**IEEE P802.11  
Wireless LANs**

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| LB266 CR for 35.3.7.1.3  (Negotiation of TID-to-link mapping) | | | | |
| Date: 2022-10-31 | | | | |
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Abstract

This submission proposes resolutions for multiple comments related to TGbe 3.0 with the following CIDs (57 CIDs):

* 15957, 16011, 17825, 17730, 16462, 17731, 17732, 17733, 17734, 17735, ~~16209~~, 17736, ~~17948~~, 17947, 15821, 15822, 15374, 15609, 17738, 15375, 17737, 16398, 15382, 17776, 17777, 16399, 17778, 17779, 18106, 18107, 17780, 18108, ~~16490~~, ~~15054~~, 16095, 15115, 16587, 15596, 18133, 16004, 18134, 18135, 18136, 16491, 15523, 15608, 16588, 17337, 16005, 16325, 16492, 16493, 17338, 15117, 16589, 16494, 16495

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 subsequent 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** | **Page** | **Comment** | **Proposed Change** | **Resolution** |
| --- | --- | --- | --- | --- |
| 15957 | 292.06 | Why is Default Link Mapping subfield is needed in the TID-To-Link Mapping element? A default mapping does not need to be negotiated. There is not requirement in 35.3.7 on when this subfield gets used. | Remove the Default Link Mapping subfield. | Rejected-  A non-AP MLD can request to switch to the default link mapping.  Also, an AP MLD can response to a non-AP MLD the default link mapping as a recommendation. |
| 17825 | 292.55 | The Default Link Mapping subfiled is not needed. Because when a MLD want to negotiate a default mapping, it just need to send a T2LM Teardown frame. | remore the Default Link Mapping subfield | Rejected-  A non-AP MLD may want a TID-to-link mapping for DL and default mapping for UL.  This is supported by only using the TID-to-link mapping negotiation. |
| 16011 | 292.43 | For an advertised TID-to-link mapping for link disable (clause 35.3.7.1.7), the TID-to-link mapping element needs to include a 'Link Mapping of TID n" for each TID value (0 to 7). Each of this element maps the TID to same subset of links which excludes the link(s) being disabled. The signaling can be optimized for this link disable use case to minimize impact on Beacon size for advertised TID-to-link mapping. | Optimize TID-to-Link Mapping element for link disable use case as per comment. | Rejected-  In the 11-21/19, similar optimizations were discussed.  In a conclusion, current TID-To-Link Mapping element has been designed with more flexibility. |
| 17730 | 292.65 | Probably unintendedly ambiguous antecedent (It => "the downlink") | Try "The subfield is set to ...". Ditto P293L1, P293L7, P293L21 | Revised-  Agree in principle.  TGbe editor:  Change from  “It is set to”  to  “The subfield is set to”  , at P292 L65, P293 L1, P293 L7, |
| 17734 | 293.30 | Probably unintendedly ambiguous antecedent (It => "T2LM") | Try "otherwise the field is not present ..." | Accepted |
| 16462 | 293.03 | TID-to-Link mapping for P2P link is not included in current standard. Add the TID-to-link mapping for P2P link.  Use reserved value 3 in the Direction subfield of TID-To-Link Control field to indicate the TID-To-Link Mapping element provides TID-to-link mapping information for frames transmitted on the TDLS direct link(s) | As in comment | Rejected-  The multi-link P2P is not defined in current 11be spec.  For example, only single-link TDLS is allowed. |
| 17731 | 293.16 | n is not italicized | Change n to italics, x2 in this sentence | Accepted |
| 17732 | 293.20 | It is always helpful when bitmap fields are identified as such by name, but this is not the case for the Link Mapping Presence Indicator field | Change name to "Link Mapping Presence Bitmap" and search/replace everywhere | Revised-  Agree in principle.  TGbe editor:  Replace  “Link Mapping Presence Indicator” with  “Link Mapping Presence Bitmap” throughout TGbe Draft 3.2. |
| 17733 | 293.20 | There are actually multiple Link Mapping Of TID n fields, so "field" is incorrect. Also "which" in place of "whether" would be more precise and informative | Try "The Link Mapping Presence Indicator subfield indicates \*which\* Link Mapping Of TID n \*fields are\* present in the TID-To-Link Mapping element (i.e., the subfield identifies the TID(s) for which the mapping is provided in the element). | Revised-  Agree in principle.  TGbe editor:  Change from “The Link Mapping Presence Indicator subfield indicates whether the Link Mapping Of TID n field is present in the TID-To-Link Mapping element (i.e., it identifies the TID(s) for which the mapping is provided in the element).”  to  “The Link Mapping Presence Bitmap subfield indicates which the Link Mapping Of TID n fields are present in the TID-To-Link Mapping element (i.e., the subfield identifies the TID(s) for which the mapping is provided in the element).” |
| 17735 | 293.30 | Missing article | Try "The absence of \*the\* Mapping Switch Time field ..." | Revised-  Agree in principle.  TGbe editor:  Change from  “The absence of Mapping Switch Time field in the TID-To-Link Mapping element”  to  “The absence of the Mapping Switch Time field in the TID-To-Link Mapping element”. |
