IEEE P802.11  
Wireless LANs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Long CW capability | | | | |
| Date: 2019-01-15 | | | | |
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|  |  |  |  |  |
|  |  |  |  |  |

Abstract

This document proposes to add a capability field for Long LDPC CW support

**Discussion:**

A STA may support Long CW LDPC. However, there is no field to indicate whether it supports Long CW.

***TGay Editor: Modify figure 51 PHY capabilities subelement adding a Long CW subfield:***

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | B0 | B1 | B2 | B3 | B4 | B5 | B6 | B7 B9 |
|  | Phase Hopping Supported | Open Loop Precoding Supported | DCM π/2-BPSK Supported | Short CW Punctured Supported | Short CW Superimposed Supported | Long CW Punctured Supported | Long CW Superimposed Supported | SC Maximum Number of SU-MIMO Spatial Streams Supported |
| Bits: | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | B10 B12 | B13 | B14 | B15 | B16 B18 | | B19 B20 | | B21 | B22 | B23 |
|  | OFDM Maximum Number of SU-MIMO Spatial Streams Supported | NUC TX Supported | NUC RX Supported | π/2-8-PSK Supported | Number of Concurrent RF Chains | STBC Supported | | EDMG A-PPDU | | Long CW | Reserved |
| Bits: | 3 | 1 | 1 | 1 | 3 | | 2 | | 1 |  | 2 |

***TGaz Editor: Add the following text after the 3rd paragraph after figure 51 (P121L12)***

The Long CW subfield is set to 1 to indicate that a STA support LDPC CW of length 1344 on code rates ½, 5/8, 3/4 and 13/16. The Long CW Punctured Supported and Long CW Superimposed Supported subfields may not be set to 1 if the Long CW subfield is set to 0.

***TGaz Editor: Add the following MIB variable at P696L34***

dot11EDMGLongCWImplemented OBJECT-TYPE

SYNTAX TruthValue

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"This is a capability variable.

Its value is determined by device capabilities.

This attribute indicates support for Long (1344) CW."

DEFVAL { false }

::= { dot11PHYEDMGEntry 23 }

***TGaz Editor: Modify the following text in P701L36:***

dot11EDMGAPPDUSupportedImplemented TruthValue,

dot11EDMGLongCWImplemented

**Discussion**

There is no header field for Secure TRN fields:

***TGay Editor: Modify the last two lines of Table 57 —EDMG-MCS field definition when the Number of SS field is 0 as follows:***

|  |  |  |  |
| --- | --- | --- | --- |
| Dual Polarization TRN Training | 1 | 6 | Corresponds to the TXVECTOR parameter DUAL\_POL\_TRAINING. If set to 1, indicates that the TRN subfields appended to this PPDU have different polarization for the same AWV (see 29.9.2.2.5). If set to 0, indicates that the TRN field appended to this PPDU does not change polarization. |
| Secure TRN Field | 1 | 7 | When set to 1, indicates that the TRN field, if present, in the PPDU contains Secure TRN Sequences specified in 29.9.3.5. Otherwise the TRN field, if present, uses the format specified in 29.9.2.2.5. |
| Reserved | 8 | 8 |  |

**References:**