

Project	IEEE 802.16 Broadband Wireless Access Working Group < http://ieee802.org/16 >	
Title	Fixes in MBS_DATA_Time_Diversity_IE	
Date Submitted	2007-05-09	
Source(s)	Lei Wang NextWave Broadband Inc. 12670 High Bluff Dr. San Diego, CA, USA, 92130	Voice: +1 858-480-3278 Fax: +1 858-480-3105 mailto: lwang@nextwave.com
Re:	P802.16-2004/Cor2/D3	
Abstract	This documents propose fixes in MBS_DATA_Time_Diversity_IE.	
Purpose	To be adopted by 802.16 Cor2	
Notice	This document has been prepared to assist IEEE 802.16. It is offered as a basis for discussion and is not binding on the contributing individual(s) or organization(s). The material in this document is subject to change in form and content after further study. The contributor(s) reserve(s) the right to add, amend or withdraw material contained herein.	
Release	The contributor grants a free, irrevocable license to the IEEE to incorporate material contained in this contribution, and any modifications thereof, in the creation of an IEEE Standards publication; to copyright in the IEEE's name any IEEE Standards publication even though it may include portions of this contribution; and at the IEEE's sole discretion to permit others to reproduce in whole or in part the resulting IEEE Standards publication. The contributor also acknowledges and accepts that this contribution may be made public by IEEE 802.16.	
Patent Policy and Procedures	The contributor is familiar with the IEEE 802.16 Patent Policy and Procedures < http://ieee802.org/16/ipr/patents/policy.html >, including the statement "IEEE standards may include the known use of patent(s), including patent applications, provided the IEEE receives assurance from the patent holder or applicant with respect to patents essential for compliance with both mandatory and optional portions of the standard." Early disclosure to the Working Group of patent information that might be relevant to the standard is essential to reduce the possibility for delays in the development process and increase the likelihood that the draft publication will be approved for publication. Please notify the Chair < mailto:chair@wirelessman.org > as early as possible, in written or electronic form, if patented	

technology (or technology under patent application) might be incorporated into a draft standard being developed within the IEEE 802.16 Working Group. The Chair will disclose this notification via the IEEE 802.16 web site <<http://ieee802.org/16/ipr/patents/notices>>.

Fixes in MBS_DATA_Time_Diversity_IE()

Problem statement

The parameter "OFDMA symbol offset" is not needed for each MBS_DATA_Time_Diversity_IE, since each MBS_DATA_Time_Diversity_IE specifies one HARQ-code MBS burst, not the region with all the HARQ-coded MBS bursts. It is actually misleading when having the parameter "OFDMA symbol offset" in each MBS_DATA_Time_Diversity_IE. The parameter "OFDMA symbol offset" shall be placed in front of the MBS_DATA_Time_Diversity_IEs that are allocated in the same frame.

Suggested Remedy

Replace Table 109u on page 103 line 6 by the following table:

Syntax	Size	Notes
MBS_DATA_Time_Diversity_IE() {	—	—
MBS_MAP Type = 1	2 bits	—
MBS Burst Frame Offset	2 bits	This indicates the burst located by this IE will be shown after MBS Burst Frame offset + 2 frames
—Multicast CID—	12 bits	12 LSBs of CID for multicast.
OFDMA symbol offset	8bits	This indicates starting position of the region of MBS Bursts with respect to start of the next (MBS Burst Frame offset + 2)-th frame.
<u># of MBS_DATA_Time_Diversity_IEs with the same MBS Burst Frame Offset</u>	<u>4 bits</u>	<u>n = # of MBS_DATA_Time_Diversity_IEs with the same MBS Burst Frame Offset</u>
<u>For(i=0; i<n; i++){</u>		
<u> Multicast CID</u>	<u>12 bits</u>	<u>12 LSBs of CID for multicast.</u>
N_EP code	4 bits	—
N_SCH code	4 bits	—
AI_SN	1 bit	—
SPID	2 bits	—
ACID	4 bits	—
Next MBS MAP change indication	1 bit	This indicates whether the size of MBS MAP message of next MBS frame for these multicast CIDs included this IE will be different from the

		size of this MBS MAP message.
Next MBS frame offset	8 bits	—
Next MBS OFDMA Symbol offset	8 bits	—
If (Next MBS MAP change indication = 1) {	—	—
Next MBS No. OFDMA symbols	2 bits 6 bits	It is to indicate the size of MBS_MAP message in Next MBS portion where the BS shall transmit the next MBS frame for multicast CIDs in this IE.
Next MBS No. OFDMA subchannels	6 bits	It is to indicate the size of MBS_MAP message in Next MBS portion where the BS shall transmit the next MBS frame for multicast CIDs in this IE.
}	—	—
}	—	—
}	—	—
}	—	—

on page 103, line 49, insert the following:

Change the definition for the OFDMA Symbol offset as indicated:

OFDMA symbol offset

This indicates starting position of the region for HARQ-coded MBS Bursts allocated with the same MBS Burst Frame offset. The region begins from the first subchannel of the OFDM symbol and in this region, MBS bursts, indicated by MBS DATA Time Diversity IE at the same MBS MAP message, are allocated in a frequency-first one-dimensional way in the order of MBS DATA Time Diversity IE at a MBS MAP message.

insert the definition for the # of MBS_DATA_Time_Diversity_IEs with the same MBS Burst Frame Offset as indicated:

of MBS_DATA_Time_Diversity_IEs with the same MBS Burst Frame Offset

This indicates the number of MBS_DATA_Time_Diversity_IEs with same MBS Burst Frame Offset that are specified this the MBS MAP message.