### **IEEE P802.11Wireless 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 [1]:

* **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 AMP energizer can optionally detect if a sub-1GHz channel is in idle status or busy status before transmitting a WPT signal. If the sub-1 GHz channel is in idle status, the AMP energizer can transmit two or more WPT signals simultaneously.

***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**

CCA-Energy Detection (CCA-ED) for WPT can be optionally performed in Sub-1GHz band. If CCA-ED for WPT is performed, the PHY shall indicate a medium busy condition if CCA-ED for WPT detects a channel busy condition. CCA-ED for WPT shall detect a channel busy condition if the received signal strength exceeds the CCA-ED for WPT threshold as given by *wptTBDthreshold* for the TBD MHz channel.

**References:**

1. [11-24/1613r12](https://mentor.ieee.org/802.11/dcn/24/11-24-1613-12-00bp-specification-framework-for-tgbp.docx): 11-24-1613-12-00bp-specification-framework-for-tgbp, Yinan Qi (OPPO)