IEEE P802.11  
Wireless LANs

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| Comment Collection 09 MAC CIDs (Comment Resolutions for CC09) | | | | |
| Date: 2013-07-17 | | | | |
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Abstract

This document provides resolutions for CID 36,38, 39, 40, 63, 968.

The changes are in the following subclauses: 9.32g.3.

Table of Contents

[0 Revision Notes 2](#_Toc350888716)

# 0 Revision Notes

R0: First draft

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **CID** | **Clause** | **Page** | **Line** | **Comment** | **Proposed Change** | **Resolution** |
| 36 | 9.32g.3 | 142 | 60 | Non-TIM STA definition is missing. | Define a non-TIM STA is an S1G STA that does not read the beacon as described in section where non-TIM STA Operation is defined. | Modified.  Non-TIM STA is an S1G STA that does not listen to the beacon. The definition should be added into 9.32g.1 General. |
| 38 | 9.32g.3 | 143 | 25 | Low power S1G STA can be a non-TIM STA. Low power S1G STA is not defined anywhere. | Simply refer to non-TIM STAs and keep consistency throughout the section. | Accepted |
| 39 | 9.32g.3 | 143 | 25 | PS-Poll can be an NDP PS-Poll | Add NDP PS-Poll in the description | Accepted |
| 40 | 9.32g.3 | 143 | 47 | dozing low power S1G STA -> the non-TIM STA | as in comment | Accepted |
| 63 | 9.32g.3 | 143 | 47 | "STA may wakeup"? | STA shall wake up. Also, how does STA know that it is going to be treated as TIM STA? add a sentence like "upon receiving the beacon, the STA infers from the TIM that it is treated as a TIM STA and hence operates as a TIM STA for the next becon itnerval" | Accepted |
| 968 | 9.32g.3 | 143 | 53 | There is a confliction on the wakeup timer with zero value and equivalent ACK Indication for Long Response where Duration Indication = 1 and Duration = 0. | Remove the text of "If the S1G AP sets the timer to 0, it indicates that there is no sleep duration for the low power S1G STA." | Accepted |

***Proposed changes:***

***[CID36] Insert the following text into 9.32g.1 General (Line 60 Page 142)***

**9.32g.1 General**

A non-TIM STA is an S1G STA that does not listen to the beacon.

**9.32g.3 Rescheduling of wake/doze cycle of non-TIM STAs**

***[CID36]***

This clause defines a procedure for non-TIM STA ~~a S1G STA that does not listen to the beacon~~ to reschedule its awake/doze cycle.

***[CID38,39]***

A ~~low power~~ non-TIM S1G STA can send a (NDP) PS-Poll/trigger frame any time to its associated AP upon waking up without listening to the beacon. ~~The low power S1G STA can be a non-TIM STA~~.

Upon receiving the (NDP) PS-Poll/trigger frame, an S1G AP may respond with a control frame that includes a timer. The control frame is either the NDP ACK frame in 8.3.4a.1.3 or the Modified NDP ACK frame in 8.3.4a.1.4, both of which use the Duration field to indicate the wakeup timer value when the Duration Indication field is set to 1. The S1G STA can re-synchronize to the beacon with the help of the wakeup timer value.

***[CID38]***

The S1G AP shall set More Data field to 1 in the responding control frame if there is BU buffered for the ~~low power~~ non-TIM S1G STA. If the ~~low power~~ non-TIM S1G STA receives the responding control frame in which the Duration Indication field is equal to 1 and the Duration field is a nonzero value, there is no frame transmission for the STA in the indicated duration in which the S1G STA may go to sleep. After the amount of time that is equal to the value in the Duration field, it shall be at the awake state.

***[CID40,63 ,968]***

An S1G AP may set the wakeup timer (Duration field) as the duration to a TBTT in the responding control frame (either NDP ACK or Modified NDP ACK frame) and treat the non-TIM STA as a TIM STA starting from the TBTT. After the amount of time that is equal to the Duration field value in the responding control frame from the S1G AP, the ~~dozing low power~~  non-TIM S1G STA ~~may~~ shall wake up to receive the beacon. Upon receiving the beacon, the STA infers from the TIM element that it is treated as a TIM STA and operates as a TIM STA from then on. The S1G STA returns to the non-TIM STA operation mode if the S1G AP indicates that there is no more data buffered for the S1G STA and the S1G STA indicates to the S1G AP that there is no more data to transmit. The S1G AP treats the S1G STA as a non-TIM STA if the STA indicates that there is no more data to transmit and the S1G AP indicates that there is no more data buffered for the STA. ~~If the S1G AP sets the timer to 0, it indicates that there is no sleep duration for the low power S1G STA.~~