IEEE P802.11  
Wireless LANs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ACK operation in TDD SP | | | | |
| Date: 2018-07-12 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | Email |
| Saehee Bang | LG |  |  | [saehee.bang@lge.com](mailto:saehee.bang@lge.com) |
| Kiseon Ryu | LG |  |  | kiseon.ryu@lge.com |
| Jinmin Kim | LG |  |  | [jinmin.kim@lge.com](mailto:jinmin.kim@lge.com) |
| Jinsoo Choi | LG |  |  | [js.choi@lge.com](mailto:js.choi@lge.com) |
| Sungjin Park | LG |  |  | [allean.park@lge.com](mailto:allean.park@lge.com) |
| Sanggook Kim | LG |  |  | [sanggook.kim@lge.com](mailto:sanggook.kim@lge.com) |
| Payam Torab | Facebook |  |  | ptorab@fb.com |

Abstract

This document proposes to modify of ACK operation in TDD SP to clear of Ack policy and AckTimeout.

* **Note:** According to the definition in the current draft text, the ACK for the TX TDD slot is transmitted in the earliest simplex RX TDD slot. However, in this case, transmitter behavior and AckTimeout need to be corrected.

The current spec only addresses the restriction of at most one single MPDU transmission per TDD slot. If more than one TDD slots are assigned to a DMG AP or a DMG STA before occurring the corresponding TDD slot Ack/BA is transmitted on, the problem may happen. So we need clarification for Ack procedure in TDD SP.

*Change as follows:*

**10.3.2.10 Acknowledgement procedure**

**…**

A DMG AP or DMG PCP operating in an SP with TDD channel access (see 10.37.6.2.2) has AckTimeout interval value equal to the duration from the PHY-TXEND.confirm primitive of the current frame to the end of the earliest occurring TDD slot the addressed recipient of the MPDU is assigned to, with access permission of the TDD slot set to simplex RX TDD slot, and with slot category of the TDD slot set to Basic TDD slot, as indicated in the TDD Slot Schedule element (see 9.4.2.268).

*Insert the following paragraphs after the 6th paragraph*

When a DMG STA operating in an SP with TDD channel access (see 10.37.6.2.2) transmits a MPDU that has an Ack Policy of Normal Ack in a TDD slot, the DMG STA shall not transmit another MPDU that has an Ack Policy of Normal Ack to the same receiver until the corresponding Ack frame is received or the end of the AckTimeOut interval.

**Straw poll**

* **Do you agree to include the text for ACK operation in TDD SP proposed in (11-18-0845-03-00ay-** **ACK operation in TDD SP text) to the spec draft?**