IEEE P802.11  
Wireless LANs

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| Resolutions for CIDs 43, 44, 45, 712, 773, 1815 | | | | |
| Date: 2011-03-14 | | | | |
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Abstract

This document provides resolution for the comments listed below

Comments are from: 11-11-0276-00-00ac-tgac-d0-1-comments.xls

Comments refer to: Draft P802.11ac\_D0.1.pdf

Changes in the text refer to: Draft P802.11ac\_D0.1.pdf

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 43 | Asai, Yusuke | 7.4a.1 | 38 | 30 | TR | "EOF pad" should be defined in section 3.2. | Insert the following definitions: End of frame (EOF) Pad: Padding octets for the last A-MPDU subframe to be padded to the last octet of the PSDU or to a multiple of 4 octets in length. | Agree  Add EOF pad definition in section 3.2  Clarify the EOF pad in 9.7d.6 A-MPDU padding for VHT format PPDU |
| 44 | Asai, Yusuke | 7.4a.1 | 38 | 30 | TR | There is no definition of the value of "EOF pad". | Add the definition of the bit pattern of "EOF Pad". It seems that one of the possible patterns is "all zero". | Disagree  It is implementation dependent.  Same as Qword pad for A-MPDU subframe |
| 773 | Liu, Yong | 7.4a.1 | 38 | 46 | TR | The "last A-MPDU subframe" is not very accurate here. The EOF delimiter can also be considered as a zero length A-MPDU subframe. | change to "the last non-zero length A-MPDU subframe" | Agree  Change to “the last A-MPDU subframe with non-zero MPDU length” |
| 45 | Asai, Yusuke | 7.4a.1 | 38 | 50 | TR | "EOF delimiters" should be replaced with "zero length A-MPDU subframes", because "zero length A-MPDU subframes" is used in Table 7-57w. | As in comment. | Agree  Changed to “zero length A-MPDU subframes with EOF field set to 1” |
| 712 | Kneckt, Jarkko | 7.4a.1 | 38 | 50 | TR | The maximum frame size definition is tricky. When the EOF and EOF bad are not included to maximum size, the A-MPDU maximum size is not known. | Please clarify why the EOF and EOF Pad are not included to A-MPDU maximum size. | Disagree  Please refer to 11-11-0034-00-00ac-max-frame-length-changes.ppt for the reason |
| 1815 | Yee, James | 7.4a.1 | 39 | 24 | TR | In Table 7-57w, wouldn't changing MPDU delimeter field format as described still create problems for non-VHT STA or complicate design? Isn't little-endian assumed and this MPDU Length High subfield should represent the lower sigficance bits? At least editorially the added NOTES should be underlined. | please clarify. | Disagree.  Reserved bits are used for the changes. The new MPDU delimiter with length extension is expected to be received and decoded by VHT STAs only.  Agree that the added NOTES should be underlined. |

**3.2 Definitions specific to IEEE 802.11**

end of frame (EOF) pad: 0 to 3 padding octets used to pad an A-MPDU to the last octet of the associated PSDU

**7.4a.1 A-MPDU format**

The structure of the A-MPDU subframe is shown in Figure 7-101p (A-MPDU subframe format). Each AMPDU

subframe consists of an MPDU delimiter followed by an MPDU. Except when an A-MPDU subframe

is the last one in an A-MPDU and there are zero octets EOF Pad, padding octets are appended to make each

A-MPDU subframe a multiple of 4 octets in length. The last A-MPDU subframe with non-zero MPDU length is padded to the last octet of the PSDU or to a multiple of 4 octets in length, whichever comes first. The A-MPDU maximum length for an HT\_MF or HT\_GF format PPDU is 65,535 octets. The A-MPDU maximum length for a VHT format PPDU excluding ~~EOF delimiters~~ zero length A-MPDU subframes with EOF field set to 1 and EOF Pad is 1,048,575 octets. The length of an A-MPDU addressed to

a particular STA may be further constrained as described in 9.7d.2 (A-MPDU length limit rules).

*NOTE—The format of the MPDU Length field maintains a common encoding structure for both VHT and HT*

*format PPDUs. For HT PPDUs only the MPDU Length Low field is used, while for VHT format PPDUs both*

*subfields are used.*

**9.7d.6 A-MPDU padding for VHT format PPDU**

Once PSDU\_LENGTH is known, A-MPDU padding proceeds as follows:

— While A-MPDU\_Length < PSDU\_LENGTH and A-MPDU\_Length mod 4 != 0, add a subframe

padding octet and increment A-MPDU\_Length by 1

— While A-MPDU\_Length + 4 <= PSDU\_LENGTH, add a zero length A-MPDU subframe with EOF

set to 1 and increment A-MPDU\_Length by 4

— While A-MPDU\_Length < PSDU\_LENGTH, add an EOF padding octet and increment A-MPDU\_Length

by 1**.**

**Premotion:**

**Do you agree with the resolutions for CIDs 43, 44, 45, 712, 773, 1815 as in doc 11/11-0374r0 and to be forwarded to the 11ac task group for motion?**

**Yes**

**No**

**Abstain**