IEEE P802.11  
Wireless LANs

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| D0.1 CID resolutions for Section 9.4.2.aa2.3 UHR PHY Capabilities | | | | |
| Date: 2025-04-23 | | | | |
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Abstract

This submission contains proposed comment resolutions to comments pertaining to Clause 9.4.2.aa2.3 in P802.11bn D0.1. The proposed text edits as part of the resolutions will be with respect to Draft 0.2.

The submission provides resolutions to the following 6 CIDs :

* 284, 1612, 2955, 2956, 3526, 3708

Revisions:

* Rev 0: Initial version of the document.

# Part 1 – (Page 61-62 of D0.1)

## Clause 9.4.2.aa2.3 CIDs 284, 1612, 2955, 2956, 3526, 3708

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **CID** | **Page.Line**  **(of D0.1)** | **Comment** | **Proposed Change** | **Resolution** |
| 284 | 61.43 | What is "NDP Sounding". Doesn't appear to be defined. | Clarify | Reject.  NDP sounding is an understood term in the UHR amendment and in prior amendments.  The description for this field further clarifies that this field is with respect to the reception of a sounding NDP, therefore the field name does not need to be changed. |
| 1612 | 61.59 | Define UHR PHY Capabilities Information field, remove TBD | as in comment | Revised.  With the understanding that additional subfields will be inserted at a future time, the TBDs of the UHR PHY Capabilities Information field can be removed.  Instruction to editor: Please see CID tag #1612 for the text change resolution under the Proposed Text Changes section of 11-25/0712r0. |
| 2955 | 61.40 | All those B\_s are obviously broken | Make them red and TBD | Revised.  With the understanding that bit-numberings are subject to change/update when additional subfields are inserted in the future, the B\_ should be converted to actual bit indices for the current definition.  Instruction to editor: Please see CID tag #2955 for the text change resolution under the Proposed Text Changes section of 11-25/0712r0. |
| 2956 | 62.05 | All the "indicates:  The" should be just "indicates" | As it says in the comment | Revised.  There was a formatting issue when the PDT was merged into D0.1 text, the text following “indicates:” should have been in bullet point format. Nevertheless, since there was only a single bullet point, the description will be re-written into a single complete sentence. |
| 3526 | 62.16 | Unclear if the requirement "Max Nss,total Rx for DL MU-MIMO ( 80 MHz)" applies to CoBF as well. (CoBF is similar to DL-MUMIMO, but is referenced elsewhere as DL non-OFDMA CoBF). Please clarify. Same comment for 160 and 320MHz. |  | Reject.  COBF is already clearly defined in spec as separate from DL MU-MIMO. Therefore this capability field does not need to further specify that it does not apply to COBF. |
| 3708 | 61.42 | There is no reason why we should start the UHR PHY Capabilities Information field with a Reserved field. | Remove the Reserved field located at B0. | Revised.  Agree with the commenter that there is no technical reason a Reserved field is needed at the beginning, and that it can be removed.  Instruction to editor: Please see CID tag #3708 for the text change resolution under the Proposed Text Changes section of 11-25/0712r0. |

# Proposed Text Changes

Under MS Word, view “All Markup” to view the detailed text additions, removals, edits. CID numbers in “[ ]” are in-lined with corresponding text changes.

## 9.4.2.aa2 UHR Capabilities Element

### 9.4.2.aa2.3 UHR PHY Capabilities Information field

The format of the UHR PHY Capabilities Information field is defined in Figure 9‑aa6 (UHR PHY Capabilities Information field format).

***[#2955]***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  | B0 | B1 | B2 |
|  | [#3708] |  | Max Nss Rx for NDP sounding (≤ 80 MHz) | Max Nss,total Rx for DL MU-MIMO (≤ 80 MHz) | Max Nss Rx for NDP sounding (= 160 MHz) |
| Bits: |  |  | 1 | 1 | 1 |
|  |  |  |  |  |  |
|  | B3 | B4 | B5 [#2955] |  |  |
|  | Max Nss,total Rx for DL MU-MIMO (= 160 MHz) | Max Nss Rx for NDP sounding (= 320 MHz) | Max Nss,total Rx for DL MU-MIMO (= 320 MHz) |  | [#1612] |
| Bits: | 1 | 1 | 1 |  |  |
|  |  |  |  |  |  |

Figure 9‑aa6 - UHR PHY Capabilities Information field format

The subfields of the UHR PHY Capabilities Information field are defined in Table 9‑130b (Subfields of the UHR PHY Capabilities Information field).

Table 9‑130b-Subfields of the UHR PHY Capabilities Information field

|  |  |  |
| --- | --- | --- |
| **Subfield** | **Definition** | **Encoding** |
| Max Nss Rx for NDP sounding (≤ 80 MHz) | For a PPDU bandwidth less than or equal to 80 MHz, indicatesthe [#2956] maximum number of spatial streams supported by the STA for the reception of a sounding NDP. | Set to 0 if up to 4 spatial streams are supported.  Set to 1 if up to 8 spatial streams are supported |
| Max Nss,total Rx for DL MU-MIMO (≤ 80 MHz) | For a PPDU bandwidth less than or equal to 80 MHz, indicates the [#2956] maximum total number of spatial streams (summed over all users) on an RU or MRU, supported by the STA for the reception of that RU or MRU in a UHR DL MU-MIMO transmission. | For a non-AP STA:  Set to 0 if up to 4 total spatial streams are supported  Set to 1 if up to 8 total spatial streams are supported  Reserved for an AP |
| Max Nss Rx for NDP sounding (= 160 MHz) | For a PPDU bandwidth of 160 MHz, indicatesthe [#2956] maximum number of spatial streams supported by the STA for the reception of a sounding NDP. | Set to 0 if up to 4 spatial streams are supported.  Set to 1 if up to 8 spatial streams are supported |
| Max Nss,total Rx for DL MU-MIMO (= 160 MHz) | For a PPDU bandwidth of 160 MHz, indicates the [#2956] maximum total number of spatial streams (summed over all users) on an RU or MRU, supported by the STA for the reception of that RU or MRU in a UHR DL MU-MIMO transmission. | For a non-AP STA:  Set to 0 if up to 4 total spatial streams are supported  Set to 1 if up to 8 total spatial streams are supported  Reserved for an AP |
| Max Nss Rx for NDP sounding (= 320 MHz) | For a PPDU bandwidth of 320 MHz, indicates the [#2956] maximum number of spatial streams supported by the STA for the reception of a sounding NDP. | Set to 0 if up to 4 spatial streams are supported.  Set to 1 if up to 8 spatial streams are supported |
| Max Nss,total Rx for DL MU-MIMO (= 320 MHz) | For a PPDU bandwidth of 320 MHz, indicates the [#2956] maximum total number of spatial streams (summed over all users) on an RU or MRU, supported by the STA for the reception of that RU or MRU in a UHR DL MU-MIMO transmission. | For a non-AP STA:  Set to 0 if up to 4 total spatial streams are supported  Set to 1 if up to 8 total spatial streams are supported  Reserved for an AP |
| [#1612] |  |  |