### IEEE P802.11Wireless LANs

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| 11ax D5.0 MAC Comment Resolution for SM Power Save |
| Date: 2019-10-30 |
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Abstract

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

22119, 22338

Revisions:

* Rev 0: Initial version of the document.

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 D5.0 Draft. This introduction is not part of the adopted material.

***Editing instructions formatted like this are intended to be copied into the TGax D5.0 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** |
| 22119 | Liwen Chu | 295.23 | 11.2.6 | The terminating conditions are not complete, e.g. Trigger frame etc. | Change the conditions per the comment. | Rejected – The two conditions for HE are added to mirror the two legacy conditions.The conditions are limited to make sure that the implementation for SMPS will not become too complicated.   |
| 22338 | Mark RISON | 295.33 | 11.2.6 | " the broadcast identifier(s) intended for the STA" is not clear. There is only ever one broadcast identifier for any given STA | Change the cited text to " 0 if the AP with which the STA is associated is not in a multiple BSSID set, 2047 if the the AP with which the STA is associated is in a multiple BSSID set" | Revised – We check 11.2.6, and there can be multiple broadcast identifiers for different BSSs when multiple BSSID is used. We simply revise the language to align with the language used in 26.11.1.*Each parameter STA\_ID in the TXVECTOR identifies the STA or group of STAs that is the recipient of an RU in the HE MU PPDU transmitted with the TXVECTOR parameter UPLINK\_FLAG set to 0.**(..existing texts…)**If an RU is intended for one or more unassociated non-AP STAs, then the parameter STA\_ID forthat RU is set to 2045. If an RU is intended for no user, then the parameter STA\_IDfor that RU is set to 2046. If an RU is intended for an AP (i.e., the TXVECTOR parameter UPLINK\_FLAG is 1), then theparameter STA\_ID contains only one element that is set to the 11 LSBs of the AID of the non-AP STAtransmitting the PPDU. If an RU is intended for multiple STAs for MU-MIMO then multiple STAs identified by STA-IDs in the parameter STA\_IDs will use the same resource unit (see 26.5.2 (UL MU operation)).If an RU is intended for multiple associated STAs and carries a single A-MPDU then the parameterSTA\_IDis set as follows:**— For an AP with dot11MultiBSSIDImplemented equal to false, if the RU is intended for more thanone associated STA in the BSS that is not a recipient of an individually addressed RU, the parameterSTA\_IDis set to 0.— For an AP with dot11MultiBSSIDImplemented equal to true, if the RU is intended for more than oneassociated STA in any of its BSSs that is not a recipient of an individually addressed RU, the parameter STA\_ID is set to 0 for transmitted BSSID or to the value of the BSSID Index field corresponding to that BSS (see 9.4.2.73 (Multiple BSSID-Index element)) for a nontransmitted BSSID. Thenumber of such elements shall not exceed the maximum number of BSSs of the multiple BSSID set.— For an AP with dot11MultiBSSIDImplemented equal to true, if the RU is intended for more than one associated STA on any of its BSSs, the parameter STA\_ID is set to 2047.*TGax editor to make the changes shown in 11-19/1814r0 under all headings that include CID 22338 |

**Discussion:** *None.*

**Propose:** Revised for CID 22338 per discussion and editing instructions in 11-19/1814r0.

***TGax editor: Change 11.2.6 SM power save as follows: (Track change on)***

(…existing texts …)

The STA can determine the end of the frame exchange sequence through any of the following:

* It receives an individually addressed frame addressed to another STA.
* It receives a frame with a TA that differs from the TA of the frame that started the TXOP.
* It receives a PPDU and classifies the PPDU as inter-BSS PPDU (see 26.2.2 (Intra-BSS and interBSS PPDU classification))
* It receives an HE MU PPDU where the RXVECTOR parameter BSS\_COLOR is the BSS color of
the BSS with which the STA is associated, the RXVECTOR parameter does not have any STA\_ID of an RU that identifies the STA as the recipient or one of the recipients of the RU (see 26.11.1 (STA\_ID))(#22338), and the BSS Color Disabled subfield in the most recently received HE Operation element from the AP to which the STA is associated is 0.
* The CS mechanism (see 10.3.2.1 (CS mechanism)) indicates that the medium is idle at the TxPIFS
slot boundary (defined in 10.3.7 (DCF timing relations)).