IEEE P802.11
Wireless LANs

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| 802.11 TGac WG Letter Ballot LB187LB187 MAC comment resolutions |
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Abstract

The document provides the comment resolution for the CIDs: 4225, 4449, 4620, 5034, 4454.

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| 4225 | 134.51 | 10.2.1.4a | There is a case receiver could not feedback a ACK after successfully receive a packet, in this case the receiver should also go to sleep if there's no following packet. | Add a condition of entering the Doze state:The STA receives a frame not causing a response with More Data field equal to 0,and the RA in the MAC header of the frame that is received correctly matches the MAC address of the STA. |

**Discussion:**

If the AP expects the acknowledgement in response to a frame with More Data bit set to 0, then station must send an acknowledgement before entering Doze. If the AP does not expect any acknowledgement, then the station can enter Doze state right after the reception of the frame. The condition for this case needs to be clarified for the ‘No Ack’ policy in the QoS Control field.

**Proposed resolution:**

Revised: See the discussion for CID 4225 in 12/0640r0.

**Proposed Text Change:**

The STA receives a frame intended to it with More Data field equal to 0 and Ack Policy subfield in the QoS Control field is equal to No Ack or sends an acknowledgement if Ack Policy subfield is not equal to No Ack.

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| 4449 | 134.46 | 10.2.1.4a | Clearer if this bullet leads with "In a received NDPA" | As in comment |

**Proposed resolution:**

Accept: See the comment resolution for CID 4449 in 12/0640r0.

**Proposed Text Change:**

In a received NDPA, the STA finds that the Partial AID in the RXVECTOR is 0 and the AID in the STA Info field does not match with its AID.

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| 4620 | 134.15 | 10.2.1.4a | It is suggested to add descriptions here about how STAs notify the AP that they opearte in TXOP power save mode and then AP could gain this knowledge to prevent from sending traffic to them | Add descriptions. |

**Discussion:**

The information about the station’s TXOP power save mode is exchanged during the association in a VHT capabilities field. With this, if AP has allowed the stations to enter Doze state in a TXOP, then AP can avoid sending frames to STAs in Doze state based on the group Id/Partial ID of the transmitted frames in the TXOP and the associated station’s information database. It is not required by stations to notify this on per frame or a TXOP basis.

**Proposed Resolution:**

Reject: See the discussion for CID 4620 in 12/0640r0.

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| 5034  | 92.35 | 9.3.2.4.7 | All the stations receive  VHT-SIG-A portion of the frame. Only the stations that are intended recipeint/s can receive the complete frame. This causes the other stations to perform EIFS. The stations that can receive correctly the BA if one is transmitted reset the EIFS. The rest of the stations perform EIFS for the transmission. This causes an unfairness in the channel access for most of the VHT as well as the other stations in the beamformed transmission. | see 802.11-11/xxx |

**Discusion:**

If a BA is sent by a STA then it is not necessary that it will be received succeesfully by all the stations. Such stations find the channel idle only after the BA transmission is completed and only then the EIFS can commence at these stations. This causes unfairness in the channel access with those who can decode the BA. Setting the NAV timer with a value (duration in the L-SIG + SIFS + ACK duration) right after reception of L-SIG of a beamformed frame rather than waiting for channel to be idle to start EIFS makes all the stations to contend for channel at same time.

**Proposed Resolution:**

Accept: See the comment resolution for CID 5034 in 12/0640r0.

**Proposed Text Changes:**

Section 9.3.2.3.7:

EIFS shall not be invoked if the NAV is updated by the frame using L-SIG information that would have caused an EIFS, such as when, - the MAC FCS fails and the L-SIG TXOP function is employed to update the NAV with L-SIG Duration

- a beamformed frame is received in which case NAV is set to a value

 *NAV = L-SIG Duration + SIFS + ACKTxTime*

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| 4454 | 134.23 | 10.2.1.4a | "decodes L-SIG of a frame correctly" but frames don't have LSIG, and need to wait until end of PPDU + EIFS | "EIFS after the end of a PPDU whose L-SIG is correctly decoded" |

**Proposed resolution:**

Revise. Make the changes as specified for CID 4454 in 12/0640r0.

**Proposed Text Changes:**

-it decodes L-SIG of a PPDU correctly or

**References:**

1. IEEE Draft P802.11ac\_D2.0
2. IEEE 11-12-0223-02-00ac-lb187-comment-tgac-d2-0.xls