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 11-22/1251r2.** |

***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 80 MHz, 160 MHz, and 320 MHz EHT MU PPDUs, and the nominal packet padding value can be taken from the values for 996-, 2×996-, and 4×996-tone RUs, respectively.

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 11-22/1251r2.** |

***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 11-22/1251r2.** |

***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 11-22/1251r2.** |

***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 11-22/1251r2.** |

***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 a mode coverd in the PPE Thresholds field in the HE Capabilities element, is the same as for the corresponding HE transmission. The mode covered in the PPE Thresholds field in the HE Capabilities element satisfies the following rules:

— is in the scope from 1 to *NSTS*+1, where *NSTS* is indicated in the NSTS subfield in the HE Capabilities element;

— The RU size is in the scope of [242, 484, 996, 2×996] corresponding to the RU Index Bitmask subfieldin the HE Capabilities element, including the RU size corresponding to 0 in the RU Index Bitmask subfield in the HE Capabilities element;

— The constellation index is less than 6.

The nominal packet padding for EHT-MCS 14 or 15 for a large size RU of size 2×996 or smaller is the same as that for HE-MCS 0 with DCM = 1 for the same RU size. 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 …

The nominal packet padding values for 484+242-tone MRU are the same as for 996-tone RU derived above, and the nominal packet padding values for 996+484-tone MRU and 996+484+242-tone MRU are the same as for 2×996-tone RU derived above, in the case of the PPE Thresholds Present subfield set to 0 in the EHT Capabilities element and 1 in the HE Capabilities element. The nominal packet …

## 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 11-22/1251r2.** |

***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.