IEEE P802.11
Wireless LANs

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| LB271 CR for 9.2.4.7.1 TRS Control field |
| Date: March 14, 2023 |
| Author(s): |
| Name | Affiliation | Address | Phone | email |
| Jason Yuchen Guo | Huawei |  |  | guoyuchen@huawei.com |
| Ming Gan | Huawei |  |  |  |
| Yunbo Li | Huawei |  |  |  |
| Guogang Huang | Huawei |  |  |  |
| Mengyao Ma | Huawei |  |  |  |
| Hongjia Su | Huawei |  |  |  |
| Yousi Lin | Huawei |  |  |  |

 Abstract

This submission proposes resolutions for following 8 CIDs received for TGbe LB271:

17306 17381 17382 17383 17384 17385 17386 18052

Revisions:

* Rev 0: Initial version of the document.
* Rev 1: add green tags.

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 TGbe Draft. This introduction is not part of the adopted material.

***Editing instructions formatted like this are intended to be copied into the TGbe Draft (i.e. they are instructions to the 802.11 editor on how to merge the text with the baseline documents).***

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

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| **CID** | **Commenter** | **Page** | **Clause** | **Comment** | **Proposed Change** | **Resolution** |
| 17306 | Alfred Asterjadhi | 141.07 | 9.2.4.7.1 | The definition of the RU Allocation field does not read well. Please re-phrase. | As in comment. | Revised – Agree in principle with the commenter. TGbe Editor:Please implement the changes in this document tagged as #17306. |
| 17381 | Brian Hart | 140.54 | 9.2.4.7.1 | "See 26.5.2.4 (A-MPDU contents in an HE TB PPDU) for details on allowed content in an A-MPDU carried in an HE TB PPDU and in an EHT TB PPDU." BUT this draft doesn't modify 26.5.2.4 and the title of 26.5.2.4 excludes EHT TB PPDU | Generalize 26.5.2.4 to include the EHT TB PPDU. OR ready/modify/write this section into clause 35(!?) | Revised – TGbe Editor:Please implement the changes in this document tagged as #17381. |
| 17382 | Brian Hart | 141.01 | 9.2.4.7.1 | NOTEs like these are dangerous at best and misleading at worst: they imply a mandatory behavior without using normative language | Include, in the note, a xref to the normative language implied by the note. Add normative language in the appropriate section if missing. | Revised – Agree in principle with the commenter. Corresponding normative texts and Xref is added.TGbe Editor:Please implement the changes in this document tagged as #17382. |
| 17383 | Brian Hart | 141.05 | 9.2.4.7.1 | Missing article | "or the EHT TB PPDU" | Revised – Agree with the commenter. TGbe Editor:Please implement the changes in this document tagged as #17383. |
| 17384 | Brian Hart | 141.12 | 9.2.4.7.1 | Re "PS160 bit, we talk about fields not bits | Rename PS160 bit to PS160 field, here and everywhere (e.g., Table 35-2 should be "PS160 field for ..."; P594L52 & L53, P678L26&L37, P684L7) | Revised – Agree in principle with the commenter. TGbe Editor:Please implement the changes in this document tagged as #17384. |
| 17385 | Brian Hart | 141.36 | 9.2.4.7.1 | TB PPDU is not a defined term or acronym | Define TB PPDU as HE TB PPDU or EHT TB PPDU | Revised – Agree with the commenter. TGbe Editor:Please implement the changes in this document tagged as #17385. |
| 17386 | Brian Hart | 141.53 | 9.2.4.7.1 | Missing "and" before last item in list | it is set to 2 for EHT-MCS 3, and it is set to 3 for EHT-MCS 15. | Accepted. |
| 18052 | Albert Petrick | 141.45 | 9.2.4.7.1 | In NOTE 2: Text reads: ....transmit power needed to achieve the expected receive signal power due to hardware or regulatory limits.... | Further clarify: change "hardware" to "hardware implementation" | Revised – Agree in principle with the commenter. In the baseline (27.3.15.2 Power pre-correction), the phrase “hardware capability” is used, we inherit that phrase here.TGbe Editor:Please implement the changes in this document tagged as #18052. |

