### **IEEE P802.11 Wireless LANs**

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| PDT WPT Signal Coexistence | | |
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**Introduction**

This document provides proposed draft text for IEEE 802.11bp draft.

The following Motions apply to this PDT:

* **WM-4**: WPT signals from two or more transmitters in S1GHz are allowed to occupy the same channel simultaneously.

[Motion #54, [1], [60] and [61]]

* **WM-7**: Energizer may perform LBT before transmitting WPT signals in S1G. The details of LBT are TBD.

[Motion #80, [1], [60], [61] and [77]]

***TGbp editor: Please add the following subclause 39.7.3:***

**39.7.3 WPT Signal Coexistence**

An energizer may detect if a sub-1GHz channel is in idle status or busy status before transmitting WPT signal according to the below algorithm.

Algorithm TBD.

If the sub-1 GHz channel is in idle status, the energizer can transmit WPT signal. If the channel is in busy status but occupied by WPT signal (how to determine WPT signal is TBD), the energizer can transmit additional WPT signal. the energizer should perform backoff procedure. Otherwise, if the channel is in busy status, the energizer should perform backoff procedure.

***TGbp editor: Please add the following subclause 40.4.11.2:***

**40.4.11.2 CCA sensitivity for WPT**

**40.4.11.2.1 General**

The thresholds in this subclause are compared with the signal level at each receiving antenna.

**40.4.11.2.2 CCA sensitivity for WPT**

WPT CCA-Energy Detection (CCA-ED) is required in Sub-1GHz band. The PHY shall indicate a medium busy condition if WPT CCA-ED detects a channel busy condition. WPT CCA-ED shall detect a channel busy condition if the received signal strength exceeds the WPT CCA-ED threshold as given by wptTBDthreshold for the TBD MHz channel. The PHY shall further indicate if WPT CCA-ED detects a channel busy condition and the channel is occupied by WPT signal (how to determine WPT signal is TBD).