**IEEE P802.11
Wireless LANs**

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| LB271 CR for R-TWT - Part 1 |
| **Date**: March 10, 2023 |
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 **Abstract**

This submission proposes resolutions for following **33** CIDs received for TGbe LB271:

**9.4.2.199: (17 CIDs)**

17169, 17579, 17285, 17582, 17583, 17286, 15908, 17584, 16133, 16473, 17585, 15803, 15804, 17586, 17587, 17588, 17589

**35.8: (16 CIDs)**

15671, 16138, 15830, 16061, 15422, 15672, 15485, 16062, 17079, 16063, 17080, 17081, 17082, 15846, 15831, 16165

**Revisions:**

* Rev 0: Initial version of the document.
* Rev 1: Minor editorial changes based on offline feedback.

***TGbe editor: The baseline for this document is P802.11beD3.0***

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.***

**CID Set 1**

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| --- | --- | --- | --- | --- | --- | --- |
| **CID** | **Commenter** | **Clause** | **Pg/Ln** | **Comment** | **Proposed Change** | **Resolution** |
| 17579 | Brian Hart | 9.4.2.199 | 243.51 | The term "Restricted TWT Parameter Set field" is used widely but when I search for the definition of that term in clause 9 of the pdf, I achieve zero hits. | 1) Explicitly define this term. Guessing, after Fig 9-766 write something like "A Broadcast TWT Parameter Set field that contains a Restricted TWT Traffic Info subfield is called a Restricted TWT Parameter Set field". 2) Or, if there is a definition of this already, make sure it is findable via a reasonable search function. | **Revised**Agree in principle. The text is revised based on suggestion.**TGbe editor, please make the changes tagged by CID #17579 in 23/0364r1.** |
| 17285 | Hanqing Lou | 9.4.2.199 | 244.30 | Change "Restricted TWT Parameter Set" to "restricted TWT Parameter Set". Note, in line 28, we defined "restricted TWT Parameter Set". There are other places using "Restricted TWT Parameter Set". Please correct them too. | Please see Comment | **Revised**The definition of Restricted TWT Parameter Set is editorially fixed (proper capitalization).**TGbe editor, please make the changes tagged by CID #17285 in 23/0364r1.** |
| 17582 | Brian Hart | 9.4.2.199 | 244.61 | Probably unintendedly ambiguous antecedent (It => Restricted TWT Traffic Info field) | "Try The Restricted TWT Traffic Info Present subfield is reserved ..." | **Revised**The text is revised based on suggestion.**TGbe editor, please make the changes tagged by CID #17582 in 23/0364r1.** |
| 17583 | Brian Hart | 9.4.2.199 | 244.65 | Missing article | Try "with its Neg Type subfield ..." | **Revised**Article “the” is added to Negotiation Type subfield as identified by the commenter. **TGbe editor, please make the changes tagged by CID #17583 in 23/0364r1.** |
| 17584 | Brian Hart | 9.4.2.199 | 245.13 | Wrong number. We don't say "does not have any friend"; we say "does not have any friends" | Try "does not have any member STAs" | **Revised**Agree in principle. The sentence is revised.**TGbe editor, please make the changes tagged by CID #17584 in 23/0364r1.** |
| 16133 | SunHee Baek | 9.4.2.199 | 245.27 | The terms both "nontransmitting AP" and "transmitting AP" aren't official terms. "nontransmitting AP" is changed to "AP corresponding to the nontransmitted BSSID" and "transmitting AP" is changed to "AP corresponding to the transmitted BSSID". | As in the comment | **Revised**Agree in principle. The sentence is revised.**TGbe editor, please make the changes tagged by CID #16133 in 23/0364r1.** |
| 16473 | Arik Klein | 9.4.2.199 | 245.27 | Please replace the term "nontransmitting AP" with "AP corresponding to nontransmitted BSSID within a multiple BSSID set" | As in comment | **Revised**Agree in principle. The sentence is revised with the same resolution as #16133**TGbe editor, please make the changes tagged by CID #16133 in 23/0364r1.** |
| 17585 | Brian Hart | 9.4.2.199 | 245.28 | Unclear subject. Reads like " transmitting AP " or " the same multiple BSSID set or co-hosted BSSID set". Also unintendedly ambiguous antecedent for "It" at P245L28. | Try "and the advertised R-TWT schedule is active ...". With this change, the antecedent for the next "It" works too. | **Revised**Agree in principle. The sentence is revised.**TGbe editor, please make the changes tagged by CID #17585 in 23/0364r1.** |
