IEEE P802.11
Wireless LANs

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| EHT TXVECTOR and RXVECTOR parameters |
| Date: 2023-05-16 |
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Abstract

This submission proposes amendment text to modify the EHT TXVECTOR and RXVECTOR parameters, changes are relative to Draft P802.11be\_D3.0 and partially based on IEEE802.11az-2022

Revisions:

1. Feedback from presentation on ‘1’ vs. ‘one’

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 TGbk Draft (i.e. they are instructions to the 802.11 editor on how to merge the text with the baseline documents).***

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

**The text preceded by “Discussion” is not part of the adopted changes.**

**Discussion:**

Making modifications to EHT TXVECTOR and RXVECTOR parameters similar to the changes made to the HE TXVECTOR and RXVECTOR parameters in IEEE802.11az-2022.

* + - * 1. **36.2.2 TXVECTOR and RXVECTOR parameters**
1. ***TGbk Editor: Change the existing rows for parameters “APEP\_LENGHT” and “PSDU\_LENGTH”. Insert new ros at end of Table 36-1 (but before the notes) as follows***

Table 36-1—TXVECTOR and RXVECTOR parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Parameter | Condition | Value | TXVECTOR | RXVECTOR |
| APEP\_LENGTH | FORMAT is EHT\_MU or EHT\_TB | Integer.If 0 and FORMAT is EHT\_MU, indicates an EHT sounding NDP or EHT Ranging NDP. If 0 and FORMAT is EHT\_TB, indicates an EHT TB Ranging NDP.Otherwise, indicates the number of octets in the range 1 to aPSDUMaxLength in the A-MPDU pre-EOF padding (see Table 36-70 (EHT PHY characteristics)) that is carried in the PSDU. | MU | N |
| FORMAT is PHY\_VER\_UNKNOWN | Not present. |
| Otherwise | See corresponding entry in Table 21-1 (TXVECTOR and RXVECTOR parameters) or Table 27-1 (TXVECTOR and RXVECTOR parameters). |
| PSDU\_LENGTH | FORMAT is EHT\_MU or EHT\_TB  | Indicates the number of octets in the PSDU in the range 0 to aPSDUMaxLength octets (see Table 36-70 (EHT PHY characteristics)). A value of 0 indicates an EHT sounding NDP, an EHT Ranging NDP or an EHT TB Ranging NDP. | N | Y |
| FORMAT is PHY\_VER\_UNKNOWN | Not present. |
| Otherwise | See corresponding entry in Table 21-1 (TXVECTOR and RXVECTOR parameters) or Table 27-1 (TXVECTOR and RXVECTOR parameters). |
|  | (…existing fields…) |
| NUM\_USERS | FORMAT is EHT\_MU and RANGING\_FLAG is present | If SECURE\_LTF\_FLAG is 0, set to 1. If SECURE\_LTF\_FLAG is 1, indicating the number of users of an EHT Ranging NDP with secure EHT-LTF. If NUM\_USERS is larger than 1, NUM\_STS, LTF\_REP and LTF\_KEY are arrays with number of entries equal to NUM\_USERS  | Y | N |
| FORMAT is EHT\_MU, or HE\_TB,and RANGING\_FLAG is not present | Not present. |
| Otherwise | See corresponding entry in Table 21-1 (TXVECTOR and RXVECTOR parameters) or Table 27-1 (TXVECTOR and RXVECTOR parameters). |
| (…existing fields…) |
| TIME\_OF\_DEPARTURE\_REQUESTED | Format is EHT\_MU orEHT\_TB and RANGING\_FLAG is present | Enumerated type:True indicates that the MAC entity requests that the PHY entity measures and reports time of departure parameters corresponding to the time when the first frame energy is sent by the transmitting port. False indicates that the MAC entity requests that the PHY entity neither measures nor reports time of departure parameters. | O | N |
| Format is EHT\_MU orEHT\_TB and RANGING\_FLAG is not present  | Not present |
| Otherwise | See corresponding entry in Table 21-1 (TXVECTOR and RXVECTOR parameters) or Table 27-1 (TXVECTOR and RXVECTOR parameters). |
| LTF\_KEY | FORMAT is either EHT\_MU or EHT\_TB and RANGING\_FLAG is present and SECURE\_LTF\_FLAG is 1 | Contains the *rsta-ltf-key* or ista-ltf-key (See [11.21.6.4.5.4](#H11o21o6o4o5o4)) when the secure EHT-LTFs are used (see [11.21.6.4.5](#H11o21o6o4o5)).   | Y | N |
| Otherwise | Not present  |
| LTF\_IV | FORMAT is either EHT\_MU or EHT\_TB and RANGING\_FLAG is present and SECURE\_LTF\_FLAG is 1 | Contains the *ltf-iv* (See 11.21.6.4.5.4) used to generate the secure EHT-LTFs | Y | N |
| Otherwise | Not present  |
| LTF\_REP | FORMAT is either EHT\_MU or EHT\_TB and RANGING\_FLAG is present  | Indicate the number of EHT-LTF repetitions.  | Y | N |
| Otherwise | Not present  |
| RANGING\_FLAG  | FORMAT is EHT\_MU | If present, indicates the PPDU is an EHT Ranging NDP. Not present otherwise. | O | N |
| FORMAT is EHT\_TB | If present, indicates the PPDU is an EHT TB Ranging NDP.Not present otherwise. | O | N |
| Otherwise | Not present. | N | N |
| SECURE\_LTF\_FLAG | FORMAT is either EHT\_MU or EHT\_TB and the RANGING\_FLAG is present. | Set to 1 when the EHT Ranging NDP or EHT TB Ranging NDP will use secure EHT-LTF.Set to 0 otherwise. | Y | N |
| Otherwise | Not present.  |
| TX\_WINDOW\_FLAG | FORMAT is either EHT\_MU or EHT\_TB and RANGING\_FLAG is present and SECURE\_LTF\_FLAG is 1 | Set to 1 when the secure EHT-LTF of an EHT Ranging NDP or EHT TB Ranging NDP will use the optional frequency domain Tx window.Set to 0 otherwise. | Y | N |
| Otherwise | Not present.  |