IEEE P802.11
Wireless LANs

|  |
| --- |
| **LB271 CR for 9.3.1.22.5** |
| **Date:** 2023-05-01 |
| **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 |  |  |  |  |
|  |  |  |  |  |

 Abstract

This submission proposes resolutions for following CID received for TGbe LB271:

* 15503, 15029, 17460, 15210, 15656, 15712, 17451, 17452, 17453, 17454,
* 17455, 17456, 17457, 17458, 17459, 17461.

**Revisions:**

* Rev 0: Initial version of the document.

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.***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **CID** | **Commenter** | **Clause** | **Page** | **Comment** | **Proposed Change** | **Resolution** |
| 15210 | Eunsung Park | 9.3.1.22.5 | 193.16 | Add detailed description for Statring Spatial Stream and Number Of Spatial Streams subfields. | As in comment | Revised –Proposed resolution accounts for the suggested changes.**TGbe editor: please implement changes as shown in 11-23/519r1 tagged 15210.** |
| 15029 | Xiangxin Gu | 9.3.1.22.5 | 193.10 | Since 11be supports maximum 8 SS, it's better to use 3 bits for starting SS and 3 bits for number of SS to get most flexibility. Same change for EHT SIG. | as the comment | Revised –To be consistent with the rest of the 11be draft, we have added description that values above 7 are reserved, which is equivalent to the proposal. TGbe editor: please implement changes as shown in 11-23/519r1 tagged 15210, **same as above** |
| 17460 | Brian Hart | 9.3.1.22.5 | 193.09 | No description is provided for Starting Spatial Stream or Number Of Spatial Streams in Fig 9-92b | Add descripion for these parameters (e.g. read/modify/write from 9.3.1.22.4) | Revised –Proposed resolution accounts for the suggested changes.TGbe editor: please implement changes as shown in 11-23/519r1 tagged 15210, **same as above** |
| 15503 | Chaoming Luo | 9.3.1.22.4 | 193.12 | Since EHT supports up to only 8 SS, it's better to change Starting Spatial Stream to 3 bits and make one bit to be reserved. | As in comment | Revised –To be consistent with the rest of the 11be draft, we have added description that values above 7 are reserved, which is equivalent to the proposal. TGbe editor: please implement changes as shown in 11-23/519r1 tagged 15029, **same as above** |
| 15656 | Geonjung Ko | 9.3.1.22.5 | 185.47 | The description of the AID12 subfield for the EHT variant User Info field is missing. | Please add text for the AID12 subfield in the EHT variant User Info field. | Revised –Agree in principle with the comment. Proposed resolution adds a sentence pointing out to Table 9-51 which has the encoding defined for AID12.**TGbe editor: please implement changes as shown in 11-23/519r1 tagged 15656.** |
| 15712 | Yapu Li | 9.3.1.22.5 | 193.33 | If the RA-RU Information subfield is reserved in the EHT variant User Info field, a HE trigger frame cannot be satisfied some cases. For example, AP solicits a 320MHz TB PPDU and allocates multiple available MRUs to STAs for free contention.So, it's better to enable UORA in EHT. | Enable RA-RU/MRU information subfield in the EHT variant User Info field. | Revised –This topic has been intensively discussed in the group. A brief recap: using UORA in 320 MHz is not spectrally efficient and introduces unfairness w.r.t. HE STAs. The solutions to these problems are non-trivial and past SP results showed that majority of the group prefer not to enable such expansion.As a resolution, we propose to disallow 0 or 2045 to be used as a AID12 value.**TGbe editor: please implement changes as shown in 11-23/519r1 tagged 15712.** |
| 17451 | Brian Hart | 9.3.1.22.5 | 185.61 | Spurious article. | Reads better if "identifies the size and location" (remove second "the") | Accepted |
| 17452 | Brian Hart | 9.3.1.22.5 | 185.62 | Missing article | Try "and \*the\* PS160 subfield in the EHT variant User Info field" | Accepted |
| 17453 | Brian Hart | 9.3.1.22.5 | 185.62 | Wrong number. "A along with B" is a singular boun (surprising but apparently true, and this convention is applied elsewhere in this draft) | Try "The mapping of B7-B1 of the RU Allocation subfield along with the settings of B0 of the RU Allocation subfield and PS160 subfield in the EHT variant User Info field \*is\* defined ..." | Accepted |
| 17454 | Brian Hart | 9.3.1.22.5 | 186.06 | Missing article | "Encoding of \*the\* PS160 and RU Alloc ..." | Accepted |
| 17455 | Brian Hart | 9.3.1.22.5 | 187.14 | X1 is used in table but not really explained in relation to table | Where is X1 obtained from? Add to intro at P185L61-P186L2 | Revised –Agree in principle with the comment. Proposed resolution adds that X1 is obtained from Table 9-53b, along with N. **TGbe editor: please implement changes as shown in 11-23/519r1 tagged 17455.** |
| 17456 | Brian Hart | 9.3.1.22.5 | 190.44 | "Trigger Frame RU Allocation" is undefined | Add a xref instead of this name | Revised –Agree in principle with the comment. Proposed resolution removes the equation and specifies that value N is obtained from Table 9-53b and also indicates that it can be calculated as 2xX1 +X0.**TGbe editor: please implement changes as shown in 11-23/519r1 tagged 17456.** |
| 17457 | Brian Hart | 9.3.1.22.5 | 191.53 | Missing articles | Try "The values of \*the\* PS160 subfield and B0 of \*the\* RU Allocation subfield". Dfitto "the PS160 subfield" at P191L60 | Accepted |
| 17458 | Brian Hart | 9.3.1.22.5 | 190.55 | The meaning of the PS160 field is not described for a 320 MHz PPDU | Describe PS160 for a 320MHz PPDU | Rejected –PS160 can be either 0 or 1 in this case and it is explicitly shown in Figure 9-53b itself and is explained in NOTE3 of Figure 9-53a. Hence, there is no need to describe in this paragraph.  |
| 17459 | Brian Hart | 9.3.1.22.5 | 192.58 | "Cannot" is not normative, yet ther seems to be some normative intent here for EHJT-MCS15/14. | Add a xref to the associated normative text. I don't find it at 36.3.8 or its referenced sections. | Revised –Equivalent normative requirements are already present in 35.5.2.1. Proposed resolution is to simply remove these two sentences and point to the general subclause 35.5.2 for the setting of this field.**TGbe editor: please implement changes as shown in 11-23/519r1 tagged 17459.** |
|  |  |  |  |  |  |  |
| 17461 | Brian Hart | 9.3.1.22.5 | 193.23 | "Tone" is singular, missing article x3 | "smaller than or equal to 2x996 tones" or "smaller than or equal to a 2x996 tone RU"; also "\*the\* PS160 subfield" ... "that \*the\* RU or MRU alloc ..." x2 | Accepted |

