IEEE P802.11
Wireless LANs

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| Comment resolutions : CID 3227, 3444-3447 |
| Date: 2019-01-15 |
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Abstract

This document presents suggested resolutions related to CIDs 3227, 3444, 3445, 3446 and 3447 for P802.11ay\_D2.0.

***Modify the following definition into 10.3.1 as highlighted in red texts:***

* STA authentication and association

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| 3227 | 10.43.5.2 | 237.30 | "responder on the corresponding primary channel and adjacent channel at a time such that the beginning of the first symbol of the SSW-Feedback frame" - both "respodner" and "frame" should be plural as they are different frames transmitted in different channels to different respodners | convert to plural | Accept |

***Discussion***

In this case, the initiator shall initiate two SSW-Feedback frames simultaneously to two respective responders on the corresponding primary channel and adjacent channel. The updated text is as below after

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| 3445 | 10.43.5.1 | 237.26 | missing the case of 'ABFT in secondary channel=3' and nothing was received by AP at primary channel but received something on secondary and secondary1 | add such case or make the description more general | Revise |

***Discussion:***

As defined in Beacon Interval Control field in Sec. 9.3.4.2 DMG Beacon in [1], for the A-BFT in Secondary Channel subfield, if set to 0, the A-BFT is present on the primary channel; if set to 1, the A-BFT is also present on the lower secondary channel adjacent to the primary channel; if set to 2, the A-BFT is also present on the upper secondary channel adjacent to the primary channel; if set to 3, the A-BFT is also present on both the lower and upper secondary channels adjacent to the primary channel. The revised text is provided with plural adjacent secondary channels to cover the case of A-BFT in Secondary Channel = 3 accordingly.

Regarding the case of A-BFT in secondary channel=3, two ajacent channels are considered in the proposed text below.

Regarding the case that SSW Feedback frame(s) may be not received on the primary channel and/or the adjacent channel(s), if an EDMG AP or EDMG PCP received SSW frame(s) transmitted from different EDMG STAs on either the primary channel and/or adjacent secondary channel(s), the initiator shall initiate an SSW feedback procedure to the respective responder(s) on the corresponding primary channel and/or adjacent channel(s).

***Proposed text changes***

*Editor: Change the eighth paragraph (line 26-39) of 10.43.5.2 in [1] as follows.*

If the A-BFT in Secondary Channel subfield is set to a nonzero value and an EDMG AP or EDMG PCP received SSW frames transmitted from different EDMG STAs on the primary channel and/or ~~an~~ adjacent secondary channel(s) with equal Sector ID and the DMG Antenna ID subfield values, the initiator shall initiate an SSW feedback procedure to the responder(s) on the corresponding primary channel and/or adjacent channel(s) at a time such that the beginning of the first symbol of the SSW-Feedback frame(s) on the WM occurs at aSSFBDuration + MBIFS before the end of the SSW slot. If the A-BFT in Secondary Channel subfield is set to a nonzero value and an EDMG AP or EDMG PCP received SSW frame(s) transmitted from different EDMG STAs on the primary channel and/or ~~an~~ adjacent secondary channel(s) with different Sector ID or DMG Antenna ID subfield values, the initiator shall initiate an SSW feedback procedure to the responder on the primary channel at a time such that the beginning of the first symbol of the SSW- Feedback frame on the WM occurs at aSSFBDuration + MBIFS before the end of the SSW slot, and/or should initiate the SSW feedback procedure to the responder(s) on the adjacent secondary channel(s) at a time such that the beginning of the first symbol of the SSW-Feedback frame on the WM occurs at aSSFBDuration + MBIFS before the end of the next available SSW slot(s).

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| **CID** | **Clause Number (C)** | **Page** | **Comment** | **Proposed Change** | **Resolution** |
| 3444 | 10.43.5.1 | 235.21 | AP ... shall be capable of simultaneously transmitting SSW-Feedback frames on the primary and adjacent secondary channels.' but later in the text AP is not able to send SSW-Feedback frames in 2 channels if the antennas or awvs of the 2 channels are different | change to 'shall be capable of simultaneously transmitting SSW-Feedback frames on the primary and adjacent secondary channels using the same sector of the same DMG antenna' | Revised |

***Discussion:***

In this case, the initiator shall initiate two SSW-Feedback frames simultaneously to respective responders on the corresponding primary channel and adjacent channel.

*Editor: Change lines 18-22 of 10.43.5.1 in [1] as follows.*

An EDMG AP or EDMG PCP that transmits a DMG Beacon frame with the value of the A-BFT in Secondary Channel subfield set to a nonzero value shall be capable of simultaneously receiving SSW frames transmitted by EDMG STAs during the corresponding A-BFT on the primary and adjacent secondary channels and, in response, shall be capable of simultaneously transmitting SSW-Feedback frames on the primary and adjacent secondary channels using the same sector of the same DMG antenna as indicated in the SSW frames received within the same SSW slot.

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| **CID** | **Clause Number (C)** | **Page** | **Comment** | **Proposed Change** | **Resolution** |
| 3446 | 10.43.5.2~~1~~ | 237.40 | at least one SSW frame' should also add SSW packet | change to 'at least one SSW frame or short SSW packet' | Accept |

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| 3447 | 10.43.5.2~~1~~ | 237.40 | shall be in quasi-omni receive mode' This should not be mandatory because STA may have already found a beter rx awv than omni if beacon has TRN-R | change shall to should | Accept |

*Editor: Change lines 1-2 of the ninth paragraph in 10.43.5.2 in [1] as follows.*

A responder that transmitted at least one SSW frame or short SSW packet within an SSW slot ~~shall~~should be in quasi-omni receive mode for a period of aSSFBDuration ending MBIFS before the end of the SSW slot.

**References**

1. Draft P802.11ay\_D2.0.