IEEE P802.11  
Wireless LANs

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| **CC50 Comment Resolutions for 60 MHz DRU Tone Plan** |
| **Date:** 2025-04-10 |
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Abstract

This submission proposes resolutions for comments of TGbn D0.2 with the following 4 CIDs:

1123 1124 2260 2264

Revisions:

* Rev 0: Initial version of the document.
* Rev 1: Revision based on offline discussion

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 TGbn D0.2 Draft. This introduction is not part of the adopted material.

***Editing instructions formatted like this are intended to be copied into the TGbn D0.2 Draft (i.e. they are instructions to the 802.11 editor on how to merge the text with the baseline documents).***

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

#### *CIDs 1123 1124 2260 2264*

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| --- | --- | --- | --- | --- | --- |
| **CID** | **Clause** | **PP.LL** | **Comment** | **Proposed Change** | **Resolution** |
| 1123 | 38.3.4 | 118.31 | The reference 38.3.2.1 (Tone plan for DRUs) does not include the tone plan for 60MHz DUR tone plan | Define the tone plan for 60MHz DRU. | Revised.  Agree in principle with the commenter. Suggest to add a table for the 60 MHz DRU tone plan in 38.3.2.1 (Tone plan for DRUs).  TGbn editor: Please add the table and make the changes shown in 11-25/0612r1. |
| 1124 | 38.3.4 | 118.61 | The reference 38.3.2.1 (Tone plan for DRUs) does not include the tone plan for 60MHz DUR tone plan | Define the tone plan for 60MHz DRU. | Revised.  Agree in principle with the commenter. Suggest to add a table for the 60 MHz DRU tone plan in 38.3.2.1 (Tone plan for DRUs).  TGbn editor: Resolution is the same as CID 1123 in 11-25/0612r1. |
| 2260 | 38.3.4 | 118.31 | "For an 80 MHz UHR TB PPDU with the highest 20 MHz preamble puncturing, 60 MHz DBW is allowed  and the 60 MHz DRU tone plan (see 38.3.2.1 (Tone plan for DRUs)) is used.". Tone plan is missing in 38.3.2.1. Please clarify. | As in comment | Revised.  Agree in principle with the commenter. Suggest to add a table for the 60 MHz DRU tone plan in 38.3.2.1 (Tone plan for DRUs).  TGbn editor: Resolution is the same as CID 1123 in 11-25/0612r1. |
| 2264 | 38.3.4 | 118.60 | "For a 160 MHz UHR TB PPDU and a 320 MHz UHR TB PPDU, in a certain 80 MHz frequency subblock with the highest 20 MHz preamble puncturing, 60 MHz DBW is allowed and the 60 MHz DRU tone plan (see 38.3.2.1 (Tone plan for DRUs)) is used by applying constant tone shifts (see 38.3.2.1 (Tone plan for DRUs)) to align tone indices.", 60 MHz DRU tone plan is missing in 38.3.2.1. Please clarify. | As in comment | Revised.  Agree in principle with the commenter. Suggest to add a table for the 60 MHz DRU tone plan in 38.3.2.1 (Tone plan for DRUs).  TGbn editor: Resolution is the same as CID 1123 in 11-25/0612r1. |

*TGbn Editor: Please add the following table between Table 38-5 (Data and pilot subcarrier indices for Distributed-tone RUs (DRU) in a 40 MHz UHR TB PPDU) and Table 38-6 (Data and pilot subcarrier indices for Distributed-tone RUs (DRU) in a 80 MHz UHR TB PPDU) in Section 38.3.2.1 (Tone plan for DRUs) of D0.2:*

(#1123)(#1124)(#2260)(#2264)**Table 38-xx—Data and pilot subcarrier indices for Distributed-tone RUs (DRU) in a 60 MHz DBW**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **DRU Type** | **DRU Index and subcarrier range** | | | |
| 52-tone DRU | DRU1  [-499:14:-23, 5:14:229] | DRU2  [-492:14:-16, 12:14:236] | DRU3  [-496:14:-20, 8:14:232] | DRU4  [-489:14:-13, 15:14:239] |
| DRU5  [-498:14:-22, 6:14:230] | DRU6  [-491:14:-15, 13:14:237] | DRU7  [-495:14:-19, 9:14:233] | DRU8  [-488:14:-12, 16:14:240] |
| DRU9  [-497:14:-21, 7:14:231] | DRU10  [-490:14:-14, 14:14:238] | DRU11  [-494:14:-18, 10:14:234] | DRU12  [-487:14:-11, 17:14:241] |
| 106-tone DRU | DRU1  [-499:7:-9, 5:7:243] | DRU2  [-496:7:-6, 8:7:246] | DRU3  [-498:7:-8, 6:7:244] | DRU4  [-495:7:-5, 9:7:247] |
| DRU5  [-497:7:-7, 7:7:245] | DRU6  [-494:7:-4, 10:7:248] | N/A | N/A |
| 242-tone DRU | DRU1  [-499:7:-9, 5:7:243, -496:7:-6, 8:7:246, -458:21:-38, 25:21:193] | | DRU2  [-498:7:-8, 6:7:244, -495:7:-5, 9:7:247, -451:21:-31, 32:21:200] | |
| DRU3  [-497:7:-7, 7:7:245, -494:7:-4,10:7:248, -444:21:-24, 39:21:207] | | N/A | |

