IEEE P802.11
Wireless LANs

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| D0.1 Comment Resolution  |
| Date: April 18, 2011 |
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Abstract

This document provides resolution for the following CIDs:

180, 1573, 243, 1574, 1003, 1400, 220, 154, 221, 47, 1272.

The comments are based on D0.1.

Edits for the proposed resolutions are based on D0.3.

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| **CommentID** | **Subclause** | **Page** | **Line** | **CommentType** | **Comment** | **SuggestedRemedy** |
| 180 | 3.1 | 19 | 19 | TR | You don't need "A contiguous transmission usesone frequency segment, while a non-contiguous transmission uses two frequency segments" in this definition - it is redundant. The other definitions of contiguous transmission and non-contiguous transmission already covers this. | Delete noted text |

**Discussion:**

This is a duplicate of editorial comment CID#1806, which has already been resolved and incorporated into D0.4.

**Proposed Response:**

**AGREE.**

Mark this CID as a duplicate of CID#1806.

**Proposed Resolution Text:**

frequency segment: Contiguous block of frequency used by a transmission. ~~A contiguous transmission uses one frequency segment, while a non-contiguous transmission uses two frequency segments.~~

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|  1573 | 3.1 | 19 | 23 | TR | non-contiguous transmission is defined as a transmission using two nonadjacent frequency segments. Although this is the case in 11ac. It may be possible in the future that non-contiguous transmission can use two or MORE nonadjacent frequency segments. | add "or more" after two |

**Proposed Response:**

**AGREE.**

**Proposed Resolution Text:**

non-contiguous transmission: A transmission using two or more nonadjacent frequency segments.

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|  243 | 3.2 | 23 | 5 | TR | "and can be used to setup a VHT 40MHz BSS" is confusing. It seems to imply, indirectly, that the definition of a primary 40 MHz channel in a 40 MHz BSS is the 40 MHz of the BSS (fine). But this idea can be expressed more clearly: either just list 40 MHz with the other bandwidths (since a subset can always be the whole set; a subchannel can be the whole channel). If the preference is to keep "subchannel" as a smaller set, avoid the "and can be used" since there is not much "and" happening; write "or the 40 MHz channel that can ..." Ditto primary 80 | As in comment |

**Proposed Response:**

**AGREE.**

**Proposed Resolution Text:**

primary 40 MHz channel: In an 80, 160 or 80+80 MHz VHT BSS, the 40 MHz subchannel that includes the primary 20 MHz channel or the 40 MHz channel that can be used to setup a VHT 40 MHz BSS.

primary 80 MHz channel: In a 160 or 80+80 MHz VHT BSS, the 80 MHz subchannel that includes the primary 40 MHz channel (and thus the primary 20 MHz channel) or the 80 MHz channel that can be used to setup a VHT 80 MHz BSS.

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|  1574 | 3.2 | 3 | 6 | TR | In a 160 or 80+80 VHT BSS, a secondary 40MHz subchannel may not always be adjacent to the primary 40MHz channel. It may be adjacent to another secondary 40MHz channel. | Leave to the PHY ad hoc |

**Discussion:**

The definition of the primary and secondary subchannels state that only the secondary 40MHz subchannel of the primary 80MHz will be adjacent to the primary 40MHz subchannel.

The same rasonsing is extended to 160 or 80+80.

**Proposed Response:**

**DISAGREE.**

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| 1003 | 7.1.3.3.7 | 22 | 1-2 | TR | non-HT or non-HT duplicate format' includes legacy and VHT. |  |
| 1400 | 7.1.3.3.7 | 22 | 1-2 | TR | non-HT or non-HT duplicate format' includes legacy and VHT. Reconsider the definition of 'non-HT' | Need an agreement |

**Discussion:**

The non-HT or non-HT duplicate definitions currently excludes VHT.