* + - * 1. **EHT variant User Info field**

***Insert the following paragraphs:***

The EHT variant User Info field is defined in [Figure 9-92a (EHT variant User Info field format)](#bookmark61) for all Trig- ger frame variants except the NFRP Trigger frame and the MU-RTS TXS Trigger frame.

B0 B11 B12 B19 B20 B21 B24 B25 B26 B31 B32 B38 B39

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| AID12 | RUAllocation | UL FECCoding Type | UL EHT- MCS | Reser ved | SS Allocation/ RA-RUInformation | UL Target Receive Power | PS160 | Trigger Dependent User Info |

Bits: 12 8 1 4 1 6 7 1 variable

**Figure 9-92a—EHT variant User Info field format**

The AID12 subfield of an EHT variant User Info field is encoded as defined in Table 9-51 (AID12 subfield encoding) and has a value between 1 and 2006*[#15656, 15712]*.

The RU Allocation subfield in an EHT variant User Info field in a Trigger frame that is not an MU-RTS Trigger frame, along with the UL BW subfield in the Common Info field, the UL BW Extension subfield in the Special User Info field, and the PS160 subfield in the EHT variant User Info field, identifies the size and *[#17451]*location of an RU or MRU. The mapping of B7–B1 of the RU Allocation subfield along with the set- tings of B0 of the RU Allocation subfield and the PS160*[#17452]* subfield in the EHT variant User Info field is*[#17453]* defined in [Table 9-53a (Encoding of PS160 and RU Allocation subfields in an EHT variant User Info field)](#bookmark62), where the bandwidth is obtained from the combination of the UL BW subfield and UL Bandwidth Extension subfields as defined in [Table 9-50a (UL Bandwidth Extension subfield encoding)](#bookmark50), and *X1* and *N* are obtained from [Table 9-53b (Lookup table for X1 and N)](#bookmark63).*[#17455, 17456]*

