IEEE P802.11
Wireless LANs

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| 802.11bi – Miscellaneous editorial comments |
| Date: May 12, 2025 |
| Author(s): |
| Name | Affiliation | Address | Phone | email |
| Antonio de la Oliva | Interdigital Ltd, UC3M |  |  | aoliva@it.uc3m.es |
| Joseph Levy | Interdigital Ltd. |  |  |  |

 Abstract

This submission addresses the comments with CID:

28, 38, 48, 110, 187, 188, 189, 190, 207, 401, 451, 492, 518, 521, 525, 526, 527, 528, 529, 531, 532, 939, 956, 1041, 1042, 1043, 1044, 1046

**Comment Resolution**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| CID | Clause Number(C) | Page(C) | Line(C) | Type of Comment | Comment | Proposed Change | Resolution |
| 28 | 9..4.1.83 | 48 | 51 | E | "start time".. The word "time" is superfluous. | At cited location delete "time" |  REVISEDEditor please implement the changes tagged with [196] in document 25/925r0 |
| 38 | 9.4.1.84 | 49 | 54 | E | "The possible values of the Epoch Request field and their meaning are shown in Table 9-129h..." Needs rephrasing, not correct. | Rewrite cited text as "The Epoch Request field values are defined in Table 9-129h...) |  ACCEPT |
| 48 | 9.4.2.248 | 61 | 32 | E | "The EDP element signals EDP epoch settings." "signals" is not the word, also need to insert the reference to the Figure. | At cited location replace sentence with: "The EDP element provides the EDP epoch settings. The EDP element format is shown in Figure 9-1074dq." |  ACCEPT |
| 110 | 10.71.2.2 | 77 | 31 | E | "EDP Response frame" should be "EDP Epoch Response frame". There are four occurrences: P77L33, P77L51, P77L60, P93L4. | Change to: EDP Epoch Response frame | ACCEPT |
| 187 | 9.3.3.6 | 36 | 19 | E | Notes should not define an element content. It is enough to define whether the element is present | Please remove the first sentence, starting with:"The EDP element..." |  ACCEPT |
| 188 | 9.3.3.5 | 35 | 55 | E | Notes should not define an element content. It is enough to define whether the element is present | Please remove the second sentence starting with:"This element..." |  ACCEPT |
| 189 | 9.3.3.7 | 36 | 49 | E | Notes should not define an element content. It is enough to define whether the element is present | Please remove the second sentence starting with:"This element..." |  ACCEPT |
| 190 | 9.3.3.8 | 37 | 27 | E | Notes should not define an element content. It is enough to define whether the element is present | Please remove the first sentence, starting with:"The EDP element..." |  ACCEPT |
| 207 | 9.4.1.84 | 49 | 57 | E | Complicated sentence. | Please clarify. | REVISEDEditor please implement the changes tagged with [38] in document 25/934r0 |
| 401 | 9.3.3.5 | 35 | 54 | E | "the Epoch" should be lowercase; also at 36.50 | As it says in the comment | REVISEDEditor please implement the changes tagged with [188] in document 25/934r0 |
| 451 | 9.4.1.84 | 49 | 53 | E | "The possible values of the Epoch Request field and their meaning are shown in Table 9-129h " -- I don't think "possible" is the way it's normally worded | Use baseline style |  REVISEDEditor please implement the changes tagged with [38] in document 25/934r0 |
| 492 |   |   |   | E | "otaMAC" is horrendous | Change to "OTA MAC" throughout (4x) | REVISEDEditor please implement the changes marked as [950] in document 25/544r4 |
| 518 | 10.71.2.1 | 76 | 33 | E | " to anonymize MLDs' selected OTA fields (e.g., STA address, AID, PN, SN, etc.) of individually addressed frames. " is a bit awkward | Change to " to anonymize selected OTA fields (e.g., STA address, AID, PN, SN, etc.) of individually addressed frames transmitted by MLDs" |  ACCEPT |
| 521 | 10.71.2.2 | 76 |   | E | "RSNXE element" should be "RSNXE" (2x) | As it says in the comment |  ACCEPT |
| 525 | 10.71.2.2 | 77 | 12 | E | "upon reception of the EDP element in an encrypted (Re)Association Request frame" needs a comma after | As it says in the comment |  ACCEPT |
| 526 | 10.71.2.2 | 77 |   | E | 77.10 talks of "EDP Epoch Request frame" but here we have just "The CPE non-AP MLD may request creation of a new EDP group by sending an EDP Request frame" | Pick one name for the frame and uses it everywhere | REVISEDEditor please implement the changes marked as [110] in document 25/934r0 |
| 527 | 10.71.2.2 | 77 |   | E | Scare quotes not needed around enum values | Delete at 77.25/45/51/57, 78.2 |  ACCEPT |
| 528 | 10.71.2.2 | 77 | 31 | E | "indicating in the Status field, SUC-CESS\_SIMILAR\_EPOCH" is confusing. Similar issue at line 51 | Change to "setting the Status field to indicate SUC-CESS\_SIMILAR\_EPOCH" |  ACCEPT |
| 529 | 10.71.2.2 | 77 | 31 | E | Is it Status field or Status Code field? | As it says in the comment | REVISEEditor please implement changes tagged as [529] in document 25/934r0 |
| 531 | 10.71.2.2 | 77 | 39 | E | "in (Re)Association Request frame." missing article | As it says in the comment |  ACCEPT |
| 532 | 10.71.2.2 | 77 | 42 | E | "EDP group(s)" should be just "EDP groups" | As it says in the comment |  ACCEPT |
| 939 | 10.71.2.2 | 77 | 19 | E | The use of "returned" in "The parameters of the assigned EDP group are returned to the CPE non-AP MLD" is ambiguous | Use "provided" or similar which is less ambiguous |  ACCEPT |
| 956 | 10.71.2.1 | 76 | 33 | E | Clumsy description. Weird apostrophe. What's with the "OTA fields"? What other type of fields to we have? | EDP epoch operation allows an AP MLD and non-AP MLD to periodically change fields that might identify a device (e.g., TA, AID, PN, SN, etc.) and synchronize when those changes occur." | REVISEDEditor please implement cahanges tagged with [956] in document 25/934r0 |
| 1041 | 10.71.2.1 | 76 | 30 | E | This text is more complex than it needs to be | Replace"sequences to anonymize MLDs' selected OTA fields (e.g., STA address, AID, PN, SN, etc.) of individually addressed frames."with"transitions between FA parameter sets." |  REVISEDEditor please implement cahanges tagged with [956] in document 25/934r0 |
| 1042 | 10.71.2.1 | 76 | 37 | E | There is no text introducing EDP groups before the use of the term here | Provide text introducing EDP groups before this sentence | REJECTEDEDP groups are defined in 3.2 |
| 1043 | 10.71.2.1 | 76 | 42 | E | There is no text regarding FA for AP MLD with BPE enabled. | Include reference to 10.71.8 (BPE). | ACCEPT |
| 1044 | 10.71.2.1 | 76 | 42 | E | If 10.71.7 (frame anonymization and AID) is merged into 10.71.3 (Establishing frame anonymization parameter sets) the the reference to 10.71.7 (frame anonymization and AID) is not needed here. | Remove refrence to 10.71.7 |  REJECTRight now this merging did not happen |
| 1046 | 10.71.2.2 | 76 | 64 | E | "is assigned' is ambiguous - who does the assignment? | Replace " CPE non-AP MLD is assigned" with "AP MLD assigns the non-AP MLD" |  ACCEPT |

