IEEE P802.11  
Wireless LANs

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| CR for rTWT TID Selection Rules | | | | |
| Date: March 18, 2022 | | | | |
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Abstract

This submission proposes resolutions for following CIDs received for TGbe CC36:

5662

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.***

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| **CID** | **Commenter** | **Page** | **Clause** | **Comment** | **Proposed Change** | **Resolution** |
| 5662 | Julien Sevin | 297.65 | 35.6.1 | The terms "Low Latency traffic" is not defined clearly. The traffic characteristics should be explicitly specified (in terms of data rate, latency, jitter, Packet delivery ratio) in order that each station applies the same strategy for the same traffic. In particular, which entity decides which traffic is a low latency traffic or not. | Define an announcement protocol for announcing clearly at each station the constraints that a traffic should be fulfilled to be considered as low latency | Revised-  Agree in principle with the comment. AP can announce a set of TIDs as low latency TIDs, STAs can only select from the announced set of TIDs when requesting to join an rTWT agreement.  TGbe editor:  Please implement changes as shown in this document tagged as 5662. |

**Discussion**: 802.11 defines a tool (QoS Map element) for the AP to map different types of traffic (i.e., different QoS requirement) to different TIDs. From AP’s perspective, different TIDs mean different latency requirement. Hence, the AP can indicate some of the TIDs to be latency sensitive TID for each rTWT agreement. STAs can only select from the announced set of TIDs when requesting to join an rTWT agreement. The benefit is that, STAs cannot abuse the rTWT SP to transmit the traffic that is not latency sensitive. Note that in the current rTWT design, the STA can indicate all TIDs to be rTWT TIDs during the rTWT setup procedure.

***TGbe editor: Please note baselines are REVme D1.0 and 11be D1.4***

**35.8.2.2 The setup procedure**

An r-TWT agreement is established using the same procedure used to set up a broadcast TWT agreement as described in 26.8.3 (Broadcast TWT operation) except that the TWT setup frames contain a broadcast TWT element that includes a Restricted TWT Parameter Set field as described in 9.4.2.199 (TWT element).

An r-TWT scheduling AP is an EHT AP that supports r-TWT operation and sets the Restricted TWT Support subfield in transmitted EHT Capabilities elements to 1.

An r-TWT scheduled STA is a non-AP EHT STA that supports r-TWT operation and sets the Restricted TWT Support subfield in transmitted EHT Capabilities elements to 1.

When included in an individually addressed TWT Setup frame transmitted by an r-TWT scheduling AP or rTWT scheduled STA, the Restricted TWT Traffic Info Present subfield of the Broadcast TWT Info field shall be set to 1.

(#4782)An r-TWT scheduling AP that includes a Restricted TWT Parameter Set field in a broadcast TWT element shall set the Restricted TWT Traffic Info Present subfield of the Restricted TWT Parameter Set field to 0 if the Negotiation Type subfield of the TWT element is equal to 2 and the r-TWT scheduling AP does not intend to limit the selection of r-TWT TIDs; otherwise, the r-TWT scheduling AP shall set the Restricted TWT Traffic Info Present subfield of the Restricted TWT Parameter Set field to 1.

The r-TWT scheduled STA shall indicate in the Restricted TWT DL TID Bitmap and Restricted TWT UL TID Bitmap subfields only the subset of the TIDs that are announced in the Restricted TWT Traffic Info subfield of the Restricted TWT Parameter Set field with the Negotiation Type subfield of the TWT element set to 2, if the Restricted TWT Traffic Info subfield is present in the TWT element.

(#5954)The r-TWT scheduling AP should indicate in the Restricted TWT DL TID Bitmap and Restricted TWT UL TID Bitmap subfields only the TIDs that are mapped to the link on which the r-TWT membership is being set up (see 35.3.7.1 (TID-to-link mapping)).

(#5954)The r-TWT scheduled STA should indicate in the Restricted TWT DL TID Bitmap and Restricted TWT UL TID Bitmap subfields only the TIDs that are mapped to the link on which the r-TWT membership is being set up (see 35.3.7.1 (TID-to-link mapping)).

(#4767)(#4775)The TID(s) that are specified inthe Restricted TWT DL TID Bitmap subfield or Restricted TWT UL TID Bitmap subfield with the corresponding DL or UL TID Bitmap Valid subfield set to 1 in a TWT Response frame that indicates Accept TWT are referred to as r-TWT DL TID(s) or r-TWT UL TID(s), and collectively as r-TWT TID(s), in the following subclauses.

**Straw Poll: Do you support to incorporate the proposed draft text in this document 11-22/0514r0 to the next revision of TGbe Draft?**

**Result: Yes/No/Abstain**