**Table 9-53a—Encoding of the PS160***[#17454]* **and RU Allocation subfields in an EHT variant User Info field**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **PS160****subfield** | **B0 of the RU****Allocation subfield** | **B7–B1 of****the RU Allocation subfield** | **Bandwidth (MHz)** | **RU or MRU size** | **RU or MRU index** | **PHY RU****or MRU index** |
| 0–3:80 MHz frequency subblock where the RU is located (See NOTE 1) | 0–8 | 20, 40, 80,160, or 320 | 26 | RU1 to RU9, respectively | 37** + RUindex |
| 9–17 | 40, 80, 160,or 320 | RU10 to RU18,respectively |
| 18 | 80, 160, or320 | Reserved |
| 19–36 | 80, 160, or320 | RU20 to RU37respectively |
| 37–40 | 20, 40, 80,160, or 320 | 52 | RU1 to RU4, respectively | 16** + RUindex |
| 41–44 | 40, 80, 160,or 320 | RU5 to RU8, respectively |
| 45–52 | 80, 160, or320 | RU9 to RU16,respectively |
| 53, 54 | 20, 40, 80,160, or 320 | 106 | RU1 and RU2, respectively | 8** + RU index |
| 55, 56 | 40, 80, 160,or 320 | RU3 and RU4, respectively |
| 57–60 | 80, 160, or320 | RU5 to RU8, respectively |
| 61 | 20, 40, 80,160, or 320 | 242 | RU1 | 4** + RU index |
| 62 | 40, 80, 160,or 320 | RU2 |
| 63, 64 | 80, 160, or320 | RU3 and RU4, respectively |
| 65 | 40, 80, 160,or 320 | 484 | RU1 | 2** + RU index |
| 66 | 80, 160, or320 | RU2 |
| 67 | 80, 160, or320 | 996 | RU1 | ** + RUindex |

**Table 9-53a—Encoding of PS160 and RU Allocation subfields in an EHT variant User Info field *(continued)***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **PS160****subfield** | **B0 of the RU****Allocation subfield** | **B7–B1 of****the RU Allocation subfield** | **Bandwidth (MHz)** | **RU or MRU size** | **RU or MRU index** | **PHY RU****or MRU index** |
| 0–1:160 MHzsegment where the RU is located (See NOTE 3) | 0 | 68 | 20, 40, 80,160, or 320 | Reserved | Reserved | Reserved |
| 1 | 160 or 320 | 2996 | RU1 | X1 + RUindex |
| 0 | 0 | 69 | 20, 40, 80,160, or 320 | Reserved | Reserved | Reserved |
| 0 | 1 |
| 1 | 0 |
| 1 | 1 | 320 | 4996 | RU1 | RU1 |

**Table 9-53a—Encoding of PS160 and RU Allocation subfields in an EHT variant User Info field *(continued)***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **PS160****subfield** | **B0 of the RU****Allocation subfield** | **B7–B1 of****the RU Allocation subfield** | **Bandwidth (MHz)** | **RU or MRU size** | **RU or MRU index** | **PHY RU****or MRU index** |
| 0–3:80 MHz frequency subblock where the MRU is located (See NOTE 1) | 70 | 20, 40 | 52+26 | MRU1 | 12** + MRU index |
| 80, 160, or320 | Reserved | Reserved |
| 71–72 | 20, 40, 80,160, or 320 | 52+26 | MRU2 and MRU3,respectively |
| 73–74 | 40, 80, 160,or 320 | 52+26 | MRU4 and MRU5,respectively |
| 75 | 40 | 52+26 | MRU6 |
| 80, 160, or320 | Reserved | Reserved |
| 76 | 20, 40, 80,160, or 320 | Reserved | Reserved |
| 77–80 | 80, 160, or320 | 52+26 | MRU8 to MRU11,respectively |
| 81 | 20, 40, 80,160, or 320 | Reserved | Reserved |
| 82 | 20, 40, 80,160, or 320 | 106+26 | MRU1 | 8** + MRU index |
| 83 | 20, 40 | 106+26 | MRU2 |
| 80, 160, or320 | Reserved | Reserved |
| 84 | 40 | 106+26 | MRU3 |
| 80, 160, or320 | Reserved | Reserved |
| 85 | 40, 80, 160,or 320 | 106+26 | MRU4 |
| 86 | 80, 160, or320 | 106+26 | MRU5 |
| 87–88 | 20, 40, 80,160, or 320 | Reserved | Reserved |
| 89 | 80, 160, or320 | 106+26 | MRU8 |
| 90–93 | 80, 160, or320 | 484+242 | MRU1 to MRU4,respectively | 4** + MRU index |

