IEEE P802.11
Wireless LANs

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| Spec Text for HE Operation element and AID Assign Rule  |
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Abstract

This submission contains spec text to be incorporated in P802.11ax D0.3 related to the following motion:

The AP may send a TBD IE that includes a field 'N‘. If the value indicated by the field N is greater than 0, then the AP shall allocate AIDs according to the formula



The TBD IE contains the number of partial BSS color bits used and the partial BSS color bits

[MAC Motion 83, March 2016, see 16/364r3]

Revision History:

* Rev 0: Initial version of the document

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

***TGax Editor: Editing instructions preceded by “TGax Editor” are instructions to the TGax editor to modify or insert material in the TGax draft. As a result of adopting the changes, the TGax editor will execute the instructions rather than copy them to the TGax Draft.***

**TGax Editor: *Instruction: change the paragraph in*** 9.4.2.214***.***

#### **9.4.2.214 HE Operation element**

***Change from the 3rd paragraph as follows (from line 54 of D.0.2):***

The format of the HE Operation Parameters field is defined in Figure 9-ax6 (HE Operation Parame­ters (#1350) field format).



Figure 9-ax6—HE Operation Parameters (#1350) field format

The BSS Color field is an unsigned integer whose value is the BSS color (#1165) of the BSS corresponding to the AP which transmitted this element, except that a value of 0 in this field indicates that there is no BSS color(#1165) for this BSS.

The Partial BSS Color Length field is an unsigned integer whose value is the number of partial bits of BSS Color of the BSS corresponding to the AP which transmitted this element. The Partial BSS Color Length field indicates the partiall BSS color bits that is used in AID assignment. A value of *N* indicates that *N* least significant bits of BSS color (i.e., *0* to *N-1* bits), are used for AID assignment.

**TGax Editor: *Instruction: add the following to section 11.x.***

#### 11.x HE BSS Operation

#### 11.x.y AID Assign Rule

An AP may set the Partial BSS Color Length field to a nonzero value in HE Operation elements it transmits. If the value of Partial BSS Color Length field N in the HE Operation Element is greater than zero, then the HE AP shall allocate AIDs according to the formula for AID[8-N+1: 8]

$$AID\left(8-N+1:8\right)=bin\left[\left(BCB\left(0:N-1\right)+\left(BSSID(47-N+1:47)⊕BSSID(43-N+1:43)\right)\right)mod 2^{N}, N\right]$$

where $BCB(0:N-1)$ stands for the least significan *N* bits of the BSS color bits and $bin[x, N]$ is the operatoe that casts decimal value *x* into *N* bits binary vector.