### IEEE P802.11Wireless LANs

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| 11ax D6.0 NAV Part II |
| Date: 2020-05-04 |
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Abstract

This submission proposes resolutions for the following CIDs:

24027, 24419

Revisions:

* Rev 0: Initial version of the document.
* Rev 1: Revision based on the discussion in the teleconference call
* Rev 2: Further revision based on offline discussion

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 D6.0 Draft. This introduction is not part of the adopted material.

***Editing instructions formatted like this are intended to be copied into the TGax D6.0 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** |
| 24027 | Seok, Yongho | 319.54 | 26.2.5 | When the NAV is set by the preamble puncture HE MU PPDUs (e.g., TXOP Duration field in the HE-SIG-A), there is no NAV reset mechanism in current TGax Draft.Please define the NAV reset mechanism for this scenario. | Possible solutions are:1) The CF-END frame is sent in the non-HT duplicate PPDU whose the TXVECTOR parameter CH\_BANDWIDTH is set to the maximum bandwidth that does not cover the punctured channel.This solution can't reset the NAV of all channels on which the preamble puncture HE MU PPDUs were sent.2) The CF-END frame is sent in the non-HT duplicate PPDU having a preamble puncturing. | Rejected –The commenter is incorrect in asserting that there is no NAV reset mechanism for this scenario; the existing NAV reset mechanism (in 10.6.6.6 (Channel Width selection for Control frames)) applies. However, the commenter may be pointing out that this existing mechanism is inadequate. The CRC took a strawpoll to determine support for a new mechanism along the lines proposed: “Do you support send CF-END frame in non-HT duplicate PPDU with inactive channels?” The result Y/N/A=8/12/9 indicates that there is insufficient support for pursuing changes in the direction proposed. |
| 24419 | RISON, Mark |  |  | [Resubmission of comment withdrawn on D5.0] We should not have "intra-BSS frame" or "inter-BSS frame". Everythign should be in terms of PPDUs | As it says in the comment | Revised – We remove the definition of intra-BSS frame and inter-BSS frame.In principle, we try to revise “intra-BSS frame” with “frame carried in an intra-BSS PPDU”.In principle, we try to revise “inter-BSS frame” with “frame carried in an inter-BSS PPDU”.TGax editor to make the changes shown in 11-20/0703r2 under all headings that include CID 24419 |

**Discussion:** *None.*

**Propose:**

***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…)

(#24419)

(..existing texts…)

***TGax editor:*** ***change 26.2.5 Truncation of TXOP as follows: (Track change on)***

**26.2.5 Truncation of TXOP**

An HE AP that maintains one NAV (see 10.3.2.1 (CS mechanism)) and receives a CF-End frame should
reset the NAV unless either of following conditions are met:

* The received CF-End frame is a frame carried in an inter-BSS PPDU and the most recently updated NAV was due to a frame carried in an intra-BSS PPDU(see 26.2.2 (Intra-BSS and inter-BSS PPDU classification)). (#24419)
* The received CF-End frame is a frame carried in an intra-BSS PPDU and the most recently updated NAV was due to a frame carried in an inter-BSS PPDU (see 26.2.2 (Intra-BSS and inter-BSS PPDU classification)). (#24419)

An HE STA that maintains two NAVs (see 26.2.4 (Updating two NAVs)) and receives a CF-End frame
should reset the basic NAV if the received CF-End frame is a frame carried in an inter-BSS PPDU and reset the intra-BSS NAV if the received CF-End frame is a frame carried in an intra-BSS PPDU. (#24419)

An HE STA that maintains two NAVs may reset both NAVs if the received CF-End frame is a frame carried in an intra-BSS PPDU and the basic NAV was updated due to a frame carried in a PPDU that cannot be identified as either inter-BSS PPDU or intra-BSS PPDU. (#24419)

**26.10.2.2 General operation with non-SRG OBSS PD level**

(..existing texts…)

If the frame is carried in an HE ER SU PPDU that is identified as an inter-BSS PPDU (where power of the L-STF/L-LTF symbols is boosted 3 dB), the received signal strength, which is measured from the L-STF or L-LTF fields of the PPDU and which is used to determine PHY-CCA.indication, shall be decreased by 3 dB to compensate for the power difference. (#24419)

(..existing texts…)

**26.10.2.3 General operation with SRG OBSS PD level**

(..existing texts…)

If the frame is carried in an HE ER SU PPDU that is identified as an inter-BSS PPDU (where power of the L-STF/L-LTF symbols is boosted 3 dB), the received signal strength, which is measured from the L-STF or L-LTF fields of the PPDU and which is used to determine PHY-CCA.indication, shall be decreased by 3 dB to compensate for the power difference when compared to the OBSS PD level. (#24419)

(..existing texts…)