IEEE P802.11  
Wireless LANs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Resolution for comments received for CC on D0.1 for subclause 38.3.25 | | | | |
| Date: 2025-03-09 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | email |
| Juan Fang | Intel |  |  | Juan.fang@intel.com |
|  |  |  |  |  |

Abstract

This submission contains proposed comment resolutions to comments on P802.11bn D0.1. The changes are based on P802.11bn D0.2.

The submission provides resolutions to the following 6 CIDs in the receiver\_specification subclause 38.3.25

610, 958, 960, 1194, 3247, 3248

Revisions:

* Rev 0: Initial version of the document.
* Rev 1: Edit change

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **CID** | **Commenter** | **Clause Number(C)** | **Page** | **Comment** | **Proposed Change** | **Resolution** |
| 610 | Eunsung Park | 38.3.24.1 | 211.04 | Co-BF/Co-SR Indication subfield should be set to 1. Add a relevant text. | See the comment. | Revised  Agree with the comment.  Instruction to editor:  Apply the change in D0.2 marked as [#610 1194] in 11-25/0585r1  Note to editor:  CID 610 and 1194 have the same comment. |
| 958 | Wookbong Lee | 38.3.24.2 | 212.16 | Define minimum Rx sensitivity for ELR PPDU | As in comment | Revised  Note to editor  No change is needed  It is added in D0.2 already |
| 960 | Wookbong Lee | 38.3.24.3 | 213.45 | Define adjacent channel rejection and non-adjacent channel rejection requirement for ELR PPDU | As in comment | Revised  Note to editor  No change is needed  It is added in D0.2 already |
| 1194 | Dong Guk Lim | 38.3.24.1 | 211.04 | Co-SR/Co-BF may not be included in this case. So, this text should be modified. | Modify the text as follows " Co-BF/Co-SR Indication field and PPDU Type And Compression Mode field in U-SIG field are equal to 1." | Revised  Agree with the comment.  Note to editor:  CID 610 and 1194 have the same proposed change. |
| 3247 | Yusuke Asai | 38.3.24.2 | 212.16 | In the Table 38-47, the MCS numbers for BPSK and QPSK should be added. Because the PSDU length for the sensitivity measurement depends on the MCS as defined in P211L10-14 and ELR-MCS0/1 are the special caases. | "BPSK" -> "BPSK (ELR-MCS0)". "QPSK" -> "QPSK (ELR-MCS1) | Accepted |
| 3248 | Yusuke Asai | 38.3.24.2 | 211.17 | It is better to change the title of the Figure 38-46 as"Receiver minumum input level sensitivity for UHR non-ELR PPDU" . Because the Table 38-47 defines the sensitivity requireiements for UHR ELR PPDU. In addition the title of the Table 38-47 should be changed as "Receiver minimum input level sensitivity for UHR ELR PPDU". | As in comment. | Accepted |

**Instruction to editor:**

Please apply the following changes marked with trackchange in 38.3.25.1 of D0.2.

* + 1. **Receiver specification**

**38.3.25.1 General**

For receiver minimum input sensitivity, adjacent channel rejection, nonadjacent channel rejection, receiver maximum input level, and CCA sensitivity requirements described in this subclause, the input levels are measured at the antenna connector and are referenced as the average power per receive antenna. The number of spatial streams under test shall be equal to the number of utilized transmitting STA physical antenna (output) ports and also equal to the number of utilized receiving STA antenna (input) ports. Each output port of the transmitting STA shall be connected through a cable to one input port of the receiving STA.

NOTE—Additional test requirements and/or test methods might be needed to meet regulatory requirements.

The requirements on receiver minimum input sensitivity in 38.3.25.2 (Receiver minimum input sensitivity), adjacent channel rejection in 38.3.25.3(Adjacent channel rejection) and nonadjacent channel rejection in 38.3.25.4 (Nonadjacent channel rejection) apply to PPDUs that meet all the following conditions:

* 0.8 µs GI is used.
* If the PPDU bandwidth is 20 MHz and the UHR-MCS is less than 10 or equal to 15, 17, 19, 20 or 23, then BCC is used. Otherwise, LDPC is used.
* The PPDU is a UHR MU PPDU without puncturing and both of the PPDU Type And Compression Mode field and the Co-BF/Co-SR Indication field in U-SIG field are equal to 1. [#610, #1194].

