IEEE P802.11  
Wireless LANs

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| D3 Comment Resolution, brianh, part 4 | | | | |
| Date: 2012-07-18 | | | | |
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##### Baseline is 11ac D3.0. Changes indicated by a mixture of Word track-changes and instructions. For equation changes, Tex notation is sometimes used. E.g. a\_{xyz}^b denotes axyzb

MAC CIDs: 6061, 6241, 6007, 6009, 6199

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| 6061 | Adrian Stephens | 10.9.3 | 154.12 | "It shall set a quiet interval"    This sounds like setting a quiet interval is mandatory. This is not the case. | Replace with "It sets a quiet interval" | Revised. See changes under CID 6061 in 12/xxxxr<motioned-rev#> that include language to avoid the sense that setting a quiet interval is mandatory |

***Discussion***

This is baseline text that the comenter is objecting to, but it is in a sentence that we are extending, so a change is reasonable. The change proposed by the commenter is helpful but still leaves a lingering sense that a quiet interval schedule is expected. Proposed changes distinguish the choice of setting a quiet interval schedule from the mechanism to do so, and avoids normative language as that doesn’t seem to add much.

***Change:***

**10.9.3 Quieting channels for testing**

A STA in an IBSS may schedule quiet intervals only if it is the DFS owner. In order to set a quiet interval schedule, the STA transmits one or more Quiet elements or Quiet Channel elements with the AP Quiet Mode field equal to 1 in the first Beacon frame establishing the IBSS. All STAs in an IBSS shall continue these quiet interval schedules by including appropriate Quiet elements or Quiet Channel elements with the AP Quiet Mode field equal to 1 in any transmitted Beacon frames or Probe Response frames.

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| 6241 | Brian Hart | 8.3.3.2 | 43.58 | quiet Channel elment is listed as a singleton but 10.9.3 says "one or more Quiet Channel elements with the AP Quiet Mode field equal to 1 in Beacon frames and Probe Response frames" | Explicitly allow one or more Quiet Channel elements in Beacon and Probe Response frames | Revised. See changes under CID 6241 in 12/xxxxr<motioned-rev#> that include language to explicitly allow multiple Quiet Channel elements as apprporiate |

***Discussion:***

Commenter is correct that multiple Quiet Channel elements with AP Quiet Mode field equal to 1 can be included in Beacons and Probe Responses, and we can be clearer in this regard.

***Change:***

**Table 8-20—Beacon frame body**

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| 65 | Quiet Channel | Either one Quiet Channel element containing an AP Quiet Mode field equal to 0 or one or more Quiet Channel elements each containing an AP Quiet Mode field equal to 1 are optionally present if dot11VHTOptionImplemented is true, and either dot11SpectrumManagementRequired or dot11RadioMeasurementActivated is true. |

**Table 8-27—Probe Response frame body**

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| 66 | Quiet Channel | Either one Quiet Channel element containing an AP Quiet Mode field equal to 0 or one or more Quiet Channel elements each containing an AP Quiet Mode field equal to 1 are optionally present if dot11VHTOptionImplemented is true, and either dot11SpectrumManagementRequired or dot11RadioMeasurementActivated is true. |

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| 6007 | Kazuyuki Sakoda | 8.5.8.7 | | | 90.25 | New Country element can be used by mesh STA as well. | | Replace "The New Country element is present when an AP performs" with "The New Country element is present when an AP or a mesh STA performs" | Revised. See changes under CIDs 6007, 6009 and 6199 in 12/xxxxr<motioned-rev#> that broadly achieve the commenters goal to enable mesh functionality |
| 6009 | Kazuyuki Sakoda | 10.8.2 | | 152.32 | | | Regarding the paragraph starting from 152.31, similar expression should be made for mesh STAs. | Add the description for mesh STAs. Commenter is willing to contribute a resolution text. | Revised. See changes under CIDs 6007, 6009 and 6199 in 12/xxxxr<motioned-rev#> that broadly achieve the commenters goal to enable mesh functionality |
| 6199 | Brian Hart | 10.39 | 157.59 | | | Changes to TPC in D2.0 did nopt fully account for mesh STAs | | Upgrade TPC/operating class/channel switch feature to account for mesh STAs | Revised. See changes under CIDs 6007, 6009 and 6199 in 12/xxxxr<motioned-rev#> that broadly achieve the commenters goal to enable mesh functionality |

***Change:***

**8.4.2.17 Power Capability element**

***Change the 3rd and 4th paragraphs as follows:***

The Minimum Transmit Power Capability field is set to the nominal minimum transmit power with which the

STA is capable of transmitting in the current channel, with a tolerance ± 5 dB. The field is coded as a signed

integer in units of decibels relative to 1 mW. Further interpretation of this field is defined in 10.8.3a (Interpretation of transmit power capability).

