IEEE P802.11  
Wireless LANs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 802.11bi – Comment resolution Clauses 9.6.42.1, 9.6.42.4 | | | | |
| Date: March 26, 2025 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | email |
| Antonio de la Oliva | Interdigital Ltd, UC3M |  |  | aoliva@it.uc3m.es |

Abstract

This submission addresses the comments with CID:

493, 950, 315, 499, 500, 501, 502, 504, 1011, 1012, 1013, 1014, 1015

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **CID** | **Clause Number(C)** | **Page(C)** | **Line(C)** | **Comment** | **Proposed Change** | **Resolution** |
| 493 | 9.6.42.1 | 69 | 7 | " EDP Group Parameter frame" should not have " frame" | As it says in the comment | ACCEPT |
| 950 | 9.6.42.1 | 69 | 13 | "otaMAC" => "OTA MAC" (we have no precedent for this odd type of capitalization and it is inconsistent with other uses) | And at 73.1, 73.3, 73.8 | ACCEPT |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **CID** | **Clause Number(C)** | **Page(C)** | **Line(C)** | **Comment** | **Proposed Change** | **Resolution** |
| 315 | 9.6.42.4 | 71 | 19 | singular form "group" not correct | use plural form "groups" | REVISED  Replace "EDP Group Parameter" with "EDP Groups Parameter" |
| 499 | 9.6.42.4 | 71 | 19 | "for one or more group" should be "... groups" | As it says in the comment | ACCEPT |
| 500 | 9.6.42.4 | 71 | 48 | "Value 0 is reserved." should be "The value 0 is reserved." | As it says in the comment | ACCEPT |
| 501 | 9.6.42.4 | 71 | 50 | "one or more EDP Setting fields" -- no such fields | Change to "one or more EDP Epoch Setting fields" | REVISED  Implement changes marked as [501] in document 25/544r4 |
| 502 | 9.6.42.4 | 72 | 9 | " Epoch request" should be " Epoch Request" | As it says in the comment | REVISED  Editor please implement the changes tagged as [502] in document 25/544r4  Note to editor: the clause is wrong it is 9.6.42.5 |
| 504 | 9.6.42.4 | 72 | 46 | "Status" should be "Status Code" | As it says in the comment | REVISED  Editor please implement the changes tagged as [504] in document 25/544r4  Note to editor: the clause is wrong it is 9.6.42.6 |
| 1011 | 9.6.42.4 | 71 | 17 | "9.6.42.4 EDP Group Parameter frame format". The frame contains information for all available EDP groups - not just a single EDP group. | Replace "EDP Group Parameter" with "EDP Groups Parameter" | REVISED  Editor please implement the changes tagged as [1011] in document 25/544r4 |
| 1012 | 9.6.42.4 | 71 | 19 | "one or more group". To avoid confusion, always clarify that this is an EDP epoch. There may be other occurences of "group" without the EDP prefix. | Throguhout document, ensure that any mentino of a group identifying an EDP group always uses the "EDP" prefix | REVISED  Editor please implement the changes marked as [1012] in the document 25/544r4. |
| 1013 | 9.6.42.4 | 71 | 37 | There is an EDP Epoch Setting for each EDP group, This number more naturally describes the number of EDP groups. | Replace "Number of EDP Epoch Settings Included" with "Number of EDP Epoch Settings" | REVISED  Editor please implement the changes tagged as [1013] in document 25/544r4 |
| 1014 | 9.6.42.4 | 71 | 47 | See comment on p71 line 37. It would be good to update this sentence to clarify that the number of EDP Epoch Settings fields is the number of EDP groups. | Update "Number of EDP Epoch Settings" to align with comment on p71 line 37. Update this sentence to clarify that the number of EDP Epoch Settings fields is the number of EDP groups. | REVISED  Editor please implement the changes as indicated with the tag [1014] in document with DCN 25/544r4 |
| 1015 | 9.6.42.4 | 71 | 47 | "EDP Setting" field does not exist. This is a typo. | Replace "EDP Setting" with "EDP Epoch Settings" | REVISED  Implement changes marked as [501] in document 25/544r4 |

**9.6.42.1 EDP Action field**

An EDP Action field, in the octet immediately after the Category field, differentiates the EDP Action frame formats. The EDP Action field values associated with each frame format within the EDP category are defined in Table 9-658u (EDP Action field values).

**Table 9-658u— EDP Action field values**

|  |  |
| --- | --- |
| **Value** | **Meaning** |
| 0 | Capabilities And Operation Parameters Request |
| 1 | Capabilities And Operation Parameters Response |
| 2 | EDP Group Parameter [493] ~~frame~~ |
| 3 | EDP Epoch Request |
| 4 | EDP Epoch Response |
| 5 | [950] OTA ~~ota~~MAC Collision Warning |
| 6 | Privacy Beacon Solicit Request |
| 7 | AID Assignment |
| 8-255 | Reserved |

**9.6.42.7 [950] OTA MAC Collision Warning frame format**

The [950] OTA MAC Collision Warning frame is used to signal when an OTA MAC address expected to be used by an EDP non-AP MLD in an upcoming epoch is calculated to collide with the MAC address of another STA.

