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

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| PDT AMP Uplink PPDU Format |
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**Introduction**

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

The following Motions apply to this PDT [1]:

* **PM-8**: IEEE 802.11bp shall specify, in 2.4 GHz, an AMP uplink PPDU for AMP STA supporting active transmission that contains an AMP-Sync field and AMP-Data field. Inclusion of an AMP-SIG field in the AMP uplink PPDU is TBD.
	+ The bandwidth of the AMP uplink PPDU is less than 20 MHz.

[Motion #11, [1] and [8]]

* **PM-24**:
	+ 11bp shall specify, in 2.4 GHz, an AMP UL PPDU for backscatter non-AP AMP STAs that contains an AMP-Sync field and an AMP-Data field.
	+ Note: This AMP UL PPDU is within one excitation field of an AMP DL PPDU.

[Motion #42, [1], [44], [45] and [46]]

* **PM-45**
	+ 11bp shall specify an AMP-S1G Uplink PPDU supporting uplink transmission for backscattering AMP STA in sub-1 GHz. AMP-S1G Uplink PPDU contains an AMP-Sync field and AMP-Data field.

[Motion #96, [1] and [97]]

***TGbp editor: Please add the following subclause 40.3.2.2 and 40.4.2.2:***

**40.3.2.2 AMP Uplink PPDU formats**

There is one AMP Uplink PPDU format for 2.4GHz band. The AMP Uplink PPDU is transmitted either by an active Tx non-AP AMP STA or a backscatter non-AP AMP STA. For an active Tx non-AP AMP STA, the AMP Uplink PPDU is defined for less than 20MHz bandwidth. For a backscatter non-AP AMP STA, the AMP Uplink PPDU is transmitted within an excitation field of an AMP DL PPDU transmitted to the backscatter non-AP AMP STA. Figure 40-*TBD1* shows the AMP Uplink PPDU format.

**Figure 40-*TBD1* – AMP Uplink PPDUformat**

AMP-Sync

AMP-Data

The fields of the AMP Uplink PPDU formats are summarized in Table 40-*TBD1*.

**Table 40-*TBD1* – Fields of the AMP Uplink PPDUs**

|  |  |
| --- | --- |
| **Field** | **Description** |
| AMP-Sync | AMP Uplink Synchronization field (see 40.3.8.3.1) |
| AMP-Data | AMP Uplink Data field carrying the PSDU (see 40.3.9) |

**40.4.2.2 AMP Uplink PPDU formats**

There is one *NAMETBD1* format for sub-1 GHz band (see 40.3.2.2). The *NAMETBD1* PPDUis transmitted by a backscatter non-AP AMP STA.

**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)