IEEE P802.11  
Wireless LANs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 11ah SB0 Comment Resolution for 8.2.4 | | | | |
| Date: 2016-01-19 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | email |
| Liwen Chu | Marvell |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

Abstract

This submission proposes comment resolutions for the following comments:

8255, 8262, 8278, 8279, 8280, 8503.

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 “TGah 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** | **Clause Num** | **P** | **L** | **Comment** | **Propose Change** | **Resolution** |
| 8255 | 8.2.4.1.1 | 75.00 | 62 | The editing instructions to remove "the value of" change technically valid text to be technically invalid. The "field" is a container, not a value...it can contain a value, thus the (correcct) text in the base standard. | Remove incorrect changes as indicated in the comment. | Revised  TGah Editor makes changes as shown in 11-16/0153r1 |
| 8262 | 8.2.4.1 | 76.00 | 51 | The combination "Type subfield is 1 and Subtype subfield is equal to 3" is undefined. (Table 8-1 does shows subtype 3 "reserved" for type 1). | Find missing addition to Table 8-1? | Revised  TGah Editor makes changes as shown in 11-16/0153r1 |
| 8278 | 8.2.4.1.1 | 76.00 | 16 | there seem to be quite a few type and subtype combinations for which the format of the frame control field is missing | Add a diagram that shows the format of S1G PPDUs that have type equal to 0 or 2 and either the same diagram or yet another one for S1G PPDUs that have type equal to 3 and subtype not equal to 1 | Revised  TGah Editor makes changes as shown in 11-16/0153r1 |
| 8279 | 8.2.4.1.1 | 77.00 | 29 | figure 8-3d condition overlaps with figure 8-2 condition - is figure 8-3d supposed to be limited to S1G PPDUs? If it is, then there will need to be yet another figure because 8-2 cannot be used to cover the cases for S1G that are not covered by the corrected figure 8-3d | Add more conditions to remove the overlap between the conditions for figure 8-3d and 8-2 and check the applicability of figure 8-3d vs S1G and add another figure if needed, to cover S1G case of type=3, subtype<>1 | Revised  TGah Editor makes changes as shown in 11-16/0153r1 |
| 8280 | 8.2.4.1.1 | 76.00 | 10 | Really, the frame control field cannot be defined here like this and then redefined in 8.8. The FC description should actually contain just two subfields - PV and FCBODY - FCBODY would then be defined depending on the value of PV plus the type and subtype and S1G PPDU information. | Create a new FC field diagram which contains only FC and FCBODY and move all existing FC field diagrams and descriptions to a new subclause within 8.2.4.1.1 called FCBODY field and place all of the existing diagrams and descriptions of subfields of the FC underneath this new FCBODY field subclause, including those that are found within 8.8 PV1 frames | Revised  TGah Editor makes changes as shown in 11-16/0153r1 |
| 8503 | 8.2.4.1.1 | 76.00 | 16 | Changes to Figure 8-2 title for the most part are no necessary and should not be made. It is out of scope of this amendment to at the "clarifying" statements "in frames" and "subfield". Hence they should be removed and the style of the title preserved as it currently is in TGmc V4.0, unless changes are made by TGmc | Change Figure 8-2 title to be: "Figure 8-2--Frame Control field when Type is not equal to 1 or Subtype is not equal to 6 or the frame is not an S1G Control frame | Revised  TGah Editor makes changes as shown in 11-16/0153r1 |

Discussion: the comments are valid. The subclause should be organized as following: In non-S1G frame, the following frame control fields are defined:

* Frame Control field when Type is not equal to 1 or Subtype is not equal to 6
* Frame Contrl field when Type is equal to 1 andor Subtype is equal to 6 is defined.

In frame control field of S1G frame, the following frame control fields are defined:

* Frame Control field when Type is not 3 or Type is not equal to 1
* Frame Control field in S1G Control frame when Subtype is not equal to 3 or Subtye is not equal to 10
* Frame Control field when Type is equal to 1 and Subtype is equal to 3
* Frame Control field when Type is equal to 1 and Subtype is equal to 10
* Frame Control field when Type is equal to 3 and Subtype is equal to 1
* Frame fields
* Frame Control field
* General

***Change subclause 8.2.4.1.1 as follows (CID 8255, 8262, 8278, 8279, 8280, 8503):***

The first three subfields of the Frame Control field are Protocol Version, Type, and Subtype. The remaining subfields of the Frame Control field depend on the setting of the Type and Subtype subfields. The Control frames carried by S1G PPDUs are called S1G Control frames.

