IEEE P802.11  
Wireless LANs

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| Power saving in TDD SP text | | | | |
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|  |  |  |  |  |

Abstract

This document proposes the duration of PS mode and indication method of applying power saving in TDD SP.

***Discussion:***

**TDD SP power management**

Due to the specification of the distributed network, TDD SP consists of number of TDD slots, and CNs use only assigned TDD slots. There is a chance for power management in unassigned TDD slots. So we propose the duration of power management in TDD SP.

The TDD SP power save mechanism allows a non-AP and non-PCP DMG STA in an infrastructure BSS or PBSS to go to PS mode during a following periods where the STA is involved in a SP with TDD channel access transmission and acknowledgement procedures.

A DMG STA that receives TDD Slot Schedule element may enter doze state for the following time duration:

* The remaining time duration after receiving EOSP subfield set to 1 within the TDD slot.
* TDD Slot unit based: The unassigned TDD slots indicated by the TDD Slot Schedule element. The assigned Rx TDD slots when there is no MPDU to transmit from the DMG STA

*Change as follows:*

**11.2.7 Power management in a PBSS and DMG infrastructure BSS**

**11.2.7.1 General**

Table 11-2—Power states for an awake BI

|  |  |  |  |
| --- | --- | --- | --- |
| **Portion of the beacon interval** | | **PPS PCP** | **PS non-AP and**  **non-PCP STA** |
| BHI | BTI | Awake | Awake or doze |
| A-BFT | Awake | Awake or doze |
| ATI | Awake | Awake |
| DTI | CBAP with the PCP Active field set to 1 in the schedule | Awake or doze | Awake or doze |
| CBAP with the PCP Active field set to 0 in the schedule | Doze | Awake or doze |
| SP with Destination AID set to broadcast AID | Awake | Awake |
| Nontruncatable or nonextensible SP with non-PCP STA as  Source AID or Destination AID | Awake or doze | Awake or doze |
| Truncatable SP or extensible SP with non-AP and non-PCP  STA (excluding the PS STA) as Source AID or Destination  AID | Awake | Awake or doze |
| SPs allocated to itself | Awake or doze | Awake or doze |
| All other SPs | Awake or doze | Awake or doze |
| Awake window | Awake | Awake |
| DTI with CBAP Only subfield set to 1 | Awake or doze | Awake or doze |
| Destination AID field of a CBAP equal to the broadcast AID  in the schedule | Awake or doze | Awake or doze |

*Insert the Table as follows:*

Table xx-x — Power states for TDD SP

|  |  |  |  |
| --- | --- | --- | --- |
| **Portion of the beacon interval** | | **PPS PCP** | **PS non-AP and**  **non-PCP STA** |
| DTI | Unassigned TDD Slot | Awake or doze | Doze |
| Assigned TDD Slot | Awake | Awake |

*Change the 15th paragraph original text as follows:*

The source DMG STA and the destination DMG STA of a nontruncatable SP, ~~or~~ allocated CBAP or allocated TDD slot with individually addressed destination AID may go to doze state within the SP, ~~or~~ within the CBAP or within the TDD slot, respectively, after the source DMG STA transmitted a frame to the destination DMG STA of the SP, ~~or~~ the CBAP or the TDD slot, respectively, with the EOSP subfield set to 1 and received the following response frame from the destination DMG STA of the SP, ~~or~~ the CBAP or the TDD slot, respectively.

**Straw poll**

* **Do you agree to include the text for Power management in TDD SP proposed in (11-18-1173-00-00ay- power saving in TDD SP text) to the spec draft?**