Project	**IEEE 802.16 Broadband Wireless Access Working Group <http://ieee802.org/16>**
Title	**Error Correction in MAP**
Date Submitted	**2005-03-09**
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Re:	IEEE P802.16e/D6
Abstract	.
Purpose	Adoption of proposed changes into P802.16e /D6
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Error Correction in MAP

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1 Motivation

Correction of Sub-MAP and H-ARQ related problems

2 Usage of CID Switch IE in Sub-MAP

2.1 Problem

The CID inclusion mode at the start of sub-MAP is not clear.

2.2 Remedy & Text Change

Reset CID inclusion mode at the start of every MAP.
   [Add section 8.4.5.3.7 CID Switch IE]

   [Change 8.4.5.3.7 as indicated:]

   The DL-MAP and Sub-DL-UL-MAP shall begin in the mode where CIDs are not included.

3 H-ARQ ACK Region clarification

3.1 Problem

H-ARQ ACK Region shall be allocated by the specific extended IE which mandatory terminal can't decode. This makes a problem when allocates data bursts in UL sub-frame.

3.2 Remedy & Text Change

To fix this problem, BS may allocate large Fast Feedback region in DL-MAP message and override a part of the Fast Feedback region as a H-ARQ ACK region.

[Add sentence at the end of the section **8.4.5.4.26 HARQ ACK Region Allocation IE***]*
HARQ ACK Region Allocation IE may override Fast feedback Region. This means that when the HARQ ACK Region Allocation IE indicates the same region which is allocated for CQICH, then the region shall be used for HARQ ACK region.

4 UL start position Indication in Sub-DL-UL MAP

4.1 Problem

We need symbol offset and sub-channel offset to indicates the UL allocation start position in a *Sub-DL-UL-MAP* message as we did in the *UL allocation start IE* because we may allocates the first burst in second or third zone in a UL sub-frame. However, in current spec, UL start position is indicated by the *UL starting slot offset* field in a *Sub-DL-UL-MAP* message.

4.2 Text Change

[Change table in section **6.3.2.3.61 Sub downlink/uplink map (SUB-DL-UL-MAP) message**
]

Table 108z—SUB-DL-UL-MAP message format

Syntax	Size	Notes
SUB-DL-UL-MAP () {		
..		
..		
DL IE Count	8 bits	
For (i=1; i <= DL IE Count; i++)		
DL-MAP_IE()	Variable	
}		
OFDMA Symbol offset	8 bits	This value indicates start Symbol offset of subsequent sub-bursts in this UL Allocation start IE
Subchannel offset	7 bits	This value indicates start Subchannel offset of subsequent sub-bursts in this UL Allocation start IE
~~UL starting slot offset~~	~~11 bits~~	
Reserved	1~~2~~ bits	Shall be set to 0
while (map data remains){		
UL-MAP_IE()	Variable	
}		
If !(byte boundary) {		
Padding Nibble	Variable	Padding to reach byte boundary.
}		
}		