IEEE P802.11
Wireless LANs

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| Resolutions Clause 6.3.126 comments for LB-251 |
| Date: 2021-04-13 |
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Abstract

This document provides proposed comment resolutions for some comments submitted in response to the 802.11 TGbd D1.0 WG letter ballot #251. CIDs: 1215, 1241, 1242, 1400, 1398, 1399, and 1749 are addressed.

r1: as updated in the 13 April 2021 TGbd teleconference.

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.

Status: Highlighting in CID column indicates the status of the discussion on the CID:

Not Discussed (not highlighted)

Discussed additional discussion required (date of discussion(s) is(are) located below CID number)

Discussed / ready for SP (date of discussion(s) is(are) located below CID number)

SP run / ready for Motion (date of the SP is located below the date of discussion)

Motioned (date of Motion is located below the date of the SP)

Resolution Status: Highlighting in the Resolution column indicates:

Yellow highlighted text needs to be discussed

Red highlighted text has been discussed and additional discussion is required

**CIDs for Clause 3.1, Page 15, line 10:**

| **CID** | **Comment** | **Proposed Change** | **Resolution** |
| --- | --- | --- | --- |
| 1399 | There are 4 ACs, not 16, and they're named not numbered | Make AccessCategory an enumeration: BE, BK, VI, VO (if you want to support 11aa alternate queues then add those too) | Revised:The commentor is correct AC are enumerated as shown. However, the AC Index (ACI) is an integer (1-4) and is usually encoded with 2 bits. Editor instructions: In Clause 6.3.126.2.2 replace “AccessCategory” with “AccessCategroyIndex” (two locations), limit the valid range to 1-4 and replace “access category” in the Description with “access category index”. In Clause 6.3.126.2.4 replace “access category” with “access category index”Editor note: see similar CID 1215 |
| 1215 | Access Category range in MLME-CANCELTX.request should be 0-3, not 0-15. I believe the access category numbers only go up to 3. A larger range could lead to interoperability problems or incorrect implementations. | In the Valid Range column of the table replace "0-15" with "0-3". | Revised:The commentor is correct there are only 4 ACs. But the AC are indexed by the ACI which has integer values of 1-4. Also, AC are enumerated and not numbered. In Clause 6.3.126.2.2Editor instructions: In Clause 6.3.126.2.2 replace “AccessCategory” with “AccessCategroyIndex” (two locations), limit the valid range to 1-4 and replace “access category” in the Description with “access category index”. In Clause 6.3.126.2.4 replace “access category” with “access category index”Editor note: see similar CID 1399 |
| 1400 | This SAP seems a bit brittle. What if the MAC couldn't cancel the MSDUs? What if it could cancel some but not others? | Change 6.3.126.3.4 to say that the SME is notified of the cancellation of MSDUs through the MA-UNITDATA.ind | Rejected:The MLME-CANCELTX.confirm is generated by the MAC entity after the execution of a MLME-CANCELTX. request. This signaling is used to inform the SME that the MLME-CANCELTX.request has been received and acted on by the MAC entity. There is no need to notify the SME through the MA-UNITDATA.ind.  |
| 1241 | The function simply says that "MSDUs" are cancelled. It is not clear whether this means that all MSDUs, specific MSDUs or that it is up to implementation which MSDUs are discarded | Be more specific about which MSDUs are "cancelled" | Revised: The MLME-CANCELTX.confirm is generated by the MAC entity after the execution of a MLME-CANCELTX. request by the SME. These primitives are a pair (request and response). Since the request contains all the information on the MSDUs to be cancelled, there is no need to repeat the information in the confirm. However, the issue of which MDSUs are discarded is clarified. Editor to replace the text in 6.3.126.2.1: “Requests cancellation of transmission of queued MSDUs belonging to a specified access category.”with: “Requests cancellation of transmission of all queued MSDUs belonging to the specified access category.” |
| 1242 | Not clear what "cancellation" means, i.e. if it is cancelling transmitting at a specific time instance or whether MSDUs are removed from the queue, i.e MSDU discarding. In the p20, line 51, the wording discarded is used, which would seem to be a wording than "cancelling". | Either rename the function to better wording such as "discarding", or clarify what "cancellation of transmission" means | Rejected: The text clearly states that the MSDUs are to be removed from the transmit queue. If the MSDU is no longer in the queue it is discarded, or its transmission will be cancelled. When the request is provided to the MAC entity, the MAC entity will act and clear all the MSDUs of the specific category from its transmission queue. From a higher layer perspective, the transmission of MSDUs of the AC specified are being “cancelled” as the higher layer entity that originally sent these MSDUs to the transmission queue is effectively cancelling the previously requested transmissions. This terminology is the result of liaison information exchanged between IEEE 802.11 TGbd and IEEE 1609 WG. |
| 1398 | The MAC has multiple transmit queues (at least one per AC) so all the talk of "the transmit queue" is confusing | Change to the plural throughout, or refer to "one of the MAC entity's transmit queues" | Rejected:How the MAC transmit queue is configured is an implementation issue. There is no requirement in the specification that there needs to be one queue per AC. Logically there is a single transmit queue, where received MPDUs await transmission. These MLME primitives request the MAC entity to remove MPDUs from the MAC transmit queue.  |
| 1749 | By cancelling transmission of queued MSDUs, should MA-UNITDATA-STATUS.indication be generated to report the LLC sublayer or bridge port that the target MSDUs were undeliverable? | Consider if it impacts the MAC data service primitives and update the effect if necessary. | Rejected:The intent of the MLME primitives is to allow the SME to respond to requests from a higher layer entity, so that the transmission queue can be managed by the higher layer entity responsible for requesting their transmission. There is no need to inform the LLC sublayer or a bridge port that the MPDUs were undelivered. This terminology is the result of liaison information exchanged between IEEE 802.11 TGbd and IEEE 1609 WG. |