IEEE P802.11
Wireless LANs

|  |
| --- |
| Proposed Changes for HELTF sequence  |
| Date: 2016-05-03 |
| Author(s): |
| Name | Affiliation | Address | Phone | Email |
| Yan ZhangRui CaoSudhir SrinivasaHongyuan Zhang | Marvell  | 5488 Marvell Ln, Santa Clara, CA 95054 | 408-222-0975 | yzhang@marvell.com |
| Bin Tian | Qualcomm |  |  |  |
| Ron Porat | Broadcom |  |  |  |
| Jianhan Liu | Mediatek |  |  |  |
| Xiaogang Chen | Intel |  |  |  |

Abstract: This document contains proposed HE-LTF sequence changes for 11ax D1.2

**Proposed change: 28.3.10.10 HELTF**

**Discussion:** In D1.2, for a 160MHz transmission using nx HE-LTF sequence (“n”=1,2 or 4), the sequence  is assigned to lower 80MHz frequency segment, and  is assigned to upper 80MHz frequency segment. However, in an 80+80MHz transmission using nx HE-LTF sequence,  is assigned to primary 80MHz channel, and  is assigned to secondary 80MHz channel. Hence  can be assigned to either lower 80MHz frequency segment or upper 80MHz frequency segment in 80+80MHz transmission, depending on where the primary 80MHz channel is located. To avoid design complications and potential interop issues due to the inconsistant assignments between 160MHz HELTF sequence and 80+80MHz HELTF sequence, HELTF sequence for 80+80MHz should adopt the same HELTF sequence assignment as 160MHz. To eliminate confusions on the indication of primary or secondary naming in and, replace  and  with  and , respectively.

ax editor: please replace  and  with  and  in equations (28-44)-(28-50), respectively, and make the following changes in D1.2 *Clause 28.3.10.10*:

* On P337L1:

In a 160 MHz transmission using 1x HE-LTF, the 1x HE-LTF sequence is given by Equation (28-44).



where  shall be used in the lower 80 MHz frequency segment

 shall be used in the upper 80 MHz frequency segment

* On P337L63:

In a 160 MHz transmission using 2x HE-LTF, the 2x HE-LTF sequence is given by Equation (28-45).

where  shall be used in the lower 80MHz frequency segment

shall be used in the upper 80MHz frequency segment

 On P338L63:

In a 160 MHz transmission using 4x HE-LTF, the 4x HE-LTF sequence is given by Equation (28-48).

 where  shall be used in the lower 80MHz frequency segment

 shall be used in the upper 80MHz frequency segment

* On P339L63:

For an 80+80MHz transmission using 1x HE-LTF, the lower 80MHz frequency segment shall use the 80MHz 1x HE-LTF sequence, ,and the upper 80MHz frequency segment shall use the 80MHz 1x HE-LTF sequence, .

For an 80+80MHz transmission using 2x HE-LTF, the lower 80MHz frequency segment shall use the 80MHz 2x HE-LTF sequence, ,and the upper 80MHz frequency segment shall use the 80MHz 2x HE-LTF sequence, .

For an 80+80MHz transmission using 4x HE-LTF, the lower 80MHz frequency segment shall use the 80MHz 4x HE-LTF sequence, ,and the upper 80MHz frequency segment shall use the 80MHz 4x HE-LTF sequence, .