IEEE P802.11
Wireless LANs

|  |
| --- |
| Comment resolution for OST comments – Part 1 |
| Date: 2024-01-22 |
| Author(s): |
| Name | Affiliation | Address | Phone | email |
| Chaoming Luo | OPPO |  |  | luochaoming@oppo.com |
|  |  |  |  |  |
|  |  |  |  |  |

Abstract

This submission resolves miscellaneous comments under ‘OST’ topic. The following CIDs are resolved: 4013, 4031, 4055, 4160, 4174, 4187, 4188, 4211, 4300, 4306.

Revisions:

* Rev 0: Initial version of the document.

# 4013

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **CID** | **Commenter** | **Page** | **Comment** | **Proposed Change** | **Resolution** |
| 4013 | Chaoming Luo | 135.18 | We were missing the "55 (9.6.7.57 ((Protected)Sensing Measurement Query frame format))" in the class 1a frames list. | Add it. | ***Accepted*** |

## Infomation

*TGbf editor to change item 4) at P135L18 of draft D3.0 as follows:*

4) Protected Dual of Public Action frame whose Public Action field value is one of the following: 51

(9.6.7.53 ((Protected) Sensing Measurement Request frame format)), 52 (9.6.7.54 ((Protected) Sensing

Measurement Response frame format)), 54 (9.6.7.56 ((Protected) Sensing Measurement Termination

frame format)), 55 (9.6.7.57 ((Protected)Sensing Measurement Query frame format)), 56 (9.6.7.58 ((Protected) SBP Request frame format)), 57 (9.6.7.59 ((Protected) SBP Response frame format)), and 58 (9.6.7.60 ((Protected) SBP Termination frame format))

# 4031

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **CID** | **Commenter** | **Page** | **Comment** | **Proposed Change** | **Resolution** |
| 4031 | Chaoming Luo | 145.17 | Grammar issue. The word "this" does not have a context, suggest to change it to "a". And "request ... to participate" sounds better than "request that ... participates". | Change to "An AP may request an unassociated STA in a TB sensing measurement exchange to participate in another sensing measurement session as a sensing responder by setting the Comeback field of the corresponding User Info field in the Sensing Polling Trigger frame to 1." | ***Accepted*** |

## Infomation

*TGbf editor to change the paragraph at P145L17 of draft D3.0 as follows:*

An AP may request ~~that~~ an unassociated STA in ~~this~~ a TB sensing measurement exchange ~~participates~~ to participate in another sensing measurement session as a sensing responder by setting the Comeback field of the corresponding User Info field in the Sensing Polling Trigger frame to 1.

# 4055, 4174

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **CID** | **Commenter** | **Page** | **Comment** | **Proposed Change** | **Resolution** |
| 4055 | Chaoming Luo | 200.34 | Remove "protected PV1 Protected Fine Timingframes (see 9.6.34 (Protected Fine Timing Frame details))," since 11me D4.1 has already removed it. Do the same for P201L13. | As in comment. | ***Revised.***Agree with the commenter. Changes are made to align with IEEE 802.11me D4.2.*TGbf editor to make the changes shown in Https://mentor.ieee.org/802.11/dcn/24/11-24-0193-00-00bf-lb281-ost-part-1.docx under all headings that include CID 4055.* |
| 4174 | Henry Ptasinski | 200.34 | "protected PV1 Protected Fine Timing frames" are not defined anywhere. Protected Fine Timing frames are PV0 Action Frames. | Delete ", protected PV1 Protected Fine Timing frames (see 9.6.34 (Protected Fine Timing Frame details)),". Also delete references to PV1 Protected Fine Timing frames at page 200 line 65 and page 201 line 13. | ***Revised.***Same resolution as CID 4055.Agree with the commenter. Changes are made to align with IEEE 802.11me D4.2.*TGbf editor to make the changes shown in Https://mentor.ieee.org/802.11/dcn/24/11-24-0193-00-00bf-lb281-ost-part-1.docx under all headings that include CID 4055.* |

## Resolution

**12.5.2.4 CCMP decapsulation**

**12.5.2.4.4 PN and replay detection**

*TGbf editor to change the item c) and d) at P145L17 of draft D3.0 as follows:*

c) If management frame protection is negotiated, the receiver shall set the MFPC bit on a given link to 1, it shall maintain a single replay counter for received individually addressed robust Management frames except Protected Fine Timing frames (see 9.6.34 (Protected Fine Timing Frame details)) and Protected Sensing frames (see 9.6.36 (Protected Sensing frame details)) that are received with the To DS subfield equal to 0, and (S1G STA only) a single replay counter for received individually addressed robust PV1 Management frames ~~except Protected Fine Timing frames (see 9.6.34 (Protected Fine Timing Frame details))~~. (#4055)

