IEEE P802.11  
Wireless LANs

|  |
| --- |
| **Comment Resolutions on Clause 6 & 8 comments** |
| **Date:** 2016-09-13 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Yasuhiko Inoue | NTT | 1-1 Hikari-no-oka, Yokosuka, Kanagawa 239-0847 Japan | ++81-46-859-5097 | inoue.yasuhiko@lab.ntt.co.jp |
| Junichi Iwatani |  | iwatani.junichi@lab.ntt.co.jp |
| Shoko Shinohara |  | shinohara.shoko@lab.ntt.co.jp |
| Abnishek Patil | Qualcomm |  |  | appatil@qti.qualcomm.com |

Abstract

This submission proposes resolutions for multiple comments on Clause 6 of the IEEE 802.11ax D0.1 with the following 20 CIDs:

* 83, 1227, 1228, 1229, 1238, 1239, 1240, 2292, 2293, 2294, 2304, 2305, 2306 (13 comments),
* 1125, 1230, 1241, 1596 (4 comments),
* 1869, 2420 (two comments),
* 1123 (one comment)

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.***

**CIDs 83, 1227, 1228, 1229, 1238, 1239, 1240, 2292, 2293, 2294, 2304, 2305, and 2306:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **CID** | **PP.LL** | **Clause** | **Comment** | **Proposed Change** | **Resolution** |
| 83 | 7.01 | 6 | Multiple elements, and MIB variables are added to support the features introduced in 11ax. | Ensure that all elements, and MIB variables are included in the appropriate tables/subclauses of the layer management clause. | Revised.  Agreed in principle. Revised text was proposed.  TGax editor to make the changes shown in 11-16/0864r6 under all headings that include CID 83. |
| 1227 | 7.42 | 6.3.7.2.2 | The HE Capabilities element does not appear to be optional in the Association Request frame, so it must be supplied in the MLME primitive. | Delete "optionally". Same thing in REASSOCIATE. | Revised  Recent changes in 802.11REVmc/D7.0 removed HT and VHT Capabilities elements from the MLME-(RE)ASSOCIATE.request, response, confirm primitives. Instead, HT and VHT Capabilities elements are included in MLME-JOIN.request primitive. Therefore, HE Capabilities element should be included in MLME-JOIN.request rather than MLME-(RE)ASSOCIATE.request primitives.  TGax editor to make the changes shown in 11-16/0864r6 under all headings that include CID 1227. |
| 1228 | 8.09 | 6.3.7.3.2 | The HE Capabilities element should be provided in the .confirm in all cases when the STA implements HE, unless the AP didn't provide it in the responst (the AP isn't capable). | Change the sentence to, "The parameter is present if dot11HighEfficiencyOptionImplemented is true and the HE Capabilities element is present in the Association Response frame received from the AP." Same thing in REASSOCIATE. | REVISED  Recent changes in 802.11REVmc/D7.0 removed HT and VHT Capabilities elements from the MLME-(RE)ASSOCIATE.request, response, confirm primitives. Instead, HT and VHT Capabilities elements are included in MLME-JOIN.request primitive. Therefore, HE Capabilities element should be included in MLME-JOIN.request rather than MLME-(RE)ASSOCIATE.request primitives.  TGax editor to make the changes shown in 11-16/0864r6 under all headings that include CID 1228. |
| 1229 | 8.16 | 6.3.7.4 | Why isn't the HE Capabilities element provided to the MLME/SME at the AP end of the Association? | Add the HE Capabilities element to the MLME-ASSOCIATE.indication and .response primitives. Same thing in REASSOCIATE. | Revised  Recent changes in 802.11REVmc/D7.0 removed HT and VHT Capabilities elements from the MLME-(RE)ASSOCIATE.request, response, confirm primitives. Instead, HT and VHT Capabilities elements are included in MLME-JOIN.request primitive. Therefore, HE Capabilities element should be included in MLME-JOIN.request rather than MLME-(RE)ASSOCIATE.request primitives.  TGax editor to make the changes shown in 11-16/0864r6 under all headings that include CID 1228. |
| 1238 | 7.11 | 6.3.3.3.2 | The HE Capabilities and HE Operation elements need to be included in the BSSDescription (with corresponding blurb in 6.3.4.2.4 for JOIN.req) | As it says in the comment | Revised  Agreed in principle. Revised text was proposed.  TGax editor to make the changes shown in 11-16/0864r6 under all headings that include CID 1238. |
| 1239 | 7.13 | 6.3.7 | The HE Capabilities element needs to be included in the MLME-ASSOCIATE.indication and .response too | As it says in the comment | Revised  Recent changes in 802.11REVmc/D7.0 removed HT and VHT Capabilities elements from the MLME-(RE)ASSOCIATE.request, response, confirm primitives. Instead, HT and VHT Capabilities elements are included in MLME-JOIN.request primitive. Therefore, HE Capabilities element should be included in MLME-JOIN.request rather than MLME-(RE)ASSOCIATE.request primitives.Revised text was proposed.  TGax editor to make the changes shown in 11-16/0864r6 under all headings that include CID 1239. |
