IEEE P802.11
Wireless LANs

|  |
| --- |
| 802.11bi – Comment resolution Clauses 9.6.42.5, 9.6.42.6 |
| Date: March 10, 2024 |
| 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:

1016, 1017, 62, 218, 858, 859, 909, 922, 1018, 63, 217, 1019

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **CID** | **Clause Number(C)** | **Page(C)** | **Line(C)** | **Comment** | **Proposed Change** | **Resolution** |
| 1016 | 9.6.42.4 | 71 | 58 | EDP Epochs are only available for MLDs, but "STA" and "AP are used here. | "STA and "AP" should be "non-AP MLD" and "AP MLD" respectively. | REVISEDNote to editor: this comment refers to 9.6.42.5, and not to 9.6.42.4 as indicated.Editor please change the phrase to " A CPE non-AP MLD may send an EDP Epoch Request frame to request a newEDP epoch group creation, assignment to a particular EDP epoch group, or leave from the current EDP epoch group, as defined in 10.71.2.1 (General(#1091)) and 10.71.2.2 (EDP group operations(#1091))”As tagged with [218] in document 25/692r4. |
| 1017 | 9.6.42.4 | 71 | 59 | This is a request frame sent by a non-AP MLD to an AP MLD. The text "or to be assigned" and "or to maintain" can suggest that the message is used by the AP MLD for assignment and maintaining. | Replace "or to be assigned" with "or to request assignment" . Replace "or to maintain" with "or to request maintaining" . | REVISEDNote to editor: this comment refers to 9.6.42.5, and not to 9.6.42.4 as indicated.Editor please change the phrase to " A CPE non-AP MLD may send an EDP Epoch Request frame to request a newEDP epoch group creation, assignment to a particular EDP epoch group, or leave from the current EDP epoch group, as defined in 10.71.2.1 (General(#1091)) and 10.71.2.2 (EDP group operations(#1091))”As tagged with [218] in document 25/692r4. |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **CID** | **Clause Number(C)** | **Page(C)** | **Line(C)** | **Comment** | **Proposed Change** | **Resolution** |
| 62 | 9.6.42.5 | 71 | 58 | "...CPE STA provides an AP to request a..." Should be "provides to an AP" | At cited location insert "to" after "provides". | REVISEDEditor please change the phrase to " A CPE non-AP MLD may send an EDP Epoch Request frame to request a newEDP epoch group creation, assignment to a particular EDP epoch group, or leave from the current EDP epoch group, as defined in 10.71.2.1 (General(#1091)) and 10.71.2.2 (EDP group operations(#1091))”As tagged with [218] in document 25/692r4. |
| 218 | 9.6.42.5 | 72 | 28 | Unclear sentence. | Please change to:" A CPE non-AP MLD may send an EDP Epoch Request frame to request a newEDP epoch group creation, assignment to a particular EDP epoch group, or leave from the current EDP epoch group, as defined in 10.71.2.1 (General(#1091)) and 10.71.2.2 (EDP group operations(#1091)).." | ACCEPT |
| 858 | 9.6.42.5 | 71 | 58 | Why only a "new" EDP Epoch request can be requested for the action frame EDP Epoch Request frame ? | This action frame could be modified such as a STA can request also an update of an EDP Epoch group. | REJECTEDUpdating the parameters of an EDP Epoch sequence would cause problems for other non-AP MLD which have already joined that group. |
| 859 | 9.6.42.5 | 71 | 58 | Why an EDP Epoch request frame can be sent only by a STA and not by an AP ? An AP would like to update characteristics of an existing EDP Epoch group or to request a STA to move to another EDP Epoch group. | This action frame should enable also for an AP. | REVISEDEditor please implement the changes tagged as [859] in document 25/692r4. |
| 909 | 9.6.42.5 | 71 | 58 | Why can a STA send an EDP Epoch request frame, while an AP cannot? | AP should too | REVISEDEditor please implement the changes tagged as [859] in document 25/692r4. |
| 922 | 9.6.42.5 | 71 | 58 | Why an EDP Epoch request frame can be sent only by a STA and not by an AP ? An AP would like to update characteristics of an existing EDP Epoch group or to request a STA to move to another EDP Epoch group. | This action frame should enable also for an AP. | REVISEDEditor please implement the changes tagged as [859] in document 25/692r4. |
| 1018 | 9.6.42.5 | 71 | 65 | This sentence is between a table caption and the corresponding table. | Move sentence before caption or after table. | ACCEPT |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **CID** | **Clause Number(C)** | **Page(C)** | **Line(C)** | **Comment** | **Proposed Change** | **Resolution** |
| 63 | 9.6.42.6 | 72 | 30 | "...provides a STA in response..." Should be "provides to" | At cited location insert "to" after "provides". | REVISED Changed to Please change to:" The EDP Epoch Response frame contains a response to a EDP Epoch Request frame.”, tagged as [217] in document 25/692r4. |
| 217 | 9.6.42.6 | 73 | 3 | Unclear sentence. | Please change to:" The EDP Epoch Response frame contains a response to a EDP Epoch Request frame." | REVISEDEditor please apply the changes tagged as [217] in document 25/692r4 |
| 1019 | 9.6.42.6 | 72 | 29 | EDP Epochs are only available for MLDs, but "STA" and "AP are used here. | "STA and "AP" should be "non-AP MLD" and "AP MLD" respectively. | REVISEDChanged to Please change to:" The EDP Epoch Response frame contains a response to a EDP Epoch Request frame.”, tagged as [217] in document 25/692r4. |