**9.4.1.84 Epoch Request field**

***Editor please change line 53 of page 49 as follows:***

The Epoch Request field values [38] are shown in Table 9-129h (Values for the Epoch Request field).

**9.4.2.348 EDP element**

***Editor please change line 32 of page 61 as follows:***

The EDP element provides the EDP epoch settings. The EDP element format is shown in Figure 9-1074dq . [48]

**10.71.2 EDP epoch operation**

**10.71.2.1 General**

Support of EDP epoch operation is optional for a CPE AP MLD and a CPE non-AP MLD.

EDP epoch operation allows the AP MLD and non-AP MLD [956] to to periodically change fields that might identify a device [956] (e.g., STA address, AID, PN, SN, etc.) and synchronize when those changes occur [956], of individually addressed frames transmitted by MLDs.[518].

At any given time, an AP MLD shall not assign an associated non-AP MLD to more than one EDP group. A non-AP MLD belongs to at most one EDP group at a time. A non-AP MLD shall not request to be assigned to more than one EDP group at a time.

A non-AP MLD that is a member of an EDP group and its associated AP MLD shall anonymize the selected fields of the individually addressed frames according to the group epoch settings as defined in 10.71.3 (Establishing frame anonymization parameter sets), 10.71.5 (MAC header anonymization and transmitting functions), 10.71.6 (MAC header anonymization and receiving functions), 10.71.7 (Frame anonymization and AID), and 10.71.8 (BPE) [1043]

**10.71.2.2 EDP group operations**

A CPE AP MLD advertises the support of EDP groups in Beacon and Probe Response frames by setting the Group EDP Epoch Supported field of the Extended RSN Capabilities field of the RSNXE [521]to 1.

A non-AP MLD advertises the support of EDP epoch group in (Re)Association Request frames by setting the Group EDP Epoch Supported field of the Extended RSN Capabilities field of the RSNXE [521]to 1.

The non-AP MLD may include in an encrypted (Re)Association Request frame an EDP element indicating the parameters for the EDP group it requests to join.

If no EDP element is included in the encrypted (Re)Association Request frame, or if the EDP element does not include information defining the parameters for the EDP group, the AP MLD assigns the CPE non-AP MLD [1046] to the default group. The first EDP epoch of an EDP epoch sequence is EDP epoch number 0.

Within the EDP element sent in (Re)Association Request frames, the CPE non-AP MLD shall include a Minimum Epoch Pacing Parameters field, indicating the minimum epoch interval length supported by the CPE non-AP MLD. If the value of the Group Epoch Interval Duration field included in the Minimum Epoch Pacing field is greater than the value of the Group Epoch Interval Duration field for the default EDP group (group 0) or of any other EDP group already created, then the CPE non-AP MLD is not assigned to any EDP group at (re)association.

