Project	**IEEE 802.16 Broadband Wireless Access Working Group <http://ieee802.org/16>**
Title	**Corrections of Reference Symbol Offset for Rotating Pilots in O-FUSC subchannel**
Date Submitted	**2005-03-12**
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Re:	IEEE P80216-Cor1_D1
Abstract	Corrections of Reference Symbol Offset for Rotating Pilots in O-FUSC subchannel
Purpose	Adopting of proposed method into P802.16 maint
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Corrections of Reference Symbol Offset for Rotating Pilots in O-FUSC subchannel

1. Introduction

In the current standard (IEEE P80216-Cor1_D1), the positions of pilot tones for optional FUSC (O-FUSC) subchannel are rotated with the symbol index which is referred to the first symbol of the frame, i.e. preamble. Then the pattern of pilot tones may vary according to the start symbol offset of each zone for O-FUSC.

However, in the FUSC subchannel structure, symbol number which determines the positions of the rotating pilots is counted from the first symbol of the current zone. In page 93, line 25, the specification reads "where *FUSC_SymbolNumber* counts the FUSC symbols used in the current zone starting from 0."

For the consistency of the pilot positioning in the FUSC and O-FUSC subchannelizations, the reference symbol offset for rotating pilots in O-FUSC subchannel should be changed as in the FUSC subchannel.

2. Suggested Text Changes

(1) Make changes in Table 312 (in page 94, line 4) as follows:

Table 312— OFDMA optional FUSC downlink carrier allocations

Parameters	Value	Comments
Number of DC Subcarriers	**1**	**Index 1024 (counting from 0)**
N_{used}	**~~1728~~ 1729**	**Number of all subcarriers used within a symbol, Including all possible allocated pilots and the DC carrier.**
Guard subcarriers: Left, Right	**~~159,160~~ 160,159**	
Number of Pilot Subcarriers	**192**	
Pilot subcarrier index	**9k+3m+1 for k=0,…,191 and m=[symbol index] mod 3**	**Symbol of index 0 in pilot subcarrier index ~~is~~ should be the first symbol ~~from which the diversity subchannelization is applied~~ of the ~~frame~~ current zone.**
Number of Data Subcarriers	**1536**	