IEEE P802.11  
Wireless LANs

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| |  |  |  |  |  | | --- | --- | --- | --- | --- | | CC36 CR on PPDU Encoding Process | | | | | | Date: 2021-07-12 | | | | | | Author(s): | | | | | | Name | Affiliation | Address | Phone | email | | Youhan Kim | Qualcomm |  |  | youhank@qti.qualcomm.com | |  |  |  |  |  | |  |  |  |  |  | |  |  |  |  |  | |  |  |  |  |  | |  |  |  |  |  | |

Abstract

This submission proposes resolutions for the following comments from CC36 in P802.11be D1.0:

4546, 7186, 4841, 8094, 7187, 7188, 4842, 6433, 4843, 7476, 5527, 4549, 7189, 4548, 5474

NOTE – Set the Track Changes Viewing Option in the MS Word to “All Markup” to clearly see the proposed text edits.

**Revision History:**

R0: Initial version.

R1: Added proposed resolutions to CIDs 4549, 7189, 4548, 5474

# CID 4546, 7186

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| **CID** | **Clause** | **Page.Line** | **Comment** | **Proposed Change** |
| 4546 | 36.3.7.2 | 383.52 | Remove "and frequency segment".  Make the similar change to all the CSD per chain step in clauses in 36.3.7 (e.g P384L13) | as in the comment. |
| 7186 | 36.3.7.2 | 383.52 | "for each transmit chain and frequency segment".  Since we've eliminated 80+80, 160+160, etc., I believe all signals now have only a single segment by definition.  In 11ax all signals has indices i\_TX and i\_seg, but the latter has been removed in 11be. Compare e.g. Equations (27-1) in 11ax and (36-7) in 11be. | Remove "and frequency segment". Also fix in other places where appropriate. |

**Background**

D1.01 P405

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D1.01 P406

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D1.01 P406

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D1.01 P407

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D1.01 P408

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D1.01 P408

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D1.01 P408

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D1.01 P409

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D1.01 P410

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**Proposed Resolution: CID 4546, 7186**

**Revised**

**Note to commenter:**

Agree with the commenter that “frequency segment” is not needed because EHT has only one frequency segment. The instruction to editor implements the text changes suggested by the commenter.

**Instruction to editor:**

In D1.01, change “spatial stream and frequency segment” to “spatial stream” at

P405L52

P406L13

P406L47

P407L18

P408L1

P408L35

P408L52

P409L13

P410L11

(Note to editor: Same resolutions for CIDs 4546 and 7186.)

# CID 4841

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| **CID** | **Clause** | **Page.Line** | **Comment** | **Proposed Change** |
| 4841 | 36.3.7.6 | 385.34 | From the U-SIG, we can use the extra tone for data. so, the number of available is 56 tone for data and pilot. so, delete the f) | As in comment |

**Background**

D1.0 P385

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**Proposed Resolution: CID 4841**

**Rejected**

Step f) is not related to the fact that U-SIG uses 4 extra tones to carry information compared to L-SIG. The duplication over all occupied 20 MHz is required and correct.

# CID 8094

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| **CID** | **Clause** | **Page.Line** | **Comment** | **Proposed Change** |
| 8094 | 36.3.7.6 | 385.34 | frequency block should be frequencty subblock | as in comment |

**Background**

D1.0 P385

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**Proposed Resolution: CID 8094**

**Revised**

**Note to commenter:**

The instruction to editor implements the text changes suggested by the commenter.

**Instruction to editor:**

At D1.01 P407L34, change “frequency block” to “frequency subblock”.

# CID 7187

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| **CID** | **Clause** | **Page.Line** | **Comment** | **Proposed Change** |
| 7187 | 36.3.7.6 | 385.37 | Change "as shown in" to "as described in" | See comment |

**Background**

D1.0 P385

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**Proposed Resolution: CID 7187**

**Accepted**

# CID 7188

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| **CID** | **Clause** | **Page.Line** | **Comment** | **Proposed Change** |
| 7188 | 36.3.7.6 | 385.52 | Change "subblock" to "subblocks" | See comment |

**Background**

D1.0 P385

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**Proposed Resolution: CID 7188**

**Rejected**

There is no “subblock” at P385L52.

There is a “subblock” at P358L51, but L34 says “… apply for each frequency subblock”. Hence, the singular “subblock” is correct at L51.

