

Project	<b>IEEE 802.16 Broadband Wireless Access Working Group</b> < <a href="http://ieee802.org/16">http://ieee802.org/16</a> >	
Title	<b>MIMO IR H-ARQ Sub-burst IE clarification</b>	
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Re:	Response to Sponsor Ballot on IEEE802.16e/D9 document	
Abstract	Fix problems in MIMO IR H-ARQ Sub-burst IE	
Purpose	To incorporate the text changes proposed in this contribution into the 802.16e/D10 draft.	
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# MIMO IR H-ARQ Sub-burst IE Clarification

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## 1. Problem Statement

For MIMO H-ARQ, each layer could be allocated to a different MS for the same data burst Hence, the allocation for each layer should include H-ARQ information such as SPID/ACID. In Table 286q and Table 302n, MIMO IR H-ARQ Sub-burst IE format, the H-ARQ related information should be moved inside of the for-loop for each layer.

## 2. Proposed Solutions

## 3. Specific Text Changes

[Modify the following section, Page 304:]

### 8.4.5.3.21 HARQ DL MAP IE

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Table 286q—MIMO DL IR H-ARQ Sub-Burst IE format

Syntax	Size	Notes
MIMO DL IR H-ARQ Sub-Burst IE {	—	—
N sub burst	5	Number of sub-bursts in the 2D region
For (j=0; j< N sub burst; j++){		
MU Indicator 1	1	Indicates whether this DL burst is intended for multiple SS
.....	.....	.....
N <sub>SCH</sub>	4	
<del>If (ACK Disable ==0) {</del>		
<del>SPID</del>	<del>2</del>	
<del>ACID</del>	<del>4</del>	
<del>AI_SN</del>	<del>1</del>	
<del>}</del>		
For (i=0; i<N_layer; i++) {		
if (MU indicator == 1) {		
RCID IE()	variable	
}		
NEP	4	
<del>If (ACK Disable ==0) {</del>		
<del>SPID</del>	<del>2</del>	
<del>ACID</del>	<del>4</del>	
<del>AI SN</del>	<del>1</del>	
<del>}</del>		
}		

}		
}	—	—

[Modify the following section, Page 369:]

8.4.5.4.23 HARQ UL MAP IE

.....

Table 302n—MIMO UL IR HARQ sub-burst IE format

Syntax	Size	Notes
MIMO UL IR H-ARQ Sub-Burst IE {	—	—
MU Indicator 1	1	Indicates whether this DL burst is intended for multiple SS
.....	.....	.....
N <sub>SCH</sub>	4	
<del>If (ACK Disable == 0) {</del>		
<del>SPID</del>	<del>2</del>	
<del>ACID</del>	<del>4</del>	
<del>AI_SN</del>	<del>4</del>	
<del>}</del>		
For (i=0;i<N_layer;i++) {		
if (MU indicator == 1) {		
RCID IE()	variable	
}		
NEP	4	
<u>If (ACK Disable == 0) {</u>		
<u>SPID</u>	<u>2</u>	
<u>ACID</u>	<u>4</u>	
<u>AI_SN</u>	<u>1</u>	
<u>}</u>		
}		
}		

4. References

- [1] IEEE 802.16- 2004 IEEE Standards for local and metropolitan area networks part 16: Air interface for fixed broadband wireless access systems
- [2] IEEE P802.16e-D9-2005