IEEE P802.11  
Wireless LANs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| LB200 TCLAS Short Frame Long Addresses | | | | |
| Date: 2013-12-27 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | email |
| Matthew Fischer | Broadcom | 190 Mathilda Place, Sunnyvale, CA 94086 | +1 408 543 3370 | [mfischer@broadcom.com](mailto:mfischer@broadcom.com) |
|  |  |  |  |  |

Abstract

Addressing CID 1383 from LB200 for Subclause 8.4.2.30 TCLAS IE

**REVISION NOTES:**

R0: initial

Interpretation of a Motion to Adopt

A motion to approve this submission means that the editing instructions and any changed or added material are actioned in the TGah Draft. This introduction is not part of the adopted material.

***Editing instructions formatted like this are intended to be copied into the TGah Draft (i.e. they are instructions to the 802.11 editor on how to merge the text with the baseline documents).***

***TGah Editor: Editing instructions preceded by “Instruction to Editor” are instructions to the TGah editor to modify existing material in the TGah draft. As a result of adopting the changes, the TGah editor will execute the instructions rather than copy them to the TGah Draft.***

**CID LIST:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 1383 | amin jafarian | 77.21 | 8.4.2.30 | what about frame classifier for short Data Frames with two full mac headers? | As in comment. | Revise - TGah editor to execute proposed changes from 11-14-0609r1 found under all headings which include CID1383 |

**Discussion**

**Proposed changes**

**CID 1383**

8.4.2.30 TCLAS element

***TGah editor: add a row to Table 8-151 Frame Classifier and modify the last row of the table as shown, noting that the table numbering in the TGah D1.3 does not match the table numbering of REVmcD2.8:***

**Table 8-151 - Frame classifier type**

|  |  |
| --- | --- |
| Classifier type | Classifier parameters |
| 0 | Ethernet parameters |
| 1 | TCP/UDP IP parameters |
| 2 | IEEE Std 802.1Q parameters |
| 3 | Filter Offset parameters |
| 4 | IP and higher layer parameters |
| 5 | IEEE Std 802.1D/Q parameters |
| 6 | IEEE 802.11 PV0 MPDU MAC header parameters (B1B0 of the Frame Control field = 00) |
| 7 | IEEE 802.11 down PV1 MPDU MAC header parameters |
| 8 | IEEE 802.11 non-down PV1 MPDU MAC header parameters |
| 9 | IEEE 802.11 PV1 MPDU Full Address MAC header parameters |
| ~~79~~10-255 | Reserved |

***TGah editor: insert the following paragraph after the third paragraph of 8.4.2.30 TCLAS element in TGah D1.3 as shown:***

The classifier type value of 9 applies only to frames with a value of 1 in the Protocol Version subfield of the Frame Control field of the MAC header and a value of 3 in the Type subfield of the Frame Control field of the MAC header.

***TGah editor: change the seventh paragraph of 8.4.2.30 TCLAS element in TGah D1.3 as shown:***

When the Classifier Type is equal to 6, 7, 8 or 9, the Classifier Mask subfield is three octets in length~~. It~~ and contains a sequence of ~~nine~~ two-bit Classifier Mask Control subfields. Each Classifier Mask Control subfield applies to a specific target field of the MAC header~~. It~~ of an MPDU and determines whether the target field is included in the comparison and whether an additional bitmask (the target field filter mask) is present. When the target field filter mask is present, it determines which bits of the target field are used in the comparison. ~~Table 8-139 (Interpretation of the Classifier Mask Control subfield values)~~ Setting the LSB of the 2 bits to 1 indicates the use of the corresponding MAC Header field for comparison, and setting the LSB of the two bits to 0 indicates the corresponding MAC header field is not used for comparison, and the corresponding Match Specification is not included in the Classifier. The setting of the MSB of the two bit to 1 indicates the inclusion of the corresponding MAC Header Filter (a bit mask) in the corresponding Match Specification; the setting of the MSB of the two bits to 0 indicates the MAC Header Filter is not included in the corresponding Match Specification and every bit of the Match Specification, if included in the Classifier Parameter, needs to be compared. If an optional MAC Header field needs to be compared, the LSB of the two bits in the Classifier Mask corresponding to the optional MAC header field is set to 1, and an MPDU that does not include the optional field is not a matching MPDU. Table 8-138a (Classifier Mask for Classifier Type (6)), Table 8-138b (Classifier Mask for Classifier Type (7)), Table 8-138c (Classifier Mask for Classifier Type (8)) and Table 8-138d (Classifier Mask for Classifier Type (9)) specify~~ies~~ the interpretation of the Classifier Mask Control subfield for each of the Classifier Type values 6, 7, 8 and 9, respectively.

***TGah editor:insert a new table into TGah D1.3 after Table 8-138c (Classifier Mask for Classifier Type (8)) as shown:***

|  |  |  |
| --- | --- | --- |
| **Table 8-138d - Classifier Mask for Classifier Type (9)** | | |
| Octet index | Bits index | Classifier parameters |
| 0 | B0B1 | Frame Control |
| B2B3 | Address 1 |
| B4B5 | Address 2 |
| B6B7 | Sequence Control |
| 1 | B0B1 | Reserved |
| B2B3 | Reserved |
| B4B5 | Reserved |
| B6B7 | Reserved |
| 2 | B0B1 | Reserved |
| B2B3 | Reserved |
| B4B5 | Reserved |
| B6B7 | Reserved |

***TGah editor: remove the following note as shown:***

***TGah editor: change the fifth paragraph of TGah D1.3 subclause 8.4.2.30 TCLAS, which begins with “For Classifier Type 6” as shown:***

For Classifier Type 6, the formats of the Frame Control Match Specification subfield, Duration/ID Match Specification subfield, Address 1 Match Specification subfield, Address 2 Match Specification subfield, Address 3 Match Specification subfield, Sequence Control Match Specification subfield, Address 4 Match Specification subfield, QoS Control Match Specification subfield and HT Control Match Specification subfield of the Frame Classifier field of a TCLAS element are shown in Figure 8-257 (Frame Control Match Specification Subfield of Classifier Type 6, 7, 8, 9), Figure 8-258 (Duration/ID Match Specification Subfield of Classifier Type 6), Figure 8-259 (Address1 Match Specification Subfield of Classifier Type 6, 8, 9), Figure 8-260 (Address2 Match Specification Subfield of Classifier Type 6, 7, 9), Figure 8-261 (Address3 Match Specification Subfield of Classifier Type 6, 7, 8), Figure 8-262 (Sequence Control Match Specification Subfield of Classifier Type 6, 7, 8, 9), Figure 8-263 (Address4 Match Specification Subfield of Classifier Type 6, 7, 8), Figure 8-264 (QoS Control Match Specification Subfield of Classifier Type 6), and Figure 8-265 (HT Control Match Specification Subfield of Classifier Type 6), respectively. The Match Specification subfield contains the match specification (i.e., the parameters) of the corresponding MAC header field with which an MPDU is compared. When the corresponding Filter Mask is not present, every bit in a Match Specification is compared; otherwise, only the bits with the same bit positions as the bits that are equal to 1 in the corresponding Filter Mask subfield are compared.

***TGah editor: change the name on the caption of figure 8-257 Frame Control Match Specification Subfield of Classifier Type 6,7,8 to includeClassifier Type 9.***

***TGah editor: change the name on the caption of*** Figure 8-259 Address1 Match Specification Subfield of Classifier Type 6, 8 ***to includeClassifier Type 9.***

***TGah editor: change the name on the caption of*** Figure 8-260 Address2 Match Specification Subfield of Classifier Type 6, 7 ***to includeClassifier Type 9.***

***TGah editor: change the name on the caption of*** Figure 8-262 Sequence Control Match Specification Subfield of Classifier Type 6, 7, 8 ***to includeClassifier Type 9.***

***TGah editor: change the references to figures 8-257, 8-259, 8-260 and 8-262 in all paragraphs of sublcause 8.4.2.30 which reference the figures to reflect the addition of Classifier Type 9 to the captions of those figures - this is probably an automatic change that will be performed by the word processing program that creates the references in those paragraphs.***

***TGah editor:insert the following two paragraphs and figure at the end of the subclause:***

For Classifier Type 9, the format of the Frame Classifier field of a TCLAS element is illustrated in Figure 8-265e (Frame Classifier field of Classifier Type 9)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Classifier  Type (9) | Classifier  Mask | Frame Control  Match Specification | Address 1 Match  Specification | Address 2  Match  Specification | Sequence  Control  Match |
| Octets: | 1 | 3 | 0 or 2 or 4 | 0 or 6 or 12 | 0 or 6 or 12 | 0 or 2 or 4 |
| **Figure 8-265e - Frame Classifier field of Classifier Type 9** | | | | | | |

For Classifier Type 9, the formats of the Frame Control Match Specification subfield, Address 1 subfield, Address 2 subfield, and Sequence Control subfield, are illustrated in Figure 8-257 (Frame Control Match Specification Subfield of Classifier Type 6, 7, 8, 9), Figure 8-259 (Address1 Match Specification Subfield of Classifier Type 6, 8, 9), Figure 8-260 (Address2 Match Specification Subfield of Classifier Type 6, 7, 9), Figure 8-262 (Sequence Control Match Specification Subfield of Classifier Type 6, 7, 8, 9), respectively. The Match Specification subfield contains the match specification (i.e., the parameters) of the corresponding MAC header field with which an MPDU needs to be compared . When the corresponding Filter Mask is not present, every bit in a Match Specification needs to be compared; otherwise, only the bits with the same bit positions as the bits that are set to 1 in the corresponding Filter Mask subfield are compared.

**References:**