IEEE P802.11
Wireless LANs

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| LB266 CR for 35.14 Nominal Packet Padding Values Selection Rules |
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Abstract

This submission contains the proposed comment resolutions of the following 8 CIDs in 22/0971 IEEE 802.11be LB266 comments, for the subclause 35.14 Nominal Packet Padding Values Selection-Rules.

CIDs 10339, 10392, 10398, 10400, 10402, 11883, 11884, 11885

Revision Notes

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| R0 | Initial revision |

## CID 10339

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| Page.Line | Clause Number | Comment | Proposed Change | Resolution |
| 523.23 | 35.14.3 | It is more accurate to use "EHT-MCS 14" rather than "MCS 14". | Replace "EHT-MCS 14" with "MCS 14" | REVISEDAgree that “MCS 14” should be changed into “EHT-MCS 14”. In addition, EHT-MCS 14 does not use 996-tone RU for the 80MHz bandwidth. Actually two 484-tone RUs are used in the case of an 80 MHz bandwidth.***Instructions to the editor:*** **Please make the changes as shown under CID 10339 in 11-22/1251r0.** |

***Instructions to the editor: please make the following changes to Line 23, Page 523 in the subclause 35.14 Nominal packet padding values selection rules in D2.0 as shown below:***

NOTE 4—EHT-MCS 14 only applies to two 484-, two 996-, and two 2×996-tone RUs, which can be regarded as 996-, 2×996-, and 4×996-tone RUs, respectively, in the case of selecting the nominal packet padding value.

Discussion:

EHT-MCS 14 is defined for user *u* in SU transmission only, and for bandwidths 80 MHz, 160 MHz, and 320 MHz only. Note that the RU sizes used for 80 MHz in the case of EHT-MCS 14 is 2×484 instead of 996.

Discussion ends.

## CID 10392

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| Page.Line | Clause Number | Comment | Proposed Change | Resolution |
| 523.26 | 35.14.4 | "PPE threshold" should be changed into "PPET", although they have the same meaning. The reason is that the names in the preceding subclauses also use "PPET" | Change "PPE threshold" into "PPET" | ACCEPTED. |

Discussion:

35.14.2 PPET not present in both HE and EHT

35.14.3 PPET not present in EHT but present in HE

35.14.4 PPE threshold present in EHT

Discussion ends.

## CID 10398

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| Page.Line | Clause Number | Comment | Proposed Change | Resolution |
| 522.52 | 35.14.3 | "EHT nominal packet padding value" should be "EHT common nominal packet padding value" in this table. | Change "EHT nominal packet padding value" into "EHT common nominal packet padding value" | ACCEPTED. |

Discussion:

The CC36 CID 7942 shown in 22/0183r2 uses “EHT common nominal packet padding value” instead of “EHT nominal packet padding value”.

Discussion ends.

## CID 10400

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| Page.Line | Clause Number | Comment | Proposed Change | Resolution |
| 524.20 | 35.14.4 | Please clarify if the constellation value "None" belongs to "defined" | Add descriptions showing that "None" belongs to "Defined". | REVISED.Change “defined” into “present”.***Instructions to the editor:*** **Please make the changes as shown under CID 10400 in 11-22/1251r0.** |

***Instructions to the editor: please make the following changes to Line 20, Page 524 in the subclause 35.14 Nominal packet padding values selection rules in D2.0 as shown below:***

All other cases with PPET8 and PPETmax values present

Discussion:



It may be confusing whether the constellation index 7 belongs to “defined” or “not defined”. To contain the case of constellation index 7, the word “defined” is changed into “present”.

Discussion ends.

## CID 10402

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| Page.Line | Clause Number | Comment | Proposed Change | Resolution |
| 524.64 | 35.14.4 | To be consistent, it’s better to have the same description as shown in Line 18, Page 521. | Use the similar description as shown in Line 18, Page 521. | REVISED.Use the same desicription.***Instructions to the editor:*** **Please make the changes as shown under CID 10402 in 11-22/1251r0.** |

***Instructions to the editor: please make the following changes to Line 64, Page 524 in the subclause 35.14 Nominal packet padding values selection rules in D2.0 as shown below:***

An EHT STA that sets the PPE Thresholds Present subfield to 1 in the EHT Capabilities element has a nominal packet padding of 0 µs for a small size RU or MRU, if 4096-QAM is not used for the RU or MRU; or if the RU size is 106 or the MRU size is 106+26 and EHT-MCS 15 is not applied to them. An EHT STA that sets the PPE Thresholds Present subfield to 1 in the EHT Capabilities element has a nominal packet padding value the same as the value for the 242-tone RU, if 4096-QAM is used for the RU or MRU; or if the RU size is 106 or the MRU size is 106+26 and EHT-MCS 15 is applied to them.

