###  **IEEE P802.11Wireless LANs**

|  |
| --- |
| LB271 CR for 9.3.1.22.3 |
| Date: 2023-03-30 |
| Author(s): |
| Name | Affiliation | Address | Phone | Email |
| Yanjun Sun | Qualcomm |  |  |  |
| Alfred Asterjadhi |  |  |  |  |
| Steve Shellhammer |  |  |  |  |
| George Cherian |  |  |  |  |
| Abhishek Patil |  |  |  |  |
| Youhan Kim |  |  |  |  |
| Bin Tian |  |  |  |  |
| Duncan Ho |  |  |  |  |
| Gaurang Naik |  |  |  |  |
| Abdel Karim Ajami |  |  |  |  |
| Brian Hart | Cisco |  |  |  |
| Ross Yu | Huawei |  |  |  |
|  |  |  |  |  |

**Abstract**

This submission proposes resolutions for the following 11 CIDs for TGbe LB271:

* 17903,17437,17438,17439,17440,17441,17442,16129,17443,17444,17445

**Revisions:**

* Rev 0: Initial version of the document.

***TGbe editor: Please note Baseline is 11be D3.0, 11me D2.1***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| CID | Commenter | Clause | Page | Comment | Proposed Change | Resolution |
| 17903 | Kazuto Yano | 9.3.1.22.3 | 178.30 | There is a unnecessary closing parenthesis at the end of the title of subclause 9.3.1.22.3. | Please remove it. | RevisedDeleted the floating ).Tgbe editor please implement changes as shown in doc 11-23/0517r0 tagged as # |
| 17437 | Brian Hart | 9.3.1.22.2 | 178.32 | Spurious articles | Change to "The Special User Info field is a User Info field that does not carry user specific information but carries extended common information not provided in the Common Info field." | RevisedAgree with the commenter in principleTgbe editor please implement changes as shown in doc 11-23/0517r0 tagged as #17437 |
| 17438 | Brian Hart | 9.3.1.22.3 | 178.45 | 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 (e.g. the clause 9 reference for the MU-BAR frame format) | RevisedAgree with the commenter in principle and added a reference to MU-BARTgbe editor please implement changes as shown in doc 11-23/0517r0 tagged as #17438 |
| 17439 | Brian Hart | 9.3.1.22.3 | 178.48 | 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 (e.g. a clause 9 reference) | RevisedAgree with the commenter in principle. Deleted the NOTE and added normative text.Tgbe editor please implement changes as shown in doc 11-23/0517r0 tagged as #17439 |
| 17440 | Brian Hart | 9.3.1.22.3 | 179.19 | "Other" is redundant given 1-7 is all other values. Also "from" is bad style. | Try "The values 1 to 7 are reserved." | RevisedAgree with the commenter in principleTgbe editor please implement changes as shown in doc 11-23/0517r0 tagged as #17440 |
| 17441 | Brian Hart | 9.3.1.22.3 | 179.23 | What is this "addressed STA"? AFAIK could be sent to multiple STAs. And AID12 is regarded as an identifier not an address. Finally we have the general "solicited TB PPDU" then the narrow "EHT TB PPDU", which seems inconsistent. | Since we're talking about the UL BW Ext subfield, and only an EHT STA can transmit an EHT PPDU, then try "The UL Bandwidth Extension subfield, together with the UL BW subfield in the Common Info field, indicates the bandwidth of the solicited EHT TB PPDU (i.e., the bandwidth in the U-SIG field of the EHT TB PPDU)." If we also want to talk about HE TB PPDU BW, then add a different sentence (And maybe some of that belongs outside clause 9). | RevisedAgree with the commenter in principleTgbe editor please implement changes as shown in doc 11-23/0517r0 tagged as #17441 |
| 17442 | Brian Hart | 9.3.1.22.3 | 180.02 | "which" seems to refer to "EHT TB PPDU". Also this treats "The EHT Spatial Reuse n subfield" as both singular and plural. | Try "The nth EHT Spatial Reuse n subfield, 1<=n<=2, carries the value to be included in the nth SpatialReuse n subfield in the U-SIG field of the EHT TB PPDU. The EHT Spatial Reuse n subfields are defined in Table 36-31 (U-SIG field of an EHT TB PPDU)." | RevisedAgree with the commenter in principleTgbe editor please implement changes as shown in doc 11-23/0517r0 tagged as #17442 |
| 16129 | Jian Yu | 9.3.1.22.3 | 180.16 | Typo, change "," to "." | As in comment | RevisedTgbe editor please implement changes as shown in doc 11-23/0517r0 tagged as #16129 |
| 17443 | Brian Hart | 9.3.1.22.3 | 180.35 | "Receiving STA action" and "Copy ..." are procedures that don't belong in clause 9. Reword! | Try "Corresponding field in U-SIG in elicited EHT TB PPDU" as a column heading then just "Disregard subfield (B20-B25) in U-SIG-1 field" and similar for the following two rows | RevisedAgree with the commenter in principle. Added reference to the procedural text.Tgbe editor please implement changes as shown in doc 11-23/0517r0 tagged as #17443 |
| 17444 | Brian Hart | 9.3.1.22.3 | 180.35 | "Subfields" is wrong number since each row contains a single subfield | Change to "Subfield in the Special ..." | RevisedAgree with the commenter in principleTgbe editor please implement changes as shown in doc 11-23/0517r0 tagged as #17444 |
| 17445 | Brian Hart | 9.3.1.22.3 | 180.59 | Missing article | "The Trigger Dependent User Info subfield" | RevisedTgbe editor please implement changes as shown in doc 11-23/0517r0 tagged as #17445 |