| 15803 | Muhammad Kumail Haider | 9.4.2.199 | 0.00 | In table 9-339a, for value 2, the sentence "It is also an active R-TWT schedule" is redundant as it is stated at the start "indicates an active R-TWT schedule". | Please remove the redundant sentence | **Revised**Agree in principle. The sentence is revised.**TGbe editor, please make the changes tagged by CID #15803 in 23/0364r1.** |
| 15804 | Muhammad Kumail Haider | 9.4.2.199 | 245.57 | "Link Bitmap subfield" -> "Link ID Bitmap subfield" at multiple places in this paragraph. Also suggest to replace "link associated with link ID i" to "link corresponding to link ID i" | as in comment | **Revised**Agree in principle. The sentence is revised as suggested by the comment.**TGbe editor, please make the changes tagged by CID #15804 in 23/0364r1.** |
| 17586 | Brian Hart | 9.4.2.199 | 245.60 | "associated" means something special in 802.11 and is generally avoided when that menaing is not applicable. | Change "associated with" to "identified by" 2x in this para | **Revised**Agree in principle. The sentence is revised as suggested by the comment.**TGbe editor, please make the changes tagged by CID #17586 in 23/0364r1.** |
| 17588 | Brian Hart | 9.4.2.199 | 246.29 | "the R-TWT membership" but this membership has not previously been mentioned | Try "an R-TWT membership is being setup". Ditto L33. | **Rejected**This is a specific membership setup, for which signaling is being done (and UL/DL TID bitmaps are being specified). Using “an” here does not tie it to a specific membership.  |
| 17587 | Brian Hart | 9.4.2.199 | 246.29 | Spurious comma | Try "... is being setup is identified ... Ditto L35 | **Revised**Agree with commenter and revised.**TGbe editor, please make the changes tagged by CID #17587 in 23/0364r1.** |
| 17589 | Brian Hart | 9.4.2.199 | 246.42 | Since we have two antecedent bitmaps "the bitmap" is not correct. Also missing articles x2 | Try "either bitmap", 2x in this para. Also "\*a\* latency sensitive traffic stream", 2x in this para | **Revised**The text is revised based on suggestion.**TGbe editor, please make the changes tagged by CID #17589 in 23/0364r1.** |
| 17169 | Dana Ciochina | 9.4.2.199 | 244.18 | "During an R-TWT SP, the AP and member R-TWT scheduled STAs prioritize their transmission of QoS Data frames that are latency sensitive traffic (see 35.8 (Restricted TWT (R-TWT)))." The behaviour is vague and incomplete as latency sensitive traffic is not defined. | describe the recommendation more specifically or reference 35.8.6 and complete definition of latency sensitive traffic | **Rejected**The specification of latency sensitive traffic for an R-TWT membership is further clarified in the broader R-TWT clause 35.8, which is duly referenced in this sentence. For clarification to the commenter, it refers to traffic belonging to R-TWT UL/DL TIDs, as is specified in 35.8.2.2 |
| 17286 | Hanqing Lou | 9.4.2.199 | 245.01 | Currently, the Restricted TWT Schedule Info field is valid only when the Negotiation Type subfield is 2. Thus when an AP and a STA neogotiate a TWT, the information such as TWT full can not be carried. However, carrying Restricted TWT Schedule Info field in negotiation is helpful for the STA understand the TWT schedule. | change from "Negotiation Type subfield set to 2" to "Negotiation Type subfield set to 2 or 3" | **Rejected**The purpose of Restricted TWT Schedule Info field (as defined in Table 9-339a) is to provide schedule specific information (Idle/Active/Full) in schedule announcements. This information can be obtained by STAs via schedule advertisements before membership negotiation. Further, this field is not applicable in frames transmitted by non-AP STAs. Therefore it is not useful to include this field during schedule negotiations. |
| 15908 | Xiaofei Wang | 9.4.2.199 | 245.12 | What is the purpose of indicting an idle R-TWT schedule? Does it imply that STA should NOT request membership or it should request membership? It is not clear from the text. Please clarify | please clarify the desired behavior | **Rejected**A STA may request membership in an idle schedule. The normative behavior is defined in 35.8.5.1e. Specifically, R-TWT scheduled STAs are required to end their TXOP before the start time of only the schedules which are advertised as Active. Schedules advertised as idle are excluded from this requirement. |

**9.4.2.199 TWT element**

***TGbe editor: Please modify the 1st paragraph, below Table 9-339 on Page 244 in 11beD3.0 as follows:***

(#17579,17285)A Broadcast TWT Parameter Set field that has the Broadcast TWT Recommendation field value equal to 4 is referred to as a Restricted TWT Parameter Set field.