Table 9-658ac—[950] OTA MAC Collision Warning frame Action field format

|  |  |
| --- | --- |
| Order | Meaning |
| 0 | Category |
| 1 | EDP Action |
| 2 | OTA MAC Collision Warning element |

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

The EDP Action field is defined in 9.6.42.1 (EDP Action field).

The OTA MAC Collision Warning element is defined in 9.4.2.349 (OTA MAC Collision Warning element).

**9.6.42.4 EDP Groups [1011] [315] Parameter frame format**

The EDP Groups [1011] [315] Parameter frame is used to carry the EDP epoch settings for one or more [1012] EDP groups [499] using the procedures defined in 10.71.2.2 (EDP group operations) and 10.71.2.3 (EDP epoch transitions operations). The EDP Groups [1011] [315] Parameter frame contains the information shown in Table 9-658z (EDP Groups [1011] **[315]** Parameter frame Action field format).

**Table 9-658z—EDP Group**s [1011] **Parameter frame Action field format**

|  |  |
| --- | --- |
| **Order** | **Meaning** |
| 0 | Category |
| 1 | EDP Action |
| 2 | Dialog Token |
| 3 | [1013] Number of EDP Epoch Settings ~~Number of EDP Epoch Settings Included~~ |
| 4 | EDP Epoch Settings List |

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

The EDP Action field is defined in 9.6.42.1 (EDP Action field).

The [1013] [1014] Number of EDP Epoch Settings ~~Number of EDP Epoch Settings Included~~ field specifies the number of EDP Epoch Settings fields that are in the EDP Epoch Settings List field [1014] (i.e., the number of EDP groups for which parameters are conveyed). The length of this field is one octet. [500] The v~~V~~alue 0 is reserved.

The EDP Epoch Settings List field contains one or more EDP Epoch [501] Settings [501] fields (as defined in 9.4.1.83 (EDP Epoch Settings field)) indicating the parameters of EDP groups that the AP MLD wants to convey to the non-AP MLD.

**9.6.42.5 EDP Epoch Request frame format**

The EDP Epoch Request frame contains the information that a CPE STA provides an AP to request a new

EDP epoch group, or to be assigned to a particular EDP epoch group, or to maintain its current EDP epoch

group, as defined in 10.71.2.1 (General) and 10.71.2.2 (EDP group operations).

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

**Table 9-658aa—EDP Epoch Request frame Action field format**

|  |  |
| --- | --- |
| Order | Meaning |
| 0 | Category |
| 1 | EDP Action |
| 2 | Dialog Token |
| 3 | Epoch [502] Request |
| 4 | EDP Epoch Settings |

The EDP Action field is defined in 9.6.42.1 (EDP Action field).

The Dialog Token field is defined in 9.4.1.12 (Dialog Token field) and is set to a nonzero value to identify

the request/response transaction.

The Epoch Request field is defined in 9.4.1.84 (Epoch Request field).

The EDP Epoch Settings field is defined in 9.4.1.83 (EDP Epoch Settings field).

**9.6.42.6 EDP Epoch Response frame format**

The EDP Epoch Response frame contains the information that an AP provides a STA in response to the

STA's EDP Epoch Request frame.

**Table 9-658ab—EDP Epoch Response frame Action field format**

|  |  |
| --- | --- |
| Order | Meaning |
| 0 | Category |
| 1 | EDP Action |
| 2 | Dialog Token |
| 3 | Status [504] Code |
| 4 | EDP Epoch Settings (Optional) |

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

The EDP Action field is defined in 9.6.42.1 (EDP Action field).

The Dialog Token field is defined in 9.4.1.12 (Dialog Token field) and is set to a nonzero value to identify

the request/response transaction.

The Status [504] Code field is defined in 9.4.1.9 (Status Code field).

The EDP Epoch Settings field is optional and is defined in 9.4.1.83 (EDP Epoch Settings field).

----------------------------------------

**Resolution for the Comment 1012**

***Editor please do the following changes, marked with the tag [1012]:***

Table 9-65—Association Response frame body

|  |  |  |
| --- | --- | --- |
| 91 | EDP | The EDP element carrying configuration and EDP Group ID for the assigned group [1012] EDP epoch. This element is present if the Association Response frame is encrypted and dot11EDPGroupEpochActivated is true; otherwise, is not present. |

**Table 9-67—Reassociation Response frame body**

|  |  |  |
| --- | --- | --- |
| 91 | EDP | The EDP element carrying configuration and EDP Group ID for the assigned group [1012] EDP epoch. This element is present if the Reassociation Response frame is encrypted and dot11EDPGroupEpochActivated is true; otherwise, is not present. |