| ~~16209~~ | ~~293.34~~ | ~~the unit for the Mapping Switch Time field is TU, it is OK when it points to a future TBTT on the reporting link, but when it needs to point to a future TBTT on another link, the accuracy of 1 TU is not enough. Please fix this issue.~~ | ~~As in the comment.~~ | ~~Rejected-~~  ~~1 TU accuracy is enough.~~  ~~The commenter should provide technical reason why 1 TU accuracy is a problem.~~ |
| ~~17948~~ | ~~293.34~~ | ~~Since the Mapping Switch Time field has units of TU, and it may need to indicate the time based on a TBTT of another link which may not allign with the TU boundary of the current link, the timing miss match can be up to 1ms~~ | ~~add an optional field to indicate the exact time within that 1ms when the Mapping Switch Time is based on a TBTT of another link. The commenter will bring a contribution to solve this issue.~~ | ~~Rejected-~~  ~~1 TU accuracy is enough.~~  ~~The commenter should provide technical reason why 1 TU accuracy is a problem.~~ |
| 17736 | 293.34 | Comma before "using" would improve readability | Try ", using" | Accepted |
| 17947 | 293.39 | What's the starting point for calculate this duration? It's currently missing. | Please clarify | Revised-  Agree in principle.  TGbe editor to make the changes shown in 11-23/0825r3 under all headings that include CID 17947. |
| The Expected Duration field indicates the duration for which the proposed TID-to-link mapping is expected to be effective in units of TUs , starting from the new mapping's establishment time indicated in the Mapping Switch Time field, (#CID 17947) when the Mapping Switch Time field is present, and the remaining duration for which the proposed TID-to-link mapping is expected to be effective in units of TUs ,starting from the frame carrying the TID-To-Link Mapping element having the Expected Duration field, (#CID 17947) when the Mapping Switch Time field is not present. The Expected Duration field is present if the TID-To-Link Mapping ele­ment is carried in a Beacon or a Probe Response frame transmitted by an AP affiliated with an AP MLD, and is not present otherwise. | | | | |
| 15821 | 293.40 | "...the remaining duration for which the proposed TID-to-link mapping is expected to be effective in units of TUs when the Mapping Switch Time field is not present." Here the word "proposed" is not correct because the mapping is already established and in effect. Please replace proposed with "established" or "indicated" | as in comment | Revised-  Agree in principle.    TGbe editor:  Change from  “the remaining duration for which the proposed TID-to-link mapping”  to  “the remaining duration for which the established TID-to-link mapping”. |
| 15822 | 293.40 | "The Link Mapping Of TID n field..": In this paragraph, the phrase "for the direction as specified in the Direction subfield" should be included for the bit set to 0 case as well. | as in comment | Revised-  Agree in principle.  TGbe editor to make the changes shown in 11-23/0825r3 under all headings that include CID 15822. |
| A value of 1 in bit position *i* (where ) of the Link Mapping Of TID *n* field indicates that TID *n* is mapped to the link associated with the link ID *i* for the direction as specified in the Direction subfield. A value of 0 in bit position *i* indicates that the TID *n* is not mapped to the link associated with the link ID *i* for the direction as specified in the Direction subfield (#CID 15822). | | | | |
| 15374 | 293.47 | Figure 9-1002ao shows that the Link Mapping of TID n field can occupy 0, 1 or 2 octets. The text describing the field indicates when it would be absent, which covers the length of 0 octets. A bitmap covering 15 positions would require two octects. When can the field be one octet long? | Expand text to explain how the length of the field is determined when the field is present or correct Figure 9-1002ao. | Rejected-  The length of the Link Mapping Of TID n field is determined by the Link Mapping Size subfield.  The Link Mapping Size subfield is set to 1 if the length of the Link Mapping Of TID n field is 1 octet and is set to 0 if the length of the Link Mapping Of TID n field is 2 octets. |
| 15609 | 293.47 | Please provide the rule for setting the last bit of the Link Mapping Of TID n field. (the last bit is not the bit corresponding to the link ID) | As in comment | Rejected-  Spec already mentioned that i is ranged from 0 to 14. |
| 15375 | 293.53 | The final sentence refers to "this field" but the description covers multiple fields | Revise sentence to say "When the Default Link Mapping subfield is set to 1, these fields are not present." | Revised-  Agree in principle.  TGbe editor to make the changes shown in 11-23/0825r3 under all headings that include CID 15375, 17737. |
