### IEEE P802.11Wireless LANs

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| 11be D1.0 CR for TID-to-link mapping and EML Notification primitives |
| Date: 2021-02-09 |
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Abstract

This submission proposes resolutions for the following 2 CIDs:

CID : 4313,4314

Revisions:

* Rev 0: Initial version of the document.
* Rev 1: Change “Draft D1.3.1” to “Draft D1.4”, and modify some editorial errors
* Rev 2: Add the description about the unsolicited TID-to-link Mapping Response frame

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 D1.4 Draft. This introduction is not part of the adopted material.

***Editing instructions formatted like this are intended to be copied into the TGbe D1.4 Draft (i.e. they are instructions to the 802.11 editor on how to merge the text with the baseline documents).***

***TGbe Editor: Editing instructions preceded by “TGbe Editor” are instructions to the TGbe editor to modify existing material in the TGbe draft. As a result of adopting the changes, the TGbe editor will execute the instructions rather than copy them to the TGbe Draft.***

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| **CID** | **Commenter** | **P.L** | **Clause** | **Comment** | **Proposed Change** | **Resolution** |
| 4313 | Alfred Asterjadhi | 51.01 | 6 | Need to add respective MLME SAP interfaces req/resp for TID to Link Mapping. | As in comment. | **Revised**Agree in principle with comments. Since TID to link mapping mechanism has been added in clause 35 and the frame formats have been added in clause 9, MLME needs the SAP interfaces to trigger the TID to link mapping negotiation and tear down the TID to link mapping.**TGbe editor: please incorporate changes shown in 11-21/0027r2 under the tag 4313** |
| 4314 | Alfred Asterjadhi | 51.01 | 6 | Need to add to MLME EML Notification related req/resp | As in comment. | **Revised****Agree in principle with comments. Since the EML Operating Mode Notification frame has been included in clause 9, so MLME needs to add the related primitives to trigger the EML Operating Mode Notification frame.****TGbe editor: please incorporate changes shown in 11-21/0027r2 under the tag 4314** |

Insert the following at the end of subclause 6.3 (MLME SAP interface):

**6.3.132 TID-to-link mapping(#4313)**

**6.3.132.1 Introduction**

The following primitives support TID-to-link mapping operation (35.3.7.1 (TID-to-link mapping)).

**6.3.132.2 MLME-TIDTOLINKMAPPING.request**

**6.3.132.2.1 Function**

This primitive intiates a request to negotiate a TID-to-link mapping for setup links with a peer MAC entity.

**6.3.132.2.2 Semantics of the service primitive**

The primitive parameters are as follows:

MLME-TIDTOLINKMAPPING.request(

PeerSTAAddress ,

Dialog Token,

TID-To-Link Mapping

)

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Valid range | Description |
| PeerSTAAddress | MAC address | Any valid individual MAC address | Specifies the address of the peer MAC entity with which the TID-to-link mapping procedure is performed. |
| Dialog Token  | Integer | 0–255 | The dialog token to identify the TID-to-link mapping procedure. |
| TID-To-Link Mapping | TID-To-Link Mapping element | As defined in 9.4.2.314 (TID-To-Link Mapping element) | Indicates links on which frames belonging to each TID can be exchanged. |

**6.3.132.2.3 When generated**

This primitive is generated by the SME to send a request to a peer MAC entity to negotiate a TID-to-link mapping.

**6.3.132.2.4 Effect of receipt**

This primitive initiates transmission of a TID-To-Link Mapping Request frame to the peer MAC entity.

**6.3.132.3 MLME-TIDTOLINKMAPPING.confirm**

**6.3.132.3.1 Function**

This primitive indicates that a TID-To-Link Mapping Response frame has been received. That may be in response to an earlier MLME-TIDTOLINKMAPPING.request primitive or an autonomous response.

