### IEEE P802.11 Wireless LANs

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| 11ax D3.0 assorted editorial comments | | | | |
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Abstract

This document contains several editorial suggestions on 802.11ax draft 3.0.

**9.7 Aggregate MPDU (A-MPDU)**

**Table 9-422 - MPDU delimiter fields (non-DMG)**

191.22

End of frame indication. Set to 1 in an A-MPDU subframe that has 0 in the MPDU Length field and that is used to pad the A-MPDU in a VHT or HE PPDU as described in 10.13.6 (A-MPDU padding for VHT PPDU). Set to 1 in the MPDU delimiter of an S-MPDU as described in 10.13.7 (Setting the EOF field of the MPDU delimiter)) and set to 1 in an MPDU delimiter preceding a QoS Data frame or Action frame soliciting an Ack frame in response that are contained in an ack-enabled multi-TID A-MPDU as described in 27.10.4.3 (Ack-enabled multi-TID A-MPDU operation) and ack-enabled A-MPDU as described in 27.10.4.1 (General). Set to 0 otherwise.

NOTE—The EOF field indicates EOF in a VHT PPDU. In an HE PPDU the EOF indicates either the EOF or that the immediate following MPDU solicits an Ack response.

193.3 The contents of an A-MPDU depend~~s~~ on the context at which it is transmitted as defined in the tables below.

195.3 In Table 9-425 (A-MPDU contents in the data enabled immediate response context), replace all occurrences of

"If transmitted by an HE STA to another HE STA:"

to

"In an HE STA, when transmitted to an HE STA:"

195.3 In Table 9-425 (A-MPDU contents in the data enabled immediate response context), replace all occurrences of

"In an A-MPDU between two HE STAs:"

to

"In an HE STA, when transmitted to an HE STA:"

**Table 9-425—A-MPDU contents in the data enabled immediate response context**

195.12 In a non-DMG STA when ~~the frame is~~ not transmitted to an ~~between an HE STA and another~~ HE STA: at most one of ~~these~~ Ack and HT-immediate BlockAck MPDUs is present.

195.23 In an HE STA w~~W~~hen transmitted ~~by an HE STA~~ to an~~other~~ HE STA: If the preceding PPDU that carried a multi-TID A-MPDU contains implicit or explicit block ack requests for multi- ple TIDs for which HT-immediate block ack agreement exist, at most one Multi-STA BlockAck frame, in which case it occurs at the start of the A-MPDU.

**Table 9-425—A-MPDU contents in the data enabled immediate response context (continued)**

196.7 Data frames not sent under a an ~~without~~ HT-immediate block ack agreement

196.7 In an HE STA when ~~If~~ transmitted ~~by an HE STA~~ to an~~other~~ HE STA: One or more QoS Data frames ~~with~~ each with different TIDs where none of the TIDs are associated with an HT-immediate block ack agreement

196.22 In an HE STA when ~~If~~ transmitted ~~by an HE STA~~ to an~~other~~ HE STA: One or more QoS Data frames each with different TIDs, each TID associated with an ~~which correspond to multiple~~ HT-immediate block ack agreement~~s~~.

196.40

Swap items

In an ack-enabled A-MPDU the following is present:

and

In a non-ack-enabled multi-TID A-MPDU context between two HE STAs, at most one of the following is present:

196.50 In a non-ack-enabled single TID ~~non-ack-enabled~~ A-MPDU context between two HE STAs at most one of the following is present:

197.22

NOTE 1—~~These The~~ MPDUs from the same TID all have the Ack Policy field equal to the same value, which is either Implicit Block Ack Request, HTP Ack or Block Ack.

NOTE 2—Only an HE AP is allowed to include a Trigger frame in the A-MPDU.

NOTE 3—The BSRP and BQRP Trigger frames can be aggregated with other MPDUs in the A-MPDU if the receiver has indicated ~~the~~ support for ~~of~~ receiving these trigger types in the BSRP BQRP A-MPDU Aggregation field of the HE Capabilities element.

**10.22.2 HCF contention based channel access (EDCA)**

**10.22.2.2 EDCA backoff procedure**

218.49 the PPDU does not ~~n't~~ solicit an HE TB PPDU,

218.53 the PPDU does not ~~n't~~ solicit an HE TB PPDU,

218.63 The transmission of at least one MPDU in the final PPDU transmitted by the TXOP holder during the TXOP for that AC has completed, the final PPDU solicits an HE TB PPDU, and the TXNAV timer has expired.

219.2 The transmission of all MPDUs in the initial PPDU of a TXOP fails, as defined in this subclause, and the PPDU solicits an HE TB PPDU.

219.7 and the PPDU does not ~~n't~~ solicit an HE TB PPDU

219.10 The transmission by the TXOP holder of all MPDUs in a non-initial PPDU of a TXOP fails, as defined in this subclause, and the non-initial PPDU solicits an HE TB PPDU.