| 17737 | 293.54 | Sicne there are up to 8 Link Mapping Of TID n fields, "this field" doesn't sit well. | For greater clarity, try "When the Default Link Mapping subfield is set to 1, no Link Mapping Of TID n field is present. | Revised-  Agree in principle.  TGbe editor to make the changes shown in 11-23/0825r3 under all headings that include CID 15375, 17737. |
| 17738 | 293.50 | i can reach 14 if and only if Link Mapping Size indicates 2 octets, else it only reaches i = 7 | Try "(where i = 0, 1, .. 7 if Link Mapping Size is set to 1, and i = 0, 1, .. 14 otherwise)" | Revised-  Agree in principle.  TGbe editor to make the changes shown in 11-23/0825r3 under all headings that include CID 17738. |
| The Link Mapping Of TID *n* field (where *n* = 0, 1, …, 7) indicates the link(s) on which frames belonging to TID *n* are allowed to be sent (i.e., carries a bitmap of the links to which the TID *n* is mapped to). A value of 1 in bit position *i* (where *n* = 0, 1, …, 7 if the Link Mapping Size subfield is set to 1, and (#CID 17738) *n* = 0, 1, …, 14 otherwise (#CID 17738)) of the Link Mapping Of TID *n* field indicates that TID *n* is mapped to the link associated with the link ID *i* for the direction as specified in the Direction subfield. A value of 0 in bit position i indicates that the TID *n* is not mapped to the link associated with the link ID *i*. When the Default Link Mapping subfield is set to 1, ~~this~~ no Link Mapping Of TID *n* (#CID 15375, 17737) field is ~~not~~ (#CID 15375, 17737) present. | | | | |
| 16398 | 318.38 | Whether the TID-to-link Mapping Request is mandatory, prefered to change, or strongly prefered to change for the TID-to-link Mapping requester is unclear. | Suggest to further specify the types of TID-to-link Mapping Request to increase the efficiency of the TID-to-link mapping negotiation | Rejected-  The comment fails to identify a specific issue to be addressed. It fails to identify changes in sufficient detail so that the specific wording of the changes that will satisfy the commenter can be determined. |
| 15382 | 319.01 | Specification of the Dialog Token should include reference to definition and follow the format commonly used in base spec. | Replace the description of the Dialog Token with "The Dialog Token field is defined in 9.4.1.12 (Dialog Token field). It is set to a nonzero value chosen by the MLD sending the TID-To-Link Mapping Request frame to identify the request/report transaction." | Rejected-  Current description is enough clear. Also, the same style is also used in the base spec. |
| 17776 | 319.06 | Probably unintendedly ambiguous antecedent (It => "9.4.2.314") | "When the TID-To-Link Mapping field" | Revised-  Agree in principle.  TGbe editor:  Change from  “When it contains two TID-To-Link Mapping elements”  to  “When the TID-To-Link Mapping field contains two TID-To-Link Mapping elements” |
| 17777 | 319.07 | Awkward English | Streamline via "the Direction subfield in one TID-To-Link Mapping element is set to 0 and the Direction subfield in the other [element] is set to 1." Ditto P319L57 | Revised-  Agree in principle.  TGbe editor:  Change from  “the Direction subfield in the other of the TID-To-Link Mapping elements”  to  “the Direction subfield in the other element” at Page 319 Line 8 and Page 319 Line 58. |
| 16399 | 319.11 | Currently specified TID-To-Link Mapping Response frame contains a field of status code, which only includes DENIED\_TID\_TO\_LINK\_MAPPING and SUCCESS for the response to the request. If the response MLD rejects the TID-TO-LINK mapping request sended by the request MLD only the status code of DENIED\_TID\_TO\_LINK\_MAPPING can be used, and the request MLD is still unable to know what TID-to-link mapping can be potentially accepted by the response MLD. The limited types of TID-To-Link Mapping Response and status codes would reduce the efficiency of the TID-to-link mapping negotiation | As in comment. | Rejected-  Status code can be set to 134 (PREFERRED\_TID\_TO\_LINK\_MAPPING\_SUGGESTED). |
| 17778 | 319.13 | Unclear if "to accept or reject" binds with "is sent" or "T2LM Req frame" | Try adding commas, as "The TID-To-Link Mapping Response frame is sent, by a STA affiliated with an MLD in response to a TID-To-Link Mapping Request frame, to accept or reject a proposed TID-to-link mapping, or sent by a STA affiliated with an MLD to suggest a preferred TID-to-link mapping." | Accepted |
| 17779 | 319.43 | This para is related to procedure since it relates to two different frames sent at different times. | Copy to clause 35 and make normative. Change the text here into a note with a xref to the normative text. Ditto P321L32, P322L37, P324L31 ... apparently this is a widespread problem! | Rejected-  Since this paragraph also describes how to encode the field, clause 9 can be a right place.  Also, similar styles sentence is used in the base spec. |
