IEEE P802.11
Wireless LANs

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| LB275 CR for TWT operation |
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Abstract

This submission proposes resolutions of comments received from TGbe comment collection LB275 based on TGbe D4.0.

19161 19453 19464 19860 19956 19963 20085 (7 CIDs)

Revisions:

* Rev 0: Initial version of the document.
1. **Introduction**

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 TGbe Draft. The introduction and the explanation of the proposed changes are not part of the adopted material.

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

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

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| **CID** | **Clause** | **Page** | **Comment** | **Proposed Change** | **Resolution** |
| 19161 | 35.3.24.1 | 0.00 | The content here is not about an MLD with TWT feature but about an EHT TWT STA (more general). | Move the content to 35.1. Or clarify that this is a general description on TWT STA and not limited to MLO. | Revised-Agree with the comment partially. 35.1 is not good place to accommodate this content since it doesn't involve the technical description.TGbe editor, move 35.3.24.1 (general) to after 35.19 (EHT link adaptation using ELA Control subfield) and rename it to 35.20 (EHT TWT operation). Moreover, rename 35.3.24 (TWT operation) in P578L24 to 35.3.24 (Multi-link device TWT operation) |
| 19453 | 35.3.24.2 | 578.42 | The current explanation can lead to a misunderstanding that the STA transmitting the TWT Request frame is the TWT requesting STA. Please clarify that the TWT requesting STA is the STA on the Link where the TWT agreement is established. Similar clarifications are needed regarding the TWT responding STA as well. | As in comment | Rejected-The definition of the TWT requesting STA and the TWT responding STA is the same as baseline in REVme D3.0 as shown below in P128L40:*STA that transmits a TWT element with the TWT Request subfield equal to 1 is a TWT requesting STAor TWT scheduled STA. Otherwise, it is a TWT responding STA or TWT scheduling STA.* |
| 19464 | 35.3.24.2 | 615.46 | the start time of a R-TWT SP is based on TSF [10:25], while the start time of quiet interval is base on TBTT. They may mismatch with each other. So the text "shall start at the same time as the corresponding R-TWT SP" is not accurate. | change "shall start at the same time as the corresponding R-TWT SP" to "shall overlap with the start time of the corresponding R-TWT SP". | Accepted- |
| 19860 | 35.3.24.2.1 | 578.58 | The note is covered by the first paragraph. | Remove this note | Accepted- |
| 19956 | 35.3.24.2.2 | 579.23 | aligned TWT negotiation and request are only defined for individual TWT. For completeness, please extend and generalize the procedure for broadcast/R-TWT schedule as well. | as in comment. | Rejected- Aligned TWT for Broadcast is described in 35.3.24.3 (Broadcast TWT operation). Further extension is not needed. |
| 19963 | 35.3.24.3 | 580.22 | The behavior of the non-AP MLD in regard to Link ID Bitmap Present subfield in the Control field of the TWT element is not currently described and needs to be clarified. | as in comment. | Rejected-The description of Link ID Bitmap Present subfield is provided in 9.4.2.198 (TWT element) and the normative behavior of Link ID Bitmap subfield is provided in 35.3.24.2 (Individual TWT agreements). Further clarification is not needed. |
| 20085 | 35.3.24.4 | 581.01 | What if the intended STA on the intended link transitions from doze state to awake state later than the rescheduled TWT start time indicated in the TWT information frame? How does the AP decide the rescheduled TWT start time of an intended STA without considering the STA's power state swithching delay? Low-end device may have longer transition delay than high-end device. In that case, the intended STA indicated by TWT information may not transition to awake state in the reschedued TWT start time and may miss some frames from the AP. | Describe how to reschedule the next TWT of the intended STA considering MLD's switching delay. | Rejected-The current text "as soon as possible" leaves the description on how to reschedule the next TWT to implementation. At the client side, the intended STA will wake up itself earlier so as to transition to awake state at the time that is aligned with the rescheduled TWT start time by considering its switch delay. At the AP side, AP could decide the rescheduled TWT start time by taking a few factors into account, including transition delay, such that the client has enough time to wake up, and this implementation specific. |