| 1240 | 8.17 | 6.3.8 | The HE Capabilities element needs to be included in the MLME-REASSOCIATE.indication and .response too | As it says in the comment | Revised    Recent changes in 802.11REVmc/D7.0 removed HT and VHT Capabilities elements from the MLME-(RE)ASSOCIATE.request, response, confirm primitives. Instead, HT and VHT Capabilities elements are included in MLME-JOIN.request primitive. Therefore, HE Capabilities element should be included in MLME-JOIN.request rather than MLME-(RE)ASSOCIATE.request primitives.  Revised text was proposed.  TGax editor to make the changes shown in 11-16/0864r6 under all headings that include CID 1240. |
| 2292 | 7.48 | 6.3.7.2.2 | "HE Operation" should be included as a primitive parameter of the MLME-ASSOCIATE.request to be consistent with the Association Request frame format defined in 9.3.3.5. | Please add the "HE Operation" in the primitive parameter of the MLME-ASSOCIATE.request.  Alternatively, HE Operation element can be removed from the frame body of the Association Requeast. | Revised  Recent changes in 802.11REVmc/D7.0 removed HT and VHT Capabilities elements from the MLME-(RE)ASSOCIATE.request, response, confirm primitives. Instead, HT and VHT Capabilities elements are included in MLME-JOIN.request primitive. Therefore, HE Capabilities element should be included in MLME-JOIN.request rather than MLME-(RE)ASSOCIATE.request primitives.  TGax editor to make the changes shown in 11-16/0864r6 under all headings that include CID 2292. |
| 2293 | 8.16 | 6.3.7.3.2 | "HE Operation" should be included as a primitive parameter of the MLME-ASSOCIATE.confirm to be consistent with the Association Response frame format defined in 9.3.3.6. | Please add the "HE Operation" in the primitive parameter of the MLME-ASSOCIATE.confirm. | Revised  Recent changes in 802.11REVmc/D7.0 removed HT and VHT Capabilities elements from the MLME-(RE)ASSOCIATE.request, response, confirm primitives.  TGax editor to make the changes shown in 11-16/0864r6 under all headings that include CID 2293. |
| 2294 | 8.00 | 6.3.7.4  6.3.7.5 | Primitive parameters such as HE Capabilities and HE Operation need to be added to the MLME-ASSOCIATE.indication and MLME-ASSOCIATE.response primitives. | Please make necessary modifications in subclauses of 6.3.7.4 MLME-ASSOCIATE.indication and 6.3.7.5 MLME-ASSOCIATE.response. | Revised  Recent changes in 802.11REVmc/D7.0 removed HT and VHT Capabilities elements from the MLME-(RE)ASSOCIATE.request, response, confirm primitives. Instead, HT and VHT Capabilities elements are included in MLME-JOIN.request primitive.  Revised text was proposed.  TGax editor to make the changes shown in 11-16/0864r6 under all headings that include CID 2294. |
| 2304 | 7.11 | 6.3 | A primitive parameter corresponding to the HE Operation element has to be included in MLME-ASSOCIATE.request, MLME-ASSOCIATE.confirm, MLME-ASSOCIATE.indication, and MLME-ASSOCIATE.response for Association Request/Response. | Add HE Operation as a parameter of those service primitives, if necessary. | Revised  The HE Operation element shall be included in the (Re)Association.response frame. However, it is not included in those primitives because it does not have to be notified from MLME to SME as the HT and VHT Operation elements in 802.11REVmc/D7.0.  TGax editor to make the changes shown in 11-16/0864r6 under all headings that include CID 2304. |
| 2305 | 24.00 | 9.3.3.7  9.3.3.8 | A primitive parameter corresponding to the HE Operation element has to be included in MLME-REASSOCIATE.request, MLME-REASSOCIATE.confirm, MLME-REASSOCIATE.indication, and MLME-REASSOCIATE.response for Reassociation Request/Response. | Add HE Operation as a parameter of those service primitives, if necessary. | Revised  The HE Operation element shall be included in the (Re)Association.response frame. However, it is not included in those primitives because it does not have to be notified from MLME to SME as the HT and VHT Operation elements in 802.11REVmc/D7.0.  TGax editor to make the changes shown in 11-16/0864r6 under all headings that include CID 2305. |
| 2306 | 25.00 | 9.3.3.9 | A primitive parameter corresponding to the HE Operation element has to be included in MLME-SCAN.request, MLME-SCAN.confirm for Probe Request/Response. | Add HE Operation as a parameter of those service primitives, if necessary. | Revised  MLME-SCAN.request primitive and Probe request frame do not need information contained in the HE Operation element.  The Probe response frame includes HE Capabilities and HE Operation elements that are contained in the BSSDescriptor element of the MLME-SCAN.confirm primitive.  TGax editor to make the changes shown in 11-16/0864r6 under all headings that include CID 2306. |

