IEEE P802.11
Wireless LANs

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| Resolution to 11ad related CIDs |
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Abstract

This document includes proposed resolutions 11ad related CIDs.

The discussion is in reference to Draft P802.11REVmc\_D4.0.

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| 5983 | 9.38.6.4.1 | 1512.58 | Beam refinement after sector sweep requires channel access. | (1) Delete the word "immediately" in the following sentence: Beam refinement can start immediately following SLS (9.38.6.4.3 (Beam refinement transaction after SLS)).(2) Specify channel access specifics, if any - e.g., if a certain AC need so be followed. |

**Proposed resolution**: Revised

**Discussion**: accept to delete “immediately”. However, don’t believe there is a need to specify additional channel access rules.

**Proposed changes**:

**9.38.6.4.1 General**

*Change the first sentence in the 5th paragraph as follows*

Beam refinement can be performed following SLS (9.38.6.4.3 (Beam refinement transaction after SLS)).

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| 5122 | 9.2.7 | 1243.62 | The use of fragmentation in DMG is unnecessary given the larger MSDU sizes. | Insert the following paragraph after the first paragraph: "An MSDU transmitted by a DMG STA shall not be fragmented." |

**Discussion:** Fragmentation may still be used in DMG if a PPDU cannot fit in the TXOP.

**Proposed resolution**: Reject

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| 5036 | 8.6.20.11 | 1209.42 | "Zero or more Relay Capable STA Info fields". The structure is not unambiguously parseable because nothing indicates the length of this sequence of fields. | Either: 1) Remove the REDS feature entirely (because nobody will ever build it), or 2) make the structure parseable, such as by adding a count, or by including each Info field into a new element. |

**Proposed resolution**: Revised

**Discussion**: Propose inserting a counter into the frame.

**Proposed changes**:

**8.6.20.11 Relay Search Response frame format**

*Change Table 8-379 as follows*

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| --- | --- |
| Order | Information |
| 1 | Category |
| 2 | DMG Action |
| 3 | Dialog Token |
| 4 | Status Code |
| 5 | Number of Relay Capable STAs |
| 6 | Zero or more Relay Capable STA Info fields |

*Insert the following paragraph after the 5th paragraph*

The Number of Relay Capable STAs field is one octet in length and indicates the number of STAs in the BSS that are relay capable. The value of this field is zero if the Status Code does not indicate success.

*Change the 6th paragraph as follows*

The Relay Capable STA Info field is defined in 8.4.1.44 (Relay Capable STA Info field). This information is included only if the status code indicates successful. The number of Relay Capable STA Info fields that appear in the frame is indicated by the value of the Number of Relay Capable STAs field.

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| 5037 | 8.6.20.13 | 1210.45 | "One or more Channel Measurement Info fields" -- The structure is not unambiguously parseable because nothing indicates the length of this sequence of fields. | Either: 1) Remove the REDS feature entirely (because nobody will ever build it), or 2) make the structure parseable, such as by adding a count, or by including each Info field into a new element. |

**Proposed resolution**: Revised

**Discussion**: Propose inserting a counter into the frame.

**Proposed changes**:

**8.6.20.13 Multi-relay Channel Measurement Report frame format**

*Change Table 8-381 as follows*

|  |  |
| --- | --- |
| Order | Information |
| 1 | Category |
| 2 | DMG Action |
| 3 | Dialog Token |
| 4 | Number of Channel Measurement Info |
| 5 | One or more Channel Measurement Info fields |

*Insert the following paragraph after the 4th paragraph*

The Number of Channel Measurement Info field is one octet in length and indicates the number of Channel Measurements Info fields included in the frame.

*Change the 5th paragraph as follows*

The format of the Channel Measurement Info field is defined in Figure 8-717 (Channel Measurement Info field format). The number of Channel Measurement Info fields included in the frame is indicated by the value of the Number of Channel Measurement Info field. Multiple Channel Measurement Info fields can be included if the reporting STA measures the channel for multiple RDSs.

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| 6271 | 9.36.6.5 | 1457.60 | It says "the time elapsed since a synchronizing reference event, in us, and is not greater than the beacon interval. The synchronizing event is the reception of the Timestamp field from the AP or PCP" -- so what happens when two beacons are, due to contention, transmitted (a little) more than a beacon interval apart? | Delete ", and is not greater than the beacon interval" from the cited fragment |

**Proposed resolution**: Accept

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| 5040 | 8.6.21.4 | 1221.18 | "The FSTS ID field contains" -- no size, structure or encoding is given for this field.Ditto at 1221.53 and 1222.25. | Identify its size, structure and encoding. |

**Proposed resolution**: Revised

**Discussion**: At the end of each paragraph there is a reference to (8.4.2.144 (Session Transition element)) where this field is defined. Propose to include a sentence referring to that format, instead of duplicating the definition.

**Proposed changes**:

**8.6.21.4 FST Tear Down frame format**

*Change the 4th paragraph as follows*

The FSTS ID field contains the identification of the FST session established between the STAs identified by the TA and RA fields of this frame. The format of the FSTS ID field is as specified in 8.4.2.144 (Session Transition element).

**8.6.21.5 FST Ack Request frame format**

*Change the 5th paragraph as follows*

The FSTS ID field contains the identification of the FST session established between the STAs identified by the TA and RA fields of this frame. The format of the FSTS ID field is as specified in 8.4.2.144 (Session Transition element).

**8.6.21.6 FST Ack Response frame format**

*Change the 5th paragraph as follows*

The FSTS ID field contains the identification of the FST session established between the STAs identified by the TA and RA fields of this frame. The format of the FSTS ID field is as specified in 8.4.2.144 (Session Transition element).

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**CID3245 and figure 9-78 caption change**

**Discussion**: [There is no CID for these particular comments]

* CID3245 was not properly implemented in D4.1. Basically, there is just one field called TRN.
* The beamforming flow in Figure 9-78 shows an R-MID subphase, but the figure caption says I-MID; correct the caption.

**Proposed changes**:

*Change the indicated sections as follows*

**21.10.2.2.5 AGC field**

*In the first paragraph, change* “The beam refinement AGC fields” *to* “The AGC fields used for beam refinement”

**21.10.2.2.6 TRN field**

*Change the caption of Figure 21-24 from* “TRN-R field definition” *to* “TRN field definition”

*Replace “I-MID” with “R-MID” in the caption of (Figure 9-78—Example of the use of the BRP setup subphase to set up the subsequent I-MID subphase)*

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| 6335 | 8.6.21.2 | 1219.18 | "One or more elements are present in this frame" -- need to explicitly list which those are, and their order | As it says in the comment (see also CID 3499) |

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| 6336 | 8.3.4.2 | 644.37 | "One or more elements can appear in this frame." -- need to explicitly list which those are, and their order | As it says in the comment (see also CID 3499) |

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| 6337 | 8.6.21.3 | 1220.24 | "One or more elements can appear in this frame." -- need to explicitly list which those are, and their order | As it says in the comment (see also CID 3499) |

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| 6338 | 8.6.20.4 | 1205.57 | "Each provided element is an element as specified in 8.4.2 (Elements), that the transmitter of this frame is providing to the destination of the frame." -- need to explicitly list which those are, and their order | As it says in the comment (see also CID 3499) |

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| 6339 | 8.6.20.5 | 1206.48 | "The provided elements are elements, as described in 8.4.2 (Elements), that the transmitter of this frame is providing to the destination of the frame." -- need to explicitly list which those are, and their order | As it says in the comment (see also CID 3499) |