**Instruction to editor:**

Please apply the following changes marked with trackchange in 38.3.25.2 of D0.2.

**38.3.25.2 Receiver minimum input sensitivity**

The PER shall be less than 10% for a PSDU with the rate-dependent input levels listed in Table 38-47 (Receiver minimum input level sensitivity) and Table38-47 (Receiver minimum input level sensitivityfor ELR). The PSDU length shall be 2048 octets for UHR-MCS 14, UHR-MCS 15, ELR-MCS0 or ELR-MCS1 or 4096 octets for all other modulations.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table 38-47— Receiver minimum input level sensitivity for UHR non-ELR PPDU** [#3248]  **(continued)** | | | | | | | | |
| **Modulation** | **Rate (*R*)** | **Minimum sensitivity (20** **MHz PPDU) (dBm)** | **Minimum sensitivity (40** **MHz PPDU) (dBm)** | | **Minimum sensitivity (80** **MHz PPDU) (dBm)** | | **Minimum sensitivity (160** **MHz PPDU) (dBm)** | **Minimum sensitivity (320** **MHz PPDU) (dBm)** |
|
| BPSK | 1/2 | –82 | –79 | | –76 | | –73 | –70 |
| QPSK | 1/2 | –79 | –76 | | –73 | | –70 | –67 |
| QPSK  (UHR-MCS 17) | 2/3 | TBD | TBD | | TBD | | TBD | TBD |
| QPSK | 3/4 | –77 | –74 | | –71 | | –68 | –65 |
| 16-QAM | 1/2 | –74 | –71 | | –68 | | –65 | –62 |
| 16-QAM  (UHR-MCS 19) | 2/3 | TBD | TBD | | TBD | | TBD | TBD |
| 16-QAM | 3/4 | –70 | –67 | | –64 | | –61 | –58 |
| 16-QAM  (UHR-MCS 20) | 5/6 | TBD | TBD | | TBD | | TBD | TBD |
| 64-QAM | 2/3 | –66 | –63 | | –60 | | –57 | –54 |
| 64-QAM | 3/4 | –65 | –62 | | –59 | | –56 | –53 |
| 64-QAM | 5/6 | –64 | –61 | | –58 | | –55 | –52 |
| 256-QAM  (UHR-MCS 23) | 2/3 | TBD | TBD | | TBD | | TBD | TBD |
| 256-QAM | 3/4 | –59 | –56 | | –53 | | –50 | –47 |
| 256-QAM | 5/6 | –57 | –54 | | –51 | | –48 | –45 |
| 1024-QAM | 3/4 | –54 | –51 | | –48 | | –45 | –42 |
| 1024-QAM | 5/6 | –52 | –49 | | –46 | | –43 | –40 |
| 4096-QAM | 3/4 | –49 | –46 | | –43 | | –40 | –37 |
| 4096-QAM | 5/6 | –46 | –43 | | –40 | | –37 | –34 |
| BPSK-DCM (UHR-MCS 15) | 1/2 | –82 | –79 | | –76 | | –73 | –70 |
| BPSK-DCM (UHR-MCS 14) | 1/2 | N/A | N/A | | –78 | | –75 | –72 |
| NOTE—N/A = not supported by the PPDU format. | | | | | | | | |
| **Table 38-48— Receiver minimum input level sensitivity for UHR ELR PPDU** [#3248] | | | | | |
| **Modulation** | **Rate (*R*)** | **RU tone and DUP** | | **Minimum sensitivity (20** **MHz PPDU) (dBm)** | |
| BPSK  (ELR-MCS0) [#3247] | 1/2 | 52-tone RRU with four times duplication | | -82 | |
| QPSK  (ELR-MCS1) [#3247] | 1/2 | 52-tone RRU with four times duplication | | -82 | |