IEEE P802.11  
Wireless LANs

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| LB225 MAC comment resolutions for clause 6 and 9 | | | | |
| Date: 2017-04-xx | | | | |
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Abstract

This submission proposes resolutions for multiple comments related to TGax D1.0 with the following CIDs:

* CIDs: 3003, 5428, 5429, 5430, 6002, 7705, 7894, and 10190 (8 CIDs).

Revisions:

* Rev 0: Initial version of the document.

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 TGax Draft. This introduction is not part of the adopted material.

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

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

# Comments on clause 6

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **CID** | **Commenter** | **Clause** | **P.L** | **Comment** | **Proposed Change** | **Resolution** |
| 3003 | Abhishek Patil | 6.3.3.2 | 11.15 | MLME-SCAN.request should include HT/VHT/HE Capabilities since the Probe Request frames can carry these capabilities elements | Add HT/VHT/HE Capabilities to MLME-SCAN.request section | Reject.  Agree with the commenter however, the inconsistency originates from the baseline spec and REVmd is a better forum to fix it. Once TGmd has included HT/VHT Capabilities element, TGax can revisit this section and add HE Capabilities element. |
| 5428 | Graham Smith | 6.3.7.4.3 | 12.37 | Ehere did "peer STA" come from? | Delete "peer" | Rejected.  The term “peer STA” is consistently used in this table. |
| 5429 | Graham Smith | 6.3.8.4.2 | 13.05 | Ehere did "peer STA" come from? | Delete "peer" | Rejected.  The term “peer STA” is consistently used in this table. |
| 5430 | Graham Smith | 6.3.11.2.2 | 13.39 | Why use different description than either HT or VHT? I think the only terms using "MAC entity" are DMG related, do we really want to follow that. HT and VHT use "supported by the STA". | Replace 'MAC entity" wirh "STA" | Revised.  Partly agree with the comment. Current base standard uses “MAC entity” for HT Capabilities while “STA” is used for VHT Capabilities.  Updated the text TGax editor, please incorporate the change as suggested by the commenter. |
| 6002 | Jarkko Kneckt | 6.3.3.3.2 | 11.42 | The RAPS information should be returned in BSSDescription table of the MLME-SCAN.confirm. | Please add the RAPS information part of the HE Operation parameters, or add the RAPS element to the BSSDescription table. | Revised.  Agree with the comment.  Updated the text to be consistent with HT and VHT.  TGax editor please make changes as shown in 11-17/606r0. |
| 7705 | Mark Hamilton | 6.3.4.2.4 | 12.14 | MLME-JOIN needs to check for unsupported HE-MCS in the Basic HE-MCS and NSS Set. | Add a change to 6.3.4.2.4, to add a paragraph after the similar VHT paragraph: "If the MLME of an HE STA receives an MLME-JOIN.request primitive with a SelectedBSS parameter containing a Basic HE-MCS And NSS Set field in the HE Operation parameter that contains any unsupported <HE-MCS, NSS> tuple, the MLME response in the resulting MLME-JOIN.confirm primitive shall contain a ResultCode parameter that is not set to the value SUCCESS." Same thing in 6.3.11.2.4. | Revised.  Agree with the comment.  Updated the text to be consistent with HT and VHT.  TGax editor please make changes as shown in 11-17/606r0. |
| 7894 | Mark RISON | 9.4.2.3 | 67.50 | Should make it clear that an AP must not include the 126 membership selector (VHT) if it wants to allow 20-MHz-only HE STAs | Add a "NOTE---To allow association of 20 MHz-only STAs, an HE AP omits the VHT PHY BSS membership selector and only includes the HT PHY and HE PHY membership selectors." | Revised.  Agree in principle.  TGax editor please make changes as shown in 11-17/606r0. |
| 10190 | Yusuke Asai | 6.3.3.3.2 | 11.21 | This change for the primitive parameters should be also added to "HE Capabilities" and "HE Operation". | As in comment. | Reject.  The MLME-SCAN.confirm primitive defined in 6.3.3.3.2 already contains HE Capabilities and HE Operation. |