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.***

***Tgbe editor: Please update 9.3.1.22.3 as follows (track change enabled):***

* + - * 1. **Special User Info field**(#17903)

The Special User Info field is a User Info field that does not carry user specific information but carries extended common information not provided in the Common Info field.(#17437)

If the Special User Info field is included in the Trigger frame, then the Special User Info Field Flag subfield of the EHT variant Common Info field is set to 0, otherwise it is set to 1.

The Special User Info field is identified by an AID12 value of 2007 and is optionally present in a Trigger frame that is generated by an EHT AP.

NOTE 1—An EHT AP does not use the value 2007 as an AID for any STA associated to it (see 35.15.1 (Basic EHT BSS operation)).

NOTE 2— The length of the Special User Info field is equal to the length of the other User Info fields present in the same Trigger frame, except when the Trigger frame is an MU-BAR Trigger frame (see 9.3.1.22.8 (MU-BAR Trigger frame format))..(#17438)

NOTE 3—The Special User Info field is not included in the Trigger frame unless the Trigger frame includes one or more EHT variant User Info fields see 35.5.2.1 (General). (#17439)

The Special User Info field, if present, is located immediately after the Common Info field of the Trigger frame and carries information for the U-SIG field of a solicited EHT TB PPDU.

The format of the Special User Info field is defined in [Figure 9-88c (Special User Info field format)](#bookmark49).

B0 B11 B12 B14 B15 B16 B17 B20 B21 B24 B25 B36 B37 B39

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| AID12 | PHYVersion Identifier | ULBandwidth Extension | EHT Spatial Reuse 1 | EHT Spatial Reuse 2 | U-SIGDisregard And Validate | Reserved | Trigger Dependent User Info |

Bits: 12 3 2 4 4 12 3 variable

**Figure 9-88c—Special User Info field format**

The PHY Version Identifier subfield indicates the PHY version of the solicited TB PPDU that is not an HE TB PPDU. The PHY Version Identifier subfield is set to 0 for EHT. (#17440)The values from 1 to 7 are reserved.

The UL Bandwidth Extension subfield, together with the UL BW subfield in the Common Info field, indi- cates the bandwidth of the solicited TB PPDU (#17441) (i.e., the bandwidth in the U- SIG field of the EHT TB PPDU). The UL Bandwidth Extension subfield is defined in [Table 9-50a (UL](#bookmark50) [Bandwidth Extension subfield encoding)](#bookmark50).