**Discussion**

**Proposed Text**

**TGax Editor: *Change the subclause below as resolution to primitive parameters (#CID):*** ***83, 1227, 1228, 1229, 1230, 1238, 1239, 1240, 2292, 2293, 2294, 2304, 2305, and 2306.***

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

***Add the following rows at the end of the table for BSSDescription:* (#2306)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Type | Valid range | Description | IBSS adoption |
| HE Capabilities | As defined in frame fromat | As defined in 9.4.2.213 (HE Capabilities element) | Specifies the parameters within the HE Capabilities element that are supported by the STA. The parameter is present if dot11HighEfficiencyOptionImplemented is true; otherwise, this parameter is not present. | Do not adopt |
| HE Operation | As defined in frame format | As defined in 9.4.2.214 (HE Operation Element) | Specifies the parameters within the HE Operation element that are supported by the AP. The parameter is present if dot11HighEfficiencyOptionImplemented is true. | Adopt |

* Synchronization
* MLME-JOIN.request
* Semantics of the service primitive

***Change the primitive parameters as follows (note that not all existing parameters in the baseline are shown):***

The primitive parameters are as follows:

MLME-JOIN.request(

…

AdvertisementProtocolInfo,

HE Capabilities (#1227, #1238),

VendorSpecificInfo

)

***Insert the following entry to the unnumbered table in this subclause:***

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Valid range | Description |
| HE Capabilities | As defined in HE Capabilities element.(#1122) | As defined in 9.4.2.213 (HE Capabilities element) | Specifies the parameters within the HE Capabilities element that are supported by the STA. The parameter is present if dot11HighEfficiencyOptionImplemented is true; otherwise, this parameter is not present. |

* Associate
* MLME-ASSOCIATE.request
* Semantics of the service primitive

***Change the primitive parameters as follows (note that not all existing parameters in the baseline are shown):***

The primitive parameters are as follows:

MLME-ASSOCIATE.request(

...

(#1227, #2292)VendorSpecificInfo

)



* MLME-ASSOCIATE.confirm
* Semantics of the service primitive

***Change the primitive parameters as follows (note that not all existing parameters in the baseline are shown):***

The primitive parameters are as follows:

MLME-ASSOCIATE.confirm(

...,

(#1227, #2293)VendorSpecificInfo

)



* MLME-ASSOCIATE.indication
* Semantics of the service primitive

***Change the primitive parameters as follows (note that not all existing parameters in the baseline are shown):***

The primitive parameters are as follows:

MLME-ASSOCIATE.indication(

...

