IEEE P802.11  
Wireless LANs

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| LB 266 Resolution for CIDs in Quarantine – Part 1 | | | | |
| Date: November 2, 2022 | | | | |
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| Alfred Asterjadhi |  |  |  |  |
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Abstract

This submission proposes resolutions for the following CIDs that are currently in quarantine:

* **Po-Kai:** 15140, 15409, 15411, 15516, 15547, 15550, 15553, 15554, 16002, 16171, 16421, 16546, 16833, 16834, 17329, 17347, 17953, 18100, 18238, 18306, 18307
* **Rubayet:** 18205, 18254
* **Subir:** 15425, 15426, 15427, 15429, 15442, 16703, 16704
* **Vishnu:** 17989
* **Xiangxin:** 16312, 16334
* **Yanjun:** 15763, 15764, 17020, 17021, 17893, 17998, 18183, 18184, 15763, 15764, 17020, 17021, 17893, 17998, 18183, 18184
* **Jason:** 16013, 16210, 16502, 16506, 17827, 17853, 17946, 18144, 18145, 18146, 16013, 16210, 16502, 16506, 17827, 17853, 17946, 18144, 18145, 18146
* **Yunbo:** 15099, 15130, 15875, 15912, 16211, 16866, 16879, 16894, 16895, 17032, 17835, 17838,

**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** | **Clause** | **Page** | **Comment** | **Proposed Change** | **Resolution** |
| **Po-Kai** | | | | | | |
| 15140 | Po-Kai Huang | 35.3.2 | 480.12 | There has been discussions about what is the SA or DA in EAPOL key frame. | If needed, clarify with the following. For MLO, - EAPOL key data frame from AP MLD to non-AP MLD with To DS 0 and From DS 1 with SA field, then the value of the SA field is the AP MLD MAC address. - EAPOL key data frame from non-AP MLD to AP MLD with To DS 1 and From DS 0 with DA field, then the value of the DA field is the AP MLD MAC address. | REVISED This CID is discussed on April 10, 2023, but no straw poll is conducted yet.  Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 15409 | John Wullert | 35.3.14.1 | 545.22 | This clause provides multiple requirements detailing how an MLD with dot11QMFActivated equal to false handles sequencing, duplicate detection, etc. Nowhere in the specification are there similar descriptions of how an MLD with dot11QMFActivated equal to true performs these same actions | Add requirements for how MLDs with dot11QMFActivated equal to true handle sequence generation, duplicate detection, retries, etc. | REVISED This CID is discussed on May 4, 2023, but no straw poll is conducted yet.  Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 15411 | John Wullert | 35.3.14.2 | 547.25 | This statement says that only one bit of the Link ID bitmap subfield can be set to one. This seems to be in contradiction to the requirements earlier on the page (starting on line 6) that indicate that the procedure can be used to indicate more than one affiliated STA as a destination. Also this is not consistent with the definition of the Link ID Bitmap field of the MLO Link Information element (clause 9.4.2.317) which clearly allows for more than one bit to be set to one. | Address the contradiction or add note to indicate why it is not a contradiction. | REVISED This CID is discussed on April 10, 2023, but no straw poll is conducted yet.  Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 15516 | Chaoming Luo | 13.11.2 | 459.41 | TWT, r-TWT and TID-to-Link mapping should be allowed to be negotiated in FT resource request protocol. | Add TWT, r-TWT and TID-to-Link mapping in Table 13-3 | REVISED This CID is discussed on May 31, 2023 with 23/0678r5, but no straw poll is conducted yet. This CID is discussed on May 10, 2023 with 23/0678r4, but no straw poll is conducted yet. Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 15547 | Chaoming Luo | 35.3.14.1 | 545.23 | This subclause 35.3.14.1 only talks about the case of an MLD with dot11QMFActivated equal to false, how about the case of an MLD with dot11QMFActivated equal to true? | Either add the following: An MLD shall set dot11QMFActivated to false. Or, add corresponding rules for an MLD with dot11QMFActivated equal to true. | REVISED This CID is discussed on May 4, 2023, but no straw poll is conducted yet.  Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 15550 | Chaoming Luo | 35.3.14.2 | 546.20 | It's not clear what are the MMPDUs that are capable of intended for more than one STA affiliated with the peer MLD. Wondering is there any? | List them out. | REVISED This CID is discussed on April 10, 2023, but no straw poll is conducted yet.  Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 15553 | Chaoming Luo | 35.3.14.2 | 547.09 | If an MMPDU is intended to STA 1 and 2 (it's possible as said in P546L20), when transmit on link 1, shall the MLO Link Information be included? | Change to: is transmitted to a STA (which is different with at least one of the intended STA(s)). | REVISED This CID is discussed on April 10, 2023, but no straw poll is conducted yet.  Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 15554 | Chaoming Luo | 35.3.14.2 | 547.26 | The first paragraph of 35.3.14.2 says 'that is intended for one or more STA(s)', while this paragraph says 'only one bit', they conflicts with each other. | Either change the text in the first paragraph of 35.3.14.2 to 'that is intended for one STA' and change '(other than the intended STA(s))' to '(other than the intended STA)'; Or change the commented text to 'At least one bit' | REVISED This CID is discussed on April 10, 2023, but no straw poll is conducted yet.  Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 16002 | Binita Gupta | 9.4.1.9 | 207.29 | An AP MLD can reject request for a link for an ML setup either because the corresponding affiliated AP has been removed or will be removed soon. There is no existing status code which can provide this specific reason for rejection to the non-AP MLD. | Add a new status code to indicate rejection of association for a link for which corresponding AP is either removed or is being removed. "DENIED\_AP\_IS\_REMOVED\_OR\_BEING\_REMOVED" | REVISED This CID is discussed on May 10, 2023, but no straw poll is conducted yet.  Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 16171 | Rojan Chitrakar | 11.20.6.5 | 388.29 | TDLS off-channel switching to 6 GHz needs to ensure the requested off-channel is safe to be used (e.g. there are no licensed users operating on the channel etc.). | Add rules to ensure that non-AP STA checks that the off-channel in 6 GHz is safe to be used. E.g., one option is to get permission from its associated AP on the existing channel, whether it is allowed to switch to the new off-channel. | REVISED This CID is discussed on May 10, 2023, but no straw poll is conducted yet.  Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 16421 | Jeongki Kim | 35.3.24.4 | 586.53 | "then the corresponding PM mode change and power state change for the STA of the intended link shall start as soon as practical after the individually addressed TWT information frame exchange" text may not be correct in some cases. For example, when an intended STA is in doze state, the power state change from doze to awake will happen at the time (Next TWT) indicated in the TWT information frame rather than "as soon as the frame exchagnes". Some text should be clarified in this subclause for correct operation. | Clarify the corresponding text with the correct flexible wake time operation | REVISED This CID is discussed on May 10, 2023, but no straw poll is conducted yet.  Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 16546 | Arik Klein | 35.3.14.2 | 547.26 | The following requirement "Only one bit in the Link ID Bitmap subfield of the MLO Link Information element shall be set to 1" contradicts with the above statement that "an individually addressed MMPDU...is intended for one or more STA(s) affiliated with the associated MLD". Thus, In case there is more than one intended STA for the MMPDU, there could be more bits that are set to 1. | Please clarify the requested indication method of the Link ID Bitmap subfield of the MLO Link Information element in case of multiple intended STAs or remove this requirement. | REVISED This CID is discussed on April 10, 2023, but no straw poll is conducted yet.  Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 16833 | Mark RISON | 35.3.14.1 | 545.23 | "An MLD with dot11QMFActivated equal to false" -- dot11QMFActivated is a STA attribute, not an MLD attribute | Refer to the STAs, and require them to all have the same setting. Also at 334.12, 336.19, 338.10 | REVISED This CID is discussed on May 4, 2023, but no straw poll is conducted yet.  Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 16834 | Mark RISON | 35.3.14.1 | 545.23 | "An MLD with dot11QMFActivated equal to false" -- OK, and what if dot11QMFActivated is true? | Specify the behaviour in this case | REVISED This CID is discussed on May 4, 2023, but no straw poll is conducted yet.  Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 17329 | Alfred Asterjadhi | 35.3.14 | 545.61 | I thought an MMPDU can be sent from a STA on behalf of another STA. I.e., only one as opposed to multiple ones. Please clarify which are these cases where the MMPDU is intended to more than one STAs affiliated with the associated MLD. If there are none then just use singular | As in comment. | REVISED This CID is discussed on April 10, 2023, but no straw poll is conducted yet.  Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 17347 | Alfred Asterjadhi | 9.4.2.317 | 300.01 | I believe only one bit can be set to 1 for EHT. Please add a statement. | As in comment. | REVISED This CID is discussed on April 10, 2023 with 23/0541r4, but no straw poll is conducted yet. This CID is discussed on March 14, 2023 with 23/0354r1, but no straw poll is conducted yet. Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 17953 | Yuchen Guo | 35.3.14.2 | 547.19 | For the individually addressed MMPDU, in order to enable the cross-link delivery, the AAD construction should be the same as the one for the individually addressed data frame. And if the individually addressed MMPDU is link-specific, then a MLO Link Information element should be included within the frame body. | As in comment. | REVISED This CID is discussed on May 10, 2023, but no straw poll is conducted yet.  Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 18100 | Abhishek Patil | 9.4.2.317 | 300.01 | Delete the "(s)" in "link(s)" and "STA(s)" to be consistent with the normative text in 35.3.14.2 (P547L26) and the description text on P299L49 | As in comment | REVISED This CID is discussed on April 10, 2023 with 23/0541r4, but no straw poll is conducted yet. This CID is discussed on March 14, 2023 with 23/0354r1, but no straw poll is conducted yet. Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 18238 | Li-Hsiang Sun | 35.3.14.1 | 546.45 | BTM request is defined as MMPDU intended for an MLD, and based on p546 L58, p547L28 it can be sent on any available link and without MLO Link Information element.  However, in 35.3.6.2.2 p511L40, it says "the affiliated AP being removed transmits BSS Transition Management Request frame(s)", i.e. the frame is intended for a non-AP STA on the link the frame is transmitted and can only be transmitted on the to-be-removed link, The frame is not intended for MLD. | Remove BTM request/response from the list of frames intended for an MLD | REVISED This CID is discussed on May 4, 2023 with 23/0541r6, but no straw poll is conducted yet. This CID is discussed on April 10, 2023 with 23/0541r4, but no straw poll is conducted yet. Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 18306 | kaiying Lu | 35.3.14.2 | 547.26 | "Only one bit in the Link ID Bitmap subfield of the MLO Link Information element shall be set to 1." Clarify whether more than one bit can be set to 1. | As in comment. | REVISED This CID is discussed on April 10, 2023, but no straw poll is conducted yet.  Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 18307 | kaiying Lu | 35.3.14.1 | 546.20 | Change to "be capable of being intended for more than one STA affiliated with the peer MLD". | As in comment. | REVISED This CID is discussed on April 10, 2023, but no straw poll is conducted yet.  Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| **Rubayet** | | | | | | |
| 18205 | Rubayet Shafin | 35.8.1 | 617.44 | 11be includes multi-link operation and restricted TWT operation. However, how restricted TWT will operate on multi-link devices (MLDs) is not clear. In general, mechanism for Broadcast TWT, which is a basis for restricted TTWT, for MLDs need to be defined. | Please provide text for R-TWT/B-TWT negotiation for MLD. | REVISED This CID is discussed on May 17, 2023 with 23/0357r1, but no straw poll is conducted yet. This CID is discussed on March 27, 2023 with 23/0357r0, but no straw poll is conducted yet. Please ignore "REVISED" - it is just for the sole purpose of showing that |
| 18254 | Li-Hsiang Sun | 35.8.3 | 619.07 | "Other TWT parameters of the aligned schedules on those multiple links remain the same as each other" Should the broadcast TWT ID on aligned links also be the same ? | add exception for broadcast TWT ID | REVISED This CID is discussed on May 16, 2023, but no straw poll is conducted yet.  Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| **Subir** | | | | | | |
| 15425 | John Wullert | 35.16.2.2.3 | 648.42 | There may be cases where an AP MLD might want to enable EPCS for a non-AP MLD that is not authorized to invoke EPCS. For example, a higher-layer function might instruct the AP MLD to enable EPCS for a non-AP MLD that is not authorized to invoke EPCS in order to provide end-to-end priority for an authorized priority voice call that is destined for that non-AP MLD. | Remove item a) and NOTE 2 from the list. Also, remove "If the verification is successful (See NOTE 2 above)," from the beginning of item b). | REVISED This CID is discussed on April 5, 2023, but no straw poll is conducted yet. Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 15426 | John Wullert | 35.16.2.2.3 | 648.56 | The specification does not make clear why an AP MLD would include EPCS EDCA or MU EDCA parameters in the Enable Request frame | Add the following to the end of item i): "The AP MLD selects EDCA and MU EDCA parameter values that provide the EPCS non-AP STA with preferential access to the wireless medium compared to non-AP STAs that do not have EPCS priority access in the enabled state using a selection method that is outside the scope of this standard." | REVISED This CID is discussed on April 5, 2023, but no straw poll is conducted yet. Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 15427 | John Wullert | 35.16.2.2.4 | 649.48 | The text restricts this verification to AP MLDs with dot11SSPNInterfaceActivated equal to true, but the requirement to populate this field (page 646, line 15) does not have a similar restriction. | Remove the text "For an AP MLD with dot11SSPNInterfaceActivated equal to true," from bullets i) and ii). Also, remove Note 1. | REVISED This CID is discussed on April 5, 2023, but no straw poll is conducted yet. Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 15429 | John Wullert | 35.16.2.2.4 | 650.16 | The specification does not make clear why an AP MLD would include EPCS EDCA or MU EDCA parameters in the Enable Resopnse frame | Add the following to the end of item i): "The AP MLD selects EDCA and MU EDCA parameter values that provide the EPCS non-AP STA with preferential access to the wireless medium compared to non-AP STAs that do not have EPCS priority access in the enabled state using a selection method that is outside the scope of this standard." | REVISED This CID is discussed on April 5, 2023, but no straw poll is conducted yet. Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 15442 | John Wullert | 35.16.3.2 | 652.64 | The specification makes no mention of how the APs affiliated with an EPCS AP MLD treat traffic that is destined for EPCS non-AP MLDs with EPCS priority access in the enabled state. | Add the following text "APs affiliated with EPCS AP MLDs should prioritize scheduling transmission of downlink frames destined for non-AP STAs affiliated with EPCS non-AP MLDs with EPCS Priority Access in the enabled state. The methods by which they do this are implementation dependent and outside the scope of this standard. | REVISED This CID is discussed on April 5, 2023, but no straw poll is conducted yet. Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 16703 | Yonggang Fang | 35.16.2.2.2 | 647.50 | The spec needs to clarify the enablement procedure if an EPCS non-AP MLD with EPCS priority access NOT in the torn down state. | See in the comment | REVISED This CID is discussed on May 17, 2023, but no straw poll is conducted yet.  Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 16704 | Yonggang Fang | 35.16.2.2.3 | 648.55 | The spec needs to clarify the enablement procedure if an EPCS non-AP MLD with EPCS priority access NOT in the torn down state. | See in the comment | REVISED This CID is discussed on May 17, 2023, but no straw poll is conducted yet.  Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| **Vishnu** | | | | | | |
