IEEE P802.11  
Wireless LANs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Proposed Text to Resolve PCP Selection | | | | |
| Date: 2015-01-20 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | email |
| Dejian Li | Huawei / HiSilicon |  |  | lidejian@huawei.com |
| Jiamin Chen | Huawei/ HiSilicon |  |  | jiamin.chen@mail01.huawei.com |
| Pei Liu | HiSilicon |  |  | liupei@hisilicon.com |
|  |  |  |  |  |

Abstract

This document presents suggested proposal towards resolving the PCP selection problem for CDMG STAs operating on a 1.08 GHz channel. The objective and idea of this text proposal has been presented in the 11aj completed proposal, see slide 17 of 13/1301r1. The proposed modification can help the selected PCP conduct the CDMG PCP/AP clustering specified in 9.34a.

***Modify the following definition into 10.3.1 as highlighted in red texts:***

* STA authentication and association

##### **10.1.4.3.4 PCP selection in a PBSS**

***Change the third paragraph in 10.1.4.3.4 as follows:***

The PCP Factor of a DMG STA is constructed by concatenating the value of select fields present in the STA’s DMG Capabilities element defined in 8.4.2.130. The PCP Factor for a DMG STA and a CDMG STA operating on a 2.16 GHz channel is defined in Figure 10-3b. The PCP Factor of a CDMG STA operating on a 1.08 GHz channel is constructed by concatenating the value of select fields present in the STA’s CDMG Capabilities element defined in 8.4.2.160 and the Supported Channel Width Set field. The PCP Factor for a CDMG STA operating on a 1.08 GHz channel is defined in Figure 10-3c.

***Insert the following paragraphs (including Figure 10-3c and Table 10-1a) after Figure 10-3b：***

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | B0 B3 | B4 B11 | | B12 B18 | B19 | B20 | B21 | B22 B23 | B24 | B26 B31 |
|  | Reserved (set to 0) | MAX AssociatedNumber | | Total Number of Sectors | Pseudo-Static Allocations | TDDTI | Decentralized PCP/AP Clustering | Supported Channel Width Set | Power Source | Reserved  (set to 0) |
| Bits: | 4 | 8 | 7 | | 1 | 1 | 1 | 2 | 1 | 6 |

Figure 10-3c—PCP Factor for a CDMG STA operating on a 1.08 GHz channel

The Supported Channel Width Set field in Figure 10-3c is obtained via encoding based on the supported channel widths that are indicated by the Operating Classes field of the received Country element or the Supported Operating Classes element of the peer STA. The encoding of the Supported Channel Width Set field is given in Table 10-1a.

**Table 10-1a—Encoding of the Supported Channel Width Set field**

|  |  |  |
| --- | --- | --- |
| **B22** | **B23** | **Meaning** |
| 0 | 0 | The CDMG STA supports 1.08GHz channel width in 60GHz band. |
| 0 | 1 | The CDMG STA supports both the 1.08GHz and 2.16GHz channel widths in 60GHz band. |
| All other combinations | | Reserved |

If a CDMG STA is operating on a 2.16 GHz channel, the PCP Factor is constructed according to Figure 10-3b. If a CDMG STA is operating on a 1.08 GHz channel, the PCP Factor is constructed according to Figure 10-3c.