IEEE P802.11
Wireless LANs

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| Resolution Clause 6 CIDs: 43, 66, 67, 68, 69, 70, 71 |
| Date: 2020-9-19 |
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Abstract

This document provides proposed comment resolutions for some comments submitted in response to the 802.11 TGbd D0.3 internal comment collection. CIDs: 43, 66, 67, 68, 69, 70, and 71 are addressed.

r1: Updated during the Tuesday 19 May 2020 TGbd teleconference.

r2: Added revision notes in abstract, and the following description of the color code for the resolution status: Green highlighted resolutions were agreed by consensus on the call. Yellow highlighted resolutions require additional work, contributions, or discussion. Text that has be stuck through has been deleted.

r3: Provides proposed resolution for open CIDs: 43, 66, 70, and 71, and adding CID 65, which was reassigned, Cyan highlighted.

r4: Changes made during the TGbd Teleconference on 16 September 2020 @ 19:00-21:00 h ET

The comments are available in: <https://mentor.ieee.org/802.11/dcn/20/11-20-0701-01-00bd-tgbd-d0-3-comments.xlsx>. The proposed resolutions are grouped by clause, page and line number.

**CIDs for Clause 6.6.1, Pages 19 and 20:**

| CID | P:L | Comment  | Proposed Change | Proposed Resolution |
| --- | --- | --- | --- | --- |
| 43 | 19 | The text could be clarified to indicate whether the MLME-CANCELTX.request primitive removes all untransmitted MSDUs in the indicated access category, or only all non-head-of-line MSDUs. If a HOL MSDU is to be removed, the text should clarify up to what point in the contention process the removal must be achievable. For example, should any HOL MSDU be removed as long as the countdown value > 0? As long as the transmission of the HOL MSDU has not started? | Clarify if head-of-line MSDUs are removed as a result of this primitive? Clarify if there is a point in the HOL MSDU's channel contention after which transmission should proceed even if this primitive is invoked. | Revise: The changes made based on the resolutions to 66, 67, 68, and 69 resolve this comment. Discussion: if 802.11/1609 architecture is assumed to be that 1609 connects and manages multiple 802.11 STAs, where each STA is on a channel and has its own queue, then these primitives would be sent to the STA (which contains the queue which needs to be managed). It is preferred that this MLME primitive would clear the MAC queue (of all MSDU matching the type defined in the primitive). Note: Any MSDU that has already been passed to the PHY, will not be impacted by these primitives. Also, the state of the countdown timer is not reset when the MAC entities queue is cleared. Discussion:Was the intent of this primitive to allow the queue to be cleared of MSDUs of a specific access category or was it to clear only the non-HOL MSDUs. If it is the latter, should there be a way to clear all MSDUs including the HOL MSDU? I assume that if the MSDU is still in the MAC buffer it should be cleared. But once it has passed the PHY SAP into the PHY buffer it should not be cleared. Also is there any need for an additional request or modification of this request that would allow all MSDUs of a particular type except for the “latest” MSDU of that type to be cleared. e.g. there are 3 type “A” MSDUs in the queue, only the first 2 are cleared promoting the last MSDU of this type to become HOL. Based on 1609 – it is any data.Additional discussion is required. The intent is to remove all. The question is about how the contention state is “maintained”.Offline discussion and a contribution is required.  |
| 65 | 19.06 | Why is this in clause 6.6.1? Doesn't it belong in the 6.3 with all the other MLME primitives. | Place these MLME primitives in the proper clause. | **Revise: Move clause 6.6.x clauses to be clause 6.3.y.x (if TGmd is used as the base line it would be 6.3.118.x). Also add a “type” header: “6.3.y Cancel Transmissions of MSDUs.”**  |
