IEEE P802.11  
Wireless LANs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| CC40-Resolution of CIDs in clause 9.4.2 part 2 | | | | |
| Date: 2022-July-10 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | Email |
| Alecsander Eitan | Qualcomm Inc. |  |  | eitana@qti.qualcomm.com |
|  |  |  |  |  |

Abstract

This document proposes resolution for CID 702, 70, 71, 72, 69, 85

**CID 702**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **CID** | **Clause Number(C)** | **Page(C)** | **Line(C)** | **Comment** | **Proposed Change** | **Resolution** |
| 702 | 9.4.2.326.4 | 52 | 55 | The max function will only be needed if u = 0. It seems practically impossible thta hte range shoudl be 0, and therefore the max function coudl be removed. | As in comment. | Revised |

**Discussion:**

The commenter’s point includes “It seems practically impossible that the range shoudl be 0” and then his point is valid. However, the computation of the Range can result in a range of “0”.

Suggest accepting the commenter’s solution and add text to specify that the Range minimum value is 1mm (same as the resolution).

**Resolution for CID 702: TGbf editor change 802.11bf D0.1 P.52 L.55 as follows:**

Range Span = minround4  log2*u* 63

**Resolution for CID 702: TGbf editor change 802.11bf D0.1 P.52 L.58 as follows:**

where is the Range Span in 1 mm units. The minimum value of *u* is 1mm.

**CID 70 & 71**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **CID** | **Clause Number(C)** | **Page(C)** | **Line(C)** | **Comment** | **Proposed Change** | **Resolution** |
| 70 | 9.4.2.326.3 | 49 | 13 | TBD octets for “Reflection Power Slope" | Resolve the TBD and assign octets. Should be 1 octet | Accepted |
| 71 | 9.4.2.326.3 | 50 | 2 | Reflection Power Slope Subelement should be in units of 1/256 | The field has 1 octet, hence better to assign 8 bits for accuracy.  Note that fix is needed also on page 51, line 6 | Accepted |

**Discussion on CID 70:**

The commenter is pointing that the “Reflection Power Slope" sub-field size is TBD. From the text in P60-L2 it is clear that the field is upto 1 octet.

Hence, this sub-field shall be set to 1 octet.

**Resolution for CID 70: TGbf editor change 802.11bf D0.1 P.49 L.13 as follows:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Subelement ID | Element Length | Data Block SN | Axis Present | Reflection Power Bias | Reflection Power Slope |
| Octets: | 1 | 1 | 1 | 1 | 1 | ~~TBD~~ 1 |

**Discussion on CID 71:**

The commenter is pointing that the “Reflection Power Slope" should be in units of 1/256 since the field is 1 octet.

The comment makes sense and should be adopted.

**Resolution for CID 70: TGbf editor change 802.11bf D0.1 P.50 L.1-2 as follows:**

The Reflection Power Slope Subelement contains the slope value to compute the reflection power. The

value is in 1/256 dBm units representing the factor for the reported values.

**Resolution for CID 70: TGbf editor change 802.11bf D0.1 P.51 L.4-5 as follows:**

Reflection Received Power [dBm] = –Reflection Power Bias

+ Reflection Power  Reflection Power Slope  256

**CID 72**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **CID** | **Clause Number(C)** | **Page(C)** | **Line(C)** | **Comment** | **Proposed Change** | **Resolution** |
| 72 | 9.4.2.326.3 | 49 | 20 | TBD octets for "Number of Reflection Subelements" | Resolve the TBD and assign octets | Revised |

**Discussion:**

The commenter points that the “Number of Reflection Subelements” has a size of TBD, and it should be set to a specific value.

Since the maximum number of filtered reflections in the case of four-dimentions (Range-Azimuth-Elevation-Doppler) is expected to be 10-100K this field will be 3 bytes.



**Resolution for CID 72: TGbf editor change 802.11bf D0.1 P.49 L.20 as follows:**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Number of Reflection Subelements | Reflection Subelements | Reserved |
| Octets: | ~~TBD~~ 3 | variable | variable |

**CID 69**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **CID** | **Clause Number(C)** | **Page(C)** | **Line(C)** | **Comment** | **Proposed Change** | **Resolution** |
| 69 | 9.4.2.326 | 45 | 27 | Duplication of "Report element" | Section 9.4.2.318 provides "Sensing Measurement Report element", and includes fields like "Report Type". In addition, 9.4.2.326 "DMG Sensing Report element" serves a very similar goal, and has some common fields, including the "Report Type" (the later has different definitions and codes here).  It would be advised to merge these into a single combined format/element if possible | **Rejected**  The "Sensing Measurement Report element" (9.4.2.318) and "DMG Sensing Report element" (9.4.2.326) serve different needs and cannot be merged.  The "Sensing Report Type" in 9.4.2.318 is different than the “DMG Sensing Report Type” in 9.4.2.326.  Hence, there is no confusion and better not to merge. |

**Discussion:**

Rejected

The "Sensing Measurement Report element" (9.4.2.318) and "DMG Sensing Report element" (9.4.2.326) serve different needs and cannot be merged.

The "Sensing Report Type" in 9.4.2.318 is different than the “DMG Sensing Report Type” in 9.4.2.326.

Hence, there is no confusion and better not to merge.

**CID 85**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **CID** | **Clause Number(C)** | **Page(C)** | **Line(C)** | **Comment** | **Proposed Change** | **Resolution** |
| 85 | 9.4.2.322 | 41 | 27 | Unused codes in Table 9-401w should be marked as Reserved | Unused codes in Table 9-401w should be marked as Reserved | Accepted |

**Discussion:**

The commenter is pointing that there are unused codes, and they should be marked as Reserved

**Resolution for CID 85: TGbf editor change 802.11bf D0.1 P.41 L.20-26 as follows:**

|  |  |  |
| --- | --- | --- |
| **Subelement ID** | **Subelement Name** | **Extensible** |
| 1 | TX Beam List | Yes |
| 2 | RX Beam List | Yes |
| 3 | DMG Sensing Scheduling | Yes |
| Other | Reserved | No |