IEEE P802.11
Wireless LANs

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| Proposed resolutions to CID 521 in LB223 |
| Date: 2016-11-09 |
| Author(s):  |
| Name | Company | Address | Phone | Email |
| Dejian Li | Huawei |  |  | dejian.li@huawei.com |
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 Abstract

This document proposes resolutions to CID 521 for TGaj D3.0.

**Revision History**

R0: Initial version.

**Technical comments:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| CID | Clause | Page | Line | Type | Comment | Proposed Change |
| 521 | 10.36.11 | 119 | 53 | T | The beamforming flow in 11aj is the same as that in 11ad. But for the subclause " Opportunistic transmission in alternative channel for CDMG STAs", it is not defined whether the BF training can also used on the alternative channel. | Define the rule that BF training, especially for SLS phase, can also be performed in the alternative channel for a pair of CDMG STAs. |

**Discussion:**

It is not clear that how the SLS is performed on the alternative channel. Do as the suggested remedy to clarify how the SLS is performed on the operating channel/dedicated channel and alternative channel.

**Proposed resolution: Revised**

***Insert the following paragraphs at the end of*** ***10.36.11 .***

 “A CDMG STA may reuse the transmit sector indicated by the Sector Select field obtained from the operating channel which is the primary channel on an alternative channel with the same channel width, and vice-versa. If an SPR frame with the Beamforming Training field set to 1 is received from a CDMG STA, the CDMG AP or PCP may configure a channel for the initiator and the responder designated by the initiator to perform BF training according to the AllocationType field in the SPR frame. The SPR frame contains channel allocation request in the AllocationType field and BF Control field for the pair of BF initiator and responder. If the NoPrimaryChannel field in the BF Control field is set to 1 and the Beamforming Training field is set to 1 in the SPR frame, the CDMG AP or PCP can allocate SPs on an alternative channel using the EDMG Extended Schedule element included in the DMG Beacon frame or the Announce frame for the initiator and the responder. If the CDMG AP or PCP received SPR frames from multiple pairs of initiators and responders, the CDMG AP or PCP may allocate time overlapping SPs on designated channels with different channel numbers for different pairs of STAs to perform SLS. ”

***Change the following paragraphs in 9.4.2.177 (CDMG Extended Schedule element) as follows.***

The BF Control subfield is defined in the Figure 9-587h and Figure 9-587i.

***Insert Figure 9-587h and Figure 9-587i and the following paragraphs.***

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | BeamformingTraining | IsInitiatorTXSS | IsResponderTXSS | Total Number of Sectors | Number of RX DMG Antennas | NoPrimaryChannel | Reserved |
| Bit | 1 | 1 | 1 | 7 | 2 | 1 | 3 |

**Figure 9-587h—BF Control field format when both IsInitiatorTXSS and IsResponderTXSS subfields are equal to 1 and the BF Control field is transmitted in Grant or Grant Ack frames**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | B0 | B1 | B2 | B3 B8 | B9 | B10 | B11 B15 |
|  | BeamformingTraining | IsInitiatorTXSS | IsResponderTXSS | RXSS Length | RXSSTxRate | NoPrimaryChannel | Reserved |
| Bit | 1 | 1 | 1 | 6 | 1 | 1 | 5 |

**Figure 9-587i—BF Control field format in all other cases**

***Insert the following paragraphs after the* Figure 9-587i *.***

The BeamformingTraining, IsInitiatorTXSS, IsResponderTXSS, Total Number of Sectors, Number of RX DMG Antennas, RXSS Length, RXSSTxRate subfields are the same as defined in 9.5.5 (Beamforming Control field).

If the NoPrimaryChannel subfield is set to 1, it indicates the CDMG initiator does not need to perform SLS on the primary channel; otherwise, it indicates the CDMG initiator needs to perform SLS on the primary channel.