IEEE P802.11  
Wireless LANs

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| 11ax D2.0 BSS Operation BW | | | | |
| Date: 2018-04-30 | | | | |
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Abstract

This submission proposes fix the bugs about BSS operation channel BW.

Revisions:

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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 TGax Draft. This introduction is not part of the adopted material.

***Editing instructions formatted like this are intended to be copied into the TGax Draft (i.e. they are instructions to the 802.11 editor on how to merge the text with the baseline documents).***

***TGax Editor: Editing instructions preceded by “TGax Editor” are instructions to the TGax editor to modify existing material in the TGax draft. As a result of adopting the changes, the TGax editor will execute the instructions rather than copy them to the TGax Draft.***

Discussion:

In 11md, an AP announces 160/80+80 MHz BSS by using **Channel Center Frequency Segment 0**, **Channel Center Frequency Segment 1, Channel Center Frequency Segment 2**. The Channel Center Frequency Segment 2 is invisable to a VHT STA that doesn’t support Extended NSS BW Support. When Channel Center Frequency Segment 2 is used, Channel Center Frequency Segment 1 needs to be set to 0, e.g. in Table 11-25 and many relsted tables. The table, text about the Channel Center Frequency 0, 1 and 2 are copied from VHT BSS operation subclause to HE BSS operation subclause with the bugs in Table 11-24 in 11md draft:



This should be fixed when Channel Center Frequency Segment 0 and Channel Center Frequency Segment 1 subfields in the HE Operation element. We may also fix the bugs in 11md draft.

**11.40 VHT BSS operation**

**11.40.1 Basic VHT BSS functionality**

***TGax editor: make the following changes in subclause 11.40.1:***

A STA that is a VHT AP or a VHT mesh STA shall set the STA Channel Width subfield in the HT

Operation element HT Operation Information field and the Channel Width, Channel Center Frequency

Segment 0 in in the VHT Operation element VHT Operation Information field, Channel Center Frequency Segment 1 subfield in the VHT Operation element VHT

Operation Information field, and the Channel Center Frequency Segment 2 subfield in the HT Operation element to indicate the BSS bandwidth as defined in Table 11-24.

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|  | | * VHT BSS bandwidth | | | |
| HT Operation element STA Channel Width field | VHT Operation element Channel Width field | | VHT Operation element Channel Center Frequency Segment 1 subfield | VHT Operation element Channel Center Frequency Segment 2 subfield | BSS bandwidth |
| 0 | 0 | | 0 | 0 | 20 MHz |
| 1 | 0 | | 0 | 0 | 40 MHz |
| 1 | 1 | | 0 | 0 | 80 MHz |
| 1 | 1 | | CCFS1 > 0 and | CCFS1 - CCFS0 | = 8 | 0 | 160 MHz when the **Supported Channel Width Set is not equal to 0** |
| 1 | 1 | | 0 | CCFS2 > 0 and | CCFS2 - CCFS0 | = 8 | 160 MHz when the **Supported Channel Width Set is equal to 0** |
| 1 | 1 | | CCFS1 > 0 and | CCFS1 - CCFS0 | > 16 | 0 | 80+80 MHz except when the **Supported Channel Width Set is equal to 2 or** the **Supported Channel Width Set and Extended NSS BW Support are equal to 1 and 3 respectively** |
| 1 | 1 | | 0 | CCFS2 > 0 and | CCFS2 - CCFS0 | > 16 | 80+80 MHz when the **Supported Channel Width Set is equal to 2 or** the **Supported Channel Width Set and Extended NSS BW Support are equal to 1 and 3 respectively** |
| 1 | 2 | | 0 |  | 160 MHz  (deprecated) |
| 1 | 3 | | CCFS1 > 0 and | CCFS1 - CCFS0 | > 16 |  | 80+80 MHz  (deprecated) |
| NOTE 1—CCFS0 represents the value of the Channel Center Frequency Segment 0 subfield.  NOTE 2—CCFS1 represents the value of the Channel Center Frequency Segment 1 subfield.  NOTE 3----CCFS2 represents the value of the Channel Center Frequency Segment 2 subfield. | | | | | |

**27.16 HE BSS operation**

**27.16.1 Basic HE BSS functionality**

***TGax editor: make the following changes in subclause 27.16.1:***

A STA that is an HE AP or an HE mesh STA that transmits an HE Operation element that has the VHT Operation Information Present field set to 1 shall set the STA Channel Width and the Channel Center Frequency Segment 2 subfields in the HT Operation element HT Operation Information field, the Channel Width, Channel Center Frequency Segment 0 and Channel Center Frequency Segment 1 subfields in the HE Operation element VHT Operation Information field to indicate the BSS bandwidth as defined in Table 11-24 (VHT BSS bandwidth).