IEEE P802.11  
Wireless LANs

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| LB 190 Annex B Comment Resolution | | | | |
| Date: 2012-11-06 | | | | |
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Abstract

This submission provides proposed resolutions to CIDs 7362 and 7332 related to Annex B of draft D4.0. Both CIDs belong to the MAC ad hoc

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| **CID** | **Page** | **Line** | **Clause** | **Comment** | **Proposed Change** | **Resolution** |
| 7362 | 336.00 |  | B.4.3 | VHT should only be allowed if HT in 5G is supported | Put CF29 into the correct feature dependency hierarchy (see 11ad for inspiration) | Revised: see changes in doc 11-12/1295r1 |

**Context:**

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| --- | --- | --- | --- | --- |
| Item | IUT configuration | References | Status | Support |
| \*CF16 | High-throughput (HT) features | 8.4.2.58 (HT Capabilities element) | O  CF29:M | Yes  No  |
| \*CF29 | Very High Throughput (VHT) Features | 8.4.2.160 (VHT Capabilities element) | O | Yes  No  |

**Discussion:**

The current PICS table specifies that mandatory support of HT features by a VHT device without specifying the the operating band. With IEEE 802.11ad, two additional enteries are added to the PICS table to indicate HT operation in the 2.4 and the 5 GHz bands. The changes introduced by IEEE 802.11ad are shown below:

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| --- | --- | --- | --- | --- |
| Item | IUT configuration | References | Status | Support |
| \*CF16 | High-throughput (HT) features | 8.4.2.58 (HT Capabilities element) | O | Yes  No  |
| \*CF16.1 | HT operation in 2.4 GHz band | Clause 20 | CF16:O.6 | Yes  No  |
| \*CF16.2 | HT operation in 5 GHz band | Clause 20 | CF16:O.6 | Yes  No  |

It makes sense to make use of the changes in the PICS table introduced by IEEE 802.11ad

**Proposed Changes**

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| --- | --- | --- | --- | --- |
| Item | IUT configuration | References | Status | Support |
| \*CF16 | High-throughput (HT) features | 8.4.2.58 (HT Capabilities element) | O | Yes  No  |
| \*CF16.1 | HT operation in 2.4 GHz band | Clause 20 | CF16:O.6 | Yes  No  |
| \*CF16.2 | HT operation in 5 GHz band | Clause 20 | CF16:O.6  CF29:M | Yes  No  |
| \*CF29 | Very High Throughput (VHT) Features | 8.4.2.160 (VHT Capabilities element) | O | Yes  No  |

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| **CID** | **Page** | **Line** | **Clause** | **Comment** | **Proposed Change** | **Resolution** |
| 7332 | 338.00 |  | B.4.12 | Why is the new channel switch stuff (SM20.4/5) required radio measurement is supported? | Remove the "OR CF13" and associated parentheses | Rejected. sub-elements of the channel switch wrapper element are transmitted based on radio measurements. |

**Context:**

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| SM20 | Channel switch procedure |  |  |  |
| SM20.4 | Transmission of channel wrapper element and procedures in conjunction with channel switch announcement or extended channel switch announcement | 10.39.1 (Basic VHT BSS functionality) | (CF1 OR CF2.2 OR CF21) AND (CF10 OR CF13) AND CF29:M(#6164) | Yes  No  N/A  |
| SM20.5 | Reception of channel wrapper element and procedures, in conjunction with channel switch announcement or extended channel switch announcement | 10.39.1 (Basic VHT BSS functionality) | CF21 AND (CF10 OR CF13) AND CF29:M(#6164) | Yes  No  N/A  |

Discussion:

Clause 10.11.1.1 on Beacon Report describes conditions for exchanging channel switch wrapper element;

“*A non-VHT STA shall not include a Wide Bandwidth Channel Switch subelement in the Beacon Request. A VHT STA shall not include a Wide Bandwidth Channel Switch subelement in the Beacon Request or Beacon Report sent to a non-VHT STA. If the Wide Bandwidth Channel Switch subelement is included in a Beacon Request, then the Operating Class shall indicate a 40 MHz channel spacing.”*

Indicating that sub-elements of the channel switch wrapper element are transmitted based on radio measurements.**References:**