### IEEE P802.11Wireless LANs

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| 11ax D5.0 MAC Comment Resolution for NAV related comments |
| Date: 2019-07-08 |
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Abstract

This submission proposes resolutions for comments of TGax Draft D5.0 with the following CIDs:

22061, 22083, 22184, 22335, 22507

Revisions:

* Rev 0: Initial version of the document.
* Rev 1: Revision based on the discussion
* Rev 2: Further Revision for 22335 based on the feedback from Yongho

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 TGax D4.0 Draft. This introduction is not part of the adopted material.

***Editing instructions formatted like this are intended to be copied into the TGax D4.0 Draft (i.e. they are instructions to the 802.11 editor on how to merge the text with the baseline documents).***

***TGax Editor: Editing instructions preceded by “TGax Editor” are instructions to the TGax editor to modify existing material in the TGax draft. As a result of adopting the changes, the TGax editor will execute the instructions rather than copy them to the TGax Draft.***

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| **CID** | **Commenter** | **P.L** | **Clause** | **Comment** | **Proposed Change** | **Resolution** |
| 22061 | Li-Hsiang Sun | 123.32 | 9.3.1.22.5 | The figure seems to indicate CCFS1>CCFS0 | add in L15 indicating figure 9-64j is an example for CCFS1>CCFS0 if B0-=1 | Revised –Agree in principle with the commenter. We adjust the lowest to highest frequence indication only to the primary 80 MHz.TGax editor to make the changes shown in 11-19/1810r2 under all headings that include CID 22061 |
| 22083 | Liwen Chu | 97.36 | 9.2.5.2 | HE TB PPDU may not always solicit acknowledgement. | Add "if required" before ", plus applicable SIFSs" | Accepted – |
| 22184 | Mark RISON | 308.58 | 26.2.2 | "If the received PPDU satisfies both intra-BSS and inter-BSS conditions by using the MAC address information of a frame carried in the PPDU" is not clear about whether it means "If the received PPDU satisfies both intra-BSS conditions by using the MAC address and inter-BSS conditions by using the MAC address" or just "If the received PPDU satisfies both intra-BSS (using any of the rules) and inter-BSS conditions by using the MAC address" | Change the cited text to "If, on the basis of the MAC address of a frame it carries, the received PPDU satisfies both intra-BSS and inter-BSS conditions" | Revised – We revise as “*If, on the basis of the MAC address information of a frame carried in a received PPDU, the received PPDU satisfies both intra-BSS and inter-BSS conditions,*”TGax editor to make the changes shown in 11-19/1810r2 under all headings that include CID 22184 |
| 22335 | Mark RISON | 245.23 | 10.3.2.4 | CID 21474 was correct: a TXOP holder does not update its NAV, since by definition its NAV was 0 when it started the TXOP, and it then just uses the TXNAV. This is consistent with "A STA that is a TXOP holder shall not update the intra-BSS NAV with the duration information indicatedby the RXVECTOR parameter TXOP\_DURATION." in 26.2.4 Updating two NAVs | In the referenced subclause delete from "An HE AP that is a TXOP holder shall update the NAV" to the end of the following bullets | Revised -The current spec does not sasy TXOP holder does not update its NAV. The following texts in the baseline describe that TXOP holder needs to update NAV if a frame is received and conditions are satisfied. *A STA that receives at least one valid frame in a PSDU can update its NAV with the information from any valid Duration field in the PSDU. When the received frame’s RA is equal to the STA’s own MAC address, the STA shall not update its NAV. Further, when the received frame is a DMG CTS frame and its TA is equal to the STA’s own MAC address, the STA shall not update its NAV. For all other received frames the STA shall update its NAV when the received Duration is greater than the STA’s current NAV value.*TGax editor to make the changes shown in 11-19/1810r2 under all headings that include CID 22335 |
| 22507 | Yonggang Fang | 358.38 | 26.5.2.5 | When NAV is considered, we need to check if the NAV is 0 or not. When the NAV is 0, the virtual CS indicates idle. When NAV is not 0, the virtual CS indicates busy. So when NAV is considered ,we should seperately describe it. | Delete" Otherwise, the virtual CSindicates busy" or seperately describe it. | Rejected –If the NAV is 0, then the NAV is not considered as described by the text below.*“A NAV is considered in virtual CS by a non-AP STA in determining whether to respond to a Trigger frame sent by an AP with which the non-AP STA is not associated, through the UORA procedure (see 26.5.4 (UL OFDMA-based random access (UORA))) unless one of the following conditions is met:— The NAV was set by a frame originating from the AP sending the Trigger frame— The NAV counter is 0”* |

**Discussion:** *None.*

**Propose:** Revised for CID 22061, 22184 per discussion and editing instructions in 11-19/1810r2.

***TGax editor: Change 9.3.1.22.5 MU-RTS variant as follows: (Track change on)***

**9.3.1.22.5 MU-RTS variant**

(…existing texts ….)

(#22061)

***TGax editor: Change 9.2.5.2 Setting for single and multiple protection under enhanced distributed channel
access (EDCA) as follows: (Track change on)***

**9.2.5.2 Setting for single and multiple protection under enhanced distributed channel
access (EDCA)**

(…existing texts …)

7) In a Basic Trigger frame, the Duration/ID field is set to the estimated time required to transmit
the solicited HE TB PPDU, plus the estimated time required to transmit the acknowledgment
for the solicited HE TB PPDU if required(#22083), plus applicable SIFSs.

***TGax editor: Change 26.2.2 Intra-BSS and inter-BSS PPDU classification as follows: (Track change on)***

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

(…existing texts…)

If, on the basis of 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.(#22184)

***TGax editor: Change 10.3.2.4 Setting and resetting the NAV as follows: (Track change on)***

**10.3.2.4 Setting and resetting the NAV**

(…existing texts…)

An HE AP that is not a TXOP holder shall update the NAV with the duration information indicated by the RXVECTOR parameter TXOP\_DURATION for an HE PPDU if all of the following conditions are met, and shall not update the NAV with the duration information indicated by the RXVECTOR parameter TXOP\_DURATION(#22335) otherwise:

— The RXVECTOR parameter TXOP\_DURATION is not UNSPECIFIED

— The HE AP does not receive a frame with a Duration field in the PPDU

— The duration indicated by the RXVECTOR parameter TXOP\_DURATION is greater than the cur-rent NAV value of the HE AP

An HE AP that is a TXOP holder shall update the NAV with the duration information indicated by the RXVECTOR parameter TXOP\_DURATION for an HE PPDU if all of the following conditions are met, and shall not update the NAV with the duration information indicated by the RXVECTOR parameter TXOP\_DURATION(#22335) otherwise:

— The RXVECTOR parameter TXOP\_DURATION is not UNSPECIFIED

— The HE AP does not receive a frame with a Duration field in the PPDU

— The duration indicated by the RXVECTOR parameter TXOP\_DURATION is greater than the cur-rent NAV value of the HE AP

— The RXVECTOR parameter BSS\_COLOR is not equal to the BSS color of the HE AP