IEEE P802.11
Wireless LANs

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| 11ax D3.0 Comment Resolution 27.5.3.2.1 |
| Date: 2018-08-28 |
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Abstract

This submission proposes resolutions for multiple comments related to TGax D3.0 with the following CIDs:

* ~~15082,~~ 15681, 16548, 16951, 16952, 17151, 17152.

Revisions:

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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** | **PP** | **LL** | **Comment** | **Proposed Change** | **Resolution** |
| ~~15082~~ | ~~281~~ | ~~12~~ | ~~First bullet should also capture the multiple BSSID case where the STA is associated with nonTxBSSID and supports receiving a multi-BSS TF from TxBSSID~~ | ~~As in comment~~ | **~~Revised~~****~~Discussion: The commenter is right.~~****~~TGax editor to make changes in 11-18/1485r0 under CID 15082~~** |
| 15681 | 281 | 15 | RUs for UORA should be shared among associated and unassocited STAs. There is no need to differentiate them using different AID12 values (0 for associated, 2045 for unassociated). It makes the UORA RUs are less likely been used, and complicates the implementation | Change the text:"The AID12 subfield is 0 when the User Info field is addressed to STAs that are associated withthe AP and that follow the UL OFDMA-based random access procedure described in 27.5.5 (ULOFDMA-based random access (UORA))."To:"The AID12 subfield is 0 when the User Info field is addressed to STAs that are associated or unassociated withthe AP and that follow the UL OFDMA-based random access procedure described in 27.5.5 (ULOFDMA-based random access (UORA))."Remove the following text:"The AID12 subfield is set to 2045 when the User Info field is addressed to STAs that are notassociated with the AP and that follow the UL OFDMA-based random access proceduredescribed in 27.5.5 (UL OFDMA-based random access (UORA))." | **Rejected****Discussion: the frames transmitted in HE TB PPDU by associated STAs and un ssociated STAs in random access RUs are different. Separating the random RUs for associated STAs and unassociated STAs helps AP’s RU resourse allocation.**  |
| 16548 | 281 | 7 | An AP may sollicit an HE TB PPDU through a TF that includes User Info fields with AID12 equal to 0, 2045 or the 12LSBs of the AID of the STA.There is also another case when AID12 = 2046 that is not written here. | Please add a bullet describing the case when the AID12 is set to 2046 | **Rejected****Discussion:****AID12=2046 within an User Info field is used to announce a RU that is not addressed to any STA. The sentence is used for describing the solicition of HE TB PPDU from STAs.**  |
| 16951 | 281 | 33 | The note contains normative behavior and should not be in a note. | move the text from the note to be a regular part of the normative text | **Revised** **Discussion: The commenter is right.****TGax editor to make changes in 11-18/1485r1 under CID 16951** |
| 16952 | 281 | 54 | The clause following "that" is not correct since the conditions listed below don't always relate to Trigger frame or TRS Control subfield. This needs to be changed. | change the phrase "that satisfies all ofthe following conditions:" into "unless all ofthe following conditions are satisfied:" | **Revised****Discussion: Agree with the commenter that “that” is not suitable. However if the following condition are all satisfied, the AP can’t transmit the Trigger frame or TRS. So the “that” should be changed to “if”****TGax editor to make changes shown in 11-18/1485r1 under CID 16952** |
| 17151 | 281 |  | "More than one Trigger frame may be aggregated in an A-MPDU. If more than one Trigger frame is aggregatedin an A-MPDU, all of them shall have the same content." whether to repeat the same content trigger frame in the same A-MPDU should be a pure implementation choice. Remove this requiremnt. | as in the comment | **Rejected****Discussion:****It is upto the implementation that whether mothan one Trigger frame is aggregated in an A-MPDU. Once multiple Trigger frames are aggregated in one A-MPDU, they have to be same. Otherwise the receiving STA can’t decide which one to use for HE TB PPDU transmission.** |
| 17152 | 281 |  | "A non-AP STA shall not send a Trigger frame or a frame with a TRS Control subfield." A non AP STA should be allowed to send Trigger frame or a frame with TRS control subfield soliciting response from single user. It provides flexibility for the STA to operate while doesnt require that STA to have receive capability from multiple STAs simutaneousely | as in the comment | **Rejected****Discussion: the Trigger frame is used to solicit frame which carries Ack/BA, buffer status, bandwidth status, sounding feedback, CTS, short NDP feedback. In baseline a non-AP STA solicits Ack/BA, CTS, sounding feedback, available BW from a single AP/STA without using Trigger frame. There is no use case for a STA to solicit feedback from multiple STAs.** |

**27.5.3.2 Rules for soliciting UL MU frames**

**27.5.3.2.1 General**

***TGax editor: change subclause 27.5.3.2.1 as follows:***

**……**

An AP that transmits a PPDU may solicit an HE TB PPDU from one or more STAs through one of the following mechanisms:

* Including in the PPDU one or more Trigger frames that include one or more User Info fields with one of the following AID12 subfield settings:
* The AID12 subfield is equal to the 12 LSBs of the AID of the STA when the User Info field is addressed to a STA that is associated with the AP.
* The AID12 subfield is equal to the 12 LSBs of the AID of the STA when the User Info field is addressed to a STA that is associated with a nontransmitted BSSID and has indicated support for receiving Control frames with TA set to the transmitted BSSID by setting the Rx Control Frame To MultiBSS subfield to 1 in the HE Capabilities element that the STA transmits. (#15082)
* The AID12 subfield is 0 when the User Info field is addressed to STAs that are associated with the AP and that follow the UL OFDMA-based random access procedure described in 27.5.5 (UL OFDMA-based random access (UORA)).
* The AID12 subfield is set to 2045 when the User Info field is addressed to STAs that are not associated with the AP and that follow the UL OFDMA-based random access procedure described in 27.5.5 (UL OFDMA-based random access (UORA)).
* Including in the PPDU one or more individually addressed frames that include a TRS Control subfield(#13136)(#14137) and that:
* Are carried in an S-MPDU format that solicits an immediate Ack frame (see 10.13.8 (Transport of S-MPDUs))
* Are carried in an A-MPDU format that solicits an immediate BlockAck frame (see 10.24.7.7 (Originator's behavior))
* Are carried in a multi-TID A-MPDU format that solicits an immediate Multi-STA BlockAck frame (see 27.10.4 (Multi-TID A-MPDU and ack-enabled A-MPDU))

The AP shall additionally follow the rules defined in 27.3.2 (Dynamic fragmentation) when fragments are present in the generated MPDU(s). (16951)

**……**

An AP shall not transmit a Trigger frame or a frame containing a TRS Control subfield if all of the following conditions are satisfied (#16952):

— The AP is operating in an operating class for which the behavior limits set listed in Annex E includes the DFS\_50\_100\_Behavior (see Table E-1)

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