*TGbn Editor: Please make the following changes in Section 38.3.2.1 (Tone plan for DRUs) of D0.2:*

**38.3.2.1 Tone plan for DRUs**

The UHR PHY subcarrier frequency spacing used in Distributed-tone RU (DRU) tone plan is identical to EHT PHY subcarrier frequency spacing defined in Clause 36 (Extreme High Efficiency (EHT) PHY specification).

The DRUs defined for UHR UL TB PPDU transmission are 26-tone DRU, 52-tone DRU, 106-tone DRU, 242-tone DRU, and 484-tone DRU.

Distribution bandwidth defined for UHR UL TB PPDU transmission are 20 MHz, 40 MHz, 60 MHz and 80 MHz.

(#1123)(#1124)(#2260)(#2264)The 26-tone DRU, 52-tone DRU, and 106-tone DRU are defined in 20 MHz distribution bandwidth. The 26-tone DRU, 52-tone DRU, 106-tone DRU, and 242-tone DRU are defined in 40 MHz distribution bandwidth. The 52-tone DRU, 106-tone DRU, and 242-tone DRU are defined in 60 MHz distribution bandwidth. The 52-tone DRU, 106-tone DRU, 242-tone DRU, and 484-tone DRU are defined in 80 MHz distribution bandwidth.

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A 52-tone DRU consists of 48 data subcarriers and 4 pilot subcarriers. The positions of the pilots for the 52- tone DRU are defined in Table 38-39 (Pilot indices for a 52-tone DRU transmission). The locations of the 52-tone DRUs are fixed as defined in Table 38-4 (Data and pilot subcarrier indices for Distributed-tone RUs (DRU) in a 20 MHz UHR TB PPDU), Table 38-5 (Data and pilot subcarrier indices for Distributed-tone RUs (DRU) in a 40 MHz UHR TB PPDU), (#1123)(#1124)(#2260)(#2264)Table 38-xx (Data and pilot subcarrier indices for Distributed-tone RUs (DRU) in a 60 MHz DBW), and Table 38-6 (Data and pilot subcarrier indices for Distributed-tone RUs (DRU) in a 80 MHz UHR TB PPDU).

A 52-tone DRU consists of tones of two corresponding 26-tone DRUs. For example, 52-tone DRU1 consists of tones of 26-tone DRU1 and 26-tone DRU2 in the same distribution bandwidth.

A 106-tone DRU consists of 102 data subcarriers and 4 pilot subcarriers. The positions of the pilots for the 106-tone DRU are defined in Table 38-40 (Pilot indices for a 106-tone DRU transmission). The locations of the 106-tone DRUs are fixed as defined in Table 38-4 (Data and pilot subcarrier indices for Distributed-tone RUs (DRU) in a 20 MHz UHR TB PPDU), Table 38-5 (Data and pilot subcarrier indices for Distributedtone RUs (DRU) in a 40 MHz UHR TB PPDU), (#1123)(#1124)(#2260)(#2264)Table 38-xx (Data and pilot subcarrier indices for Distributed-tone RUs (DRU) in a 60 MHz DBW), and Table 38-6 (Data and pilot subcarrier indices for Distributed-tone RUs (DRU) in a 80 MHz UHR TB PPDU).

A 106-tone DRU consists of tones of two corresponding 52-tone DRUs and two extra tones. For example, 106-tone DRU1 consists of tones of 52-tone DRU1, 52-tone DRU2, and two extra tones in the same distribution bandwidth.

A 242-tone DRU consists of 234 data subcarriers and 8 pilot subcarriers. The positions of the pilots for the 242-tone DRU are defined in Table 38-41 (Pilot indices for a 242-tone DRU transmission). The locations of the 242-tone DRUs are fixed as defined in Table 38-5 (Data and pilot subcarrier indices for Distributed-tone RUs (DRU) in a 40 MHz UHR TB PPDU), (#1123)(#1124)(#2260)(#2264)Table 38-xx (Data and pilot subcarrier indices for Distributed-tone RUs (DRU) in a 60 MHz DBW), and Table 38-6 (Data and pilot subcarrier indices for Distributed-tone RUs (DRU) in a 80 MHz UHR TB PPDU).

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