IEEE P802.11  
Wireless LANs

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| Comment resolutions for 9.3.3.X | | | | |
| Date: 2018-03-01 | | | | |
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Abstract

This submission proposes resolutions for multiple comments related to TGax D2.0 with the following CIDs:

* 11918, 12381, 12382, 12383, 12384, 12385, 12431 (7 CIDs)

Revisions:

* Rev 0: Initial version of the document.
* Rev 1: Minor editorials. CID 12383 is deferred for follow up (red).
* Rev 2: Revised comment resolution for CID 12383. Changes in green.

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.***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **CID** | **Commenter** | **P.L** | **Comment** | **Proposed Change** | **Resolution** |
| 11918 | Huizhao Wang | 99.31 | TWT element order is different in Associate Response than in Beacon | Change the TWT element order to after HE Operation element, so that the order is consistent with Beacon. The same change should be applied to the Table 9-32, in page 101 | Rejected –  The order is different because of backward compliance. TWT element in the Assoc. Response was already added by 11ah. As such it must appear before the HE Operation element. Besides, there is no technical benefit for having one order or the other.  No changes are needed for this comment. |
| 12381 | Liwen Chu | 98.56 | ESS Support should also based on other capabilities, e.g. Partial Bandwidth Extended Range. | Change the text per the comment. | Rejected –  The details on when the ESS is implemented are specified in subclause 11.24.7.5 (Planned ESS). This table merely determines whether the element is present or not and when. Also from a quick check of 11.24.7.5 there seem no dependency on other capability bits for this functionality.  No changes are needed for this comment. |
| 12382 | Liwen Chu | 99.04 | TWT element can be in Association Request frame. | Change the table per the comment. | Rejected –  The TWT element is already present in the Association Request frame. Please refer to P801L21 of IEEE802.11REVmd D1.0.  No changes are needed for this comment. |
| 12383 | Liwen Chu | 99.35 | Change to "The TWT element is optionally present if dot11TWTOptionActivated is true, TWT element is not presented in the Association Request frame that elicited this Association Response frame and the TWT Requester Support field in the HE Capabilities element in the Association Request frame that elicited this Association Response frame is 1." | Change the text per the comment. | Revised –  Agree in principle with the comment. Proposed resolution accounts for the suggested change accounting for some minor editorials.  TGax editor to make the changes shown in 11-18/0379r2 under all headings that include CID 12383. |
| 12384 | Liwen Chu | 99.63 | ESS Support should also based on other capabilities, e.g. Partial Bandwidth Extended Range. | Change the text per the comment. | Rejected –  The details on when the ESS is implemented are specified in subclause 11.24.7.5 (Planned ESS). This table merely determines whether the element is present or not and when. Also from a quick check of 11.24.7.5 there seem no dependency on other capability bits for this functionality.  No changes are needed for this comment. |
| 12385 | Liwen Chu | 102.21 | Broadcast TWT Support equal to 1 is the condition htat TWT in broadcast Probe Response. | Change the text per the comment. | Revised –  Agree in principle with the comment. Proposed resolution accounts for the suggested change accounting for some minor editorials.  TGax editor to make the changes shown in 11-18/0379r2 under all headings that include CID 12385. |
| 12431 | Liwen Chu | 161.19 | The present of TWT element should also be decided by whether Broadcast TWT Support subfield. | Change the note according to the comment. | Revised --  Agree with the comment. The same issue was solved in the past F2F and the proposed change is the same as for the already approved CID 12046.  Note to TGax editor: These changes already appear in D2.2 as such no further changes are needed.  TGax editor to make the changes 11-18/0010r0 under all headings that include CID 12046. |

**Discussion: *None.***

Change the subsequent occurrences of the term “A-MSDU” to “A-MSDU (or fragment thereof).”

