IEEE P802.11
Wireless LANs

|  |
| --- |
| LB253 Resolution to some CID set1 |
| Date: 2021-02-24 |
| Author(s): |
| Name | Affiliation | Address | Phone | email |
| Assaf Kasher | Qualcomm |  |  | assaf.kasher@gmail.com |
|  |  |  |  |  |

Abstract

This document proposes resolutions to CIDs: - 5109, 5111, 5440, 5441, 5442, 5443, 5114, 5115, 5395, 5281, 5286, 5397, 5402, 5136, 5319, 5400, 5149

Editor instruction based on D3.0

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 5109 | 61.00 | 12 | 9.4.2.127.10 | "attached to an FTM"/"attached to a Fine Timing Measurement Frame" - it applies also to TRN fields attached to ACK frames | I lines 9-19, whenever "an FTM frame" is used or similar text, replace with "an FTM/ACK frame" - submission will be provided |  Revise,TGaz Editor: perform the instructions in [11-21-0346r0](https://mentor.ieee.org/802.11/dcn/21/11-21-0346-00-00az-LB253-resolution-to-CID-set1.docx) |

***TGaz Editor: Modify the text in 61L9-18 as follows***

A DMG (#1509, #2124) STA sets the AOA TX Capability subfield to 1 to indicate the ability to attach a TRN field to an FTM/Ack frame for the purpose of allowing the receiver of that frame to perform angle of arrival (AOA) estimation.

A DMG STA sets the AOA RX Capability subfield to 1 to indicate the ability to estimate the AOA based on a TRN field attached to an FTM/Ack frame.

A DMG STA sets the AOD TX Capability subfield to 1 to indicate the ability to attach a TRN field, possibly with different antenna settings to different TRN subfields, to an FTM/Ack frame, for the purpose of allowing the responder to estimate the angle of departure (AOD) of the PPDU.

A DMG STA sets the AOD RX Capability subfield to 1 to indicate the ability to estimate the AOD based on a TRN field attached to a Fine Timing Measurement or Ack frame and send a report.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 5111 | 62.00 | 6 | 9.4.2.127.10 | "and responding with channel measurement feedback by transmitting a LOS Assessment FTM PPDU." - the measurement feedback is not sent in a Loss Assessment FTM PPDU but in the next FTM frame. | replace "by transmitting a LOS Assement FTM PPDU" with "in the next FTM frame to the ISTA" |  **Revise**:*TGaz editor perform instructions in* [*11-21-0346r0*](https://mentor.ieee.org/802.11/dcn/21/11-21-0346-00-00az-LB253-resolution-to-CID-set1.docx) |

***TGaz Editor:Modify the text in P62L6-7 as follows:***

and responding with a Channel Measurement Feedback element in the next FTM frame to the ISTA.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 5440 | 65.00 | 9 | 9.4.2.167 | "A value of 1 in the R2I AOA Request subfield indicates a request for FTM responder to FTMinitiator angle of arrival measurement." It is not clear whether FTM responder is the transmitter or receiver of this measurement. | Please revise the sentence so it's clear who is the transmitter and who is the receiver of the measurement. |  **Revise**:*TGaz editor perform instructions in* [*11-21-0346r0*](https://mentor.ieee.org/802.11/dcn/21/11-21-0346-00-00az-LB253-resolution-to-CID-set1.docx) |
| 5442 | 65.00 | 13 | 9.4.2.167 | "A value of 1 in the R2I AOD Request subfield indicates a request for FTM responder to FTM initiator angle of departure measurement." It is not clear whether FTM responder is the transmitter or receiver of this measurement. | Please revise the sentence so it's clear who is the transmitter and who is the receiver of the measurement. |  **Revise**:*TGaz editor perform instructions in* [*11-21-0346r0*](https://mentor.ieee.org/802.11/dcn/21/11-21-0346-00-00az-LB253-resolution-to-CID-set1.docx) |
| 5443 | 65.00 | 15 | 9.4.2.167 | "A value of 1 in the I2R AOD Request subfield indicates a request for FTM initiator to FTM responder angle of departure measurement." It is not clear whether FTM responder is the transmitter or receiver of this measurement. | Please revise the sentence so it's clear who is the transmitter and who is the receiver of the measurement. |  **Revise**:*TGaz editor perform instructions in* [*11-21-0346r0*](https://mentor.ieee.org/802.11/dcn/21/11-21-0346-00-00az-LB253-resolution-to-CID-set1.docx) |
| 5441 |   | 11 | 9.4.2.167 | "A value of 1 in the I2R AOA Request subfield indicates a request for FTM initiator to FTM responder angle of arrival measurement." It is not clear whether FTM responder is the transmitter or receiver of this measurement. | Please revise the sentence so it's clear who is the transmitter and who is the receiver of the measurement. |  **Revise**:*TGaz editor perform instructions in* [*11-21-0346r0*](https://mentor.ieee.org/802.11/dcn/21/11-21-0346-00-00az-LB253-resolution-to-CID-set1.docx) |

***TGaz Editor: Modify the text in P65L9-16 as follows:***

A value of 1 in the R2I AOA Request subfield indicates a request for RSTA to ISTA angle of arrival measurement.

