IEEE P802.11
Wireless LANs

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| CR for Examples of WUR MC-OOK Symbol Design and CSD Design in Annex AB |
| Date: 2018-11-13 |
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Abstract

This contribution proposes comment resolutions for Annex AB of the TGba Draft D1.0. The CIDs resolved are: 160, 215, 278, 1062, 1063, 1064, 1155

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| **CID** | **Page** | **Clause** | **Comment** | **Proposed Change** | **Resolution** |
| 160 |  | Annex AB | The sequence examples are not normalized and can cause power differences | Add a normalization factor for each example | Revised.Updated denominators in Example 2 in Table AB-1 and Table AB-2 and updated the denominator in Example 3 in Table AB-2. And added a Note. |

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| 215 | 98.21 | Annex AB | Example 3 in Table AB-2 is not normalized to unit length constellation symbols. All other examples in both Table AB-1 and Table AB-2 are unit length. | Modify Example 3 from "(1+j){1,-1,1,-1,-1,1,0,-1,-1,1,1,1,1}" to "(1+j)/sqrt(2) {1,-1,1,-1,-1,1,0,-1,-1,1,1,1,1}" | Accepted. |

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| 278 | 98.22 | Annex AB | In Table AB-2, the coefficients of Example 3 should be devided by sqrt(2) for power normalization. | See the comment. | Accepted. |

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| 1062 | 97.37 | Annex AB | The scaling factor for the sequence in Example 2 is not consistent with the other example sequences and also it is not consistent with Eq. (32-2). The norm of the sequence has to be equal to number of non-zero coefficients, which is equal to 6.Replace the denominator in Example 2 with sqrt(159.333) | As shown in the comment. | Revised.Changed the denominator to sqrt(159.333) and added a descriptive note. |

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| 1063 | 98.18 | Annex AB | The scaling factor for the sequence in Example 2 is not consistent with the other example sequences and also it is not consistent with Eq. (32-2). The norm of the sequence has to be equal to number of non-zero coefficients, which is equal to 12.Replace the denominator in Example 2 with sqrt(155.333) | As shown in the comment. | Revised.Changed the denominator to sqrt(155.333) and added a descriptive note. |

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| **CID** | **Page** | **Clause** | **Comment** | **Proposed Change** | **Resolution** |
| 1064 | 98.22 | Annex AB | The scaling factor for the sequence in Example 3 is not consistent with the other example sequences and also it is not consistent with Eq. (32-2). The norm of the sequence has to be equal to number of non-zero coefficients, which is equal to 12.Add a scaling facor of (1/sqrt(2)) in Example 3 | As shown in the comment. | Accepted. |

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| 1155 | 97.20 | AB | "This annex provides example sequences for the construction of these symbols."Is this an implementation dependent issue? Depending on the implementation, any sequence and CSD can be used. | Please remove Annex AB.Nevertheless you want to refer such examples in the spec, just mention the submission number as done in Annex O. | Rejected.The group has agreed to provide 3 examples for each data rate. |

To TGba editor, change Table AB-1 and Table AB-2 to the following:

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| * Example Values for the Sequence *S-6,6* used for the Construction of the 2 µs MC-OOK On symbol
 |
| Index | Sequence *S-6,6*  |
| Example 1 |  |
| Example 2 | $$\frac{\{3+7j,0,1+15j,0,-5+13j,0,0,0,13-5j,0,-15-1j,0,7+3j\}}{\sqrt{170}\sqrt{159.333} (\#160, \#1062)}$$Note – The scaling factor has been chosen so that the MC-OOK On symbol is normalized to have the same power as the other examples. (#160, #1062) |
| Example 3 |  |

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| * Example Values for the Sequence *S-6,6* used for the Construction of the 4 µs MC-OOK On symbol
 |
|  Index | Sequence *S-6,6* |
| Example 1 |  |
| Example 2 | $$\frac{\{-9-5j,-7+9j,-1+1j,9+15j,15-9j,-9+1j,0,1-9j,9-15j,15+9j,-1+1j,9-7j,5+9j\}}{\sqrt{170}\sqrt{155.333} (\#160, \#1063)}$$Note – The scaling factor has been chosen so that the MC-OOK On symbol is normalized to have the same power as the other examples. (#160, #1063) |
| Example 3 | $$\frac{1+j}{\sqrt{2}(\#160, \#215, \#278, \#1064)}\{1,-1,1,-1,-1,1,0,-1,-1,1,1,1,1\}$$ |

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