* Management frames
* Beacon frame format

Change the following rows into Table 9-27 (Beacon frame body) maintaining row order:

|  |  |  |
| --- | --- | --- |
| * Beacon frame body | | |
| **Order** | **Information** | **Notes** |
| 21 | QoS Capability | The QoS Capability element is present if dot11QosOptionImplemented and dot11MeshActivated is false, and neither the EDCA Parameter Set element nor the MU EDCA Parameter Set element are ~~is not~~ present.(#12041) |
| 74 | HE Capabilities | The HE Capabilities element is present when dot11HEOptionImplemented is true; otherwise it is not present. |
| 75 | HE Operation | The HE Operation element is present when dot11HEOptionImplemented is true; otherwise it is not present. |
| 76 | TWT | The TWT element is optionally present when dot11TWTOptionActivated is true; otherwise it is not present. |
| 77 | UORA Parameter Set | The UORA Parameter Set element is optionally present when dot11OFDMARandomAccessOptionImplemented(#11985) is true; otherwise it is not present. |
| 78 | BSS Color Change Announcement | The BSS Color Change Announcement element is optionally present when dot11HEOptionImplemented is true; otherwise it is not present. |
| 79 | Spatial Reuse Parameter Set | The Spatial Reuse Parameter Set element is optionally present if dot11HighEfficiencyOptionImplemented is true; otherwise it is not present. |
| 80 | MU EDCA Parameter Set | The MU EDCA Parameter element is optionally present if dot11HighEfficiencyOptionImplemented is true; otherwise it is not present. The MU EDCA Parameter element is not present if the QoS Capability element is present.(#12041) |
| 81 | ESS Report | The ESS Report element is optionally present when dot11HEOptionImplemented is true; otherwise it is not present. |

* Association Request frame format

Insert the following new row into Table 9-29 (Association Request frame body):

|  |  |  |
| --- | --- | --- |
| * Association Request frame body | | |
| **Order** | **Information** | **Notes** |
| 42 | HE Capabilities | The HE Capabilities element is present when dot11HEOptionImplemented is true; otherwise it is not present. |

* Association Response frame format

**TGax Editor: *Change the table below of this subclause as follows (#CID 12383):***

Change Table 9-30 (Association Response frame body) as follows maintaining numeric order:

|  |  |  |
| --- | --- | --- |
| * Association Response frame body | | |
| **Order** | **Information** | **Notes** |
| 38 | TWT | The TWT element is present if dot11TWTOptionActivated is true and the TWT element is present in the Association Request frame that elicited this Association Response frame.  The TWT element is optionally present if dot11TWTOptionActivated is true, the TWT element is present in the Association Request frame that elicited this Association Response frame or, the TWT Requester Support field in the HE Capabilities element in the Association Request frame that elicited this Association Response frame is 1. *(#12383)*  Otherwise, the TWT element is not present.  If the TWT element was present in the Association Request frame that elicited the Association Response frame but the TWT element was not present in the Association Response frame then the STA can transmit another TWT request frame after association.*(#12383)* |
| 54 | HE Capabilities | The HE Capabilities element is present when dot11HEOptionImplemented is true; otherwise it is not present. |
| 55 | HE Operation | The HE Operation element is present when dot11HEOptionImplemented is true; otherwise it is not present. |
| 56 | BSS Color Change Announcement | The BSS Color Change Announcement element is optionally present when dot11HEOptionImplemented is true; otherwise it is not pre-sent. |
| 57 | Spatial Reuse Parameter Set | The Spatial Reuse Parameter Set element is optionally present if dot11HighEfficiencyOptionImplemented is true; otherwise it is not present. |
| 58 | MU EDCA Parameter Set | The MU EDCA Parameter Set element is optionally present if dot11HighEfficiencyOptionImplemented is true; otherwise, it is not present. |
| 59 | UORA Parameter Set | The UORA Parameter Set element is optionally present if dot11HighEfficiencyOptionImplemented is true; otherwise, it is not present. |
| 60 | ESS Report | The ESS Report element is optionally present when dot11HEOptionImplemented is true; otherwise it is not present. |

* Reassociation Request frame format

Insert the following row in Table 9-31 (Reassociation Request frame body):

|  |  |  |
| --- | --- | --- |
| * Reassociation Request frame body | | |
| **Order** | **Information** | **Notes** |
| 47 | HE Capabilities | The HE Capabilities element is present when dot11HEOptionImplemented is true; otherwise it is not present. |