| 17989 | Vishnu Ratnam | 35.3.16.2 | 551.20 | A reconfigurable multi-radio AP or non-AP MLD should be capable of moving its radios quasi-statically across the enabled links based on the requirement. A mechanism to seemlessly indicate the updated MCS-NSS set for each of such links without the need for re-association is required. | The commenter will bring forth a solution to the problem. | "REVISED  This CID is discussed on April 24, 2023, but no straw poll on the resolution (SP#2) is conducted yet.  Please ignore ""REVISED"" - it is just for the sole purpose of showing that this CID has a pending resolution." |
| **Xiangxin** | | | | | | |
| 16312 | Juseong Moon | 35.3.12.4 | 540.17 | It is not clear how STAs can transmit PS-Poll over multiple links with NAVSyncDelay. When STAs of a non-AP STA MLD wakes up from the doze state, the STAs can not transmit PS-Poll during NAVSyncDelay timer before successful reception of frames. A STA received TIM can immediately transmit PS-Poll but other STAs of the same non-AP STA MLD may not transmit PS-Poll due to NAVSyncDelay which delays BU transmission over indicated multiple links. Even though APs of the AP MLD can transmit TF to solicit PS-Poll transmission, it is difficult to estimate exact STAs' wakeup time and STAs' wakeup status. If the STA received TIM can transmit PS-Poll with other links' wakeup status, APs may transmit TF or BU directly. | Please define a method to indicate other links' wakeup status. | REVISED This CID is discussed on April 6, 2023, but no straw poll is conducted yet.  Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 16334 | Yongho Kim | 35.3.17 | 565.12 | In a scenario where an EMLSR non-AP MLD receives a TIM and a multi-link traffic indication in a beacon frame from its associated MLD, it can suffer from MediumSyncDelay or NAVSyncDelay when it has to send multiple PS-Poll frames. Therefore, PS-Poll frame which can indicate multiple links wake up status is needed to reduce delay caused by ediumSyncDelay or NAVSyncDelay. | As in comment, please define a PS-poll frame which can indicate wake-up status of multiple links. | REVISED This CID is discussed on April 6, 2023, but no straw poll is conducted yet.  Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| **Yanjun** | | | | | | |
| 15763 | Dong Guk Lim | 35.5.2.3.1 | 593.31 | Add the B55 in the text | As in comment | REVISED This CID is discussed on May 15, 2023, but no straw poll is conducted yet.  Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 15764 | Dong Guk Lim | 35.5.2.3.1 | 593.32 | All combinations of B54 and B55 except the case both B54 and B55 are set to 1 don't mean the EHT variant. Clarify it and refer the table 9-45. | As in comment | REVISED This CID is discussed on May 15, 2023, but no straw poll is conducted yet.  Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 17020 | Mark RISON | 35.5.2.3.1 | 593.31 | "addressed to a non-AP STA" -- well, obviously | Delete the cited text | REVISED This CID is discussed on May 15, 2023, but no straw poll is conducted yet.  Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 17021 | Mark RISON | 35.5.2.3.1 | 593.22 | "The User Info field is an HE variant addressed to a non-AP STA if the B39 of the User Info field is set to 0 and the B54 of Common Info field is set to 1 in the Trigger frame; otherwise, it is an EHT variant." contradicts Table 9-45c--Valid combinations of B54 and B55 in the Common Info field, B39 in the User Info field, and solicited TB PPDU format: if B39 and B54 are both 0 then it's also an HE variant | Delete the cited text and DO NOT DUPLICATE INFORMATION BECAUSE THIS LEADS TO SPEC ROT | REVISED This CID is discussed on May 15, 2023, but no straw poll is conducted yet.  Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 17893 | Gaurang Naik | 35.15.2 | 643.58 | When the channel switch is to a channel that has at least one punctured subchannel, the affected AP will include a Bandwidth Indication element. The reporting AP will include the corresponding (E)CSA element in the per-STA profile corresponding to the affected AP but the Bandwidth Indication element is not included. Without the bandwidth indication element, the receiving STA will not be aware of the punctured subchannel. | Please add Bandwidth Indication element to the direct inclusion element list in clause 35.3.11 | REVISED This CID is discussed on May 17, 2023, but no straw poll is conducted yet.  Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 17998 | Yanjun Sun | 35.15.2 | 643.59 | Clarification is needed on the 2 methods an EHT AP can use to indicate an updated puncturing pattern in D3.0: 1) indicated via the the Disabled Subchannel Bitmap subfield in the EHT Operation element in the Beacon frame, 2) indicated via the Disabled Subchannel Bitmap subfield in the Bandwidth Indication element of (e)CSA. The key difference between the two methods is that method 2) allows for a more graceful transition based on the channel switch acount. Please clarify the difference to avoid interop issue and add a should requirement for method 2) if a graceful transition is needed. | As in comment | REVISED This CID is discussed on June 7, 2023 with 23/0728r2, but no straw poll is conducted yet. This CID is discussed on May 17, 2023 with 23/0728r1, but no straw poll is conducted yet. Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 18183 | Abhishek Patil | 35.15.2 | 643.58 | TPE with EIRP for 320MHz/puncturing is missing. | Please add it for completeness of the spec | REVISED This CID is discussed on May 17, 2023, but no straw poll is conducted yet.  Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 18184 | Abhishek Patil | 35.15.2 | 643.58 | TPE with PSD for 320MHz/puncturing is missing. | Please add it for completeness of the spec | REVISED This CID is discussed on May 17, 2023, but no straw poll is conducted yet.  Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 15763 | Dong Guk Lim | 35.5.2.3.1 | 593.31 | Add the B55 in the text | As in comment | REVISED This CID is discussed on May 15, 2023, but no straw poll is conducted yet.  Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 15764 | Dong Guk Lim | 35.5.2.3.1 | 593.32 | All combinations of B54 and B55 except the case both B54 and B55 are set to 1 don't mean the EHT variant. Clarify it and refer the table 9-45. | As in comment | REVISED This CID is discussed on May 15, 2023, but no straw poll is conducted yet.  Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 17020 | Mark RISON | 35.5.2.3.1 | 593.31 | "addressed to a non-AP STA" -- well, obviously | Delete the cited text | REVISED This CID is discussed on May 15, 2023, but no straw poll is conducted yet.  Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 17021 | Mark RISON | 35.5.2.3.1 | 593.22 | "The User Info field is an HE variant addressed to a non-AP STA if the B39 of the User Info field is set to 0 and the B54 of Common Info field is set to 1 in the Trigger frame; otherwise, it is an EHT variant." contradicts Table 9-45c--Valid combinations of B54 and B55 in the Common Info field, B39 in the User Info field, and solicited TB PPDU format: if B39 and B54 are both 0 then it's also an HE variant | Delete the cited text and DO NOT DUPLICATE INFORMATION BECAUSE THIS LEADS TO SPEC ROT | REVISED This CID is discussed on May 15, 2023, but no straw poll is conducted yet.  Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 17893 | Gaurang Naik | 35.15.2 | 643.58 | When the channel switch is to a channel that has at least one punctured subchannel, the affected AP will include a Bandwidth Indication element. The reporting AP will include the corresponding (E)CSA element in the per-STA profile corresponding to the affected AP but the Bandwidth Indication element is not included. Without the bandwidth indication element, the receiving STA will not be aware of the punctured subchannel. | Please add Bandwidth Indication element to the direct inclusion element list in clause 35.3.11 | REVISED This CID is discussed on May 17, 2023, but no straw poll is conducted yet.  Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 17998 | Yanjun Sun | 35.15.2 | 643.59 | Clarification is needed on the 2 methods an EHT AP can use to indicate an updated puncturing pattern in D3.0: 1) indicated via the the Disabled Subchannel Bitmap subfield in the EHT Operation element in the Beacon frame, 2) indicated via the Disabled Subchannel Bitmap subfield in the Bandwidth Indication element of (e)CSA. The key difference between the two methods is that method 2) allows for a more graceful transition based on the channel switch acount. Please clarify the difference to avoid interop issue and add a should requirement for method 2) if a graceful transition is needed. | As in comment | REVISED This CID is discussed on June 7, 2023 with 23/0728r2, but no straw poll is conducted yet. This CID is discussed on May 17, 2023 with 23/0728r1, but no straw poll is conducted yet. Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 18183 | Abhishek Patil | 35.15.2 | 643.58 | TPE with EIRP for 320MHz/puncturing is missing. | Please add it for completeness of the spec | REVISED This CID is discussed on May 17, 2023, but no straw poll is conducted yet.  Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 18184 | Abhishek Patil | 35.15.2 | 643.58 | TPE with PSD for 320MHz/puncturing is missing. | Please add it for completeness of the spec | REVISED This CID is discussed on May 17, 2023, but no straw poll is conducted yet.  Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| **Jason** | | | | | | |
| 16013 | Binita Gupta | 35.3.7.1.7 | 520.31 | Spec should allow a non-AP MLD to keep its individually negotiated TID-to-Link mapping if it does not conflict with the advertised TID-to-Link mapping. Current behavior will result in unnecessary individual renegotiations when the advertised TID-to-Link mapping becomes effective. Also modify NOTE 4 and Figure 35-15 to reflect this behavior. | Modify requirement and NOTE and Figure 35-15 as per comment | REVISED This CID is discussed on June 14, 2023 with 23/0813r2, but no straw poll is conducted yet. This CID is discussed on June 8, 2023 with 23/0813r0, but no straw poll is conducted yet. Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 16210 | Ming Gan | 35.3.7.1.7 | 518.62 | the unit of TU is OK when the Mapping Switch Time field 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. | REVISED This CID is discussed on June 14, 2023 with 23/0813r2, but no straw poll is conducted yet. This CID is discussed on June 8, 2023 with 23/0813r0, but no straw poll is conducted yet. Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 16502 | Arik Klein | 35.3.7.1.7 | 520.01 | The following 2 paragraphs seems to be repetitive - including the same normative behavior text in 2 different places in the 802.11be spec. : Paragraph 1: P518L61 - P519L32 Paragraph 2: P520L1 - P520L27 Please reunite them into a single, coherent one paragraph which includes all the normative rules for the Mapping Switch Time field in the TID-To-Link Mapping element | As in comment | REVISED This CID is discussed on May 16, 2023, but no straw poll is conducted yet.  Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 16506 | Arik Klein | 35.3.7.1.7 | 521.05 | Need to clarify that the mapping C has to be identical to the mapping B (advertised) but is applicable only for the links that have been setup between the non-AP MLD and the AP MLD. Please revise the sentence as suggested. | The sentence should be revised as follows: "Note that any mapping between TIDs and links \*that are setup between the non-AP MLD and the AP MLD\* is enabled in C must be already enabled in the advertised TID-to-link mapping B \*(but may include additional links over those included in mapping C)\*" | REVISED This CID is discussed on June 14, 2023 with 23/0813r2, but no straw poll is conducted yet. This CID is discussed on June 8, 2023 with 23/0813r0, but no straw poll is conducted yet. Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 17827 | Yunbo Li | 35.3.7.1.7 | 520.11 | how to define this sufficiently large value? | explain what is the sufficiently large value | REVISED This CID is discussed on May 16, 2023, but no straw poll is conducted yet.  Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 17853 | Yunbo Li | 35.3.7.1.7 | 521.10 | It is not discard all negotiated T2LM and revert to default mappings. If a negotiated T2LM complies to a new advertise T2LM, the negotiated T2LM can keeps. | if the mapped links in an negotiated T2LM are a subset of enable links in a new advertised T2LM, the negotiated T2LM keeps after the new advertised T2LM. | REVISED This CID is discussed on June 14, 2023 with 23/0813r2, but no straw poll is conducted yet. This CID is discussed on June 8, 2023 with 23/0813r0, but no straw poll is conducted yet. Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 17946 | Yuchen Guo |  | 0.00 | In Advertised T2LM, the Mapping Switch Time field may indicate the time of the TBTT of the DTIM Beacon to be transmitted on another link, which may not allign with the TU boundary of the current link. However, the unit of the Mapping Switch Time field is 1TU. Hence, there's a miss match. | Please fix this issue. One possible solution is to add a field, together with the Mapping Switch Time field, indicates the time with the acuraccy of 1us. The commenter will bring a contribution to solve this issue. | REVISED This CID is discussed on June 14, 2023 with 23/0813r2, but no straw poll is conducted yet. This CID is discussed on June 8, 2023 with 23/0813r0, but no straw poll is conducted yet. Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 18144 | Abhishek Patil | 35.3.7.1.7 | 520.35 | NOTE 4 provides critical guidance and should be converted to normative text. | Replace NOTE 4 as: "An individually negotiated TID-to-link mapping whose negotiation was completed prior to the establishment of an advertised TID-to-link mapping shall be discarded at the time of the establishment of the advertised TID-to-link mapping." | REVISED This CID is discussed on June 14, 2023 with 23/0813r2, but no straw poll is conducted yet. This CID is discussed on June 8, 2023 with 23/0813r0, but no straw poll is conducted yet. Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 18145 | Abhishek Patil | 35.3.7.1.7 | 520.49 | A non-AP MLD is allowed to negotiate a subsetted mapping of what is advertised by the AP MLD. Therefore, this NOTE is confusing. Reword it (as normative) to say that a non-AP MLD shall not transmit a response frame to acknowledge the reception of a T2LM advertisement. However a non-AP MLD may initiate a negotiation of a mapping that is a subset of the advertised mapping by transmitting a T2LM Request frame. NOTE 7 and the following paragraph can be consolidated as suggested above. | As in comment | REVISED This CID is discussed on June 14, 2023 with 23/0813r2, but no straw poll is conducted yet. This CID is discussed on June 8, 2023 with 23/0813r0, but no straw poll is conducted yet. Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 18146 | Abhishek Patil | 35.3.7.1.7 | 521.29 | If a non-AP MLD had successfully negotiated a mapping 'A' (via T2LM Req/Resp frames) which is a subset of a new (upcoming) advertised mapping 'B' (via Beacon/Probe Resp frames), then which mapping holds true for that non-AP MLD (A or B) after the Mapping Switch Time for the advertised mapping? Shouldn't it be A? Please clarify that this is the case (it will save additional frame exchange for negotiation). | As in comment | REVISED This CID is discussed on June 14, 2023 with 23/0813r2, but no straw poll is conducted yet. This CID is discussed on June 8, 2023 with 23/0813r0, but no straw poll is conducted yet. Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 16013 | Binita Gupta | 35.3.7.1.7 | 520.31 | Spec should allow a non-AP MLD to keep its individually negotiated TID-to-Link mapping if it does not conflict with the advertised TID-to-Link mapping. Current behavior will result in unnecessary individual renegotiations when the advertised TID-to-Link mapping becomes effective. Also modify NOTE 4 and Figure 35-15 to reflect this behavior. | Modify requirement and NOTE and Figure 35-15 as per comment | REVISED This CID is discussed on June 14, 2023 with 23/0813r2, but no straw poll is conducted yet. This CID is discussed on June 8, 2023 with 23/0813r0, but no straw poll is conducted yet. Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 16210 | Ming Gan | 35.3.7.1.7 | 518.62 | the unit of TU is OK when the Mapping Switch Time field 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. | REVISED This CID is discussed on June 14, 2023 with 23/0813r2, but no straw poll is conducted yet. This CID is discussed on June 8, 2023 with 23/0813r0, but no straw poll is conducted yet. Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 16502 | Arik Klein | 35.3.7.1.7 | 520.01 | The following 2 paragraphs seems to be repetitive - including the same normative behavior text in 2 different places in the 802.11be spec. : Paragraph 1: P518L61 - P519L32 Paragraph 2: P520L1 - P520L27 Please reunite them into a single, coherent one paragraph which includes all the normative rules for the Mapping Switch Time field in the TID-To-Link Mapping element | As in comment | REVISED This CID is discussed on May 16, 2023, but no straw poll is conducted yet.  Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 16506 | Arik Klein | 35.3.7.1.7 | 521.05 | Need to clarify that the mapping C has to be identical to the mapping B (advertised) but is applicable only for the links that have been setup between the non-AP MLD and the AP MLD. Please revise the sentence as suggested. | The sentence should be revised as follows: "Note that any mapping between TIDs and links \*that are setup between the non-AP MLD and the AP MLD\* is enabled in C must be already enabled in the advertised TID-to-link mapping B \*(but may include additional links over those included in mapping C)\*" | REVISED This CID is discussed on June 14, 2023 with 23/0813r2, but no straw poll is conducted yet. This CID is discussed on June 8, 2023 with 23/0813r0, but no straw poll is conducted yet. Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 17827 | Yunbo Li | 35.3.7.1.7 | 520.11 | how to define this sufficiently large value? | explain what is the sufficiently large value | REVISED This CID is discussed on May 16, 2023, but no straw poll is conducted yet.  Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 17853 | Yunbo Li | 35.3.7.1.7 | 521.10 | It is not discard all negotiated T2LM and revert to default mappings. If a negotiated T2LM complies to a new advertise T2LM, the negotiated T2LM can keeps. | if the mapped links in an negotiated T2LM are a subset of enable links in a new advertised T2LM, the negotiated T2LM keeps after the new advertised T2LM. | REVISED This CID is discussed on June 14, 2023 with 23/0813r2, but no straw poll is conducted yet. This CID is discussed on June 8, 2023 with 23/0813r0, but no straw poll is conducted yet. Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 17946 | Yuchen Guo |  | 0.00 | In Advertised T2LM, the Mapping Switch Time field may indicate the time of the TBTT of the DTIM Beacon to be transmitted on another link, which may not allign with the TU boundary of the current link. However, the unit of the Mapping Switch Time field is 1TU. Hence, there's a miss match. | Please fix this issue. One possible solution is to add a field, together with the Mapping Switch Time field, indicates the time with the acuraccy of 1us. The commenter will bring a contribution to solve this issue. | REVISED This CID is discussed on June 14, 2023 with 23/0813r2, but no straw poll is conducted yet. This CID is discussed on June 8, 2023 with 23/0813r0, but no straw poll is conducted yet. Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 18144 | Abhishek Patil | 35.3.7.1.7 | 520.35 | NOTE 4 provides critical guidance and should be converted to normative text. | Replace NOTE 4 as: "An individually negotiated TID-to-link mapping whose negotiation was completed prior to the establishment of an advertised TID-to-link mapping shall be discarded at the time of the establishment of the advertised TID-to-link mapping." | REVISED This CID is discussed on June 14, 2023 with 23/0813r2, but no straw poll is conducted yet. This CID is discussed on June 8, 2023 with 23/0813r0, but no straw poll is conducted yet. Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 18145 | Abhishek Patil | 35.3.7.1.7 | 520.49 | A non-AP MLD is allowed to negotiate a subsetted mapping of what is advertised by the AP MLD. Therefore, this NOTE is confusing. Reword it (as normative) to say that a non-AP MLD shall not transmit a response frame to acknowledge the reception of a T2LM advertisement. However a non-AP MLD may initiate a negotiation of a mapping that is a subset of the advertised mapping by transmitting a T2LM Request frame. NOTE 7 and the following paragraph can be consolidated as suggested above. | As in comment | REVISED This CID is discussed on June 14, 2023 with 23/0813r2, but no straw poll is conducted yet. This CID is discussed on June 8, 2023 with 23/0813r0, but no straw poll is conducted yet. Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 18146 | Abhishek Patil | 35.3.7.1.7 | 521.29 | If a non-AP MLD had successfully negotiated a mapping 'A' (via T2LM Req/Resp frames) which is a subset of a new (upcoming) advertised mapping 'B' (via Beacon/Probe Resp frames), then which mapping holds true for that non-AP MLD (A or B) after the Mapping Switch Time for the advertised mapping? Shouldn't it be A? Please clarify that this is the case (it will save additional frame exchange for negotiation). | As in comment | REVISED This CID is discussed on June 14, 2023 with 23/0813r2, but no straw poll is conducted yet. This CID is discussed on June 8, 2023 with 23/0813r0, but no straw poll is conducted yet. Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| **Yunbo** | | | | | | |
