IEEE P802.11  
Wireless LANs

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| |  |  |  |  |  | | --- | --- | --- | --- | --- | | LB244 CR various | | | | | | Date: 2019-11-13 | | | | | | Author(s): | | | | | | Name | Affiliation | Address | Phone | email | | Matthew Fischer | Broadcom |  |  | [Matthew.fischer@broadcom.com](mailto:Matthew.fischer@broadcom.com) | |  |  |  |  |  | |  |  |  |  |  | |  |  |  |  |  | |  |  |  |  |  | |  |  |  |  |  | |  |  |  |  |  | |

Abstract

Proposed language to address CIDs from LB244:

22073

22422

Changes are referenced to TGax D5.1.

**REVISION NOTES:**

**R0**:

Initial

**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**

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| 22073 | Li-Hsiang Sun | 26.11.7 | 427.12 | Can 4 LSB of INACTIVE\_SUBCHANNEL set to 0110 or 0101? Assuming the LSB (left-most) corresponds to the primary channel  If yes, then the BFRP for the sounding sequence cannot be punctured. The beamformer can only use primary 20MHz for sounding feedback | Allow BFRP to be sent in non-HT duplicate with INACTIVE\_SUBCHANNEL | Revise - TGax editor to make changes as shown in 11-19/2067r0 that are marked with CID 22703 which generally agree with the commenter’s suggestion. |
| 22422 | Matthew Fischer | 26.17.2 | 449.19 | It would be good to have some way to disable EDCA access by Tgax devices in the 6GHz band to allow most efficient use of this new spectrum as new 802.11 amendments are created. | Add a signaling mechanism that allows future devices to disable EDCA in TGax devices operating in channels in 6GHz, that is, those channels that are referenced to a channel starting frequency of 5.940 Ghz as indicated in the tables in Annex E | Revise - TGax editor to make changes as shown in 11-19/2067r0 that are marked with CID 22422 which generally agree with the commenter’s suggestion. |

**Discussion:**

**Proposed Changes to TGax D5.1:**

**CID 22703**

***TGax editor: within subclause 26.11.7 INACTIVE\_SUBCHANNELS and RU\_ALLOCATION of TGax D5.1, change the following text:***

**26.11.7 INACTIVE\_SUBCHANNELS and RU\_ALLOCATION**

The indication of which subchannels are punctured in an HE sounding NDP or in an HE NDP Announcement frame that is carried in a non-HT Duplicate PPDU is conveyed from the MAC to the PHY through the TXVECTOR parameters INACTIVE\_SUBCHANNELS and RU\_ALLOCATION. 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 or a BFRP Trigger frame. The parameter INACTIVE\_SUBCHANNELS shall not be present otherwise. The setting of the RU\_ALLOCATION parameter for other PPDUs is specified in 26.5.2.3.3 (TXVECTOR parameters for HE TB PPDU response to Trigger frame), 26.5.2.3.4 (TXVECTOR parameters for HE TB PPDU response to TRS Control subfield) and 26.5.7.2 (STA behavior). **(#22703)**

INACTIVE\_SUBCHANNELS is an eight-bit bitmap with an encoding that is the same as the encoding for the Disallowed Subchannel Bitmap subfield defined in 9.3.1.19 (VHT/HE NDP Announcement frame format). A bit in the INACTIVE\_SUBCHANNELS bitmap is set to 1 to indicate that no energy is transmitted on the corresponding subchannel for the corresponding PPDU. The RU\_ALLOCATION parameter is set to a value that corresponds to the puncturing signalled by the INACTIVE\_SUBCHANNELS bitmap.

A STA transmitting an HE sounding NDP may set the TXVECTOR parameter INACTIVE\_SUBCHANNELS to any value provided that the bit representing the primary 20 MHz channel is set to 0.

If an HE AP transmits an HE NDP Announcement frame or a BFRP Trigger frame in a PPDU with punctured channels, then the TXVECTOR parameters FORMAT, NON\_HT\_MODULATION, CH\_BANDWIDTH and INACTIVE\_- SUBCHANNELS shall be set as follows: **(#22703)**

— The TXVECTOR parameter FORMAT shall be set to NON\_HT

— The TXVECTOR parameter NON\_HT\_MODULATION shall be set to NON\_HT\_DUP\_OFDM.

— The INACTIVE\_SUBCHANNELS parameter may have any value, except that the bit in the bitmap representing the primary 20 MHz subchannel shall be set to 0.

— The CH\_BANDWIDTH parameter value shall be set to CBW80 if there are no bits set to 0 in the INACTIVE\_SUBCHANNELS bitmap that correspond to any 20 MHz subchannel of the secondary 80 MHz and at least one bit set to 0 that corresponds to any 20 MHz subchannel of the secondary 40 MHz

— The CH\_BANDWIDTH parameter value shall be set to CBW160 if there is at least one bit set to 0 in the INACTIVE\_SUBCHANNELS bitmap that corresponds to any 20 MHz subchannel of the secondary 80 MHz

**CID 22422**

***TGax editor: within subclause 9.4.2.28 EDCA Parameter Set element, change the following text:***

**9.4.2.28 EDCA Parameter Set element**

The value of the AC index (ACI) references the AC to which all parameters in this record correspond. The mapping between ACI and AC is defined in Table 9-154 (ACI-to-AC coding). The ACM (admission control mandatory) subfield indicates that admission control is required for the AC. If the ACM subfield is equal to 0, then there is no admission control for the corresponding AC. If the ACM subfield is set to 1, admission control has to be used prior to transmission using the access parameters specified for this AC. The AIFSN subfield indicates the number of slots after a SIFS a STA defers before either invoking a backoff or starting a transmission, except that the value 0 in the AIFSN field indicates that EDCA is disabled for the corresponding AC for STAs operating in the 6 GHz band.  **(#22422)**

**26.17.2 HE BSS operation in the 6 GHz band**

**26.17.2.1 General**

***TGax editor: within subclause 26.17.2.1 General, insert the the following text at the end of the subclause:***

A 6GHz non-AP HE STA associated with an AP shall disable EDCA for each AC for which the most recently received EDCA Parameter Set element from the associated AP includes a value of 0 in the AIFSN field for that AC. **(#22422)**

**End of proposed changes.**