IEEE P802.11
Wireless LANs

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| Proposed Draft Text: OFDM modulation |
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Abstract

This submission proposed the draft text on OFDM modulation for TGbe D0.2.

This document is based on 27.3.12.14 OFDM modulation of P802.11ax D7.0.

Revisions:

* Rev 0: Initial version of the document.

**34.3.12.9 OFDM modulation**

The time domain waveform of the Data field of an EHT PPDU that is not an EHT TB PPDU for transmit chain shall be as defined in Equation (36-x1).

(36-x1)

where

 is defined in Table 36-9 (Timing-related constants)

 is defined in 17.3.5.10 (OFDM modulation)

 depends on the corresponding RU size. It is selected from Equation (27-101) to Equation (27-107) for RU size defined in 27.3.12.13 (Pilot subcarriers), except for MRU 26+52 using Equation (36-xx) and MRU 26+106 using Equation (36-yy), and for RU using Equation (36-72) defined in 36.3.12.8 (Pilot subcarriers).

 represents the cyclic shift for spatial stream as defined in 36.3.11.2.2 (Cyclic shift for EHT modulated fields).

 is the guard interval duration as defined in Table 36-9 (Timing-related constants)

 is the transmitted constellation for user in the -th RU at subcarrier k, spatial stream m, and Data field OFDM symbol and is defined by Equation (36-x2).

 (36-x2)

where

 is the set of pilot subcarrier indices for the Data field OFDM symbols as defined in 36.3.12.13 (Pilot subcarriers)

 is defined in Equation (36-x3)

 (36-x3)

where

 is the minimum value of the set

 is the cardinality of a set

NOTE— translates a subcarrier index into the index of data symbols in a transmission over RU . The subcarrier index for the data subcarrier is first offset by the minimum value of subcarrier index

 (for the lower edge subcarrier) in this RU, and then subtracted by the number of pilot subcarriers falling in between the data subcarrier and the edge subcarrier.

The time domain waveform of the Data field of an EHT TB PPDU for user in the -th RU/MRU from transmit chain shall be as defined in Equation (36-x4).

(36-x4)

where

 is defined in 36.3.10 (Mathematical description of signals).