IEEE P802.11  
Wireless LANs

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| **TGba D2.1 Comment Resolutions for CIDs 2424 and 2491** |
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Abstract

This submission proposes resolutions for comments of TGba D2.1 with the following CIDs:

* 2424, 2491

Interpretation of a Motion to Adopt

A motion to approve this submission means that the editing instructions and any changed or added material are actioned in the TGba D2.1 Draft. This introduction is not part of the adopted material.

***Editing instructions formatted like this are intended to be copied into the TGba D2.1 Draft (i.e. they are instructions to the 802.11 editor on how to merge the text with the baseline documents).***

***TGba Editor: Editing instructions preceded by “TGba Editor” are instructions to the TGba editor to modify existing material in the TGba draft. As a result of adopting the changes, the TGba editor will execute the instructions rather than copy them to the TGba Draft.***

#### *CIDs 2424, 2491*

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| **CID** | **Clause** | **PP.LL** | **Comment** | **Proposed Change** | **Resolution** |
| 2424 | 31.2.10.2 | 105.31 | The text reads "The encoded binary data shall be modulated using MC-OOK". This sentence contains normative text stating that MC-OOK shall be used. However the current version of the draft does not define MC-OOK, it only says that it is a multicarrier signal in Sect 3.2 and gives examples of how it can be constructed in Sect 31.2.8.. Hence, normative text defining MC-OOK ought to be provided. | Change the text in page 98, lines 63 to 65 (Sect 31.2.8) to "For the WUR Sync ON symbols and WUR Data MC-OOK ON symbols (SymLDROn and SymHDROn), the baseband signal shall be as specified in Equation (31-3)" | Revised  Agree in principle with the commenter. Change “can be” to “should be” and modifiy the sentence.  TGba editor to make the changes shown in 11-19/0755r5. |
| 2491 | 31.2.10.2 | 105.41 | The definition of MC-OOK has been removed without a clear reason. The definition was in D1.0 (P84L24) as follows "the OOK waveform of WUR PPDU is generated by using contiguous 13 subcarriers with a subcarrier spacing of 312.5 kHz and the center subcarrier being null." Based on D1.0 and the doc.:11-17/575r11 "Spec Framework Document", R3.3.B and R3.3.C, the definition of MC-OOK needs to be added back to the spec. | Add back the following definition of MC-OOK from D1.0 to P84L46 of D2.0:"The MC-OOK ON symbol (SymLDROn) is generated by using contiguous 13 subcarriers with a subcarrier spacing of 312.5 kHz and the center subcarrier being null. The other coefficients are selected from BPSK, QPSK, 16-QAM, 64-QAM, or 256-QAM. Indices for contiguous 13 subcarriers are from -6 to 6." or change "can be" to "is" in the Mathematical descripsions in 31.2.8, 31.2.4.1, 31.2.4.2. | Revised-  Add the text which describes MC-OOK in section 31.2.10.2.  TGba editor to make the changes shown in 11-19/0755r5. |

*TGba Editor: Please make the following changes (in red) in 106.63 of D2.1:*

For the WUR-Sync ON symbols and WUR-Data MC-OOK ON symbols (SymLDROn and SymHDROn), the baseband signal should be obtained by taking the Inverse Discrete Fourier Transform (IDFT) of a set of subcarrier coefficients, which is described using Equation (31-3). (#2424)

*TGba Editor: Please ad the following sentence (in red) in 31.2.10.2 WUR-Data field for low data rate and high data rate of D2.1:*

For WUR LDR, 4μs MC-OOK OFF and ON symbols are denoted as SymLDROff and SymLDROn, respec­tively. For WUR HDR, 2μs MC-OOK OFF and ON symbols are denoted as SymHDROff and SymHDROn, respectively.

SymLDROn and SymHDROn should be generated using contiguous 13 subcarriers, centered within a 20MHz channel, with a subcarrier spacing of 312.5 kHz and the center subcarrier being null. The subcarrier coefficients may take values from the BPSK, QPSK, 16-QAM, 64-QAM, or 256-QAM constellation symbols. (#2491)

When a single 20 MHz WUR channel is used for transmission of a WUR PPDU, SymHDROn and SymL­DROn are described in 31.2.8 (Mathematical description of signals). The generation of SymHDROn and SymLDROn is described in 31.2.4.1 (WUR PPDU waveform generation for WUR-Sync field and high data rate WUR-Data field) and 31.2.4.2 (WUR PPDU waveform generation for low data rate WUR-Data field), respectively.