IEEE P802.11  
Wireless LANs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| LB275 CR for CIDs in 35.3.10 | | | | |
| Date: 2023-09-05 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | email |
| Ming Gan | Huawei  Huawei |  |  | ming.gan@huawei.com |
| Jason Yuchen Guo |  |  |  |
| Yunbo Li | Huawei |  |  |  |
| Guogang Huang | Huawei |  |  |  |
| Zhi Mao | Huawei |  |  |  |
| Lan Peng | Huawei |  |  |  |
| Zhenguo Du | Huawei |  |  |  |
| Steven Qi Wang | Huawei |  |  |  |
| Yue Zhao | Huawei |  |  |  |
| Ying Li | Huawei |  |  |  |
| Maolin Zhang | Huawei |  |  |  |

Abstract

This submission proposes resolutions of comments received from TGbe comment collection LB275 based on TGbe D4.0.

19270 19863 20055 19783 20056 19462 20057 20081 (8 CIDs)

Revisions:

* Rev 0: Initial version of the document.

1. **Introduction**

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. The introduction and the explanation of the proposed changes are 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 802.11be 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.***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **CID** | **Clause** | **Page** | **Comment** | **Proposed Change** | **Resolution** |
| 19270 | 35.3.10 | 534.16 | Sentence construction makes it hard to parse. | Revise as "An AP (reporting AP) affiliated with an AP MLD that is not in a multiple BSSID set or that corresponds to a transmitted BSSID in a multiple BSSID set shall:" | Accepted- |
| 19863 | 35.3.10 | 534.45 | The critical update or nonTXBSSID critical update flag should be set when an advertise T2LM element is added | add "or if the frame incldues a new TID-to-Link Mapping element" | Revised-  Agree with the comment. Apply the changes marked as #19863 in this document. |
| 20055 | ï»¿35.3.10 | 534.45 | For better readability of what all conditions the CUF is set for, revise paragraph structure to show those conditions as bullet points. Same for pg535ln33. | As per comment | Revised-  Agree with the comment. The corresponding change has been made by the resolution of CID 19655 in 11-23/1480r4.  TGbe editor, incorporate the changes marked as #19655 in 11-23/1480r4. |
| 19783 | 35.3.10 | 534.48 | There are several distinct conditions stated within this bullet that are hard to find within the texts. For ease of of parsing, list each condition as a separate sub-bullet under this bullet. Same comment applies to the next paragraph on nonTxBSSID. | As in comment | Revised-  Agree with the comment. The corresponding change has been made by the resolution of CID 19655 in 11-23/1480r4.  TGbe editor, incorporate the changes marked as #19655 in 11-23/1480r4. |
| 20056 | ï»¿35.3.10 | 534.57 | The condition for setting CUF also needs to include the scenario when a TTLM element is advertised as per procedure in ï»¿35.3.7.2.4. Same for pg535ln48. | Add advertised TTLM as another condition for setting CUF. | Revised-  Agree with the comment. Apply the changes marked as #20056 in this document. |
| 19462 | 35.3.10 | 535.01 | It is not clear about pending buffered traffic is not clear. Change it to the status of buffered, individually addressed MSDUs/MMPDUs | as in the comment | Revised-  Agree with the comment. Apply the changes marked as #19462 in this document. |
| 20057 | ï»¿35.3.10 | 535.04 | The All Updates Included subfield will continue to be set to 1 even after ï»¿BSS Parameters Change Count subfield is additionally incremented due to another critical update if all the updated elements are included in the frame carrying RNR. Revise text to capture this aspect. Same for pg535ln59. | Revise text as "...ï»¿and the All Updates Included subfield remains set to 1 until the updated elements are no longer included or until the BSS Parameters Change Count subfield is additionally incremented due to another critical update for which updated elements are not included in the frame, and set to 0 otherwise." | Rejected-  If the BSS Parameters Change Count subfield is additionally incremented due to another critical update, then the receiver can't identify whether the frame carries all the updated elements or not. All Updated Included subfield with equal to 1 can only be used for the case where the gap between the received BPPC and the local stored BPCC is 1. Otherwise, the receiver shall follow this subclause to retrieve the corresponding update. |
| 20081 | 35.3.10 | 535.25 | "where the AP corresponding to the nontransmitted BSSID is identified by the Link ID subfield of the Common Info field in the Basic Multi-Link element in a Probe Response frame that is not a multi-link probe response"  Not clear what it means. The link ID identifies the non-transmitted BSSID link within the MLD containing the non-transmitted BSSID, but other links (STA profile) are not included in non-ML probe response | Remove "where the AP corresponding to the nontransmitted BSSID is identified by the Link ID subfield of the Common Info field in the Basic Multi-Link Element" | Rejected-  The comment failed to identify the technical issue. In non-ML probe response, the BPCC for the non-transmitted BSSID is carried in the common info field in the basic ML element in the nontrasnmitted Profile (different from the 4th bullet which is for ML probe response), the BPCC for other AP(s) affiliated with the same MLD as the nontransmitted BSSID is carried in RNR as mentioned in the second bullet. |

