IEEE P802.11
Wireless LANs

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| Removal of Unnecessary PHY TBDs |
| Date: 2016-09-12 |
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Abstract

This document contain text change proposal to remove uncessary TBDs in the physical layer sections of the TGax draft.

There are few TBDs in the draft TGax specification v0.4 that is uncessary.

**Discussion #1:**

It have been left TBD on whether the STA transmitting signals above minimum power shall support EVM requirements for MCS 7 or above MCS 7. There has not been any additional materials or proposal to increase this requirement. Whether or not we have the TBD text, does not prevent members to bring new proposal to changes. Because of this the current TBD is completely uncessary.Therefore, we propose to delete this TBD.

**Proposed Changes #1:**

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**To TGax Editor: P227L38:**

A STA transmitting at and above the minimum power shall support the EVM requirements for MCS 7(#1616) ~~(TBD whether support for higher MCS)~~.

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**Discussion #2:**

The RSSI measurement for HE trigger-base PPDU is stated to be TBD. However, this is wrong the RSSI measurement has been clarified in the TXVECTOR/RXVECTOR section. Rather than duplicating the description for RSSI measurement for HE trigger-based PPDU in the TXVECTOR/RXVECTOR section and section 26.3.18, we propose to simply delete this TBD.

**Proposed Changes #2:**

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**To TGax Editor: P239L12:**

The PHY includes the most recently measured RSSI value in the PHY-RXSTART.indication(RXVECTOR) primitive issued to the MAC. ~~The RSSI measurement for HE-trigger based PPDU is TBD.~~

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**Discussion #3:**

The TBD in section 26.4.2 doesn’t really help improving the draft text. We propose to delete this TBD.

**Proposed Changes #3:**

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**To TGax Editor: P242L13:**

**26.4.2 PHY MIB**

~~TBD~~

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**Discussion #4:**

There are TBD in section 26.5 that we already have agreements in TGax. We have agree to the following, which is already captured in the TGax SFD.

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| For an 11ax device, the support of DL and UL OFDMA (non MU-MIMO) shall be mandatory.For an 11ax device* Support of Nss>1 is optional
* Support of STBC is optional.

For an 11ax device* Support for single spatial stream HE-MCSs 0 to 7 (transmit and receive) is mandatory in all supported channel widths and RU sizes
* Transmit and receive support for HE-MCSs 8, 9 , 10 and 11 is optional

For an 11ax AP, support for DL MU-MIMO transmission, where MU-MIMO is being done on the entire PPDU BW, shall be mandatory if the AP supports Tx Nss>=4Full BW DL MU-MIMO reception shall be mandatory at a non-AP STA. For the receiving STA, max Nss (per STA) supported for DL MU-MIMO shall be equal to the minimum of 4 and the max Nss supported for SU PPDUs. The *NSTS,total* that the STA can support in NDP sounding and in the DL MU-MIMO packet is a capability, 4 being the minimum value for both.[May 2016, see [2]] |
| Make the following changes to D0.1 MCS Tables:* When DCM=1, change the *NSD* parameter to be ½ of DCM=0 cases for the same RU size.
* When DCM=1, change the *NCBPS* parameter to be ½ of DCM=0 case.
* When DCM=1, change the *NDBPS* parameter to be ½ of DCM=0 case, or take the floor for the two cases: 106-RU, MCS0, DCM=1, Nss=1, and 242-RU, MCS0, DCM=1, Nss=1.
* When DCM=1, change the coding rate *R* parameter to be identical to the DCM=0 case.
* Limit DCM=1 only to the allowed Nss.

[May 2016, see [76]] |

**Proposed Changes #4:**

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**To TGax Editor: P244L38:**

DCM is only applicable to MCS 0, 1, 3 and 4 with up to ~~TBD~~ 2 number of streams ~~and for TBD RU sizes~~.

**To TGax Editor: P244L46:**

Support for OFDMA 26-tone RU, 52-tone RU, 106-tone RU, 242-tone RU and 996-tone RU with *NSS* = 1 is ~~TBD mandatory/optional~~ Mandatory.

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**Discussion #5:**

The physical layer receive procedure section contains uncessary TBDs. We propose to remove them as they do not add value to the readers of the 802.11ax specification.

**Proposed Changes #5:**

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***To TGax editor:*** ***P230L1*** *remove unnecessary TBDs as the proposed changes below.*

These transmit procedures do not describe the operation of optional features, such as DCM.

***To TGax editor:*** ***P238L5*** *remove unnecessary TBDs as the proposed changes below.*

NOTE—This state machine does not describe the operation of optional features, such as DCM.

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