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Title	**UL 2D allocation**
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Re:	IEEE P802.16-2004/Cor1-D3
Abstract	It clarifies the 2D allocation in UL subframe.
Purpose	Adoption of suggested changes into IEEE P802.16-2004/Cor1-D4
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Introduction

It provides proposed text for 2D UL allocation clarification.

Motivations

1. Normal SS that does not support HARQ shall be allowed not to decode HARQ MAP for the 2D allocation made by HARQ MAP.
   A. If SS has to, H-ARQ MAP is not more optional.

Remedy

1. 2D region made by H-ARQ MAP shall be the part of FAST-FEEDBACK region.
   A. We can achieve this goal to mandate H-ARQ CQICH and ACK to override the Fast FeedBack region allocated by normal MAP.

Suggested Text changes

Option-1

6.3.2.3.43.7.5Compact UL-MAP IE for H-ARQ Region allocation

[Modify the following paragraph as follows on page32 line 12]

H-ARQ ACK Region ~~may~~ shall ~~override~~reside in Fast feedback Region. This means that when the Compact UL-MAP IE for H-ARQ ACK Region indicates ~~the same~~ a region within the region which is allocated for ~~CQICH~~ FAST FEEDBACK, then the region shall be used for H-ARQ ACK region.

6.3.2.3.43.7.6Compact UL-MAP IE for CQICH Region allocation

[Insert the following paragraph at the beginning of the section on page 32 line 32]

H-ARQ CQICH region shall reside in Fast feedback Region. This means that when the Compact UL-MAP IE for CQICH Region indicates a region within the region which is allocated for Fast feedback channel, then the region shall be used for H-ARQ CQICH region.

8.4.5.4 UL-MAP IE format

[Change the first paragraph of Section 8.4.5.4 as follows:]

The OFDMA UL-MAP IE defines uplink bandwidth allocations. Uplink bandwidth allocations are specified either as block allocations (subchannel by symbol) with an absolute offset, or as an allocation with duration in slots with either a relative or absolute slot offset. Block allocations are used for fast feedback (UIUC=0), CDMA ranging and BW request allocations (UIUC=12) as well as PAPR/Safety zone allocations (UIUC=13). Slot allocations are used for all other UL bandwidth allocations. For UL allocations in non-AAS zones, the starting position for the allocation is determined considering the prior allocations appearing in the UL-MAP. For UL allocations in an AAS UL Zone, the starting position is included in the UL IE indicating an absolute slot offset from the beginning of the AAS zone. If an OFDMA UL-MAP IE with UIUC = 0 or UIUC = 12 or UIUC = 13 exists, they shall always be allocated first.

Option-2

6.3.2.3.43.7.5Compact UL-MAP IE for H-ARQ Region allocation

[Modify the following paragraph as follows on page32 line 12]

H-ARQ ACK Region ~~may~~ shall ~~override~~reside in Fast feedback Region. This means that when the Compact UL-MAP IE for H-ARQ ACK Region indicates ~~the same~~ a region within the region which is allocated for ~~CQICH~~ FAST FEEDBACK, then the region shall be used for H-ARQ ACK region.

6.3.2.3.43.7.6Compact UL-MAP IE for CQICH Region allocation

[Insert the following paragraph at the beginning of the section on page 32 line 32]

H-ARQ CQICH region shall reside in Fast feedback Region. This means that when the Compact UL-MAP IE for CQICH Region indicates a region within the region which is allocated for Fast feedback channel, then the region shall be used for H-ARQ CQICH region.

8.4.5.4 UL-MAP IE format

[Change the first paragraph of Section 8.4.5.4 as follows:]

The OFDMA UL-MAP IE defines uplink bandwidth allocations. Uplink bandwidth allocations are specified either as block allocations (subchannel by symbol) with an absolute offset, or as an allocation with duration in slots with either a relative or absolute slot offset. Block allocations are used for fast feedback (UIUC=0, see also 6.3.2.3.43.7.5 and 6.3.2.3.43.7.6), CDMA ranging and BW request allocations (UIUC=12) as well as PAPR/Safety zone allocations (UIUC=13). Slot allocations are used for all other UL bandwidth allocations. For UL allocations in non-AAS zones, the starting position for the allocation is determined considering the prior allocations appearing in the UL-MAP. For UL allocations in an AAS UL Zone, the starting position is included in the UL IE indicating an absolute slot offset from the beginning of the AAS zone. If an OFDMA UL-MAP IE with UIUC = 0 or UIUC = 12 or UIUC = 13 exists, they shall always be allocated first.