

Project	<b>IEEE 802.16 Broadband Wireless Access Working Group</b> < <a href="http://ieee802.org/16">http://ieee802.org/16</a> >	
Title	<b>[Byte Alignment of Anchor_BS_switch_IE]</b>	
Date Submitted	<b>[2005-03-09]</b>	
Source(s)	Jung Je Son, Jonghyun Won, Panyuh Joo Samsung Electronics Suwon shi, Korea, Republic of	Voice: [+82-31-279-5098] Fax: [+82-31-279-5130] <a href="mailto:jungje.son@samsung.com">[mailto: jungje.son@samsung.com]</a>
Re:	This is a response to Sponsor Ballot recirculation	
Abstract	This contribution includes the proposed change of Anchor_BS_Switch_IE for byte alignment.	
Purpose	This contribution is for discussion and adaptation at 802.16e Task Group	
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 < <a href="http://ieee802.org/16/ipr/patents/policy.html">http://ieee802.org/16/ipr/patents/policy.html</a> >, 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 < <a href="mailto:chair@wirelessman.org">mailto:chair@wirelessman.org</a> > 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 < <a href="http://ieee802.org/16/ipr/patents/notices">http://ieee802.org/16/ipr/patents/notices</a> >.	

## Byte Alignment of Anchor BS Switch IE

*Jung Je Son, Jonghyun Won, Panyuh Joo*  
*Samsung Electronics*

### Introduction

In IEEE802.16e/D6 Draft, Anchor BS Switch IE are not well defined to implement since there are some error in itself and no consideration of byte alignment. And there was an accepted contribution C802.16e-05\_88 to list up Extended DIUC/UIUC and Extended DIUC2/UIUC2 with correction of confliction between several messages. We propose the well-defined Anchor BS Switch IE with editorial error correction according to C802.16e-05\_88 and byte alignment.

### Proposed Change

*Proposed Remedy 1 :*

*[Change Table 302j at page 345 as proposed below]*

**Table 302j—Anchor\_BS\_switch\_IE format**

Syntax	Size	Notes
Anchor_BS_switch_IE() {		
<del>Extended DIUC/UIUC2</del>	4 bits	<del>Anchor_BS_switch_IE() = 0x03</del>
Length	<del>8bits</del> 4 bits	Length of the message in bytes
N_Anchor_BS_switch	4 bits	Number of Anchor BS switching indicated in this IE
For (i = 0; i < N_Anchor_BS_switch; i++) {		
<del>Reduced</del> CID	<del>12</del> 6 bits	<del>LSB 12 bits of</del> Basic CID of a MS whose anchor BS switching is indicated in this IE
Action code	2 bits	00 - The MS shall switch to the Anchor BS specified in the fast Anchor BS selection information in the FAST FEEDBACK Fast-feedback channel, at the default time specified by the switching period defined in the DCD. 01 - The MS shall switch to the Anchor BS specified in this IE and at the action time specified in this IE. 10 - The MS shall cancel all anchor switching procedure, stop switching timer and remain on the current anchor BS; 11 -reserved
If (Action code == 01) {		

<b>Action time (A)</b>	3 bits	In units of frames .000 In units of frames. 000 means the MS shall switch at the default time specified by the switching period defined in the DCD
<b>TEMP_BS_ID</b>	3 bits	TEMP_BS_ID of the anchor BS to switch to. (TEMP_BS_ID is the assigned ID to the BS when it was added to the active set of a MS)
<b>reserved</b>	<u>2 bits</u>	
}		
If ( Action code == 00    Action code == 01 ) {		
<b>CQICH Allocation Indicator</b>	<u>2</u> bit	To indicate if CQICH allocation at the new Anchor BS is included in this IE.

Syntax	Size	Notes
If (CQICH_Allocation_Indicator == 1) {		
<b>CQICH_ID</b>	Variable	Index to uniquely identify the CQICH resource assigned to the MS after the MS switched to the new anchor BS
<b>Feedback channel offset</b>	6 bits	Index to the Fast-feedback channel region of the new Anchor BS marked by UIUC=0
<b>Period (=p)</b>	2 bits	A CQI feedback is transmitted on the CQICH every $2^p$ frames.
<b>Frame offset</b>	3 bits	The MS starts reporting at the frame of which the number has the same 3 LSB as the specified frame offset. If the current frame is specified, the MS should start reporting in 8 frames
<b>Duration (=d)</b>	3 bits	A CQI feedback is transmitted on the CQI channels indexed by the CQICH_ID for $10 \times 2^d$ frames. If $d == 0$ , the CQI-CH is de-allocated. If $d == 111$ , the MS should report until the BS command for the MS to stop.

<b>MIMO_permutation_feedback_cycle</b>	2 bits	00 = No MIMO and permutation mode feedback 01 = the MIMO and permutation mode indication shall be transmitted on the CQICH indexed by the CQICH_ID every 4 frames. The first indication is sent on the 8th CQICH frame. 10 = the MIMO mode and permutation mode indication shall be transmitted on the CQICH indexed by the CQICH_ID every 8 frames. The first indication is sent on the 8th CQICH frame. 11 = the MIMO mode and permutation mode indication shall be transmitted on the CQICH indexed by the CQICH_ID every 16 frames. The first indication is sent on the 16th CQICH frame.
<u>Reserved</u>	<u>variable</u>	<u>Number of bits required to align to byte length from CQICH Allocation Indicator bit field, shall be set to zero.</u>
}		
<u>}elseif</u>		
<u>Reserved</u>	<u>2bits</u>	
<u>}</u>		
}		
}		