IEEE P802.11  
Wireless LANs

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| LB272 Comment Resolution for OST category | | | | |
| Date: 2023-03-30 | | | | |
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Abstract

This document proposes resolution for CID 1757.

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| **CID** | **Clause** | **Page** | **Comment** | **Proposed Change** | **Resolution** |
| 1757 | 11.55.1.2 | 170.35 | Need to add a bit (i.e. USNM-MFPR) in the RSNE to communicate the need for use of PMF for the unassociated STA intending to perform sensing measurement procedure with some normative text in section 11 (i.e. 11.55.1.2 Dependencies) | "A STA in which dot11RSTARequiresPMFActivated has the value Required (2) shall set the USNM-MFPR field of the RSNXE to 1. Otherwise, it shall set the USNM-MFPR field to 0."  "If an AP has set the USNM-MFPR field in the RSNXE to 1,an unassociated STA shall establish a PTKSA with that AP prior to initiating a session setup with that AP. "An AP shall reject an MS Setup Request frame or an MS Query frame from an unassociated STA if a PTKSA was required, and the unassociated STA has not successfully set up a PTKSA to allow protection of all (SPB) sensing measurement frames including (SPB) sensing measurement report frame exchanged between the AP and the unassociated STA. | Revise  <https://mentor.ieee.org/802.11/dcn/21/11-23-0554-03-00bf-LB272-comment-resolution-for-OSC-category>.docx |

**Discussion for CID 1757:**

The commenter is correct to suggest adding a bit in the RSNXE element (not RSNE element as stated by the commentor) to require the use of protected Sensing frames for an unassociated STA. In addition, the commenter does not request the inclusion of second bit requiring the use of protected Sensing frames for all unasscoiated STAs exclusing the 20MHz only device as it was identified to be useful during Ranging product certification.

***TGbf editor: Insert (append) rows shown below at the end of Table 9-321—Extended RSN Capabilities field***

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| **Bit** | **Information** | **Notes** |
| 8 | Secure HE-LTF Support | A STA sets the Secure HE-LTF Support field to 1 when dot11SecureLTFImplemented is true. Otherwise, the STA sets the Secure HE-LTF Support field to 0. See [11.21.6.4.5](#H11o21o6o4o5) (Secure HE-LTF in the TB and non-TB ranging measurement exchange protocol)) |
| 9 | Secure RTT Supported | A STA sets the Secure RTT Supported field to 1 if it supports Secure RTT Measurement exchange as defined in [11.21.6.4.2.7](#H11o21o6o4o2o7) (DMG secure measurement exchange protocol for EDMG STAs). Otherwise, the field is set to 0. |
| 10 | URNM-MFPR-X20 | A STA sets the URNM-MFPR-X20 field to 1 if dot11RSTARequiresPMFActivated is set to 1. Otherwise, it sets the field to 0. See [11.21.6.3.1](#H11o21o6o3o1) (General), C.3 MIB detail. |
| 15 | URNM-MFPR | A STA sets the URNM-MFPR field to 1 if dot11RSTARequiresPMFActivated is set to 2. Otherwise, it sets the field to 0. See 11.21.6.3.1. (General) |
| Previous+1 | USNM-MFPR-X20 | A STA sets the USNM-MFPR-X20 field to 1 if dot11APRequiresPMFActivated is set to 1. Otherwise, it sets the field to 0. See [11.55.1](#H11o21o6o3o1).2 (Dependencies), C.3 MIB detail. |
| Previous+1 | USNM-MFPR | A STA sets the USNM-MFPR field to 1 if dot11RSTARequiresPMFActivated is set to 2. Otherwise, it sets the field to 0. See [11.55.1](#H11o21o6o3o1).2 (Dependencies), C.3 MIB detail. |

***TGbf editor: Insert the paragraphs below under section 11.55.1.2 (Dependencies) P170L35***

A STA in which dot11APRequiresPMFActivated has the value Required (2) shall set the USNM-MFPR field of the RSNXE to 1. Otherwise, it shall set the USNM-MFPR field to 0.