HE Capabilities (#1227, #1239, #1240, #2294),

VendorSpecificInfo

)

***Insert the following entry to the unnumbered table in this subclause:***

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Valid range | Description |
| HE Capabilities | As defined in HE Capabilities element.(#1122) | As defined in 9.4.2.213 (HE Capabilities element) | Specifies the parameters within the HE Capabilities element that are supported by the peer STA. The parameter is present if it is present in the Association Request frame received from the STA; otherwise, this parameter is not present. |

* Reassociate
* MLME-REASSOCIATE.request
* Semantics of the service primitive

***Change the primitive parameters as follows (note that not all existing parameters in the baseline are shown):***

The primitive parameters are as follows:

MLME-REASSOCIATE.request(

...  
 (#1227)

VendorSpecificInfo

)







* MLME-REASSOCIATE.indication
* Semantics of the service primitive

The primitive parameters are as follows:

MLME-REASSOCIATE.indication(

...

HE Capabilities, (#1227, #1239, #1240)

VendorSpecificInfo

)

***Insert the following entry to the unnumbered table in this subclause:***

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Valid range | Description |
| HE Capabilities | As defined in HE Capabilities element.(#1122) | As defined in 9.4.2.213 (HE Capabilities element) | Specifies the parameters within the HE Capabilities element that are supported by the peer STA. The parameter is present if it is present in the Reassociation Request frame received from the STA; otherwise, this parameter is not present. |

* Management frames
* Beacon frame format

Insert the following new rows (header row shown for convenience) into Table 9-27 (Beacon frame body):

|  |  |  |
| --- | --- | --- |
| **Order** | **Information** | **Notes** |
| <ANA> | HE Capabilities | The HE Capabilities element is present when dot11HighEfficiencyOptionImplemented(#1313) is true; otherwise it is not present. |
| <ANA> | HE Operation | The HE Operation element is present when dot11HighEfficiencyOptionImplemented(#1313) is true; otherwise it is not present. |
| <ANA> | TWT | The TWT element is optionally present when dot11TWTOptionActivated(#1313) is true; otherwise it is not present. |
| * Beacon frame body | | |

* Association Request frame format

Insert the following new row (header row shown for convenience) into Table 9-29 (Association Request frame body) (#2304):

|  |  |  |
| --- | --- | --- |
| * Association Request frame body | | |
| **Order** | **Information** | **Notes** |
| <ANA> | HE Capabilities | The HE Capabilities element is present when dot11HighEfficiencyOptionImplemented(#1313) is true; otherwise it is not present. |
|  |  |  |

* Association Response frame format

Change the Table 9-30 (Association Response frame body) as follow (#2304):

|  |  |  |
| --- | --- | --- |
| **Order** | **Information** | **Notes** |
| <ANA> | HE Capabilities | The HE Capabilities element is present when dot11HighEfficiencyOptionImplemented(#1313) is true; otherwise it is not present. |
| <ANA> | HE Operation | The HE Operation element is present when dot11HighEfficiencyOptionImplemented(#1313) is true; otherwise it is not present. |
| * Association Response frame body | | |

* Reassociation Request frame format

Insert the following new row (header row shown for convenience) into Table 9-31 (Reassociation Request frame body) (#2305):

|  |  |  |
| --- | --- | --- |
| * Reassociation Request frame body | | |
| **Order** | **Information** | **Notes** |
| <ANA> | HE Capabilities | The HE Capabilities element is present when dot11HighEfficiencyOptionImplemented(#1313) is true; otherwise it is not present. |
|  |  |  |

* Reassociation Response frame format

Change the Table 9-32 (Reassociation Response frame body) as follow (#2305):

|  |  |  |
| --- | --- | --- |
| **Order** | **Information** | **Notes** |
| <ANA> | HE Capabilities | The HE Capabilities element is present when dot11HighEfficiencyOptionImplemented(#1313) is true; otherwise it is not present. |
| <ANA> | HE Operation | The HE Operation element is present when dot11HighEfficiencyOptionImplemented(#1313) is true; otherwise it is not present. |
| * Reassociation Response frame body | | |

* Probe Request frame format

Insert the following new rows (header row shown for convenience) into Table 9-33 (Probe Request frame body) (#2306):

|  |  |  |
| --- | --- | --- |
| * Probe Request frame body | | |
| **Order** | **Information** | **Notes** |
| <ANA> | HE Capabilities | The HE Capabilities element is present when dot11HighEfficiencyOptionImplemented is true; otherwise it is not present. |