**9.2.4.7.1 TRS Control**

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The Control Information subfield in a TRS Control subfield contains triggered response scheduling (TRS)

information for soliciting an HE TB PPDU that follows an HE MU PPDU, HE SU PPDU, or HE ER SU

PPDU carrying the Control subfield (see 26.5.2.2 (Rules for soliciting UL MU frames))or for soliciting an

EHT TB PPDU that follows an EHT MU PPDU carrying the Control subfield (see 35.5.2.2 (Rules for

soliciting UL MU frames). See 26.5.2.4 (A-MPDU contents in an HE TB PPDU) (#17381)and 35.5.2.3.1 (General) for details on allowed

content in an A-MPDU carried in an HE TB PPDUand in an EHT TB PPDU. The format of the subfield is

shown in Figure 9-26 (Control Information subfield format in a TRS Control subfield).

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NOTE 1—A TRS Control subfield is not included in a PPDU that is neither an HE PPDU nor an EHT PPDU (#17382) as described in 35.5.2.2.4 (Allowed settings of the Trigger frame fields and TRS Control subfield).

The UL Data Symbols subfield indicates the number of OFDM symbols in the Data field of either the HE TB PPDU response or (#17383)the EHT TB PPDU response and is set to the number of OFDM symbols minus 1.

(#17306)(#17306)If the TRS Control subfield is carried in an HE MU PPDU, HE SU PPDU or HE ER SU PPDU then the RU Allocation subfield indicates the RU assigned for transmitting the HE TB PPDU response with the encoding defined in 9.3.1.22.4 (HE variant User Info field). If the TRS Control subfield is carried in an EHT MU PPDU then the RU Allocation subfield, together with the PS160 subfield, determined according to Table 35-2 (PS160 for RU allocation in EHT TRS), indicate the RU or MRU assigned for transmitting the EHT TB PPDU response, with the encoding defined in 9.3.1.22.5 (EHT variant User Info field).

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NOTE 2—A STA might transmit the HE TB PPDU or EHT TB PPDU at a transmit power that is below the transmit power needed to achieve the expected receive signal power due to hardware (#18052)capability or regulatory limits (see 27.3.15.2 (Power pre-correction) for an HE TB PPDU and 36.3.16.2 (Power pre-correction) for an EHT TB PPDU).

**35.5.2.3.3 TXVECTOR parameters for EHT TB PPDU response to TRS Control subfield**

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— The RU\_ALLOCATION parameter is set to the value indicated by the RU Allocation subfield of the
TRS Control subfield and a PS160 (#17384)subfieldwhich is determined based on the RU allocation in the EHT
MU PPDU carrying the TRS control subfield according to Table 35-2 (PS160 for RU allocation in
EHT TRS).

*Note to the Editor: please use “subfield” or “field” based on the Editor’s guideline*

**(#17384)Table 35-2 – PS160 subfield for RU Allocation in EHT TRS**

|  |  |
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| **Input** | **Output** |
| **RU Size of the RU/MRU indicated by the RU Allocation subfield in the TRS control subfield** | **The location of the 160MHz channel with more data tones of the RU/MRU that carries the frame with the TRS control subfield**  | **PS160 subfield** |
| 2×996+484-tone | Low 160MHz | 0 |
| 2×996+484-tone | High 160MHz | 1 |
| 3×996-tone or 3×996+484-tone | Low 160MHz | 1 |
| 3×996-tone or 3×996+484-tone | High 160MHz | 0 |
| Smaller than or equal to 2×996-tone | Primary 160MHz | 0 |
| Smaller than or equal to 2×996-tone | Secondary 160MHz | 1 |

**35.5.2.2.4 Allowed settings of the Trigger frame fields and TRS Control subfield**

*TGbe Editor: please add the following sentence at the end of this subclause*

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(#17382)An AP shall not send a PPDU that is neither an HE PPDU nor an EHT PPDU which carries a TRS Control subfield.

**3.2 Definitions specific to IEEE 802.11**

*TGbe Editor: please add the following sentence at the end of this subclause*

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**(#17385)trigger based (TB) physical layer (PHY) protocol data unit (PPDU):** A PPDU transmitted with HE TB PPDU format or EHT TB PPDU format