IEEE P802.11
Wireless LANs

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| 11ax D2.0 BSS Operation BW |
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Abstract

This submission proposes fix the bugs about BSS operation channel BW. The text is based on 11md D1.0.

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 11-24, 11-25 and many related tables in 11md D1.0. 11ax refers to 802.11baseline spec for HE BSS BW definition that is only applicable to BSS with same NSS support at <=80MHz as NSS support at 160/80+80MHz.This should be fixed. Another observation is that in Table 11-23, it is not defined whether Channel Center Frequency Segment 2 is set to 0 or not. We calirafy it also.

 **27.16 HE BSS operation**

**27.16.1 Basic HE BSS functionality**

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

**(…existing text…)**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 do one of the following to set the BSS operating channel:

* setting the STA Channel Width subfield and Channel Center Frequency Segment 2 subfield in the HT Operation element HT Operation Information field, the Channel Width in the HE Operation element VHT Operation Information field, the 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 11-23 (VHT BSS bandwidth) and Table 11-25 (**Extended NSS channel width**) respectively based on Extended NSS BW Support and **Supported Channel Width Set**.
* setting the STA Channel Width subfield and Channel Center Frequency Segment 2 subfield in the HT Operation element HT Operation Information field, the Channel Width in the HE Operation element VHT Operation Information field, the 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 11-23 (VHT BSS bandwidth) and Table 11-25 (**Extended NSS channel width**) respectively based on Rx HE-MCS Map <= 80 MHz, Rx HE-MCS Map 160 MHz, Rx HE-MCS Map 80+80 MHz.

Note 1: the Channel Center Frequency Segment 2 is 0 when Table 11-23 is applied.

Note 2: these two methods give the same result.

**(…existing text…)**