Project	**IEEE 802.16 Broadband Wireless Access Working Group** <http://ieee802.org/16>	
Title	**Compressed R-Zone prefix for FFT size 128**	
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Re:	IEEE 802.16j-07/019: "Call for Technical Comments Regarding IEEE Project 802.16j"	
Abstract	The current baseline It is better to have compressed format for FFT-128, because FFT-128 has smaller capacity than other FFT sizes. So introduce a compressed R-Zone prefix format.	
Purpose	To incorporate the proposed text into the P802.16j Baseline Document (IEEE 802.16j-06/026r4)	
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Compressed R-Zone prefix for FFT size 128

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Nortel

I. Introduction

The current baseline It is better to have compressed format for FFT-128, because FFT-128 has smaller capacity than other FFT sizes. So introduce a compressed R-Zone prefix format separately for the FFT size 128 considering the number of symbols in a frame and other considerations.

II. Text Proposal

----------Start of the Text----------

[*Do the following text modification into the Section* 8.4.4.7.4 *P802.16j baseline document page 149 Line 8 onwards*]

8.4.4.7.4 R-Zone prefix

The R-Zone_Prefix is a data structure transmitted on R-FCH of a DL relay zone. The R-Zone_Prefix includes information regarding the location of the first relay zone in the next frame and the information required for decoding R-MAP. Table ~~xxx~~377a defines the format of the R-Zone_Prefix for FFT sizes 512 and 1024. Considering the .small number of symbols in a frame for the FFT size 128, a compressed R-zone prefix shall be used. Table YYY defines the format of the R-Zone_Prefix for FFT size 128.

Table 377a—R-Zone_Prefix format for FFT Sizes 512 and 1024

[*Insert the following table and the field description after Table 377a at Line 53, page 149, Section* 8.4.4.7.4 *P802.16j baseline document*]

Table YYY—R-Zone_Prefix format for FFT Size 128

Syntax Size(bits) Notes	Syntax Size(bits) Notes	Syntax Size(bits) Notes
R-Zone_Prefix_format() {	-	-
R-Zone_Location	3	The field indicates the OFDM symbol index referenced to the beginning of next frame in unit of 1 OFDM symbol
Used_subchannel_bitmap	**3**	Bit #0: Subchannel group 0 Bit #1: Subchannel group 1 Bit #2: Subchannel group 2
R-MAP_Length	**3**	Length in unit of slot
FEC Code type and modulation type	**5**	0b0000 = QPSK (CTC) 1/2 0b0001 = QPSK (CTC) 3/4 0b0010 = 16-QAM (CTC) 1/2 0b0011 = 16-QAM (CTC) 3/4 0b0100 = 64-QAM (CTC) 1/2 0b0101 = 64-QAM (CTC) 2/3 0b0111 = 64-QAM (CTC) 3/4

		0b1000 = 64-QAM (CTC) 5/6 0b1001-0b1111 reserved
Repetition_Coding_Indication	**1**	0: No repetition coding on R-MAP 1: Repetition coding of 2 used on R-MAP
}		

R-Zone_Location
An indicator regarding the location of the first relay zone in the next frame. The first OFDM symbol in each frame is indexed as 0. The R-Zone location indicates the OFDM symbol index relative to the first OFDM symbol in next frame. The unit is 1 OFDM symbol.
R-MAP_Length
The length in slots of the R-MAP message that immediately follows the R-Zone_Prefix.
FEC Code type and modulation type
An indicator indicating the modulation and code rate used for R-MAP message.

----------End of the Text----------