IEEE P802.11
Wireless LANs

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| D2.0 Comment Resolution on U-SIG Part 2 |
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Abstract

This submission proposes resolutions for the following comments on P802.11be D2.0: Comments in 36.3.12.7.2.

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. Resolve CIDs 10937, 11221, 11355, 12188, 12202, 12532.

R1: Make revisions according to discussion in the PHY call.

# CID 10937, 12188, 12202

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| **CID** | **Clause** | **Page.Line** | **Comment** | **Proposed Change** | **Resolution** |
| 10937 | 36.3.12.7.2 | 642.23 | The word "autodetection" is often used in 802.11 discussion, but it is not defined in the standard. | Suggest to add definition of "autodetection" to e.g. Sec 3.2 or to say "detection of PHY format" | Revised.Agree to the comment that if the word “autodetection” is used, it needs a definition. Replace it by “detection”.Instruction to editor: Change “autodetection” to “detection”. |
| 12188 | 36.3.12.7.2 | 642.30 | Is the dot11EHTBaseLineFeaturesImplementedOnly requirement still needed? May simply remove "with dot11EHTBaseLineFeaturesImplementedOnly equal to true" and NOTE 1. | as in the comment. | Revised.Firstly, it is fine to remove “with dot11EHTBaseLineFeaturesImplementedOnly equal to true” in this sentence. Secondly, need to keep “NOTE 1—Some of the Disregard or Validate fields might be redefined for EHT STAs with dot11EHTBaseLineFeaturesImplementedOnly equal to false.” until it becomes clear that no Disregard or Validate fields would be ever redefined for R2 features. Instruction to editor: Remove “with dot11EHTBaseLineFeaturesImplementedOnly equal to true” in P642L30. |
| 12202 | 36.3.12.7.1 | 642.64 | The contents of the U-SIG field of an ER preamble cannot change between 80MHz subblocks (unlike MU/OFDMA where the puncturing information can vary between 80MHz subblocks), so it's not clear why the spec defines that the U-SIG contents can vary between different 80MHz subblocks for both MU and ER PPDU types. | Separate MU and ER descriptions in this paragraph and specify that the U-SIG contents of an ER preamble cannot change between 80MHz subblocks (at least per current definition of the fields). | Rejected.There is no passed motion/SP to support that the ER preamble or a future ER PPDU can only be used for a specific type of transmission (e.g., non-OFDMA transmission to a single user) but not for other types of transmission (e.g., DL OFDMA transmission). Therefore, better not to restrict the U-SIG contents of an ER preamble to be identical for all 80MHz frequency subblocks. |

# CID 12532

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| 12532 | 36.3.12.7.2 | 645.07 | It is not clear if the Punctured Channel Information field of the USIG contains the punctured channel indicated by the Disabled Subchannel Bitmap field of the EHT Operation element in addition to any other punctured channel which would be punctured on dynamic basis. | Add a note to explicitly state that the Punctured Channel Information field in U-SIG signals all punctured channels either the ones indicated by the Disabled Subchannel Bitmap or any other punctured channels in addition to those channels. | Revised.See the discussion on CID 12532 in the following document [*https://mentor.ieee.org/802.11/dcn/22/11-22-1066-01-00be-d2.0-comment-resolution-on-u-sig-part-2.docx*](https://mentor.ieee.org/802.11/dcn/22/11-22-1066-01-00be-d2.0-comment-resolution-on-u-sig-part-2.docx).Instruction to editor: In P645L48 (end of the current description of the Punctured Channel Information field), add the following sentence as a new paragraph: “For further information on punctured channels, refer to 36.3.12.11.” |

**Discussion on CID 12532**

The cause of preamble puncturing is stated in 36.3.12.11.1 (see highlighted sentence below). Therefore, it is clear that the punctured pattern indicated in the Punctured Channel Information field of U-SIG is a result of both the punctured channel indicated by the Disabled Subchannel Bitmap field of the EHT Operation element and any other dynamic puncturing due to CCA. We do not necessarily need to address this in the definition of the Punctured Channel Information field. We may simply refer to 36.3.12.11.



# CID 11221, 11355

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| 11221 | 36.3.12.7.2 | 646.10 | To avoid efficiency loss, limit number of EHT-SIG symbols to minimum needed for Non-OFDMA EHT MU PPDU transmitter to single user. | When PPDU Type and compression mode set to 1 and for non-NDP packets,set Number of EHT-SIG Symbols field to1 if EHT-SIG MCS = 00 if EHT-SIG MCS = 1 or 23 if EHT-SIG MCS = 3 | Revised.Agree to the comment to limit the number of EHT-SIG Symbols in an EHT MU PPDU to minimum needed for non-OFDMA transmission to a single user. Instead of adding the proposed text in the description of the Number of EHT-SIG Symbols field, we revised the text and combined it at the end of the paragraph in P647L27-30.Instruction to editor: At the end of the paragraph in P647L27-30, add the following: “In the case when the EHT MU PPDU is a transmission to a single user, the Number of EHT-SIG Symbols field should be set to 0 if the EHT-SIG MCS field should be set to 1 or 2, 1 if the EHT-SIG MCS field is set to 0, or 3 if the EHT-SIG MCS field is set to 3.” |
| 11355 | 36.3.12.7.2 | 652.27 | Change "Indicates whether or not specific spatial reuse modes" to "Indicates whether or not PSR spatial reuse" , since this field only indicate PSR spatial reuse is allowed. See Table 27-23. Make the similar chanes to Spatial Reuse 2 | as in the comment | Revised.Agree to the comment. Slightly change the proposed text and add the Page.Line references.Instruction to editor: Change “Indicates whether or not specific spatial reuse modes are” to “Indicates whether or not PSR spatial reuse is” in P652L27 and P653L7. |