IEEE P802.11
Wireless LANs

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| LB271 CR for 36.3.16 Transmit Requirements |
| Date: 2022.07.12 |
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Abstract

This submission contains the proposed comment resolutions of CIDs in 23/0272 IEEE 802.11be LB271 comments.

All the comments in subclause 36.3.16 (Transmit requirements for PPDUs sent in response to a triggering frame) are resolved.

Resolved CIDs: 17160, 17226 and 17927

Revision Notes

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| R0 | Initial revision |

## CID 17160

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| Page.Line | Clause Number | Comment | Proposed Change | Resolution |
| 859.02 | 36.3.16.3 | Add "power" and "from" in this sentence: "The RSSI accuracy requirements shall be applied toreceive signal power level range from -82dBm to -20 dBm in the 2.4 GHz band and from -82 dBm to -30 dBm in the 5 GHz and 6 GHz bands." | as in comment | ACCEPTED |

Discussion (the related text is shown below):

The absolute transmit power accuracy is applicable for the entire range of transmit power that the STA is intending to use for the current band of operation. The RSSI accuracy requirements shall be applied to receive signal power level range from –82 dBm to –20 dBm in the 2.4 GHz band and from –82 dBm to –30 dBm in the 5 GHz and 6 GHz bands. The requirements are for nominal (room) temperature conditions. The RSSI shall be measured during the reception of the non-EHT portion of the EHT PPDU preamble.

## CID 17226

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| Page.Line | Clause Number | Comment | Proposed Change | Resolution |
| 857.58 | 36.3.16.2 | "the AP's transmit power, normalized to 20 MHz and expressed in dBm/20 MHz, (...)". Should we be more specific in case puncturing is applied? | Define "normalization" to only include non-punctured channels. | REVISED.Agree with the commenter. Different definiations of the normalization may lead to the inaccuracy of the path loss calculation.***Instructions to the editor:*** **Please make the changes as shown under CID 17226 in 11-23/0369r0.** |

***Instructions to the editor: please make the following changes to Page 857, Line 58 in the subclause 36.3.16 (Transmit requirements for PPDUs sent in response to a triggering frame) in D3.0 as shown below:***

$Tx\_{pwr}^{AP}$ is the AP’s transmit power, normalized to 20 MHz and expressed in dBm/20 MHz, as indicated by the AP Tx Power subfield of the Common Info field in the Trigger frame, the encoding of which is specified in 9.3.1.22 (Trigger frame format), or the AP Tx Power subfield of the TRS Control field, the encoding of which is specified in 9.2.4.6a.1 (TRS Control).

$Rx\_{pwr}$ is the receive signal power, normalized to 20 MHz and expressed in dBm/20 MHz, at the antenna connector of the STA of the triggering PPDU. $Rx\_{pwr}$ is an average of the receive signal power over the antennas on which the average $PL\_{DL}$ is being computed. If the triggering PPDU is a HT-mixed, VHT, HE, or EHT PPDU, then the receive signal power is measured from the fields prior to the HT-STF, VHT-STF, HE-STF, or EHT-STF, respectively.

NOTE 1—$Tx\_{pwr}^{AP}$ and $Rx\_{pwr}$ are normalized to 20 MHz and expressed in dBm/20 MHz, where the nomarlization only includes non-punctured channels. $Tx\_{pwr}^{STA}$ and $TargetRx\_{pwr}$ are expressed in dBm without normalization.

Discussion:

The above two parameters are used for the path loss calculation at the receiver.

$$PL\_{DL}=Tx\_{pwr}^{AP}-Rx\_{pwr}$$

## CID 17927

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| Page.Line | Clause Number | Comment | Proposed Change | Resolution |
| 857.16 | 36.3.16.1 | The sentence "Since there are multiple transmitters, transmission time, frequency, sampling symbol clock, and power pre-correction (in the case of an EHT TB PPDU) by the non-AP STAs are necessary to mitigate synchronization and interference issues at the AP" should be further polished because it is very confusing. | Changing the mentioned sentence to "To avoid synchronization and interference issues at the AP due to the simultaneously transmissions from multiple non-AP STAs (in the case of an EHT TB PPDU) , some pre-corrections should be completed by the non-AP STAs, like transmission time, frequency, sampling symbol clock, and power pre-corrections." | REVISED.Agree with the commenter in principle. The sentence can be further polished.***Instructions to the editor:*** **Please make the changes as shown under CID 17927 in 11-23/0369r0.** |

***Instructions to the editor: please make the following changes to Page 857, Line 16 in the subclause 36.3.16 (Transmit requirements for PPDUs sent in response to a triggering frame) in D3.0 as shown below:***

An AP may solicit simultaneous EHT TB PPDU transmissions, or simultaneous non-HT or non-HT duplicate PPDU transmissions from multiple non-AP STAs using a triggering frame. Since there are multiple transmitters (non-AP STAs) in the above simultaneous transmissions, the pre-corrections of transmission time, frequency, sampling symbol clock, and power (in the case of an EHT TB PPDU) by the non-AP STAs are necessary to mitigate synchronization and interference issues at the AP.

Discussion:

1. The commenter thinks that the wording “multiple transmitters” is not very clear.
2. In addition, the commenter thinks that it is better to put “pre-correction” ahead of “transmission time” to make the sentence clearer (this has been revised in the latest version of Revme).

Text in Revme D2.1:

