### IEEE P802.11 Wireless LANs

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| 11be D2.0 CR for clause 6.3 part 3 | | | | |
| Date: 2022-08-18 | | | | |
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Abstract

This submission proposes resolutions for the following 11 CID:

CIDs:10280,13518,10450,12242,13529,10281,10282,10283,13283,~~13284~~,10942

Revisions:

* Rev 0: Initial version of the document.
* Rev 1: Modification based on offline talk for CID 12242.
* Rev 2: Add a new CR on CID 10942 reassigned from Abhishek.
* Rev 3: revision for a typo.
* Rev 4: defer CID 13284 for more offline discussion

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 D2.0 Draft. This introduction is not part of the adopted material.

***Editing instructions formatted like this are intended to be copied into the TGbe D2.0 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** |
| 10280 | Michael Montemurro | 75.14 | 6.3.5.1 | This convention not only applies to the clause where it appears, but to the entire standard. | Add the following paragraph to the end of clause 1.4:  Reference in this standard to "STA" means a "STA" that is not affiliated with an MLD unless specified otherwise. Reference to "AP" means an AP that is not affiliated with an MLD unless specified otherwise. When referring to MLD management, the "SME" is the entity that manages the MLD. A peer MAC entity can be within a STA that is not affiliated with an MLD or an MLD depending on the context. A PeerSTAAddress can be the MAC address of a STA that is not affiliated with an MLD or an MLD MAC address depending on the context."  Delete the cited paragraph at 75.14, 78.26, 90.44, 92.15, 95.8, 98.29, 307.14, 307.18, 334.48, and 334.51. | **Revised-**  Agree with the commenter in principle.  In addition to proposed change,a notification should be added in each relevant subclause to clarify that this interface is related to MLD management, since there are some interfaces corresponding to MLD management while some others do not.  As the description is not redundant in clause 11(P307L14, P307L18) and clause 12(P334L48,P334L51),the necessary modifcation is only added in clause 6.  TGbe editor to make the changes under tag 10280 in this document 11-22 1312r4 |
| 13518 | Mark Hamilton | 75.14 | 6.3.5.1 | Grammar | The second occurrence of STA should not be quotes. In the first sentence, "the "STA"" and "the AP" should be "a STA" and "an AP" respectively, as these have no antecedent. This setence appears multiple times (sometimes with the second "AP" also in quotes, when it should not be) and they all should be corrected the same way. | **Revised-**  Agree with the commenter in principle.  The word usage related to MLD management has been moved to the end of clause 1.4 and should be revised as proposed change.  At the same time,occurences in clause 6.3 should be removed.  TGbe editor to make the changes under tag 13518 in this document 11-22 1312r4 |
| 10450 | Yonggang Fang | 101.15 | 6.3.131.2.2 | Please clarify PeerSTAAddress is affilated STA address or MLD MAC address. | in the comment. | **Revised-**  As EPCS is an MLD feature, PeerSTAAddress is the MLD address and more MLD description should be added in the beginning of this subclause.  TGbe editor to make the changes under tag 10450 in this document 11-22 1312r4 |
| 12242 | Stephen McCann | 75.49 | 6.3.5.2.2 | There are 67 occurences of "STA affiliated with a non-AP MLD" and 29 occurences of "non-AP STA affiliated with a non-AP MLD". I think the former is the better version and the additional "non-AP" is not required. | Change all occurences of "non-AP STA affiliated with a non-AP MLD" throughout the draft to "STA affiliated with a non-AP MLD". | **Revised-**  Change "STA affiliated with a non-AP MLD" to "non-AP STA affiliated with a non-AP MLD".  **TGbe editor to make the changes throughout the Draft** |
| 10942 | Graham Smith | 35.3.2.1 | 406.38 | I see many instances of "STA affilicted with a non-AP MLD".  Is this really also for an AP with a non-AP MLD?  Just checking. Should it be" non-AP STA affiliated with a non-AP MLD"? | Just check if this is for both a "non AP STA affililiated with a non-AP MLD" AND a "AP affililiated with a non-AP MLD"? | **Revised-**  Change "STA affiliated with a non-AP MLD" to "non-AP STA affiliated with a non-AP MLD".  **TGbe editor to make the changes throughout the Draft** |
| 13529 | Mark Hamilton | 90.62 | 6.3.39.2.1 | Is SA Query really a link-level thing, or should it be an MLD level thing (and therefore sent to the peer MLD)? 5.1.5.1 says the Security association is a MLD upper MAC sublayer function. | Replace "or be sent to an affiliated STA of the specified peer MLD" to "or be sent to a specified peer MLD". | **Rejected-**  SA query referring to the MLD association is at MLD level.  The action frames are transmitted between the affiliated STA and the affiliated AP,but apply to the non-AP MLD and AP MLD.So there is no doubt about the original text. |
| 10281 | Michael Montemurro | 89.42 | 6.3.11.2 | Given that the MLD has a single SME, it would make more sense if the SME would call this primitive on individual affiliated STAs or on the MLD MAC? In any case, this should be explained (likely in Clause 11.1.4.4.1). | Add the following paragraph at the end of 11.1.4.4.1.  "A MLD SME calls MLME.START.request primitive to initialize a BSS on an affiliated STA." | **Revised-**  Agree with the commenter in principle.  We generally use the term 'SME' rather than 'MLD SME' that has not been defined in the context.  Comparing to proposed change, there is less modification if we make change in  ***6.3.11.2.3 When generated***  TGbe editor to make the changes under tag 10281 in this document 11-22 1312r4 |
| 10282 | Michael Montemurro | 90.24 | 6.3.12.2 | Given that the MLD has a single SME, it would make more sense if the SME would call this primitive on the affiliated STAs. In any case, this should be explained (likely in Clause 11.1.6). | Add the following paragraph at the end of 11.1.6:  "A MLD SME calls the MLME.STOP.request primitive to terminate a BSS on an affiliated STA." | **Revised-**  Agree with the commenter in principle.  We generally use the term 'SME' rather than 'MLD SME' that has not been defined in the context.  Comparing to proposed change, there is less modification if we make change in  ***6.3.12.2.3 When generated***  TGbe editor to make the changes under tag 10282 in this document 11-22 1312r4 |
| 10283 | Michael Montemurro | 90.33 | 6.3.12.2 | MLME-STOP should operate on an affiliated STA, not an MLD. | Delete "or an MLD" at the cited location. | **Revised-**  Agree with the commenter in principle.  It is more appropriate to be revised as ‘an AP affiliated with an MLD’.  TGbe editor to make the changes under tag 10282 in this document 11-22 1312r4 |
| 13283 | Binita Gupta | 73.05 | 6.3 | Add MLME primitive to trigger adding a new affiliated AP to an AP MLD. | As in comment | **Rejected-**  Since MLME-START.request can add a new affiliated AP, there is no need to add a new MLME primitive. |
| 13284 | Binita Gupta | 73.05 | 6.3 | Add MLME primitive to trigger removing an affiliated AP from an AP MLD. | As in comment | **Revised-**  Since MLME-STOP.request can terminate an affiliated AP, there is no need to add a new MLME primitive.  But when an AP MLD is removing an affiliated AP,beacons it transmits should carry reconfiguration multi-link element.So MultiLink parameter in MLME-START.request should be revised.  TGbe editor to make the changes under tag 13284 in this document 11-22 1312r4 |