| 66 | 19:12 | This primitive can only cancel transmission of mSDUs that have not bee transmitted, as if they have been transmitted they are no longer in the queue. | Replace: "which have been provided to the MAC entity but not yet transmitted"With: "that are in the MAC entity's transmit queue." | **Accept:** Replace: "which have been provided to the MAC entity but not yet transmitted"With: "that are in the MAC entity's transmit queue." |
| 67 | 19:32 | All MSDUs in the transmit queue are un-transmitted, hence there is no need to state that they are un-transmitted. | Delete: "untransmitted"also delete "untransmitted" on line 39. | **Accept:** Delete: "untransmitted"also delete "untransmitted" on line 39. |
| 68 | 19:45 | The description of the effect of receipt should be clearer. | Replace: "This primitive imitates removal of the mistranslated MSDUs of the specified access category from their transmit queue."with: "The receipt of this primitive by the MAC entity causes the MAC entity to remove MSDUs of the specified access category from thetransmit queue." | **Accept:** Replace: "This primitive imitates removal of the mistranslated MSDUs of the specified access category from their transmit queue."with: "The receipt of this primitive by the MAC entity causes the MAC entity to remove MSDUs of the specified access category from the transmit queue." |
| 69 | 19:53 | All MSDUs in the transmit queue are untransmitted, hence there is no need to state that they are untransmitted. | Delete: "untransmitted" | **Accept:** Delete: "untransmitted" |
| 70 | 19:59 | It seems this primitive does not have any parameters. If so, the semantics text should in line with that of other primitives with no parameters. Though it may be use full for this primitive to return the AccessCategory - so that the SME is aware of which MLME\_CANCELTX.request was successful if more than one request was issues. | Replace: "The primitive parameter is as follows:MLME-CANCELTX.confirm()"with: "This primitive has no parameter | **Revised:**In agreement with the proposed resolutions, but with a typo corrected:Replace: "The primitive parameter is as follows:MLME-CANCELTX.confirm()"with: "This primitive has no parameters.” **Discussion:**Should this primitive return the AccessCategory parameter, to allow the confirmation to indicate which request is being confirmed, in the event that more than one request was made (i.e. requests for different access categories)? Additional discussion and contributions may be needed. 1609 assumes an extended MAC – this may need additional discussion with 1609. Possibly there may be “two” STAs, or two queues that can be toggled between, or a means to save the status of the queues and upload the status on a channel switch. How do we keep it simple and specify it correctly in the 802.11 specification? Does 1609 need to update their specification to be consistent with the 802.11 updates?  |
| 71 | 20:9 | This text should align with the text in the MLE-CANCELTX.request | Replace: "The SME is notified of the completion of the removal of untransmitted MSDUs."With: "The SME is notified that the MAC entity has removed MSDUs of the specified access category from the transmit queue." | **Accept:** Replace: "The SME is notified of the completion of the removal of untransmitted MSDUs."With: "The SME is notified that the MAC entity has removed MSDUs of the specified access category from the transmit queue."**Question:** Should this be queues or queue?The current draft refers to a transmit queue (that may contain other sub queues), but it is referred to as the “transmit queue”. |

**References:**

1. [2014 IEEE Standards Style Manual](https://development.standards.ieee.org/myproject/Public/mytools/draft/styleman.pdf): <https://development.standards.ieee.org/myproject/Public/mytools/draft/styleman.pdf>
2. IEEE Std 802.11-2016: <https://ieeexplore.ieee.org/document/7786995>
3. IEEE Std 802.11md D3.0: <http://www.ieee802.org/11/private/Draft_Standards/11md/Draft%20P802.11REVmd_D3.0.pdf>
4. IEEE Std 802.11bd D0.3: <http://www.ieee802.org/11/private/Draft_Standards/11bd/Draft%20P802.11bd_D0.3.pdf>
5. [802.11-20/0701r1](https://mentor.ieee.org/802.11/dcn/20/11-20-0701-01-00bd-tgbd-d0-3-comments.xlsx), TGbd-D0.3-comments, https://mentor.ieee.org/802.11/dcn/20/11-20-0701-01-00bd-tgbd-d0-3-comments.xlsx