**Table 9-53a—Encoding of PS160 and RU Allocation subfields in an EHT variant User Info field *(continued)***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **PS160****subfield** | **B0 of the RU****Allocation subfield** | **B7–B1 of****the RU Allocation subfield** | **Bandwidth (MHz)** | **RU or MRU size** | **RU or MRU index** | **PHY RU****or MRU index** |
| 0–1:160 MHzsegment where the MRU is located (See NOTE 3) | 0 | 94, 95 | 160 or 320 | 996+484 | MRU1 and MRU2,respectively | 4X1 +MRU index |
| 1 | MRU3 and MRU4,respectively |
| 0: MRU islocated in the primary160 MHz | 0 | 96–99 | 160 | 996+484+242 | MRU1 to MRU4,respectively | MRU index |
| 1 | MRU5 to MRU8,respectively |
| 1 | Any | 20, 40, 80,160, or 320 | Reserved | Reserved | Reserved |
| 0 | 0 | 100–103 | 320 | 2996+484 | MRU1 to MRU4,respectively | MRU index |
| 0 | 1 | 100–101 | MRU5 and MRU6,respectively |
| 0 | 1 | 102–103 | 20, 40, 80,160, or 320 | Reserved | Reserved |
| 1 | 0 | 100–101 | 20, 40, 80,160, or 320 | Reserved | Reserved |
| 1 | 0 | 102–103 | 320 | 2996+484 | MRU7 and MRU8,respectively |
| 1 | 1 | 100–103 | MRU9 to MRU12,respectively |
| 0 | 0 | 104 | 320 | 3996 | MRU1 | MRU index |
| 0 | 1 | MRU2 |
| 1 | 0 | MRU3 |
| 1 | 1 | MRU4 |

**Table 9-53a—Encoding of PS160 and RU Allocation subfields in an EHT variant User Info field *(continued)***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **PS160****subfield** | **B0 of the RU****Allocation subfield** | **B7–B1 of****the RU Allocation subfield** | **Bandwidth (MHz)** | **RU or MRU size** | **RU or MRU index** | **PHY RU****or MRU index** |
| 0 | 0 | 105, 106 | 320 | 3996+484 | MRU1 and MRU2,respectively | MRU index |
| 0 | 1 | MRU3 and MRU4,respectively |
| 1 | 0 | MRU5 and MRU6,respectively |
| 1 | 1 | MRU7 and MRU8,respectively |
| Any | Any | 107–127 | 20, 40, 80,160, or 320 | Reserved | Reserved | Reserved |
| NOTE 1—B0 of the RU Allocation subfield is set to 0 to indicate that the RU or MRU allocation applies to the pri- mary 80 MHz channel and set to 1 to indicate that the RU allocation applies to the secondary 80 MHz channel in the primary 160 MHz, if PS160 subfield is equal to 0 and the RU or MRU size is smaller than or equal to 996 tones. B0 of the RU Allocation subfield is set to 0 to indicate that the RU or MRU allocation applies to the lower 80 MHz in the secondary 160 MHz and is set to 1 to indicate that the RU or MRU allocation applies to upper 80 MHz in the secondary 160 MHz, if PS160 subfield is equal to 1 and the RU or MRU size is smaller than or equal to 996 tones.NOTE 2—The PHY MRU index of a 52+26-tone MRU is not defined in the case of the MRU index equal to 1, 6, 7, or 12, if the bandwidth indicates 80, 160, or 320 MHz. The PHY MRU index of a 106+26-tone MRU is not defined in the case of the MRU index equal to 2, 3, 6, or 7, if the bandwidth indicates 80, 160, or 320 MHz. Refer to 36.3.2.2.2 (Small size MRUs) for details.NOTE 3—If the size of RU or MRU is smaller than or equal to 2996 tone, then the PS160 subfield is set to 0 to indicate the RU or MRU allocation applies to the primary 160 MHz channel and set to 1 to indicate the RU or MRU allocation applies to the secondary 160 MHz channel. Otherwise, the PS160 subfield is used to indicate the RU or MRU index along with the RU Allocation subfield.NOTE 4—The PHY RU or MRU index in this table indicates the allocated RU or MRU index defined in 36.3.2 (Subcarrier and resource allocation). |

