IEEE P802.11
Wireless LANs

|  |
| --- |
| Resolution of General EPCS-Related CIDs (LB271) |
| Date: March 2023 |
| Author(s): |
| Name | Affiliation | Address | Phone | email |
| John WullertSubir Das | PERATON LABS |  |  | <jwullert@peratonlabs.com><sdas@peratonlabs.com> |
| An Nguyen Frank Suraci | DHS/CISA/ECD |  |  | (an.p.nguyen, frank.suraci) @cisa.dhs.gov |
| Atsushi Shirakawa | SHARP CORPORATION |  |  | shirakawa.atsushi@ieee.org |

 Abstract

This submission proposes resolutions for 17 comments related to EPCS submitted during TGbe LB271.

CIDs: 15942, 15354, 15693, 15694, 16367, 17965, 17673, 15371, 15370, 17675, 17676, 17781, 17782, 15383, 15384, 15385, 15386

Revisions:

* Rev 0: Initial version of the document.

Interpretation of a Motion to Adopt

A motion to approve this submission means that the editing instructions and any changed or added material are actioned in the TGbe Draft. This introduction is not part of the adopted material.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **CID** | **Clause** | **Pg/Ln** | **Comment** | **Proposed Change** | **Resolution** |
| 15942 | 3.2 | 58.45 | When EPCS is enabled, a non-AP MLD may exchange non emergency traffic as well. The EPCS traffic definition should indicate emergency communication traffic. | Change "The traffic generated" -> "The emergency communication traffic generated" or something along the line. | RevisedAgree with commenter that the definition of EPCS traffic can give impression that a device with EPCS priority access enabled might have priority and non-priority traffic, but specification does not provide any way to distinguish them. The proposed resolution basically uses the term to define the term, which is not the best practice for clarity. Revised definition to clarify that all traffic is prioritized.**TGbe editor please implement changes labelled as #15942 in document 802.11-23-0329r1** |
| 15354 | 4.5.13 | 69.35 | The phrase "operating in the area" does not reflect the situation in 802.11 networks | Change "operating in the area" to "associated with a BSS" | Accepted |
| 15693 | 4.5.13 | 69.57 | test uses "any enabled link" - should it be "any setup link" to be consistent | change "any enabled link" to "any setup link" | RejectedThis text describes transmission of an EPCS Enable Request frame. This frame must be set over an enabled link and cannot be sent over setup links that are disabled. |
| 15694 | 4.5.13 | 70.09 | text uses "any enabled link", should it be "any setup link"? | change "any enabled link" to "any setup link" | RejectedThis text describes transmission of an EPCS Enable Response frame. This frame must be set over an enabled link and cannot be sent over setup links that are disabled. |
| 16367 | 9.4.1.9 | 207.08 | If there is reason beyond the scope of the standard, its sufficient to just name the status code "EPCS\_DENIED" | Change "EPCS\_DENIED\_OTHER\_REASON" to "EPCS\_DENIED" at 207.8, 649.62 and 650.52. | Accepted |
| 17965 | 9.4.2.312.1 | 251.57 | The term "Priority Access" is not really accurate and doesn't represent the real purpose of this design. Suggest to change to "Emergency Priority Access". | as in comment | RevisedAgree with commenter in principle. Change name to EPCS Multi-Link element. **TGbe editor change all references to “Priority Access Multi-Link element” to “EPCS Priority Access Multi-Link element” and change “Priority Access” to “EPCS Priority Access” in column “Multi-Link element variant name” in Table 9-401b.** |
| 17673 | 9.4.2.312.2.6 | 269.07 | Missing article | Try "in **the** Priority Access Multi-Link ..." | Accepted |
| 15371 | 9.4.2.312.6 | 269.13 | The description of the Vendor Specific subelements does not indicate where they are found | Rephrase as "Zero or more Vendor Specific subelements are included in the Link Info field. The Vendor Specific subelements have the same format as their corresponding elements (see 9.4.2.25 (Vendor Specific element))."Apply this same change to the identical text in clause 9.4.2.312.4 on page 268, line 29. | Revised.Referenced text is on page 270, line 13. Agree with commenter. Revised text addresses issue.**TGbe editor please implement changes labelled as #15371 in document 802.11-23-0329r1** |