* Probe Response frame format

Insert the following new rows (header row shown for convenience) into Table 9-34 (Probe Response frame body) (#2306):

|  |  |  |
| --- | --- | --- |
| **Order** | **Information** | **Notes** |
| <ANA> | HE Capabilities | The HE Capabilities element is present when dot11HighEfficiencyOptionImplemented(#1313) is true; otherwise it is not present. |
| <ANA> | HE Operation | The HE Operation element is present when dot11HighEfficiencyOptionImplemented(#1313) is true; otherwise it is not present. |
| * Probe Response frame body | | |

**CIDs 1125, 1230, 1241, and 1596:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **CID** | **PP.LL** | **Clause** | **Comment** | **Proposed Change** | **Resolution** |
| 1125 | 9.60 | 6.3.11.2.2 | What is "BSSType = INFRASTRUCRURE"? | Define "BSSType = INFRASTRUCTURE". | Reject  The value of INFRASTRUCTURE for the BSSType has already been defined in the base standard. |
| 1230 | 9.48 | 6.3.11 | The HE Capabilities element is not optional in the Beacon for HE capable STAs, so it must be provided in the MLME-START | Delete "optionally". | Accepted.  TGax editor to make the changes shown in 11-16/0864r6 under all headings that include CID 1230. |
| 1241 | 9.60 | 6.3.11.2.2 | Why is the HE Operation restricted to infrastructure? Why can't an IBSS or PBSS or MBSS use HE? | Remove this restriction. Instead put restrictions on other features elsewhere (e.g. an IBSS STA may not use OFDMA or MU-MIMO features). Also add blurb in 6.3.11.2.4 | Revised  Agreed in principle. Current text of BSSType=INFRASTRUCTURE is restrictive. We need more discussion to decide whether HE features will be available in BSSes other than the infrastructure BSS.  TGax editor to make the changes shown in 11-16/0864r6 under all headings that include CID 1241. |
| 1596 | 9.60 | 6.3.11.2.2 | HE Operation is restricted to infrastructure here but other parts talk about HE in the context of IBSS | Decide whether HE can be used in BSSes other than infrastructure BSSes | Revised  Agreed in principle. Current text of BSSType=INFRASTRUCTURE is restrictive. We need more discussion to decide whether HE features will be available in BSSes other than the infrastructure BSS.  TGax editor to make the changes shown in 11-16/0864r6 under all headings that include CID 1596. |

**Discussion**

These three comments discuss about the primitive parameter of the MLME-START.request.

CID 1125: The base standard has already specified the value of INFRASTRUCTURE for the BSSType parameter.

CIDs 1241 and 1596: These comments ask for clarification whether HE Operation is allowed in IBSS, MBSS and PBSS. HE Operation contains BSS COLOR information for spatial reuse operation which may be used in IBSS and MBSS. The 802.11ac VHT Operation is not restricted to infrastructure BSS. TGax has not discussed about this issue. Therefore, these comments shall be accepted in principle and restriction of “BSSType=INFRASTRUCTURE” is removed for now. Need more discussion to make decision on this.

#### 6.3.11.2 MLME-START.request

**TGax Editor: *Change the Description of primitive parameter for MLME-START.request (#CIDs: 1230, 1241 and 1596)***

* Semantics of the service primitive

***Change the primitive parameters as follows (note that not all existing parameters in the baseline are shown):***

MLME-START.request(

...,

HE Capabilities,

HE Operation,

VendorSpecificInfo

)

***Insert the following entry to the unnumbered table in this subclause:***

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Valid range | Description |
| HE Capabilities | As defined in HE Capabilities element.(#1122) | As defined in 9.4.2.213 (HE Capabilities element) | Specifies the parameters within the HE Capabilities element that are supported by the MAC entity. The parameter is (#1230) present if dot11HighEfficiencyOptionImplemented is true; otherwise, this parameter is not present. |
| HE Operation | As defined in HE Operation element.(#1122) | As defined in 9.4.2.214 (HE Operation element) | The additional HE capabilities to be advertised for the BSS. The parameter is present if (#1241, #1596)dot11HighEfficiencyOptionImplemented is true; otherwise, this parameter is not present. |

**CID 1869:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **CID** | **PP.LL** | **Clause** | **Comment** | **Proposed Change** | **Resolution** |
| 1869 | 10.01 | 6.3.28 | MLME-HL-SYNC primitives should include the RU information aw well as MAC address of STA. | Define extensive primitive format of MLME-HL-SYNC which are able to contain the RU information. | Revised.  This comment was considered in the resolution of CID 2420. |

**Discussion**

This comment is considered in the resolution of CID 2420. However, further proposal will be needed to fully address this issue.

