IEEE P802.11  
Wireless LANs

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| |  |  |  |  |  | | --- | --- | --- | --- | --- | | CR TXVECTOR INACTIVE SUBCHANNELS and more | | | | | | Date: 2020-04-30 | | | | | | Author(s): | | | | | | Name | Affiliation | Address | Phone | email | | Matthew Fischer | Broadcom |  |  | [Matthew.fischer@broadcom.com](mailto:Matthew.fischer@broadcom.com) | |  |  |  |  |  | |  |  |  |  |  | |  |  |  |  |  | |  |  |  |  |  | |  |  |  |  |  | |  |  |  |  |  | |

Abstract

Proposed language to address TGaxD6.0 WG LB247 CIDs on TXVECTOR parameter INACTIVE\_SUBCHANNELS and a few others. CIDs 24028, 24041, 24043, 24281, 24271

Proposed changes are referenced to TGax D6.0.

**REVISION NOTES:**

**R0**:

initial

**R1**:

No actual changes of significance – the problem is that if you mistakenly think that you have a new revision and click on the revise link on the document server, even though there is a cancel option that appears, you’re still committed to providing a revision. So here it is…

Had to change the doc reference numbers.

**R2**:

Changed proposed text change for CID 24281

Updated doc references

**R3**:

Changed proposed resolution text for CID 24281, with no technical change to the content or to the proposed change

CID 24271 proposed changes – added some text in the behavioural subclause for TDLS setup

Updated doc references

**R4**:

Added modification to 11.21.1 to make it clear that dual-peer support for a feature enables its use regardless of the AP support.

Updated doc references

**END OF REVISION NOTES**

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**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **CID** | **Commenter** | **Clause** | **Page** | **Comment** | **Proposed Change** | **Resolution (Proposed)** |
| 24028 | Seok, Yongho | 26.11.7 | 433.52 | "The parameter INACTIVE\_SUBCHANNELS may be present in the TXVECTOR of a non-HT duplicate PPDU that carries an HE NDP Announcement frame or of an HE sounding PPDU."  The parameter INACTIVE\_SUBCHANNELS should be also allowed for other MAC frames.  For example, the CTS-to-self frame for supporting the NAV protection before the preamble punctured PPDU transmissions.  The CF-End frame for supporting the NAV reset after the preamble punctured PPDU transmissions. | Please allow the parameter INACTIVE\_SUBCHANNELS for other MAC frames. | Reject – while there is no specific technical issue raised against the proposed change, outside of the creation of additional complexity in the protocol, the result of group discussion on the question of expanding the use of INACTIVE\_SUBCHANNELS failed to achieve enough support to include the concept in the draft at this time. |
| 24041 | Seok, Yongho | 26.11.7 | 433.51 | "The parameter INACTIVE\_SUBCHANNELS may be present in the TXVECTOR of a non-HT duplicate PPDU that carries an HE NDP Announcement frame or of an HE sounding PPDU.  The parameter INACTIVE\_SUBCHANNELS shall not be present otherwise."    The parameters INACTIVE\_SUBCHANNELS can be present in any non-HT duplicate PPDU.  There is no technical reason to limit the usage to the HE NDP Announcement frame and the HE NDP.  Remove the cited sentences. | As in the comment. | Reject – while there is no specific technical issue raised against the proposed change, outside of the creation of additional complexity in the protocol, the result of group discussion on the question of expanding the use of INACTIVE\_SUBCHANNELS failed to achieve enough support to include the concept in the draft at this time. |
| 24043 | Seok, Yongho | 26.11.7 | 433.48 | The AP needs to send the BFRP Trigger frame to collect the beamforming feedback from each STA.  In addition to the HE NDP Announcement frame and the HE NDP, the BFRP Trigger frame should be allowed for a non-HT Duplicate PPDU with the INACTIVE\_SUBCHANNELS parameter. | As in the comment. | Reject – while there is no specific technical issue raised against the proposed change, outside of the creation of additional complexity in the protocol, the result of group discussion on the question of expanding the use of INACTIVE\_SUBCHANNELS failed to achieve enough support to include the concept in the draft at this time. |
| 24281 | Seok, Yongho | 26.11 | 428.40 | The INACTIVE\_SUBCHANNELS parameter can be present in the non-HT duplicate PPDU.  Change the title of the 26.11 as the following:  "Setting TXVECTOR parameters by an HE STA" | As in the comment. | Revise – Tgax editor to make the changes marked with CID 24281 in 11-20-0376r4 which generally agree with the commenter’s suggestion to modify the subclause heading, but changed instead to: “**Rules for the setting of some TXVECTOR parameters for PPDUs that are transmitted by an HE STA**” in order to limit the meaning appropriately, noting that any STA that transmits an HE PPDU would be subject to the limitations and noting that VHT PPDUs are also mentioned in the subclause. |
| 24271 | Fischer, Matthew | 9.6.12 | 223.01 | TDLS mgmt frames need 6 GHz cap i.e. | Add 6 GHz cap i.e. to TDLS mgmt frames | Revise – Tgax editor to make the changes marked with CID 24271 in 11-20-0376r4 which generally agree with the commenter’s suggestion to add the HE 6 GHz Cap IE to TDLS Setup Request and Response frames. |