**Discussion:** None.

***TGbe Editor: please modify the following paragraphs in the approved CR document 11-23/1480r4***

**35.3.10 BSS parameter critical update procedure**

An AP (reporting AP) affiliated with an AP MLD that is not in a multiple BSSID set or that corresponds to a transmitted BSSID in a multiple BSSID set shall:(#19270)—include in Beacon and Probe Response frames it transmits a BSS Parameters Change Count subfield for each of all APs affiliated with the same AP MLD as the reporting AP, and (#19271) include in a (Re)Association Response frame it transmits a BSS Parameters Change Count subfield for each of all APs that are requested for (re)setup in the received (Re)Association Request frame.

...

(#19655)—set the Critical Update Flag subfield of the Capability Information And Status Indication field to 1 in Beacon and Probe Response frames until and including the next DTIM beacon on the link on which the reporting AP is operating if at least one of the following conditions is met:

* There is a change to a value carried in the BSS Parameters Change Count subfield of the MLD Parameters field in the Reduced Neighbor Report element for any AP affiliated with the same AP MLD as the reporting AP or a value carried in the BSS Parameters Change Count subfield in the Common Info field of the Basic Multi-Link element.
* A new affiliated AP is added to the AP MLD with which the reporting AP is affiliated following the procedure defined in 35.3.6.2 (Adding affiliated APs) .
* A Reconfiguration Multi-Link element is included or modified by adding a new Per-STA Profile subelement by the reporting AP affiliated with an AP MLD, following the procedure defined in 35.3.6.3 (Removing affiliated APs).
* An AP affiliated with the same AP MLD as the reporting AP becomes disabled or enabled through a new advertised TTLM defined in 35.3.7.5 (Affiliated AP link disablement and enablement). (#19863, 20056)

—Otherwise, set the Critical Update Flag subfield of the Capability Information And Status Indication field to 0.

If an AP affiliated with an AP MLD is a nontransmitted BSSID in a multiple BSSID set, then the AP that corresponds to the transmitted BSSID in the same multiple BSSID set shall: (#ED)

—include in Beacon and Probe Response frames it transmits a BSS Parameters Change Count subfield for each of all APs affiliated with the same AP MLD as the AP corresponding to the nontransmitted BSSID. (#ED)

…

(#19655)—set the Critical Update Flag subfield of the Capability Information And Status Indication field in the Nontransmitted BSSID Capability And Status element (for that nontransmitted BSSID) to 1 in Beacon and Probe Response frames until and including the next DTIM beacon of the nontransmitted BSSID if at least one of the following conditions is met:

* There is a change to a value carried in the BSS Parameters Change Count subfield of the MLD Parameters field in the Reduced Neighbor Report element for any AP affiliated with the same AP MLD as the AP corresponding to the nontransmitted BSSID or a value carried in the BSS Parameters Change Count subfield corresponding to the nontransmitted BSSID in the Common Info field of the Basic Multi-Link element.
* A new affiliated AP is added to the AP MLD with which the nontransmitted BSSID is affiliated following the procedure defined in 35.3.6.2 (Adding affiliated APs).
* A Reconfiguration Multi-Link element is included or modified by adding a new Per-STA Profile subelement by the reporting AP in the Nontransmitted BSSID Profile corresponding to the nontransmitted BSSID affiliated with an AP MLD, following the procedure defined in 35.3.6.3 (Removing affiliated APs).
* An AP affiliated with the AP MLD with which the nontransmitted BSSID is affiliated becomes disabled or enabled through a new advertised TTLM defined in 35.3.7.5 (Affiliated AP link disablement and enablement). (#19863, 20056)

—Otherwise, set the Critical Update Flag subfield of the Capability Information And Status Indication field to 0.

***TGbe Editor: please modify the following paragraphs***

**35.3.12.4 Traffic indication**

An AP affiliated with an AP MLD where the AP is not a member of a multiple BSSID set shall indicate the status of buffered, individually addressed MSDUs/MMPDUs (#19462) for a non-AP MLD associated with that AP MLD using the partial virtual bitmap of the TIM element as described in 9.4.2.5 (TIM element) and by following the rules described in this subclause.

An AP affiliated with an AP MLD where the AP corresponds to a transmitted BSSID in a multiple BSSID set shall indicate the status of buffered, individually addressed MSDUs/MMPDUs (#19462) for a non-AP MLD associated with any AP MLD that has an affiliated AP in the same multiple BSSID set as the AP using the partial virtual bitmap of the TIM element as described in 9.4.2.5 (TIM element), 11.1.3.8.5 (Traffic advertisement in a multiple BSSID set), and by following the rules described in this subclause.