IEEE P802.11  
Wireless LANs

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| 802.11 TGac WG Letter Ballot LB187  Proposed resolutions to CIDs 4147, 4686, 4267, 4268 | | | | |
| Date: 2012-03-08 | | | | |
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##### Comments are based on 11ac D2.0. Proposed resolutions are based on 11ac D2.0. Changes indicated by a mixture of Word track-changes and instructions. For equation changes, Latex notation is sometimes used. E.g. a\_{xyz}^b denotes axyzb

Following CID is covered in this document:

MAC: 4147, 4686, 4267, 4268

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| **CID** | **Page** | **Clause** | **Comment** | **Proposed Change** |
| 4147 | 3.24 | 3.2 | The PPDU is transmitted using a 40 MHz transmit spectral mask defined in Clause 20 or Clause 22. Right? | Add the reference to Clause 22 ... |
| 4686 | 3.24 | 3.2 | Will a VHT 40MHz PPDU be sent by using HT spectral mask? | Clarify it. |
| 4267 | 3.25 | 3.2 | clause 20 works for 1)-3) but not 4)-5) | refer to VHT clause for 4) and 5) |

**Discussion:**

Context:



Figure 22-1 (Interaction of Clause 22 primitives with Clause 18 and 20 primitives) shows that when transmitted from a VHT STA, VHT PPDUs use the Clause 22 masks, HT PPDUs use the Clause 20 masks, 11a PPDUs use Clause 18 mask, and non-HT duplicate PPDUs use Clause 22 masks. Hence, the commenters are correct that 4) and 5) should be subject to the Clause 22 masks.

**Proposed Resolution:**

**CID 4147, 4686, 4267:**

REVISE. The mask to be used is a function of both the STA type and PPDU format. Make changes as specified at the end of 12/0318r0.

**Proposed Text Change:**

See consolidated text change at the end of this document.

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| **CID** | **Page** | **Clause** | **Comment** | **Proposed Change** |
| 4268 | 3.24 | 3.2 | "The PPDU is transmitted ..." implies it is extra spurious info, when in fact it is core | Replace "The PPDU is txed" by "that is transmitted". Do this 4x for 40/80/160/80+80 definitions |

**Proposed Resolution:**

REVISE. For 40 MHz, CID 4147, 4686 and 4267 moves the sentence under question to a different location, making the comment obsolete. For 80/160/80+80 MHz, we can make the condition more obviously “core” by rewording. Make changes as specified at the end of 12/0318r0.

**Proposed Text Change:**

Change P3L5 as follows:

**40 MHz mask physical layer convergence procedure (PLCP) protocol data unit (PPDU):** One of the following

PPDUs:

1. a 40 MHz high-throughput (HT) PPDU (TXVECTOR parameter CH\_BANDWIDTH equal to ~~HT\_~~CBW40) transmitted using the 40 MHz transmit spectral mask defined in Clause 20 (High Throughput (HT) PHY specification);
2. a 40 MHz non-HT duplicate PPDU (TXVECTOR parameter CH\_BANDWIDTH equal to ~~NON\_HT\_~~CBW40) transmitted using the 40 MHz transmit spectral mask defined in
   * Clause 20 (High Throughput (HT) PHY specification) when transmitted from a HT STA
   * Clause 22 (Very High Throughput (VHT) PHY specification) when transmitted from a VHT STA; ~~or~~
3. a Clause 20 (High Throughput (HT) PHY specification) 20 MHz HT PPDU with the TXVECTOR parameter CH\_BANDWIDTH equal to ~~HT\_~~CBW20 and the CH\_OFFSET parameter equal to either CH\_OFF\_20U or CH\_OFF\_20L~~.~~ transmitted using the 40 MHz transmit spectral mask defined in Clause 20 (High Throughput (HT) PHY specification);
4. a Clause 22 (Very High Throughput (VHT) PHY specification) 20MHz VHT PPDU with the TXVECTOR parameter CH\_BANDWIDTH equal to CBW20 transmitted using the 40 MHz transmit spectral mask defined in Clause 22 (Very High Throughput (VHT) PHY specification); or
5. a 40 MHz very high throughput (VHT) PPDU with the TXVECTOR parameter CH\_BANDWIDTH equal to CBW40 transmitted using the 40 MHz transmit spectral mask defined in Clause 22 (Very High Throughput (VHT) PHY specification).

Change P4L9 as follows:

**80 MHz mask physical layer convergence procedure (PLCP) protocol data unit (PPDU):** A PPDU that is transmitted using the 80 MHz transmit spectral mask defined in Clause 22 and that is one of the following:

Delete P4L21:

Change P4L25 as follows:

160 MHz mask physical layer convergence procedure (PLCP) protocol data unit (PPDU): A PPDU that is transmitted using the 160 MHz transmit spectral mask defined in Clause 22 and that is one of the following:

Delete P4L40:

Change P4L45 as follows:

**80+80 MHz mask physical layer convergence procedure (PLCP) protocol data unit (PPDU)**: A PPDU that is transmitted using the 80+80 MHz transmit spectral mask defined in Clause 22 and that is one of the following:

Delete P4L53: