IEEE P802.11
Wireless LANs

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| LB275 CR for CID 20087 |
| Date: 2023-11-10 |
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Abstract

This submission proposes resolutions for the following CIDs for TGbe LB275:

20088

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.***

***TGbe editor: The baseline for this document is 11be D4.1.***

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| **CID** | **Commenter** | **Clause** | **Pg/Ln** | **Comment** | **Proposed Change** | **Resolution** |
| 20087 | Liuming Lu | 35.3.17 Enhanced multi-link single radio operation | 566.05 | How the non-AP MLD operating in the EMLSR mode receives the group addressed frame is unclear, such as whether it is needed to be switched to an EMLSR link before receiving the group addressed frame on this link. | A procedure for the transmission and reception of the group addressed frames between an AP MLD and its associtated non-AP MLDs operating in the EMLSR mode needs to be specified. | RevisedIt is proposed to add a note to clarify the behavior of.a non-AP MLD that is operating in the EMLSR mode for receiving the group addressed frame(s).**Instruction to the editor**, ***please update the text in the subclause 35.3.17 Enhanced multi-link single radio operation, as shown in this document (doc.: IEEE 802.11-23/1870r0).*** |

**Discussion:**

A non-AP STA affiliated with a non-AP MLD that is in listening operation of EMLSR mode may not be able to receive the group addressed frames using rates that are higher than 24Mb/s or more SS, or being carried in HE PPDUs or EHT PPDUs if MU-RTS is not sent before the group addressede frames according to currently specified rules for EMLSR mode, shown as follows.

*“ When a non-AP MLD is operating in the EMLSR mode with an AP MLD supporting the EMLSR mode, the following applies:*

*—The non-AP MLD shall be able to listen on the EMLSR link(s), by having its affiliated non-AP STA(s) corresponding to those links in awake state. The listening operation includes CCA and receiving the initial Control frame of frame exchanges that is initiated by the AP MLD.*

*…*

*—An AP affiliated with the AP MLD that initiates frame exchanges that are not group addressed Data or Management frames with the non-AP MLD on one of the EMLSR links shall begin the frame exchanges by transmitting the initial Control frame to the non-AP MLD with the limitations specified below.*

*•The initial Control frame of frame exchanges shall be sent in the non-HT PPDU or non-HT duplicate PPDU format using a rate of 6 Mb/s, 12 Mb/s, or 24 Mb/s. ”*

**Proposed Text Change:**

35.3.17 Enhanced multi-link single radio operation

…

When a non-AP MLD is operating in the EMLSR mode with an AP MLD supporting the EMLSR mode, the following applies:

…

b) On the EMLSR link(s), the group addressed frame(s) that are expected to be received by the non-AP MLD shall be buffered and delivered following the rules defined in 35.3.15 (Multi-link operation group addressed frames).

***TGbe editor: please add the following text:***

Note: The non-AP MLD that expects to receive the group addressed frame(s) and be capable of receiving a PPDU that is sent using more than one spatial stream on one of the EMLSR links corresponding to an AP of the AP MLD might switch to the link before or at the scheduled group addressed frame transmission time on that link.

**References:**

1. <https://mentor.ieee.org/802.11/dcn/23/11-23-0802-01-00be-lb271-cr-for-cid-16415-on-35-3-17-enhanced-multi-link-single-radio-operation.docx>