**9.6.42.5 EDP Epoch Request frame format**

[218] ~~The EDP Epoch Request frame contains the information that a CPE STA provides [63] to 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).~~

[218] A CPE non-AP MLD may send an EDP Epoch Request frame to request a new EDP epoch group creation, assignment to a particular EDP epoch group, or leave from the current EDP epoch group, as defined in 10.71.2.1 (General) and 10.71.2.2 (EDP group operations).

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

[1018] ~~The Category field is defined in 9.4.1.11 (Action field).~~

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

[1018] 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 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 [217] the response to an EDP Epoch Request or EDP Epoch Assignment frame. ~~information that an AP provides [63] to 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 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 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).

***Note to editor: Please add the following clause after 9.6.42.6.***

**9.6.42.7 EDP Epoch Assignment frame format [859]**

An EDP AP MLD may send an EDP Epoch Assignment frame to request a CPE non-AP MLD to transition to a different EDP group.

**Table 9-XX—EDP Epoch Assignment frame Action field format**

|  |  |
| --- | --- |
| **Order** | **Meaning** |
| 0 | Category |
| 1 | EDP Action |
| 2 | Dialog Token |
| 3 | EDP Epoch Settings |

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

***Note to editor: Modify the paragraph starting at line 28 of page 79 in section 10.71.2.2 (802.11bi/D1.1)***

The CPE non-AP MLD may request creation of a new EDP group by sending an EDP Epoch [859] Request frame with Epoch Request field indicating "Create" and indicating the parameters for the EDP group to be created in the EDP Epoch Settings field.

***Note to editor: Modify the paragraph starting at line 33 of page 79 in section 10.71.2.2 (802.11bi/D1.1)***

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 [859] Response frame indicating in the Status field, SUCCESS\_SIMILAR\_EPOCH, and providing the EDP Epoch Settings field with the parameters of the EDP group.

***Note to editor: Modify the paragraph starting at line 51 of page 79 in section 10.71.2.2 (802.11bi/D1.1)***

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 [859] 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 group.

***Note to editor: Modify the paragraph starting at line 58 of page 79 in section 10.71.2.2 (802.11bi/D1.1)***

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 Assignment [859] frame to the associated CPE non-AP MLD, 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 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 (Re)Association Request frame.

***Note to editor: Modify the paragraph starting at line 5 of page 80 in section 10.71.2.2 (802.11bi/D1.1)***

A CPE non-AP MLD may leave an EDP group at any time by sending an EDP Epoch [859] Request frame indicating "Leave" 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.

***Note to editor: Modify the paragraph starting at line 63 of page 94 in section 10.71.7 (802.11bi/D1.1)***

A CPE non-AP MLD shall include an AID Storage Size field in the EDP element of (Re)Association

Request frame and EDP Epoch [859] Request frame it transmits. The AID Storage Size field indicates the maximum number of AIDs that the CPE non-AP MLD can store.