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Re:	IEEE P802_Cor1_D2
Abstract	This contribution introduces clarifications for making allocations in an AAS zone in the OFDMA PHY
Purpose	Adopt into P802.16d/D5 corrigenda
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Clarifications for AAS Zone Allocations

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1 Issues with the AAS Zone

1) The preamble modifier type should be included in the AAS IE()'s.
2) The PRBS_ID was added to the STC_DL_ZONE_IE. It should be added to the AAS_DL_IE() for consistency.
3) AAS Zone Length was missing from AAS_UL_IE which is required for use with private maps.

2 Outline of proposed solution

1) Add preamble modifier type to AAS_UL_IE() and AAS_DL_IE()
2) Add PRBS_ID field to AAS_DL_IE()
3) Add zone length field to AAS_UL_IE()

3 Proposed Text Changes

[Modify table 278 "AAS_DL_IE()" as follows:]

Syntax	Size	Notes
AAS_DL_IE() {		
Extended DIUC	4 bits	AAS = 0x02
Length	4 bits	Length = 0x03
OFDMA Symbol Offset	8 bits	Denotes the start of the zone (counting from the frame preamble and starting from 0)
Permutation	3 ~~2~~ bits	0b000 = PUSC permutation 0b001 = FUSC permutation 0b010 = Optional FUSC permutation 0b011 = adjacent-subcarrier permutation 0b1xx = reserved
DL_PermBase	6 bits	
Downlink_preamble_config	2 bits	0b00 - 0 symbols 0b01 - 1 symbols 0b10 - 2 symbols 0b11 - 3 symbols
Preamble type	1 bit	0 – Frequency shifted preamble is used in this DL AAS zone 1 – Time shifted preamble is used in this DL AAS zone
PRBS_ID	2 bits	Refer to 8.4.9.4.1
Reserved	~~6~~ 2 bits	Shall be set to zero
}		

[Modify the first paragraph of 8.4.4.4 as follows:]

After decoding the DL_Frame_Prefix message within the FCH, the SS has the knowledge of how many and which subchannels are allocated to the PUSC segment. In order to observe the allocation of the subchannels in the downlink as a contiguous allocation block, the subchannels shall be renumbered. The renumbering, for the first PUSC zone, shall start from the FCH subchannels (renumbered to values 0…11), then continue numbering the subchannels in a cyclic manner to the last allocated subchannel and from the first allocated subchannel to the FCH subchannels. Figure 221 gives an example of such renumbering for segment 1. For other PUSC zones, in which use all SC indicator is set to '1', renumbering shall be performed starting from subchannel (*Nsubchannels*/3)*PRBS_ID, where PRBS ID is specified in the STC_DL_Zone_IE or AAS_DL_IE(). For other PUSC zones, in which use all SC indicator is set to '0', the renumbering shall be the same as in the first
PUSC zone.

[Modify the text on Page 144, line 30 as follows:]

b5..b4 = Set to the segment number + 1 as indicated by the frame preamble in the first downlink zone and the 2 LSBs of PRBS_ID as indicated by the STC_DL_Zone_IE() or AAS_DL_IE() in ~~the~~ other downlink zones. Set to the t~~T~~wo MSBs of UL_PermBase in the uplink.

[Replace table 293 "AAS_UL_IE()" with the following:]

Syntax	Size	Notes
AAS_UL_IE() {		
Extended UIUC	4 bits	AAS = 0x02
Length	4 bits	Length = ~~0x03~~ 0x04
Permutation	2 bits	0b00 = PUSC permutation 0b01 = Optional PUSC permutation 0b10 = adjacent-subcarrier permutation 0b11 = reserved
UL_PermBase	7 bits	
OFDMA Symbol Offset	8 bits	Denotes the start of the zone (counting from the frame preamble and starting from 0)
AAS zone length	8 bits	Number of OFDMA symbols in AAS zone
Uplink_preamble_config	2 bits	0b00 - 0 symbols 0b01 - 1 symbols 0b10 - 2 symbols 0b11 - 3 symbols
Preamble type	1 bit	0 – Frequency shifted preamble is used in this UL AAS zone 1 – Time shifted preamble is used in this UL AAS zone
Reserved	~~5~~ 4 bits	Shall be set to zero
}		