and" -> ", where" | **Revised**  Agree with the commenter in principle. The cited statements are revised.  **TGbe editor: please implement the changes shown in document 11-23/859r1 tagged as 16785.** |

**Discussion**

**CID 16234**

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***TGbe editor: Please note Baseline is 11be D3.2***

**9.4.2.236 OCI element**

***TGbe editor: please update the following paragraphs as shown below [CID 17592]***

If the operating class does not indicate a 320 MHz channel width (#17592), the Frequency Segment 1 Channel Number field is set to the channel center frequency index of the secondary segment (frequency segment 1) being used currently, if applicable, or set to 0 otherwise. The value of the Frequency Segment 1 Channel Number field is one of the center frequency indices from the row corresponding to the operating class as defined in Annex E.

If the operating class indicates a 320 MHz channel width (#17592), the Frequency Segment 1 Channel Number field is set to the center frequency of the channel.

**9.4.2.312.2.3 Common Info field of the Basic Multi-Link element**

***TGbe editor: please update the following paragraph as shown below [CID 17621]***

The EMLSR Support subfield indicates support (#17621) for EMLSR operation by the MLD described in the Basic Multi-Link element. The EMLSR Support subfield is set to 1 if the MLD supports the EMLSR operation; otherwise it is set to 0. For a non-AP MLD, the EMLSR Support subfield is set to 0 if the EMLMR Support subfield is set to 1.

***TGbe editor: please update the following paragraph as shown below [CID 17637]***

The EMLMR Delay subfield indicates the minimum padding duration required for a non-AP MLD for (#17637) an EMLMR link switch when operating in EMLMR mode (see 35.3.18 (Enhanced multi-link multi-radio operation)).

***TGbe editor: Please update the Table 9-404i as shown below: [CID 16170]***

**Table 9-404i – Subfields of the MLD Capabilities and Operations subfield**

|  |  |  |
| --- | --- | --- |
| **Subfield** | **Definition** | **Encoding** |
| Frequency Separation For STR/AP MLD  Type Indication | Frequency Separation For STR: Indicates the minimum frequency gap between any two links that is recommended by the non-AP MLD for STR operation. The frequency gap is specified as the difference between the nearest frequency edges of the two links.  AP MLD Type Indication:  Indicates the type of an AP MLD. | Frequency Separation For STR:  For a non-AP MLD:  Set the Frequency Separation for STR subfield (#16170) to 0 to indicate that no frequency separation information is provided.  Set the Frequency Separation for STR subfield (#16170) to a nonzero value *n* to indicate that the STR frequency gap is (*n* – 1) ´ 80 MHz.  AP MLD Type Indication:  For an AP MLD:  Set B0 of the AP MLD Type Indication subfield (#16170) to 1 to indicate that the AP MLD is an NSTR mobile AP MLD; set to 0 otherwise.  B1–B4 of the AP MLD Type Indication subfield (#16170)are reserved.  See 35.3.16.2 (Multi-link device capability and operation signaling). |

**9.4.2.312.2.4 Reconfiguration Multi-Link element**

***TGbe editor: Please update the following paragraph as shown below: [CID 18022]***

The STA Info field consists of fields whose presence is indicated by the subfields of the STA Control field. (#18022)

***TGbe editor: Please update the following paragraph as shown below: [CID 17669]***

The Pad subfield is set to 0 (#17669). The number of bits in the Pad subfield is the number of bits required to make the length of the Operation Parameter Info subfield 2 octets.

**9.4.2.313.5 EHT PPE Thresholds field**

***TGbe editor: Please update the following paragraph as shown below: [CID 17669]***

The PPE Pad field is set to 0 (#17669). The number of bits in the PPE Pad field is the least number of bits required to round the length of the PPE Thresholds Info field to an integer number of octets.

**9.4.2.315 Multi-Link Traffic Indication**

***TGbe editor: Please update the following paragraph as shown below: [CID 17669]***

The Padding subfield contains 0–7 padding bits so that the length of the Per-Link Traffic Indication List field is a multiple of 8 bits. The Padding subfield is set to 0 (#17669).

**9.4.2.312.2.4 Reconfiguration Multi-Link element**

***TGbe editor: Please update the following paragraph as shown below: [CID 17674]***

Each Per-STA Profile subelement includes (#17674) a STA Control field, followed by a variable number of fields and elements, as defined in Figure 9-1001w (Per-STA Profile subelement for the Reconfiguration Multi-Link element).

**35.3.4.3 Non-AP MLD behavior**

***TGbe editor: Please revise the following statements as shown below [CID 11323, 13351]***

A non-AP MLD discovers an AP MLD and its affiliated APs when a non-AP STA affiliated with the non-AP MLD receives one or more of the following:

* a Basic Multi-Link element carried in a Beacon frame or Probe Response frame, that is not a Multi-Link probe response, transmitted by an AP affiliated with the AP MLD or by the AP corresponding to the transmitted BSSID in the same multiple BSSID set as at least one of the APs affiliated with the AP MLD.
* a multi-link probe response from an AP affiliated with the AP MLD or the AP corresponding to the transmitted BSSID in the same multiple BSSID set as at least one of the APs affiliated with the AP MLD carrying a Basic Multi-Link element with a complete profile of the reported AP.
* one or more of (#16785) Beacon, Probe Response, or FILS Discovery frame transmitted by an AP (reporting AP) and the frame carries a Reduced Neighbor Report element that includes the MLD Parameters subfield in the TBTT Information field corresponding to the reported AP. A non-AP MLD infers the relationship between the reported AP and the reporting AP by decoding the MLD ID subfield of the MLD Parameters subfield in the Reduced Neighbor Report element and following the rules described in 35.3.4.1 (AP behavior).
* a Management frame that (#16785) carries a Neighbor Report element. A non-AP MLD determines that two or more APs reported in different Neighbor Report elements that include the Basic Multi-Link subelement are affiliated with the same AP MLD. The reported APs are affiliated with the same AP MLD if the values carried in MLD MAC Address field of the Common Info field of the Basic Multi-Link element of the reported APs are the same.