IEEE P802.11
Wireless LANs

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| Comment resolutions for HE BSS operation in 6 GHz–part 2 |
| Date: 2019-06-01 |
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Abstract

This submission proposes resolutions for multiple comments related to TGax D4.0 with the following CIDs (6 CIDs):

* 20074, 20075, 20130, 20211, 21512, 21048

Revisions:

* Rev 0: Initial version of the document.
* Rev 1: Incorporated suggestions received during the presentation. No technical changes.

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

***Editing instructions formatted like this are intended to be copied into the TGax 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** | **Comment** | **Proposed Change** | **Resolution** |
| 20074 | Abhishek Patil | 429.50 | FILS Authentication scheme (12.12) dramatically cuts down the number of frames exchanges during authentication. In order to reduce mgmt frame overhead, make it mandatory for non-AP STAs operating in 6GHz to support FILS Authentication scheme. | As in comment | Rejected –This was discussed in the May F2F meeting and the group could not reach consensus on it. A STA can implement the feature if it wants to reap the benefits of it. |
| 20075 | Abhishek Patil | 429.64 | In addition to not transmitting (V)HT Cap/Op, the related MIB variables should also be set to false so that the condition to include these IEs in various mgmt frames formats is not met (Table 9-34, 96 and so on) | Mention that shall set dot11HTOption... and dot11VHTOptionImplemented to false. | Revised –This CID has been resolved in document 19/963r1 under CID 20456. The resolution is to remove the cases that mention that these MIB variables are set to false since HE STAs are VHT STAs. TGax editor to make the changes shown in 11-19/0963r1 under all headings that include CID 20456. |
| 20130 | Alfred Asterjadhi | 429.49 | HE STAs are the first 802.11 STAs to use the 6 GHz band. For which we can enforce respecting of TXOP limits. Ensure that a TXOP holder shall not exceed the TXOP limit specified for the BSS of which it is a member of when transmitting PPDUs in the 6 GHz band. | As in comment. | Rejected –This was discussed in the May F2F meeting and the group could not reach consensus on it. A device that is standards compliant will already be respecting the TXOP. |
| 20211 | GEORGE CHERIAN | 430.00 | 6GHz access: Add rules to MU EDCA access that will help AP to better manage the medium. For example, instead of starting the MU EDCA timer only for the AC for which an MPDU is sent in the HE TB PPDU, start the timer for all ACs (of course, with different values as in the draft) if the HE TB PPDU is sent by the STA irrespective of the AC of the MPDU that is carried in the HE TB PPDU | As in the comment. | Rejected –This was discussed earlier in the preceding meetings and the group could not reach consensus on it. The expectation is that a device will generally wait to be triggered by the AP, and if the AP behaves appropriately (i.e., schedules the STA frequently) then the STA will not contend on its own to send frames using EDCA. |
| 21512 | Yonggang Fang | 430.59 | Both HE SU PPDU and HE ER SU PPDU are supported in Beacon frame format. Suggest to add HE ER SU beacon as an optional for an HE AP in 6GHz as the HE ER beacon could help to improve the receiving reliability if there is a need. | As in the comment | Rejected –If an AP is having range issues then it should naturally move to the lower bands (2.4 GHz band or 5 GHz band) rather than sending frames in ER SU PPDU, which are longer. |
| 21048 | Matthew Fischer |  | Given that a new protocol might be defined for the 5.940 band, it would be good to have some way to disable EDCA access by Tgax devices in this band to allow most efficient use of this new spectrum. | Add a signaling mechanism that allows future devices to disable EDCA in Tgax devices operating in channels referenced to 5.940 GHz | Rejected –This is already achievable by using the baseline Quiet element. Any STA that receives a frame that contains a Quiet element does not access the medim during the quiet time periods. One thing that needs to be considered in the future amendments is to add exemptions for future devices to be exempt from these restrictions for the 6 Ghz band, since all 11ax STAs are restricted from accessing the medium during this period. Note that in this mode the STA cannot be triggered either by the AP.If an AP wants EDCA disabled and TB PPDU enabled then the AP uses the MU EDCA operation with AIFSN = 0 which disables the EDCA for the STAs so that they are triggered for a certain period of time as provided by the MUEDCAtimer[AC] as long as the STAs don’t get out of it by sending OMI Control with UL MU Disable bit set to 1. |

**Discussion: *None.***