IEEE P802.11  
Wireless LANs

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| |  |  |  |  |  | | --- | --- | --- | --- | --- | | EHT PHY MIB | | | | | | Date: 2022-03-7 | | | | | | Author(s): | | | | | | Name | Affiliation | Address | Phone | email | | Youhan Kim | Qualcomm |  |  | youhank@qti.qualcomm.com | |  |  |  |  |  | |  |  |  |  |  | |  |  |  |  |  | |  |  |  |  |  | |  |  |  |  |  | |

Abstract

This submission proposes resolutions for the following comment on P802.11be D1.0:

7281

NOTE – Set the Track Changes Viewing Option in the MS Word to “All Markup” to clearly see the proposed text edits.

**Revision History:**

R0: Initial version.

R1: Updated during March 3, 2022 meeting.

# CID 7281

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **CID** | **Clause** | **Page.Line** | **Comment** | **Proposed Change** |
| 7281 | 36.4.1 | 551.34 | Table 36-68: Do we have to repeat the whole Table (including HT, VHT, HE, ...) instead of just adding the new values. | Clarify |

**Discussion**

The current EHT PHY MIB (Table 36-69 in D1.4) has ~125 MIB attributes and is 7 pages long (D1.4).

In many instances, a particular MIB attribute is relevant in transmitting/receiving a particular generation of PPDU. For example, Table 36-69 lists the MIB attribute dot11HTGreenfieldOptionImplemented. This attribute has no relevance to transmitting or receiving EHT PPDUs, and only matters for transmitting/receiving HT PPDUs.

Note also that there are some MIB attributes which have different values between different PHY clauses. For example, dot11PHYType has the following values in various tables.

* Table 15-4: DSSS-2.4 (02)
* Table 16-3: High rate-2.4 (X’05’)
* Table 17-20: OFDM-5. (04)
* Table 18-4: ERP (X’06’)
* Table 19-24: HT (X’07’)
* Table 27-53: he
* Table 36-69: eht

So, which value/table should one refer to?

P802.11REVme D1.0 P395 states (for MLME-SCAN.confirm):

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Hence, when an EHT STA receives, say, an HT PPDU, then we need to refer to Table 19-24 (not Table 36-69) for the MIB attributes anyway.

Therefore, it is not necessary to copy and paste all MIB attributes from previous PHY generations into Table 16-69. Rather, it would suffice to list out the other tables the EHT STA needs to be aware of as well for MIB.

**Proposed Resolution: CID 7281**

**Revised**

**Note to Commenter:**

Instruction to Editor updates the text to add references to the MIB tables in previous PHY generations, and deletes duplicative MIB attributes from Table 36-69.

**Instruction to Editor:**

Implement the proposed text updates for CID 7281 in <https://mentor.ieee.org/802.11/dcn/20/11-22-0321-01-00be-eht-phy-mib.docx>

**Proposed Text Updates: CID 7281**

*Instruction to Editor: Update 36.4.2 (D1.4 P698L33) as shown below (REVme D1.0 is used as the baseline of Tables 15-4 ~ Table 27-3).*

### 36.4.2 PHY MIB

PHY MIB attributes for an EHT STA are defined in Annex C with specific values defined in Table 15-4, Table 16-3, Table 17-20, Table 18-4, Table 19-24, Table 21-27, Table 27-53 and [Table 36-69](#bookmark335). The “Operational semantics” column in [Table 36-69](#bookmark335) contains two types: static and dynamic.

— Static MIB attributes are fixed and cannot be modified for a given PHY implementation.

Dynamic MIB attributes are interpreted according to the MAX-ACCESS field of the MIB attribute. If MAX-ACCESS is equal to read-only, the MIB attribute value may be updated by the PLME and read from the MIB attribute by management entities. If MAX-ACCESS is equal to read-write, the MIB attribute may be read and written by management entities.

## Table 36-69—EHT PHY MIB attributes

|  |  |  |
| --- | --- | --- |
| **Managed object** | **Default value/ range** | **Operational semantics** |
| **dot11PHYOperationTable** | | |
| dot11PHYType | eht | Static |
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**Table 36-69—EHT PHY MIB attributes *(continued)***

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| **Managed object** | **Default value/ range** | **Operational semantics** |
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**Table 36-69—EHT PHY MIB attributes *(continued)***

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| **Managed object** | **Default value/ range** | **Operational semantics** |
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**Table 36-69—EHT PHY MIB attributes *(continued)***

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| **Managed object** | **Default value/ range** | **Operational semantics** |
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**Table 36-69—EHT PHY MIB attributes *(continued)***

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| **Managed object** | **Default value/ range** | **Operational semantics** |
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**Table 36-69—EHT PHY MIB attributes *(continued)***

