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

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| 11bp PDT Duty-cycle operation | | |
| Date: 2025-09-08 | | |
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Abstract

This document contains Proposed Draft Text (PDT) for Duty-cycle operation of the proposed TGbp (AMP, Ambient Power) amendment to the 802.11 standard.

**Revision information**

The following is a summary of the important changes that occurred within each revision of this document:

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| **Revision** | **Major changes** |
| 0 | Initial revision |
| 1 | Revised version based on the comments from task group members. |
| 2 | Revised version based on online and offline comments during September 2025 session. |
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# **Introduction**

Interpretation of a Motion to Adopt.

A motion to approve this submission means that the editing instructions and any changed or added material are actioned in the TGbp Draft. The abstract, revision information, introduction, explanation of the proposed changes and references sections are not part of the adopted material.

***Editing instructions formatted like this are intended to be copied into the TGbp Draft (i.e. they are instructions to the 802.11 editor on how to merge the text with the baseline documents).***

# **Explanation of the proposed changes:**

The proposed changes to the 802.11 TGbp draft within this document are based on the following motions adopted by the TGbp task group:

## Relevant passing motions [1]:

* **MM-4**: If an AMP device is able to support TSF, it can monitor AMP DL Frame in a duty-cycle manner.

[Motion #32, [1], [21] and [22]]

* **MM-24**: 802.11bp defines one mechanism that a non-AP AMP STA can derive its specific AMP service period in order to monitor AMP DL Frame.

[Motion #101, [1], [100], [101] and [103]]

* **MM-22**: IEEE 802.11bp defines an AMP Service Period, that allows an Active Tx non-AP AMP STA to enter doze state after a minimum wake up time since the start of the AMP Service Period, if the Active Tx non-AP AMP STA does not receive any AMP DL PPDU from the AMP AP.

[Motion #75, [1], [22], [74] and [75]]

* **FM-8**: 802.11bp allows duty-cycle configuration to be carried in an AMP trigger Frame.
  + Details of Duty-cycle configuration (e.g., AMP service period) are TBD.
  + Note: The presence of the duty-cycle configuration is configurable.

[Motion #100, [1], [100], [101], [102] and [103]]

# **Text to be adopted begins here.**

***TGbp editor: Please add the following text to the respective subclauses in 802.11bp draft D0.1:***

## 39.5.1 Duty-cycle operation

AMP duty cycle identifies the duration during which an Active Tx non-AP AMP STA that supports duty cycle needs to be in the awake state, and enter the doze state till a subsequent point in time. Duty cycle configuration parameters are indicated by an AMP AP to enable an Active Tx non-AP AMP STA to monitor an AMP DL frame in a duty-cycled manner. The duty cycle configuration may include the following parameters: parameters related to AMP service period and other TBD parameters.

An Active Tx non-AP AMP STA that enters the awake state at the start of an AMP service period, should stay in the awake state for a minimum wake up time since the start of the AMP service period, after which the Active Tx non-AP AMP STA may enter doze state if it does not receive any AMP DL PPDU from the intended AMP AP. The Active Tx non-AP AMP STA should enter an awake state at the start of the subsequent AMP service period, which is a *TBD* duration from the start of a previous AMP service period.

The duty cycle configuration parameters are optionally indicated in an AMP Trigger frame specified in Clause 9.10.2. Upon receiving the parameters in an AMP Trigger frame, an Active Tx non-AP AMP STA may derive its AMP service period.

# **Text to be adopted ends here.**

**References:**

1. 11-24/1613r12: 11-24-1613-10-00bp-specification-framework-for-tgbp, Yinan Qi (OPPO)