219.40 After transmission of an MPDU in an HE TB PPDU, ~~A~~an HE STA resumes the EDCA backoff procedure without modifying the CW or the backoff counter for the associated EDCAF, ~~after transmission of an MPDU in an HE TB PPDU~~ regardless of whether the STA has received the corresponding acknowledgment frame in response to the MPDU sent in the HE TB PPDU.

**10.22.2.6 Sharing an EDCA TXOP**

223.32

— If the preceding PPDU is a DL HE MU PPDU with preamble puncture, the TXOP holder shall set the TXVECTOR parameter CH\_BANDWIDTH of the non-initial PPDU to a value whose corre- sponding 20 MHz channels are within a set of 20 MHz channels where pre-HE modulated fields of the preceding PPDU are located.

— If the non-initial PPDU is a DL HE MU PPDU with preamble puncture, the TXOP holder shall set the TXVECTOR parameter RU\_ALLOCATION of the non-initial PPDU to a value whose corre- sponding RU is within a set of 20 MHz channels where pre-HE modulated fields of the preceding PPDU are located.

**27.6 HE sounding protocol**

303.18 The HE sounding protocol provides explicit feedback mechanisms, defined as HE non-trigger-based (non-TB) sounding and HE trigger-based (TB) sounding,

308.57 NOTE 2—The HE beamformee does not request feedback for the gap between the two 80 MHz segments of the 80+80 MHz channel.

309.3 — The minimum 26-tone RU located within the channel width in the VHT Operation Information field of either the HE Operation element or the VHT Operation element, whichever is present, and within the channel width indicated in the HT Operation element

309.16 — The maximum 26-tone RU located within the channel width in the VHT Operation Information field of either the HE Operation element or the VHT Operation element, whichever is present, and within the channel width indicated in the HT Operation element

310.42 NOTE—A non-AP HE beamformee that transmits an OM Control subfield with the UL MU Disable field set to 1 does not respond to BFRP Trigger frames (see 27.8 (Operating mode indication)).

311.1 NOTE—The BFRP Trigger frame contains one or more User Info fields, each of ~~the~~ which is addressed to an HE beam-formee.

311.55 An HE beamformee that transmits an HE compressed beamforming and CQI report including the HE Compressed Beamforming Report information

311.63 NOTE—If an HE beamformer solicits the missing feedback segments from a beamformee and does not ~~n't~~ receive the responses from the beamformee, the HE beamformer might either initiate an HE TB sounding sequence or transmit an additional BFRP Trigger frame to the HE beamformee.

312.13 —NUM\_STS indicates two or more space-time streams when the Feedback Type field in the HE MIMO Control field of the preceding HE NDP Announcement frame is set to either SU or MU. Otherwise, NUM\_STS is set to any value.

**27.10 A-MPDU operation**

348.5 except that the maximum length for the A\_MPDU pre-EOF padding shall be ~~is~~ equal to

348.14 except that the maximum length for the A-MPDU pre-EOF padding shall be ~~is~~ equal to

348.23 An HE STA that transmits a~~n~~ DL HE MU PPDU that contains one or more PSDUs, PSDUs, each of which carrying~~ies~~ an A-MPDU

348.47 The STA computes the PSDU\_LENGTH based on the TXVECTOR parameters and initializes the AMPDU\_Length to 0.

348.62 and? provided that the following conditions are met:

349.20 An A-MPDU pre-EOF padding is constructed for? ~~from~~ each user from any of the following:

349.52 — One or more non-EOF MPDUs that are not under ~~the~~ block ack agreements

350.63 from the same AC or a higher AC

351.1 NOTE—While it is recommended that the STA transmits QoS Data from the AC that is same or higher than the preferred AC, the STA is still permitted to aggregate QoS Data from an AC lower than the preferred AC.

351.10 NOTE—If the AP indicates AC\_BK in the Preferred AC subfield in the Trigger Dependent User Info field of a Basic Trigger frame, then an HE STA that transmits a multi-TID A-MPDU to the AP can ~~might~~ aggregate MPDUs from any AC/TID or combination of TIDs, up to the limit indicated in the TID Aggregation Limit subfield in Trigger Dependent User Info field of the Trigger frame.

351.29 An HE AP may aggregate MPDUs from any TID~~s~~ in a multi-TID A-MPDU for a DL HE MU PPDU transmission and the number of TIDs in the multi-TID A-MPDU shall not be more than the Multi-TID Aggregation Rx Support announced by the recipient.

351.50 NOTE—A non-ack-enabled multi-TID A-MPDU can ~~might~~ include other frames such as a Trigger frame, BlockAck frame, or QoS Null frame (see Table 9-425 (A-MPDU contents in the data enabled immediate response context))