IEEE P802.11
Wireless LANs

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| Comment resolution on CID 25016 |
| Date: 2020-09-24 |
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This submission present a resolution for CID 25016. The proposed changes are based on P802.11ax D7.0.

##### Revision history:

##### R0 – initial version

##### R1 – Revised the discussion based on the comments received offline

R2 – Revised the proposed resolution based on the comments received during the September 24th CRC call.

R3 – Revised the proposed resolution based on the comments received during the September 29th CRC call.

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| CID | Clause | Page | Line | Comment | Proposed Change | Resolution |
| 25016 | C.3 | 773 | 4 | On behalf of Pooya MonajemiThere may be high-density SR scenarios (and other cases) where the intention is to maintain equal BSS colors or it is not possible or optimal to switch colors. Spec currently mandates disabling color when collision is detected for a duration. (Also see section 26.17.3.5.1 for AP behavior) | Reserve a "disabled" value for dot11BSSColorCollisionAPPeriod. | Revised.Agree in principle. Please refer to the changes as shown in https://mentor.ieee.org/802.11/dcn/20/11-20-1520-03-00ax-comment-resolution-on-cid-25016.docx |

Discussion:

As per subclauses 9.4.2.249, 26.17.3.5, and Annex C.3:



The HE AP shall set the BSS Color Disabled subfield to 1 in the HE Operation element that it transmits if the BSS color collision persists for a duration of at least dot11BSSColorCollisionAPPeriod.



The description of dot11BSSColorCollisionAPPeriod in Annex C.3 is applicable for the scenario when a BSS color collision is detected for the given duration.

Similar to dot11TXOPDurationRTSThreshold, we can reserve a value from the Unsigned32 range to indicate that the BSS color is not disabled in the case of a collision, i.e., the BSS Color Disabled subfield may remain 0.

Alternatively, we can create a new MIB variable, e.g., dot11BSSColorDisable with Truthvalue as a unit. When dot11BSSColorDisable is true, then the value of dot11BSSColorCollisionAPPeriod is used. When dot11BSSColorDisable is false, then dot11BSSColorCollisionAPPeriod is disabled.

**Proposed resolution for CID 25016:**

**Revised.**

***TGax editor: At 489.34, please modify the first paragraph of 26.17.3.5.1 as follows:***

An HE AP may determine that a BSS color collision has occurred if it receives HE PPDUs on its primary channel from an OBSS STA containing the same BSS color as the one it has selected for its BSS or if it receives autonomous BSS color collision event reports from its associated STAs. The HE AP shall set the BSS Color Disabled subfield to 1 in the HE Operation element that it transmits if the BSS color collision persists for a duration of at least dot11BSSColorCollisionAPPeriod if dot11BSSColorCollisionAPPeriod is not -1. The value -1 means that the BSS color is not disabled in the case of a collision.

***TGax editor: At 773.4, please modify the description of dot11BSSColorCollisionAPPeriod as follows:***

dot11BSSColorCollisionAPPeriod OBJECT-TYPE

 SYNTAX INTEGER (-1..120)

 UNITS "seconds"

 MAX-ACCESS read-write

 STATUS current

 DESCRIPTION

 "This is a control variable.

 It is written by an external management entity.

 Changes take effect as soon as practical in the implementation.

 This attribute indicates the duration for which an HE AP waits before disabling

 BSS color when a color collision is detected. The value -1 means that this feature is disabled."

 DEFVAL { 50 }

 ::= { dot11HEStationConfigEntry 13 }

***TGax editor: At 769.52, please change the unit of dot11BSSColorCollisionAPPeriod as follows:***

dot11BSSColorCollisionAPPeriod INTEGER,