Project	IEEE 802.16 Broadband Wireless Access Working Group <a href="http://ieee802.org/16">http://ieee802.org/16</a> >		
Title	Corrections for PRBS Operation in AAS Zone with Diversity Map Support		
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Re:	IEEE P802.16-2004/Co1/D3		
Abstract	Corrections for PRBS Operation in AAS Zone with Diversity Map Support		
Purpose	Adoption of suggested changes into IEEE P802.16-2004/Co1/D4		
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### Introduction

In the current text, SS should blind scan for AAS-DLFPs in Diversity Map zone with all possible locations and permutation type. This task becomes more complex if we add ambiguity from PRBS sequences. Consequently, for the proper operation of AAS Diversity Map, the definition of initialization vector of PRBS sequences and symbol offset for PRBS generation should be clarified. In this contribution, we propose the text for this purpose.

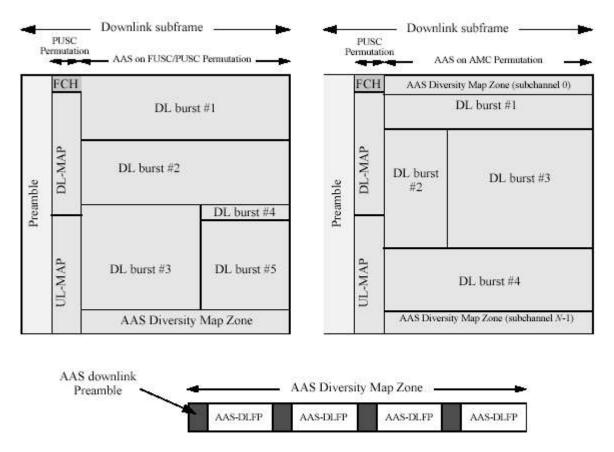


Figure 223—Example of allocation for IE AAS-DLFP

#### **Motivations**

The initialization vector of PRBS sequences and symbol offset for PRBS in AAS zone with Diversity Map should be determined by frame-starting DL preamble because AAS Diversity Map is intended for SS which do not see the DL-Map (although synchronized with frame-starting DL preamble).

# **Propose solution**

- 1. Indicate the presence of Diversity Map in AAS\_DL\_IE.
- 2. The initialization vector of the PRBS in 8.4.9.4.1 is fixed as the same way as in the first downlink zone in the downlink AAS zone with Diversity Map support.
- 3. The PRBS symbol offset in the downlink AAS zone with Diversity Map support is counted from the first symbol of the first downlink zone.

# **Detailed Text Changes**

# [Modify at line 51 p. 106 in AAS\_DL\_IE]

reserved	2 bits	Shall be set to zero
Diversity Map	<u>1 bit</u>	0: Not Supported in this AAS zone
		1: Supported in this AAS zone
reserved	<u>1 bit</u>	Shall be set to zero
}		

## [Insert the text at line 58 and 63 p.166]

b0 .. b4 = Five least significant bits of IDell as indicated by the frame preamble in the first downlink zone and in the downlink AAS zone with Diversity Map support, DL Permbase following STC\_DL\_Zone\_IE() and 5 LSB of DL Permbase following AAS DL IE without Diversity Map support in the downlink.

b5 .. b6 = Set to the sequent number + 1 as indicated by the frame preamble in the first downlink zone <u>and in the downlink AAS zone with Diversity Map support</u> and the 2 LSBs of PRBS\_ID as indicated by the STC\_DL\_Zone\_IE() or AAS\_DL\_IE() <u>without Diversity Map support</u> in other downlink zones, 0b 11 in the uplink.

## [Insert the text at line 15 p.167]

.. where symbol offset is counted from the first symbol in each zone as zero in the downlink <a href="mailto:except downlink">except downlink</a> <a href="mailto:except downlink">AAS zone with Diversity\_Map support where the symbol offset is counted from the first symbol of the first downlink zone as zero and from Allocation start time in the uplink.