IEEE P802.11
Wireless LANs

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| Proposed draft 11be Spec text for MLME of NSEP Priority Access |
| Date: 2020-10-28 |
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Abstract

This contribution proposes the draft specification text of MLME SAP for TGbe draft.

Revisions:

* Rev 0: Initial version of the document.
* Rev 1: Some editial modification.

The texts is prepared for the following motions.

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| Layer management | MLME SAP interface\* | Zhiqiang Han | Basics (R1) | Po-Kai Huang, Rojan Chitrakar, Abhishek Patil, Jay Yang, Xiandong Dong,Subir Das , Liuming Lu | [Motion 50, [28] and [113] ][Motion 115, #SP90, [14] and [114]][Motion 126, [1] and [115]][Motion 131, #SP207, [19] and [115]] |

This contribution addresses the following motions:

The 802.11be amendment shall define mechanism(s) in support of priority access to a non-AP STA for national security (NS)/emergency preparedness (EP) Priority Service

NOTE – A non-AP STA for NS/EP Priority Service is a regular non-AP STA authorized to NS/EP service.

[Motion 50, [28] and [113]]

The NS/EP Priority Service if supported by a non-AP STA, shall use an action frame to indicate the need for priority access to its associated AP STA and to be included in Release 1 specification.

[Motion 115, #SP90, [14] and [114]]

[Motion 126, [1] and [115]]

The Priority Service Information shall be defined in EHT MAC Capability Information Element to exchange the NS/EP Priority Service capability information between AP STA and non-AP STA

[Motion 131, #SP207, [19] and [115]]

802.11be\_D0.2 has included NSEP Priority Access Procedure, but how to trigger this procedure by SME is missing, so this contribution is proposed to add a new MLME SAP interface 6.3.x NSEP Priority Access according to those motions and the text in 802.11be\_D0.2.

**Proposed spec text:**

The baseline for this text is 802.11 REVmd draft 5.0 and 802.11be draft 0.2.

***TGbe editor: Please add the subclauses as follows***

**6.3.x**  **NSEP Priority Access**

**6.3.x.1 Introduction**

The following primitives supports the NSEP Priority access opertaion.

In clause 6.3.x NSEP priority Access,the “SME” is the entity that manages the MLD. The peer MAC entity is with a MLD. The PeerSTAAddress is the MLD MAC address.

**6.3.x.2 MLME-NSEPPRIACCESS.request**

**6.3.x.2.1 Function**

This primitive requests a change to NSEP Priority Access from an associated peer MAC entity that is within an AP MLD or a non-AP MLD.

**6.3.x.2.2 Semantics of the service primitive**

The primitive parameters are as follows:

MLME-NSEPPRIACCESS.request(

PeerSTAAddress,

Dialog Token,

RequestType

)

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Valid range | Description |
| PeerSTAAddress  | MacAddress  | Any valid individual MAC address | Specifies the address of the peer MAC entity with which to perform the NSEP Priority Access process.  |
| Dialog Token | Integer | 0–255 | The dialog token to identify the NSEP Priority Access transaction. |
| RequestType | NSEP Request Action field  | As defined in 9.6.x.2 NSEP Priority Access Request frame format. | Specifies the NSEPRequest parameters. |

**6.3.x.2.3 When generated**

 This primitive is generated by the SME when a non-AP MLD wishes a change(e.g., enable or disable) to the NSEP Priority Access from an AP MLD or when an AP MLD wishes a change to the NSEP Priority Access from an non-AP MLD.

**6.3.x.2.4 Effect of receipt**

This primitive initiates an NSEP Priority Access procedure. In the case that a response is received from the responder MLD, the MLME subsequently issues an MLME-NSEPPRIACCESS.confirm primitive that reflects the results.

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**6.3.x.3 MLME-NSEPPRIACCESS.confirm**

**6.3.x.3.1 Function**

This primitive reports the results of an NSEP Priority Access change with an associated peer MAC entity that is in an AP MLD or a non-AP MLD .

**6.3.x.3.2 Semantics of the service primitive**

The primitive parameters are as follows:

MLME-NSEPPRIACCESS.confirm(

PeerSTAAddress,

Dialog Token,

Status Code

)

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Valid range | Description |
| PeerSTAAddress  | MacAddress  | Any valid individual MAC address | Specifies the address of the peer MAC entity with which to perform the NSEP Priority Access process. |
| Dialog Token | Integer | 0–255 | The dialog token to identify the NSEP Priority Access transaction. |
| Status Code | As defined in frame format | As defined in 9.4.1.9 (Status Code field) | Indicates the status of a requested operation. |

**6.3.x.3.3 When generated**

This primitive is generated by the MLME as a result of receipt of an NSEP Priority Access response frame from the peer MAC entity which is in an AP MLD or a non-AP MLD.

**6.3.x.2.4 Effect of receipt**

The SME is notified of the results of the NSEP Priority Access procedure.

**6.3.x.4 MLME-NSEPPRIACCESS.indication**

**6.3.x.4.1 Function**

This primitive indicates that an associated peer MAC entity is requesting a change to NSEP Priority Access from the local MAC entity which is in an AP MLD or a non-AP MLD.

**6.3.x.4.2 Semantics of the service primitive**

The primitive parameters are as follows:

MLME-NSEPPRIACCESS.indication(

PeerSTAAddress,

Dialog Token,

RequestType

)

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Valid range | Description |
| PeerSTAAddress  | MacAddress  | Any valid individual MAC address | Specifies the address of the peer MAC entity with which to perform the NSEP Priority Access process.  |
| Dialog Token | Integer | 0–255 | The dialog token to identify the NSEP Priority Access transaction. |
| RequestType | NSEP Request Action field  | As defined in 9.6.x.2 NSEP Priority Access Request frame format | Specifies the NSEPRequest parameters. |

**6.3.x.4.3 When generated**

This primitive is generated by the MLME as a result of the receipt of an NSEP Priority Access request from a specific peer MAC entity which is in a non-AP MLD or an AP MLD.

**6.3.x.4.4 Effect of receipt**

The SME is notified of the receipt of the NSEP Priority Access request.

**6.3.x.5 MLME-NSEPPRIACCESSP.response**

**6.3.x.5.1 Function**

This primitive is generated by the MLME to send a response to an associated peer MAC entity that requested an NSEP Priority Access change with the AP MLD or the non-AP MLD that issued the corresponding request primitive.

6.3.x.5.2 Semantics of the service primitive

The primitive parameters are as follows:

MLME-NSEPPRIACCESS.response(

PeerSTAAddress,

Dialog Token,

Status Code

)

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Valid range | Description |
| PeerSTAAddress  | MacAddress  | Any valid individual MAC address | Specifies the address of the peer MAC entity with which to perform the NSEP Priority Access process.  |
| Dialog Token | Integer | 0–255 | The dialog token to identify the NSEP Priority Access transaction. |
| Status Code | As defined in frame format | As defined in 9.4.1.9 (Status Code field) | Indicates the status of a requested operation. |

**6.3.x.5.3 When generated**

This primitive is generated by the SME of an AP MLD or a non-AP MLD as a response to an MLME-NSEPPRIACCESS.indication primitive.

**6.3.x.5.4 Effect of receipt**

This primitive initiates transmission of an NSEP Priority Access response to the specific peer MAC entity whithin a non-AP MLD or an AP MLD that requested the change to NSEP Priority Access.

**Straw Poll: Do you support to incorporate the proposed draft text in this document to the TGbe Draft 0.2?**

**Result: Yes/No/Abstain**