NOTE 3 (#4055)—For sensing, PV1 Management frames are not applicable.

d) f dot11RSNAProtectedManagementFramesActivated is true and dot11QMFActivated is also true, the

receiver shall maintain an additional replay counter for each ACI for received individually addressed robust Management frames ~~except Protected Fine Timing frames (9.6.34 Protected Fine Timing Frame details)~~ that are received with the To DS subfield equal to 1~~.~~ , except Protected Fine Timing frames (see 9.6.34 (Protected Fine Timing Frame details)), and Protected Sensing frames (see 9.6.36 (Protected Sensing frame details)). (#4055)

*~~NOTE 3~~ NOTE 4*(#4055)*—Separate replay counters for PV0 and PV1 Management frames allow for reordering between the two types. However, S1G STAs are required to use PV1 Management frames for individually addressed Action (and Action No Ack) frames when the peer is known to support them (see 10.57 (Generation of PV1 MPDUs and header compression procedure)), so there is no issue with PV0 Action (and Action No Ack) frames. The other robust Management frames are Deauthentication and Disassociation frames, but reordering of a PV1 Action frame and a Deauthentication/Disassociation frame is not of much concern since the Action frame is not valid after deauthentication/disassociation.*

*~~NOTE 4~~* *NOTE 5*(#4055)*—QMF is not supported for PV1 Management frames (see 11.24.1.1 (Overview)).*

**12.5.4 GCM protocol (GCMP)**

**12.5.4.4 GCMP decapsulation**

**12.5.4.4.4 PN and replay detection**

*TGbf editor to change the item c) and d) at P200L60 of draft D3.0 as follows:*

c) If management frame protection is negotiated, the receiver shall set the MFPC bit on a given link to 1, it shall maintain a single replay counter for received individually addressed robust Management frames except Protected Fine Timing frames (see 9.6.34 (Protected Fine Timing frame details)) and Protected Sensing frames (see 9.6.36 (Protected Sensing frame details)) that are received with the To DS subfield equal to 0, and a single replay counter for received individually addressed robust PV1 Management frames ~~except PV1 Protected Fine Timing frames (see 9.6.34 (Protected Fine Timing frame details)).~~ (#4055)

NOTE 2 (#4055)—For sensing, PV1 Management frames are not applicable.

d) If dot11RSNAProtectedManagementFramesActivated is true and dot11QMFActivated is also

true, the receiver shall maintain an additional replay counter for each ACI for received individually addressed robust Management frames ~~except Protected Fine Timing frames (see 9.6.34 (Protected Fine Timing frame details)) and robust PV1 Management frames except Protected Fine Timing frames (see 9.6.34 (Protected Fine Timing frame details))~~ that are received with the To DS subfield equal to 1, except Protected Fine Timing frames (see 9.6.34 (Protected Fine Timing Frame details)), and Protected Sensing frames (see 9.6.36 (Protected Sensing frame details)). (#4055)

~~NOTE 2~~ NOTE 3(#4055)—PV1 frames are not supported with GCMP (see 12.5.4.1 (GCMP overview)).

# 4187

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **CID** | **Commenter** | **Page** | **Comment** | **Proposed Change** | **Resolution** |
| 4187 | Henry Ptasinski | 201.15 | The Sequence Number field is not protected by CCMP or GCMP. The replay counter must be selected based on protected fields. | Define a new key specifically for Protected Sensing Frames. | ***Rejected***Refer to CID 4055.Changes are made to align with IEEE 802.11me D4.2.The “Sequence Number” related text had already been removed from the baseline text. So the issue raised by the commentor does not exist anymore. |
| 4188 | Henry Ptasinski | 200.37 | The Sequence Number field is not protected by CCMP or GCMP. The replay counter must be selected based on protected fields. | Define a new key specifically for Protected Sensing frames. | ***Rejected***Refer to CID 4055.Changes are made to align with IEEE 802.11me D4.2.The “Sequence Number” related text had already been removed from the baseline text. So the issue raised by the commentor does not exist anymore. |

# 4160

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **CID** | **Commenter** | **Page** | **Comment** | **Proposed Change** | **Resolution** |
| 4160 | Alireza Raissinia | 133.36 | Add two new statements"The Category field is defined in 9.4.1.11 (Action field)." and "The Action field is defined in 9.6.36.1 (Protected Sensing Action field)." under sections 9.6.36.2, 9.6.36.4, and 9.6.36.7 so that they all have the same information. | As per comment | ***Accepted*** |

## Infomation

*TGbf editor to change the subclauses 9.6.36.2, 9.6.36.4, and 9.6.36.7 of draft D3.0 as follows:*

**9.6.36.2 Protected Sensing Measurement Report frame**

The Category field is defined in 9.4.1.11 (Action field).