***TGbe editor: Please modify the last two paragraphs on Page 244 in 11beD3.0 as follows:***

The Restricted TWT Traffic Info Present subfield of the Restricted TWT Parameter Set field is set to 1 if the Restricted TWT Traffic Info field is present; and set to 0 otherwise. (17582)~~It~~ The Restricted TWT Traffic Info Present field is reserved for non-EHT STAs.

The Restricted TWT Schedule Info subfield is set as described in Table 9-339a (Restricted TWT Schedule Info field values) when included in a Restricted TWT Parameter Set field carried in a TWT element with (#17583)the Negotiation Type subfield set to 2, and the TWT element is transmitted by an EHT AP with dot11RestrictedTWTOptionImplemented set to true; otherwise, the subfield is reserved.

***TGbe editor: Please modify Table 9-339a as shown below:***

**Table 9-339a---Restricted TWT Schedule Info subfield values**

|  |  |
| --- | --- |
| **Restricted TWT Schedule Info subfield value** | **Description when included in a Restricted TWT Parameter Set field** |
| 0 | The corresponding R-TWT schedule does not have any member STAs(#17584) or the schedule is suspended for all the member STAs.Such an R-TWT schedule is referred to as an idle R-TWT schedule. |
| 1 | The corresponding R-TWT schedule has at least one member STA for which the schedule is not suspended.Such an R-TWT schedule is referred as an active R-TWT schedule. |
| 2 | Indicates an active R-TWT schedule for which the R-TWT scheduling AP is unlikely to accept a request from a STA in the BSS to establish a new membership.Such an R-TWT schedule is referred to as a full R-TWT schedule (i.e., the AP might not have sufficient resources within this schedule for accepting new memberships). ~~It is also an active R-TWT schedule~~.(#15803) |
| 3 | (#16133, 17585, 15803)Indicates that the advertised R-TWT schedule is active and is for an AP corresponding to a nontransmitted BSSID that is a member of the same multiple BSSID set or co-hosted BSSID set as the AP transmitting the Restricted TWT Schedule Info subfield.  |

***TGbe editor: Please modify the last paragraph on Page 245 in 11beD3.0 as follows:***

(#15804,17586)The Link ID Bitmap subfield indicates the links to which the TWT element sent by a STA affiliated with an MLD applies (see 35.3.24.2 (Individual TWT agreements)). A value of 1 in bit position *i* of the Link ID Bitmap subfield indicates that the TWT element sent by a STA affiliated with an MLD applies to the link ~~associated with~~ identified by ~~the~~ link ID *i*. A value of 0 in bit position *i* of the Link ID Bitmap subfield indicates that the TWT element sent by a STA affiliated with an MLD does not apply to the link ~~associated with~~ identified by ~~the~~ link ID *i*.

***TGbe editor: Please modify the last three paragraphs in this subclause (on page 246 in 11beD3.0) as follows:***

(#17587,17588)The DL TID Bitmap Valid subfield is set to 1 to indicate that the Restricted TWT DL TID Bitmap field is valid. The DL TID Bitmap Valid subfield is set to 0 to indicate that the DL traffic of all the TIDs mapped in DL to the link ~~in~~ on which ~~the~~ an R-TWT membership is being setup~~,~~ is identified as latency sensitive traffic, and the Restricted TWT DL TID Bitmap field is reserved.

(#17587,17588)The UL TID Bitmap Valid subfield is set to 1 to indicate that the Restricted TWT UL TID Bitmap field is valid. The UL TID Bitmap Valid subfield is set to 0 to indicate that the UL traffic of all the TIDs mapped in UL to the link ~~in~~ on which ~~the~~ an R-TWT membership is being setup~~,~~ is identified as latency sensitive traffic, and the Restricted TWT UL TID Bitmap field is reserved.

