IEEE P802.11  
Wireless LANs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| LB279 Comment Resolution EHT MAC/PHY Part 6 | | | | |
| Date: 2024-03-11 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | email |
| Christian Berger | NXP | 350 Holger Way, San Jose, CA |  | [christian.berger@nxp.com](mailto:christian.berger@nxp.com) |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

Abstract

This submission proposes to address the following CID 1037, 1094, 1005, and 1088, changes are relative to Draft P802.11be\_D4.0, Draft P802.11REVme\_D4.2, and Draft P802.11bk D1.0.

Revisions:

1. Incorporate changes during presentation.

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 TGbk 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 TGbk 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.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **CID** | **P.L** | **Clause** | **Comment** | **Proposed Change** | **Resolution** |
| **1037** | 15.12 | 3.2 | Modify definition of HE-LTF repetitions | Change as follows "LTF repetitions: Multiple transmissions of HE-LTF or EHT-LTF symbols in an HE Ranging NDP, HE TB Ranging NDP, EHT Ranging NDP, or EHT TB Ranging NDP, where an LTF repetition value of 1 indicates no repetitions, and, for example, a value of 2 or 3 would indicate twice or three times as many HE-LTF or EHT-LTF symbols, respectively" | **Accepted**  Note to TGbk editor:  The “HE-LTF Repetitions” definition is in 11az/11me baseline standard. |
| **1094** | 15.23 | 3.2 | REVme D4.1 P 219L16 defines HE-LTF repetitions, but 11bk D1.0 lacks a similar definition for EHT-LTF repetitions in Subclause D3.2 | "Define EHT-LTF repetitions in 11bk D1.0 Subclause D3.2 as follows:  EHT-LTF repetitions: Multiple transmissions of EHT-LTF symbols in an EHT Ranging NDP or EHT TB Ranging NDP, where an EHT-LTF repetition value of 1 indicates no repetitions, and, for example, a value of 2 or 3 would indicate twice or three times as many EHT-LTF symbols, respectively." | **Revised**  This CID is resolved by CID 1037.  TGbk editor, make the changes identified in 11/24-0574r1 for CID 1037  <https://mentor.ieee.org/802.11/dcn/24/11-24-0574-01-00bk-lb279-comment-resolution-eht-mac-phy-part-6.docx> |
| **1005** | 86.36 | 36.3.4.1 | The number of EHT-LTF symbols as indicated in the SIG of an EHT PPDU may be less than the actual number of EHT LTFs because of the LTF\_REP>1. Thus, the T\_EHT-PREAMBLE of equation (36-97) of TGbe D4.0 needs modification. | As in comment. One solution would be to add a dash to this list outlining impact of actual number of LTFs to T\_EHT-PREAMBLE computation. | **Rejected**  The equation in (36-97) still holds, as N\_{EHT-LTF} definition according to Table 36-18 is “The number of OFDM symbols in the EHT-LTF field”.  The total number EHT OFDM symbols can be calculated based on the information given in the LTFVECTOR of the intended 11bk receiver.  For unintended STAs the receiver has other means to discard the NDP without requiring signalling in the SIG field. |
| **1088** | 86.21 | 36.3.4.1 | "When the TXVECTOR parameter NUM\_USERS is greater than 1, the TXVECTOR parameter NUM\_STS[1] is used to set the NSS subfield and the Number of EHT-LTF Symbols subfield within the Common field of the EHT-SIG, as defined ..." | I don't understand how this can work. When NUM\_USERS is greater than 1, the NDP has multiple user blocks and is incompatible with the EHT NDP. This can not be communicated in EHT\_SIG. Should the receiver ignore the values of NSS subfield and the Number of EHT-LTF Symbols? | **Revised**  TGbk editor, make the changes identified in document  <https://mentor.ieee.org/802.11/dcn/24/11-24-0574-01-00bk-lb279-comment-resolution-eht-mac-phy-part-6.docx> |

1. ***Discussion:***
2. When NUM\_USERS is greater than 1, the EHT Ranging NDP has multiple user blocks. Therefore the EHT-SIG can not fully convey the NSS or Number of EHT-LTF for each user block. We then set the EHT-SIG based on the first user block.

36.3.19a.1 EHT Ranging NDP

1. ***TGbk Editor: Change 6th bullet point on page 86, Clause 36.3.19a.1 EHT Ranging NDP (p.86, l.21 in 11bk D1.0) as follows:***

* When the TXVECTOR parameter NUM\_USERS is equal to 1, the TXVECTOR parameter NUM\_STS is used to set the NSS subfield and the Number of EHT-LTF Symbols subfield within the Common field of the EHT-SIG, as defined in Table 36-37 (Common field for the EHT sounding NDP and for the EHT Ranging NDP). The Number of EHT-LTF Symbols subfield is set according to Table 21-13 (Number of VHT-LTFs required for different numbers of space-time streams). Otherwise, when the TXVECTOR parameter NUM\_USERS is greater than 1 and the TXVECTOR parameter NUM\_STS is an array, NUM\_STS[1], i.e., the first element in the array, is used instead.