| 15099 | Pei Zhou | 35.3.16.4 | 554.46 | "A non-AP STA affiliated with ... may choose not to transmit any frame corresponding to that AC due to expected interference caused by the transmission at the non-AP STA operating on the other link of the NSTR link pair within the non-AP MLD ...". There is no enough solution how the NSTR situation is avoided. AP's restriction/behavior may also be needed. For example, if NSTR non-AP MLD 1 and NSTR non-AP MLD 2 perform P2P transmission under triggered TXOP sharing mode 2, the AP MLD (and/or other non-AP MLDs) cannot transmit to non-AP MLD 1 and/or non-AP MLD 2. So, other devices should know the ongoing NSTR P2P transmission, in order to avoid the interference to the NSTR link pair. | An non-AP MLD may need to report its peer non-AP MLD's ID to AP MLD (and/or other non-AP MLDs). Then, rules should be provided to avoid AP MLD (and/or other non-AP MLDs) tranmitting to other afflicated STAs of the two non-AP MLDs in P2P transmission. | REVISED This CID is discussed on May 11, 2023, but no straw poll is conducted yet.  Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 15130 | Tomoko Adachi | 35.3.16.2.1 | 0.00 | "The ability of a non-AP MLD to perform STR operation on a pair of setup links may change after multi-link setup. The non-AP MLD may use a Management frame on any enabled link to inform the AP MLD about the ability change to perform STR operation." The Management frame here should be clarified that it is a Multi-Link Operation Update Request frame. And the description should also cover the case when changing to perform NSTR operation. | As in comment. | REVISED This CID is discussed on May 17, 2023, but no straw poll is conducted yet.  Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 15875 | Chunyu Hu | 35.3.16.4 | 555.13 | The NOTE is really unnecessary, plus it's not a good reason as the TSF of the other AP(s) can be learned from the Beacon/Probe Response frames already. | Remove the note. | REVISED This CID is discussed on May 11, 2023, but no straw poll is conducted yet.  Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 15912 | Zhou Lan | 9.2.4.7.6 | 142.09 | "For a non-EHT non-AP HE STA, or a non-AP EHT STA that is associated with a non-EHT HE AP, eachEach bit in the bitmap corresponds to a 20 MHz subchannel within the operating channel width of the BSS in which the STA is associated, with the LSB corresponding to the lowest numbered operating subchannel of the BSS. The bit in position X in the bitmap is set to 1 to indicate that the subchannel X + 1 is idle; otherwise, it is set to 0 to indicate that the subchannel is busy or unavailable.", here the "unavailable" is not accurate. When the operating bandwidth of a STA is smaller than the operating BW of the AP, AP may still send a BQRP that ask channel availability information on the channel that the STA is not capable of performing CCA. Change "unavailable" to "unapplicable". | As shown in the comment | REVISED This CID is discussed on May 16, 2023, but no straw poll is conducted yet. Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 16211 | Ming Gan | 35.3.16.2 | 554.32 | non-AP MLD may be awake on both links of an NSTR link pair when it is receiving on one link, even though the AP MLD may not send a PPDU on the other link. This is not good for STA power save. | as in comment | REVISED This CID is discussed on May 11, 2023, but no straw poll is conducted yet.  Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 16866 | Mark RISON | 35.3.16.2.1 | 552.28 | "The non-AP MLD may use a Management frame on any enabled link to inform the AP MLD about the ability change to perform STR operation. " -- not any old Management frame | Identify the specific Management frames that can be used | REVISED This CID is discussed on May 17, 2023, but no straw poll is conducted yet.  Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 16879 | Mark RISON | 35.3.16.4 | 554.54 | Is that really a "may"? Can the STA do anything else? | Change "may" to "shall perform one of the following actions" | REVISED This CID is discussed on May 11, 2023, but no straw poll is conducted yet.  Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 16894 | Mark RISON | 35.3.16.7 | 559.47 | All the requirements are expressed in terms of "should", i.e. they are not requirements at all | Consider changing them to "shall"s | REVISED This CID is discussed on May 11, 2023, but no straw poll is conducted yet.  Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 16895 | Mark RISON | 35.3.16.7 | 559.63 | "an ED-based CCA" is rather vague and might allow implementations to just do part of ED-based CCA and claim to meet the shall | Change to "ED-based CCA as described in ..." | REVISED This CID is discussed on May 11, 2023, but no straw poll is conducted yet.  Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 17032 | Mark RISON | 35.5.3 | 596.27 | The way this is written suggests the requirements are for an EHT non-AP STA only, but the term "EHT STA" used also covers APs, and dot11TwoBQRsOptionImplemented is not marked as non-AP STA-only | Change "EHT STA" to "EHT non-AP STA" throughput (or maybe it's "non-AP EHT STA"?) | REVISED This CID is discussed on May 16, 2023, but no straw poll is conducted yet. Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 17835 | Yunbo Li | 35.3.16.7 | 559.62 | equal to PIFS also need to be covered in this sentence. | change "larger than SIFS and less than PIFS" to "larger than SIFS and less than or equal to PIFS" | REVISED This CID is discussed on May 11, 2023, but no straw poll is conducted yet.  Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |
| 17838 | Yunbo Li | 35.3.16.2.1 | 552.28 | The details about the management frame for NSTR status update is not specified in the spec. | complete the frame format of this management frame, as well as the NSTR status update procedure. | REVISED This CID is discussed on May 17, 2023, but no straw poll is conducted yet.  Please ignore "REVISED" - it is just for the sole purpose of showing that this CID has a pending resolution. |