IEEE P802.11  
Wireless LANs

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| Rate Identification Field | | | | |
| Date: 2011-09-14 | | | | |
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|  |  |  |  |  |

Abstract

This document provides resolution for the comments listed below

Comments are from: 11-11-0907-0x-00ac-lb178-comments-tgac-d1-0.xlsx

**Comment**

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| --- | --- | --- | --- | --- | --- |
| 3073 | 48.65 | 8.4.1.32 Rate Identification field(11v): does not support 11ac. Also there is an issue with including 11ac indication: 11ac MCS are not uniquely indexed | include indication for 11ac rates | Agree in principle | MAC |

**Discussion**

The MCS specified in clause 19 are uniquely identified by an MCS Index;

In clause 22, the MCS index is unique only for a given bandwidth and number of spatial streams;

The proposed solution is to use reserved values of the Mask field to indicate that the MCS is indicated in the VHT format, for a specific BW; the MCS Index in this case is re-interpreted to indicate Nss and MCS Index as in the MCS tables of section 22.

**Instructions to the Editor**

**Modify section 8.4.1.32 of REVmb D 9.1 as follows**

**8.4.1.32 Rate Identification field(11v)**

The Rate Identification field is 4 octets in length and contains the rate identification information for a frame

that is not the current frame transmitted or received by a STA. This information allows services to exchange

frame rate information prior to use of the frames that (#12356)use the rate specified by the Rate Identification

field. The contents of the field is defined in Figure 8-65 (Identification field format).



The Mask field specifies which other fields in the Rate Identification field are used by a STA. The format of

the Mask field is shown in Figure 8-66 (Mask field format).

The MCS Selector field set to 0 indicates the MCS Index field is reserved. The MCS Selector field set to 1

indicates the MCS Index field specifies an index value that is taken from Table 19-30 (MCS parameters for

mandatory 20 MHz, NSS = 1, NES = 1) through Table 19-33 (MCS parameters for optional 20 MHz, NSS = 4, NES =



1, EQM) and Table 19-39 (MCS parameters for optional 20 MHz, NSS = 2, NES = 1, UEQM)

through Table 19-41 (MCS parameters for optional 20 MHz, NSS = 4, NES = 1, UEQM) in 19.6 (Parameters

for HT MCSs). The MCS Selector field set to 2 indicates the MCS Index field specifies an index value that

is taken from Table 19-34 (MCS parameters for optional 40 MHz, NSS = 1, NES = 1) through Table 19-38

(MCS parameters for optional 40 MHz MCS 32 format, NSS = 1, NES = 1) and Table 19-43 (MCS parameters

for optional 40 MHz, NSS = 3, UEQM) through Table 19-44 (MCS parameters for optional 40 MHz,

NSS = 4, UEQM) in 19.6 (Parameters for HT MCSs).

The MCS Selector field set to 3 indicates the MCS Index field specifies values that are taken from Tables 22-25 to 22-32, indicating a 20 MHz VHT MCS.

The MCS Selector field set to 4 indicates the MCS Index field specifies values that are taken from Tables 22-33 to 22-40, indicating a 40 MHz VHT MCS.

The MCS Selector field set to 5 indicates the MCS Index field specifies values that are taken from Tables 22-41 to 22-48, indicating a 80 MHz VHT MCS.

The MCS Selector field set to 6 indicates the MCS Index field specifies values that are taken from Tables 22-49 to 22-56, indicating a 80+80 or 160 MHz VHT MCS.

The MCS Selector field values of 7 is reserved.

The Rate Type field set to 0 indicates the Rate field is reserved. The Rate Type field set to 1 indicates the

Rate field specifies a data rate that is in the basic rate set. The Rate Type field set to 2 indicates the Rate field

specifies a data rate that is not in the basic rate set.

If MCS selector is set to 1 or 2, the MCS Index field is a 1 octet unsigned integer that specifies the row index for one of the MCS parametertables in 19.6 (Parameters for HT MCSs).

If MCS selector is set to 3,4,5 or 6, the MCS Index field is interpreted as in figure XX; In figure XX, the Nss field indicates the number of spatial streams and the MCS Index Row indicates a value from the MCS Index row from the MCS Table corresponding to the BW and Nss values;

If the MCS selector is set to either 1 or 2, the Rate field contains a 2-octet unsigned integer that specifies the PHY rate in 0.5 Mb/s units. If MCS selector is set to 3,4,5 or 6, the Rate field contains a 2-octet unsigned integer that specifies the PHY rate in 1.5 Mb/s units;

|  |  |  |
| --- | --- | --- |
| 3 | 4 | 1 |
| Nss | MCS Index Row | Reserved |

**Figure XX - MCS Index Field when MCS selector is set to 3,4,5 or 6,**