IEEE P802.11
Wireless LANs

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| LB253 Resolution to some CID set6 |
| Date: 2021-07-02 |
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Abstract

Editor instruction based on D3.1

CIDs resolved: 5148, 5464, 5408, 5419, 5418, 5470, 5375, 5472

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| 5148 | 222.00 | 27.2.2 | The "PSDU\_LENGTH" apears twice in table 27-1 with different conditions | select one of the the ways for PSDU\_LENGTH definition | Revise***TGaz Editor:*** *perform changes shown in https://mentor.ieee.org/802.11/dcn/21/11-21-1156-01-00az-lb253-resoluiton-to-cid-set6.docx* |
| 5464 | 222.00 | 27.2.2 | There are two rows for PSDU\_LENGTH in the TX/RXVECTOR table. | Keep only one row for PSDU\_LENGTH | Revise***TGaz Editor:*** *perform changes shown in https://mentor.ieee.org/802.11/dcn/21/11-21-1156-01-00az-lb253-resoluiton-to-cid-set6.docx* |
| 5408 |   | 27.2.2 | There are two parameters in Table 27-1 with the name PSDU\_LENGTH | Remove or combine the two parameters PSDU\_LENGTH | Revise***TGaz Editor:*** *perform changes shown in https://mentor.ieee.org/802.11/dcn/21/11-21-1156-01-00az-lb253-resoluiton-to-cid-set6.docx* |

***TGaz Editor: Delete the two lines of “PSDU LENGTH” from Table 27-1 (page 229)***

***TGaz Editor: Insert the follow text in after Table 27-1 (P230L3):***

***Editor: Change the line of PSDU\_LENGTH in table 27-1 as follows:***

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| PSDU\_LENGTH | FORMAT is HE\_SU, HE\_MU, HE\_ER, HE\_ER\_SU or HE\_TB | Indicates the number of octets in the PSDU in the range of 0 to *aPSDUMaxLength* octets (see Table 27-54). A value of 0indicates an HE sounding NDP, an HE Ranging NDP or an HE TB Ranging NDP. | N | Y |
| Otherwise | See corresponding entry in Table 21-1 (RXVECTOR and RXVECTOR parameters). |

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| 5419 | 233.00 | 7 | 27.3.18d | Need to define some detection requirements for Secure HE-LTF. The system security is determined by both Tx and Rx side. Besides defining a Secure HE-LTF, the detection requirements are also important to meet a certain level of security. | Define secure HE-LTF detection requirements |  RejectThe standard tends not to define Rx requirements except Frame Error Rate (with/without). It is not even clear what is a good Rx performance that can be tested.  |

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| 5418 | 237.00 | 27.3.19.2 | The intent of the last sentence in the paragraph was to not measure spectral flatness when the Flat Top window (for improved security) is used at the transmitter. Since nothing has changed for the rectangular window for 802.11ax, i.e., same windowing, 64 QAM, etc. 802.11az are still expected to meet the spectral flatness when the rectangular window is used | Rewrite sentence as follows: "Spectral flatness shall not be measured when the Ranging NDP uses a secure LTF with a frequency domain flat top window. Spectral flatness is shall be measured when the Ranging NDP uses a secure LTF with a frequency domain rectangular window" |  Revise:The need to measure spectral flatness over Ranging NDP is not clear. TGaz Editor: replace the underlined text in P246 L26-28 with:"Spectral flatness shall not be measured when the Ranging NDP uses a secure LTF with a frequency domain flat top window. Spectral flatness may be measured when the Ranging NDP uses a secure LTF with a frequency domain rectangular window" |

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| 5470 | 238.00 | 27.3.21 | "Transmission of the PHY preamble may start if TIME\_OF\_DEPARTURE\_REQUESTED is false"This does not convey any useful information.Also, "Transmission of the PHY preamble ... shall start immediately if TIME\_OF\_DEPARTURE\_REQUESTED is true".Does this mean we have to transmit even if the channel is busy? | If the intent is to say that transmit even if the channel is busy (which I do not recomment):Change "Transmission of the PHY preamble may start if TIME\_OF\_DEPARTURE\_REQUESTED is false2 and shall start immediately if TIME\_OF\_DEPARTURE\_REQUESTED is true" to"Transmission of the PHY preamble of HE Ranging NDP or HE Ranging TB NDP shall start immediately if TIME\_OF\_DEPARTURE\_REQUESTED is true"If the intent is to still wait for the channel to be idle before transmitting, I don't have suggested text, but the current text seems erroneous. |  Revise:TGaz Editor: delete the text in P247L4-6 |

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| 5472 | 238.00 | 27.4.3 | What is the TXTIME for HE Ranging NDP and HE Ranging TB NDP? | Define TXTIME for HE Ranging NDP and HE Ranging TB NDP. |  Revise***TGaz Editor:*** *perform changes shown in https://mentor.ieee.org/802.11/dcn/21/11-21-1156-01-00az-lb253-resoluiton-to-cid-set6.docx* |
| 5375 | 238.00 | 27.3.21 | TXTIME computation needs to be updated for repetition case and multi-user Secure HE-DL-NDP case, refer to 27.4.3 section in 11ax draft 8.0 for details | as in comment |  Revise***TGaz Editor:*** *perform changes shown in https://mentor.ieee.org/802.11/dcn/21/11-21-1156-01-00az-lb253-resoluiton-to-cid-set6.docx* |

***TGaz Editor: Insert the following before clause 28 (P247L29)***

**27.4.3 TXTIME and PSDU\_LENGTH calculation**

***Editor: Change the equation (27-136) and the following text as follows:***

 TXTIME = 20 + *T*HE-PREAMBLE + *NSYMTSYM + N*LTF-REP*NMAN*HE-LTF*T*HE-LTF-SYM + *TPE+SignalExtension*

*Where*

 *T*HE-PREAMBLE is defined as in Equation (27-121)

 *SignalExtension* takes the value of aSignalExtension as defined in Table 27-54

 *N*LTF-REP is equal to N\_LTF\_REP (see 27.3.18a) for HE ranging NDP and HE TB ranging NDP and set to 1 otherwise

For an HE sounding NDP, ~~and~~ HE TB feedback NDP, HE ranging NDP and HE TB ranging NDP, there is no Data field and *NSYM* = 0.

***TGaz Editor: Change the text in P236L20 (converting N\_HE\_LTF to N*HE*\_*LTF*)***

HE-LTF symbols *N*HE\_LTF and the number of LTF repetitions LTF\_REP.

**References: DraftP802.11az\_D3.1**