IEEE P802.11
Wireless LANs

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| LB 271 Resolution for CIDs in Quarantine – Part 2 |
| Date: November 2, 2022 |
| Author(s): |
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 Abstract

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

* **Dibakar:**  15066, 15095, 15816, 15879, 15964, 16395, 16410, 16413, 16672, 16709, 16725, 16909, 17174, 17261, 17798, 17898, (pending SPs: 609r2, 604r3, 608r0)
* **Duncan:** 18071
* **Gaurang:** 17480
* **Guogang:** (pending SP: 696, 692, 693)
* **Jeongki:** 16422
* **Juseong:** 16309, 16310, 16338, 16340

**Revisions:**

* Rev 0: Initial version of the document.
* Rev 1: With updates from whatever has been received until AM1 of Wednesday. Pending the update of the resolution boxes with the document numbers. We will use the following format: REJECTED – “This CID is discussed on July 6, 2023, in 11-23/xxxx and the group could not reach consensus on a resolution. The SP result was: X, Y, Z (if an SP was run)”

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** |
| **Dibakar** |
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| 15066 | Michail Koundourakis | 35.3.16.8.2 | 561.10 | "A STA that is capable of obtaining a TXOP" where is this capability defined? If it is already defined, add a reference for clarity otherwise define.When is an STA not capable of obtaining a TXOP? | Provide a definition or clear explanation of "STA capable of obtaining a TXOP...". | REVISEDThis CID is discussed on April 24, 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. |
| 15095 | Thomas Handte | 35.17 | 654.37 | EHT is yet missing a non-TB access variant. | Please add an EDCA variant in which a STA may access the channel without being triggered before. For example, the STA may be part of a non-trigger-enabled R-TWT or TWT which aligns to the signaled service intervals. (The commenter may assist in comment resolution) | REVISEDThis CID is discussed on May 18, 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. |
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| 15816 | Muhammad Kumail Haider | 35.17 | 654.47 | "the EHT AP should ensure that the service interval aligns with negotiated TWT wake intervals": sevice interval aligns with -> service intervals align with | as in comment | REVISEDThis CID is discussed on May 18, 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. |
| 15879 | Chunyu Hu | 35.3.16.8.2 | 561.03 | It doesn't make a lot of sense to describe a STA "capable of obtaining a TXOP" here. All 802.11 STAs are capable of so. Is it actually referring to "a STA that wants to obtain a TXOP"? Same problem in the 2nd paragraph. | Change to: A STA that wishes to obtain a TXOP, or change to some proper description. | REVISEDThis CID is discussed on April 24, 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. |
| 15964 | Binita Gupta | 35.2.1.2.3 | 477.20 | The first requirement in the paragraph applies only for the MU-RTS TXS Trigger frame with 'Triggered TXOP Sharing Mode subfield equal to 2'. Clarify this is the requirement. | Change to:"After sending the CTS solicited by an MU-RTS TXS Trigger frame with 'Triggered TXOP Sharing Mode subfield equal to 2, the STA shall set the Duration/ID field of its frame(s) to a STA that is not the associated AP with a value that indicates a time no later than theending time of the PPDU carrying the MU-RTS TXS Trigger frame plus the allocated time duration in theAllocation Duration field of the soliciting MU-RTS TXS Trigger frame." | REVISEDThis CID is discussed on April 26, 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. |
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| 16395 | Liuming Lu | 35.3.16.8.2 MediumSyncDelay OFDM ED based recovery procedure | 561.01 | The STAs affiliated with different MLDs can have their respective nonzero MediumSyncDelay timers. For example, when an AP affiliated with an AP MLD can solicit TB PPDUs from multiple MLDs operating on NSTR link pairs, the solicited STAs affiliated with the different MLDs start their MediumSyncDelay timers. In this case, if one of the multiple STAs transmits an RTS frame as the initial frame, all other STAs can reset its timer mistakenly based on the RTS frame, even though there is no response to the RTS frame. | The events which cause the timer to reset to zero need to be clarified. | REVISEDThis CID is discussed on April 24, 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. |
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| 16410 | Liuming Lu | 35.17 EHT SCS procedure | 654.44 | If the QoS Data frames of the R-TWT TID delivered during the R-TWT SPs corresponds to a traffic flow specified by a QoS Characteristics element with delay bound for the uplink or downlink direction, the further rule needed to meet the requirement of delay bound is unclear. | Suggest to add a rule that "if the QoS Data frames of the R-TWT TID delivered during the R-TWT SPs corresponds to a traffic flow specified by a QoS Characteristics element with delay bound for the uplink or downlink direction, the delay bound for the uplink or downlink direction corresponding to the QoS Data frames of the R-TWT TID should be met". | REVISEDThis CID is discussed on May 18, 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. |