NOTE 1—The CPE non-AP MLD might remain associated without FA and might request the creation of a new EDP group (through the EDP Epoch Request frame).

The CPE AP MLD, upon reception of the EDP element in an encrypted (Re)Association Request frame,[525] may assign the CPE non-AP MLD to the EDP group with parameters that best match the parameters requested. In all cases, the assigned EDP epoch interval length shall not be shorter than indicated in the Minimum Epoch Pacing Parameters field.

The parameters of the assigned EDP group are provided [939] to the CPE non-AP MLD through an EDP element in the (Re)Association Response frame. If no EDP element is included in the (Re)Association Response frame, the CPE non-AP MLD is not assigned to any EDP group.

The CPE non-AP MLD may request creation of a new EDP group by sending an EDP Epoch [110] Request frame with Epoch Request field indicating Create [527] and indicating the parameters for the EDP group to be created in the EDP Epoch Settings field.

The CPE AP MLD may create the new EDP group with the received parameters. Alternatively, the CPE AP MLD may allocate the CPE non-AP MLD to an already existing EDP group with similar parameters. This may be signalled to the CPE non-AP MLD in an EDP Epoch [110] Response frame setting the Status Code [529] field to indicate SUCCESS\_SIMILAR\_EPOCH [528], and providing the EDP Epoch Settings field with the parameters of the EDP group.

NOTE 2—In this context, an EDP group with "similar parameters" refers to an existing EDP group whose epoch duration is equal or smaller than the one requested by the CPE non-AP MLD (i.e., most privacy-preserving). This choice is made while ensuring adherence to any pacing limits indicated in the Minimum Epoch Pacing Parameters field that the CPE non-AP MLD has specified in (Re)Association Request frame.

Once the CPE non-AP MLD is associated and has been assigned an EDP group, it may request to join a different EDP group. Information on the available EDP groups [532] may be distributed periodically by the CPE AP MLD transmitting EDP Group Parameter frames. To join a different EDP group, the CPE non-AP MLD sends an EDP Epoch Request frame, indicating Join [527] in the Epoch Request field and providing the EDP Epoch Settings field indicating the parameters of the EDP group it requests to join.

If the CPE AP MLD can fulfill the request, it will include the CPE non-AP MLD in the new EDP group and remove it from the previous EDP group. The result of the operation is indicated to the CPE non-AP MLD through an EDP Epoch [110] Response frame. This frame indicates in the [528]Status Code [529] field SUCCESS[527], [528] and an optional EDP Epoch Settings field to indicate the parameters of the newly joined group.

At any point in time, the CPE AP MLD may request the associated CPE non-AP MLD to transition to a different EDP group, by sending an EDP Epoch [110] Request frame to the associated CPE non-AP MLD with EDP Request field set to Join [527] and including the EDP Epoch Settings field with the parameters of the suggested EDP group. The CPE non-AP MLD may report the status of the operation by responding with an EDP Epoch [110] Response frame. This operation allows the CPE AP MLD to reorganize the EDP groups in use. Following this reorganization, the resulting EDP groups should maintain the same level of restrictiveness or be even more restrictive, i.e., shorter epoch durations, while also respecting any pacing limits indicated in the Minimum Epoch Pacing Parameters field that the CPE non-AP MLD has specified in the [531](Re)Association Request frame.

A CPE non-AP MLD may leave an EDP group at any time by sending an EDP Epoch [110] Request frame indicating Leave [527] in the Epoch Request field. Upon reception of this message, the CPE AP MLD shall remove the CPE non-AP MLD from the EDP group.

**9.3.3.5 Association Request frame format**

***Editor please modify last row of Table Table 9-64—Association Request frame body***

|  |  |  |
| --- | --- | --- |
| Last assigned+2>  | EDP | The EDP element is present if theAssociation Request frame is encrypted anddot11EDPGroupEpochActivated is true;otherwise, it is not present. [188] |

**9.3.3.6 Association Response frame format**

***Editor please modify last row of Table 9-65—Association Response frame body***

|  |  |  |
| --- | --- | --- |
| <Last assigned+1>  | EDP | [187]This element is present if theAssociation Response frame is encryptedand dot11EDPGroupEpochActivated istrue; otherwise, it is not present. |

**9.3.3.7 Reassociation Request frame format**

***Editor please modify last row of Table 9-66—Reassociation Request frame body***

|  |  |  |
| --- | --- | --- |
| <Last assigned+2>  | EDP | The EDP element is present if theReassociation Request frame is encryptedand dot11EDPGroupEpochActivated istrue; otherwise, it is not present. [189] |

**9.3.3.8 Reassociation Response frame format**

***Editor please modify last row of Table 9-67—Reassociation Response frame body***

|  |  |  |
| --- | --- | --- |
| <Last assigned+1>  | EDP | [190]This element is present if theRessociation Response frame is encryptedand dot11EDPGroupEpochActivated istrue; otherwise, it is not present |