IEEE P802.11  
Wireless LANs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Proposed resolution of remaining MAC comments | | | | |
| Date: 2020-08-06 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | email |
| Mark Hamilton | Ruckus/CommScope | 350 W Java Dr  Sunnyvale, CA 94089 | +1.303.818.8472 | mark.hamilton2152@gmail.com |

Abstract

This submission contains comments in the REVmd initial SA ballot MAC ad hoc remaining to be resolved as of Aug 6, 2020.

Each of the comments has a proposed disposition, based on the current status of discussion, as of Aug 6.

R0 – initial version.

**All page/line references are per REVmd D3.0.**

**Propose “Revised”:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **CID** | **Page** | **Line** | **Clause** | **Comment** | **Proposed Change** | **Ad-hoc Notes** |
| 4077 | 2176.00 | 19 | 11.2.1 | The statement "A STA can be in one of two power states" really only applies to a STA that is using the power management mode and should say so. Also, the critical factor that impacts AP behavior is that there is a known awake/doze schedule that the AP and STA are aware of and the AP must buffer frames for the STA with an active PS mode according to the schedule and mode. The actual state of the STA is not a function of the agreed PS mode awake/doze schedule. | Replace "A STA can be in one of two power states:" With "A STA in power save (PS) mode is scheduled to be in one of two states:" | MAC: 2020-07-21 17:54:27Z - Suggest: Replace the first two paragraphs of 11.2.1 with:  A STA is either in an active mode, or can optionally support the power save mode. A STA in active mode is always in awake state. A STA in power save mode transitions between awake and doze states as determined by its power management mode and as reflected in dot11PowerManagementMode.    MAC: 2020-01-11 21:44:13Z - status set to: Discuss |

From the direction of 4082, it seems there is no agreement to describe power save mode as (necessarily) being “scheduled”. However, a clarification that transitioning between the power save states (awake and doze) only applies when the STA is in power save mode might be appropriate, as was suggested on a recent teleconference.

**Resolution: Revised.**  Replace the first two paragraphs of 11.2.1 with:

A STA is either in an active mode, or can optionally support the power save mode. A STA in active mode is always in awake state. A STA in power save mode transitions between awake and doze states as determined by its power management mode and as reflected in dot11PowerManagementMode.

**Propose “Accepted”:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **CID** | **Page** | **Line** | **Clause** | **Comment** | **Proposed Change** |
| 4564 | 1853.00 | 4 | 10.23.4.2.3 | "Frame exchange sequences for Management frames [...] are excluded from the used\_time update." -- this allows a STA to circumvent admission control by putting an Action No Ack in an A-MPDU together with a bunch of Data frames. | Change to "Frame exchange sequences that do not include any Data frames [...]" |
| 4572 | 1501.00 | 24 | 9.5.1 | "(#2620)The DMG Antenna ID subfield indicates the antenna or DMG antenna the transmitter is currently using for this transmission." should have a NOTE to clarify it's an antenna when used by a CMMG STA. Maybe also needed at the end of 9.5.4? | Change to "The DMG Antenna ID subfield indicates the antenna (for a CMMG STA) or DMG antenna (for a DMG STA) the transmitter is currently using for this transmission." |
| 4648 | 2182.00 | 22 | 11.2.3.5.1 | The need to qualify BU as DL BL only arises for 11ah; other STAs can only have BUs for DL anyway | In 11.2.3.5.1 change "downlink BUs to" to "BUs to a" |
| 4687 | 1748.00 | 20 | 10.3.2.12 | Should not duplicate requirements already given elsewhere. For ack policy, it's all in Table 9-13--Ack policy | Delete "A recipient STA shall not send any frame as an immediate response to an F-MPDU with Block Ack ack policy. An originator STA may solicit an immediate response following an F-MPDU by setting the ack policy of the eliciting F-MPDU to Implicit BAR.(#1415)". Delete "A STA shall not transmit an Ack or BlockAck frame in response to a QoS Data frame whose ack policy is No Ack." in 10.3.2.11 |
| 4701 |  |  | 9.4.5 | Are you sure it's called null in ASCII? I thought it was called NUL | In 9.4.5.4 and 9.4.5.21 change "null" to "NUL" |
| 4707 | 1700.00 | 60 | 9.9.1 | CID 2308 follow-up. There are lots of rules for things like Acks, CTSes, PS-Polls, etc. The limited extensions to Clauses 10 and 11 to cover the NDP CMAC PPDU flavours of these MPDUs cannot cover all the cases where they are used and the rules that apply in each case. They have to inherit from the non-NDP-CMAC behaviours | At the end of 9.9.1 add "NDP CMAC frames are not MPDUs but NDPs, but they obey the rules for equivalent MPDUs, as shown in Table 9-539." In Table 9-539 add a column "Equivalent MPDU" and then for values 0 to 7 respectively say "CTS or CF-End", PS-Poll, Ack, "Ack to PS-Poll", BlockAck, Beamforming Report Poll, Action, Probe Request |