IEEE P802.11
Wireless LANs

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| **TGbe Comment Resolutions for CIDs Related to 20 MHz Operating STA in****36.3.2.2 Support of wide bandwidth OFDM operation** |
| **Date:** 2021-04-26 |
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Abstract

This submission proposes resolutions for the comments of the following 12 CIDs:

1286, 1546, 1547, 1944, 1960, 1985, 2018, 2019, 2781, 3095, 3165, 3267

Revisions:

* Rev 0: Initial version of the document.
* Rev 1: Modification of the resolution for CID 2781 based on an offline discussion

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 D0.3 Draft. This introduction is not part of the adopted material.

***Editing instructions formatted like this are intended to be copied into the TGbe D0.4 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.***

#### *CIDs 2781, 3095, 3165, 3267*

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| **CID** | **Clause** | **PP.LL** | **Comment** | **Proposed Change** | **Resolution** |
| 2781 | 36.3.2.2 | 183.49 | Change "supports" to "shall support" | See comment | Revised20 MHz operating STAs mandatorily support 26-tone RU, 52-tone RU, 106-tone RU and 52+26-tone MRU in both MU and TB PPDU with BW larger than 20 MHz except for some disallowed RUs and MRUs whereas support for 242-tone RU is optional for 20 MHz operating STAs in EHT MU PPDU with BW larger than 20 MHz. Divide the corresponding sentence into two sentences to clarify mandatory and optional supports.TGbe editor to make the changes shown in 11-21/0731r1. |
| 3095 | 36.3.2.2 | 183.50 | "A 20 MHz operating non-AP EHT STA supports 26-tone RU, 52-tone RU, 106-tone RU, 242-tone RU 26+52-tone MRU, and 26+106-tone MRU in locations allowed in 36.3.2.5 (RU/MRU restrictions for 20 MHz operation)". 26+106 tone MRU should be removed from the sentence since it is disallowed. In 36.3.2.5, it states that "An AP shall not assign all 26+106-tone MRUs to a 20 MHz operating non-AP EHT STA for 40 MHz, 80 MHz, 160 MHz, and 320 MHz EHT MU PPDU and EHT TB PPDU". | As in comment | RevisedAgree in principle with the commenter. Remove 106+26-tone RU.TGbe editor to make the changes shown in 11-21/0731r1. |
| 3165 | 36.3.2.2 | 183.53 | "An EHT AP shall be able to allocate an RU or MRU on a 20 MHz channel within the BSS bandwidth in a 40 MHz, 80 MHz, 160 MHz, or 320 MHz EHT MU or EHT TB PPDU to a 20 MHz operating non-AP EHT STA."This is up to the AP's scheduler. | Change "An EHT AP shall be able to allocate" to "An EHT AP may allocate".Similar change at P184L10 and P184L32. | Accepted |
| 3267 | 36.3.2.2 | 183.50 | 26+52-tone MRU and 26+106-tone MRU should be 52+26-tone MRU and 106+26-tone MRU to be consistent throught the spec | as in comment | AcceptedTGbe editor: This is already reflected in D0.4. No further change is needed. |

*TGbe Editor: Please make the following changes in the third paragraph of 36.3.2.2 Support of wide bandwidth OFDM operationg of D0.4:*

A 20 MHz operating non-AP EHT STA shall support(#2781) 26-tone RU, 52-tone RU, 106-tone RU, and(#2781) 52+26-tone MRU(#3095) in locations allowed in 36.3.2.5 (RU and MRU restrictions for 20 MHz operation(#3276)) when participating in EHT DL and UL OFDMA transmissions with PPDU bandwidth larger than 20 MHz. A 20 MHz operating non-AP EHT STA may support 242-tone RU when participating in EHT DL transmissions with PPDU bandwidth larger than 20 MHz (see 36.3.2.5 (RU and MRU restrictions for 20 MHz operation)).(#2781) An EHT AP may(#3165) allocate an RU (see 36.3.2.1 (Subcarriers and resource allocation for wideband)) or MRU (see 36.3.2.3 (Subcarriers and resource allocation for multiple RUs)) on a 20 MHz channel within the BSS bandwidth in a 40 MHz, 80 MHz, 160 MHz, or 320 MHz EHT MU or EHT TB PPDU to a 20 MHz operating non-AP EHT STA.

*TGbe Editor: Please make the following changes in the seventh paragraph of 36.3.2.2 Support of wide bandwidth OFDM operationg of D0.4:*

An 80 MHz operating non-AP EHT STA shall be able to participate in 160 MHz and 320 MHz, EHT DL and UL OFDMA transmissions. An EHT AP may(#3165) allocate an RU (see 36.3.2.1 (Subcarriers and resource allocation for wideband) or MRU (see 36.3.2.3 (Subcarriers and resource allocation for multiple RUs)) on one 80 MHz channel within the BSS bandwidth in a 160 MHz or 320 MHz EHT MU or EHT TB PPDU to an 80 MHz operating non-AP EHT STA.