(#17589)The Restricted TWT DL TID Bitmap and Restricted TWT UL TID Bitmap subfields specify the TID(s) that are identified by the R-TWT scheduling AP or the R-TWT scheduled STA as latency sensitive traffic streams in the downlink and uplink direction, respectively. A value of 1 at bit position *k* in ~~the~~ either bitmap indicates that TID *k* is classified as latency sensitive traffic stream for the direction the bitmap corresponds to. A value of 0 at bit position *k* in ~~the~~ either bitmap indicates that TID *k* is not classified as latency sensitive traffic stream for the direction the bitmap corresponds to.

**CID Set 2**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **CID** | **Commenter** | **Clause** | **Pg/Ln** | **Comment** | **Proposed Change** | **Resolution** |
| 16138 | SunHee Baek | 35.8.1 | 617.46 | The term "the BSS" is ambiguous to identify which BSS is. R-TWT operation enables in a BSS since R-TWT SP(s) isn't considered in the other BSS in the EHT. | Please replace "Restricted TWT operation described in this subclause enables the STAs in the BSS" to "Restricted TWT operation described in this subclause enables the STAs in a BSS" | **Revised**The text is revised based on suggestion.**TGbe editor, please make the changes tagged by CID #16138 in 23/0364r1.** |
| 15830 | Muhammad Kumail Haider | 35.8.2.2 | 618.15 | The definitions for R-TWT scheduling AP and R-TWT scheduled STA should be moved to the general subclause (35.8.1) | as in comment | **Revised**The text is revised based on suggestion.**TGbe editor, please make the changes tagged by CID #15830 in 23/0364r1.** |
| 16061 | Binita Gupta | 35.8.1 | 617.56 | Clarify that it is a non-AP EHT STA that has the dot11RestrictedTWTOptionImplemented equal to true. | Modify to "A non-AP EHT STA that has the dot11RestrictedTWTOptionImplemented equal to true establishes membership ..." | **Revised**The text is revised based on suggestion.**TGbe editor, please make the changes tagged by CID #16061 in 23/0364r1.** |
| 15485 | Xiandong Dong | 35.8.2.2 | 618.43 | "TWT Response frame" should be "TWT Setup frame with TWT Request subfile set to 0". | As in comment | **Revised**“TWT Response frame” is replaced with TWT response for brevity, as there are several occurrences of “TWT response” usage in baseline 802.11ax (refer to 10.47 for example usage) and is shorter.**TGbe editor, please make the changes tagged by CID #15485 in 23/0364r1.** |
| 16062 | Binita Gupta | 35.8.2.2 | 618.42 | Don't need the part "in the subsequent text and the following subclauses." | Remove the text as per comment. | **Revised**The text is revised based on suggestion.**TGbe editor, please make the changes tagged by CID #16062 in 23/0364r1.** |
| 17079 | Mark RISON | 35.8.2.2 | 618.44 | ", in the subsequent text and thefollowing subclauses" is unclear and unnecessary | Delete the cited text | **Revised**The text is revised based on suggestion.**TGbe editor, please make the changes tagged by CID #17079 in 23/0364r1.** |
| 16063 | Binita Gupta | 35.8.2.2 | 618.48 | Indicate that the R-TWT TID(s) are for a corresponding R-TWT membership in the requirement. | Modify to "When a TID-to-link mapping update results in a mapping where none of the R-TWT TID(s) for an R-TWT membership are mapped onto the link...". | **Revised**The text is revised based on suggestion.**TGbe editor, please make the changes tagged by CID #16063 in 23/0364r1.** |
| 17080 | Mark RISON | 35.8.2.2 | 618.47 | "When a TID-to-link mapping update results in a mapping where none of the R-TWT TID(s) are mappedonto the link on which the R-TWT membership is set up any more" not clear | Delete "any more" | **Revised**The text is revised based on suggestion.**TGbe editor, please make the changes tagged by CID #17080 in 23/0364r1.** |
| 17081 | Mark RISON | 35.8.2.2 | 618.50 | "torn-down" should have a space not a hyphen | As it says in the comment | **Revised**The text is revised based on suggestion.**TGbe editor, please make the changes tagged by CID #17081 in 23/0364r1.** |
