IEEE P802.11
Wireless LANs

|  |
| --- |
| Resolution for CIDs in clause 26.2.2 |
| Date: February 3, 2022 |
| Author(s): |
| Name | Affiliation | Address | Phone | email |
| Abhishek Patil | Qualcomm Inc |  |  | appatil@qti.qualcomm.com |
| Alfred Asterjadhi |  |  |  |

 Abstract

This submission proposes resolution for comments received in LB258 (REVme D1.0) for clause 26.2.2.

***TGm editor: The baseline for this document is REVme D1.0.***

**Revisions:**

* Rev 0: Initial version of the document.
* Rev 1: Live updates made when the doc was presented in TGm call on 2/7/22

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 TGm Draft. This introduction is not part of the adopted material.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **CID** | **Commenter** | **Clause** | **Page** | **Line** | **Comment** | **Proposed Change** | **Resolution** |
| 1023 | Abhishek Patil | 26.2.2 | 4127.00 | 11 | Paragraphs starting line 4 and 33 of pg 4126 provide rules on classifying PPDU as intra- or inter-BSS based on BSS color. However, these rules do not apply if color is disabled. This aspect is covered in the last paragraph of this subclause. | Move the paragraph starting line 11 as the first paragraph in this subclause. | **Revised**The last paragraph in this subclause is deleted and the bullets under inter- and intra-BSS classification are updated to include the condition that BSS color is not disabled.TGm editor, please implement changes as shown in https://mentor.ieee.org/802.11/dcn/22/11-22-0274-01-000m-lb258-resolution-for-cids-in-26.2.2.docx tagged as 1023. |
| 1021 | Abhishek Patil | 26.2.2 | 4126.00 | 6 | The RXVECTOR parameter BSS\_COLOR being referred here is that of the received PPDU. Update the bullet to match first bullet in the next paragraph | Update the first bullet as: "The RXVECTOR parameter BSS\_COLOR of the PPDU carrying the frame is not 0 and is not the BSS color ..." | **Revised**Based on discussion during TGm call on 2/7/22, it was determined that there is no need to refer to the *PPDU carrying the frame*. As a result, the text in the 1st bullet of the subsequent paragraph was deleted. TGm editor, please implement changes as shown in https://mentor.ieee.org/802.11/dcn/22/11-22-0274-01-000m-lb258-resolution-for-cids-in-26.2.2.docx tagged as 1021. |
| 1022 | Abhishek Patil | 26.2.2 | 4126.00 | 36 | The BSS color must be nonzero for this rule to apply. | Update the first bullet as: "The RXVECTOR parameter BSS\_COLOR of the PPDU carrying the frame is not 0 and is the BSS color ..." | **Revised**Per clause 26.11.4, color 0 is reserved for PPDU transmitted to a peer STA with whom the transmitting STA is not associated with. Therefore, the criteria for classifying a PPDU as intra-BSS must also check if the color is nonzero. However, TGm discussed and concluded that the text ‘is the color of the BSS of which the STA is a member of’ will cover the case of zero. Hence no changes are need in clause 26.2.2. In addition, a note was added to clause 26.11.4 clarifying that an AP or a STA that starts an IBSS or mesh doesn’t select color 0 for its BSS.TGm editor, please implement changes as shown in https://mentor.ieee.org/802.11/dcn/22/11-22-0274-01-000m-lb258-resolution-for-cids-in-26.2.2.docx tagged as 1022 |

* **Intra-BSS and inter-BSS PPDU classification**

***TGm editor: Please update the contents of this subclause as shown below:***

A STA shall classify a received PPDU as an inter-BSS PPDU if at least one of the following conditions is true:

* [1023]The BSS color is not disabled (see 26.17.3.3 (Disabling BSS color)) and the RXVECTOR parameter BSS\_COLOR is not 0 and is not the BSS color of the BSS of which the STA is a member.
* The PPDU is a VHT PPDU with RXVECTOR parameter PARTIAL\_AID not equal to the BSSID[39:47] of the BSS in which the STA is associated or any of the other BSSs in the same multiple BSSID set or co-hosted BSSID set to which its BSS belongs and the RXVECTOR parameter GROUP\_ID is 0.
* The PPDU is a VHT PPDU with RXVECTOR parameter PARTIAL\_AID[5:8] not equal to the 4 LSBs of the BSS color announced by the BSS of which the STA whose dot11PartialBSSColorImplemented is equal to true is a member and RXVECTOR parameter GROUP\_ID equal to 63 when the Partial BSS Color field in the most recent HE Operation element is 1.
* The PPDU is either a VHT MU PPDU or an HE MU PPDU with the RXVECTOR parameter UPLINK\_FLAG equal to 0, and the STA is an AP.
* The PPDU carries a frame that has a BSSID field, the value of which is not the BSSID of the BSS in which the STA is associated or any of the other BSSs in the same multiple BSSID set or co-hosted BSSID set to which its BSS belongs or the wildcard BSSID.
* The PPDU carries a frame that does not have a BSSID field but has both an RA field and TA field, neither value of which is equal to the BSSID of the BSS in which the STA is associated or any of the other BSSs in the same multiple BSSID set or co-hosted BSSID set to which its BSS belongs. The Individual/Group bit in the TA field value is forced to 0 prior to comparison.

A STA shall classify the received PPDU as an intra-BSS PPDU if at least one of the following conditions is true:

* [1023]The BSS color is not disabled (see 26.17.3.3 (Disabling BSS color)) andthe RXVECTOR parameter BSS\_COLOR [1021]is the BSS color of the BSS of which the STA is a member or the BSS color of any TDLS links to which the STA belongs if the STA is an HE STA associated with a non-HE AP.
* The PPDU is a VHT PPDU with RXVECTOR parameter PARTIAL\_AID equal to the BSSID[39:47] of the BSS in which the STA is associated or any of the other BSSs in the same multiple BSSID set or co-hosted BSSID set to which its BSS belongs and the RXVECTOR parameter GROUP\_ID equal to 0.
* The PPDU is a VHT PPDU with RXVECTOR parameter PARTIAL\_AID[5:8] equal to the 4 LSBs of the BSS color announced by of the BSS of which the STA whose dot11PartialBSSColorImplemented is equal to true is a member, the RXVECTOR parameter GROUP\_ID is equal to 63, and the Partial BSS Color field in the most recent HE Operation element is 1.
* The PPDU carries a frame that has an RA, TA, or BSSID field value that is equal to the BSSID of the BSS or the BSSID of any BSS in which the STA is associated or any of the other BSSs in the same multiple BSSID set or co-hosted BSSID set to which its BSS belongs. The Individual/Group bit in the TA field value is forced to the value 0 prior to the comparison.
* The PPDU carries a Control frame that does not have a TA field and that has an RA field value that matches the saved TXOP holder address of the BSS or any BSS in which the STA is associated or any of the other BSSs in the same multiple BSSID set or co-hosted BSSID set to which its BSS belongs.

NOTE—See 10.19 for the definition of PARTIAL\_AID[5:8] and BSSID[39:47].

Otherwise, the PPDU cannot be determined as an intra-BSS or inter-BSS PPDU.

If, based on the MAC address information of a frame carried in a received PPDU, the received PPDU satisfies both intra-BSS and inter-BSS conditions, then the received PPDU is classified as an intra-BSS PPDU.

If the received PPDU satisfies the intra-BSS conditions using the RXVECTOR parameter BSS\_COLOR and also satisfies the inter-BSS conditions using MAC address information of a frame carried in the PPDU, then the classification made using the MAC address information takes precedence.

[1023]

* **BSS\_COLOR**

***TGm editor: Please add the following NOTE after the paragraph cited below this subclause as shown:***

A non-AP HE STA that transmits an HE SU PPDU or HE ER SU PPDU to a STA that is not a member of the transmitting STA’s HE BSS shall set the TXVECTOR parameter BSS\_COLOR to 0.

[1022]NOTE - An HE AP that is starting an infrastructure BSS or an HE STA that is starting an IBSS or MBSS selects a nonzero BSS color as described in 26.17.3.2 (Initial BSS color).