A value of 1 in the I2R AOA Request subfield indicates a request for ISTA to RSTA angle of arrival measurement.

A value of 1 in the R2I AOD Request subfield indicates a request for RSTA to ISTA angle of departure measurement.

A value of 1 in the I2R AOD Request subfield indicates a request for ISTA to RSTA angle of departure measurement.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 5114 | 66.00 | 4 | 9.4.2.167 | "from on EMDG STA to the IFTMR frame" - text doesn't make sense, seems like an incorrect insertion" | submission will be provided |  **Revise**:*TGaz editor perform instructions in* [*11-21-0346r0*](https://mentor.ieee.org/802.11/dcn/21/11-21-0346-00-00az-LB253-resolution-to-CID-set1.docx) |

 ***TGAz Editor: Modify the text in P66L3-10 as follows:***

The EDMG Specific Parameters subelement contains a number of fields that are used to advertise the requested or allocated operation configurations from one EDMG STA to another. The EDMG Specific Parameters subelement is included in the IFTMR as described in 9.6.7.32 (Fine Timing Measurement Request frame format), and the initial Fine Timing Measurement frame, as described in 9.6.7.33 (Fine Timing Measurement frame format). if the Secure RTT Measurement subfield of the Fine Timing Measurement Parameters field of these frames is set to 1. (#**3028, #3029**) The use of the EDMG Specific Parameters subelement is described in 11.21.6 (Fine timingmeasurement procedure).

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 5115 | 66.00 | 15 | 9.4.2.167 | The length of the secure ranging parameters is only 32 octets | replace "64" with "32" in the number of octets in figure 9-626e |  **Accept** |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 5395 | 67.00 | 3 | 9.4.2.167 | Wrong reference to Table 9-282 in P67L3, P67L14, P67L26 P124L33, P218L11. The table don't exist. It should be Table 9-280 instead | Replace 9-282 by 9-280 |  **Accept** |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 5281 | 84.00 | 9.4.2.302 | "2407" should be "2047". | Change "2407" to "2047". |  **Accept** |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 5286 | 106.00 | 10.42.10.6 | Wicked "which": should be "that". | Change "which" to "that". |  **Accept** |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 5397 | 133.00 | 11.21.6.3.6 | There is no "Secure RTT Measurement subfield" in the EDMG Capabilities field | Replace "EDMG Capabilities" by "RSNXE" |  **Revise**:*TGaz editor perform instructions in* [*11-21-0346r0*](https://mentor.ieee.org/802.11/dcn/21/11-21-0346-00-00az-LB253-resolution-to-CID-set1.docx) |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 5402 | 133.00 | 16 | 11.21.6.3.6 | There is no "Secure ToF Measurement subfield" defined in the draft | Define this subfield or replace with the correct name |  **Revise**:*TGaz editor perform instructions in* [*11-21-0346r0*](https://mentor.ieee.org/802.11/dcn/21/11-21-0346-00-00az-LB253-resolution-to-CID-set1.docx) |

***TGaz Editor: Modify the text P133L16-17 as follows:***

Supported field in the RXSNEto 1. An ISTA that sets the Secure RTT Measurement subfield to 1 shall generate a 32 octet random Secret Key and include it in the

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 5219 | 133.00 | 36 | 11.21.6.3.7 | AoA Results could be used for non-DMG devices | Add text that enables AoA for non-DMG devices | **Defer, TGaz Editor do nothing**  |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 5136 | 134.00 | 31 | 11.21.6.3.7 | "The requested AOA/AOD I2R/R2I parameters in the initial Fine Timing Measurement frame to the same value as those requested in" - missing "shall be set to" | replace with "The requested AOA/AOD I2R/R2I parameters in the initial Fine Timing Measurement frame shall be set to the same value as those requested in" |  **Accept** |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 5139 | 138.00 | 39 | 11.21.6.4.2.1.2 | "The RSTA may use implementation dependent AWV (such as sectors) in the TRN field." - this is a bit confusing because of the for purpose of the I2R AOD is the RSTA is receiving | replace with "The RSTA may use implementation dependent AWV (such as sectors) in the reception of the TRN field." |  **Accept** |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 5400 | 142.00 | 27 | 11.21.6.4.2.1.6 | Meaningless sentence "When an ISTA transmits an EDMG secure ranging PPDU, it shall include the Ack frame in a control response of the received Protected FTM" frame. | Remove the sentence |  **Accept** |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 5149 | 241.00 | 22 | 28.9.3.2 | "If beam refinement is performed on a 4.32 GHz, 6.48 GHz, or 8.64 GHz channel, the Secure TRN subfields in the TRN field of DMG secure ranging PPDUs shall be transmitted over the entire signal bandwidth of the channel." The text is confusing - the beam refinement is performed before the ranging PPDUs are used? | replace with "If beam refinement has been performed on a 4.32 GHz, 6.48 GHz, or 8.64 GHz channel, the Secure TRN subfields in the TRN field of DMG secure ranging PPDUs shall be transmitted over the entire signal bandwidth of the channel." |  **Accept** |

**References: DraftbP802.11az\_D3.0**