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| **Managed object** | **Default value/ range** | **Operational semantics** |
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| **dot11PHYEHTTable** | | |
| dot11EHTCurrentChannelWidth | Implementation dependent | Dynamic |
| dot11EHTSupportFor320MHzImplemented | false/Boolean | Static |
| dot11EHTNonOFDMAULMUMIMOLessThanOrEqualto80Implemented | false/Boolean | Static |
| dot11EHTNonOFDMAULMUMIMOEqualto160Implemented | false/Boolean | Static |
| dot11EHTNonOFDMAULMUMIMOEqualto320Implemented | false/Boolean | Static |
| dot11EHTPartialBWULMUMIMOImplemented | false/Boolean | Static |
| dot11EHTMUPPDUwith4xEHTLTFand0point8usecGIImplemented | false/Boolean | Static |
| dot11EHTPSRBasedSRImplemented | false/Boolean | Static |
| dot11EHTPowerBoostFactorImplemented | false/Boolean | Static |
| dot11EHTTx1024QAMand4096QAMLessThan242ToneRUImplemented | false/Boolean | Static |
| dot11EHTRx1024QAMand4096QAMLessThan242ToneRUImplemented | false/Boolean | Static |
| dot11EHTExtraLTFsImplemented | false/Boolean | Static |
| dot11EHTMaxNumberOfSupportedEHTLTFsForSU | Implementation dependent | Static |
| dot11EHTMaxNumberOfSupportedEHTLTFsForMUandNDP | Implementation dependent | Static |
| dot11EHTMCS15For52p26and106p26MRUImplemented | false/Boolean | Static |
| dot11EHTMCS15For484p242MRUImplemented | false/Boolean | Static |
| dot11EHTMCS15For996p484and996p484p242MRUImplemented | false/Boolean | Static |
| dot11EHTMCS15For3x996MRUImplemented | false/Boolean | Static |
| dot11EHTDupImplemented | false/Boolean | Static |
| dot11EHTSupportFor242ToneRUInBWWiderThan20Implemente d | false/Boolean | Static |
| dot11EHT20MHzOperatingSTARxNDPwithWiderBWImplemented | false/Boolean | Static |

**Table 36-69—EHT PHY MIB attributes *(continued)***

|  |  |  |
| --- | --- | --- |
| **Managed object** | **Default value/ range** | **Operational semantics** |
| dot11EHTCurrentChannelCenterFrequencyIndex0 | Implementation dependent | Dynamic |
| **dot11EHTTransmitBeamformingConfigTable** | | |
| dot11EHTSUBeamformerImplemented | false/Boolean | Static |
| dot11EHTSUBeamformeeImplemented | false/Boolean | Static |
| dot11EHTMUBeamformerLessThanOrEqualTo80Implemented | false/Boolean | Static |
| dot11EHTMUBeamformerEqualTo160Implemented | false/Boolean | Static |
| dot11EHTMUBeamformerEqualTo320Implemented | false/Boolean | Static |
| dot11EHTPartialBWDLMUMIMOImplemented | false/Boolean | Static |
| dot11EHTTriggeredSUBeamformingFeedbackImplemented | false/Boolean | Static |
| dot11EHTTriggeredMUBeamformingPartialBWFeedbackImplemented | false/Boolean | Static |
| dot11EHTTriggeredCQIFeedbackImplemented | false/Boolean | Static |
| dot11EHTNonTriggeredCQIFeedbackImplemented | false/Boolean | Static |
| dot11EHTBeamformeeSSLessThanOrEqualTo80 | Implementation dependent | Static |
| dot11EHTBeamformeeSSEqualTo160 | Implementation dependent | Static |
| dot11EHTBeamformeeSSEqualTo320 | Implementation dependent | Static |
| dot11EHTNumberSoundingDimensionsLessThanOrEqualTo80 | Implementation dependent | Static |
| dot11EHTNumberSoundingDimensionsEqualTo160 | Implementation dependent | Static |
| dot11EHTNumberSoundingDimensionsEqualTo320 | Implementation dependent | Static |
| dot11EHTNG16SUFeedbackImplemented | false/Boolean | Static |
| dot11EHTNG16MUFeedbackImplemented | false/Boolean | Static |
| dot11EHTCodebookSizePhi4Psi2SUFeedbackImplemented | false/Boolean | Static |
| dot11EHTCodebookSizePhi7Psi5MUFeedbackImplemented | false/Boolean | Static |
| dot11EHTMaxNc | Implementation dependent | Static |
| dot11EHTNDPwith4xEHTLTFand3point2GIImplemented | false/Boolean | Static |

[End of File]