IEEE P802.11
Wireless LANs

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| TGba D2.0 Comment Resolutions for Sec. 31.2.5.2, 31.2.5.3 and 31.2.5.4 |
| Date: 2019-03-11 |
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Abstract

This submission proposes resolutions for comments received on Overview of the PPDU encoding process for WUR Legacy portion in TGba D2.0. The following is the list of CIDs:

* 2666, 2667, 2668

***CIDs for Clause 31.2.5.2, 31.2.5.3, 31.2.5.4***

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| **CID** | **Clause** | **Page.Line** | **Comment** | **Proposed Change** | **Resolution** |
| 2666 | 32.2.5.2 | 93.57 | Multiple frequency segments not supported. Replace "Apply CSD for each transmit chain and frequency segment" with "Apply CSD for each transmit chain" | As shown in the comment | Accepted. |
| 2667 | 32.2.5.3 | 94.14 | Multiple frequency segments not supported. Replace "Apply CSD for each transmit chain and frequency segment" with "Apply CSD for each transmit chain" | As shown in the comment | Accepted. |
| 2668 | 32.2.5.4 | 94.44 | Multiple frequency segments not supported. Replace "Apply CSD for each transmit chain and frequency segment" with "Apply CSD for each transmit chain" | As shown in the comment | Accepted. |

*TGba Editor: Please make the following changes (in red) in Section 31.2.5.2, 31.2.5.3 and 31.2.5.4. of D2.0:*

* Construction of the L-STF

Construct the L-STF field as defined in 31.2.9.2.1 L-STF Definition with the following highlights:(#189, #1205)

* Determine the channel bandwidth from the TXVECTOR parameter CH\_BANDWIDTH.
* Sequence generation: Generate the L-STF sequence over the CH\_BANDWIDTH as described in 31.2.9.2.1 L-STF Definition.
* Phase rotation: Apply appropriate phase rotation for each 20 MHz subchannel as described in 21.3.7.4 (Transmitted signal) and 21.3.7.5 (Definition of tone rotation).
* IDFT: Compute the inverse discrete Fourier transform
* CSD: Apply CSD for each transmit chain as described in 21.3.8.2.1 (Cyclic shift for pre-VHT modulated fields).
* Insert GI and apply windowing: Prepend a GI (LONG\_GI) and apply windowing as described in 21.3.7.4 (Transmitted signal).
* Analog and RF: Upconvert the resulting complex baseband waveform associated with each transmit chain to an RF signal according to the center frequency of the desired channel and transmit. Refer to 21.3.7.4 (Transmitted signal) and 21.3.8 (VHT preamble) for details.
* Construction of the L-LTF

Construct the L-LTF field as defined in 31.2.9.2.2 L-LTF Definition with the following highlights:(#189, #1205)

* Determine the CH\_BANDWIDTH from the TXVECTOR.
* Sequence generation: Generate the L-LTF sequence over the CH\_BANDWIDTH as described in 31.2.9.2.2 L-LTF Definition.
* Phase rotation: Apply appropriate phase rotation for each 20 MHz subchannel as described in 21.3.7.4 (Transmitted signal) and 21.3.7.5 (Definition of tone rotation).
* IDFT: Compute the inverse discrete Fourier transform.
* CSD: Apply CSD for each transmit chain as described in 21.3.8.2.1 (Cyclic shift for pre-VHT modulated fields).
* Insert GI and apply windowing: Prepend a GI (2 x LONG\_GI) and apply windowing as described in 21.3.7.4 (Transmitted signal).
* Analog and RF: Upconvert the resulting complex baseband waveform associated with each transmit chain to an RF signal according to the center frequency of the desired channel and transmit. Refer to 21.3.7.4 (Transmitted signal) and 21.3.8 (VHT preamble) for details.
* Construction of the L-SIG

Construct the L-SIG field as defined in 31.2.9.2.3 L-SIG Definition with the following highlights:(#189, #1205)

* In a WUR PPDU, set the RATE subfield in the SIGNAL field to 6 Mb/s. Set the Length, Parity, and Tail bits in the SIGNAL field as described in 31.2.9.2.3 L-SIG Definition.
* BCC encoder: Encode the L-SIG field by a convolutional encoder at the rate of R=1/2 as described in 21.3.10.5.3 (Binary convolutional coding and puncturing).
* BCC interleaver: Interleave as described in 21.3.10.8 (BCC interleaver).
* Constellation Mapper: BPSK modulate as described in 21.3.10.9 (Constellation mapping).
* Pilot insertion: Insert pilots as described in 21.3.10.11 (OFDM modulation).
* Duplication and phase rotation: Duplicate the L-SIG field over the occupied 20 MHz subchannel of the CH\_BANDWIDTH. Apply appropriate phase rotation for each 20 MHz subchannel as described in 21.3.7.4 (Transmitted signal) and 21.3.7.5 (Definition of tone rotation).
* IDFT: Compute the inverse discrete Fourier transform.
* CSD: Apply CSD for each transmit chain as described in 21.3.8.2.1 (Cyclic shift for pre-VHT modulated fields).
* Insert GI and apply windowing: Prepend a GI (LONG\_GI) and apply windowing as described in 21.3.7.4 (Transmitted signal).
* Analog and RF: Upconvert the resulting complex baseband waveform associated with each transmit chain to an RF signal according to the center frequency of the desired channel and transmit. Refer to 21.3.7.4 (Transmitted signal) and 21.3.8 (VHT preamble) for details.