For a frame carried in an non-S1G PPDU, when the value of the Type subfield is not equal to 1 or the value of the Subtype subfield is not equal to 6, the remaining subfields within the Frame Control field are: To DS, From DS, More Fragments, Retry, Power Management, More Data, Protected Frame, and Order. In this case, the format of the Frame Control field is illustrated in Figure 8-2 (Frame Control field in non-SIG PPDUs when Type is not equal to 1 or Subtype is not equal to 6)

B0 B1 B2 B3 B4 B7 B8 B9 B10 B11 B12 B13 B14 B15

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Protocol  Version | Type | Subtype | To DS | From DS | More Fragments | Retry | Power Management | More Data | Protected Frame | Order |

Bits 2 2 4 1 1 1 1 1 1 1 1

Figure 8-2 Frame Control field in non-S1G PPDUs when Type subfield is not equal to 1 or Subtype subfield is not equal to 6

For a frame carried in an non-S1G PPDU, when the value of the Type subfield is equal to 1 and the value of the Subtype subfield is equal to 6, the remaining subfields within the Frame Control field are the following: Control Frame Extension, Power Management, More Data, Protected Frame, and Order. In this case, the format of the Frame Control field is illustrated in Figure 8-3 (Frame Control field in non-S1G PPDUs when Type is equal to 1 and Subtype is equal to 6)

B0 B1 B2 B3 B4 B7 B8 B11 B12 B13 B14 B15

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Protocol Version | Type | Subtype | Control Frame Extension | Power Management | More Data | Protected Frame | Order |

Bits 2 2 4 4 1 1 1 1

Figure 8-3 Frame Control field in non-S1G PPDUs when Type subfield is equal to 1 and Subtype subfield is equal to 6

For a frame carried in an S1G PPDU, when the value of the Type subfield is not 3 or Type subfield is not equal to 1, the remaining subfields within the Frame Control field are: To DS, From DS, More Fragments, Retry, Power Management, More Data, Protected Frame, and Order. In this case, the format of the Frame Control field is illustrated in Figure 8-3a (Frame Control field in SIG PPDUs when Type is not 3 or Type is not equal to 1)

B0 B1 B2 B3 B4 B7 B8 B9 B10 B11 B12 B13 B14 B15

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Protocol  Version | Type | Subtype | To DS | From DS | More Fragments | Retry | Power Management | More Data | Protected Frame | Order |

Bits 2 2 4 1 1 1 1 1 1 1 1

Figure 8-3a Frame Control field in SIG PPDUs when Type is not 3 or Type is not equal to 1

For a frame carried in an S1G Control frame, when the(#MDR) Subtype subfield is not equal to 3 or not equal to 10, the(#6081, 6082) format of the Frame Control field is illustrated in Figure 8-3b (Frame Control field in S1G Control frame when the(#MDR) Subtype is not equal to 3 or not equal to 10)

B0 B1 B2 B3 B4 B7 B8 B10 B11 B12 B13 B14 B15

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Protocol Version | Type | Subtype | Bandwidth Indication | Dynamic Indication | Power Management | More Data | Protected Frame | Order |

Bits 2 2 4 3 1 1 1 1 1

Figure 8-3b Frame Control field in non-S1G Control frames when Type subfield is not equal to 3 and Subtype subfield is not equal to 10

For a frame carried in an S1G Control frame, when the(#MDR) Subtype subfield is equal to 3, the(#6081, 6082) format of the Frame Control field is illustrated in Figure 8-3c (Frame Control field in S1G Control frame when the(#MDR) Subtype is equal to 3)

B0 B1 B2 B3 B4 B7 B8 B10 B11 B12 B13 B14 B15

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Protocol Version | Type | Subtype | Bandwidth Indication | Dynamic Indication | Power Management | More Data | Protected Frame | Reserved |

Bits 2 2 4 3 1 1 1 1 1

Figure 8-3c Frame Control field in non-S1G Control frames when Subtype subfield is equal to 3

For a frame carried in an S1G Control frame, when the(#MDR) Subtype subfield is equal to 10, the(#6081, 6082) format of the Frame Control field is illustrated in Figure 8-3d (Frame Control field in S1G Control frame when the(#MDR) Subtype is equal to 10)

B0 B1 B2 B3 B4 B7 B8 B10 B11 B12 B13 B14 B15

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Protocol Version | Type | Subtype | Bandwidth Indication | Dynamic Indication | Power Management | More Data | Poll Type |

Bits 2 2 4 3 1 1 1 2

Figure 8-3d Frame Control field in non-S1G Control frames when Subtype subfield is equal to 10

When(#MDR) the Type subfield is equal to 3 and(#MDR) the Subtype subfield is equal to 1,(#6081, 6082) the format of the Frame Control field is shown in Figure 8-3e (Frame Control field format when Type subfield is equal to 3 and Subtype subfield is equal to 1)

B0 B1 B2 B3 B4 B7 B8 B9 B10 B11 B13 B14 B15

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Protocol Version | Type | Subtype | Next TBTT Present | Compressed SSID Preent | ANO Present | BSS BW | Security | AP PM |

Bits 2 2 4 3 1 1 1 1 1

Figure 8-3e Frame Control field when Type is equal to 3 and Subtype is equal 1