IEEE P802.11  
Wireless LANs

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| 11be D2.0 Comment Resolution for CID 11852, 13453 | | | | |
| Date: December 2022 | | | | |
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Abstract

The submission proposes text changes to resolve the following CIDs

11852, 13453

Please see discussion notes below for a review of introduced changes.

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| --- | --- | --- | --- | --- | --- |
| **CID** | **Page** | **Line** | **Comment** | **Proposed Change** | **Proposed Resolution** |
| 11852 | 294 | 26 | The derivation of the maximum a-mpdu length is becoming confusing. We have the length exponent in ht, vht, he caps, and then we have extensions in he and eht caps, not always present. please provide a table on the presence of these values in different bands and amendment. Possibly for the MPDU size as well. | As in comment. | Revised  Discussion: the commenter is correct, the text in 11be 10.12.2 is not very clear about which fields are used to decide the maximum A-MPDU size in various PPDU types and bands.  The usage of HT Capabilitites, VHT Capabilitties and HE 6 GHz Band Capabilities to decide the maximum MPDU leghth is described in **Table 9-34—Maximum data unit sizes (in octets) and durations (in microseconds)**.  TGbe editor to make changes in THIS DOCUMET with lable 11852 |
| 13453 | 294 | 26 | The 2.4GHz bnad and 5GHz band should be separatelydescribed. | As in comment. | **Revised**  **Discussion: the commenter is correct, the text in 11be 10.12.2 is not very clear about which fields are used to decide the maximum A-MPDU size in various PPDU types and bands**  **TGbe editor to make changes in THIS DOCUMET with lable 13453** |

Discussion:

A table describing which fields are used to decide the maximum A-MPDU size in various PPDU types and bands is added

In addition, the current text in 35.6 does not support a PSDU in an EHT PPDU transmitted in 2.4GHz using (40MHz and Nss>2) or using (20MHz and Nss>4)

For example EHT PPDU using 40MHz, MCS 13 and Nss=4, the PSDU size can be

4680 (N\_DBPS)\*396 (symbols) /8 (bits/byte) \* 4(Nss) = 926640 bytes = 2^(19.822)

For example EHT PPDU using 20MHz, MCS 13 and Nss=5, the PSDU size can be

2340 (N\_DBPS)\*396 (symbols) /8 (bits/byte) \* 5(Nss) = 579150 bytes = 2^(19.144)

The text for a 2.4 GHz EHT STA that does not send a VHT Capabilities element but sends an HT Capabilities element, an HE Capabilities element and an EHT capability element is added

TGbe editor: Modify the 1st paragraph in ***10.12.2 A-MPDU length limit rules*** (#11852, 13453):

### 10.12.2 A-MPDU length limit rules

A STA indicates in the Maximum A-MPDU Length Exponent field in its HT Capabilities element the

maximum A-MPDU length that it can receive in an HT PPDU. A STA indicates in the Maximum A-MPDU

Length Exponent field in its VHT Capabilities element the maximum length of the A-MPDU pre-EOF padding

that it can receive in a VHT PPDU. A STA indicates in the Maximum A-MPDU Length Exponent field in its

S1G Capabilities element the maximum length of the A-MPDU pre-EOF padding that it can receive in an

S1G PPDU. A STA indicates in the Maximum A-MPDU Length Exponent field in its DMG Capabilities

element the maximum A-MPDU length that it can receive in a DMG PPDU. A STA indicates the maximum

length of the A-MPDU pre-EOF padding that it can receive in an HE PPDU in the Maximum A-MPDU Length

Exponent field in its HT Capabilities, VHT Capabilities, and HE 6 GHz Band Capabilities elements (if present)

and in the Maximum A-MPDU Length Exponent Extension field in its HE Capabilities element.(11ax) A STA

indicates in the Maximum A-MPDU Length Exponent field in its EDMG Capabilities element the maximum

length of the A-MPDU that it can receive in an EDMG PPDU.(11ay) Fields used for calculating the maximum A-MPDU size of various PPDU Types in different bands are specified in Table xxx.

TGbe editor: Add the following table after the 1st paragraph in ***10.12.2 A-MPDU length limit rules*** (#11852, 13453):

**Table xxx — Fields used** **for calculating the maximum A-MPDU size of various PPDU Types in different bands**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Maximum A-MPDU per PPDU Type and Band** | Maximum A-MPDU Length Exponent field in HT Capabilities | Maximum A-MPDU Length Exponent field in VHT Capabilities | Maximum  A-MPDU  Length  Exponent  Extension in HE Capabilities | Maximum A-MPDU Length Exponent field in HE 6G Capabilities | Maximum  A-MPDU  Length  Exponent  Extension in EHT Capabilities | Maximum A-MPDU Length Exponent field in DMG Capabilities | Maximum A-MPDU Length Exponent field in EDMG Capabilities |
| **Maximum A-MPDU in HT PPDU of 2.4 GHz band** | Y | N | N | N | N | N | N |
| **Maximum A-MPDU in HE PPDU of 2.4 GHz band** | Y | N | Y | N | N | N | N |
| **Maximum A-MPDU in EHT PPDU of 2.4 GHz band** | Y | N | Y | N | Y | N | N |
| **Maximum A-MPDU in HT PPDU of 5 GHz band** | Y | N | N | N | N | N | N |
| **Maximum A-MPDU in VHT PPDU of 5 GHz band** | N | Y | N | N | N | N | N |
| **Maximum A-MPDU in HE PPDU of 5 GHz band** | N | Y | Y | N | N | N | N |
| **Maximum A-MPDU in EHT PPDU of 5 GHz band** | N | Y | Y | N | Y | N | N |
| **Maximum A-MPDU in HE PPDU of 6 GHz band** | N | N | Y | Y | N | N | N |
| **Maximum A-MPDU in EHT PPDU of 6 GHz band** | N | N | Y | Y | Y | N | N |
| **Maximum A-MPDU in DMG PPDU** | N | N | N | N | N | Y | N |
| **Maximum A-MPDU in EDMG PPDU** | N | N | N | N | N | N | Y |

### **35.6** **A-MPDU operation in an EHT PPDU**

TGbe editor: Add the following table after the 6th paragraph in 35.6 A-MPDU operation in an EHT PPDU (#11852, 13453):

An EHT STA that does not send a VHT Capabilities element but sends an HT Capabilities element, an HE Capabilities element and an EHT Capabilities element with Maximum A-MPDU Length Exponent Extension subfield greater than 0 shall support in reception of an EHT PPDU with an A-MPDU pre-EOF padding with maximum length as defined in 10.12.2(A-MPDU length limit rules), except that the maximum length for the A-MPDU pre-EOF padding shall be equal 2(19 + Maximum A-MPDU Length Exponent Extension) – 1. An EHT STA that sets the Maximum A-MPDU Length Exponent Extension subfield in the EHT Capabilities element to a value greater than 0 shall set the Maximum A-MPDU Length Exponent subfield of the HT Capabilities element to 3 and the Maximum A-MPDU Length Exponent Extension subfield of the HE Capabilities element to 3.