IEEE P802.11  
Wireless LANs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Resolution Text for PHY Type Related Comments | | | | |
| Date: 2022-03-04 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | email |
| Hitoshi Morioka | SRC Software | Fukuoka, JAPAN |  | hmorioka@src-soft.com |
|  |  |  |  |  |

Abstract

This document describes the resolutions related to the PHY Type field.

**The baseline is D2.1.**

# Suggested resolution

### 9.4.5.30 Enhanced Broadcast Services ANQP-element

***Modify Figure 9-839b at P48L43 as follows:* [2027, 2270, 2028]**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Control | Content ID | Negotiation Method | Content Authentication Algorithm | Content Address Type | Content Address |
| Octets: | 1 | 1 | 1 | 1 | 1 | variable |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Title Length | Title | PHY Type (optional) | T~~X~~x Rate (optional) | Next T~~X~~x Schedule (optional) | Time ~~t~~To Termination (optional) |
| Octets: | 1 | variable | 0 or 1 | variable | 0 or ~~8~~ 2 | 0 or 2 |

Figure 9-839b---Enhanced Broadcast Services Tuple field format

***Modify Figure 9-839c at P49L2 as follows:* [2027, 2270, 2028]**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | B0 | B1 | B2 | B3 | B4 B7 |
|  | Tx Rate Present | Next Tx Schedule Present | Time To Termination Present | Association Required | Reserved |
| Bits: | 1 | 1 | 1 | 1 | 4 |

Figure 9-839c---Control field format

***Insert the following paragraph at P49L14:* [2027, 2270, 2028]**

The Tx Rate Present subfield is set to 1 if the PHY Type subfield and the Tx Rate subfield are present and is set to 0 otherwise.

***Modify the paragraph at P51L51 as follows:* [2027, 2270, 2028]**

The PHY Type subfield indicates the PHY type of the EBCS Data frames of the ~~content~~ EBCS traffic stream. The PHY type is encoded as defined in Table 9-340d (PHY Type subfield).

***Replace Table 9-340d at P51L56 as follows:* [2027, 2270, 2028]**

Table 9-340d---PHY Type subfield

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Value** | **Operating Band** | | | | | | | | | | |
| **TV white space** | **Sub-1 GHz (excluding TV white space)** | **2.4 GHz** | **3.6 GHz** | **4.9 GHz** | **5 GHz** | **6 GHz** | **45 GHz** | **60 GHz** | **Chinese 60 GHz** | **Light** |
| 0 | TVHT | S1G | DSSS, HR/DSSS,  OFDM,  ERP | OFDM | OFDM | OFDM | Reserved | CMMG | DMG | CDMG | LC |
| 1 | Reserved | Reserved | HT | Reserved | Reserved | HT | Reserved | Reserved | EDMG | Reserved | Reserved |
| 2 | Reserved | Reserved | Reserved | Reserved | Reserved | VHT | Reserved | Reserved | Reserved | Reserved | Reserved |
| 3 | Reserved | Reserved | HE | Reserved | Reserved | HE | HE | Reserved | Reserved | Reserved | Reserved |
| 4-255 | Reserved | Reserved | Reserved | Reserved | Reserved | Reserved | Reserved | Reserved | Reserved | Reserved | Reserved |

***Insert the following paragraph at P52L23:* [2027, 2270, 2028]**

The PHY Type subfield value depends on the operating band of the EBCS AP. If the PHY Type subfield is not present, the PHY type and the transmission rate of the EBCS Data frames of the EBCS traffic stream is same as the PHY type and the transmission rate of the EBCS Info frame (dot11EBCSInfoTxRate).

### 10.6.5.3 Rate selection for EBCS frames

***Modify the paragraph at P76L23 as follows:* [2027, 2270, 2028, 2192, 2193]**

The transmission rate for EBCS Info frames and EBCS UL frames is determined from dot11EBCSInfoPHYType and dot11EBCSInfoTxRate. When dot11EBCSInfoPHYType is equal to 255, the AP may select a transmission rate following the rules specified in 10.6.5.4 (Rate selection for other group addressed Data and Management frames).

The transmission rate for EBCS Data frames is determined from ~~dot11EBCSContentList~~ dot11EBCSTrafficStreamPHYType and dot11EBCSTrafficStreamTxRate. When dot11EBCSTrafficStreamPHYType is equal to 255, the AP may select a transmission rate following the rules specified in 10.6.5.4 (Rate selection for other group addressed Data and Management frames).

### 11.55.2.2 EBCS DL operation at an EBCS AP

***Modify the paragraph at P79L22 as follows:* [2192, 2193]**

An EBCS AP shall advertise its EBCS capabilities in the EBCS Support field in the Extended Capabilities element in Beacon frames and Probe Response frames. An EBCS AP that has EBCS DL enabled shall transmit EBCS Info frames periodically in the interval that is specified by dot11EBCSInfoInterval~~, at the transmission rate that is specified by dot11EBCSInfoTxRate~~. An EBCS AP shall advertise the timing of the next EBCS Info frame transmission in the EBCS Info Frame TX Countdown field in the EBCS Parameters element and shall not signal the EBCS Info frame in the TIM element in Beacon frames and Probe Response frames. The EBCS Info frame shall be transmitted among the set of group addressed frames transmitted immediately after the Beacon frame identified by the EBCS Parameters element. Details of EBCS Info frame generation are described in 11.55.2.4 (EBCS Info frame generation and usage).

### C.3 MIB detail

***Insert the following entry at P103L23:* [2192, 2193]**

dot11EBCSInfoPHYType Unsigned32,

***Insert the following element at P104L32:* [2192, 2193]**

dot11EBCSInfoPHYType OBJECT-TYPE

SYNTAX Unsigned32 (0..255)

MAX-ACCESS read-write

STATUS current

DESCRIPTION

"This is a control variable.

It is written by an external management entity or the SME. Changes take effect as soon as practical in the implementation. This variable specifies the transmission PHY type of the EBCS Info frames encoded in the PHY Type subfield value in Table 9-340d (PHY Type subfield). A value of 255 indicates the PHY type is not specified."

::= { dot11StationConfigEntry <ANA+5> }

***Modify dot11EBCSInfoTxRate at P104L32 as follows and increment the ANA number of the following elements:* [2192, 2193]**

dot11EBCSInfoTxRate OBJECT-TYPE

SYNTAX OCTET STRING (SIZE(2..4))

MAX-ACCESS read-write

STATUS current

DESCRIPTION

"This is a control variable.

It is written by an external management entity or the SME. Changes take effect as soon as practical in the implementation. This attribute indicates the transmission rate of EBCS Info frames.

~~This variable encodes as a PHY Type subfield and a TX Rate subfield in the Enhanced Broadcast Tuple as described in 9.4.5.30 (Enhanced Broadcast Services ANQP-element)."~~

This variable specifies the transmission rate of the EBCS Info frames encoded as in the TX Rate subfield format in 9.4.5.30 (EBCS ANQP-element).”

~~DEFVAL {’000C’H}~~

::= { dot11StationConfigEntry <ANA+~~5~~6> }

***Insert the following entry at P105L65:* [2192, 2193]**

dot11EBCSInfoPHYType,