IEEE P802.11  
Wireless LANs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Comment Resolution for Subclause 9.20.2 | | | | |
| Date: 2013-08-01 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | email |
| Alfred Asterjadhi | Qualcomm  Inc. | 5775 Morehouse Dr  San Diego,  CA 92109 | +1-858-658-5302 | aasterja@qti.qualcomm.com |
| Menzo Wentink | Qualcomm Inc. |  |  |  |
| Simone Merlin | Qualcomm Inc. |  |  |  |

Abstract

This document provides comment resolution for TGah Draft 0.1 Comment Collection 9 with these CIDs: 808, 838, 839, and 840.

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 TGah Draft. This introduction is not part of the adopted material.

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

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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **CID** | **P.L** | **SC** | **Comment** | **Proposed Change** | **Resolution** |
| 808 | 121.1 | 9.20.2 | The current draft does not clearly define how RID interoperate with NAV and EIFS. It is not clear how this impacts the deperral and backoff procedures. Need to define consistent rules for 11ah, e.g., combining of NAV and RID, TXOP Truncation, etc. | As in comment. | Revised –  TGah editor to make changes shown in 11-13-xxxx-01-00ah under the heading for CID 808. |
| 838 | 121.1 | 9.20.2.3 | 9.20.2.3 Obtaining an EDCA TXOP;does this text requie any change given that we have RID and speed frame exvhange? | define the exact behavior based on NAV + RID | Revised –  TGah editor to make changes shown in 11-13-xxxx-01-00ah under the heading for CID 808. |
| 839 | 121.1 | 9.20.2.5 | 9.20.2.5 EDCA backoff procedure; any change due to RID? | define the exact behavior based on NAV + RID | Revised –  TGah editor to make changes shown in 11-13-xxxx-01-00ah under the heading for CID 808. |
| 840 | 121.1 | 9.20.2.7 | 9.20.2.7 Truncation of TXOP; how does it work with the RID? | define the exact behavior nased on NAV + RID | Revised –  TGah editor to make changes shown in 11-13-xxxx-01-00ah under the heading for CID 808. |

**Discussion:**

* **EDCA TXOPs**

**Instruction to Editor: *Please modify the second note in this subclause as follows:***

NOTE 1—This is a rule for the TXOP holder. A TXOP responder need not be aware of the TXOP limit nor of when the TXOP was started.NOTE 2—This rule prevents the use of RD, SF, and TXOP Sharing when the TXOP limit is 0.

* **Obtaining an EDCA TXOP**

**Instruction to Editor: *Please modify this paragraph as follows:***

The specific slot boundaries at which exactly one of these operations shall be performed are defined as follows, for each EDCAF:

* Following AIFSN[AC] × aSlotTime – aRxTxTurnaroundTime of idle medium after SIFS (not necessarily idle medium during the SIFS(#156)) after the last busy medium on the antenna that was the result of a reception of a frame with a correct FCS or of a S1G frame.
* **Multiple frame transmission in an EDCA TXOP**

**Instruction to Editor: *Please modify the 1st paragraph as follows:***

Multiple frames may be transmitted in an EDCA TXOP that was acquired following the rules in 9.20.2.3 (Obtaining an EDCA TXOP) if there is more than one frame pending in the AC for which the channel has been acquired. However, those frames that are pending in other ACs shall not be transmitted in this EDCA TXOP. If a TXOP holder has in its transmit queue an additional frame of the same AC as the one just transmitted and the duration of transmission of that frame plus any expected acknowledgment for that frame is less than the remaining TXNAV timer value, then the STA may commence transmission of that frame a SIFS (or RIFS, under the conditions defined in 9.3.2.3.2 (RIFS)) after the completion of the immediately preceding frame exchange sequence, subject to the TXOP limit restriction as described in 9.20.2.2 (EDCA TXOPs). An HT STA that is a TXOP holder may transmit multiple MPDUs of the same AC within an A‑MPDU as long as the duration of transmission of the A‑MPDU plus any expected (#192)BlockAck frame response is less than the remaining TXNAV timer value. An S1G STA that is a TXOP holder may transmit multiple MPDUs of the same AC within an A-MPDU as long as the duration of transmission of the A-MPDU plus any expected (NDP) BlockAck frame response is less than the remaining TXNAV timer value.

NOTE 1—An RD responder can transmit multiple MPDUs as described in 9.26.5 (Rules for RD responder).(#241)

NOTE 2—An SF responder can transmit multiple MPDUs as described in 9.32i (Speed Frame Exchange).

* **Truncation of TXOP**

**Instruction to Editor: *Please add immediately after the 1st paragraph:***

An S1G STA that transmits a PPDU with the TXVECTOR parameter RESPONSE INDICATION equal to Long Response or an NDP (Modified) ACK with Duration Indication field equal to 1 and Duration field equal to 0, for which it does not receive, after a SIFS period, a response with the RXVECTOR’s parameter RESPONSE INDICATION equal to NDP Response or Normal Response, may transmit a NDP frame with Response Indication “No Response” to truncate any active RID.