IEEE P802.11
Wireless LANs

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| **CIDs: Acknowledgment related comments** |
| **Date:** 2017-07-10 |
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Abstract

This submission proposes resolutions for multiple comments related to TGax D1.0s with the following CIDs (**23 CIDs**):

3047, 3130, 4602, 5048, 5567, 5763, 6128, 6129, 6130, 6173,

6510, 7061, 7063, 7136, 7383, 7665, 8413, 8414, 8542, 9675,

9684, 9685, 9854

Interpretation of a Motion to Adopt

A motion to approve this submission means that the editing instructions and any changed or added material are actioned in the TGax Draft. This introduction is not part of the adopted material.

***Editing instructions formatted like this are intended to be copied into the TGax Draft (i.e. they are instructions to the 802.11 editor on how to merge the text with the baseline documents).***

***TGax Editor: Editing instructions preceded by “TGax Editor” are instructions to the TGax editor to modify existing material in the TGax draft. As a result of adopting the changes, the TGax editor will execute the instructions rather than copy them to the TGax Draft.***

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| **CID** | **Commenter** | **Page** | **Comment** | **Proposed Change** | **Resolution** |
| 3047 | Abhishek Patil | 99.14 | Definition of L3 FRAG ADDBA Req/Resp is missing, though the values for Action field are defined in Table 9-302 | Add the definition as in the comment | Rejected - Valid comment. However, this is already addressed through comments #5982, #3302, #8158, #8544, #7539, #8545. The fields are removed, and added to ADDBA Extension Element. No further changes needed to D1.3.  |
| 3130 | Adrian Stephens | 99.22 | The frame formats for the new L3 FRAG frames is not defined. | Add a subclause per new Block Ack frame type describing its format. | Rejected - Valid comment. However, this is already addressed through comments #5982, #3302, #8158, #8544, #7539, #8545. The fields are removed, and added to ADDBA Extension Element. No further changes needed to D1.3.  |
| 4602 | Albert Petrick | 78.38 | Add clarity and call out bit position in Table 9-262z for subfield "All Ack Support" corresponding to those bit positions in Figure 9-589ck. | Add bit "B17:" in Definition column before the word "Indicates"Add bits "B17:" in Encoding column before the word "Set" | Rejected - Current text follows the general convention. Since each field name is unique, there is no ambiguity |
| 5048 | Chunyu Hu |  | Size of the MBA response bitmap can be chosen by the MBA transmitter without constraint, so the STA that elicits the MBA cannot predict the duration of MBA - this is probably only a problem for SU PPDU eliciting frame because the MU PPDU includes a trigger for response which includes a duration value |  | Rejected - Non-actionable comment. Agree that TXOP setting for SU PPDU will need to overallocate considering the maximum buffer size negotiated for that STA  |
| 5567 | Graham Smith | 121.55 | "A STA may use a BlockAckReq frame to solicit the acknowledgment frame(s), to whom the STA sent the QoS Data frame(s) with Ack Policy subfield equal to Block Ack or from whom the STA did not receive the immediate acknowledgement frames after sending QoS Data frame(s) in a HE trigger-based PPDU with Ack Policy subfield equal to Normal Ack or Impilcit BAR" Does not read right. | To read "When a STA sends a QoS Data frame(s) with Ack Policy subfield equal to Block Ack , or when the STA did not receive the immediate acknowledgement frames after sending QoS Data frame(s) in a HE trigger-based PPDU with Ack Policy subfield equal to Normal Ack or Impliit BAR, a STA may use a BlockAckReq frame to solicit the acknowledgment frame(s)." | Rejected - The proposed change doesn't convey the intent accurately. The new sentence seem to indicate that when a STA sends a QoS data frame with Ack policy setto Block Ack, the STA needs to send BAR also at the same time, which is not correct |
