IEEE P802.11  
Wireless LANs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Proposed Draft Text (PDT-PHY): Preamble Puncture | | | | |
| Date: 2020-08-26 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | email |
| Oded Redlich | Huawei |  |  | oded.redlich@huawei.com |
| Shimi Shilo | Huawei |  |  |  |

Abstract

This submission proposed the draft text on the Preamble Puncture sub-clause for TGbe D0.1.

The text is based on motions 30,31 and 90.

34.3.10.10 – Preamble Puncture

34.3.10.10.1 – General

### The idea of preamble puncturing is to allow an EHT STA to transmit a PPDU in a given bandwidth, even when a portion of the bandwidth is not available. The unavailability of any part of the bandwidth may be due to various reasons, for example when an OBSS STA operates on a 20MHz channel which is one of the secondary channels of the BSS STA.

Preamble puncture relates to the punctured 20MHz sub channels within any 80MHz segment in which the preamble is transmitted.

The preamble puncture resolution shall be 20MHz. In other words, puncturing a subchannel smaller than a 242-tone RU is not allowed.

An EHT STA shall indicate the preamble puncturing information, i.e. which 20MHz sub channels are punctured, in the U-SIG or in the EHT-SIG (TBD) fields.

34.3.10.10.2 – Preamble Puncture for PPDUs transmitted to a single user

An EHT-STA shall support a preamble puncture mechanism for an EHT PPDU transmitted to a single STA. The signaling for describing the preamble puncture in a given PPDU shall be included in a sub-field within U-SIG or EHT-SIG (TBD) and is defined in 34.3.10.6.x.x or in 34.3.10.7.x.x

34.3.10.10.3 – Preamble Puncture for PPDUs transmitted to multiple users

An EHT-STA shall support a preamble puncture mechanism for an EHT PPDU transmitted to multiple STAs. The signaling for describing the preamble puncture in a given PPDU shall be included in a sub-field within U-SIG or EHT-SIG (TBD) and is defined in 34.3.10.6.x.x or in 34.3.10.7.x.x