| 16413 | Liuming Lu | 35.17 EHT SCS procedure | 654.29 | Whether to meet the requirement of delay bound for uplink transmission specified by QoS Characteristics element for a request is unclear. | Suggest to add a rule that an EHT AP should schedule transmission of uplink frames such that the delay bound requested is met for the uplink data frames if the Direction subfield of the QoS Characteristics element indicates uplink. | REVISEDThis CID is discussed on May 18, 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. |
| 16672 | Liwen Chu | 35.2.1.2.1 | 473.60 | The non-TB PPDU restriction should be applied to the PPDU to the AP only. For the P2P, the requriement can be relaxed. | As in comment | REVISEDThis CID is discussed on April 26, 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. |
| 16709 | Yonggang Fang | 35.17 | 654.25 | QoS characteristics is the traffic profile maintained at the MLD level, but is used by the AP MLD and affiliated APs or non-AP MLD and affiliated STAs to schedule transmissions on corresponding enabled links. It needs to clarify that the scheduled transmission on each link should meet the requirement of QoS Characteristics. | The QoS Characteristics element is a reference for the EHT AP's scheduling transmission on the enabled links. An EHT AP should schedule transmission of downlink frames on one or more enabled links such that the delay bound and minimum data rate requested are met for the downlink Data frames if the Direction subfield of the QoS Characteristics element indicates downlink. An EHT AP should enable on one or more enabled links the transmission of uplink frames from the EHT STA with an interval that falls between the requested minimum and maximum service intervals and the requested minimum data rate is met requested if the Direction subfield of the QoS Characteristics element indicates uplink. | REVISEDThis CID is discussed on May 18, 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. |
| 16725 | Mark RISON | 35.2.1.2.3 | 477.02 | "A QoS Data frame is transmitted successfully by the STA for an ACif it requires immediate acknowledgment and the STA receives an immediate acknowledgment for thatframe, or if the QoS Data frame does not require immediate acknowledgment." -- is this changing the existing definition of successful transmission? I assume not | Delete the cited text | REVISEDThis CID is discussed on April 26, 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. |
| 16909 | Mark RISON | 35.3.16.8.2 | 561.50 | Why is this just a "should"? | Consider changing to "shall" | REVISEDThis CID is discussed on April 24, 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. |
| 17174 | Dana Ciochina | 35.17 | 654.25 | "An EHT AP should enable the transmission of uplink frames ..", "The transmission of uplink Data frames should be enabled by using Basic Trigger frames or alternatively by using MU-RTS TXS Trigger frames ...". STAs having latency sensitive traffic which characteristics which can be sent through the QoS Characteristics element should also be facilitated the uplnik transmission through R TWT intervals set according to these characteristics even when these STAs are not using triggered access. An option of non triggered r twt should be explictly mentioned in this context. | as in comment | REVISEDThis CID is discussed on May 18, 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. |
| 17261 | Zinan Lin | 35.2.1.2.3 | 477.21 | "the STA shall set the Duration/ID field of its frame(s) to a STA that is not the associated AP with a value that indicates a time no later than the ending time of the PPDU carrying the MU-RTS TXS Trigger frame plus the allocated time duration in the Allocation Duration field of the soliciting MU-RTS TXS Trigger frame." What does mean here? It means that the STA may set the Duration/ID field to a value which is larger than the ending time of the PPDU carrying the MU-RTS TXS Trigger frame plus the allocated time duration in the Allocation Duration of field of the soliciting MU-RTS TXS Trigger frame? | Please clarify it | REVISEDThis CID is discussed on April 26, 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. |
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| 17798 | Abdel Karim Ajami | 35.2.1.2.2 | 475.08 | Please clarify how the Duration/ID field of the MU RTS TXS Trigger frame is set when sharing the TXOP with a non-AP STA using Triggered TXOP Sharing Mode 2 | As in the comment | REVISEDThis CID is discussed on April 26, 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. |