| 18106 | 319.51 | The T2LM IE is carried in a frame to request, update or suggest. The number of IEs (0, 1 or 2) depend on various conditions. Therefore the last part of the sentence is incorrect (in saying that 0, 1 or 2 are carried for indicating preferred mapping). | Delete "in order to suggest a preferred mapping" from the 1st sentence | Revised-  One or two T2LM IEs carried in the TID-To-Link Mapping Response frame is for suggesting a preferred mapping.  Agree in principle.  TGbe editor to make the changes shown in 11-23/0825r3 under all headings that include CID 18106. |
| 17780 | 319.53 | Probably unintendedly ambiguous antecedent (It => “ a preferred mapping”) | Try “The TID-To-Link Mapping field contains … Otherwise, the TID-To-Link Mapping field does not ... When the TID-To-Link Mapping field contai“s " | Revised-  Agree in principle.  TGbe editor to make the changes shown in 11-23/0825r3 under all headings that include CID 17780. |
| 18107 | 319.52 | The text in the 2nd & 3rd sentences is confusing and doesn’t clearly state when 0 or 1 or 2 T2LM Ies are carried in the frame. | Organizing the two sentences as two bullets – one bullet for accept or reject case (where the T2LM IE is not carried) and another bullet for suggested preferred mapping (where 1 or 2 Ies will be carried). Clarify the case of 1 vs 2 (based on direction field) under the ‘suggested preferred mapping’ bullet. | Revised-  Agree in principle.  TGbe editor to make the changes shown in 11-23/0825r3 under all headings that include CID 18107, 18108. |
| 18108 | 319.55 | Clarify that the 0 T2LM IE case applies to Status Code value of 0 or 133 | As in comment | Revised-  Agree in principle.  TGbe editor to make the changes shown in 11-23/0825r3 under all headings that include CID 18107, 18108. |
| The TID-To-Link Mapping field contains zero, one, or two TID-To-Link Mapping elements as specified in 9.4.2.314 (TID-To-Link Mapping element) ~~in order to suggest a preferred mapping~~(#CID 18106).   * ~~It~~ The TID-To-Link Mapping field (#CID 17780) contains one or two TID-To-Link Mapping elements if the Status Code is set to 134 (PREFERRED\_TID\_TO\_LINK\_MAPPING\_SUGGESTED).   + When it contains two TID-To-Link Mapping elements, the Direction subfield in one of the TID-To-Link Mapping elements is set to 0 (Downlink) and the Direction subfield in the other of the TID-To-Link Mapping elements is set to 1 (Uplink). (#CID 18107, 18108) * Otherwise, ~~it~~ the TID-To-Link Mapping field (#CID 17780) does not contain a TID-To-Link Mapping element. ~~When it contains two TID-To-Link Mapping elements, the Direction subfield in one of the TID-To-Link Mapping elements is set to 0 (Downlink) and the Direction subfield in the other of the TID-To-Link Mapping elements is set to 1 (Uplink).~~ (#CID 18107, 18108) | | | | |
| ~~16490~~ | ~~515.27~~ | ~~Advertising a TID-to-link mapping in the Beacon or Probe Response frame is not considered as a negotiated TID-to-link mapping since it is a mandatory mapping, as clearly defined in 35.3.7.1.7: "An AP MLD may advertise a \*mandatory TID-to-link mapping\* by including a TID-To-Link Mapping element in the Beacon and Probe Response frames that the APs affiliated with the AP MLD transmit." Please remove the following part from the sentence: "Advertise a TID-to-link mapping by including a TID-To-Link Mapping element in Beacon and Probe Response frames as defined in 35.3.7.1.7 (Advertised TID-to-link mapping in Beacon and Probe Response frames)."~~ | ~~The sentence should be revised as follows:" An AP MLD with dot11TIDtoLinkMappingActivated equal to true that initiates a TID-to-link mapping negotiation may send an individually addressed TID-to-link Mapping Request frame to a non-AP MLD"~~ | ~~Revised-~~  ~~Agree in principle.~~  ~~TGbe editor to make the changes shown in 11-23/0825r3 under all headings that include CID 16490.~~ |
| 16004 | 515.56 | The AP MLD can perform both actions as well, meaning it can Advertise TID-to-link mapping and also send individually addressed TID-to-link mapping request. Revise to indicate this. | Update to "An AP MLD with dot11TIDtoLinkMappingActivated equal to true that initiates a TID-to-link mapping negotiation may perform one or more of the following:" | Revised-  Agree in principle.  TGbe editor to make the changes shown in 11-23/0825r3 under all headings that include CID 16004. |
| 18133 | 515.52 | Either delete 'non-AP' on P515L50 or replace 'to a responding MLD' as "to its associated AP MLD" on L52. It seems the intention is the former hence delete 'non-AP' from P515L50. | As in comment | Revised-  Agree in principle.  TGbe editor to make the changes shown in 11-23/0825r3 under all headings that include CID 18133. |
| ~~18134~~ | ~~516.01~~ | ~~Clarify that the T2LM Response frame can be sent on any enabled link (subject to power-save state of the corresponding non-AP STA) - i.e., the response doesn't need to go on the same link as the link where the request frame was received (see ADDBA exchange in 35.3.8 as example).~~ | ~~As in comment~~ | ~~Revised-~~  ~~Agree in principle.~~  ~~TGbe editor to make the changes shown in 11-23/0825r3 under all headings that include CID 18134.~~ |
