IEEE P802.11
Wireless LANs

|  |
| --- |
| REVmc Preballot Resolutions - CID 270-105 |
| Date: 2013-01-15 |
| Author(s): |
| Name | Affiliation | Address | Phone | email |
| Daniel Cohn | Lantiq | Zarhin 13, Ra’anana, Israel | +972 54 922 5104 | Daniel.cohn@lantiq.com |
|  |  |  |  |  |

Abstract

Resolutions to PHY CIDs 270 and 105

# CID 270

|  |  |  |
| --- | --- | --- |
| **CID** | **Comment** | **Proposed Change** |
| 270 | Short slot timing equations are broken. We have that:Slot = D + CCAdel + M + TA CT + M + TAwhere D = aRxRFDelay + aRxPLCPDelayM = aMACProcessingDelayTA = aRxTxTurnaroundTimeCT = aCCATime[I'm making D = D1 ~= D2 because aAirpropagationTime << 1 us, and I'malso making M = M1 = M2 because that's what's specified.]However, for all PHYs on the market (i.e. not IR or FH), aMACProcessingDelay is given as < or <= 2 us and aRxTxTurnaround time is <= 5 us for DS and HRDS, < 5 us for ERP, < 2 us for OFDM and HT. aCCATime is < 15 us for DS and HRDS and long-slot ERP, < 4 for 20 MHz OFDM, short-slot ERP and HT.So for short slots the equation comes to 9 = < 4 + < 2 + < 2, which cannot be satisfied. | Bump aRxTxTurnaroundTime on the short slot PHYs up from < 2 us to < 3 us or even (for consistency with the long slot PHYs) < 5 us.Or just say that at least one of aMACProcessingDelay and aRxTxTurnaroundTime should be implementation-dependent as long as aSIFSTime is met - would need to check any knock-on effects of this change. |

**Proposed Resolution:**

Revise - Make the changes as proposed in 11-12/1256r9.

Changes proposed in 12/1256r9 already cover the second proposed solution (Or just say that at least one of ...should be implementation-dependent as long as ...).

# CID 105

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **CID** | **Page** | **Clause** | **Duplicate of CID** | **Resn Status** | **Comment** | **Proposed Change** |
| 105 | 1553.00 | 17.3.3 |  |  | Why does the HR PHY have such a big max MPDU length? All other PHYs have a maximum of 4095 | In Table 16-2 change the 13 to a 12 for aMPDUMaxLength (note corresponding changes to 802.11ac in clause 8) |

**Proposed Resolution:**

Reject.

The comment refers to clause 17.3.3 and to the HR PHY, but then the proposed changes mention table 16-2 which belongs to the DS PHY.

Assuming the comment referse to the DS PHY and to table 16-2, the commenter doesn’t give a reason why the MPDU length should be changed to 4095.

Lack of consistency with other PHYs is not a good enough reason to change the existing language and potentially making existing implementations non compliant. The DS PHY does appear to support the transmission of an 8193-bit MPDU.