Project	**IEEE 802.16 Broadband Wireless Access Working Group <http://ieee802.org/16>**
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Re:	Response to Sponsor Ballot on IEEE802.16e/D6 document
Abstract	This contribution describes the missing WirelessMAN-OFDMA system MAC and PHY profiles.
Purpose	To incorporate the text changes proposed in this contribution into the 802.16e/D6 draft.
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Extension 0f Supporting Per Sub-Burst DIUC Encoding In CC IR H-ARQ

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1. Problem Statement

The flexibility of DIUC encoding on a sub-burst basis in CC IR H-ARQ is missing in IEEE Standard 802.16e/D6-2005. The same problem is addressed in another contribution C80216e-05_131.

2. Proposed solutions

This contribution provides text changes to add the flexibility to the CC IR H-ARQ to allow per sub-burst DIUC encoding.

3. Specific text changes

=== Start text changes ====

[Modify the following text changes in **Table 285p** in section **8.4.5.22**]

Table 285p—DL HARQ IR CC sub-burst IE format

Syntax	Size	Notes
DL HARQ IR ~~CTC~~ CC sub-burst IE {		
Sub-Burst DIUC Indicator	1 bit	Indicates that each sub burst will be assigned a unique DIUC.
If(Sub-Burst DIUC Indicator == 0){		
DIUC	4 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
}		
N sub burst	5 bits	
For (j=0; j< N sub burst; j++){		
RCID_IE()	Variable	
Duration	10 bits	

If(Sub-Burst DIUC Indicator == 1){		
DIUC	4 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
}		
ACID	4 bits	
AI_SN	1 bit	
SPID	2 bits	
CQICH Control Indicator	1 bits	
If(CQICH Control Indicator == 1){		
Allocation Index	6 bits	Index to the channel in a frame the CQI report should be transmitted by the SS
Period (p)	3 bits	A CQI feedback is transmitted on the CQI channels indexed by the (CQI Channel Index) by the SS in every 2^p frames.
Frame offset	3 bits	The MSS 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 MSS should start reporting in 8 frames.
Duration (d)	4 bits	A CQI feedback is transmitted on the CQI channels indexed by the (CQI Channel Index) by the SS for $2^{(d-1)}$ frames. If d is 0b0000, the CQICH is de-allocated. If d is 0b1111, the MSS should report until the BS command for the MSS to stop
}		
Dedicated DL Control Indicator	1 bit	
If (Dedicated DL Control Indicator ==1) {		
Dedicated DL Control IE ()	Variable	
}		
}		
}		

=== End text changes ====

4. References

[1] IEEE Standard 802.16e/D6-2005
[2] IEEE Standard 802.16-2004
[3] C80216e-05_131