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| 17898 | Gaurang Naik | 35.3.16.8.2 | 561.03 | Why would a STA not be capable of obtaining a TXOP? Revise this to "A STA that intends to obtain a TXOP while the ...". Same comment on Line 10. | As in comment | REVISEDThis CID is discussed on April 24, 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. |
| **Duncan** |
| 18071 | Abhishek Patil | 4.9.6 | 73.44 | Please use consistent terminology (and harmonize different variant to one). | Since the term non-MLO is defined, replace non-MLD with non-MLO throughout the draft | "REVISEDThis 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." |
| **Gaurang** |
| 17480 | Brian Hart | 9.3.3.10 | 203.35 | Why is ML probe response defined in this section when the term is not used in this section? | Delete this para | "REVISEDThis CID is discussed on June 8, 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." |
| **Guogang** |
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| **Jeongki** |
| 16422 | 16422 | 35.3.24.4 | 586.53 | What if the intended STA on the intended link transitions from doze state to awake state later than the rescheduled TWT start time indicated in the TWT information frame? How does the AP decide the rescheduled TWT start time of an intended STA without considering the STA's power state swithching delay? Low-end device may have longer transition delay than high-end device. | Describe how to reschedule the next TWT of the intended STA considering MLD's switching delay. | "REVISEDThis 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." |
| **Juseong** |
| 16309 | Juseong Moon | 35.3.17 | 565.22 | In Draft 3.0, an AP affiliated with the AP MLD is allowed to begin the group addressed Data trasnsmission without transmitting the initial control frame.If the transmission of a group addressed BU is delayed for some reason, such as high channel load, it is unclear from the current specification whether the EMLSR STA MLD should go into listening operation or continue normal Tx/Rx operation. It is necessary to provide clarification on whether the EMLSR STA MLD should return to listening operation if group addressed BUs are not received or operate in normal Tx/Rx operation until the BUs are received. | As in comment. | REVISEDThis CID is discussed on May 31, 2023 with 23/0787r0, but no straw poll is conducted yet.This CID is discussed on April 6, 2023 with 23/0437r3, 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. |
| 16310 | Juseong Moon | 35.3.7.3.2 | 523.54 | When a link is disbled/enabled by an AP MLD, EMLSR/EMLMR operation of associated non-AP MLD related to the disabled/enabled link shall be clarifyed. When one or more links in the multi-link are disabled, the EMLSR/EMLMR operation of the non-AP MLD that is related to the disabled link(s) can be automatically modified or disabled. Alternatively, the non-AP MLD can transmit an EML OMN frame to modify or disable the EMLSR/EMLMR operation. Similarly, when a link is re-enabled, the non-AP MLD's EMLSR/EMLMR operation can be automatically enabled or modified, or the non-AP MLD can transmit an EML OMN frame to enable or modify the EMLSR/EMLMR operation. | Please clarify EMLSR/EMLMR operation that may be affected by link disablement/enablement. | REVISEDThis CID is discussed on June 8 and June 13, 2023 with 23/0266r2, 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. |
| 16338 | Yongho Kim | 35.2.1.2.1 | 473.58 | When EMLSR STA MLD (or STA affiliated with EMLSR STA MLD) is a recipient of P2P(Triggered TXOP Sharing mode 2), EMLSR operating STA can not receive PPDU from non-AP STA without initial control frame. | Please define a procedure to communication with EMLSR operating STA in triggered TXOP sharing mode 2. | REVISEDThis 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. |
| 16340 | Yongho Kim | 35.3.17 | 565.12 | In an R-TWT SP, when an AP wants to transmit separate TXOPs (i.e., different AC data frames) to an EMLSR STA, every transmission shall start with an initial control frame. After the first reception of the ICF, the STAs of the EMLSR STA MLD can remain on the link without returning to the listening operation until the end of the R-TWT SP. Therefore, starting from the second data frame transmission, there is no need to transmit the ICF and it can mitigate delay in the R-TWT SP. Additionally, according to subclause 35.8.5.1 of 11be draft 3.0, the TXOP end time rule for EMLSR MLD is defined. Therefore, it's reasonable that EMLSR MLD is not to operate of listening opeation in the R-TWT SP. | As in comment, please add the method that EMLSR MLD is not to return to listening operation in R-TWT SP. | REVISEDThis CID is discussed on May 31, 2023 with 23/0788r0, but no straw poll is conducted yet.This CID is discussed on April 6, 2023 with 23/0437r3, 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. |
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