The Maximum Transmit Power Capability field is set to the nominal maximum transmit power with which

the STA is capable of transmitting in the current channel, with a tolerance ± 5 dB. The field is coded as a

signed integer in units of decibels relative to 1 mW. Further interpretation of this field is defined in 10.8.3a

(Interpretation of transmit power capability).

**8.4.2.165 Control Switch Wrapper element**

The New Country subelement is present when an AP or mesh STA performs extended channel switching to a new Country,

Operating Class Table or a changed set of Operating Classes relative to the contents of the Country element

sent in the Beacon; otherwise this subelement is not present. The format of the New Country subelement is

defined to be the same as the format of the Country element (see 8.4.2.10 (Country element)), except that no

Subband Triplet fields are present in the New Country subelement. The Country string within the New Country

subelement indicates the Country and Operating Class Table of the BSS after extended channel switching

and Operating Triplet fields within the New Country subelement indicate the operating classes of the BSS

after extended channel switching (see 10.39.1 (Basic VHT BSS functionality)).

**8.5.8.7 Extended Channel Switch Announcement frame format**

The New Country element is present when an AP or mesh STA performs extended channel switching to a new Country,

Operating Class Table or a changed set of Operating Classes relative to the contents of the Country element

sent in the Beacon; otherwise this element is not present. The format of the New Country element is defined

to be the same as the format of the Country element (see 8.4.2.10 (Country element)), except that no Subband

Triplet fields are present in the New Country element. The Country string within the New Country element

indicates the Country and Operating Class Table of the BSS after extended channel switching and Operating

Triplet fields within the New Country element indicate the operating classes of the BSS after extended channel

switching (see 10.39.1 (Basic VHT BSS functionality)).

**10.8.2 Association based on transmit power capability**

***Note to reader, not for inclusion in the draft: This para is deleted from this section and immediatrely reinserted in a new section following 10.8.3 (Peering based on transmit power capability).***

**10.8.3a Interpretation of transmit power capability**

If the Beacon or Probe Response frame most recently received by a VHT STA that has

dot11SpectrumManagementRequired or dot11RadioMeasurementActivated equal to true from an AP includes

one or more VHT Transmit Power Envelope elements, then the units of the Minimum Transmit Power

Capability and Maximum Transmit Power Capability fields within the Power Capability element sent in the

STA's (Re)Association Request frame to the AP shall be interpreted according to the Local Maximum Transmit

Power Units Interpretation subfield in the Transmit Power Information field in the VHT Transmit Power

Envelope element (see 8.4.2.164 (VHT Transmit Power Envelope element)) sent first in the Beacon or Probe

Response frame; otherwise the units of the Minimum Transmit Power Capability and Maximum Transmit

Power Capability fields within the Power Capability element sent in the STA's (Re)Association Request

frame to the AP shall be interpreted as EIRP.

If the Beacon or Probe Response frame most recently received by a VHT mesh STA that has

dot11SpectrumManagementRequired or dot11RadioMeasurementActivated equal to true from a neighbor mesh STA includes one or more VHT Transmit Power Envelope elements, then the units of the Minimum Transmit Power

Capability and Maximum Transmit Power Capability fields within the Power Capability element sent in the

Mesh Peering Open frame to the neighbor mesh STA shall be interpreted according to the Local Maximum Transmit

Power Units Interpretation subfield in the Transmit Power Information field in the VHT Transmit Power

Envelope element (see 8.4.2.164 (VHT Transmit Power Envelope element)) sent first in the Beacon or Probe

Response frame; otherwise the units of the Minimum Transmit Power Capability and Maximum Transmit

Power Capability fields within the Power Capability element sent in the VHT mesh STA's Mesh Peering Open frame to the neighbor mesh STA shall be interpreted as EIRP.

**10.39.1 Basic VHT BSS functionality**

A VHT AP or VHT mesh STA can also announce a new Country string (including a new Operating Table index), new operating classes or new TPC parameters for the BSS that come into effect at the same time as the switch of operating channel, operating bandwidth, or both.