| After the multi-link (re)setup is successful and 4-way handshake is complete (if RSNA is required), to negotiate a new TID-to-link mapping, an initiating ~~non-AP~~ (#CID 16490, 16004, 18133) MLD with dot11TIDtoLinkMappingActivated equal to true shall send an individually addressed TID-to-link Mapping Request frame through an affiliated STA, on any enabled link, (#CID 18134) to a responding MLD that has indicated support of TID-to-link mapping negotiation.  ~~An AP MLD with dot11TIDtoLinkMappingActivated equal to true that initiates a TID-to-link mapping negotiation may perform one of the following:~~  ~~—Send an individually addressed TID-to-link Mapping Request frame to a non-AP MLD~~  ~~—Advertise a TID-to-link mapping by including a TID-To-Link Mapping element in Beacon and Probe Response frames as defined in 35.3.7.1.7 (Advertised TID-to-link mapping in Beacon and Probe Response frames).~~ (#CID 16490, 16004, 18133)  …  Upon receiving the individually addressed TID-to-link Mapping Request frame, the responding MLD shall send an individually addressed TID-to-link Mapping Response frame through an affiliated STA, on any enabled link, (#CID 18134) to the initiating MLD according to the following rules: | | | | |
| 15054 | 515.28 | For channels on different bands, the coverage may be much different. For example, the coverage of a channel in 2.4G band is much larger than it of a channel in 5G band. When an non-AP MLD moves out of the BSS of an 5G AP affiliated with the associated AP MLD, the non-AP MLD must remap some TIDs only mapped to the corresponding 5G link to a 2.4G link in order to guarantee the traffics QoS. | It is better to provide the AP MLD the cause of the TID-to-Link mapping negotiation to assistant the AP MLD to respond the request. | Rejeted-  The comment fails to identify a specific issue to be addressed. It fails to identify changes in sufficient detail so that the specific wording of the changes that will satisfy the commenter can be determined. |
| 16095 | 515.28 | In this subcluase, "TID-to-link" should be changed to "TID-to-Link" before Request/Response frame and element, for which there are some places | As in the comment | Revised-  Agree in principle.  TGbe editor:  Change from  “TID-to-link Mapping Negotiation Support subfield”  to  “TID-To-Link Mapping Negotiation Support subfield”  throughout TGbe Draft 3.2.  Change from  “TID-to-link Mapping element”  to  “TID-To-Link Mapping element” throughout TGbe Draft 3.2.  Change from  “TID-to-link Mapping Request frame”  to  “TID-To-Link Mapping Request frame”  throughout TGbe Draft 3.2.  Change from  “TID-to-link Mapping Response frame”  to  “TID-To-Link Mapping Response frame”  throughout TGbe Draft 3.2.  Change from  “TID-to-link Mapping Teardown frame”  to  “TID-To-Link Mapping Teardown frame”  throughout TGbe Draft 3.2. |
| 15115 | 515.30 | MLD Capabilities and Operations is a subfield (in the Common Info field of the Basic MLE) and not a field. | Please revise the sentence as follows: "An MLD that supports TID-to-link mapping negotiation has dot11TIDtoLinkMappingActivated equal to true and shall set to a nonzero value the TID-to-link Mapping Negotiation Support subfield in the MLD Capabilities and Operations \*subfield\* of the Basic Multi-Link element that it transmits." | Revised-  Agree in principle.  TGbe editor:  Change from  “MLD Capabilities and Operations field”  to  “MLD Capabilities and Operations subfield”  throughout TGbe Draft 3.2. |
| 16587 | 515.30 | MLD Capabilities and Operations is a subfield (in the Common Info field of the Basic MLE) and not a field. Please revise as suggested. | Please revise the sentence as follows:" An MLD that supports TID-to-link mapping negotiation has dot11TIDtoLinkMappingActivated equal to true and shall set to a nonzero value the TID-to-link Mapping Negotiation Support subfield in the MLD Capabilities and Operations \*subfield\* of the Basic Multi-Link element that it transmits." | Revised-  Agree in principle.  TGbe editor:  Change from  “MLD Capabilities and Operations field”  to  “MLD Capabilities and Operations subfield”  throughout TGbe Draft 3.2. |
| 15596 | 515.40 | the value 2 of TID-to-link Mapping Negotiation Support subfield is reserved and not definedï¼please use value 2 instead of 3 to define "each TID is mapped to the same or different link set" | change the "If the TID-to-link Mapping Negotiation Support subfield value received from a peer MLD is equal to 3," to " If the TID-to-link Mapping Negotiation Support subfield value received from a peer MLD is equal to 2", and make value 3 reserved | Rejected-  The comment fails to identify a specific issue to be addressed. It fails to identify changes in sufficient detail so that the specific wording of the changes that will satisfy the commenter can be determined. |