 *[#17456]*[Table 9-53b (Lookup table for X1 and N)](#bookmark63) provides *N* for differ- ent configurations, which is equal to 2  *X1 + X0*.*[#17456]* For a bandwidth less than or equal to 80 MHz, PS160, B0, X0, and X1 are set to 0. For a bandwidth of 160 MHz, PS160 and X1 are set to 0, while X0 is set to 0 to indicate that the RU or MRU allo- cation applies to the lower 80 MHz frequency subblock and set to 1 to indicate that the RU or MRU alloca- tion applies to the upper 80 MHz frequency subblock. For a bandwidth of 320 MHz, X1 is set to 0 to indicate that the RU or MRU allocation applies to the lower 160 MHz segment and set to 1 to indicate that the RU or MRU allocation applies to the upper 160 MHz segment. Within the indicated 160 MHz segment, X0 is set to 0 to indicate that the RU or MRU allocation applies to the lower 80 MHz frequency subblock and set to 1 to indicate that the RU or MRU allocation applies to the upper 80 MHz frequency subblock. The configuration indicates the frequency order of the primary and secondary 80 MHz and 160 MHz channels. The order from left to right indicates the order from lower frequency to higher frequency. The primary 80 MHz channel is indicated by P80, the secondary 80 MHz channel is indicated by S80, and the secondary 160 MHz channel is indicated by S160.

**Table 9-53b—Lookup table for X1 and N**

|  |  |  |
| --- | --- | --- |
| **Bandwidth (MHz)** | **Inputs** | **Outputs** |
| **Configuration** | **PS160** | **B0** | **X0** | **X1** | **N** |
| 20/40/80 | [P80] | 0 | 0 | 0 | 0 | 0 |
| 160 | [P80 S80] | 0 | 0 | 0 | 0 | 0 |
| 0 | 1 | 1 | 0 | 1 |
| [S80 P80] | 0 | 0 | 1 | 0 | 1 |
| 0 | 1 | 0 | 0 | 0 |
| 320 | [P80 S80 S160] | 0 | 0 | 0 | 0 | 0 |
| 0 | 1 | 1 | 0 | 1 |
| 1 | 0 | 0 | 1 | 2 |
| 1 | 1 | 1 | 1 | 3 |
| [S80 P80 S160] | 0 | 0 | 1 | 0 | 1 |
| 0 | 1 | 0 | 0 | 0 |
| 1 | 0 | 0 | 1 | 2 |
| 1 | 1 | 1 | 1 | 3 |
| [S160 P80 S80] | 0 | 0 | 0 | 1 | 2 |
| 0 | 1 | 1 | 1 | 3 |
| 1 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 0 | 1 |
| [S160 S80 P80] | 0 | 0 | 1 | 1 | 3 |
| 0 | 1 | 0 | 1 | 2 |
| 1 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 0 | 1 |

The values of the PS160 subfield and B0 of the RU Allocation*[#17457]* subfield indicate the 80 MHz frequency subblock in which the RU or MRU is located for 26-tone RU, 52-tone RU, 106-tone RU, 242-tone RU, 484-tone RU, 996-tone RU, 52+26-tone RU, and 106+26-tone RU. The 80 MHz frequency subblock is derived based on the corresponding PHY RU or MRU index column in [Table 9-53a (Encoding of PS160 and RU Allocation](#bookmark62) [subfields in an EHT variant User Info field)](#bookmark62).

The values of PS160 subfield indicates the 160 MHz segment in which the RU or MRU is located for 2996-tone RU, 996+484-tone MRU, and 996+484+242-tone MRU.

For 4996-tone RU, 2996+484-tone MRU, 3996-tone MRU, and 3996+484-tone MRU, the description of RU or MRU index is the same as that of the PHY RU or MRU index for the 320 MHz channel.

If the bandwidth indicates 20 MHz, the mapping of the PHY RU index to RU is defined in Table 27-7 (Data and pilot subcarrier indices for RUs in a 20 MHz HE PPDU and in a non-OFDMA 20 MHz HE PPDU) in increasing order.

If the bandwidth indicates 40 MHz, the mapping of the PHY RU index to RU is defined in Table 27-8 (Data and pilot subcarrier indices for RUs in a 40 MHz HE PPDU and in a non-OFDMA 40 MHz HE PPDU) in increasing order.

If the bandwidth indicates 80 MHz, the mapping of the PHY RU index to RU is defined in Table 36-5 (Data and pilot subcarrier indices for RUs in an 80 MHz EHT PPDU) in increasing order.

If the bandwidth indicates 160 MHz, the mapping of the PHY RU index to RU is defined in Table 36-6 (Data and pilot subcarrier indices for RUs in a 160 MHz EHT PPDU) in increasing order.

