

Project	<b>IEEE 802.16 Broadband Wireless Access Working Group</b> < <a href="http://ieee802.org/16">http://ieee802.org/16</a> >	
Title	<b>New SS capability - Receive buffer limit</b>	
Date Submitted	<b>2004-07-07</b>	
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Re:	The contribution contains material for comment submitted to 802.16 WG ballot on IEEE 802.16e/D3	
Abstract	The documents suggests changes in 802.16e/D3 to support SSs with limited resources	
Purpose	The contribution contains material for comment submitted to 802.16 WG ballot on IEEE 802.16e/D3	
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# New SS capability - Receive buffer limit

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## 1. Motive for receive buffer limitation

A new format option is suggested for DL-MAP IE, which allows for encoding range of CIDs instead of individual CIDs. Such format may be used to mark DL burst with MAC PDUs addressed to multiple MSSs. Then MSSs with Basic CIDs out of the specified range will be informed that there is no relevant data and therefore they may decide to skip processing of the burst thus preserving their resources.

## 2. Improvement in DL-MAP format

[Change in 8.4.5.3, Table 273—OFDMA DL-MAP IE format]

Syntax	Size	Notes
DL-MAP_IE() {		
DIUC	4 bits	
if (DIUC == 15) {		
Extended DIUC dependent IE	variable	See clauses following 8.4.5.3.1
} else {		
if (INC_CID == 1) {		The DL-MAP starts with INC_CID = 0. INC_CID is switched between 0, 1 and 2 by the CID-SWITCH_IE() (8.4.5.3.7)
N_CID	8 bits	Number of CIDs assigned for this IE
for (n=0; n< N_CID; n++) {		
CID	16 bits	
} else {		
if (INC_CID == 2) {		
N_CID	8 bits	Number of CID pairs
for (n=0; n< N_CID; n++) {		
CID_min	16 bits	Minimum Basic CID / multicast CID value of those to which the data is addressed
CID_max	16 bits	Maximum Basic CID / multicast CID value of those to which the data is addressed
}		
}		
OFDMA Symbol offset	8 bits	
Subchannel offset	6 bits	

Boosting	3 bits	000: normal (not boosted); 001: +6dB; 010: -6dB; 011: +9dB; 100: +3dB; 101: -3dB; 110: -9dB; 111: -12dB;
No. OFDMA Symbols	7 bits	
No. Subchannels	6 bits	
Repetition Coding Indication	2 bits	0b00 - No repetition coding 0b01 - Repetition coding of 2 used 0b10 - Repetition coding of 4 used 0b11 - Repetition coding of 6 used
}		
}		

***[Change in 8.4.5.3.7]***

In the DL-MAP, a BS may transmit DIUC=15 with the CID-Switch\_IE() to switch between different modes of inclusion of the CID parameter in DL-MAP allocations. The DL-MAP shall begin in the mode where CIDs are not included (INC\_CID = 0). Each next appearance of the CID-Switch\_IE() increments INC\_CID value modulo 3.