| 17082 | Mark RISON | 35.8.2.2 | 618.52 | "signal QoS Characteristics element" missing article | As it says in the comment | **Revised**The text is revised based on suggestion.**TGbe editor, please make the changes tagged by CID #17082 in 23/0364r1.** |
| 15846 | Muhammad Kumail Haider | 35.8.2.2 | 618.53 | 'A non-AP EHT STA that is also' is redundant, because every R-TWT scheduled STA is a non-AP EHT STA by definition. | Remove 'A non-AP EHT STA that is also' in the sentence. | **Revised**The text is revised based on suggestion.**TGbe editor, please make the changes tagged by CID #15846 in 23/0364r1.** |
| 15831 | Muhammad Kumail Haider | 35.8.2.2 | 618.54 | "delivered over R-TWT SPs..." over->during | suggest to replace over with during | **Revised**The text is revised based on suggestion.**TGbe editor, please make the changes tagged by CID #15831 in 23/0364r1.** |
| 16165 | Charlie Pettersson | 35.8.2.2 | 618.59 | What is an "R-TWT schedule setup"? Only two mentions of it in the amendment and no description. | Add a description of what the R-TWT schedule setup is. | **Revised**R-TWT schedule setup is replaced with R-TWT membership setup, which is specified in 35.8.2. For clarification, it refers to the procedure of establishing membership in an R-TWT schedule.**TGbe editor, please make the changes tagged by CID #16165 in 23/0364r1.** |
| 15671 | Osama Aboulmagd | 35.8.1 | 617.46 | "Restricted TWT operation described in this subclause enables the STAs in the BSS to use enhanced mediumaccess protection and resource reservation mechanisms for delivery of latency sensitive traffic." What is enhanced access protection? And how it achieves low delay performance? | At least there should be a discussion what is this enhanced protection? How it works? And how it helps achieve delay sensitive. Is it the Quiet period? Is this really an enhanced protection? It seems to me it is a brute force approach like killing a fly with a hammer. | **Rejected**This aspect has been discussed extensively in previous rounds and several rules have been added in 35.8 to provision these aspects. The enhanced medium access protection is provided by the specification for R-TWT supporting STAs to end their TXOP at R-TWT SP start boundary, which prioritizes medium access for traffic belonging to R-TWT TIDs. Overlapping quiet periods may also be scheduled to provide medium access protection.  |
| 15672 | Osama Aboulmagd | 35.8.2.2 | 618.34 | I may have missed it but I don't see TWT Traffic Info filed in the TWT element | Please make it clear | **Rejected**Restricted TWT Traffic Info field is optionally present in the TWT element, as specified in 9.4.2.199 in 802.11beD3.0 Pg246: “The Restricted TWT Traffic Info field is present in a Restricted TWT Parameter Set field when the Restricted TWT Traffic Info Present subfield of the Broadcast TWT Info subfield is set to 1. Its format is defined in Figure 9-770a (Restricted TWT Traffic Info field format). |
| 15422 | John Wullert | 35.8.2.2 | 618.20 | The text refers to a "broadcast TWT element", saying that a R-TWT scheduled STA sends one to or receives one from an AP. While the AP can broadcast this, the non-AP STA will not broadcast to an AP. Also, the element in question is referred to as "TWT element" (see 9.4.2.199). | Remove the word "broadcast" | **Rejected**“Broadcast” here refers to the TWT element carrying Broadcast TWT Parameter Set fields and not the fact that it is included in a broadcast frame. Please refer to baseline usage in 802.11ax. Example from Table 26-7 “NOTE 4—MMPDUs that contain a broadcast TWT element generated by a TWT scheduled STA can be(Re)Association Request frames and can be TWT Setup frames with TWT Request field equal to 1.”  |

**35.8 Restricted TWT (R-TWT)**

**35.8.1 General**

***TGbe editor: Please modify this subclause on Page 617 in 11beD3.0 as follows:***

Restricted TWT operation described in this subclause enables the STAs in ~~the~~ a(#16138) BSS to use enhanced medium access protection and resource reservation mechanisms for delivery of latency sensitive traffic.