| 15370 | 9.4.2.312.6 | 269.33 | The sentence indicates that the Per-STA profile "starts with the STA Control field", which is not correct. | Rephrase as "Each Per-STA Profile subelement **includes** a STA Control field, followed by a variable number of fields and elements. | Accepted |
| 17675 | 9.4.2.312.2.6 | 270.02 | Not really clear if the options are 0 or 2 subelements, or 0/EDCA only/MU EDCA only/both subelements | Assuming it is 0 or 2 only, then try "The STA Profile subfield contains zero or both of the following two elements (see 35.16 (EPCS priority access) for conditions): | RevisedAgree with the commenter about the potential for confusion. The intention is to allow either or neither of the two. The text has been altered to clarify.**TGbe editor please implement changes labelled as #17675 in document 802.11-23-0329r1** |
| 17676 | 9.4.2.312.2.6 | 270.05 | This over-emphasises the format at the expense of expressing the meaning of the element. Second bullet should use "that" not "which". Clarify the xref is for the format only, and that the higher level semantics are defined here and are for EPCS via a stronger verb than "carries". Also "The (MU) EDCA Param Set element" should be "An (MU) EDCA Param Set element" or (for minimal ambiguity if true???) "One (MU) EDCA Param Set element" | Try/review: "- One EDCA Parameter Set element, with format defined in 9.4.2.28 (EDCA Parameter Set element), that indicates the EDCA parameter set used for priority access on the link identified by the Link ID in the STA Control field, and- One MU EDCA Parameter Set element, with format defined in 9.4.2.251 (MU EDCA Parameter Set element), that indicates the MU EDCA parameter set used for MU priority access on the link identified by the Link ID in the STA Control field." | RevisedAgree with the commenter the need for greater clarity. The text has been altered to address this issue.**TGbe editor please implement changes labelled as #17675 in document 802.11-23-0329r1** |
| 17781 | 9.6.35.5 | 320.25 | Probably unintendedly ambiguous antecedent (It => "category") | Try "The frame ...". Ditto P321L3, P321L45 | RevisedAgree with comment. Edits shown below clarify for the editor.**TGbe editor please implement changes labelled as #17781 in document 802.11-23-0329r1** |
| 17782 | 9.6.35.5 | 320.35 | We avoid "values" here | Try "The Status Code field is defined ..." | Revised.Agree with commenter. Cited instance is on page 321, row 35.**TGbe editor please implement changes labelled as #17782 in document 802.11-23-0329r1** |
| 15383 | 9.6.25.5 | 320.51 | Description of Dialog Token should follow format commonly used in base spec. | Replace the description of the Dialog Token with "The Dialog Token field is defined in 9.4.1.12 (Dialog Token field). It is set to a nonzero value chosen by the MLD sending the EPCS Priority Access Enable Request frame to identify the request/report transaction." | Revised.Agree with commenter. **TGbe editor please implement changes labelled as #15383 in document 802.11-23-0329r1** |
| 15384 | 9.6.35.5 | 320.54 | The Priority Access Multi-Link is an element, not a field | Replace "field" with "element" | Accepted |
| 15385 | 9.6.35.6 | 321.31 | Description of Dialog Token should follow format commonly used in base spec. | Replace description of Dialog Token with "The Dialog Token field is defined in 9.4.1.12 (Dialog Token field). It is set to the value of the Dialog Token field in the corresponding EPCS Priority Access Enable Request frame." | Revised.Agree with commenter. **TGbe editor please implement changes labelled as #15385 in document 802.11-23-0329r1** |
| 15386 | 9.6.35.6 | 321.38 | The Priority Access Multi-Link is an element, not a field | Replace "field" with "element" | Accepted |