**Discussion:**

**Proposed Changes to TGax D6.0:**

**CID 24271:**

***TGax editor: within TGax D6.0, in subclause in 9.6.12.2 TDLS Setup Request Action field format, in Table 9-414 (Information for TDLS Setup Request Action field), insert a new row as shown:***

**9.6.12.2 TDLS Setup Request Action field format**

***Change Table 9-414 (Information for TDLS Setup Request Action field) as follows (maintaining numeric order):***

**Table 9-414—Information for TDLS Setup Request Action field**

|  |  |  |
| --- | --- | --- |
| **Order** | **Information** | **Notes** |
| 19 | AID | The AID element containing the AID of the STA sending the frame is present if dot11VHTOptionImplemented, dot11HE-OptionImplemented, or dot11S1GOptionImplemented is true. |
| 23 | HE Capabilities | The HE Capabilities element is present if dot11HEOptionImplemented is true; otherwise it is not present. The HE Capabilities element is defined in 9.4.2.247 (HE Capabilities element) |
| 24 | TWT | The TWT element is optionally present if dot11TWTOptionActivated is true; otherwise not present.  The Trigger subfield and the Negotiation Type subfield of the TWT element are set to 0. |
| <ANA> | HE 6 GHz Band Capabilities | The HE 6 GHz Band Capabilities element is present if dot11HEOptionImplemented and dot11HE6GOptionImplemented are true; otherwise not present. **(#24271)** |

***TGax editor: within TGax D6.0, in subclause in 9.6.12.3 TDLS Setup Response Action field format, in Table 9-415 (Information for TDLS Setup Response Action field), insert a new row as shown:***

**9.6.12.3 TDLS Setup Response Action field format**

***Change Table 9-415 (Information for TDLS Setup Response Action field) as follows (maintaining numeric order):***

**Table 9-415—Information for TDLS Setup Response Action field**

|  |  |  |
| --- | --- | --- |
| **Order** | **Information** | **Notes** |
| 20 | AID | The AID element containing the AID of the STA sending the frame is present if dot11VHTOptionImplemented, dot11HE-OptionImplemented, or dot11S1GOptionImplemented is true. |
| 25 | HE Capabilities | The HE Capabilities element is present if dot11HEOptionImplemented is true and the Status Code is SUCCESS; otherwise it is not present. The HE Capabilities element is defined in 9.4.2.247 (HE Capabilities element) |
| 26 | TWT | The TWT element is optionally present if dot11TWTOptionActivated is true and the TWT element is present in the TDLS Setup Request frame that elicited this TDLS Setup Response frame. The TWT element is optionally present if dot11TWTOption- Activated is true and the TWT Requester Support field or the TWT Responder Support field is equal to 1 in the HE Capabili-ties in the TDLS Setup Request frame that elicited this TDLS Setup Response frame. Otherwise, the TWT element is not present.  The Trigger subfield and the Negotiation Type subfield of the TWT element are set to 0. |
| <ANA> | HE 6 GHz Band Capabilities | The HE 6 GHz Band Capabilities element is present if dot11HEOptionImplemented and dot11HE6GOptionImplemented are true; otherwise not present. **(#24271)** |

**11.21 Tunneled direct-link setup**

**11.21.1 General**

Features, excluding PCO, that are supported by both TDLS peer STAs may be used on a TDLS direct link between those STAs regardless of whether or not they are supported by the BSS.

**CID 24281:**

***TGax editor: within TGax D6.0, change the heading of subclause 26.11 as shown:***

**26.11 Rules for the setting of some TXVECTOR parameters for PPDUs that are transmitted by an HE STA (#24281)**

**End of proposed changes.**