IEEE P802.11  
Wireless LANs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Proposed Draft Text (PDT-PHY)Update : EHT Sounding NDP | | | | |
| Date: 2020-11-18 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | email |
| Sameer Vermani | Qualcomm |  |  | svverman@qti.qualcomm.com |
| Alice Li | Qualcomm |  |  | alicel@qti.qualcomm.com |
| Bin Tian | Qualcomm |  |  | btian@qti.qualcomm.com |
| Youhan Kim | Qualcomm |  |  | youhank@qti.qualcomm.com |

Abstract

This document proposes updates to EHT Sounding NDP draft spec section

* + 1. EHT sounding NDP

The EHT sounding NDP is a variant of the EHT MU PPDU. The format of an EHT sounding NDP is defined in Figure 34-xx (EHT sounding NDP format).



Figure 34-xx: EHT sounding NDP format

NOTE—The number of EHT-LTF symbols in the EHT sounding NDP is indicated in the Number of EHT-LTF symbols field of EHT-SIG.

The EHT sounding NDP has the following properties:

* Uses the EHT MU PPDU with EHT-SIG field contents of the NDP mode, without the data field and a single EHT SIG symbol encoded using MCS0.
* Has a PE field that is given as follows:
* 4 µs when, the PPDU bandwidth is less than or equal to 160MHz and the number of spatial streams is less than or equal to 8,
* 8 µs, for all the other cases.

~~The EHT sounding NDP overlapping the 242-tone RUs corresponding to bits with a value of 1 in the bitmap of the TXVECTOR parameter INACTIVE\_SUBCHANNELS or overlapping a punctured center 26-tone RU of an EHT sounding NDP are punctured. The center 26-tone RU of the HE sounding NDP is punctured if either one of the adjacent 242-tone RUs is punctured.~~

In the EHT sounding NDP, the 242 tone RUs overlapping the 20MHz channels which are signaled as punctured through the punctured channel indication field of the U-SIG, are punctured.

It is mandatory to support the 2x EHT-LTF with 0.8 µs GI and 2x EHT-LTF with 1.6 µs GI. It is optional to support the 4x EHT-LTF with 3.2 µs GI. The other combinations of EHT-LTF type and GI duration are disallowed.

If the Beamformed field in EHT-SIG of an EHT sounding NDP is 1, then the receiver of the EHT sounding NDP should not perform channel smoothing when generating the compressed beamforming feedback report.