### 1.4 Word usage

***Add the following paragraph at the end of clause 1.4:***

(#10280,#13518)Reference in this standard to "STA" means a "STA" that is not affiliated with an MLD unless specified otherwise. Reference to "AP" means an "AP" that is not affiliated with an MLD unless specified otherwise. When referring to MLD management, the "SME" is the entity that manages the MLD. A peer MAC entity can be within a STA that is not affiliated with an MLD or an MLD depending on the context. A PeerSTAAddress can be the MAC address of a STA that is not affiliated with an MLD or an MLD MAC address depending on the context.

### 6.3.5 Authenticate

#### 6.3.5.1 Introduction

***Change the paragraph as follows:***

(#10280)When related to MLD management,refer to clause 1.4 (word usage) for more information.

### 6.3.7 Associate

#### 6.3.7.1 Introduction

***Change the paragraph as follows:***

(#10280)When related to MLD management,refer to clause 1.4 (word usage) for more information.

### 6.3.39 SA Query support

#### 6.3.39.1 General

***Change the paragraph as follows:***

(#10280)When related to MLD management,refer to clause 1.4 (word usage) for more information.

### 6.3.57 BSS transition management

#### 6.3.57.1 BSS transition management procedure

***Change the paragraph as follows:***

(#10280)When related to MLD management,refer to clause 1.4 (word usage) for more information.

### 6.3.82 SCS request and response procedure

#### 6.3.82.1 General

***Change the paragraph as follows:***

(#10280)When related to MLD management,refer to clause 1.4 (word usage) for more information.

### 6.3.116 MSCS request and response procedure

#### 6.3.116.1 General

***Change the paragraph as follows:***

(#10280)When related to MLD management,refer to clause 1.4 (word usage) for more information.

### 6.3.131 EPCS priority access

#### 6.3.131.1 Introduction

***Change the paragraph as follows:***

The following primitives support EPCS priority access operation (see 35.17 (EPCS priority access)) (#10450)between an AP MLD and a non-AP MLD.

***add the following paragraph at the end of this subclause:***

(#10280,#10450)When related to MLD management,refer to clause 1.4 (word usage) for more information.

### 6.3.11 Start

#### 6.3.11.2 MLME-START.request

**6.3.11.2.3 When generated**

***Change the first paragraph as follows:***

This primitive is generated by the SME to start an infrastructure BSS (with the MAC entity within an AP (#10281)or within an AP affiliated with an MLD),

an IBSS (with the MAC entity acting as the first STA in the IBSS), or an MBSS (with the MAC entity acting

as the first mesh STA in the MBSS) or to become a member of an existing MBSS or a PBSS (with the MAC

entity within a PCP). In an MBSS, this primitive starts the process of mesh beaconing.

### 6.3.12 Stop

#### 6.3.12.2 MLME-Stop.request

**6.3.12.2.3 When generated**

***Change the first paragraph as follows:***

This primitive is generated by the SME to terminate an infrastructure BSS (with the MAC entity within an AP or within an AP affiliated with (#10282)an MLD) or a PBSS (with the MAC entity within the PCP). The MLME-STOP.request primitive shall be generated only after successful use of an MLME-START.confirm primitive.

### 6.3.11 Start

#### 6.3.11.2 MLME-START.request

**6.3.11.2.2 Semantics of the service primitive**

Change the primitive parameters as follows (not all existing parameters are shown):

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Valid range | Description |
| ... |  |  |  |
| MultiLink | (#13284)Multi-Link element | As defined in 9.4.2.312 (Multi-Link element) | Indicates the Multi-Link parameters of the MLD. (#13284)If dot11MultiLinkActivated is true, the Basic Multi-Link element is present and the Reconfiguration Multi-Link element is optionally present (see 35.3.6.2.2 (Removing affiliated APs)); otherwise Multi-Link element is not present. |
| VendorSpecificIn  fo | A set of  elements | As defined in 9.4.2.25 (Vendor Specific  element) | Zero or more elements. |