***Instructions to the editor: please make the following changes to Line 19, Page 521 in the subclause 35.14 Nominal packet padding values selection rules in D2.0 as shown below:***

An EHT STA that sets the PPE Thresholds Present subfield to 0 in both the EHT and HE Capabilities elements has a nominal packet padding value indicated by the Common Nominal Packet Padding subfield in the EHT Capabilities element for a small size RU or MRU, if 4096-QAM is used for the RU or MRU; or if the RU size is 106 or the MRU size is 106+26 and EHT-MCS 15 is applied to them.

Discussion:

**Line 18, Page 521:**

An EHT STA that sets the PPE Thresholds Present subfield to 0 in both the EHT and HE Capabilities elements has a nominal packet padding of 0 µs for a small size RU or MRU (see 36.3.2.2 (Subcarriers and resource allocation for multiple RUs)), if 4096-QAM is not used for the RU or MRU; or if the RU size is 106 or the MRU size is 106+26 and EHT-MCS 15 is not applied to them.

Discussion ends.

## CID 11883

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| Page.Line | Clause Number | Comment | Proposed Change | Resolution |
| 520.57 | 35.14.2 | Is it defined somewhere as to what is a large size RU? Please clarify e.g., by adding a reference | As in comment. | REVISED.A reference is added.***Instructions to the editor:*** **Please make the changes as shown under CID 11883 in 11-22/1251r0.** |

***Instructions to the editor: please make the following changes to Line 57, Page 520 in the subclause 35.14 Nominal packet padding values selection rules in D2.0 as shown below:***

An EHT STA that sets the PPE Thresholds Present subfield to 0 in both the EHT and HE Capabilities elements, and the Common Nominal Packet Padding subfield to 0 in the EHT Capabilities element that it transmits has a nominal packet padding of 0 µs for all constellations, NSS and large size RU allocations that it supports (See 36.3.2.2 (Subcarriers and resource allocation for multiple RUs) for the definition of the large size RU).

Discussion:



Discussion ends.

## CID 11884

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| Page.Line | Clause Number | Comment | Proposed Change | Resolution |
| 521.64 | 35.14.2 | Undefined indexes n and b> Please list ranges of these variables. | As in comment. | REVISED.The corresponding sentences are updated accordingly.***Instructions to the editor:*** **Please make the changes as shown under CID 11884 in 11-22/1251r0.** |

***Instructions to the editor: please make the following changes to Line 64, Page 521 in the subclause 35.14 Nominal packet padding values selection rules in D2.0 as shown below:***

An EHT STA that sets the PPE Thresholds Present subfield to 0 in the EHT Capabilities element, and sets it to 1 in the HE Capabilities element that it transmits, indicates that the nominal packet padding requirement for an EHT transmission with NSS value *n*, RU allocation index *b* and constellation index less than 6, is the same as for the corresponding HE transmission if the mode (NSS value *n*, and RU allocation index *b*) is covered in the PPE Thresholds field in the HE Capabilities element. The modes covered in the PPE Thresholds field in the HE Capabilities element consist of $N\_{SS} $indicated by the NSTS subfield (0 to the *NSTS* indicated in the NSTS subfield) and the RU allocation indices indicated by the RU Index Bitmask subfield ([242, 484, 996, 2×996]) in the HE Capabilities element.

Discussion:

For small size RUs:

The nominal packet padding is 0 µs for a small size RU or MRU, except for the following cases: 4096-QAM is used for the RU or MRU, or EHT-MCS 15 is used for an RU of size 106 or MRU of size 106+26. The nominal packet padding for EHT-MCS 15 for an RU of size 106 or MRU of size 106+26 is the same as that of HE-MCS 0 with DCM = 1 for RU size 106.

Discussion ends.

## CID 11885

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| Page.Line | Clause Number | Comment | Proposed Change | Resolution |
| 523.52 | 35.14.2 | For better clairty suggest to convert this paragraph to an itemized list | As in comment. | REVISED.The corresponding sentences are updated accordingly.***Instructions to the editor:*** **Please make the changes as shown under CID 11885 in 11-22/1251r0.** |

***Instructions to the editor: please make the following changes to Line 52, Page 523 in the subclause 35.14 Nominal packet padding values selection rules in D2.0 as shown below:***

In Table 35-6 (PPE thresholds per PPET8 and PPETmax), “RU Allocation index = (b + DCM)” means the following. With the exception of an RU or MRU indicated by the RU allocation index equal to 3 or 4, if EHT-MCS 14 or EHT-MCS 15 is applied in a given RU, the nominal packet padding value is based on the next larger RU allocation index (RU allocation index + 1). Examples of the selection of the RU allocation index considering DCM include:

—If EHT-MCS 15 is applied to a 242-tone RU then the nominal packet padding value for a 484-tone RU is used.

—If EHT-MCS 15 is applied to a 106-tone RU or a 106+26-tone MRU then the nominal packet padding value for a 242-tone RU is used.

—If EHT-MCS 15 is applied to an RU or MRU indicated by the RU allocation index equal to 3 or 4, then the nominal packet padding value for the same RU or MRU is used.

—If EHT-MCS 14 is applied, the RU allocation indices (b + DCM) for the 80 MHz, 160 MHz, and 320 MHz PPDUs are equal to 3, 3, and 4, respectively.