| 18135 | 516.08 | Clarify that T2LM IE is not included if the responding MLD accepts the requested mapping (i.e., Status Code is 0). | add to the end of the 1st bullet : '...Response frame "and does not include T2LM IE in the frame"' | Revised-  Agree in principle.  TGbe editor to make the changes shown in 11-23/0825r3 under all headings that include CID 18135. |
| 18136 | 516.10 | Clarify that T2LM IE is not included if the responding MLD rejects the requested mapping (i.e., Status Code is 133). | add before 'or' : "... and does not include T2LM IE in the frame" | Revised-  Agree in principle.  TGbe editor to make the changes shown in 11-23/0825r3 under all headings that include CID 18136. |
| 16491 | 516.13 | Need to change the normative behavior to "shall" in the following sentence, in order to assure that if Status Code of 134 is used, the responding MLD is required to include the preferred mapping: "When the Status Code in the TID-to-link Mapping Response frame is 134 (PREFERRED\_TID\_TO\_LINK\_MAPPING\_SUGGESTED), the responding MLD is suggesting a preferred mapping as indicated in the TID-to-link Mapping element included in the frame." | The sentence should be revised as follows: "When the Status Code in the TID-to-link Mapping Response frame is 134 (PREFERRED\_TID\_TO\_LINK\_MAPPING\_SUGGESTED), the responding MLD \*shall suggest\* a preferred mapping as indicated in the TID-to-link Mapping element included in the frame." | Revised-  Agree in principle.  TGbe editor to make the changes shown in 11-23/0825r3 under all headings that include CID 16491. |
| 16588 | 516.21 | Revise the following sentence for better wording: "An MLD shall not send an unsolicited TID-to-link Mapping Response frame that includes the TID-to-link Mapping element and sets the Status Code to either 0 (SUCCESS) or 133 (DENIED\_TID\_TO\_LINK\_MAPPING).", as suggested | The sentence should be revised as follows: "An MLD shall not send an unsolicited TID-to-link Mapping Response frame that includes the TID-to-link Mapping element and \*in which\* the Status Code is \*set\* to either 0 (SUCCESS) or 133 (DENIED\_TID\_TO\_LINK\_MAPPING)." | Revised-  Agree in principle.  TGbe editor to make the changes shown in 11-23/0825r3 under all headings that include CID 16588. |
| Upon receiving the individually addressed TID-to-link Mapping Request frame, the responding MLD shall send an individually addressed TID-to-link Mapping Response frame to the initiating MLD according to the following rules:   * If the responding MLD accepts the requested TID-to-link mapping in the TID-to-link Mapping element in the received TID-to-link Mapping Request frame, it shall set to 0 (SUCCESS) the Status Code in the TID-to-link Mapping Response frame and not include the TID-To-Link Mapping element in the frame (#CID 18135). * Otherwise, the responding MLD shall indicate rejection of the proposed TID-to-link mapping by ~~setting to~~ either:   + Setting to 133 (DENIED\_TID\_TO\_LINK\_MAPPING) the Status Code in the TID-to-link Mapping Response frame. The responding MLD shall not include the TID-To-Link Mapping element in the frame. (#CID 18136)   + Setting to 134 (PREFERRED\_TID\_TO\_LINK\_MAPPING\_SUGGESTED) the Status Code in the TID-to-link Mapping Response frame. ~~When the Status Code in the TID-to-link Mapping Response frame is 134 (PREFERRED\_TID\_TO\_LINK\_MAPPING\_SUGGESTED), t~~The responding MLD ~~is suggesting~~ shall include (#CID 16491) a preferred mapping ~~as indicated~~ in the TID-to-link Mapping element ~~included~~ in the frame.   An MLD may suggest a preferred TID-to-link mapping to a peer MLD by sending an unsolicited TID-to-link Mapping Response frame with the Dialog Token field set to 0 that includes the TID-to-link Mapping element and sets the Status Code to 134 (PREFERRED\_TID\_TO\_LINK\_MAPPING\_SUGGESTED). An MLD shall not send an unsolicited TID-to-link Mapping Response frame that includes the TID-to-link Mapping element and in which the Status Code is set ~~sets the Status Code~~ (#CID 16588) to either 0 (SUCCESS) or 133 (DENIED\_TID\_TO\_LINK\_MAPPING). | | | | |
| 15523 | 516.18 | Should the ‘unsolicited TID-to-link Mapping Response frame’ be an individually addressed frame? | Change to: sending an individually addressed unsolicited TID-to-link Mapping Response frame | Rejected-  The comment fails to identify a specific issue to be addressed. It fails to identify changes in sufficient detail so that the specific wording of the changes that will satisfy the commenter can be determined. |
| 15608 | 516.18 | It is necessary to clarify how to interpret the preferred link indicated for a TID that is missing from the TID-to-Link mapping element transmitted to indicate preferred TID-to-Link mapping. | As in comment | Rejeted-  The comment fails to identify a specific issue to be addressed. It fails to identify changes in sufficient detail so that the specific wording of the changes that will satisfy the commenter can be determined. |
| 17337 | 516.27 | All negotiations that are initiated are expected to be new. Unless we have other places we initiate old negotiations I would suggest to remove “new” in this context. | As in comment. | Revised-  Agree in principle.  Tgbe editor:  Change from  “a new TID-to-link mapping”  to  “a TID-to-link mapping”  throughout Tgbe Draft 3.2. |
