IEEE P802.11  
Wireless LANs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Resolution to CID 1195 | | | | |
| Date: 2018-09-13 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | Email |
| Guido R. Hiertz | Ericsson | Ericsson GmbH Ericsson Allee 1 52134 Herzogenrath Germany | +49-2407-5755575 | hiertz@ieee.org |
| Dennis Sundman | Ericsson | Sweden |  | dennis.sundman@  ericsson.com |
| Leif Wilhelmsson | Ericsson | Mobilvägen 1 22632 Lund Sweden | +46-706-216956 | leif.r.wilhelmsson@ericsson.com |
| Jerome Henry | Cisco | 124 Forest Ridge Lane, Pittsboro NC 27312 | +1 919 392 2503 | jerhenry@cisco.com |
| Menzo Wentink | Qualcomm | Utrecht, The Netherlands | +31-65-183-6231 | mwentink@  qti.qualcomm.com |

Abstract

This document contains a proposed resolution for CID 1195.

***Modify as shown.***

Changes relative to 802.11REVmd\_D1.2.

**10.24.2.7 Sharing an EDCA TXOP**

The AC associated with the EDCAF that gains an EDCA TXOP is referred to as the primary AC. Frames from ACs other than the primary AC shall not be included in the TXOP, with the following exceptions (TXOP sharing):

* Frames from a higher priority AC may be included when all frames from the primary AC have been transmitted and at least one frame from the primary AC has been transmitted.
* Frames from a higher or lower priority AC may be included in a VHT or S1G DL MU PPDU with TXVECTOR parameter NUM\_USERS > 1 when these frames do not increase the duration of the VHT or S1G MU PPDU beyond that required for the transmissions of the frames of the primary AC, and for up to four STAs. Frames from the primary AC shall be transmitted first.

When sharing, the TXOP limit that applies is the TXOP limit of the primary AC.

For the purpose of admission control (see 10.24.4.2), all frames transmitted under TXOP sharing shall be treated as if they were from the primary AC.

NOTE—An AP can protect an immediate response by preceding the VHT (11ah)or S1G MU PPDU (which might have TXVECTOR parameter NUM\_USERS > 1) with an RTS/CTS exchange or a CTS-to-self transmission.

**10.24.2.8 Multiple frame transmission in an EDCA TXOP**

A frame exchange, in the context of multiple frame transmission in an EDCA TXOP, may be one of the following:

— A frame not requiring immediate acknowledgment (such as a group addressed frame or a frame transmitted with an acknowledgment policy that does not require immediate acknowledgment) or an A-MPDU containing only such frames

— A frame requiring acknowledgment (such as an individually addressed frame transmitted with an acknowledgment policy that requires immediate acknowledgment) or an A-MPDU containing at least one such frame, followed after SIFS by a corresponding acknowledgment frame

— Either

— a VHT NDP Announcement frame followed after SIFS by a VHT NDP followed after SIFS by a PPDU containing one or more VHT Compressed Beamforming frames, or

— a Beamforming Report Poll frame followed after SIFS by a PPDU containing one or more VHT Compressed Beamforming frames

Multiple frames may be transmitted in an EDCA TXOP that was acquired following the rules in 10.24.2.4 (Obtaining an EDCA TXOP) if there is at least one frame pending in the primary AC for which the channel has been acquired. Frames that are pending in other ACs shall not be transmitted in this EDCA TXOP except when permitted by the rules in 10.24.2.7 (Sharing an EDCA TXOP).