IEEE P802.11
Wireless LANs

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| TGbd D4.0 Comment Resolution related to DMG STA communicating OCB |
| Date: 2022-5-13 |
| Author(s): |
| Name | Affiliation | Address | Phone | email |
| Hiroyuki Motozuka | Panasonic | 600 Saedo-cho, Tsuzuki-ku, Yokohama, Kanagawa, Japan |  | motozuka.hiroyuki@jp.panasonic.com |
| Gaius Wee | 202 Bedok South Ave 1 Singapore 469332 |  | yaohuang.wee@sg.panasonic.com |

Abstract

This submission proposes resolution to the following CIDs related to DMG STA communicating OCB in Draft P802.11bd D4.0. The comments were received during Initial SA Ballot.

5 CIDs 5086 5087 5098 5099 5100

Revision history:

r0 Initial version (TBD for CID5098)

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| **CID** | **Page** | **Comment** | **Proposed Change** | **Proposed Resolution** |
| 5086 | 50.46 | "In addition, " is not needed (and begs the question "in addition to what?") | Delete extraneous text. | **Revised****Discussion:**The intent of “In addition,” was to clarify all the subtypes a DMG STA shall not send. Clearer expression is proposed below:**Proposed change:**TGbd Editor: Please remove “In addition,” as suggested by the commenter. Then Insert “in addition to not sending Control frames of subtype PS-Poll and CF-End,” after “If the STA… is true,”. |

11.18 STAs communicating Data frames outside the context of a BSS

TGbd Editor: Please change item b) in subclause 11.18 of 11bd D4.0 as follows:

Change item b) in the first paragraph as follows:

1. **The STA may send Control frames, except those of subtype PS-Poll and CF-End. If the STA is a DMG STA for which dot11DMGOCBActivated is true, in addition to not sending Control frames of subtype PS-Poll and CF-End, the STA shall not send Control frames of subtype Poll, SPR, Grant, Grant Ack, Sector Ack, Block Ack Schedule, and TDD Beamforming.**

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| **CID** | **Page** | **Comment** | **Proposed Change** | **Proposed Resolution** |
| 5087 | 48.0247.64 | Regarding: "When the STA receives one or more DMG Beacon frames with the OCB subfield equal to 1 from a peer STA, and the address of the peer STA is an address that is newly discovered, the STA shall perform an SLS with the OCB subfield set to 1 in transmitted SSW frames during the A-BFT following the DMG Beacon frames if present, or during the DTI. " it is not clear how the "or" applies. The comma list implies "and" (and implied is not always good) so is the frame "during the DTI" applied if ANY of the and conditions fail or does it mean that "during the DTI" applies if DMG beacon frames are not present (which makes more sense to me). It would be clearer if broken up into two or more sentences. | Clarify the requirement so that a common implementation is more likely. | **Revised****Discussion:**The comma before “or” was causing confusion because the other comma before “if present” was missing.**Proposed change:**TGbd Editor: Please add comma after “during the A-BFT following the DMG Beacon frames” (i.e. before “if present”) |

11.1.4.7 DMG discovery outside the context of a BSS

TGbd Editor: Please change the 4th paragraph in subclause 11.1.4.7 as follows:

**When the STA receives one or more DMG Beacon frames with the OCB subfield equal to 1 from a peer STA, and the address of the peer STA is an address that is newly discovered, the STA shall perform an SLS with the OCB subfield set to 1 in transmitted SSW frames during the A-BFT following the DMG Beacon frames, if present, or during the DTI.**

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| **CID** | **Page** | **Comment** | **Proposed Change** | **Proposed Resolution** |
| 5098 | 52.30 | Condition for issuing MLME-OCB-LINKSTATUS.indication primitive with BeamLinkStatus parameter set to EXPIRED is specified, but not specified for status ESTABLISHED or NOT\_ESTABLISHED that are defined in 6.3.130.6.2. | Add description to 11.27.1.1 and/or 6.3.130.6.2. The primitive with ESTABLISHED is issued when a beamformed link is established, as described in 11.27.1.1 of the baseline. NOT\_ESTABLISHED indicates other (likely, unexpected) case. | **TBD****Discussion****Proposed change:** |
| 5099 | ~~25.17~~35.17 | In description for BeamLinkStatus, "Indicates the status of beamformed link and the beam link maintenance timer as described in 11.27.1.1 (General(11ay))." - "status change of beam link maintenance timer" is unclear. "beamformed link" is sufficient. (CID4004 is related) | Remove "and the beam link maintenance timer" from the description. | **Revised****Discussion**The intent of this primitive is to notify of the status of the beamformed link. Thus agree with the proposed change. Additionally, propose to change the status enumerate of “EXPIRED” to “TIMER\_EXPIRED” since what to be expired is “timer,” not “beamformed link”.**Proposed change:**TGbd Editor: Please change “EXPIRED” to “TIMER\_EXPIRED” in Valid Range for BeamLinkStatus, and remove "and the beam link maintenance timer" from the description.*Note: CID4004 pointed out the same problem but rejected in [3] due to procedural reason.* |
| 5100 | 34.64 | "This primitive indicates the status change of beamformed link and beam link maintenance timer with a peer STA" - status change of beam link maintenance timer is unclear. (CID4003 is related) | Change to "This primitive indicates the status change of beamformed link with a peer STA" (i.e. remove "and beam link maintenance timer ") | **Accepted****Discussion:**Agree that “status of beam link maintenance timer” is unclear. “beamformed link” is the term used in 11.27.1.1, and the modified statement “This primitive indicates the status change of beamformed link and beam link maintenance timer with a peer STA.” should be clear.*Note: CID4003 pointed out the same problem but rejected in [3] due to procedural reason.* |

6.3.130.6 MLME-OCB-LINKSTATUS.indication

6.3.130.6.1 Function

TGbd Editor: Please change the 1st paragraph in subclause 6.3.130.6.1 as follows(CID #5100):

This primitive indicates the status change of beamformed link with a peer STA.

6.3.130.6.2 Semantics of the service primitive

TGbd Editor: Please change the table in subclause 6.3.130.6.2 as follows(CID #5099):

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| **Name** | **Type** | **Valid Range** | **Description** |
| PeerSTAAddress | MAC Address | Any valid individual MAC address | Specifies the MAC address of the peer STA for which the status of beamformed link is reported.  |
| BeamLinkStatus | Enumeration | ESTABLISHED, TIMER\_EXPIRED, NOT\_ESTABLISHED | Indicates the status of beamformed link as described in 11.27.1.1(General). |
| VendorSpecificInfo | A set of elements | As defined in 9.4.2.25 (Vendor Specific element) | Zero or more elements |

11.27.1 Beamformed link maintenance

11.27.1.1 General

TBD

**References**

[1] Draft P802.11bd D4.0

[2] 11-22/0730r2 P802.11bd\_Initial\_SA\_Ballot\_comments

[3] 11-22/0561r2 TGbd LB261 comments