

Project	<b>IEEE 802.16 Broadband Wireless Access Working Group</b> < <a href="http://ieee802.org/16">http://ieee802.org/16</a> >	
Title	<b>AAS enhancements for OFDMA PHY</b>	
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Re:	IEEE P802.16-REVe/D3	
Abstract	This contribution introduces AAS enhancements for the OFDMA PHY to better support the scalable FFT sizes	
Purpose	Adopt into P802.16e/D4 draft	
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## 1 Introduction

The definition of the AAS Diversity Map Zone in the optional Diversity-Map Scan Method (section 8.4.4.6 in IEEE802.16-REVd/D5) has two fixed subchannels assigned. These two fixed subchannels are a significant fraction of the available subchannels when considering the 128-FFT mode of the OFDMA PHY.

In this contribution, we describe a modification to the AAS Diversity Map Zone reducing the number of subchannels assigned to it to only one subchannel.

## 2 Proposed Text Changes

Add the following text changes, including bracketed instructions to Section 8.4.4.6 in IEEE P802.16e/D3.

[Modify the text in Section 8.4.4.6.1 “AAS Frame Structure” in IEEE P802.16-REVd/D5 as follows.]

In the AMC permutation, the 4<sup>th</sup> and (N-4)th subchannels of the total N subchannels of the DL frame may be dedicated at the discretion of the BS for the AAS Diversity-Map Zone when  $N_{\text{FFT}}$  is greater than or equal to 512. For  $N_{\text{FFT}} = 128$ , only the highest subchannel will be dedicated to the AAS Diversity Map Zone.

[Modify the figure captions to Figures 223 and 224 in Section 8.4.4.6.1 “AAS Frame Structure” in IEEE P802.16-REVd/D5 as follows.]

Figure 223—Example of allocation for AAS-DLFP when  $N_{\text{FFT}}$  is greater than or equal to 512

Figure 224: AAS Diversity Map Frame Structure when  $N_{\text{FFT}}$  is greater than or equal to 512