An EHT STA with dot11RestrictedTWTOptionImplemented equal to true shall set the Restricted TWT Support subfield in its transmitted EHT Capabilities element to 1 and shall set the Broadcast TWT Support subfield in its transmitted HE Capabilities element to 1; otherwise, the EHT STA shall set the Restricted TWT Support subfield in its transmitted EHT Capabilities element to 0.

(#15830)An R-TWT scheduling AP is an EHT AP with dot11TWTOptionActivated equal to true that sets the Restricted TWT Support subfield in the transmitted EHT Capabilities element to 1.

(#15830)An R-TWT scheduled STA is a non-AP EHT STA that sets the Restricted TWT Support subfield in the transmitted EHT Capabilities element to 1 and sends to or receives from an R-TWT scheduling AP a broadcast TWT element carrying one or more Restricted TWT Parameter Set field(s).

(#15830,16061)An R-TWT scheduled STA ~~non-AP EHT STA~~ establishes membership for one or more R-TWT schedules with its associated EHT AP by following the rules defined in 26.8.3 (Broadcast TWT operation) with the additional rules defined in 35.8.2 (R-TWT membership setup). An ~~EHT AP that has dot11RestrictedTWTOptionImplemented equal to true~~ R-TWT scheduling AP may announce one or more R-TWT SPs as described in 35.8.4 (R-TWT SPs announcement). EHT STAs that support R-TWT operation follow the rules as defined in 26.8.3 (Broadcast TWT operation) and the additional rules and restrictions that are defined in the subclauses below.

**35.8.2.2 The setup procedure**

***TGbe editor: Please modify this subclause on Page 618 in 11beD3.0 as follows:***

An R-TWT membership is established using the same procedure used to set up a broadcast TWT membership as described in 26.8.3 (Broadcast TWT operation) except that the broadcast TWT element(s) carried in the TWT Setup frame (9.6.24.8 (TWT Setup frame format)) include one or more Restricted TWT Parameter Set fields as described in 9.4.2.199 (TWT element).

(#15830)~~An R-TWT scheduling AP is an EHT AP with dot11TWTOptionActivated equal to true that sets the Restricted TWT Support subfield in the transmitted EHT Capabilities element to 1.~~

(#15830)~~An R-TWT scheduled STA is a non-AP EHT STA that sets the Restricted TWT Support subfield in the transmitted EHT Capabilities element to 1 and sends to or receives from an R-TWT scheduling AP a broadcast TWT element carrying one or more Restricted TWT Parameter Set field(s).~~

An R-TWT scheduling AP should set the Trigger field to 1 in the Restricted TWT Parameter Set field(s) it transmits.

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

The R-TWT scheduling AP and the R-TWT scheduled STA should set the Restricted TWT Traffic Info field (see 9.4.2.199 (TWT element)) to identify the TID(s) that carry latency sensitive traffic in DL and UL for the R-TWT membership being set up. The TID(s) indicated as latency sensitive traffic in DL and UL in the Restricted TWT Traffic Info field shall be within the set of TIDs that are mapped in DL and UL, respectively, to the link on which the R-TWT membership is being setup (see 35.3.7.1 (TID-to-link mapping)).

The TID(s) that are specified in the Restricted TWT Traffic Info field of the TWT element (as described in 9.4.2.199 (TWT element)) in a TWT ~~R~~response ~~frame~~(#15485) 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 subsequent text and the following subclauses~~(#16062,17079).

When a TID-to-link mapping update results in a mapping where none of the R-TWT TID(s) (#16063)for an R-TWT membership are mapped onto the link on which the R-TWT membership is set up ~~any more~~(#17080), the corresponding R-TWT membership is considered as ~~torn-down~~ torn down(#17081).

(#15846)~~A non-AP EHT STA that is also a~~An R-TWT scheduled STA may signal (#17082)a QoS Characteristics element for a traffic flow intended to be delivered (#15831)~~over~~during R-TWT SPs of an R-TWT schedule in an SCS Request frame to the R-TWT scheduling AP as per procedures defined in 35.17 (EHT SCS procedure).

If an R-TWT scheduling AP has received QoS Characteristics element(s) from an R-TWT scheduled STA whose TID and Direction fields match an R-TWT TID and its specified direction for an R-TWT (#16165)~~schedule~~ membership setup, the R-TWT scheduling AP may use those parameters in QoS Characteristics element(s) as guidance for R-TWT (#16165)~~schedule~~ membership setup.