| 16005 | 516.29 | Clarify what does it mean for the AP MLD to take into account traffic flows from the non-AP MLD when providing a preferred TID-to-link mapping or initiating a new TID-to-link mapping negotiation. Is this referring to R-TWT schedules and/or SCS streams which are setup for the non-AP MLD? | Clarify text as per comment | Rejected-  The comment fails to identify a specific issue to be addressed. It fails to identify changes in sufficient detail so that the specific wording of the changes that will satisfy the commenter can be determined. |
| 16325 | 516.35 | “a MLD” is not correct. | Please change as: “an MLD”. | Accepted |
| 16492 | 516.40 | Please remove the following part of the sentence “…except a non-AP MLD shall not tear down a negotiated TID-to-link mapping if the current TID-to-link mapping was established by an advertisement of TID-to-link mappi“g " since the advertisement of TID-to-link mapping in Beacon or Probe Response frame is not considered as a negotiation between AP MLD and non-AP MLD (but rather a mandatory mapping for all non-AP MLDs associated with the AP MLD, as stated in P518L57) | As in comment | Revised-  Agree in principle.  TGbe editor to make the changes shown in 11-23/0825r3 under all headings that include CID 16492. |
| When two MLDs have negotiated a TID-to-link mapping, either MLD may tear down the negotiated TID-to-link mapping by sending an individually addressed TID-To-Link Mapping Teardown frame~~, except a non-AP MLD shall not tear down a negotiated TID-to-link mapping if the current TID-to-link mapping was established by an advertisement of TID-to-link mapping~~ (#CID 16492).  At Pg 320 ln 5  In a Beacon frame when the (#17742)Per-Link Traffic Indication Bitmap n subfield corresponds to a non-AP MLD that is in the default mapping mode or has negotiated a TID-to-link mapping or is in the advertised TID-to-link mapping with an AP MLD and all TIDs are mapped to all the enabled links, a value of 1 in the bit position i in the bitmap indicates that the link with the link ID equal to i is recommended for retrieving buffered BU(s).  At Pg 546, ln 34  If a ML reconfiguration operation results in one or more links being added to the ML setup of a non-AP MLD, the non-AP MLD and the AP MLD shall operate with all the TIDs mapped to the newly added links until a new TID-to-link mapping is ~~negotiated~~ updated according to the procedure defined in 35.3.7.1 (TID-to-link mapping).  At Pg 549 ln 20  If a non-AP STA affiliated with a non-AP MLD is in active mode on a link with a set of TIDs mapped for DL transmission, its associated AP affiliated with the AP MLD shall transmit to the non-AP STA:  —MSDUs/A-MSDUs, if any, corresponding to that set of ~~negotiated~~ mapped TIDs for the non-AP MLD, and  —MMPDUs, if any, for the non-AP MLD or its affiliated non-AP STAs, subject to the rules defined in 35.3.14 (Multi-link device individually addressed Management frame delivery),  At Pg 551 ln 20  NOTE—If there is no successfully negotiated TID-to-link mapping or advertised TID-to-link mapping for a TID, then the TID is mapped to all setup links for DL and UL.  At Pg 574, ln 43  When a non-AP STA that is in PS mode and that is affiliated with a non-AP MLD operating with either a negotiated non-default TID-to-link mapping (see 35.3.7.2.3 (Negotiation of TID-to-link mapping)) or an advertised TID-to-link mapping (see 35.3.7.2.4 (Advertised TID-to-link mapping in Beacon and Probe Response frames)) receives an individually addressed MPDU from its associated AP with the More Data subfield set to 1 on a link (receiving link), then at least one of any non-AP STA (#16500)that is affiliated with the non-AP MLD, that is in PS mode and that is operating on the link (receiving link) or another link to which any of the TIDs that is mapped to the link (receiving link) is also mapped shall follow or continue following the procedures defined in 11.2.3.7 (Receive operation for STAs in PS mode) and 11.2.3.8 (Receive operation using APSD) and may send PS-Poll frames or UAPSD trigger frames, if needed, with any TID that is mapped to this operating link to retrieve the buffered BUs buffered at the AP MLD. | | | | |
| 16493 | 516.53 | Need to emphasize that t“e "most recent TID-to-link mapp”ng" is a successfully negotiated mapping, as suggested | Please revise the sentence as follow“: "If an MLD has failed to negotiate the TID-to-link mapping with a peer MLD, the most recent \*successfully negotiated\* TID-to-link mapping of all TID shall remain unchanged and val”d." | Rejected-  It is not just limited to the negotiated mapping.  It emphasizes that any TID-to-link mapping (if exists) remains unchanged and valid. |
| 17338 | 516.“3 | "shall remain unchanged and va”id"...for how long? | As in comment. | Revised-  Agree in principle.  TGbe editor to make the changes shown in 11-23/0825r3 under all headings that include CID 17338. |
