IEEE P802.11
Wireless LANs

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| SubmissionCR CID 25120 25050 UL SR field |
| Date: 2020-10-22 |
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Abstract

This submission proposes a resolution to TGax SA2 CID 25120 and CID 25050 related to the UL SR field.

Revisions:

* R0: Initial version of the document.
* R1:
	+ Fixed placeholder subclause name
* R2:
	+ CID 25050 - Change resolution to revise, created proposed text change to remove NOTE labelling of some text within table in 9.x describing the meaning of the target RSSI max value of 127
	+ CID 25120 – modified the wording of the Acceptable receiver interference level paragraph – reordered and slightly reworded a phrase
	+ Fixed resolution column document reference revision numbers
* R3:
	+ Add “s” to HE TB PPDU, remove “uplink”

***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.***

**CIDs**

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| **CID** | **Commenter** | **Clause** | **Page** | **Comment** | **Proposed Change** | **Resolution (Proposed)** |
| 25050 | RISON, Mark | 26.10.3.4 | 452.43 | "should be set to the expected receive signal power indicated by the ULTarget Receive Power subfield in the Trigger frame minus the minimum SNR value that yields≤ 10% PER for the highest HE-MCS of the ensuing uplink HE TB PPDU" -- this is undefined if the power indicated as "as loud as you can" (represented by 127) | Change to "should be set to the expected receive signal power indicated by the ULTarget Receive Power subfield in the Trigger frame minus the minimum SNR value that yields≤ 10% PER for the highest HE-MCS of the ensuing uplink HE TB PPDU, or to 1000 dBm if that subfield indicated transmission at the STA’s maximum transmit power for the assigned HE-MCS." | Revise – TGmd editor to make changes labeled CID 25050 within 11-20/1665r2 which remove the designation of NOTE from the description of the meaning of the max value 127 of the UL Target Receive Power subfield in clause 9.x, Table 9-31j (UL Target Receive Power subfield in Trigger frame) |
| 25120 | RISON, Mark | 26.10.3.4 | 452.34 | "the total power at the antenna connector, in dBm, for that 20 MHz subchannel, over allantennas used to transmit the PSRR PPDU containing the Trigger frame for each 20 MHz sub-channel for a 20 MHz, 40 MHz, or 80 MHz PPDU or in each of the 40 MHz subchannels foran 80+80 MHz or 160 MHz PPDU." is confusing as to how exactly 40 MHz subchannels are handled | Add a NOTE afterwards: "NOTE---In the case of 40 MHz subchannels, the power over 40 MHz is converted to a power over 20 MHz by subtracting 3 dB." | Revise – TGmd editor to make changes labeled CID 25120 within 11-20/1665r2 which modify the language cited to provide a more clear distinction between the 20 and 40 cases, noting that the adjustment suggested by the commenter is not needed, as for each of the PPDU cases indicated, the power is either per 20 MHz or per 40 MHz. |

**CID 25050**

***TGax editor: Within TGax Draft D7.0, change the text in Table 9-31j – UL Target Receive Power subfield in Trigger frame found in subclause 9.3.1.22.1 General, as shown:***

**9.3.1.22 Trigger frame format**

**9.3.1.22.1 General**

**Table 9-31j—UL Target Receive Power subfield in Trigger frame**

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| --- | --- |
| **UL Target Receive Power subfield** | **Description** |
| 0-90 | The expected receive signal power, in units of dBm, is *Targetpwr* = –110 + *Fval*, where *Fval* is the subfield value |
| 91-126 | Reserved |
| 127 | The STA transmits the HE TB PPDU at the STA’s maximum transmit power for the assigned HE-MCS.The expected receive signal power is the STA's maximum transmit power for the assigned HE-MCS minus the path loss. |

**CID 25120**

***TGax editor: Within TGax Draft D7.0, change the text of subclause 26.10.3.4 UL Spatial Reuse subfield of Trigger frame, as shown:***

**26.10.3.4 UL Spatial Reuse subfield of Trigger frame**

***Change the text as shown:***

*TX\_PWRAP* is the total power at the antenna connector, in dBm, for that 20 MHz subchannel for a 20 MHz, 40 MHz, or 80 MHz PPDU or for that 40 MHz subchannel for an 80+80 MHz or 160 MHz PPDU, over all antennas used to transmit the PSRR PPDU containing the Trigger frame.

Acceptable Receiver Interference LevelAP is a value in dBm for that 20 MHz subchannel for a 20 MHz, 40 MHz, or 80 MHz PPDU or for that 40 MHz subchannel for an 80+80 MHz or 160 MHz PPDU and should be set to the expected receive signal power indicated by the UL Target Receive Power subfield in the Trigger frame for the highest HE-MCS of the ensuing HE TB PPDUs minus the minimum SNR value that yields ≤ 10% PER for that MCS, minus a safety margin value not to exceed 5 dB as determined by the AP.