**TGbe editor: Please note baseline is 11be D3.0**

**TGbe editor: Please make the indicated changes to the definition in Clause 3.2**

**3.2 Definitions specific to IEEE 802.11**

…

**Emergency Preparedness Communications Service (EPCS) traffic:** (#15942)All traffic generated by a non-access point (non-AP) multi-link device (MLD) or traffic destined for a non-AP MLD when the EPCS priority access is authorized and enabled for that non-AP MLD.

**TGbe editor: Please make the indicated changes to the text in Clause 9.4.2.312.6**

**9.4.2.312.6 Priority Access Multi-Link element**

…

The STA Profile subfield optionally (see 35.16 (EPCS priority access) for conditions) contains (#17675)one or both of the following two elements:

* (#17676)One EDCA Parameter Set element (see 9.4.2.28 (EDCA Parameter Set element)) to indicate the EDCA parameter information used for priority access on the link identified by the Link ID in the STA Control field, and
* (#17676)One MU EDCA Parameter Set element (see 9.4.2.251 (MU EDCA Parameter Set element)) to indicate the MU EDCA parameter information used for MU priority access on the link identified by the Link ID in the STA Control field.

(#15371)Zero or more Vendor Specific subelements are included in the Link Info field (see Figure 9-401c (Optional subelement IDs for Link Info field of the Multi-Link element). The Vendor Specific subelements have the same format as their corresponding elements (see 9.4.2.25 (Vendor Specific element)).

**TGbe editor: Please make the indicated changes to the text in Clause 9.4.2.312.4**

**9.4.2.312.2.4 Link Info field of the Basic Multi-Link element**

…

(#15371)Zero or more Vendor Specific subelements are included in the Link Info field (see Figure 9-401c (Optional subelement IDs for Link Info field of the Multi-Link element). The Vendor Specific subelements have the same format as their corresponding elements (see 9.4.2.25 (Vendor Specific element)).

**TGbe editor: Please make the indicated changes to the text in Clauses 9.6.35.5, 9.6.35.6 and 9.6.35.7**

**9.6.35.5 EPCS Priority Access Enable Request frame format**

The EPCS Priority Access Enable Request frame is an Action frame of category Protected EHT. (#17781)The frame is transmitted by an MLD through an affiliated STA as a request to enable EPCS priority access. The Action field of the EPCS Priority Access Enable Request frame contains the information shown in Table 9-623g (EPCS Priority Access Enable Request frame Action field format).

…

The Dialog Token field is defined in 9.4.1.12 (Dialog Token field) (#15383) is set to a nonzero value chosen by the MLD sending the EPCS Priority Access Enable Request frame to identify the request/response transaction..

…

**9.6.35.6 EPCS Priority Access Enable Response frame format**

The EPCS Priority Access Enable Response frame is an Action frame of category Protected EHT. (#17781)The frame is transmitted in response to an EPCS Priority Access Enable Request frame. The Action field of the EPCS Priority Access Enable Response frame contains the information shown in Table 9-623h (EPCS Priority Access Enable Response frame Action field format).

…

(#15385)The Dialog Token field is defined in 9.4.1.12 (Dialog Token field) and is set to the Dialog Token field in the corresponding EPCS Priority Access Enable Request frame.

The Status Code field (#17782) is defined in 9.4.1.9 (Status Code field).

…

**9.6.35.7 EPCS Priority Access Teardown frame details**

The EPCS Priority Access Teardown frame is an Action frame of category Protected EHT. (#17781)The frame is transmitted by an initiating MLD through an affiliated STA to tear down EPCS priority access. The Action field of the EPCS Priority Access Teardown frame contains the information shown in Table 9-623i (EPCS Priority Access Teardown Action field format).