IEEE P802.11  
Wireless LANs

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| LB266: CR for Misc CIDs | | | | |
| Date: December 20, 2022 | | | | |
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Abstract

This submission proposes resolutions for following 9 CIDs received for TGbe LB266:

11098, 11449, 11450, 12368, 13215, 13689, 13894, 14119, 14112

**Revisions:**

* Rev 0: Initial version of the document.
* Rev 1: Added CID 14119

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** | **Section** | **Pg.Ln** | **Comment** | **Proposed Change** | **Resolution** |
| 11098 | Robert Stacey |  | 407.22 | Trying to cover the singular and plural using this bracketing technique is cumbersome and in this case has errors. If you want to do it, it needs to be done so that the sentence reads correctly without the bracketed content, which it does not in this case. Same problem at 407.28 and 407.38. | Remove brackets from around the "s" | **Revised**  The cited statement was deleted as a resolution for CID 12794 in CR document 1182r7.  **No further changes are needed in this document.**  **TGbe editor, please apply changes as shown in 11-22/1182r7 (https://mentor.ieee.org/802.11/dcn/22/11-22-1182-07) tagged 12794** |
| 11449 | Gaurang Naik | 35.3.16.6 | 456.54 | A STA with backoff counter that has already reached zero initiate transmission only following condition 1b)' is contradictory to item 3), which says that the STA may perform backoff following 10.23.2.4 and 10.3.4.3 to transmit. | Replace the statement with 'A STA with backoff counter that has already reached zero initates a transmission following condition 1b) or 3). | **Revised**  Agree with the commenter in principle.  **TGbe editor: Please implement the changes shown in document [**<https://mentor.ieee.org/802.11/dcn/22/11-22-2170-01-00be-lb266-misc-cids.docx>] **tagged as 11449** |
| 11450 | Gaurang Naik | 35.3.16.6 | 457.61 | Condition 1b) refers to the case where the STA transmits following the wait. Case 2) is the one where STA chooses not to transmit and waits. Therefore, the statement should refer to case 2) and not Case 1b). | Replace 'that choose not to transmit following condition 1b)' with 'that chose not to transmit following condition 2)' | **Rejected**  The cited text is referring to the correct condition (i.e., condition 1b). |
| 12368 | Rojan Chitrakar | 9.4.2.312.2.2 | 220.26 | Directly reference bit number (B7) is risky, in case the format of the MLD capabilities field is changed, the bit position may change; also B7 refers to bit position within the MLD capabilities and operations subfield, not within the AP MLD Type Indication subfield. | Best if values of the the AP MLD Type Indication subfield can be used, e.g. value 0 indicates not a NSTR mobile AP MLD, 1 indicates NSTR mobile AP MLD and remaining values are reserved. If preference is to use the first bit of the subfield, change B7 to B0 of the AP MLD Type Indication subfield. | **Rejected**  The group could not reach consensus on a resolution that would address the issue raised by the commenter. Particularly, there was disagreement between the two options proposed by the commenter. |
| 13215 | Evgeny Khorov | 10.23.2.4 | 0.00 | Regarding the backoff procedure in DCF, the spec notes that it is important that designers recognize the need for statistical independence of the random number streams between STAs. (10.3.3). For NSTR MLD, it make sense to inialize backoff with the same value, if the state of the channel in both links is synchonized. | Add a note (after the second paragraph of 10.23.2.4) that if NSTR MLD initializes a backoff of the same AC synchroneously on several links and use the same CW, the corresponding affiliated STAs may initialize backoff with the same random value. | **Rejected**  The cited issue has been discussed in the group and the group could not reach consensus. The issue was discussed in 11-20/974r4 (SP2). The results of the SP were 21Y, 34N, 20A. |
| 13689 | Yunbo Li |  | 424.20 | "The Common info field of the Basic Multi-Link element carried in the (Re)Association Request frame shall include the MLD MAC address, the MLD Capabilities and Operations, and the EML Capabilities subfields". When neither EMLSR nor EMLMR supported, why do we need to carry EML Capabilities subfield? | clarify that only when EMLSR or EMLMR is supproted, the EML Capabilities subfield shall be carried. | **Revised**  The cited statement was deleted as a resolution for CID 10629 in CR document 1399r4.  **No further changes are needed in this document.**  **TGbe editor, please incorporate the changes as shown in 22/1399r4 (https://mentor.ieee.org/802.11/dcn/22/11-22-1399-04) under CID 10629** |
| 13894 | Ming Gan | 35.3.4.3 | 417.23 | one case of ML element with Per STA profiles in Neighbor Report element is missing | please complete the missing case | **Rejected**  The comment fails to identify a technical issue that needs to be resolved. Specifically, the missing case is not specified. |
| 14119 | Li-Hsiang Sun | 35.3.11 | 438.40 | (re)association response does not have a timestamp/TBTT, and subject to retransmission. How does it correspond to a reported link TBTT when quiet element is included in (re)association response frame? | add a reference timestamp in association response frame | **Rejected**  It is expected that a non-AP MLD has performed either active or passive scanning before sending an Association Request frame to the AP MLD. During scanning, the non-AP MLD would have determined the TSF of the AP and TBTT offsets with respect to the partner links. As a result, the non-AP MLD will have the TSF information of the link on which the non-AP MLD is performing ML setup and also that of the other links supported by the AP MLD. Therefore, there is no need to add a reference timestamp in the association response frame. |
| 14112 | Li-Hsiang Sun | 35.3.19.1 | 469.11 | "APs affiliated with an NSTR mobile AP MLD that are simultaneously transmitting PPDUs to the peer device affiliated with an MLD shall align the end time of PPDUs"  The AP MLD simultaneously transmitting PPDUs to more than 1 peer device on different links should also align the end of PPDUs | As in comment | **Rejected**  The comment fails to identify a technical issue that needs to be resolved.  End-alignment is specified for an AP MLD when the AP MLD simultaneously transmits PPDUs to the same non-AP MLD since it can lead to NSTR interference at the non-AP MLD if the PPDUs are not end aligned. This issue does not exist if the AP MLD is transmitting PPDUs to different non-AP MLDs. Hence, no changes are needed. |

***TGbe editor: Please note Baseline is 11be D2.3***

**35.3.16.6 Start time sync PPDUs medium access**

***TGbe editor: Please revise the following paragraph as shown [CID 11449]***

A STA affiliated with an MLD operating on a link that is part of an NSTR link pair for that MLD shall follow the channel access procedure described below:

1. The STA may initiate transmission on a link when the medium is idle as indicated by the physical and virtual CS mechanism and one of the following conditions is met:
2. The STA obtained an EDCA TXOP following the procedure in 10.23.2.4 (Obtaining an EDCA TXOP).
3. The backoff counter of the STA is already zero, and the STA operating on the other link of NSTR link pair of the affiliated MLD obtains an EDCA TXOP following the procedure in 10.23.2.4 (Obtaining an EDCA TXOP).
4. When the backoff counter of the STA reaches zero, it may choose to not transmit and keep its backoff counter at zero. A STA with backoff counter that has already reached zero may initiate transmission following condition 1b) or 3) (#11449).
5. A STA with backoff counter that has already reached zero and that chose not to transmit following condition 1b) may perform a new backoff procedure following deferral as described in 10.23.2.4 (Obtaining an EDCA TXOP) and 10.3.4.3 (Backoff procedure for DCF) before being allowed to initiate transmission on a link following condition 1a). In such a case, CW[AC] and QSRC[AC] are left unchanged.