# CID 4842, 6433

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| **CID** | **Clause** | **Page.Line** | **Comment** | **Proposed Change** |
| 4842 | 36.3.7.6 | 385.56 | To make it clear, add the size of the frequency block.. | change " between frequency subblocks " with " between 80MHz frequency subblocks" |
| 6433 | 36.3.7.6 | 385.56 | Add "80 MHz" between "between" and "frequency". | As in comment |

**Background**

D1.0 P385

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**Proposed Resolution: CID 4842, 6433**

**Accepted**

(Note to editor: Same resolutions for CIDs 4842 and 6433.)

# CID 4843

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| **CID** | **Clause** | **Page.Line** | **Comment** | **Proposed Change** |
| 4843 | 36.3.7.6 | 385.57 | To indicate the DL OFDMA, the DL/UL flag in U-SIG should be used. add the DL-UL flag in U-SIG is set to 0 in this sentence. | before (DL OFDMA), add " the DL-UL flag in U-SIG is set to 0" |

**Background**

D1.01 P407

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**Proposed Resolution: CID 4843**

**Revised**

**Note to commenter:**

Agree with the commenter that UL/DL flag is also used in determining DL OFDMA. Instruction to editor below implements the proposed change by the commenter, but with some editorial updates.

**Instruction to editor:**

At D1.01 P407L57, change

“field in the U-SIG equal to 0 (DL OFDMA).”

to

“field equal to 0 and the UL/DL field equal to 0 in the U-SIG (DL OFDMA).”

# CID 7476

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| **CID** | **Clause** | **Page.Line** | **Comment** | **Proposed Change** |
| 7476 | 36.3.7.8 | 386.58 | Change "Prepend a GI; 0.8 us..." to "Prepend a GI of 0.8 us..." | As in comment |

**Background**

D1.0 386:

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**Proposed Resolution: CID 7476**

**Accepted**

# CID 5527

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| **CID** | **Clause** | **Page.Line** | **Comment** | **Proposed Change** |
| 5527 | 36.3.7.9 | 387.11 | In  "..except the UL MU-MIMO transmission not using EHT single stream pilot EHT-LTF mode as described in 36.3.12.10 (EHT-LTF)",  the term of EHT single stream pilot EHT-LTF mode is not defined in 36.3.12.10 (EHT-LTF).  It would be better to just say as  "..except the UL MU-MIMO transmission by using 1x-LTF as described in 36.3.12.10 (EHT-LTF)". | As in comment |

**Background**

D1.0 387:

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D1.01 P491:

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P1.01 P496:

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**Proposed Resolution: CID 5527**

**Rejected**

36.3.12.10 has the description of the use of single stream pilot in EHT-LTF at D1.01 P491L13-21. Also, Equation (36-41) within 36.3.12.10 uses the term sigle stream pilot EHT-LTF mode to describe how the EHT-LTF is generated.

# CID 4549

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| **CID** | **Clause** | **Page.Line** | **Comment** | **Proposed Change** |
| 4549 | 36.37.10 | 387.49 | MCS14 is a special case for which segment parser and deparser step is not needed for 2x996-tone RU. Need to add some text to clarify on this | as in the comment. |

**Background**

D1.0 P387:

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D1.01 P397:

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D1.01 P657:

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D1.01 P516-7

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**Proposed Resolution: CID 4549**

**Rejected**

MCS 14 in a 320 MHz EHT MU PPDU uses two 2x996-tone RU (see D1.01 P397L25-28). And Figure 36-33 on D1.01 P657 shows that the segment parser/deparser are used for MCS 14 in 320 MHz EHT MU PPDU. Also, 36.3.13.10 (D1.01 P517) states that the frequency duplication for MCS 14 is done at the segement deparser output. Hence, segment parser/deparser are used for for MCS 14 in EHT MU PPDU (which uses 2x996-tone RU).

# CID 7189

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| **CID** | **Clause** | **Page.Line** | **Comment** | **Proposed Change** |
| 7189 | 36.3.7.10 | 387.51 | Change "output by" to "output from" | See comment |

**Background**

D1.0 P387:

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**Proposed Resolution: CID 7189**

**Accepted**

# CID 4548, 5474

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| **CID** | **Clause** | **Page.Line** | **Comment** | **Proposed Change** |
| 4548 | 36.3.7.10 | 388.15 | Should be "after steps a) to n)" | as in the comment. |
| 5474 | 36.3.7.10 | 388.15 | steps a) to m) should be steps a) to n) | as in comment |

**Background**

D1.0 P388:

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**Proposed Resolution: CID 4548, 5474**

**Revised**

**Note to commenter:**

Commenter is correct that “m)” should be “n)”. Instruction to editor below implements the proposed change.

**Instruction to editor:**

At D1.01 P410L15, change “a) to m)” to “a) to n)”.

(Note to editor: Same resolutions for CIDs 4548 and 5474.)

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