**Table 9-50a—UL Bandwidth Extension subfield encoding**

|  |  |  |  |
| --- | --- | --- | --- |
| **UL BW** | **Bandwidth for HE TB PPDU (MHz)** | **UL****Bandwidth Extension** | **Bandwidth for EHT TB PPDU (MHz)** |
| 0 | 20 | 0 | 20 |
| 0 | 20 | 1 | Reserved |
| 0 | 20 | 2 | Reserved |
| 0 | 20 | 3 | Reserved |
| 1 | 40 | 0 | 40 |
| 1 | 40 | 1 | Reserved |
| 1 | 40 | 2 | Reserved |
| 1 | 40 | 3 | Reserved |
| 2 | 80 | 0 | 80 |
| 2 | 80 | 1 | Reserved |
| 2 | 80 | 2 | Reserved |
| 2 | 80 | 3 | Reserved |
| 3 | 160 | 0 | Reserved |
| 3 | 160 | 1 | 160 |
| 3 | 160 | 2 | 320 (for 320 MHz-1 defined in 36.3.24.2 (Channel- ization for 320 MHz channel)) |
| 3 | 160 | 3 | 320 (for 320 MHz-2 defined in 36.3.24.2 (Channel- ization for 320 MHz channel)) |

The EHT Spatial Reuse *n* subfield, 1  *n*  2 , carries the values to be included in the corresponding Spatial Reuse *n* subfield in the U-SIG field of the EHT TB PPDU. The values for the EHT Spatial Reuse *n* subfields (#17442) are defined in Table 36-31 (U-SIG field of an EHT TB PPDU).

The U-SIG Disregard And Validate subfield carries the values to be included in the Disregard and Validate subfields of the U-SIG field of the solicited EHT TB PPDUs. The U-SIG Disregard And Validate subfield is further divided into three subfields as shown in [Figure 9-88d (U-SIG Disregard And Validate subfield for-](#bookmark51) [mat)](#bookmark51). The mapping from the subfields in the U-SIG Disregard And Validate subfield to subfields in the U- SIG field for an EHT TB PPDU is defined in [Table 9-50b (Mapping from Special User Info field to U-SIG-](#bookmark52) [1 and U-SIG-2 fields in the EHT TB PPDU)](#bookmark52). The Validate In U-SIG-2 subfield is set to 1. The values of the Disregard In U-SIG-1 and Disregard In U-SIG-2 subfields are defined in 35.5.2.2.4 (Allowed settings of the Trigger frame fields and TRS Control subfield). (#16129)

B25 B30 B31 B32 B36

|  |  |  |
| --- | --- | --- |
| Disregard In U-SIG-1 | Validate In U-SIG-2 | Disregard In U-SIG-2 |

Bits: 6 1 5

**Figure 9-88d—U-SIG Disregard And Validate subfield format**

**Table 9-50b—Mapping from Special User Info field to U-SIG-1 and U-SIG-2 fields in the EHT TB PPDU**(#17443,#17444)

|  |  |
| --- | --- |
| **Subfield in the Special User Info field** | **Corresponding subfield of U-SIG field in elicited EHT TB PPDU (see 35.5.2.3.2 (TXVECTOR parameters for EHT TB PPDU response to Trigger frame))**  |
| Disregard In U-SIG-1 (B25–B30) | Disregard subfield of U-SIG-1 field (B20–B25 of U-SIG-1 field) |
| Validate In U-SIG-2 (B31) | Validate subfield of U-SIG-2 field (B2 of U-SIG-2 field) |
| Disregard In U-SIG-2 (B32–B36) | Disregard subfield of U-SIG-2 field (B11–B15 of U-SIG-2 field) |

The presence and length of the Trigger Dependent User Info subfield in the Special User Info field depends on the variant of the Trigger frame. When present, the length and the subfields of the Trigger Dependent User Info subfield are as follows:

* The length is one octet and all the subfields are reserved in a Basic Trigger frame and in a BFRP Trigger frame.
* The length is four octets and all the subfields, except for the BAR Type subfield, are reserved in an MU-BAR Trigger frame. The BAR Type subfield is set to indicate a Compressed BAR in an MU BAR Trigger frame.

(#17445) The Trigger Dependent User Info subfield is not present in the Special User Info field if the Special User Info field is contained in other Trigger frame variants.

**35.5.2 EHT UL MU operation**

**35.5.2.1 General**

***TGbe editor: Please add the following paragraph to the end of this subclause (track change enabled):***

(#17439)An EHT AP shall not include the Special User Info field in a Trigger frame if the Trigger frame does not include any EHT variant User Info field.