IEEE P802.11
Wireless LANs

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| Comment Resolution on A-PPDU |
| Date: 2018-3-6 |
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Abstract

This submission proposes resolution of comments received from LB# 231 (TGay Draft 1.0) on clause 10.15 DMG A-PPDU operation

- 5 CIDs: 1096, 1099, 1215, 1282 and 1764

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| **CID** | **Page Number** | **Line Number** | **Comment** | **Proposed Change** | **Proposed Resolution** |
| 1096 | 112 | 31 | I couldn't find the abbreviation A-PPDU introduced anywhere. If not present in the baseline, please add in clause 3.4 | as in comment | **Revised**Besides the abbreviation of A-PPDU, the definitions of A-PPDU, DMG A-PPDU and EDMG A-PPDU are also added |

**Proposed changes to D1.0:**

*TGay Editor: Adding the following definitions of A-PPDU in clause 3.2 in alphabetic order (CID #1096):*

**3.2 Definitions specific to IEEE Std 802.11**

aggregate physical layer (PHY) protocol data unit (A-PPDU): A sequence of two or more PPDUs transmitted without IFS, preamble, and with a PHY-header between PPDU transmissions.

directional multi-gigabit (DMG) aggregate physical layer (PHY) protocol data unit (A-PPDU): An A-PPDU where all constituent PPDUs are DMG PPDUs.

enhanced directional multi-gigabit (EDMG) aggregate physical layer (PHY) protocol data unit (A-PPDU): An A-PPDU where all constituent PPDUs are EDMG PPDUs.

*TGay Editor: Adding acronym of A-PPDU in clause 3.4 in alphabetic order (CID #1096):*

3.4 Abbreviations and acronyms

A-PPDU: Aggregate PHY protocol data unit

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| 1099 | 112 | 34 | In practice there are two A-PPDU formats: DMG A-PPDU and EDMG A-PPDU. The text presented in 10.15 need to distinguish between the two and be clearer of what can be done and what is not.Below rule should be clearer, the text should state a rule regarding transmitting EDMG PPDUs in DMG A-PPDU format. Having both non-EDMG and EDMG PPDUs in EDMG-APPDU is not possible per the EDMG A-PPDU format as described in 30.3.2.2."A non-EDMG PPDU and an EDMG PPDU shall not be included in the same A-PPDU." | All EDMG PPDUs within an EDMG A-PPDU shall have the ADD-PPDU parameter of the TXVECTOR set to NO-ADD-PPDU. All EDMG PPDUs within an EDMG A-PPDU shall have the EDMG\_ADD\_PPDU parameter of the TXVECTOR set to ADD-PPDU, except forthe last PPDU in the EDMG A-PPDU that shall have this parameter set to NO-ADD-PPDU. A non-EDMG PPDU and an EDMG PPDU shall not be included in the same DMG A-PPDU.DMG A-PPDU shall not include EDMG PPDU. | **Revised**EDMG A-PPDU capability indication is added for clear EDMG A-PPDU operation.  |

**Proposed changes to D1.0:**

*TGay Editor: Changing Figure 24 and adding one paragraph after L19P56 of clause 9.4.2.250.1 as follows (CID #1099):*

9.4.2.250.1 General

B0 B6 B7 B18 B19 B42 B43 B44 B47

A-MPDU Parameters

TRN Parameters

Supported MCS

Reserved

EDMG A-PPDU

Bits: 7 12 24 1 4

**Figure 24 —Core Capabilities field format**

**……**

The EDMG A-PPDU subfield is set to 1 to indicate that the STA can receive EDMG A-PPDU. Otherwise, it is set to 0.

*TGay Editor: Changing the title and first 3 paragraphs of clause 10.15 as follows (CID #1099):*

10.15 DMG A-PPDU and EDMG A-PPDU operation

A DMG STA is DMG aggregate PPDU (A-PPDU) capable if the A-PPDU supported field within the STA’s DMG Capabilities element is 1. Otherwise, the STA is non-DMG A-PPDU capable.

An EDMG STA is EDMG A-PPDU capable if the EDMG A-PPDU field within the STA’s EDMG Capabilities element is 1. Otherwise, the STA is non-EDMG A-PPDU capable.

A DMG STA shall not transmit a DMG A-PPDU to a non-DMG A-PPDU capable STA. An EDMG STA shall not transmit an EDMG A-PPDU to a non-EDMG A-PPDU capable STA.

All PPDUs within a DMG A-PPDU shall have the ADD-PPDU parameter of the TXVECTOR set to ADD-PPDU, except for the last PPDU in the DMG A-PPDU that shall have this parameter set to NO-ADD-PPDU. EDMG PPDUshall have the ADD-PPDU parameter of the TXVECTOR set to NO-ADD-PPDU. All PPDUs within an EDMG A-PPDU shall have the EDMG\_ADD\_PPDU parameter of the TXVECTOR set to ADD-PPDU, except for the last PPDU in the EDMG A-PPDU that shall have this parameter set to NO-ADD-PPDU. A non-EDMG PPDU and an EDMG PPDU shall not be included in the same A-PPDU.

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| 1215 | 113 | 7 | "The EDMG SU A-PPDU format is defined in 30.3.2.2." - the MAC should not need to know anything about this format if the coupling between the MAC and PHY is adequately represented by the PHY SAP. | Remove cited text. | **Accpeted** |

*TGay Editor: Deleting the last paragraph of clause 10.15 as follows (CID #1215):*

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| **CID** | **Page Number** | **Line Number** | **Comment** | **Proposed Change** | **Proposed Resolution** |
| 1282 | 113 | 7 | "The EDMG SU A-PPDU format is defined in 30.3.2.2.""30.3.2.2 EDMG A-PPDU format"Use the unified name | Delete “SU” and specific EDMG A-PPDU used for SU only. | **Revised**The refered sentence has been deleted base on CR of CID 1215. 30.3.2.2 specifics EDMG A-PPDU is only for SU. |

*TGay Editor: Adding the following sentence to the end of the fourth paragraph of clause 10.15 (CID #1282):*

The value of a TXVECTOR parameter of a PPDU belonging to an A-PPDU might differ from the value of the same TXVECTOR parameter of another PPDU in the same A-PPDU, including the MCS parameter. EDMG A-PPDU transmission shall be used for SU only.

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| 1764 | 112 | 34 | The sentence "All EDMG PPDUs within an A-PPDU shall have the ADD-PPDU parameter of the TXVECTOR set to NO-ADD-PPDU." contradicts with the next sentence. | Remove the sentence "All EDMG PPDUs within an A-PPDU shall have the ADD-PPDU parameter of the TXVECTOR set to NO-ADD-PPDU." | **Rejected**ADD-PPDU and EDMG\_ADD\_PPDU need separate indications, no confliction here. |

**Straw Poll/Motion:**

* **Do you agree to accept the comment resolution for CID1096, 1099, 1215, 1282 and 1764 as proposed in doc 11-18/0530r2?**