IEEE P802.11  
Wireless LANs

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| Proposed resolution to SP allocation related CIDs | | | | |
| Date: 2017-07-13 | | | | |
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Abstract

This submission proposes a resolution to several CIDs related to SP request for the 11ay draft text.

The discussion is in reference to Draft IEEE P802.11ay D0.3.

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| **CID** | **Clause** | **Page** | **Comment** | **Proposed change** |
| 140 | 9.4.2.134 | 23.10 | Two problems: i) need to specify that the BW field indicates the requested BW of the allocation. 2) the reference to table 31 is inapropriate, as it is not clear which IsChannelNumber field is being referred to. | Possibly copy the definition from Table 31 here and adjust properly. In the process of doing that, also fix: i) the paragraph above & ii) do the same in 9.4.2.252 EDMG Extended Schedule element. Basically, need to specify what the purpose of the BW fields in the TSPEC is. |

**Discussion:** (1) According to this comment, we need to unify the BW definitions in the DMG TSPEC element and SPR frame (Table 31).

(2)Since the IsChannelNumber is not included in the EDMG Extended Schedule element, the current BW definition in the EDMG Extended Schedule element is correct. So we do not need to modify the BW definition in the EDMG Extended Schedule element.

(3) Add “When transmitted in an ADDTS Response frame, the BW field indicates the allocated channel for the allocation using the bitmap format of the BW field defined in Table 16”, in order to unify the BW field definitions in EDMG Extended Schedule element and ADDTS Response frame.

**Proposed resolution**: Revised

**9.4.2.134 DMG TSPEC element**

***Change the 2nd and 3rd paragraphs as follows***

The IsChannelNumber subfield indicates whether the value in the BW field represents a channel width or channel number. When transmitted in an ADDTS Response frame, the IsChannelNumber is reserved.

The Aggregation subfield is defined in Table 16.

The BW field indicates the requested channel width or channel number of the allocation. If the IsChannelNumber field is set to 1, the BW field indicates the requested channel number for the allocation using the bitmap format of the BW field defined in Table 16. If the IsChannelNumber field is set to 0, the BW field indicates a channel width. In this case, the channel width can be allocated on any channel number. When transmitted in an ADDTS Response frame, the BW field indicates the allocated channel for the allocation using the bitmap format of the BW field defined in Table 16.

**30.3.7 Control trailer**

***Change Table 31 in 30.3.7 as follows***

1. —Control trailer definition when CT\_TYPE is SPR

|  |  |  |  |
| --- | --- | --- | --- |
| **Field** | **Number of bits** | **Start bit** | **Description** |
| Channel Aggregation | 1 | 0 | See Table 16 |
| BW | 8 | 1 | Indicates the requested channel width or channel number of the allocation.  If the IsChannelNumber field is set to 1, the BW field indicates the requested channel number for the allocation using the bitmap format of the BW field defined in .  If the IsChannelNumber field is set to 0, the BW field indicates a channel width. In this case, the channel width can be allocated on any channel number. |
| Primary Channel Number | 3 | 9 | See Table 16 |
| IsChannelNumber | 1 | 12 | Indicates whether the value in the BW subfield represents a channel width or channel number. |
| Reserved | 114 | 13 | Set to 0 by the transmitter and ignored by the receiver. |
| CTCS | 16 | 127 | Contains the CRC-16 computed over the content of the control trailer. This field is computed as defined in section 20.3.7 |

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| 256 | 30.3.7 | 127.02 | In the defintion of IsChannelNumber in the table, what is a "designed channel"? Also, the definition should relate to modifying interpretation of BW field | Replace text in row 5, column 4 with "Indicates whether the value in the BW field represents a channel width or channel number" |

**Discussion: “**designed” is a typo, and it should be “designated” channel. We accept the comment’s suggestion, and add text related to the orginal sentence to clause 11, because the original sentence is a necessary rule. As for the Table 31, the same changes are proposed as in resolution to CID 140.

**Proposed resolution**: Revised

***Change Table 31 as follows (the same changes as in resolution to CID 140)***

1. —Control trailer definition when CT\_TYPE is SPR

|  |  |  |  |
| --- | --- | --- | --- |
| **Field** | **Number of bits** | **Start bit** | **Description** |
| Channel Aggregation | 1 | 0 | See Table 16 |
| BW | 8 | 1 | Indicates the requested channel width or channel number of the allocation.  If the IsChannelNumber field is set to 1, the BW field indicates the requested channel number for the allocation using the bitmap format of the BW field defined in .  If the IsChannelNumber field is set to 0, the BW field indicates a channel width. In this case, the channel width can be allocated on any channel number. |
| Primary Channel Number | 3 | 9 | See Table 16 |
| IsChannelNumber | 1 | 12 | Indicates whether the value in the BW subfield represents a channel width or channel number. |
| Reserved | 114 | 13 | Set to 0 by the transmitter and ignored by the receiver. |
| CTCS | 16 | 127 | Contains the CRC-16 computed over the content of the control trailer. This field is computed as defined in section 20.3.7 |

**11.4.13.2 Isochronous allocation**

***Change the first paragraph in 11.4.13.2 in 802.11ay D0.3 as follows:***

An EDMG STA may request an SP allocation by using the BW, Channel Aggregation and IsChannelNumber subfields in the DMG TSPEC element. To request a specific channel, the STA shall set the IsChannelNumber subfield to 1 and set the BW subfield to the value of the requested channel; otherwise, the STA shall set the IsChannelNumber subfield to 0 and set the BW subfield to the value of requested channel width. Upon reception of a DMG ADDTS Request frame that is admitted, an EDMG AP or EDMG PCP sets the values of the BW and Channel Aggregation subfields in the DMG TSPEC element of the DMG ADDTS Response frame sent in response to the ADDTS Request frame such that it meets the following requirements:

**11.4.13.3 Asynchronous allocation**

***Change the second paragraph in 11.4.13.3 in 802.11ay D0.3 as follows:***

An EDMG STA may request an SP allocation by using the BW, Channel Aggregation and IsChannelNumber subfields in the SPR frame. To request a specific channel, the STA shall set the IsChannelNumber subfield to 1 and set the BW subfield to the value of the requested channel; otherwise, the STA shall set the IsChannelNumber subfield to 0 and set the BW subfield to the value of requested channel width. Upon reception of an SPR frame, an EDMG AP or EDMG PCP sets the values of BW and Channel Aggregation subfields in the control trailer of the Grant frame sent in response to the SPR frame such that it meets the following requirements:

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| **CID** | **Clause** | **Page** | **Comment** | **Proposed change** |
| 365 | 9.4.2.130 | 23.09 | It is not clear when DMG TSPEC element sent in ADDTS response, BW field means bandwidth or channel number | When transmitted in an ADDTS Response frame, the IsChannelNumber is set to 1 |

**Discussion:** We have added “When transmitted in an ADDTS Response frame, the BW field indicates the allocated channel for the allocation using the bitmap format of the BW field defined in Table 16” in the resolution to CID 140. This is the same meaning with the commenter’s proposed change.

**Proposed resolution**: Revised

***The resolution to CID 365 refers to CID 140.***

**References:**

Draft IEEE P802.11ay D0.3

**Straw Poll:**

Do you agree that the text in contribution 17/1083r0 (Proposed resolution to SP allocation related CIDs) shall be incorporated in the 11ay draft?