

Project	IEEE 802.16 Broadband Wireless Access Working Group < http://ieee802.org/16 >	
Title	AAS enhancements to support mobility in OFDMA PHY	
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Re:	IEEE P802.16e/D2-2004	
Abstract	This contribution introduces AAS enhancements for OFDMA PHY.	
Purpose	Adopt into P802.16e/D3 draft.	
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1 Introduction

The AAS Optional Diversity-Map Scan method as introduced in C802.16d-04/73r4 and C802.16d-04/90 may operate adaptively, updating the beamforming weight used for each SS in response to changing channel conditions as experienced in a mobile environment. In such a case, the BS will ignore any SS initiated indications to use a new “beam”, as sent in the AAS Beam Select Message. To avoid the overhead of BW allocations to support these messages, it is proposed that a TLV be added to the UCD channel encodings for OFDMA to indicate whether this message should or should not be sent by the SS.

2 Instructions to Editor

Modify the text in section 6.3.2.3.41 as indicated in blue below:

6.3.2.3.41 AAS Beam Select message

The AAS Beam Select message may be used by a system supporting AAS. This message may be sent by the SS in an unsolicited manner, to inform the BS about the preferred beam direction for the AAS SS sending this message. The AAS Beam Select message shall be sent on the basic CID. The parameter “Allow AAS Beam Select Messages” in the UCD channel encoding TLV messages can be configured to indicate that these messages should not be sent by any SS. The default value of “Allow AAS Beam Select Messages” is 1.

Insert the following text indicated in blue as the last row in Table 306 – UCD PHY-specific channel encodings – WirelessMAN-OFDMA.

Name	Type	Length	Value
Allow AAS Beam Select Messages	xxx	1	Boolean to indicate whether unsolicited AAS Beam Select messages (see 6.3.2.3.41) should be sent by the SS. The default value is 1, with possible values of 0-1: 0 – SS should not send AAS Beam Select Messages 1 – SS may send AAS Beam Select Messages