IEEE P802.11  
Wireless LANs

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| Proposed Comment Resolution from D0.3 | | | | |
| Date: 2017-11-02 | | | | |
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Abstract

Proposed comment resolutions for CIDs 29, 32, 90, 106, 134, 154, 160, 236, 237, 238, 239, 247, 366, 368, 369, 459, 460, 475 from D0.3.

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| **CID** | **Clause Number(C)** | **Page(C)** | **Comment** | **Proposed Change** |
| 29 | 9.4.2.250.2 | 27 | "indicates the number of data SC blocks": It inidicates the minimum number, there is no problem with transmitting more. | Add the word minimum |
| 90 | 9.4.2.250.2 | 28 | The range provided only allows for aBRPminSCblocks to be included as this value is a minimum. It seems that we are wasting the 5 bits. | If the intension is to have what is written, then assign the 5 bits to "Reserved". Otherwise, clean up the language so as to have consistency with the usage of aBRPminSCblocks. |

ACCEPT. Editor to add the word "minimum" before the word "number".

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| **CID** | **Clause Number(C)** | **Page(C)** | **Comment** | **Proposed Change** |
| 32 | 9.4.2.250.4 | 28 | Antenna Polarization Field - there is no behavior associated with this field - what does a stattion do with this information | Either provide normative behavior associated with this field or remove the field |

REVISE. Add the following text (with necessary editorial changes) to the Clause 10. "The Antenna Polarization Field allows a STA to share it's antenna polarization characterstics with other stations. STAs utilizes this information to simplify beamforming and enhance link performance. For example, if an AP is synthesizable polarization capable and a STA is linear polarization capable, the AP can employ circularly polarized antenna to do initial beamforming training with the STA to avoid polarization alignment loss. Once initial beamforming training is completed, the AP can further perform beam refinement by switching to linear polarized antenna performs polarization alignment using BRP."

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| **CID** | **Clause Number(C)** | **Page(C)** | **Comment** | **Proposed Change** |
| 106 | 9.4.2.251 | 31 | We should not allow for EDMG STAs to send non-EDMG duplicate PPDU without channel width information. | Make EDMG Operation element mandatory for all frames. If overhead is a concern, make a new element ID that has Operating Channel Width only. |

REJECT. Already addresed in 0.5 with CH\_BANDWIDTH\_IN\_NON\_EDMG.

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| **CID** | **Clause Number(C)** | **Page(C)** | **Comment** | **Proposed Change** |
| 134 | 9.4.2.250.4 | 28 | There is no DMG antenna ID to identify which antenna each polarization applies to. Either define it, or make a static mapping. | As noted |

ACCEPT. Add the following text after Figure 23 "Each polarization capability is statically mapped to the Antenna ID value used for the antenna." Editor to renumber Polarization Capabilities from 0 to N-1.

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| **CID** | **Clause Number(C)** | **Page(C)** | **Comment** | **Proposed Change** |
| 154 | 10.24.2 | 50 | An implicit Block ACK agreement would be more efficient than always requiring STAs to set up agreements explicitly. | Contribution will be provided. |

REJECT. Draft text has already been incorporated into D0.8.

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| **CID** | **Clause Number(C)** | **Page(C)** | **Comment** | **Proposed Change** |
| 160 | 30.5.5 | 141 | MCS modes 12 and 13 could be improved substantially with a better constellation and code combination. Suggest allowing new, optional, MCS modes here. | Contribution will be provided. |

REJECT. Draft text has already been incorporated into D0.8.

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| **CID** | **Clause Number(C)** | **Page(C)** | **Comment** | **Proposed Change** |
| 236 | 9.4.2.250.1 | 25 | Is it necessary to include EDMG Capabilites in Announce frame when DMG Capabilities is optional? Justify or remove | Delete "Announce ," |

REVISE. The sentences "The element is present in Announce, Association Request, Association Response, Reassociation Request, Reassociation Response, Probe Request and Probe Response frames and can be present in DMG Beacon, Information Request, and Information Response frames." will be removed from the draft since they are not necessary and do not follow current 802.11 style guidlines.

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| **CID** | **Clause Number(C)** | **Page(C)** | **Comment** | **Proposed Change** |
| 237 | 9.4.2.250.1 | 25 | Should we enable concatenating multiple EDMG Capabilities elements since there appears to be no limit to the potential number and size of the Extended Capabilities fields (e.g. Antenna Polarization Capability field) | Add text to enable including multiple DMG Capabilities. In which case values of duplicated fields should not be changed between elements |

REJECT. Comment is unclear. Please provide a submission.