| 5763 | Guoqing Li | 120.03 | Missing "non-HT" from the list | change to "are allowed in non-HT, non-HT Duplicate..." | Rejected - Valid comment. However, per CID 9684, this sentence will be removed.  |
| 6128 | Jing Ma | 99.12 | Define the exact L3 FRAG ADDBA Request frame action field format | as the comment | Rejected - Valid comment. However, this is already addressed through comments #5982, #3302, #8158, #8544, #7539, #8545. The fields are removed, and added to ADDBA Extension Element. No further changes needed to D1.3.  |
| 6129 | Jing Ma | 99.16 | Define the exact L3 FRAG ADDBA Response frame action field format | as the comment | Rejected - Valid comment. However, this is already addressed through comments #5982, #3302, #8158, #8544, #7539, #8545. The fields are removed, and added to ADDBA Extension Element. No further changes needed to D1.3.  |
| 6130 | Jing Ma | 99.18 | Define the exact L3 FRAG ADDBA Response frame action field format | as the comment | Rejected - Valid comment. However, this is already addressed through comments #5982, #3302, #8158, #8544, #7539, #8545. The fields are removed, and added to ADDBA Extension Element. No further changes needed to D1.3.  |
| 6173 | Jinjing Jiang | 120.12 | Multi-STA Block Ack frame is a variant of BloackAck frame. | Change to "is either a BlockAck frame or an Ack frame" | Revised - Replace the sentence, "The immediate acknowledgement is either a BlockAck frame, Ack frame or Multi-STA Block Ack frame."with"The immediate acknowledgement is either a Compressed BlockAck frame, Ack frame or Multi-STA Block Ack frame." |
| 6510 | John Coffey | 121.55 | Garbled text: "A STA may use a BlockAckReq frame to solicit the acknowledgment frames" from, presumably, some other STA. But which one? The text goes on to say ", to whom the STA sent the QoS Data frame(s)", which makes it sound as if the STA is soliciting acknowledgment frames from the acknowledgment frames. | Reword to identify the STA(s) from which the acknowledgment frames are solicited. | Rejected - The text is quite clear - "the STA" is referring to the same STA that is referred to at the beginning of the sentence. |
| 7061 | Junichi Iwatani | 99.01 | There is no explanation for "L3 FRAG ADDBARequest", "L3 FRAG ADDBAResponse" and "L3 FRAG DELBA".Only "L3 FRAG ADDBAResponse" is used in 27.3.4.4 (Page 154, Line 41). However explanations are not enough. | Add explanations. | Rejected - Valid comment. However, this is already addressed through comments #5982, #3302, #8158, #8544, #7539, #8545. The fields are removed, and added to ADDBA Extension Element. No further changes needed to D1.3.  |
| 7063 | Junichi Iwatani | 120.05 | There is no example and figure for MultiSTA BlockAck response in OFDMA HE MU PPDU. The rule is complicated as described in 27.4.4.5 (Page 162, Line 22). Therefore an example should be added to clarify the rules.Also a reference to 27.4.4.5 should be added since additional conditions are described in 27.4.4.5. | as in comment | Rejected - The draft already has an example figure (10-12b) for the scenario that the commentor requested. |
| 7136 | kaiying Lv | 99.16 | Which elements are included in L3 FRAG ADDBA Request, L3 FRAG ADDBA Response or L3 FRAG DELBA? | Please Clarify it. | Rejected - Valid comment. However, this is already addressed through comments #5982, #3302, #8158, #8544, #7539, #8545. The fields are removed, and added to ADDBA Extension Element. No further changes needed to D1.3.  |
| 7383 | Laurent Cariou | 99.01 | Remove L3 FRAG ADDBARequest, response, Delba to harmonize to the solution used for fragmentation levels 1 and 2. | Same as comment | Rejected - Valid comment. However, this is already addressed through comments #5982, #3302, #8158, #8544, #7539, #8545. The fields are removed, and added to ADDBA Extension Element. No further changes needed to D1.3.  |
