IEEE P802.11  
Wireless LANs

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| **CC50 Comment Resolutions**  **for 38.3.15.10.3 CSD for DRU transmission** |
| **Date:** 2025-04-01 |
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Abstract

This submission proposes resolutions for comments of TGbn D0.2 with the following 5 CIDs:

339 943 944 2184 2303

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 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 2184 943 944 339 2303*

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| **CID** | **Clause** | **PP.LL** | **Comment** | **Proposed Change** | **Resolution** |
| 2184 | 38.3.15.10.3 | 193.12 | Make some English rephrasing corrections to this paragraph | Change to "CSD is used for a DRU UHR STF...A DRU transmission reuses...Like per stream CSD in UL MU-MIMO, the CSD index for each DRU....If the number of streams (Nss) for this DRU is larger than 1, then the value used will be CSD [mod..." | Accepted. |
| 943 | 38.3.15.10.3 | 193.13 | Seems CSD values are not unique as per Table 38-30/31/32 | Remove "unique" | Accepted. |
| 944 | 38.3.15.10.3 | 193.21 | What is definition of index i? | Define index i. | Revised.  Agree in principle with the commenter. Suggest to change index “i” to “j” to avoid confusion with the DRU index used in the tables for CSD starting index and add texts which explain what the formula means.  TGbn editor: Please make the changes shown in 11-25/0524r0. |
| 339 | 38.3.15.10.3 | 193.23 | "it will use CSD [mod(i-1:i+Nss-2,8)+ones(1,Nss)]". There are only two possible values for Nss. A generic, hard to read formula here may be less clear than simply listing the value. | Replace formula with a table. | Revised.  If more streams are allowed in the future, it would be better to use formula instead of listing all of the CSD indices. Suggest to keep the formula and add texts which clarify what the formula means.  TGbn editor: Please make the changes shown in 11-25/0524r0. |
| 2303 | 38.3.15.10.3 | 193.21 | Please add a range for CSD start index i, which should be in the range of [1,8]. | As in comment | Revised.  Agree in principle with the commenter. Suggest to change index “i” to “j” to avoid confusion with the DRU index used in the tables for CSD starting index and add texts which explain what the formula means.  TGbn editor: Please make the changes shown in 11-25/0524r0. |

*TGbn Editor: Please make the following changes in Section 38.3.15.10.3 of D0.2:*

**38.3.15.10.3 CSD for DRU transmission**

CSD is used for a DRU UHR-STF transmission to solve unintentional beamforming issue. It is applied in each distribution BW. For each DRU user, a CSD index will be assigned according to its DRU index to minimize CSD collision.(#943)(#2184)

A DRU transmission reuses the existing 8 CSD table (Table 21-11–Cyclic shift values for the VHT modulatedfields of a PPDU) for the CSD allocation.(#2184)

Like per stream CSD in UL MU-MIMO, the CSD index for each DRU assignment can be defined based on DRU index. For a DRU assignment in a distribution BW, it is assigned with a CSD start index *j*. If the number of streams (Nss) for this DRU is larger than 1, then the value used will be CSD [mod(*j*-1:*j*+Nss-2,8)+ones(1,Nss)] for each stream where *j* designates the CSD starting index of the DRU with a range from 1 to 8 as described in 38.3.15.10.4 (CSD index assignment for DRU UHR-STF transmission), mod(*a*:*b*,*c*) means a modulo *c* operation on values from *a* to *b* and ones(1,*d*) stands for a length *d*-vector with all elements of 1.(#339)(#944)(#2184)(#2303)