IEEE P802.11
Wireless LANs

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| CC36 Resolution for CID 5882 |
| Date: March 24, 2022 |
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 Abstract

This submission proposes resolutions for following 1 CID received for TGbe CC36:

5882

**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 TGbe Draft. This introduction is 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 802.11 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.***

**PART A: Signaling length of Common Info field and STA Info field**

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| --- | --- | --- | --- | --- | --- | --- |
| **CID** | **Commenter** | **Clause** | **Pg/Ln** | **Comment** | **Proposed Change** | **Resolution** |
| 5882 | Liangxiao Xin | 9.4.2.199 | 298.34 | Need extra parameter setting for R-TWT setup, whether there is quiet elment protection, whether R-TWT member STA is allowed to contend channel outside R-TWT SP. | suggest to use all the values of the broadcast TWT recommendation subfield 4~7 for restricted TWT. | **Revised**Agree with the commenter. In 11ax, “A TWT scheduled STA should not transmit frames to the TWT scheduling AP outside of broadcast TWTSPs.” However, it is not nominal behavior for a member R-TWT scheduled STA since it is expected to transmit outside R-TWT SPs and ends its TXOP before the start of R-TWT SPs. It is better for a R-TWT scheduled STA to indicate whether it will transmit outside the R-TWT SPs. **TGbe editor, please incorporate changes as shown in 11-22/0536r0 tagged 5882** |

**Discussion**

A r-TWT scheduling AP should have different schedule for a member r-TWT scheduled STA during negotiated r-TWT SPs depending on whether the member r-TWT scheduled STA is allowed to transmit frames outside the negotiated r-TWT SPs. For example, if the member r-TWT scheduled STA does not contend the channel outside the r-TWT SP, then the member r-TWT scheduled STA can only finish its UL transmission within the negotiated r-TWT SPs. The r-TWT scheduling AP should ensure those UL transmissions can be done within the negotiated r-TWT SPs. Otherwise, the r-TWT scheduling AP may not worry about whether the member r-TWT scheduled STA can finish its UL transmission within the negotiated r-TWT SPs or not.

***TGbe editor: The baseline for this document is 11be D1.5***

**9.4.2.199 TWT element**

***TGbe editor: please update Figure 9-770 as below***

 B0 B1 ~~B0~~ B2 B3 B7 B8 B15

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Restricted TWT Traffic Info Present | Restricted TWT Schedule Full | Transmission allowance outside r-TWT | Broadcast TWT ID | Broadcast TWT Persistence |

 Bits: 1 1 ~~3~~1 5 8

**Figure 9-770—Broadcast TWT Info subfield format(#6414)(#2920)(#5882)**

(#5882)Transmission allowance outside r-TWT subfield is set to 1 to indicate that the r-TWT scheduled STA is allowed to contend the channel and transmit frames outside the r-TWT SPs if the Negotiation Type subfield of the TWT element is equal to 3 and the Broadcast TWT Recommendation field is equal to 4; Otherwise it is set to 0 to indicate that the r-TWT scheduled STA is not recommended to contend the channel and transmit frames outside the r-TWT SPs if the Negotiation Type subfield of the TWT element is equal to 3 and the Broadcast TWT Recommendation field is equal to 4 . The field is reserved and set to 0 if neither the Negotiation Type subfield of the TWT element is equal to 3 nor the Broadcast TWT Recommendation field is equal to 4.

* + - 1. **Rules for TWT scheduled STA**

A TWT scheduled STA that receives a broadcast TWT element in a Beacon frame shall follow the rules defined in this subclause to interact with the TWT scheduling AP.

A TWT scheduled STA should not transmit frames to the TWT scheduling AP outside of broadcast TWT SPs and should not transmit frames that are not contained within HE TB PPDUs to the TWT scheduling AP within trigger-enabled broadcast TWT SPs, except that

* The STA can transmit frames within negotiated individual TWT SPs as defined in 26.8.2 (Individual TWT agreements).
* (#5882)The member r-TWT scheduled STA may transmit frames outside negotiated restricted TWT SPs as defined in 35.9.5 (Traffic delivery)

NOTE—The TWT scheduled STA decides which frames to transmit within or outside a TWT SP and while it is recommended that the TWT scheduled STA not transmit using EDCA within or outside TWT SPs, the TWT scheduled STA might still do so. If the STA decides to transmit then the STA might contend for accessing the medium as defined in 10.23.2 (HCF contention based channel access (EDCA)) and in 26.2.7 (EDCA operation using MU EDCA parameters).

**35.9.2.2 The setup procedure(#2920)**

***TGbe editor: please add the below text to the end of the subclause***

(#5882)When a r-TWT scheduled STA negotiates the membership of a r-TWT with the r-TWT scheduling AP, it shall set the Transmission allowance outside r-TWT subfield to 1 in the TWT request frame if it requests to transmit frames outside the negotiated r-TWT SPs in addition to the negotiated r-TWT SPs, Otherwise, it shall set the Transmission allowance outside r-TWT subfield to 0.

(#5882)The r-TWT scheduling AP shall set the Transmission allowance outside r-TWT subfield in a TWT response frame that indicates Accept TWT to the same value as the Transmission allowance outside r-TWT subfield in the corresponding TWT request frame.

**35.9.5 Traffic delivery(#4775)**

***TGbe editor: please add the below text to the end of the subclause***

(#5882)A member r-TWT scheduled STA may transmit frames outside the negotiated r-TWT SPs if the Transmission allowance outside R-TWT subfield is set to 1 in the corresponding TWT response frame. Otherwise, the member r-TWT scheduled STA should not transmit frames outside the negotiated r-TWT SPs.