| Once an MLD has successfully negotiated the TID-to-link mapping with a peer MLD, both the MLD and the peer MLD shall update uplink and/or downlink TID-to-link mapping information according to the negotiated TID-to-link mapping. In case TID-to-link mapping of a specific TID is missing in the negotiation, the most recent TID-to-link mapping of this TID shall remain unchanged and valid unless it is successfully updated according to the procedure defined in 35.3.7.1 (TID-to-link mapping) (#CID 17338). If an MLD has failed to negotiate the TID-to-link mapping with a peer MLD, the most recent TID-to-link mapping of all TID shall remain unchanged and valid unless it is successfully updated according to the procedure defined in 35.3.7.1 (TID-to-link mapping) (#CID 17338). | | | | |
| 15117 | 516.56 | Typo: Add "s" to "all TID" | Should be "all TIDs" | Accepted |
| 16589 | 516.56 | Typo: Add "s" to "all TID" | Should be "all TIDs" | Accepted |
| 16494 | 516.61 | Please remove the "Beacon frame or Probe Response frame" from the sentence "When an MLD has successfully negotiated with a peer MLD an uplink and/or downlink TID-to-link mapping in which the bit position i of the Link Mapping Of TID n field in the TID-to-link Mapping element in the (Re)Association Request frame, TID-To-Link Mapping Request frame, Beacon frame, or Probe Response frame is set to 0, TID n shall not be mapped to the link associated with the link ID i in the uplink and/or downlink based on the Direction subfield in the TID-To-Link Mapping element. " since the advertisement of TID-to-link mapping in Beacon or Probe Response frame is not considered as a negotiation between AP MLD and non-AP MLD (but rather a mandatory mapping for all non-AP MLDs associated with the AP MLD, as stated in P518L57) | The sentence should be revised as follows: "When an MLD has successfully negotiated with a peer MLD an uplink and/or downlink TID-to-link mapping in which the bit position i of the Link Mapping Of TID n field in the TID-to-link Mapping element in the (Re)Association Request frame \*or\* TID-To-Link Mapping Request frame, is set to 0, TID n shall not be mapped to the link associated with the link ID i in the uplink and/or downlink based on the Direction subfield in the TID-To-Link Mapping element. " | Revised-  Agree in principle.  TGbe editor to make the changes shown in 11-23/0825r3 under all headings that include CID 16494. |
| 16495 | 517.05 | Please remove the "Beacon frame or Probe Response frame" from the sentence "When an MLD has successfully negotiated with a peer MLD an uplink and/or downlink TID-to-link mapping in which the bit position i of the Link Mapping Of TID n field in the TID-to-link Mapping element in the (Re)Association Request frame, TID-To-Link Mapping Request frame, Beacon frame, or Probe Response frame is set to 1, the TID n shall be mapped to the link associated with the link ID i in the uplink and/or downlink based on the Direction subfield in the TID-To-Link Mapping element" since the advertisement of TID-to-link mapping in Beacon or Probe Response frame is not considered as a negotiation between AP MLD and non-AP MLD (but rather a mandatory mapping for all non-AP MLDs associated with the AP MLD, as stated in P518L57) | The sentence should be revised as follows: "When an MLD has successfully negotiated with a peer MLD an uplink and/or downlink TID-to-link mapping in which the bit position i of the Link Mapping Of TID n field in the TID-to-link Mapping element in the (Re)Association Request frame or TID-To-Link Mapping Request frame, is set to 1, the TID n shall be mapped to the link associated with the link ID i in the uplink and/or downlink based on the Direction subfield in the TID-To-Link Mapping element" | Revised-  Agree in principle.  TGbe editor to make the changes shown in 11-23/0825r3 under all headings that include CID 16495. |
| When an MLD has successfully negotiated with a peer MLD an uplink and/or downlink TID-to-link mapping in which the bit position *i* of the Link Mapping Of TID *n* field in the TID-to-link Mapping element in the (Re)Association Request frame~~,~~ or TID-To-Link Mapping Request frame~~, Beacon frame, or Probe Response frame~~ (#CID 16494, 16495) is set to 0, TID *n* shall not be mapped to the link associated with the link ID *i* in the uplink and/or downlink based on the Direction subfield in the TID-To-Link Mapping element.  When an MLD has successfully negotiated with a peer MLD an uplink and/or downlink TID-to-link mapping in which the bit position *i* of the Link Mapping Of TID *n* field in the TID-to-link Mapping element in the (Re)Association Request frame~~,~~ or TID-To-Link Mapping Request frame~~, Beacon frame, or Probe Response frame~~ (#CID 16494, 16495) is set to 1, the TID *n* shall be mapped to the link associated with the link ID *i* in the uplink and/or downlink based on the Direction subfield in the TID-To-Link Mapping element. | | | | |