* Reassociation Response frame format

TGax Editor: Change the table below of this subclause as follows (#CID 12383):

Change Table 9-32 (Reassociation Response frame body) as follows maintaining numeric order:

|  |  |  |
| --- | --- | --- |
| * Reassociation Response frame body | | |
| **Order** | **Information** | **Notes** |
| 42 | TWT | The TWT element is present if dot11TWTOptionActivated is true and the TWT element is present in the Reassociation Request frame that elicited this Reassociation Response frame.  The TWT element is optionally present if dot11TWTOptionActivated is true, the TWT element is present in the Reassociation Request frame that elicited this Reassociation Response frame or, the TWT Requester Support field in the HE Capabilities in the Reassociation Request frame that elicited this Reassociation Response frame is 1. *(#12383)*  Otherwise, the TWT element is not present.  If the TWT element was present in the Reassociation Request frame that elicited the Reassociation Response frame but the TWT element was not present in the Reassociation Response frame then the STA can transmit another TWT request frame after association.*(#12383)* |
| 57 | HE Capabilities | The HE Capabilities element is present when dot11HEOptionImplemented is true; otherwise it is not present. |
| 58 | HE Operation | The HE Operation element is present when dot11HEOptionImplemented is true; otherwise it is not present. |
| 59 | BSS Color Change Announcement | The BSS Color Change Announcement element is optionally present when dot11HEOptionImplemented is true; otherwise it is not present. |
| 60 | Spatial Reuse Parameter Set | The Spatial Reuse Parameter Set element is optionally present if dot11HighEfficiencyOptionImplemented is true; otherwise it is not present. |
| 61 | MU EDCA Parameter Set | The MU EDCA Parameter Set element is optionally present if dot11HighEfficiencyOptionImplemented is true; otherwise, it is not present. |
| 62 | UORA Parameter Set | The UORA Parameter Set element is optionally present if dot11HighEfficiencyOptionImplemented is true; otherwise, it is not present. |
| 63 | ESS Report | The ESS Report element is optionally present when dot11HEOptionImplemented is true; otherwise it is not present. |

* Probe Request frame format

Insert the following new row into Table 9-33 (Probe Request frame body):

|  |  |  |
| --- | --- | --- |
| * Probe Request frame body | | |
| **Order** | **Information** | **Notes** |
| 31 | HE Capabilities | The HE Capabilities element is present when dot11HEOptionImplemented is true; otherwise it is not present. |

* Probe Response frame format

TGax Editor: Change the table below of this subclause as follows (#CID 12385):

Insert the following new rows into Table 9-34 (Probe Response frame body):

|  |  |  |
| --- | --- | --- |
| * Probe Response frame body | | |
| **Order** | **Information** | **Notes** |
| 91 | HE Capabilities | The HE Capabilities element is present when dot11HEOptionImplemented is true; otherwise it is not present. |
| 92 | HE Operation | The HE Operation element is present when dot11HEOptionImplemented is true; otherwise it is not present. |
| 93 | TWT | The TWT element is optionally present within broadcast Probe Response frames when dot11TWTOptionActivated, dot11HEOptionImplemented and dot11FILSOmitReplicateProbeResponses are true; otherwise it is not present. If the TWT element is present, then the Broadcast field of the TWT element is 1. *(#12385)* |
| 94 | UORA Parameter Set | The UORA Parameter Set element is optionally present when dot11OFDMARandomAccessOptionImplemented(#11985) is true; otherwise it is not present. |
| 95 | BSS Color Change Announcement | The BSS Color Change Announcement element is optionally present when dot11HEOptionImplemented is true; otherwise it is not present. |
| 96 | Spatial Reuse Parameter Set | The Spatial Reuse Parameter Set element is optionally present if dot11HighEfficiencyOptionImplemented is true; otherwise it is not present. |
| 97 | MU EDCA Parameter Set | The MU EDCA Parameter Set element is optionally present if dot11HighEfficiencyOptionImplemented is true; otherwise, it is not present. |
| 98 | ESS Report | The ESS Report element is optionally present when dot11HEOptionImplemented is true; otherwise it is not present. |