IEEE P802.11
Wireless LANs

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| CIDs 7106 and 7412 |
| Date: 4/20/2016 |
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Abstract

This submission proposes a resolution for CIDs 7106 and 7412.

CID 166

# CID 7106

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| 7106 | Stephens, Adrian | 2330 | 39 | 19.2.5 | "the MAC shall set the CH\_BANDWIDTH" - this is a normative requirement on the MAC buried in the guts of a PHY subclause.Ditto at 2504.27 | Move this normative requirement to a MAC subclause. |

The comment is about the opening sentence of 19.2.5:



And 21.2.5.2:



Both sections describe a way to generate a non-HT PPDU using the TXVECTOR defined for HT and VHT respectively. This comes down to specifying the values of specific fields of these TXVECTORs to correspond to the configuration of the non-HT format.

PHY and MAC interface with each other through TXVECTOR, but the statement that it is the MAC that should configure these values is probably out of scope since this may be implementation specific. To keep changes minimal, it is proposed to modify the wording in a way that avoids explicit reference to the MAC. In that case, this becomes a statement on TXVECTOR alone, which is appropriate for the PHY section.

Proposed change for 2330.39:

In order to transmit a non-HT PPDU, the ~~MAC shall set the CH\_BANDWIDTH and CH\_OFFSET in the~~ TXVECTOR fields CH\_BANDWIDTH and CH\_OFFSET shall be set so as to achieve the required non-HT PPDU format (see Table 19-2 (PPDU format as a function of CH\_BANDWIDTH and CH\_OFFSET parameters)); for 20 MHz bandwidth transmissions in a 40 MHz channel, the CH\_OFFSET shall be CH\_OFF\_20U if the SECONDARY\_CHANNEL\_OFFSET parameter of the PHYCONFIG\_VECTOR was SECONDARY\_CHANNEL\_ABOVE, or CH\_OFF\_20L otherwise.

Proposed change for 2504.27:

In order to transmit a non-HT PPDU, the ~~MAC shall set the CH\_BANDWIDTH and CH\_OFFSET in the~~ TXVECTOR fields CH\_BANDWIDTH and CH\_OFFSET shall be set so as to achieve the required non-HT PPDU format (see Table 19-2 (PPDU format as a function of CH\_BANDWIDTH and CH\_OFFSET parameters)); for 20 MHz bandwidth transmissions in a 40 MHz channel, the CH\_OFFSET shall be CH\_OFF\_20U if *f*P20,idx < *f*S20,idx, or CH\_OFF\_20L otherwise. The quantities *f*P20,idx and *f*S20,idx are defined in 21.3.7.3 (Channel frequencies).

Note that both subclauses 19.2.5 and 21.2.5.2 have already been modified as a result of other comment resolutions, so these changes should be merged with the latest agreements on these clauses.

Proposed resolution:

Revised

Change first line of 19.2.5 and first line of 21.2.5.2 as shown in this document.

# CID 7412

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| 7412 | 21.2.5.3 | 2505 | 60 | "PHY-TXSTART.request(TXVECTOR) primitive is issued" -- to what? There is no OFDM PHY | Use "as if" wording, as above |

CID 7412 was addressed in 802.11-16/291r2, where a resolution was proposed in line with CID 7411.

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| --- | --- | --- | --- | --- | --- |
| 7411 | 21.2.5.2 | 2504 | 51 | "PHY-TXSTART.request(TXVECTOR) primitive is issued" -- to what? There is no OFDM PHY | Use "as if" wording, as above |

It appears that the resolution to 7411 was later pulled from the motion and modified. From “REVmc BRC Minutes for March 2016 - Macau” (802.11-16/250):



NOTE: This change has not yet been incorporated in the latest draft text. Based on the report above, the change for 7411 would look like:

On page 2504, line 45:

~~The~~ where the Clause 21 (Very High Throughput (VHT) PHY specification) TXVECTOR parameters in Table 21-1 (TXVECTOR and RXVECTOR parameters) are mapped to Clause 17 (Orthogonal frequency division multiplexing (OFDM) PHY specification) TXVECTOR parameters in Table 17-1 (TXVECTOR parameters) according to Table 21-3 (Mapping of the VHT PHY parameters for NON\_HT operation) ~~and the Clause 17 (Orthogonal frequency division multiplexing (OFDM) PHY specification) PHYTXSTART. request(TXVECTOR) primitive is issued~~.

Consequently, it appears like 7412 needs a resolution consistent with what was agreed for 7411.

On page 2505, line 56

~~The~~ where the Clause 21 (Very High Throughput (VHT) PHY specification) TXVECTOR parameters in Table 21-1 (TXVECTOR and RXVECTOR parameters) are mapped directly to Clause 19 (High Throughput (HT) PHY specification) TXVECTOR parameters in Table ~~20~~19-1 ~~and the Clause 19 (High Throughput (HT) PHY specification) PHY-TXSTART.request(TXVECTOR) primitive is issued~~.

Proposed resolution:

Revised.

* At 2505.56, replace “The” with “where the”.
* At 2505.59 delete “and the Clause 19 (High Throughput (HT) PHY specification) PHY-TXSTART.request(TXVECTOR) primitive is issued”
* Change reference to Table 20-1 to Table 19-1