IEEE P802.11
Wireless LANs

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| 11be lb271 CR for Clause 36.3.11 Mathematical description of signals |
| Date: 2023-03-13 |
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Abstract: This document contains proposed resolutions for comments in *Clauses 36.3.11* from 11be D3.0 with 8 CIDs below.

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| ***Clause 36.3.11***15054, 15221, 15771, 16636, 17198,17199,17200,17201 |  |
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| 15045 | 36.3.11.4 | 752.52 | In Figure 36-29, the EHT of t\_EHT-PE is written in red, so please correct it. | as in comment. | **Revised.**TGbe editor: Incorporate the changes in <https://mentor.ieee.org/802.11/dcn/23/11-23-0422-00-00be-11be-lb271-CR-for-Clause-36-3-11-mathematical-description-of-signals.docx> |
| 15221 | 36.3.11.4 | 752.52 | Change the color in "t\_EHT-PE" from red to blcak in Figure 36-29 | as in comment. | **Revised.**TGbe editor: Incorporate the changes in <https://mentor.ieee.org/802.11/dcn/23/11-23-0422-00-00be-11be-lb271-CR-for-Clause-36-3-11-mathematical-description-of-signals.docx> |
| 15771 | 36.3.11.4 | 752.52 | the color of t\_EHT-PE should be changed to 'black' in figure 36-29. | As in comment | **Revised.**TGbe editor: Incorporate the changes in <https://mentor.ieee.org/802.11/dcn/23/11-23-0422-00-00be-11be-lb271-CR-for-Clause-36-3-11-mathematical-description-of-signals.docx> |
| 16636 | 36.3.11.4 | 752.52 | Correct font color of t\_EHT-PE in figure 36-29 | As in comment | **Revised.**TGbe editor: Incorporate the changes in <https://mentor.ieee.org/802.11/dcn/23/11-23-0422-00-00be-11be-lb271-CR-for-Clause-36-3-11-mathematical-description-of-signals.docx> |
| 17200 | 36.3.11.4 | 752.52 | "t\_EHT-PE" in Figure 36-29 has red font | Remove red font | **Revised.**TGbe editor: Incorporate the changes in <https://mentor.ieee.org/802.11/dcn/23/11-23-0422-00-00be-11be-lb271-CR-for-Clause-36-3-11-mathematical-description-of-signals.docx> |

be editor: please make the following changes in 3.0 *Clause 36.3.11.4*:

* On P752L20 (CID #15045,#15221,#15771,#16636,#17200):



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| 17198 | 36.3.11.2 | 749.50 | "subcarriers on which the signal is transmitted in each 80 MHz bandwidth is identical to an 80 MHz EHT PPDU transmission". The subcarriers are not identical, there is an additional shift. | Replace with "subcarriers on which the signal is transmitted in each 80 MHz bandwidth are identical (up to a shift) to an 80 MHz EHT PPDU transmission". | **Revised.**Agree with the commentor that the subcarrier indices of each 80MHz subblock of 160MHz PPDU are not identical to that of 80MHz PPDU, and there is +/-512 shift for upper and lower 80MHz frequency subblock, respectively.**Revised.**TGbe editor: Incorporate the changes in <https://mentor.ieee.org/802.11/dcn/23/11-23-0422-00-00be-11be-lb271-CR-for-Clause-36-3-11-mathematical-description-of-signals.docx> |

be editor: please make the following changes in D3.0 *Clause 36.3.11.2*:

* On P749L50 (CID #17198):

For a 160 MHz EHT PPDU transmission, each half 80 MHz bandwidth is divided into 1024 subcarriers for EHT modulated fields, and the subcarriers on which the signal is transmitted in each 80 MHz bandwidth is identical to those in an 80 MHz EHT PPDU transmission with a corresponding subcarrier index shift, depending on whether it is nonpunctured non-OFDMA, punctured non-OFDMA, or OFDMA transmission within the corresponding 80 MHz.

For a 320 MHz EHT PPDU transmission, each quarter 80 MHz bandwidth is divided into 1024 subcarriers for EHT modulated fields, and the subcarriers on which the signal is transmitted in each 80 MHz bandwidth is identical to those in an 80 MHz EHT PPDU transmission with a corresponding subcarrier index shift, depending on whether it is nonpunctured non-OFDMA, punctured non-OFDMA, or OFDMA transmission within the corresponding 80 MHz.

For a 160 MHz or a 320 MHz EHT PPDU transmission in EHT DUP mode, the subcarriers on which the signal is transmitted in each 80 MHz bandwidth is identical to those in a nonpunctured non-OFDMA 80 MHz EHT PPDU transmission that is not in EHT DUP mode with a corresponding subcarrier index shift.

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| 17199 | 36.3.11.4 | 752.39 | In Table 36-1, the parameter CH\_BANDWIDTH only has values CBW320-1 and CBW320-2 defined. Table 36-25 uses CBW320, CBW320-1 and CBW320-2. Since both refer to the same parameter CH\_BANDWIDTH, this inconsistency needs to be resolved either by added CBW320 in TX/RXVECTOR (Table 36-1) or by removing CBW320 from Table 36-25. | As in comment. | **Revised.**Agree with commentor that the parameter CH\_BANDWIDTH for EHT PPDU only has values CBW320-1 and CBW320-2. TGbe editor: Incorporate the changes in <https://mentor.ieee.org/802.11/dcn/23/11-23-0422-00-00be-11be-lb271-CR-for-Clause-36-3-11-mathematical-description-of-signals.docx> |

be editor: please make the following changes in D3.0 *Clause 36.3.11.4*:

* On P752L39 (CID #17199):

Table 36-25—Center frequency of the transmitted PPDU

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| **dot11EHTCurrentCha nnelWidth** | **CH\_BANDWIDTH** | *fc* = *f*CH Start + 5  *f*0 |
| *f*0 |
| 320 MHz | CBW20 | *f*P20 idx |
| CBW40 | *f*P40 idx |
| CBW80 | *f*P80 idx |
| CBW160 | *f*P160 idx |
| CBW320-1, CBW320-2 | *fc* idx0 |

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| 17201 | 36.3.11.4 | 754.47 | The defintion on alpha\_r says that it is "determined by the POWER\_BOOST\_FACTOR parameter in the TXVECTOR". The subsequent NOTE says that it is "set to the value of POWER\_BOOST\_FACTOR in the TXVECTOR". Why not make this part of the defintion in the first place? | Change definition of alpha\_r to "is the power boost factor of the r-th occupied RU or MRU in an EHT MU PPDU and is set to the value of POWER\_BOOST\_FACTOR in the TXVECTOR" | **Revised.**Agree with the commentor the note can be removed and merged into the definition.TGbe editor: Incorporate the changes in <https://mentor.ieee.org/802.11/dcn/23/11-23-0422-00-00be-11be-lb271-CR-for-Clause-36-3-11-mathematical-description-of-signals.docx> |

be editor: please make the following changes in D3.0 *Clause 36.3.11.4*:

* On P754L47(CID #17201):

$α\_{r}$ is the power boost factor of the r-th occupied RU or MRU in an EHT MU PPDU as defined in 35.11.1.2 (POWER\_BOOST\_FACTOR), and is set to the value of POWER\_BOOST\_FACTOR parameter in the TXVECTOR.