IEEE P802.11
Wireless LANs

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| Miscellaneous fixes for CID 9001 |
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Abstract

This document provides bug fixes for CID 9001.

**Subclause 21.2.2, Page 509, Line 37 (Draft 8.0)**

*Comment:*

Inconsistent definitions of PACKET-TYPE in TXVECTOR, and Packet Type in OFDM and SC headers. Make it one definition.

*Recommended change:*

Table 21-1 (TXVECTOR and RXVECTOR parameters): Change the PACKET-TYPE definition as follows,

"Enumerated Type:

TRN-R-PACKET indicates either a packet whose data part is followed by one or more TRN-R subfields, or a packet that is requesting TRN-R subfields to be appended to a future response packet.

TRN-T-PACKET indicates a packet whose data part is followed by one or more TRN-T subfields.

This field is reserved if TRN-LEN is 0."

Table 21-11 (Control PHY header fields): Rename "Packet type" to "Packet Type", and change the definition to the following text:

Table 21-13 (OFDM header fields): Change the definition of "Packet Type" to the following text:

Table 21-17 (SC header fields): Change the definition of "Packet Type" to the following text:

"Corresponds to the TXVECTOR parameter PACKET-TYPE.

 \* Packet Type = 0 indicates either a packet whose data part is followed by one or more TRN-R subfields, or a packet that is requesting TRN-R subfields to be appended to a future response packet.

 \* Packet Type = 1 indicates a packet whose data part is followed by one or more TRN-T subfields.

The field is reserved when the Training Length field is set to 0."

**Subclause 8.4.2.132, Page 185**

*Comment:*

The Number of Measurements (*Nmeas*) field in the FBCK-TYPE field format represents the number of channel measurements or the number of sectors, both up to 64 inclusive. There is a use case for a value of zero as well. The field width needs to be increased 7 to be able to cover the full range 0-63.

In addition, all bit numbers for the FBCK-REQ and FBCK-TYPE fields need to be shifted up by 2 to stay consistent with Figure 8-401v."

*Recommended change:*

**Changes to Figure 8-401v (DMG Beam refinement element format):** FBCK-TYPE field 18 bits (B34-B51), MID Extension field 1 bit (B52), Capability Request field 1 bit (B53), Reserved field 2 bits (B54-B55).

**Changes to Figure 8-401w (FBCK-REQ field format):** Shift all bit indices up by 2, showing B29, B30, B31-B32 and B33 respectively.

**Changes to Figure 8-401x (FBCK-TYPE field format):** SNR Present field 1 bit (B34), Channel Measurement Present field 1 bit (B35), Tap Delay Present field 1 bit (B36), Number of Taps Present field 2 bits (B37-B38), Number of Measurements field 7 bits (B39-B45), Sector ID Order Present field 1 bit (B46), Number of Beams field 5 bits (B47-B51).

**Subclause 8.4.2.32, Page 175 (Table 8-110a)**

*Edit the table title to “Reliability field values”.*

**Subclause 8.4.2.32, Page 175, Line 31**

*Comment:*

Text talks about when the Reliability field is "included" in an ADDTS Request/Response frame, but the field is a fixed part of the DMG TSPEC and included in the ADDTS Request/Response frame anyways. It also says when the field is nonzero it indicates the PER expectations. It indicates the PER expectation anyways, and can be unspecified. Usage of the Reliability field in 2 out of 4 combinations is not specified. Finally, text is not consistent in style with the baseline text surrounding it in 8.4.2.32 (use "for this TS" instead of "per specific TSID").

Subclause 9.12.3, page 278, line 7 (Draft 8.0)

*Recommended change:*

Replace

"When the Reliability subfield is included in the ADDTS Request frame and the Direction field is set to downlink, and when this subfield is included in the ADDTS Response frame and the Direction field is set to uplink, then the value in this subfield represents the receiver expectation of the PER per specific TSID."

with

"The Reliability field in the ADDTS Request frame with the Direction subfield set to downlink, or in the ADDTS Response frame with the Direction field set to uplink indicates the receiver's expectation of the PER for this TS. The Reliability field in the ADDTS Request frame with the Direction subfield set to uplink, or in the ADDTS Response frame with the Direction field set to downlink is reserved."

Also increase the indent of the paragraph starting at line 24 to make it part of the Reliability bullet (this is a big section).

**Subclause 8.5.22.3, Page 257, Line 29**

*Comment:*

The maximum length of the channel measurement information inside a Channel Measurement Feedback IE is 255 bytes. Serialization can result in Tap Delay subfield also being split between IEs.

*Recommended change:*

The BRP frame contains more than one Channel Measurement Feedback element if the measurement information exceeds 255 bytes. The content of each Channel Measurement Feedback element that follows the first one in a single BRP frame is a continuation of the content in the previous element. The Channel Measurement, Tap Delay, and Sector ID Order subfields can be split between several elements. Each Channel Measurement Feedback element that is not the last Channel Measurement Feedback element in the frame is 257 bytes long. Channel measurement information for a single channel measurement is always contained within a single BRP frame.

**Subclause 9.7.5a.2, Page 274, Line 20**

*Comment:*

The aggregate of ACK/BA, BAR and QoS Null frames needs to have the same reliability as a standalone ACK/BA frame, and therefore needs to be made subject to the same MCS selection rules.

*Recommended change:*

After the sentence "The rules in this subclause do not apply to control frames that are contained in A-MPDUs that also include at least one MPDU of type Data or Management.", add

"Exception is an A-MPDU consisting of one of the following combinations:

– an ACK frame and a QoS NULL frame

– a BA frame and a QoS NULL frame

– a BAR frame and a QoS NULL frame

– a BA frame, a BAR frame and a QoS NULL frame

in which case the rate selection rules are the same as those for a standalone ACK or BA frame."