IEEE P802.11
Wireless LANs

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| D2.0 Comment Resolution – CID 4084 |
| Date: May 15th 2012 |
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Abstract

This document provides resolution for CID 4084.

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| **CID** | **Page** | **Clause** | **Comment** | **Proposed change** | **Resolution** |
| 4084 | 202.54 | 22.3.8.1.4 | "A STA shall not transmit a VHT PPDU if the Length value calculated using Equation (35) exceeds 4095 octets."Where is this rule executed? There is nothing in the PHY interface to say: "I didn't transmit this because it is too long". | If this statement is redundant, delete it. If not, move it into the MAC and express it as a constraint on the permitted TXVECTOR parameters. | REVISED.See 12/0593r0. |
| <Discussion>In RevMB this language is in clause 9.23.4 for 802.11n.  But in that case LENGTH was sent through the TXVECTOR. Currently in 802.11ac we compute Length in the PHY. Now what’s passed in the TXVECTOR is APEP\_LENGTH, which seems not suitable to proving that converting an L-SIG Length of 4095 to a max APEP\_LENGTH and sticking this requirement in 9.12.6.  So, rather than moving Length calculation back to the MAC and passing the Length in the TXVECTOR similar to what Adrian suggested, I think a restriction based on aPPDUMaxTime (already defined as 5.484ms for VHT PHY) could be sufficient one (easier and more suitable for this).

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| Table 22-29. VHT PHY characteristics |
| Characteristics | Value |
| aCCAMidTime | < 25 µs |
| aPPDUMaxTime | 5.484 ms |
| aPSDUMaxLength | 4692480 (see NOTE) |
| NOTE—this is the maximum length in octets for SU PPDUs with a bandwidth of 160 MHz or 80+80 MHz, MCS9 and 8 spatial streams, limited by 1504 possible Short GI data symbols in aPPDUMaxTime. |

It can be easily seen that 4095 is exactly equivalent to 5.484 ms if we make use of Eq. (9-13) in RevMB D12.0 as follows: 4095 = ceiling{(5.484ms - 20us) / 4us }x3 -3 where 5.484ms = aPPDUMaxTime          20us = L\_STF + L\_LTF + L\_SIGTherefore, even though I don’t like redundant text, I would suggest we have a note in the in 22.3.8.1.4 stating that Length cannot exceed 4095 based on aPPDUMaxTime for VHT PHY for more understanding.  **TGac editor: Add the following** Move the following sentence in MAC clause (9.12.2) end of P106 in D2.2A STA shall not transmit a VHT PPDU if the PPDU duration exceeds aPPDUMaxTime defined in Table 22-29. Note – The restriction limits the LENGTH field in the L-SIG field of a VHT PPDU to 4095. Editor’s instruction: delete the sentence in clause 22.3.8.1.4, as follows. |