**6.3.132.3.2 Semantics of the service primitive**

The primitive parameters are as follows:

MLME-TIDTOLINKMAPPING.confirm(

PeerSTAAddress,

Dialog Token,

Status Code,

TID-To-Link Mapping

 )

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Valid range | Description |
| PeerSTAAddress | MAC address | Any valid individual MAC address | Specifies the address of the peer MAC entity with which the TID-to-link mapping procedure is performed. |
| Dialog Token  | Integer | 0–255 | The dialog token to identify the TID-to-link mapping procedure. |
| Status Code | As defined in frame format | As defined in 9.4.1.9 (Status Code field) | Indicates the status of the request procedure |
| TID-To-Link Mapping | TID-To-Link Mapping element | As defined in 9.4.2.314 (TID-To-Link Mapping element) | Indicates links on which frames belonging to each TID can be exchanged. |

**6.3.132.3.3 When generated**

This primitive is generated by the MLME when a TID-To-Link Mapping Response frame is received from the peer MAC entity.

**6.3.132.3.4 Effect of receipt**

The SME is notified of the receipt of the TID-to-link mapping.

**6.3.132.4 MLME-TIDTOLINKMAPPING.indication**

**6.3.132.4.1 Function**

This primitive indicates that a request to negotiate a TID-to-link mapping has been received from a peer MAC entity.

**6.3.132.4.2 Semantics of the service primitive**

The primitive parameters are as follows:

MLME-TIDTOLINKMAPPING.indication(

PeerSTAAddress ,

Dialog Token,

TID-To-Link Mapping

)

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Valid range | Description |
| PeerSTAAddress | MAC address | Any valid individual MAC address | Specifies the address of the peer MAC entity with which the TID-to-link mapping procedure is performed. |
| Dialog Token  | Integer | 0–255 | The dialog token to identify the TID-to-link mapping procedure. |
| TID-To-Link Mapping | TID-To-Link Mapping element | As defined in 9.4.2.314 (TID-To-Link Mapping element) | Indicates links on which frames belonging to each TID can be exchanged. |

**6.3.132.4.3 When generated**

This primitive is generated by the MLME as a result of the receipt of a TID-To-Link Mapping Request frame from a peer MAC entity.

**6.3.132.4.4 Effect of receipt**

The SME is notified of the receipt of the TID-to-link mapping request.

**6.3.132.5 MLME-TIDTOLINKMAPPING.response**

**6.3.132.5.1 Function**

This primitive is generated by the MLME to send a response. This may be in response to an MLME-TIDTOLINKMAPPING.indication primitive or an antonomous response.

**6.3.132.5.2 Semantics of the service primitive**

The primitive parameters are as follows:

MLME-TIDTOLINKMAPPING.response(

PeerSTAAddress,

Dialog Token,

Status Code,

TID-To-Link Mapping

 )

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Valid range | Description |
| PeerSTAAddress | MAC address | Any valid individual MAC address | Specifies the address of the peer MAC entity with which the TID-to-link mapping procedure is performed. |
| Dialog Token  | Integer | 0–255 | The dialog token to identify the TID-to-link mapping procedure. |
| Status Code | As defined in frame format | As defined in 9.4.1.9 (Status Code field) | Indicates the status of the request procedure |
| TID-To-Link Mapping | TID-To-Link Mapping element | As defined in 9.4.2.314 (TID-To-Link Mapping element) | Indicates links on which frames belonging to each TID can be exchanged. |

**6.3.132.5.3 When generated**

This primitive is generated by the SME to request a TID-To-Link Mapping Response frame be sent. That may be in response to an MLME-TIDTOLINKMAPPING.indication primitive or a request to transmit an autonomous response.

**6.3.132.5.4 Effect of receipt**

This primitive initiates transmission of a TID-To-Link Mapping Response frame to the peer MAC entity.

**6.3.132.6 MLME-TIDTOLINKMAPPINGTEARDOWN.request**

**6.3.132.6.1 Function**

This primitive instructs a peer MAC entity to tear down TID-to-link mapping.