**Discussion:**

**TGax Editor: *Make the following changes in section 6.3.3.3, D1.3 p41.l55 (#CID 6002):***

* Scan
* MLME-SCAN.confirm
* Semantics of the service primitive

***Insert the following rows at the end of the BSSDescription table:***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Type | Valid range | Description | IBSS adoption |
| HE Capabilities | As defined in frame format | As defined in 9.4.2.237 (HE Capabilities element) | The value from HE Capabilities element. The parameter is present if dot11HEOptionImplemented is true and HE Capabilities element was present in the Probe Response or Beacon frame from which the BSSDescription was determined. Otherwise, the parameter is not present.(#5426, #7469, #7704) | Do not adopt |
| HE Operation | As defined in frame format | As defined in 9.4.2.238 (HE Operation element) | The value from HE Operation element. The parameter is present if dot11HEOptionImplemented is true and a HE Operation element was present in the Probe Response or Beacon frame from which the BSSDescription was determined. Otherwise, the parameter is not present.(#7704, #5427, #7470, #7294) | Adopt |
| RAPS | As defined in frame format | As defined in 9.4.2.239 (OFDMA-based Random Access Parameter Set (RAPS) element) | The RAPS element is optionally present when dot11OFDMARandom- AccessOptionImlemented is true; otherwise it is not present.(#6002) | Do not adopt |

* Synchronization
* MLME-JOIN.request
* Effect of receipt

***TGax editor: Insert the following text at the end of 6.3.4.2.4(#7705):***

If the MLME of a HE STA receives an MLME-JOIN.request primitive with a SelectedBSS parameter containing (#3359)a Basic HE-MCS And NSS Set field(#5392) in the HE Operation parameter(#3359) that contains any unsupported <HE-MCS, NSS> tuple, the MLME response in the resulting MLME-JOIN.confirm primitive shall contain a ResultCode parameter that is not set to the value SUCCESS.

* Start
* MLME-START.request
* Semantics of the service primitive

***TGax editor: Change the description of the HE Capabilities in D1.3 as follow(#7705):***

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Valid range | Description |
| HE Capabilities | As defined in HE Capabilities element. | As defined in 9.4.2.237 (HE Capabilities element) | Specifies the parameters within the HE Capabilities element that are supported by the STA(#5430). The parameter is present if dot11HEOptionImplemented is true; otherwise, this parameter is not present. |
| HE Operation | As defined in HE Operation element. | As defined in 9.4.2.238 (HE Operation element) | The additional HE capabilities to be advertised for the BSS. The parameter is present if dot11HEOptionImplemented is true; otherwise, this parameter is not present. |

* Effect of receipt

***TGax editor: Insert the following text at the end of 6.3.11.2.4(#7705):***

If the MLME of a HE STA receives an MLME-JOIN.request primitive with a SelectedBSS parameter containing (#3359)a Basic HE-MCS And NSS Set field(#5392) in the HE Operation parameter(#3359) that contains any unsupported <HE-MCS, NSS> tuple, the MLME response in the resulting MLME-JOIN.confirm primitive shall contain a ResultCode parameter that is not set to the value SUCCESS.

* Management and Extension frame body components
* Elements
* Supported Rates and BSS Membership Selectors element

Insert a new last row in Table 9-78 (BSS membership selector value encoding) as follows:

|  |  |  |
| --- | --- | --- |
| * BSS membership selector value encoding | | |
| Value | Feature | Interpretation |
| 126 | HE PHY | Support for the mandatory features of Clause 28 is required in order to join the BSS that was the source of the Supported Rates and BSS Membership Selectors element or Extended Supported Rates and BSS Membership Selectors element containing this value.  NOTE---To allow association of 20 MHz-only STAs, an HE AP omits the VHT PHY BSS membership selector and only includes the HT PHY and HE PHY membership selectors.(#7894) |