IEEE P802.11  
Wireless LANs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| BSS Color and frame format | | | | |
| Date: 2024-08-19 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | email |
| Ali Raissinia | Qualcomm Inc. |  |  | [alirezar@qti.qualcomm.com](mailto:alirezar@qti.qualcomm.com) |
|  |  |  |  |  |

Abstract

This contribution proposes to include normative text for the use of BSS Color field & frame format(s).

**Discussion**

The contribution is to address missing normative text regarding:

-frame formats for Sensing Trigger frame and Sensing NDP Announcement frame

-use of BSS Color field in Sensing Trigger frame, Sensing NDP Announcement frame, Sensing Measurement Report frame and the SBP Report frame.

TGBF Editor: Add the following text in P150L34 (i.e., TB sensing measurement exchange)

For a Sensing Trigger frame or a Sensing NDP Announcement frame transmitted in an HE PPDU or an EHT PPDU, the BSS\_COLOR parameter shall be set to the value indicated in the BSS Color Information field of the Sensing Measurement Parameters element transmitted by the AP.

An unassociated non-AP STA acting as a sensing responder transmitting a Sensing Measurement Report frame in an HE PPDU or an EHT PPDU shall set the BSS\_COLOR parameter to the value indicated in the BSS Color Information field of the Sensing Measurement Parameters element transmitted by the AP.

An AP shall follow the rules defined in 26.5.2 (UL MU Operation) or 35.5.2 (EHT UL MU operation) when transmitting Sensing Trigger frames. Additionally, the following rules apply:

1. --- A Sensing Trigger frame shall be carried in an S-MPDU if the Sensing Trigger frame is carried in a VHT PPDU, HE PPDU, or EHT PPDU.
2. --- An AP shall not transmit a Sensing Trigger frame or a Sensing NDP Announcement frame in a VHT MU PPDU, HE MU PPDU, or EHT MU PPDU that is not an EHT SU transmission.

TGBF Editor: Add the following text in P160L37 (i.e. NTB sensing measurement exchange)

A sensing initiator shall not transmit a Sensing NDP Announcement frame in a VHT MU PPDU, HE MU PPDU, or EHT MU PPDU that is not an EHT SU transmission.

For a Sensing NDP Announcement frame transmitted in an HE PPDU or an EHT PPDU, the BSS\_COLOR parameter shall be set to the value indicated in the BSS Color Information field of the Sensing Measurement Parameters element transmitted by the AP.

A sensing responder transmitting a Sensing Measurement Report frame to an unassociated non-AP STA acting as a sensing initiator in an HE PPDU or an EHT PPDU shall set the BSS\_COLOR parameter to the value indicated in the BSS Color Information field of the Sensing Measurement Parameters element transmitted by the AP.

TGBF Editor: Add the following text in P147L3

NOTE: For an HE PPDU or an EHT PPDU addressed to an unassociated non-AP STA, the STA\_ID in the preamble of the PPDU, if present, is set to the USID.

TGBF Editor: Add the following text in P173L55 (SBP)

For an SBP Report frame transmitted in an HE PPDU or an EHT PPDU to an unassociated non-AP STA acting as an SBP Initiator, the BSS\_COLOR parameter shall be set to the value indicated in the BSS Color Information field of the Sensing Measurement Parameters element transmitted by the AP (i.e., SBP responder).

TGBF Editor: Add the following text in P167L28

NOTE: For an HE PPDU or an EHT PPDU addressed to an unassociated non-AP STA, the STA\_ID in the preamble of the PPDU, if present, is set to the USID.

**References: P802.11bf D4.0, P802.11 Reve D7.0, P802.11bk D3.0**