**CID 2420:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **CID** | **PP.LL** | **Clause** | **Comment** | **Proposed Change** | **Resolution** |
| 2420 | 10.01 | 8.3.5.3.2 | For supporting the reception of the frames simultaneously transmitted from the multiple STA (i.e., UL MU transmission), PHY-DATA.indication primitives shall return the USER\_INDEX parameter in additional to DATA parameter.  Add the following USER\_INDEX parameter into the PHY-DATA.indication primitive.  "The USER\_INDEX parameter (typically identified as u for a HE STA) is present for an HE trigger-based PPDU and indicates the index of the user in the RXVECTOR from which the accompanying DATA octet is recevied; otherwise, this parameter is not present." | As per comment | Revised.  Agreed in principle.  Since the USER\_INDEX is defined for VHT PHY, to avoid confusion, STA\_INDEX is added to the PHY-DATA.request and indication primitives for the HE PHY.  TGax editor to make the changes shown in 11-16/0864r6 under all headings that include CID 2420. |

**Discussion**

The USER\_INDEX was added to the primitive parameter for the PHY-DATA.indication. Proposed text is presented.

#### 8.3.5 PHY SAP detailed service specification

* PHY-DATA.request
* Semantics of the service primitive

The primitive provides the following parameter:

PHY-DATA.request(

DATA  
USER\_INDEX

STA\_INDEX(#2420)(11ac)  
)

**TGax Editor: *Insert the following sentence for description of STA\_ID parameter of PHY-DATA.request primitive after the texts of USER\_INDEX* (#2420)*.***

The STA\_INDEX parameter (obtained from STA\_ID\_LIST in Table 26-1 (TXVECTOR and RXVECTOR parameters (11ax))) is present for a HE MU PPDU and indicates the index of the user in the TXVECTOR to which the accompanying DATA octet applies; otherwise, this parameter is not present.(11ac)

#### 8.3.5.3 PHY-DATA.indication

**TGax Editor: *Change the primitive parameter as the resolution to CID 2420.***

#### 8.3.5.3.2 Semantics of the service primitive

The primitive provides the following parameter:

PHY-DATA.indication(

DATA

STA\_INDEX (#2420)

)

**TGax Editor: *Add the following sentence at the end of 8.3.5.3.2 as the resolution to CID 2420.***

The STA\_INDEX parameter is present for an HE trigger-based PPDU and indicates the index of

the user in the RXVECTOR to which the accompanying DATA octet applies; otherwise, this parameter is

not present.

**CID 1123:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **CID** | **PP.LL** | **Clause** | **Comment** | **Proposed Change** | **Resolution** |
| 1123 | 7.43 | 6.3.7.2.2 | "dot11HighEfficiencyOptionImplemented" does not exist. | Define "dot11HighEfficiencyOptionImplemented" in subclause C.3. | Revised  Agreed. Proposed text provided. |

**TGax Editor: *Add the following MIB objects as the resolution to CID 1123.***

**C.3 MIB Detail (#1123)**

-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

-- \* Major sections

-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

-- Station ManagemenT (SMT) Attributes

-- DEFINED AS "The SMT object class provides the necessary support

-- at the station to manage the processes in the station such that

-- the station may work cooperatively as a part of an IEEE Std 802.11

-- network."

dot11smt OBJECT IDENTIFIER ::= { ieee802dot11 1 }

…

-- dot11STACivicLocationConfigTable ::= { dot11smt 37 }

-- dot11HEStationConfigTable ::= { dot11smt <ANA>}

…

***Change Dot11StationConfigEntry as follows:***

Dot11StationConfigEntry ::= SEQUENCE

{

…,

dot11FutureChannelGuidanceActivated TruthValue,

dot11HighEfficiencyOptionImplemented TruthValule

}

…

dot11HighEfficiencyOptionImplemented OBJECT-TYPE

SYNTAX TruthValue

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"This is a capability variable.

Its value is determined by device capabilities.

This attribute indicates whether the entity is HE Capable."

::= { dot11StationConfigEntry <ANA>}

…