*TGbe Editor: Please make the following changes in the eleventh paragraph of 36.3.2.2 Support of wide bandwidth OFDM operationg of D0.4:*

A 160 MHz operating non-AP EHT STA shall be able to participate in 320 MHz EHT DL and UL OFDMA transmissions. An EHT AP may(#3165) allocate an RU or MRU on the primary 160 MHz channel within the BSS bandwidth in a 320 MHz EHT MU or EHT TB PPDU to a 160 MHz operating non-AP EHT STA.

#### *CIDs 1546, 1944, 1960, 1985, 2018*

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| **CID** | **Clause** | **PP.LL** | **Comment** | **Proposed Change** | **Resolution** |
| 1546 | 36.3.2.2 | 184.03 | the restriction of MRU for 20MHz operating non-AP STA is described in P183L50. delete the following sentence (some restrictions TBD) | as in comment. | RevisedFor a better description clarify the TBD by referring to the section for RU and MRU restrictions of 20 MHz operation.TGbe editor: TBD was resolved in 11-21/0692r2. No further change is needed. |
| 1944 | 36.3.2.2 | 184.01 | Define TBD restrictions, define SST operation or remove TBD descriptoins about SST operation | As in comment | RevisedClarify the TBD by referring to the section for RU and MRU restrictions of 20 MHz operation.TGbe editor: TBD was resolved in 11-21/0692r2. No further change is needed. |
| 1960 | 36.3.2.2 | 184.04 | clear the "some resitrictions TBD" in this subcaluse: A 20 MHz operating non-AP STA shall be able to support the reception of the preamble and data in the allocated RU or MRU on the 20 MHz channel assigned by the EHT AP in a 40 MHz, 80 MHz, 160 MHz, or 320 MHz EHT MU PPDU (some restrictions TBD). | clear the restrictions TBD. Note 320MHz only available in 6GHz band and EHT 20 MHz operating non-AP STA is not allowed in 6GHz. | RevisedClarify the TBD by referring to the section for RU and MRU restrictions of 20 MHz operation. Note there are two types of 20MHz oprating STAs. One is 20MHz-only STA which does not operate in 6GHz. The other one basically has a wide channel width capability but its operating channel width is reduced to 20MHz and it can operate in 6GHz.TGbe editor: TBD was resolved in 11-21/0692r2. No further change is needed. |
| 1985 | 36.3.2.2 | 184.03 | What is (some restriction TBD) for? If it means about the reception of the preamble and data outside of the primary 20 MHz channel, it's already being covered by following sentence as "A 20 MHz operating non-AP EHT STA shall operate in the primary 20 MHz channel with exception TBD." that needs to be resolved in the next version of draft. Suggest to remove TBD (to minimize TBDs in the draft). | Delete (some restrictions TBD). | RevisedFor a better description clarify the TBD by referring to the section for RU and MRU restrictions of 20 MHz operation.TGbe editor: TBD was resolved in 11-21/0692r2. No further change is needed. |
| 2018 | 36.3.2.2 | 184.04 | I don't know what is some restrictions. | delete the text '(some restrictions TBD)' | RevisedFor a better description clarify the TBD by referring to the section for RU and MRU restrictions of 20 MHz operation.TGbe editor: TBD was resolved in 11-21/0692r2. No further change is needed. |

#### *CIDs 1286, 1547, 2019*

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| **CID** | **Clause** | **PP.LL** | **Comment** | **Proposed Change** | **Resolution** |
| 1286 | 36.3.2.2 | 184.06 | To maintain efficiency in a wide bandwidth BSS with lots of 20M operating STAs (even if they only carry with intermittent traffic), the AP must be able to use SST to move such STAs across the BSS bandwidth. | Make SST mandatory for 20M operating STAs | RevisedClarify the TBD by using SST operation. However, this section is not a proper section to describe whether SST is mandatory or not for 20 MHz operating STAs.TGbe editor: TBD was resolved in 11-21/0692r2. No further change is needed. |
| 1547 | 36.3.2.2 | 184.06 | SST operation is supported in R1. So, by using the SST operation, the 20MHz operating non-AP STA can operate in a non-primary 20MHz channel in BSS BW. by reflecting the SST operation, modify the TBD. | as in comment. | RevisedClarify the TBD by using SST operation.TGbe editor: TBD was resolved in 11-21/0692r2. No further change is needed. |
| 2019 | 36.3.2.2 | 184.06 | A 20 MHz operating non-AP EHT STA shall operate in the primary 20 MHz channel with exception SST operation. | change 'TBD' to 'SST operation' | RevisedClarify the TBD by using SST operation.TGbe editor: TBD was resolved in 11-21/0692r2. No further change is needed. |