IEEE P802.11
Wireless LANs

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| 11be Spec text for EHT BSS Operation |
| Date: 2020-08-20 |
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Abstract

We propose the draft specification skeleton for MLD to help the creation of TGbe draft D0.1.

Revisions:

* Rev 0: Initial version of the document.

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| MAC | EHT BSS Operation | Liwen Chu | Guogang Huang, Po-kai Huang, Insun Jang, George Cherian, Mark Rison, Yonggang Fang, John Yi, Liuming Lu | Basics (R1) |  | Motion 112, #SP53Motion 112, #SP54 |

The texts is prepared for the following motions.

802.11be supports that in 6 GHz band, an EHT AP may announce different BSS operating bandwidth to non-EHT STAs than the BSS operating bandwidth it announces to EHT STAs when EHT BW covers disallowed 20 MHz channels and/or when the announced EHT BW is not supported by non-EHT amendments. The advertised BSS operating bandwidth to EHT STA shall include the advertised BSS operating bandwidth to non-EHT STA.

[Motion 112, #SP53, [13] and [95]]

802.11be supports defining an EHT operation element to indicate the channel configuration for EHT STA, which does not need to combine with the indication of CCFS0 and CCFS1 in HE operation elements at 6 GHz.

[Motion 112, #SP54, [13] and [172]]

**Proposed spec text:**

The baseline for this text is 802.11 REVmd draft 3.4, 802.11ax D6.0.

33. Extreme High Throughput (EHT) MAC specification

***TGbe editor: Add new a subclause 33.x*. (EHT BSS 6GHz Operation) *under clause 33x as follows:***

**33.x EHT BSS Operation**

**33.x.y EHT BSS 6GHz Operation**

In 6 GHz band, an EHT 6 GHz AP may announce different BSS operating bandwidth to non-EHT 6 GHz STAs than the BSS operating bandwidth it announces to EHT 6 GHz non-AP STAs when EHT BW covers disallowed 20 MHz channels and/or when the announced EHT BW is not supported by non-EHT amendments.

If an EHT 6 GHz AP doesn’t announce the punctured 20MHz channels covered by its BSS operating channel defined in the EHT Operating element and the BSS operating channel defined in the EHT Operating element is not more than 160 MHz, the EHT 6 GHz AP shall announce the same BSS operating channel width in the EHT Operating element and the HE Operating element.

If an EHT 6 GHz AP doesn’t announce the punctured 20 MHz channels covered by its BSS operating channel defined in EHT Operating element and the BSS operating channel defined in EHT Operating element is more than 160 MHz, the EHT6 GHz AP shall announce 160 MHz channel width in the HE Operating element.

If an EHT 6 GHz AP announces the punctured 20 MHz channels covered by its BSS operating channel defined in EHT Operating element and the BSS operating channel defined in EHT Operating element is no more than 160MHz, the EHT6 GHz AP shall announce the channel width in the HE Operating element that doesn’t cover any punctured 20 MHz channels.

If an EHT 6 GHz AP announces the punctured 20 MHz channels covered by its BSS operating channel defined in EHT Operating element and the BSS operating channel defined in EHT Operating element is not in the primary 160 MHz channel, the EHT6 GHz AP shall announce 160 MHz channel width in the HE Operating element.

An EHT 6 GHz AP shall set the Channel Width subfield, the Channel Center Frequency Segment 0, and the Channel Center Frequency Segment 1 subfields in EHT Operating element as defined in Table 33-xx (6 GHz BSS channel width).

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| Table 33-xx 6 GHz BSS channel width  |
| Center Frequency Segment 1 field | BSS channel width |
| 0 | 20 MHz |
| 0 | 40 MHz |
| 0 | 80 MHz |
| CCFS1 > 0 and |CCFS1 – CCFS0| = 8 | 160 MHz |
| CCFS1 > 0 and |CCFS1 – CCFS0| = 16 | 320 MHz |