| 7665 | Liwen Chu | 120.01 | Change "an AP may send either multiple BlockAck frames (or Ack frames) inan HE MU PPDU, or a Multi-STA BlockAck frame (see 27.4 (Block acknowledgement)). Multi-STABlockAck frame transmissions are allowed in a non-HT Duplicate PPDU, HT PPDU, VHT PPDU, HE SUPPDU, HE extended range SU PPDU and OFDMA HE MU PPDU." to "an AP may send either multiple BlockAck frames (or Ack frames) inan HE MU PPDU, or a Multi-STA BlockAck frame (see 27.4 (Block acknowledgement)). Multi-STABlockAck frame transmissions are allowed in a non-HT Duplicate PPDU, HT PPDU, VHT PPDU, HE SUPPDU, HE extended range SU PPDU and OFDMA HE MU PPDU where each multi-STA BlockAck frame is in a broadcast RU." | As in comment | Rejected - M-BA can be indivudually addressed, in which case M-BAs can be carried in unicast RUs of HE MU PPDU  |
| 8413 | Po-Kai Huang | 120.02 | For the format allowed for Multi-STA BA, can we just say Multi-STA BA transmission are allowed in any PPDU format except HE TB PPDU? It seems that this is the intention. | Revised as in comment. | Rejected - M-BA is allowed in HE TB PPDU (when STAs are responding to Multi-TID AMPDU). Per CID 9684, this sentence will be removed |
| 8414 | Po-Kai Huang | 120.05 | The OFDMA part in OFDMA HE MU PPDU is redundant. | Remove OFDMA from OFDMA HE MU PPDU. | Rejected - Valid comment. However, per CID 9684, this sentence will be removed |
| 8542 | Rojan Chitrakar | 98.46 | Instead of defining new Action frames (L3 Frag BA Request/Response) for block ack setup for L3 fragmentation, it is more efficient to reuse the HE Fragmentation Operation subfield to indicate L3 fragmentation as well. | Remove Block Ack Action field values 3, 4 and 5 and instead use the value of 3 for the HE Fragmentation Operation subfield in the ADDBA request/response frames to negotiate Block Ack setup under fragmentation level 3. | Rejected - Valid comment. However, this is already addressed through comments #5982, #3302, #8158, #8544, #7539, #8545. The fields are removed, and added to ADDBA Extension Element. No further changes needed to D1.3.  |
| 9675 | Yongho Seok | 99.01 | The below frames are not defined.- L3 FRAG ADDBA Request- L3 FRAG ADDBA Response- L3 FRAG DELBAPlease define the above frames or remove them. | As per comment. | Rejected - Valid comment. However, this is already addressed through comments #5982, #3302, #8158, #8544, #7539, #8545. The fields are removed, and added to ADDBA Extension Element. No further changes needed to D1.3.  |
| 9684 | Yongho Seok | 120.03 | "Multi-STA BlockAck frame transmissions are allowed in a non-HT Duplicate PPDU, HT PPDU, VHT PPDU, HE SU PPDU, HE extended range SU PPDU and OFDMA HE MU PPDU."The non-HT PPDU is missing. Add the non-HT PPDU.However, if the non-HT PPDU is also added, all possible downlink PPDU can carry an Multi-STA BlockAck frame.Then, this sentence does not have any meaning.Please remove this sentence. | As per comment. | Accepted - TGax editor shall remove the sentence cited by the commentor |
| 9685 | Yongho Seok | 120.08 | The PSDU of HE PPDU is always an A-MPDU.Change it as the following"...in response to A-MPDU sent in HE trigger-based PPDU..." | As per commnet. | Rejected - The STA is allowed to send S-MPDU (AMPDU with EOF=1 & non-zero delimiter) |
| 9854 | Young Hoon Kwon | 121.55 | The case "to whom the STA sent the QoS Data frame(s) with Ack Policy subfield equal to Block Ack" is not for UL MU PPDU transmission. Therefore, it's better to exclude this explanation in this subclause, as this sub-clause describes acknowledgement procedure for UL MU PPDU. | Delete ", to whom the STA sent the QoS Data frame(s) with Ack Policy subfield equal to Block Ack or" from the paragraph. | Accepted - TGax editor to incorporate the proposed change. |