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| **CID** | **Clause Number(C)** | **Page(C)** | **Comment** | **Proposed Change** |
| 238 | 9.4.2.250.1 | 25 | AID field should also be included in the element since element may advertise another STA's capability. (e.g. Information Response with Broadcast Subject Address field). | Add AID field to the element |

REJECT. This is not needed since a DMG Capabilities field will include this information.

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| **CID** | **Clause Number(C)** | **Page(C)** | **Comment** | **Proposed Change** |
| 239 | 9.4.2.250.1 | 25 | Logically, TRN Parameters could be in the Beamforming Capabiltiy field and MCS support in the PHY Capability field? It is not clear what goes into the Core Capabilities and what does not | Add text to explain the purpose of the Core Capailities field |

REJECT. The draft defines what goes into the core capabilities and what goes into the extended capabilities.

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| **CID** | **Clause Number(C)** | **Page(C)** | **Comment** | **Proposed Change** |
| 247 | 9.4.2.251 | 31 | The EDMG Operation element is also transmitted in DMG Beacon (Extension) frame | Delete the second sentence |

ACCEPT. Editor to delete the sentence "The EDMG Operation element is transmitted in a management frame." This makes the text consistent with the text for other Operation elements in 802.11.

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| **CID** | **Clause Number(C)** | **Page(C)** | **Comment** | **Proposed Change** |
| 366 | 9.4.2.250 | 25 | Number of RX DMG antennas (2 bits), Total Number of Sectors (7 bits) defined in DMG STA capability Information seem to be less than 3 and 11 bits defined for EDMG antenna ID and sector ID/CDOWN. It should be clarified how these DMG capabilities are related to the capabilities of EDMG STA | Defines MSB for these fields |

REJECT. Will be addressed in a future contribution.

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| **CID** | **Clause Number(C)** | **Page(C)** | **Comment** | **Proposed Change** |
| 368 | 9.4.2.251 | 32 | (primary channel)' under 2.16GHz is not necessary, because there could be SP that occupies single channel but not on the primary channel. The field is only about BW | remove (primary channel) |
| 369 | 9.4.2.251 | 31 | Currently EDMG Operation element is only present in DMG beacon, and DMG beacon is only sent on primary channel. Why it is necessary to signal primary channel in this element? | remove Primary Channel field, or define EDMG operation element in other frames which could be transmitted on 2ndary channel |

REJECT. AP/PCP needs to signal primary channel.

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| **CID** | **Clause Number(C)** | **Page(C)** | **Comment** | **Proposed Change** |
| 459 |  | 31 | In the spec:"... and the value 0 corresponds to the AP or PCP. The 8 MSBs of the AID field are reserved." (9.4.1.8 AID field). This convention allows scheduling for unassociated devices w/o providing AID of AP/PCP. In the draft "The BSS AID field contains a value assigned by an AP or PCP to identify the BSS. Need changes in 9.4.1.8 | Append: "The BSS AID field contains a value assigned by an AP or PCP to identify the BSS (9.4.1.8)"  and add paragraph to 9.4.1.8 AID field "A DMG STA assigns the value of the AID field in the range 1 to 254. The value 255 is reserved as the broadcast AID, and the value 0 corresponds to the AP or PCP. The 8 MSBs of the AID field are reserved. An EDMG PCP/AP assigns value in the range 1 to 254 to identify the PCP/AP in addition to the DMG reserved value. |

REVISE. Editor to incorporate text that corresponds with 9.4.1.8 DMG STA usage.

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| **CID** | **Clause Number(C)** | **Page(C)** | **Comment** | **Proposed Change** |
| 460 |  | 31 | "The Primary Channel number field indicates a 2.16 GHz channel number, as defined in Annex E, of the primary channel of the BSS." Annex E does not define primary channel. | Few options are relevant: 1. Add additional field of primary channel to the Extended Channel Switch Announcement element 2. Define operating class to indicate primary channel for each channel width. It actually means to have 1, 2, 3, and 4 operating classes respectively to channel width for each channel number. May need submission to agree. Resolve per resolution of comment 11 |

REJECT. Text as written is correct. The phrase "as defined in Annex E" is referring to the definition of a 2.16 GHz channel number.

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| **CID** | **Clause Number(C)** | **Page(C)** | **Comment** | **Proposed Change** |
| 475 | 9.4.2.250 | 25 | Table 1: the text reads "Determines the minimum time between the start of adjacent MPDUs within an A-MPDU that the STA can receive, measured at the PHY SAP. " It is not apparent that this also applies to adjacent MPDUs within an A-PPDU | add text to clarify that adjacent MPDUs within an A-PPDU is also applied |

REJECT. Not possible to have adjacent MPDUs between two PPDUs in an A-PPDU.