IEEE P802.11
Wireless LANs

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| CR for 35.4.1 DL MU operation |
| Date: Mar. 22, 2021 |
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 Abstract

This submission proposes resolutions for following CID received for TGbe CC34:

1087

Revisions:

* Rev 0: Initial version of the document.
* Rev 1: Some wording change based on offline comments.
* Rev 2: Change the text based on Draft 1.0.
* Rev 3: Correct some references to the sub clauses.

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** | **Page** | **Clause** | **Comment** | **Proposed Change** | **Resolution** |
| 1087 | Alfred Asterjadhi | 146.42 | 35.4 | Subclause for DL MU operation is missing. Several things need to be expanded in this case, such as support for EHT MU PPDU, 320 MHz, up to 16 SS, and other new PHY functionalities that are added to the PHY subclauses. Add necessary capability bits and MIB variables. | As in comment | Revised-Agree with the comment. Inherit the rules defined in 26.5.1 (HE DL MU operation) that can also be applied to EHT DL MU operation. Define some new rules to support EHT MU PPDU.TGbe editor:Please implement changes as shown in this document. |

***TGbe editor: Please note baselines are REVmd D5.0, 11ax D8.0 and 11be D0.4***

**35.4.1 EHT DL MU operation**

***TGbe editor: Please update the subclause as shown below***

**35.4.1.1 General**

An EHT AP or an EHT non-AP STA shall follow the rules defined in 26.5.1 (HE DL MU operation) to transmit or receive an HE MU PPDU.

When transmitting or receiving an EHT MU PPDU, the rules defined in 26.5.1 (HE DL MU operation) that apply to an HE MU PPDU shall apply to an EHT MU PPDU, unless specified in 35.4.1 (EHT DL MU operation).

The rules defined in 26.5.1 (HE DL MU operation) that apply to the EDCA procedure of HE DL MU operation shall apply to the EDCA procedure of EHT DL MU operation.

An EHT AP shall not transmit an EHT MU PPDU with an RU that is narrower than the PPDU bandwidth and that is allocated to more than one STA (DL MU-MIMO) unless the AP has received from each STA an EHT Capabilities element with the Partial Bandwidth DL MU-MIMO subfield in the EHT PHY Capabilities Information field equal to 1.

**35.4.1.2 RU allocation in an EHT MU PPDU**

An AP shall not transmit a 320 MHz EHT MU PPDU in the 6 GHz band with a 4×996-tone RU allocated to a non-AP EHT STA, unless the AP has received from the non-AP EHT STA an EHT Capabilities element with the Support For 320 MHz In 6 GHz subfield in the EHT PHY Capabilities Information field equals to 1.

If dot11EHTSupportFor242ToneRUInBWWiderThan20Implemented equals to false, then the STA shall set the Support For 242-tone RU In BW Wider Than 20 MHz subfield in the EHT PHY Capabilities Information field in the EHT Capabilities element to 0.

An AP shall not transmit a 40 MHz, 80 MHz, 160 MHz, or 320 MHz EHT MU PPDU with an RU allocated to a 20 MHz operating non-AP EHT STA, unless the AP has received from the 20 MHz operating non-AP EHT STA an EHT Capabilities element with the Support For 242-tone RU In BW Wider Than 20 MHz subfield in the EHT PHY Capabilities Information field equals to 1.

An AP shall follow the RU restriction rules defined in 36.3.2.6 (RU and MRU restrictions for 20 MHz operation) when assigning an RU to a 20 MHz operating non-AP STA in a 40 MHz, 80 MHz, 160 MHz, or 320 MHz EHT MU PPDU. An AP shall follow the rules in 36.3.2.5 (20 MHz operating non-AP EHT STAs), and 36.3.2.7 (80 MHz operating non-AP EHT STAs) if allocating RUs to an EHT non-AP STA.

**Straw Poll: Do you support to incorporate the proposed draft text in this document 11-21/0538r3 to the next revision of TGbe Draft?**

**Result: Yes/No/Abstain**