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1. Introduction

Fast feedback allocation was designed for 2D allocation as in H-ARQ MAP. For the consistency, it is necessary to make it 2-dimensional allocation. Further, the subcarrier mapping for the current Fast feedback channel is not clear.

2. Suggested text change

[Change the text as follows in 8.4.5.4 pp59, line 26]

8.4.5.4 UL-MAP IE format

Table 285—OFDMA UL-MAP IE format

Syntax	Size	Notes
UL-MAP_IE() {		
CID	16 bits	
UIUC	4 bits	
if (UIUC == 0) {		
FEEDBACK_Allocation_IE()	32 bits	
}		
if (UIUC == 12) {		
OFDMA Symbol offset	8 bits	
Subchannel offset	7 bits	
No. OFDMA Symbols	7 bits	
No. Subchannels	7 bits	
Ranging Method	2 bits	0b00 - Initial Ranging over two symbols 0b01 - Initial Ranging over four symbols 0b10 - BW Request/Periodic Ranging over one symbol 0b11 - BW Request/Periodic Ranging over three symbols
reserved	1 bit	Shall be set to zero
} else if (UIUC == 13) {		
PAPR_Reduction_and_Safety_Zone_Allocation_IE	32 bits	
} else if (UIUC == 14) {		
CDMA_Allocation_IE()	32 bits	
else if (UIUC == 15) {		
Extended UIUC dependent IE	*variable*	See clauses following 8.4.5.4.3
} else {		
Duration	10 bits	In OFDMA slots (see 8.4.3.1)
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
if (AAS UL Zone){		AAS Allocations include absolute slot offset.
Slot offset	12 bits	Offset from start of the AAS zone for this allocation, specified in slots.
}		
}		
}		

[Change the text as follows in 8.4.5.4.9, page 65, line 35]

8.4.5.4.9 FAST-FEEDBACK message mapping

Table XXX defines the FEEDBACK_Allocation_IE that allocates 2D region of FAST-FEEDBACK channel. This IE is identified by UIUC=0.

Table XXX - FEEDBACK_Allocation_IE format

Syntax	size	Notes
FEEDBACK_Allocation_IE() {		
OFDMA symbol offset	8 bits	
Subchannel offset	7 bits	
No. OFDMA symbols	7 bits	
No subchannels	7 bits	
Reserved	3 bits	
}		

Each FAST-FEEDBACK message occupies one UL slot. FAST-FEEDBACK messages are mapped in to the region marked by UIUC=0 in the UL-MAP, in a ~~time~~ frequency-first order, as shown in Figure 230.

[Modify the figure 230 as follows in 8.4.5.4.9]

Substitute the number #2 with the number #3 in the dashed thick box. Substitute the number #3 with the number #2 in the dashed thick box.

8.4.5.4.10 FAST_FEEDBACK channels

[Modify the text as follows in 8.4.5.4.10, page 65 line37 (pp 540 for IEEE802.16-2004)]

The fast-feedback code words used in table 263 belong to a set of orthogonal vectors and are mapped directly to the data subcarriers of a tile in time first manner~~(see 8.4.9.4.2), where subcarriers(0) is the lowest numbered data subcarrier in the tile~~, and the tile indices are defined in eq (109) for PUSC and eq (111) for optional PUSC ~~by the permutation (see 8.4.6.2)~~. The vectors are defined in Table 295.