IEEE P802.11  
Wireless LANs

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| CC36 Resolution for Miscellaneous CIDs in Clause 9 | | | | |
| Date: August 10, 2021 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | email |
| Gaurang Naik | Qualcomm Inc. |  |  | gnaik@qti.qualcomm.com |
| Abhishek Patil | Qualcomm Inc. |  |  | appatil@qti.qualcomm.com |
| Alfred Asterjadhi | Qualcomm Inc. |  |  | aasterja@qti.qualcomm.com |
| George Cherian | Qualcomm Inc. |  |  | gcherian@qti.qualcomm.com |
| Duncan Ho | Qualcomm Inc. |  |  | dho@qti.qualcomm.com |
| Yanjun Sun | Qualcomm Inc. |  |  | yanjuns@qti.qualcomm.com |
| Abdel Karim Ajami | Qualcomm Inc. |  |  | aajami@qti.qualcomm.com |
| Rubayet Shafin | SRA |  |  |  |
| Tomo Adachi | Toshiba |  |  |  |

Abstract

This submission proposes resolutions for following 11 CIDs received for TGbe CC36:

4105, 6181, 6230, 5767, 6226, 6565, 6975, 7846, 8294, 4269, 7708

**Revisions:**

* Rev 0: Initial version of the document.

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** |
| 4105 | Abhishek Patil | 9.4.2.26 | 120.24 | A STA is "affiliated with" a non-AP MLD | replace "STA of a non-AP MLD" with "STA affiliated with a non-AP MLD" | **Revised**  Agree with the comment.  **TGbe editor please implement changes as proposed in CID 4105 and shown in doc 11-21/1264r0 tagged as 4105** |
| 6181 | Michael Montemurro | 9.4.2.26 | 120.24 | It a STA affiliated with a non-AP MLD, not a STA "of". | Change "or a STA of" to "or as STA affiliated with" | **Revised**  Agree with the comment.  **TGbe editor please implement changes as proposed in CID 4105 and shown in doc 11-21/1264r0 tagged as 4105** |
| 6230 | Ming Gan | 9.4.2.36 | 120.57 | Please split this paragraph into two parts, one is for Capabilities element, the other is for Operation element | as in the comment | **Rejected**  The comment fails to identify a technical issue. Please note that the statement is aligned with the corresponding statements for the HT/VHT/HE Capabilities and Operation elements. Please see P1228 and P1229 of REVme D0.1. Hence keeping the same structure ensures consistency across amendments. |
| 5767 | Laurent Cariou | 9.4.2.36 | 120.58 | This sentence is not clear about EHT capabilities. Also it does not mention the ML element that can also be included. | as in comment | **Revised**  The statement related to EHT Capabilities and Operation elements is aligned with the corresponding statements for the HT/VHT/HE Capabilities and Operation elements. Please see P1228 and P1229 of REVme D0.1. Hence keeping the same structure ensures consistency across amendments.  The Basic variant Multi-Link element was added separately because the statement is applicable only to the Common Info field of the Basic variant Multi-Link element. As per 11be D1.1, the Basic variant Multi-Link element carried in a Neighbor Report element cannot carry the Link Info field. Hence, when critical updates defined in subclause 35.3.10 occur, the Multi-Link element carried in the Beacon frames of the reported AP will be different from the Multi-Link element carried in the Neighbor Report element corresponding to the reported AP.  **Tgbe editor please implement changes as shown in doc 11-21/1264r0 tagged as 5767** |
| 6226 | Ming Gan | 9.4.2.36 | 121.32 | When is the basic variant Multi-Link element present in Neighbor Report element, please make it complete. | as in the comment | **Revised**  Agree with the comment. The condition for inclusion of the Basic variant Multi-Link element was clarified. The ML element is included in a Neighbor Report element if the reported AP is affiliated with an AP MLD. Otherwise, the ML element is not included.  **Tgbe editor please implement changes as shown in doc 11-21/1264r0 tagged as 6226** |
