IEEE P802.11
Wireless LANs

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| Resolution for CIDs in 11-22/0074r11 Comments on P802.11bb/D1.0 |
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Abstract

This submission proposes resolutions for CIDs 88, 32, 311, and 219 in 11-22/0074r11 Comments on P802.11bb/D1.0.

***Discussion: Highlighted text preceded by “Discussion” are not to be copied into the TGbb Draft. Such text provides rationale for the proposed changes.***

History:

R0: proposal of resolutions for CIDs 88 and 219.

R1: revise the resolution for CID 219 and reconsider CID 32 together with CID 219.

R2: add resolution for CID 311.

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| CCI | Comment | Page | Subclause | Line | Proposed Change | Resolution |
| 219 | It is not clear whether an LC AP can transmit its own new packet immediately after the retransmission of the transmission from a non-AP LC STA is completed even when the backoff counter of the LC AP is not zero. | 21 | 32.3.2.5 | 24 | Please clarify whether an LC AP may transmit its own new packet immediately after the retransmission of the transmission from a non-AP LC STA is completed without any restriction. If there is any restriction, please specify it. | assigned to Chong to provide new text, Nancy to check |
| 88 | Figure 32-5 shows an example of channel access with the repetition CCA mechanism. In this figure, ACK and IFS are not drawn. Then, the actual procedure of the channel access is unclear.Because the procedure of the repeated signal will cause a delay, does the IFS operation work correctly? | 21 | 32.3.2.5 | 27 | Show the exact procedures to operate correctly. | assigned to Chong: Please, provide updated figure and new description |
| 311 | "When the LC AP has a packet to transmit, it may follow normal DCF procedure or optionally start the transmission of the new packet immediately after the retransmission of the transmission from a non-AP LC STA is completed."; channel access rules for the "optional" part is not clear. "Immediately after" is not a standard interoperable term. Specify timings (IFS for example) and conditions (when AP can do this and when it cannot) - for reference we have similar behavior for non-LC with PIFS access. | 21 | 32.3.2.5 | 24 | Specify channel access details | should be added to doc. 397r1 |

***Discussion: The resolution of CCI 219 is proposed as follows:***

***Remove the text of P21L24-26:***

***Change resolution of CIDs 32, 219 and 311 to:***

***Replace P21L30-32 with the following text***

After retransmitting Packet 1 and sending an ACK to Packet 1, the LC AP follows normal DCF/EDCA behavior and waits until its backoff counter reaches zero before transmitting Packet 2 to non-AP LC STA1. Non-AP LC STA1 acknowledges Packet 2. Sometime later non-AP LC STA2 obtains access to the channel and transmits Packet 3. Packet 4 is queued at the LC AP before it finishes transmission of repeated signal of Packet 3 that does not require an ACK. The figure shows optional behavior whereby the LC AP continues occupying the downlink channel by transmitting its queued packet (i.e., Packet 4) after completing retransmission of Packet 3 without waiting for any IFS. This optional feature helps reduce the backoff time by the LC AP on the downlink channel since the LC AP is the only user of the channel.

***Discussion: For CCI 88, Fig. 32-5 is redrawn to provide missing elements such as backoff and acknowledgement as shown below. Regarding the question of delay, the delay caused by the repetition is in ns while the IFS operation is in microseconds. Hence, the delay will not afftect the IFS operation.***



Figure 32-5—An example of channel access with repetition CCA mechanism