**Table 9-80— Status codes**

|  |  |  |
| --- | --- | --- |
| Status code | Name | Meaning |
| … |  |  |
| 145 | SUCCESS\_SIMILAR\_EPOCH | The request to join or create a group [1012] EDP epoch is successful but the epoch parameters are not exactly th~~e~~ose [22] requested |
| 146 | [192] SUCCESS~~FAILURE~~\_ALREADY\_EXISTING\_EPOCH | ~~The creation of the group epoch fails because the group already exists.~~ The STA has successfully joined the requested group [1012] EDP epoch. [192] The EDP group already exists, no new EDP group is created. |
| 147 | FAILURE\_MAX\_NUM\_EPOCH\_REACHED [931] | Failure to create a group [1012] EDP epoch because the maximum number of group EDP [1012] epochs at the AP has been reached |
| 148 | SUCCESS\_AID\_LIST\_PARTIALLY\_STORED | The AID List is too large and the CPE non-AP MLD has stored it only partially. |
| 149 | FAILURE\_AID\_LIST\_NOT\_STORED | No AID value has been stored. |
| 150 | FAILURE\_AID\_STORAGE\_TOO\_SMALL | The request to join or create a group [1012] EDP epoch has failed, because the AID storage of the non-AP MLD is too small |
| 151 | NO\_ASSIGNED\_AID | The non-AP MLD has no AID value for the current group EDP [1012] epoch. |

**9.4.1.84 EDP Epoch Settings field**

***Editor: change the line 52 of page 48 as follows:***

The [1012] EDP Group ID field signals an identifier of the EDP group. The value 0 indicates the default [1012] EDP group. The value 255 is reserved.

***Editor: Change the name of the field Group ID to EDP Group ID in Figure 9-207n (EDP Epoch Settings field format) and the field Group ID Present to EDP Group ID Present in Figure 9-207o (EDP Epoch Settings Control field format)***

***Editor: change the line 36 of Page 50 as follows:***

The Participating Affiliated STAs Count field represents an indication of the number of affiliated STAs par-

ticipating in the signaled [1012] EDP group on the link. The Participating Affiliated STAs Percentage field, with values in the range of 0 to 100, represents an indication of the percentage of the associated affiliated STAs participating to the signalled [1012] EDP group on the link. Values 101-255 are reserved.

**9.4.2.350 AID List element**

***Editor: change the field Group ID in Figure 9-1074ds (AID List element) to EDP Group ID***

***Editor: change the line 6 of page 64 as follows:***

The [1012] EDP Group ID field signals an identifier of the EDP group.

***Editor please change the paragraph starting at line 38 of page 72 (IEEE 802.11bi/D1.0), as follows:***

**9.6.42.4 EDP Group Parameter frame format**

The EDP Group Parameter frame is used to carry the EDP epoch settings for one or more [1012] EDP groups using the procedures defined in 10.71.2.2 (EDP group operations) and 10.71.2.3 (EDP epoch transitions operations).

***Editor please change the paragraph starting at line 12 of page 73 (IEEE 802.11bi/D1.0), as follows:***

**9.6.42.5 EDP Epoch Request frame format**

The EDP Epoch Request frame contains the information that a CPE STA provides an AP to request a new EDP ~~epoch~~ [1012] group, or to be assigned to a particular EDP ~~epoch~~[1012] group, or to maintain its current EDP ~~epoch~~[1012] group, as defined in 10.71.2.1 (General) and 10.71.2.2 (EDP group operations).

***Editor please change the paragraph starting at line 46 of page 78 (IEEE 802.11bi/D1.0), as follows:***

**10.71.2 EDP epoch operation**

**10.71.2.1 General**

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 [1012] EDP 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) and 10.71.7 (Frame anonymization and AID).

***Editor please change the paragraph starting at line 1 of page 79 (IEEE 802.11bi/D1.0), as follows:***

**10.71.2.2 EDP group operations**

***Editor please change the paragraph starting at line 1 of page 79 (IEEE 802.11bi/D1.0), as follows:***

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 CPE non-AP MLD is assigned to the default [1012] EDP group. The first EDP epoch of an EDP epoch sequence is EDP epoch number 0.

***Editor please change the paragraph starting at line 6 of page 79 (IEEE 802.11bi/D1.0), as follows:***

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 resulting of the multiplication of the Epoch Interval Length field by the Epoch Interval Unit field included in the Minimum Epoch Pacing field is greater than the value resulting of the multiplication of the Epoch Interval Length field by the Epoch Interval Unit 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. [1012]

***Editor please change the paragraph starting at line 52 of page 79 (IEEE 802.11bi/D1.0), as follows:***

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 Response frame. This frame includes a Status field, "SUCCESS", indicating the operation result and an optional EDP Epoch Settings field to indicate the parameters of the newly joined [1012] EDP group.

***Editor please perform the following changes in page 143, MIB object dot11EDPGroupEpochCurrentGroup***

Page 143

dot11EDPGroupEpochCurrentGroup OBJECT-TYPE

SYNTAX Unsigned32 (0..255)

MAX-ACCESS read-write

STATUS current

DESCRIPTION

"This is a control variable.

It is written by an external management entity.

This attribute indicates the current ~~EDP~~ epoch EDP [1012] group to which the non-AP

MLD is assigned. A value of zero (0) indicates the non-AP MLD is assigned

to the default [1012] EDP group. A null value indicates that the non-AP MLD is not

currently assigned to an ~~epoch~~[1012] EDP group."

DEFVAL { NULL }

::= { dot11EDPStationConfigEntry 5 }