IEEE P802.11
Wireless LANs

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| LB266 CR for CIDs of 4.3.16a |
| Date: 2022.07.14 |
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Abstract

This submission proposes resolutions of comments received from TGbe comment collection LB266 (TGbe D2.1.1):

* CIDs: 10965, 13216

Revisions:

* R0: Initial version of the document.
* R1: updated resolutions for CIDs 10965, 13216; the latest resolutions are based on TGbe D2.1.1

# Introduction

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. The introduction and the explanation of the proposed changes are 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 802.11be 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.Line | Clause Number | Comment | Proposed Change | Resolution |
| 10965 | Rui Yang | 55.53 | 4.3.16a | This part of the spec should include a statement for 20 MHz operating non-AP EHT STA. Since "Support For 242-tone RU In BW Wider Than 20 MHz" is an subfiled in PHY capability info field, supporting for participating in 160 MHz/320 MHz UL/DL OFDMA for an 20 MHz operating non-AP EHT STA should be optional. | Insert the following bullete after line 53: "Optional support for participating in 160 MHz/320 MHz UL/DL OFDMA for an 20 MHz operating non-AP EHT STA." | **Revised.**Agree that the support for large BW transmission for a 20 MHz operating non-AP EHT STA is optional. In 11ax, the optional support for 160 MHz UL/DL OFDMA for a 20 MHz operating non-AP STA is already covered. So only add support for 320 MHz here.***Instructions to editor***:Please make the changes to the spec as shown in 11/22- 1120r1, under CID 13216. |
| 13216 | Evgeny Khorov | 55.36 | 4.3.16a | 16x MU-MIMO is missing but was discussed as a candidate feature | Add the support of 16x MU-MIMO | **Rejected.**The group discussed and ran SPs in both PHY ad-hoc and Joint conference call regarding whether TGbe needs to support 16 SS or not and decided not to. The SP is shown here: " Do you agree that 802.11be shall not define operation with more than 8 spatial streams and that the format of all subfields related to spatial streams shall remain unchanged (i.e. no changing the number of bits)?" and the result in PHY ad-hoc was 22Y, 4N, 5A while the result in Joint was 51Y, 12N, 26A". |

**Discussion:**

Similar as the feature in 36.1.1 P55L48 *Mandatory support for participating in 160 MHz/320 MHz UL/DL OFDMA for an 80 MHz operating non-AP EHT STA,* the optional support of participating in 320 MHz UL/DL OFDMA for a 20 MHz operating non-AP EHT STA should be added.

Besides, support for 320 MHz UL/DL OFDMA of certain RU sizes (26-, 52-, and 106-tone) for a 20 MHz operating non-AP STA is mandatory in 11be (36.1.1 P561L42) while it is optional in 11ax:

 

Optional support for 320 MHz UL/DL OFDMA for 20 MHz operating non-AP STA can be seen as a key PHY feature.

**Propose:**

Revised for CID 10965 at **4.3.16a Extremely high throughput (EHT) STA** as per editing instructions in 11-22/1120r1

***Change the fourth paragraph as follows*:**

The main PHY features in an EHT STA that are not present in HE STA, VHT STA or HT STA are the following:

— Mandatory support for MRU

— Mandatory support for non-OFDMA preamble puncturing with any pattern needed to support mandatory MRU for non-OFDMA

— Mandatory support for non-OFDMA UL MU-MIMO transmission for a non-AP EHT STA

— Mandatory support for single spatial stream EHT-MCSs 8 and 9 for a non-AP EHT STA that is not a 20 MHz-only non-AP EHT STA

— Mandatory support for single spatial stream EHT-MCS 15 in an RU

— Mandatory support for participating in 160 MHz/320 MHz UL/DL OFDMA for an 80 MHz operating non-AP EHT STA

— Mandatory support for participating in 320 MHz UL/DL OFDMA for a 160 MHz operating non-AP EHT STA

— Optional support for participating in 320 MHz UL/DL OFDMA foe a 20 MHz operating non-AP EHT STA

— Optional support for EHT-MCSs 12 and 13

— Optional support for single spatial stream EHT-MCS 14 in 6 GHz band

— Optional support for single spatial stream EHT-MCS 15 in an MRU