Project	IEEE 802.16 Broadband Wireless Access Working Group <a href="http://ieee802.org/16">http://ieee802.org/16</a> >		
Title	Clarifications for AAS Zone		
Date Submitted	2005-5-3		
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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.

## 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 Proposed Text Changes

[Modify table 278 "AAS DL IE()" as follows:]

Permutation	3 <b>2</b> bits	$0b_{000} = PUSC$ permutation
		$0b_{00}^{00}1 = FUSC$ permutation
		$0b_0^{\circ}10 = Optional FUSC permutation$
		$0b_0^011 = adjacent-subcarrier permutation$
		0b1xx = reserved
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
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Reserved	62 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 tT-wo MSBs of UL\_PermBase in the uplink.

#### [Modify table 293 "AAS\_UL\_IE()" as follows:]

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