IEEE P802.11
Wireless LANs

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| Comment resolutions for 27.7.5 |
| Date: 2018-09-01 |
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Abstract

This submission proposes resolutions for multiple comments related to TGax D3.0 with the following CIDs (1 CIDs):

* 15103

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 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** |
| 15103 | Abhishek Patil | 329.51 | The rules for soliciting an UL are specified in 27.5.3 and don't need to be repeated in this note | Delete the first two sentences from the note leaving behind the sentence on RA-RU and reference to 27.14.2 | Revised –Disagree in principle with the comment. The intention of notes is to provide guidance to the reader for finding the respective subclauses where certain behaviors are defined. This note falls under this category. Proposed resolution is to simplify the wording so that it is easier to read.TGax editor to make the changes shown in 11-18/1470r0 under all headings that include CID 15103 |

**Discussion: *None.***

* Power save(#11955) operation during TWT SPs

The following rules apply to TWT SPs for both broadcast TWT schedules and individual TWT agreements where the TWT SP of a broadcast TWT is uniquely identified by the <broadcast TWT ID, MAC address of TWT scheduling AP> tuple and the TWT SP of an individual TWT is uniquely identified by the <TWT flow identifier, MAC address of TWT requesting STA, MAC address of TWT responding STA> triple.(#12539)

A TWT requesting STA or a TWT scheduled STA that is not in PS mode and that transmits a frame with the Power Management subfield set to 1 during a TWT SP shall remain in the awake state until the AdjustedMinimumTWTWakeDuration time has elapsed from the TWT SP start time or until a TWT SP termination event is detected, whichever occurs first for that particular TWT SP.(#12539)

A TWT requesting STA or a TWT scheduled STA in PS mode that is in the awake state for a TWT SP may transition to the doze state after AdjustedMinimumTWTWakeDuration time has elapsed from the TWT SP start time even if it has previously transmitted a PS-Poll frame or U-APSD trigger frame(#Ed) and has not yet received the expected frames from the AP in response.(#12539)

When a TWT SP termination event is detected within a TWT SP by a STA in PS mode that is participating in the TWT SP, the STA may transition to the doze state without waiting for the expiration of the AdjustedMinimumTWTWakeDuration time as described in 10.43.1 (TWT Overview), even if it has previously transmitted a PS-Poll frame or U-APSD trigger frame(#Ed) and has not yet received the expected frames from the AP in response.

(#13793)A TWT requesting STA or a TWT scheduled STA shall classify any of the following events as a TWT SP termination event:

* The successful exchange of a TWT Information frame with the TWT responding STA or the TWT scheduling AP (see 27.7.4 (Use of TWT Information frames)).(#13793)
* The transmission by the TWT requesting STA or TWT scheduled STA of an acknowledgment(#11208) in response to an individually addressed QoS Data or QoS Null frame(#11353) sent by the TWT responding STA or TWT scheduling AP, respectively, that had the EOSP subfield equal to 1.
* The transmission by the TWT requesting STA or TWT scheduled STA of an acknowledgment(#11208) in response to an individually addressed frame that is neither a QoS Data frame nor a QoS Null frame, sent by the TWT responding STA or TWT scheduling AP, respectively, with the More Data field equal to 0(#11353).
* The reception of an individually addressed or broadcast QoS Data or QoS Null frame sent by the TWT responding STA or TWT scheduling AP, that does not solicit an immediate response and with the EOSP subfield equal to 1.(#11353)
* The reception of an individually addressed frame that is neither a QoS Data frame nor a QoS Null frame, sent by the TWT responding STA or TWT scheduling AP, that does not solicit an immediate response and with the More Data field equal to 0.(#11353)
* The reception of a Trigger frame sent by the TWT responding STA or TWT scheduling AP that has the More TF field equal to 0 and is not intended for the TWT requesting STA or TWT scheduled STA provided that the TWT requesting STA or TWT scheduled STA is either awake for an announced trigger-enabled TWT SP but did not transmit an indication that it is in the awake state to the TWT responding STA or TWT scheduling AP or is awake for an unannounced trigger-enabled TWT SP.(#11854, #13927)

The classification of a More Data field equal to 0 in an Ack, BlockAck and Multi-STA BlockAck frame as an event that terminates a TWT SP is only possible when both STAs have indicated support of transmitting or receiving the frame with a nonzero More Data subfield, which is indicated in the More Data Ack subfield of the QoS Info field of frames they transmit (see 11.2.2 (Power management in a non-DMG infrastructure network)).

NOTE 1—A STA participating in multiple TWT SPs which overlap in time stays in the awake state until the latest AdjustedMinimumTWTWakeDuration time of all of the TWT SPs expires, except that a TWT SP(#11353) termination event causes all of the overlapping TWT SPs to terminate.

**TGax Editor: *Change the paragraph below of this subclause as follows (#CID 15103):***

(#11854, #13927)NOTE 2—A Trigger frame is addressed to theSTA when the Trigger frame contains the AID of the STA in one of its Per User Info fields (see 27.5.3 (UL MU operation)), and has in its TA field either the MAC address of its associated AP or the(#11036, #13794) transmitted BSSID (see 27.5.3.2.3 (Allowed settings of the Trigger frame fields and TRS Control subfield)). Otherwise, the Trigger frame is not addressed tothe STA. If the Trigger frame contains one or more RA-RUs(#11033) for which the STA can gain access according to 27.5.5 (UL OFDMA-based random access (UORA)) then the STA can follow the rules defined in 27.14.2 (Power save with UORA) to determine an early TWT SP termination event.*(#15103)*