IEEE P802.11
Wireless LANs

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| CC36 CR for remaining CIDs in subclause 9 |
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 Abstract

This submission proposes resolutions for following CIDs received for TGbe CC36 based on TGbe D1.4:

4004 4012 4098 4330 5894 5317 5319 8273 (9 CIDs)

Revisions:

* Rev 0: Initial version of the document.
* Rev 1-2: Editorial fix

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** | **Clause** | **Page** | **Comment** | **Proposed Change** | **Resolution** |
| 4004 | Abhishek Patil | 9.4.1.8 | 110.37 | In a multi-link setup, the AID is assigned to a non-AP MLD (i.e., AID is at the MLD level). | Update text in 9.4.1.8 AID field | Revised-Agree with the comment. Proposed resolution accounts for the suggested change.TGbe editor:Please implement the changes as shown in doc 11-22/0382r3 tagged as 4004 |
| 4012 | Abhishek Patil | 9.4.2.295b.1 | 128.24 | Link ID Info subfield and BSS Parameter Change Count subfield are applicable only to Basic variant Multi-Link element. | Remove the reference to these subfields from the general description and describe them in the subclause on Basic variant Multi-Link element | Revised-The proposed changed is reflected in 802.11 D1.4. Note to TGbe editor: there is no any text change for this CID |
| 4098 | Abhishek Patil | 9.4.1.6 | 110.11 | The Listen Interval value applies at the MLD level hence the NOTE needs to be updated. | Update the NOTE as: "NOTE--The value 0 might be used by a STA that is not affiliated with an MLD or by a non-AP MLD whose affiliated STA(s) never enters power save mode." | Revised-Agree with the comment. Proposed resolution accounts for the suggested change.TGbe editor:Please implement the changes as shown in doc 11-22/0382r3 tagged as 4098 |
| 4330 | Arik Klein | 9.4.1.6 | 110.14 | It is not clear why "The value is in units of the maximum value of beacon intervals corresponding to the links that the non-AP MLD \*intends to setup\* in the (Re)Association Request frame" and not according to maximum value of beacon intervals corresponding to the links that the AP MLD has accepted in the (Re)Association Request frame? It puts a significant burden on the AP MLD buffers in case that the TBTT is large in value which is not really needed by the associated non-AP MLD.... | 1. Revise the sentence as follows:" The value is in units of the maximum value of beacon intervals corresponding to the links that the AP MLD has accepted for (re) setup in the (Re)Association Response frame"2. Correct the Listen interval value in the example illustrated in Figure 35-10 and described on P271L46. | Rejected-Based on the meaning of listen interval in baseline, this value is requested by the non-AP STA. If this value can't be accommodated, AP could reject this request.  |
| 5894 | Liangxiao Xin | 9.4.1.6 | 110.11 | The definition of beacon intervals is not consistant with the procedure shown in Fig. 35-9 | Please clarify this setence | Revised-The description about Fig. 35-9 was updated by 21/1587r3, there is no any inconsistent issue in 802.11be D1.4.Note to TGbe editor: there is no any text change for this CID |
| 5317 | Jarkko Kneckt | 9.4.2.6a.10 | 73.39 | It is unclear how AAR helps on NSTR non-AP STAs medium synchronization?AAR is communicating the links in which STA requires triggering fast. Such indication may be beneficial:1.  in real time data transmissions,2.  TID-to-Link mapping and to ensure that AP MLD knows that STA it prepared to transmit HE TB PPDU in the links.These indications may be done by STR and NSTR STAs, so there is no need to limit AAR only for NSTR STAs. | Please clarify that AAR can be used for STR and NSTR links to signal the links that need urgent triggering. Please note, that bitmap used in AAR signaling is capable to signal any link regardless of non-AP STA STR or NSTR capabilitty in the link.If AAR does not have room to signal the time in which the triggering should be done, then please add a separate A-Control field for this signaling | Rejected-AAR is used to indicate the link ID of the assisting AP that is requested to send a Trigger frame to help the STA that has lost medium synchronization to transmit UL frame. For the detail, please refer to the 35.3.16.8.2 (AP as-sisted medium synchro-nization recovery proce-dure) in 802.11be D1.4.On the other hand, the comment failed to identify the motivation to signal the links that need urgent triggering for STR and NSTR. |
| 5319 | Jarkko Kneckt | 9.4.2.6a.10 | 73.39 | The AAR should signal the time in which the AP should send a Trigger in the link(s). Real time applications have strict delay limits and a trigger frame transmitted later than this time may be wasted, because the transmitted frame is deleted due to maximum lifetime expiration. In these cases, AAR may just waste AP and STA resources. | Please allow non-AP MLD to signal the maximum triggering time in which the AP should trigger the STA, or define a new signaling for this information. | Rejected-AAR is used to indicate the link ID of the assisting AP that is requested to send a Trigger frame to help the STA that has lost medium synchronization to transmit UL frame. For the detail, please refer to the 35.3.16.8.2 (AP as-sisted medium synchro-nization recovery proce-dure) in 802.11be D1.4.On the other hand, regarding the maximum triggering time, it depends on a few factors, like medium sync timer, channel status (busy or idle), it is not easily guaranteed. Given the available space in A-control field, this extra signaling is not needed. |
| 8273 | Zhiqiang Han | 9.4.1.6 | 110.12 | associated with the multi-link (re)setup?It's better to change it to associated with the AP MLD. | Change "associated with the multi-link (re)setup" to "associated with the AP MLD" | Revised-The proposed change is reflected in 802.11be D1.4.Note to TGbe editor: there is no any text change for this CID |

***TGbe editor: Please note baselines are 802.11-2020 and 11be D1.5 (CID #4004)***

**9.4.1.8 AID field**

**…**

The AID field for a non-DMG and non-S1G STA that is a STA that is not associated to an EHT AP is in the range of 1 to 2007. The AID field for a STA or non-AP MLD that is associated to an EHT AP is in the range of 1 to 2006. (CID #4004) This value is placed in the 14 LSBs of the AID field, with the two MSBs of the AID field set to 1.The AID field for an S1G STA is in the range of 1 to 8191, and the 3 MSBs of the AID field are reserved. The AID field for a DMG STA is in the range 1 to 254. The value 255 is reserved as the broadcast AID, and the value 0 corresponds to the AP or PCP. The 8 MSBs of the AID field are reserved.

**35.16.1 Basic EHT BSS operation**

If the peer AP is operating as an EMA AP, an EHT non-AP STA should follow the procedure described in 11.1.3.8.3 (Discovery of a nontransmitted BSSID profile) for efficient discovery during scanning and to save power after association.

An EHT AP shall not assign an AID value of 2007 to any STA or non-AP MLD (CID #4004).

**35.5.2.2.4 Allowed settings of the Trigger frame fields and TRS Control subfield**

**…**

(#7913)NOTE 1—An EHT AP does not assign an AID value of 2007 to any STA or non-AP MLD (CID #4004) (see 35.16 (EHT BSS operation)).

***TGbe editor: Please note baselines are 802.11-2020 and 11be D1.5 (CID #4098)***

**9.4.1.6 Listen Interval field**

***Change the first paragraph as follows:***

NOTE—The value 0 might be used by a STA that is not affiliated with an MLD or by a non-AP MLD whose all affiliated STAs (CID #4098) that never enters power save mode.