IEEE P802.11
Wireless LANs

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| Proposal for resolution of CID 1968 |
| Date: 2019-10-29 |
| Author(s): |
| Name | Affiliation | Address | Phone | email |
| Jerome Henry | Cisco |  |  | jerhenry@cisco.com |

Abstract

This document presents resolutions to CID1968.

Change request refer to D1.5 paging and structure.

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| --- | --- | --- | --- | --- | --- | --- |
| 1968 |  |  | 9 | There's a luxurious variety of "Specific Parameters" elements, half of which are not defined or are defined with random words | Fix this grotesque mess:DMG Direction Measurement Parameters (sometimes referred to as DMG Direction Measurement Specific Parameters)PDMG Specific Parameters not defined, sometimes referred to as PDMG Specific Parameter subelement (note singular)PEDMG Specific Parameters defined in Figure 9-619cPDMGz Specific Parameters not definedNon-TB Specific Parameters (or "non-TB-specific subelement" in T9-1000 or sometimes "Non-TB Specific subelement" or "non-TB Ranging Specific subelement") defined but with wrong name in 9-1007TB Specific Parameters (or "TB-specific subelement" in T9-1000 or sometimes "TB Specific subelement" or "TB-Specific subelement" or "TB-specific subelement" or "TB Specific Parameters field") defined"One or more of the Non-TB specific or the TB specific subelements are included in the initialFTM Request. Only one of the Non-TB specific or the TB specific subelement shall be included" is wrong tooHEz specific subelement not defined | **Accepted** . |

Discussion:

The DMG, PEDMG, PDMGz HEz acronyms were unified as part of other comments, addressed in 11-19-646, 11-19-1422, and 11-19-1507. However, draft 1.5 still uses non-TB-specific subelement, non-TB-Specific Parameters subelement

***TGaz Editor: Change the paragraph in 9.4.2.279 P73L19-29 and P74L1 as follows:***

Table 9-1001 – Ranging Subelement IDs for Ranging Parameters

|  |  |  |
| --- | --- | --- |
| Subelement ID | Name | Extensible |
| 0 | Non-TB-specific subelement | Yes |
| 1 | TB-specific subelement | Yes |
| 2-220 | Reserved |  |
| 221 | Vendor-Specific |  |
| 222-255 | Reserved |  |

The Non-TB-specific subelement is included in the initial Fine Timing Measurement Request to describe the requested set of parameters that the initiator proposes to use and in the initial Fine Timing Measurement, if the initiator and the responder successfully negotiate and FTM session where the negotiated ranging protocol is Non-TB.

The format of the Non-TB-specific subelement is as shown in Figure 9-1007 (Non-TB Specific subelement format)



Figure 9-1007—Non-TB-specific subelement format

***TGaz Editor: Change the paragraph in 11.22.6.1.2 P108L1-4 as follows:***

Because of conflict arising due to other activities, ISTA may not start measurement at start of availability window while the RSTA waits for the start of measurement phase. Dotted region in Figure 11-35a indicates that the non-TB ranging measurement exchange phase may not start at the beginning of the time window since the ISTA may have been active on another channel.

***TGaz Editor: Change the paragraphs in 11.22.6.4.4.2 P139L12-28 as follows:***

An ISTA shall set the MinTimeBetweenMeasurements parameter and the MaxTimeBetweenMeasurements in the non-TB- specific subelement in the Ranging Parameters element in the initial FTM Request frame, where MaxTimeBetweenMeasurements shall be larger than MinTimeBetweenMeasurements and takes into account of the measurement exchange duration. An RSTA shall assign the value of the MinTimeBetweenMeasurements and MaxTimeBetweenMeasurements in the non-TB- specific subelement in the Ranging Parameters element in the initial FTM frame, where MaxTimeBetweenMeasurements shall be larger than MinTimeBetweenMeasurements and takes into account of the measurement exchange duration.

An ISTA shall not initiate a new measurement exchange sequence until the minimum time interval between subsequent range measurements, specified in the MinTimeBetweenMeasurements field in the non-TB-specific subelement subfield in the Ranging Parameters field in an initial Fine Timing Measurement frame, has elapsed (see Figure 11-36j). An ISTA, should complete the measurement sequence before the MaxTimeBetweenMeasurements, included in the non-TB- specific subelement subfield in the Ranging Parameters field in an initial FTM frame, has elapsed. (#2276, #2278, #1654, #2431)

***TGaz Editor: Change the paragraphs in 11.22.6.4.4.3 P142L1-17 as follows:***

An RSTA indicates immediate reporting by setting the Immediate LMR parameter in the non-TB-specific subelement in the Ranging Parameters field to 1. In immediate reporting, the ToA feedback corresponding to the current measurement exchange sequence is reported in the current measurement exchange, see Figure 11-36j. (#2276, #1654, #1220, #2431)

An RSTA indicates delayed reporting by setting the Immediate LMR parameter in the non-TB-specific subelement in the Ranging Parameters field to 0. (#2276, #1654, #1220, #2431)

In delayed feedback, the ToA and ToD values in the current LMR carries the measurement results of the previous round, see Figure 11-36k. In this case, the LMR following the very first sounding sequence has no valid TOA to include, which in Figure 11-36j is termed an “Empty LMR” for illustrative purposes.

The Immediate LMR parameter in the non-TB-specific subelement in the Ranging Parameters field is reserved in the initial FTM Request frame.

***TGaz Editor: Change the paragraph in 9.4.2.279 P75L30-31 as follows:***

The Trigger Frame MAC Padding Duration field in the TB-specific subelement in the Ranging Parameter element is defined in 9.4.2.237.2 HE MAC Capabilities Information field.

***TGaz Editor: Change the paragraph in 11.22.6.3.8 P122L39-44 as follows:***

When an RSTA has set the Passive Location Ranging Responder Measurement Support field to 1 in the Extended Capabilities element it transmits, an ISTA with dot11PassiveLocationRangingInitiatorActivated equal to true may set the Passive Location Ranging field in the TB-specific subelement in an initial Fine Timing Measurement Request frame to 1 to request a Passive Location Ranging measurement session between the ISTA and the RSTA. (#1287)

***TGaz Editor: Change the paragraph in 11.22.6.3.8 P123L3-6 as follows:***

When an ISTA sets the Passive Location Ranging field in the TB-specific subelement in an initial Fine Timing Measurement Request frame to 1, the ISTA shall set the Secure LTF Required subfield in the Ranging Parameters field in an initial Fine Timing Measurement Request frame to 0.

***TGaz Editor: Change the paragraph in 11.22.6.3.6 P121L14-20 as follows:***

A PDMG/PEDMG ISTA may request initiator AOA measurement, responder AOA measurement, initiator AOD measurement and responder AOD measurement, by including a DMG Direction Measurement Parameters subelement in the Fine Timing Measurement Parameters element transmitted in the FTM request frame. Valid combinations of AOA and AOD requests and the corresponding required capabilities are shown in Table 11-1000 The L-RX field in the DMG Direction Measurement Specific Parameters subelement shall be set to the number of TRN units the ISTA needs for AOA estimation in case R2I AOA was requested, otherwise it shall be set to zero.

Note: there is an undiscriminate use of non-TB-specific, non-TB Specific, non-TB ranging and non-TB Ranging forms, they may need to be unified

**References:**

[1] Draft P802.11azD1.5