The Action field is defined in 9.6.36.1 (Protected Sensing Action field).

The Protected Sensing Measurement Report frame is an Action No Ack frame of category Protected Sensing transmitted to provide sensing measurement results. The format of the frame after the Protected Sensing Action field is identical to the format of the Sensing Measurement Report Public Action frame (9.6.7.55 (Sensing Measurement Report frame format)).

**9.6.36.4 Protected DMG Sensing Measurement Report frame**

The Category field is defined in 9.4.1.11 (Action field).

The Action field is defined in 9.6.36.1 (Protected Sensing Action field).

The Protected DMG Sensing Measurement Report frame is an Action frame of category Protected Sensing transmitted to provide DMG sensing measurements. The format of the frame after the action field is identical to the format of the DMG Sensing Measurement Report frame (see 9.6.21.10 (DMG Sensing Measurement Report frame format)).

**9.6.36.7 Protected SBP Report frame**

The Category field is defined in 9.4.1.11 (Action field).

The Action field is defined in 9.6.36.1 (Protected Sensing Action field).

The Protected SBP Report frame is an Action No Ack frame of category Protected Sensing transmitted to

provide sensing measurements. The format of the frame after the action field is identical to the format of the SBP Report frame as described in 9.6.7.61 (SBP Report frame format).

# 4211

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **CID** | **Commenter** | **Page** | **Comment** | **Proposed Change** | **Resolution** |
| 4211 | Rui Du | 73.61 | The length of the reserved field in Figure 9-1002be Non-TB Specific subelement format should be 1 instead of 9. | As in comment. | ***Revised.***Agree with the commenter.*TGbf editor to make the changes shown in Https://mentor.ieee.org/802.11/dcn/24/11-24-0193-00-00bf-lb281-ost-part-1.docx under all headings that include CID 4211.* |

## Resolution

*TGbf editor to change the Figure 9-1001be— Non-TB Sensing Specific subelement format of draft D3.0 as follows:*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | B0 B7  | B8 B15  | B16 B38  |  B39  ~~B47~~  |
|  | SubelementID | Length | MinMeasurementInterval | Reserved |
| Bits | 8 | 8 | 23 |  ~~9~~  1  |

**Figure 9-1001be— Non-TB Sensing Specific subelement format** (#4211)

# 4300

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 4300 | Liuming Lu | 140.12 | The descrption is confusing as a sensing measurement session may contain zero sensing measurement exchanges. | Suggest to change "A sensing measurement session is a set of sensing measurement exchanges that use operational parametersagreed to between a sensing initiator and sensing responder and is identified by a Measurement Session ID." to "A sensing measurement session contains zero or more sensing measurement exchanges that use operational parameters agreed to between a sensing initiator and sensing responder and is identified by a Measurement Session ID." | ***Accepted*** |

## Infomation

**11.55.1.4 Sensing measurement session**

**11.55.1.4.1 General**

*TGbf editor to change the P410L12 of draft D3.0 as follows:*

A sensing measurement session contains ~~a set of~~ zero or more (#4300) sensing measurement exchanges that use operational parameters agreed to between a sensing initiator and sensing responder and is identified by a Measurement Session ID.

# 4306

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 4306 | Fumihide Goto | 73.08 | 2^(Measurement Setup Expiry Exponent +8) seems to be typo | Please correct as "2^(Measurement Session Expiry Exponent +8)" | ***Accepted*** |

## Infomation

**9.4.2.320 Sensing Measurement Parameters element**

*TGbf editor to change the paragraph at P73L06 of draft D3.0 as follows:*

The Measurement Session Expiry Exponent field contains an unsigned integer. It is encoded according to

the conventions in 9.2.2 (Conventions). The Measurement Session Expiry value is equal to 2(Measurement ~~Setup~~ Session Expiry Exponent + 8) ms. It is a time after which the sensing measurement session is terminated, if there are no frame exchange sequences (see 11.55.1.6 (Sensing measurement session termination).

# SP

Do you support resolutions to the following CIDs and incorporate the text changes into the latest TGbf draft: 4013, 4031, 4055, 4160, 4174, 4187, 4188, 4211, 4300, 4306, in 11-24/0193r0.

Y/N/A