**6.3.132.6.2 Semantics of the service primitive**

The primitive parameters are as follows:

MLME-TIDTOLINKMAPPINGTEARDOWN.request(

PeerSTAAddress

)

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Valid range | Description |
| PeerSTAAddress | MAC address | Any valid individual MAC address | Specifies the address of the peer MAC entity with which the TID-to-link mapping procedure is performed. |

**6.3.132.6.3 When generated**

This primitive is generated by the SME when a STA intends a tear down TID-to-link mapping.

**6.3.132.6.4 Effect of receipt**

This primitive initiates a TID-to-link mapping teardown procedure.

**6.3.132.7 MLME-TIDTOLINKMAPPINGTEARDOWN.indication**

**6.3.132.7.1 Function**

This primitive indicates that a peer MAC entity is tearing down TID-to-link mapping.

**6.3.132.7.2 Semantics of the service primitive**

The primitive parameters are as follows:

MLME-TIDTOLINKMAPPINGTEARDOWN.indication(

PeerSTAAddress

)

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Valid range | Description |
| PeerSTAAddress | MAC address | Any valid individual MAC address | Specifies the address of the peer MAC entity with which the TID-to-link mapping procedure is performed. |

**6.3.132.7.3 When generated**

This primitive is generated by the MLME as a result of the receipt of a TID-To-Link Mapping Teardown frame from a peer MAC entity.

**6.3.132.7.4 Effect of receipt**

The SME is notified of the results of the TID-to-link mapping procedure.

Insert the following at the end of subclause 6.3 (MLME SAP interface):

**6.3.133 EML operating mode notification(#4314)**

**6.3.133.1 Introduction**

The following primitives support EML operation mode notification operation.

**6.3.133.2 MLME-EMLOPERATINGMODENOTIF.request**

**6.3.133.2.1 Function**

This primitive requests the transmission of an EML Operating Mode Notification frame to a peer MAC entity.

**6.3.133.2.2 Semantics of the service primitive**

The primitive parameters are as follows:

MLME-EMLOPERATINGMODENOTIF.request(

PeerSTAAddress,

Dialog Token,

EML Control

)

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Valid range | Description |
| PeerSTAAddress | MAC address | Any valid individual MAC address | Specifies the address of the peer MAC entity to which the EML operating mode notification is sent. |
| Dialog Token  | Integer | 0–255 | The dialog token to identify the EML operating mode notification procedure. |
| EML Control  | As defined in EML Control field | As defined in 9.4.1.74 (EML Control field) | Indicates the information that is changing the EML operation. |

**6.3.133.2.3 When generated**

This primitive is generated by the SME to request that an EML Operating Mode Notification frame be sent to a peer MAC entity.

**6.3.133.2.4 Effect of receipt**

This primitive initiates transmission of an EML Operating Mode Notification frame to the peer MAC entity.

**6.3.133.3 MLME-EMLOPERATINGMODENOTIF.indication**

**6.3.133.3.1 Function**

This primitive indicates that an EML Operating Mode Notification frame has been received.

**6.3.133.3.2 Semantics of the service primitive**

MLME-EMLOPERATINGMODENOTIF.request(

PeerSTAAddress,

Dialog Token,

EML Control

)

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Valid range | Description |
| PeerSTAAddress | MAC address | Any valid individual MAC address | Specifies the address of the peer MAC entity to which the EML operating mode notification is sent. |
| Dialog Token  | Integer | 0–255 | The dialog token to identify the EML operating mode notification procedure. |
| EML Control  | As defined in EML Control field | As defined in 9.4.1.74 (EML Control field) | Indicates the information that is changing the EML operation. |

**6.3.133.3.3 When generated**

This primitive is generated by the MLME when an EML Operating Mode Notification frame is received.

**6.3.133.3.4 Effect of receipt**

On receipt of this primitive, the SME uses the information contained within the notification.