A STA in which dot11APRequiresPMFActivated has the value Required-X20M (1) shall set the URNM-MFPR-X20 field of the RSNXE to 1. Otherwise, it shall set the URNM-MFPR-X20 field to 0.

If an AP has set the USNM-MFPR field in the RSNXE to 1, an unassociated non-AP STA shall establish a PTKSA with that AP prior to initiating a sensing measurement session with that AP.

If the AP has set USNM-MFPR-X20 field in the RSNXE to 1, an unassociated non-AP STA shall establish a PTKSA with that AP prior to initiating a sensing measurement session with that AP unless BW field in the Sensing Measurement Parameter Element field in the Sensing Measurement Setup Request frame sent by that non-AP STA indicates a 20 MHz Bandwidth.

An AP shall discard Sensing Measurement Setup Request frame, Sensing Measurement Setup Query frame, and SBP Request frame from an unassociated non-AP STA if a PTKSA was required and the unassociated STA has not successfully set up a PTKSA to allow protection of all sensing and/or SBP management frames between the AP and the unassociated STA.

***TGbf editor: Insert the paragraphs below under section 3.2 (*Definitions specific to IEEE Std 802.11*) P22L55***

**Unassociated Sensing Negotiation and Measurement Management Frame Protection** **Required (USNM-MFPR)**: A security policy that specifies whether sensing frames are required to be protected without association.

**Unassociated Sensing Negotiation and Measurement Management Frame Protection Required Exempt 20 MHz (URNM-MFPR-X20)**: A security policy that specifies whether sensing frames are required to be protected without association if bandwidth greater than 20 MHz is used.

***TGbf editor: Insert the following text in C3. MIB detail in P241***

Dot11SENSStationConfigEntry::= SEQUENCE

{

dot11SENSReportSegmentSize, Unsigned32

dot11SBPSetupExpiry, Unsigned32

dot11DMGSensingProcedureExpiry, Unsigned32

dot11DMGSBPSetupExpiry, Unsigned32

dot11DMGSBPProcedureExpiry, Unsigned32

dot11APRequiresPMFActivated, INTEGER

***TGbf editor: Insert the following text in C3. MIB Detail in P243L6***

dot11APRequiresPMFActivated OBJECT-TYPE

SYNTAX INTEGER {Inactive (0), Required-X20M (1),

Required (2)}

MAX-ACCESS read-write

STATUS current

DESCRIPTION

"This is a control variable.

It is written by an external management entity or the

SME.

Changes take effect at the next occurrence of an MLME-

START.request or MLME-JOIN.request primitive.

The attribute applies only to preassociation sensing

behavior.

When set to Required (2), indicates that the station

requires Management Frame Protection for all

sensing frames exchanged during the Sensing capability

exchange (see 11.55.1.3), Sensing measurement

setup (see 11.55.1.4) and SBP setup (see 11.55.22)

and Sensing measurement reporting (see 11.55.1.5.2.6.1,

11.55.1.5.2.6.2 11.55.1.5.3.3 and 11.55.2.2).

When set to Required-X20M (1), indicates that the

station Management Frame Protection for all sensing

frames exchanged during the the Sensing capability

exchange (see 11.55.1.3), Sensing measurement

setup (see 11.55.1.4) and SBP setup (see 11.55.22)

and Sensing measurement reporting (see 11.55.1.5.2.6.1,

11.55.1.5.2.6.2 11.55.1.5.3.3 and 11.55.2.2)

except those using a 20 MHz bandwidth for

measurements.

Otherwise, when set to Inactive (0), indicates that

Management Frame Protection during Sensing capability

Exchange, Sensing measurement setup, SBP setup, and

Sensing measurement reporting is not required.

DEFVAL { Inactive }

**References:**

**[1] Draft P802.11bf\_D1.0**

SP: Do you agree with the resolution for CID 1757 in the document 11-23-0554?