If the bandwidth indicates 320 MHz, the mapping of the PHY RU index to RU is defined in Table 36-7 (Data and pilot subcarrier indices for RUs in a 320 MHz EHT PPDU) in increasing order.

If the bandwidth indicates 20 MHz, the mapping of the PHY MRU index to MRU is defined in Table 36-8 (Indices for small size MRUs in an OFDMA 20 MHz EHT PPDU) in increasing order.

If the bandwidth indicates 40 MHz, the mapping of the PHY MRU index to MRU is defined in Table 36-9 (Indices for small size MRUs in an OFDMA 40 MHz EHT PPDU) in increasing order.

If the bandwidth indicates 80 MHz, the mapping of the PHY MRU index to MRU is defined in Table 36-10 (Indices for small size MRUs in an OFDMA 80 MHz EHT PPDU) and Table 36-13 (Indices for large size MRUs in an OFDMA 80 MHz EHT PPDU and in a non-OFDMA 80 MHz EHT PPDU) in increasing order.

If the bandwidth indicates 160 MHz, the mapping of the PHY MRU index to MRU is defined in Table 36-11 (Indices for small size MRUs in an OFDMA 160 MHz EHT PPDU) and Table 36-14 (Indices for large size MRUs in an OFDMA 160 MHz EHT PPDU and in a non-OFDMA 160 MHz EHT PPDU) in increasing order.

If the bandwidth indicates 320 MHz, the mapping of the PHY MRU index to MRU is defined in Table 36-12 (Indices for small size MRUs in an OFDMA 320 MHz EHT PPDU) and Table 36-15 (Indices for large size MRUs in an OFDMA 320 MHz EHT PPDU and in a non-OFDMA 320 MHz EHT PPDU) in increasing order.

The UL FEC Coding Type subfield of the User Info field indicates the code type of the solicited EHT TB PPDU. The UL FEC Coding Type subfield is set to 0 to indicate BCC and set to 1 to indicate LDPC.

The UL EHT-MCS subfield of the User Info field indicates the EHT-MCS of the solicited EHT TB PPDU. In an EHT variant User Info field, the encoding of the UL EHT-MCS subfield is defined in 36.3.8 (EHT modulation and coding schemes (EHT-MCSs)) and is set as defined in 35.5.2 (EHT UL MU operation). *[#17459]*

B25 is reserved in the EHT variant User Info field.

The SS Allocation subfield of the EHT variant User Info field indicates the spatial streams of the solicited EHT TB PPDU and the format is defined in [Figure 9-92b (SS Allocation subfield format of an EHT variant](#bookmark64) [User Info field)](#bookmark64).

B26 B29 B30 B31

Number Of Spatial Streams

Starting Spatial Stream

Bits: 4 2

**Figure 9-92b—SS Allocation subfield format of an EHT variant User Info field**

The Starting Spatial Stream subfield indicates the starting spatial stream and is set to the starting spatial stream minus 1 (see 35.5.2.3.2 (TXVECTOR parameters for EHT TB PPDU response to Trigger frame)) with a maximum value of 7 for the Starting Spatial Stream subfield (see 36.1.1 (Introduction to the EHT PHY)). The Starting Spatial Stream subfield values above 7 are reserved for a STA. The Starting Spatial Stream subfield is set to 0 if the corresponding RU or MRU is not allocated for MU-MIMO.

The Number Of Spatial Streams subfield indicates the number of spatial streams, and is set to the number of spatial streams minus 1 (see 36.1.1 (Introduction to the EHT PHY)).*[#15210]*

The UL Target Receive Power subfield indicates the expected receive signal power, measured at the AP’s antenna connector and averaged over the antennas, for the EHT portion of the EHT TB PPDU transmitted on the assigned RU and is defined in [Table 9-53 (UL Target Receive Power subfield in Trigger frame)](#bookmark59).

If the size of RU or MRU is smaller than or equal to 2996-tones, then the PS160 subfield is set to 0 to indicate that the RU or MRU allocation applies to the primary 160 MHz channel and set to 1 to indicate that the RU or MRU allocation applies to the secondary 160 MHz channel. Otherwise, the PS160 subfield is used to indicate the RU or MRU index along with the RU Allocation subfield. The PS160 subfield is set as defined in [Table 9-](#bookmark62) [53a (Encoding of PS160 and RU Allocation subfields in an EHT variant User Info field)](#bookmark62).*[#17461]*

The Trigger Dependent User Info subfield is set as defined in [9.3.1.22.4 (HE variant User Info field)](#bookmark53). The RA-RU Information subfield is reserved in the EHT variant User Info field.