The definition of “non-high-throughput (non-HT) duplicate” in 3.2 (P19L36):

“non-high-throughput (non-HT) duplicate: A transmission format of the physical layer (PHY) that duplicates a 20 MHz non-HT transmission in two ~~adjacent~~or more 20 MHz channels and allows a station (STA) in a non-HT basic service set (BSS) on ~~either~~any one 20 MHz channel to receive the transmission.”

specifically say that it is “a 20 MHz non-HT transmission in two ~~adjacent~~or more 20 MHz channels”. A VHT specification does not allow transmiiting duplicated VHT frame in two or more channels.

“For VHT STAs, the Individual/Group bit is set to one in the transmitter address of control frames that carry the bandwidth indication field and that are transmitted in non-HT or non-HT duplicate format and set to zero otherwise.”

**Proposed Response:**

**DISAGREE**

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| 220 | 7.2.1.1 | 25, 26 | 57, 6 | TR | Section 9.2.0b.6a has defined how to determine the two parameters are valid or not. The term "valid" is used consistently throughput section 9.2.0b.6a and 9.2.0b.7. Note that the two parameters may be present in RXVECTOR even though they may not be valid. | Replace "present" with "are valid" |
| 221 | 7.2.1.6 | 9 | 5-6 | TR | Section 9.2.0b.6a has defined how to determine the two parameters are valid or not. The term "valid" is used consistently throughput section 9.2.0b.6a and 9.2.0b.7. Note that the two parameters may be present in RXVECTOR even though they may not be valid. | Replace "with the INDICATED\_CH\_BANDWIDTH TXVECTOR parameter present" with "with a valid INDICATED\_CH\_BANDWIDTH TXVECTOR parameter" |

**Proposed Response:**

**AGREE**

**Proposed Resolution Text:**

The TA field is the address of the STA transmitting the RTS frame. If the RTS frame is transmitted by a VHT STA in a non-HT or non-HT duplicate format with valid INDICATED\_CH\_BANDWIDTH and INDICATED\_DYN\_BANDWIDTH TXVECTOR parameters,

[26, 6] If the CTS is a response to an RTS with the Individual/Group bit in the TA set to 1, then the CTS response is transmitted in a non-HT or non-HT duplicate format with a valid INDICATED\_CH\_BANDWIDTH TXVECTOR parameter.

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| 154 | 7.2.1.1 | 25 | 60 | TR | Clarify what a third party non-VHT STA will do when receiving an RTS frame with Group bit set to 1.  | Clarify. |

**Discussion:**

The behavior of a VHT STA is already specified in section 9.2.0b.7 “CTS procedure”.

**Proposed Response:**

**DISAGREE**

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| 47 | 9.2.0a | 44 | 45 | TR | Explain how VHT STAs perform fast collision inference on secondary channels. | For e.g. add following text "using INDICATED\_CH\_BANDWIDTH in CTS frame" at end of the line 47.  |

**Discussion:**

The behavior of a VHT STA is already specified in section 9.2.0b.7 “CTS procedure”.

“If the INDICATED\_DYN\_BANDWIDTH RXVECTOR parameter for a RTS frame is valid and set to Static, the VHT STA addressed by the RTS frame shall respond with a non-HT or non-HT duplicate CTS frame over all channels that are specified by the INDICATED\_CH\_BANDWIDTH parameter of the RTS frame if all non-primary channels indicated by the RTS frame have met the following condition: the PHY-CCA.indication primitive indicates IDLE during an interval of PIFS before the RTS frame is received. A VHT STA that is addressed by the RTS frame shall not respond with a CTS frame if the condition is not met for any nonprimary channel indicated by the RTS frame.

 …”

**Proposed Response:**

**DISAGREE**

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| 1272 | 9.2.0a | 44 | 46 | TR | "STA originating the RTS to" - what's wrong with "transmitting"? Originator is a term tied to the BA mechanism, so it's gratuitous use in other contexts should be minimized. | originating->transmitting |

**Proposed Response:**

**AGREE**

**Proposed Resolution Text:**

For VHT STAs, the RTS/CTS exchange also performs fast collision inference on secondary channels, helping the STA transmitting the RTS to determine the available bandwidth at the responder.