| 6565 | Payam Torab Jahromi | 9.4.2.240 | 126.33 | Reword for better reading (simiar comment to be submitted to 11me for the baseline paragraph before). | Change to "When present in the Per-STA Profile subelement of a Basic variant Multi-link element, the Non-Inheritance element identifies one or more elements that are not inherited by the STA corresponding to the per-STA profile. The identified elements are present in the Management frame of the STA that carried the Basic variant Multi-Link element." | **Revised**  Agree with the commenter. The identified statement was revised.  **Tgbe editor please implement changes as shown in doc 11-21/1264r0 tagged as 6565** |
| 6975 | Sanghyun Kim | 9.4.2.295b.2 | 136.05 | The STA requesting complete information is the non-AP STA, not the AP STA. | change 'from the AP' to 'to the AP' | **Revised**  The identified statement is revised for more clarity in doc 11-21/1274 as a resolution for CID 7586.  **Tgbe editor no further changes are required for the resolution of this CID.** |
| 7846 | Yonggang Fang | 9.4.2.295c.1 | 136.28 | Suggest to change "EHT MAC Capabilities Information" to "EHT MAC Capabilities Control" to align with the naming convention of other IEs, like "Basic variant Multi-Link element", "Probe Request variant Multi-Link element". | See the comment. | **Rejected**  The subfield “EHT MAC Capabilities Information” provides capability information of the EHT AP. The purpose of the fields “Multi-Link Control” or “STA Control” is to provide presence indicators in other fields/subfields and identify the ML element variant.  Additionally, the name “Information” is aligned with subfield names in the HE Capabilities element, VHT Capabilities element, and HT Capabilities element. Therefore, “EHT MAC Capabilities Information” is more appropriate than “EHT MAC Capabilities Control”.  **TGbe Editor: No further changes are required for the resolution of this CID.** |
| 8294 | Zhiqiang Han | 9.4.2.295c.2 | 137.36 | Change "a STA" to "the STA" | as in comment. | **Accepted** |
| 4269 | Alfred Asterjadhi | 9.4.2.295c.2 | 150.60 | Replace the last 7 rows with a single one that lists values from 9-15. | As in comment. | **Revised**  Agree with the comment.  **TGbe editor please implement changes as proposed in CID 4269 and shown in doc 11-21/1264r0 tagged as 4269** |
| 7708 | Xiaofei Wang | 9.6.7.36 | 155.20 | operating channel width value says Reserved instead of 320 MHz, change "Reserved" to "320 MHz" | as in comment | **Rejected**  The “Reserved” entry is for HR/DSSS. OFDM, ERP, HT, VHT, or HE BSS, which is correct since they do not support 320 MHz bandwidth. Additionally, EHT does not support 80+80 MHz bandwidth, which is why a separate column was added. |

***TGbe editor: Please note Baseline is 11be D1.1***

**9.4.2.26 Extended Capabilities element**

***TGbe editor: Please revise the Table as shown below [CID 4105]***

**Table 9-153—Extended Capabilities field**

|  |  |  |
| --- | --- | --- |
| **Bit** | **Information** | **Notes** |
| 17 | WNM Sleep Mode | ~~The~~ A non-AP STA or a STA affiliated with (#4105) a non-AP MLD sets the WNM Sleep Mode field to 1 when dot11WNMSleepModeActivated is true, and sets it to 0 otherwise. See 11.2.3.16 (WNM sleep mode). |

**9.4.2.36 Neighbor Report element**

***TGbe editor: Please revise the text as shown below [CID 5767]***

The Extremely High Throughput subfield is set to 1 to indicate that the AP represented by this BSSID is an EHT AP and that the EHT Capabilities element (or EHT Operation element), if included as a subelement in the report, is identical in content to the EHT Capabilities element (EHT Operation ele­ment) included in the neighboring AP’s Beacon frame. Otherwise, the Extremely High Throughput subfield is set to 0.

When the Extremely High Throughput subfield is set to 1, the Basic variant Multi-Link element, if included as a subelement in the report, is identical in content to all the fields that are present in the Basic variant Multi-Link element included in the neighboring AP’s Beacon frame (#5767).

NOTE – A Basic variant Multi-Link subelement included in a Neighbor Report element does not carry the Link Info field as described in 35.3.2 (Advertisement of multi-link information in Multi-Link element) (#5767).

***TGbe editor: Please revise the text as shown below [CID 6226]***

The Basic variant Multi-Link subelement is the same as the Basic variant Multi-Link ele­ment defined in 9.4.2.295b.2 (Basic variant Multi-Link element). The Basic variant Multi-Link subelement is present in a Neighbor Report element corresponding to a reported AP if the reported AP is affili­ated with an AP MLD. Otherwise, the Basic variant Multi-Link subelement is not present (#6226).

**9.4.2.240 Non-Inheritance element**

***TGbe editor: Please revise the text as shown below [CID 6565]***

When present in the Per-STA Profile subelement of a Basic variant Multi-Link element, the Non-Inheritance element identifies one or more elements that are not inherited by the STA corresponding to the per-STA pro­file. The identified elements are present in the Management frame of the STA that carried the Basic variant Multi-Link element. (#6565)

**9.4.2.295c EHT Capabilities element**

**9.4.2.295c.2 EHT MAC Capabilities Information field**

***TGbe editor: Please revise the text as shown below [CID 4269]***

**Table 9-322at—Encoding of the maximum number of Nss for a specified MCS value**

|  |  |
| --- | --- |
| **Max Nss subfield value** | **Maximum number of spatial streams that supports the specified MCS set** |
| 0 | Not supported |
| 1 | 1 |
| 2 | 2 |
| 3 | 3 |
| 4 | 4 |
| 5 | 5 |
| 6 | 6 |
| 7 | 7 |
| 8 | 8 |
| 9-15 (#4269) | Reserved |
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**DISCUSSION**

**TGbe Editor: Please note that the following changes are shown only for discussions.**

**[CID 8294]**

**Table 9-322aq—Subfields of the EHT MAC Capabilities Information field**

|  |  |  |
| --- | --- | --- |
| **Subfield** | **Definition** | **Encoding** |
| Triggered TXOP Sharing Support | Indicates support for transmitting or responding to a TXOP sharing trigger frame that does not solicit TB PPDU. | For an EHT AP:  Set to 1 to indicate that the AP is capable of transmitting a modified MU-RTS frame that allocates time to a STA to transmit non-TB PPDUs (see 35.2.1.3 (Triggered TXOP sharing procedure)).  Set to 0 otherwise.  For an non-AP EHT STA:  Set to 1 to indicate that the non- AP STA is capable of responding to a modified MU-RTS frame that allocates time to the STA to transmit non-TB PPDUs (see 35.2.1.3 (Triggered TXOP sharing procedure)).  Set to 0 otherwise. |

**[CID 7708]**

**Table 9-384—BSS Operating Channel Width**

|  |  |  |  |
| --- | --- | --- | --- |
| **BSS Operating Channel Width field** | **HR/DSSS, OFDM, ERP, HT, VHT, or HE BSS**  **operating channel width** | **EHT BSS operating channel width** | **TVHT BSS operating channel width** |
| 0 | 20 MHz or 22 MHz | 20 MHz or 22 MHz | TVHT\_W |
| 1 | 40 MHz | 40 MHz | TVHT\_W+W |
| 2 | 80 MHz | 80 MHz | TVHT\_2W |
| 3 | 160 MHz or 80+80 MHz | 160 MHz | TVHT\_4W or TVHT\_2W+2W |
| 4 | Reserved | 320 MHz | Reserved |
| ~~4~~5–7 | Reserved | Reserved | Reserved |