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Abstract	The document contains technical proposals for IEEE P802.16j that would provide an ARQ scheme by using multiple cooperative relays	
Purpose	The document is submitted for review by 802.16 Working Group members	
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R-FCH Information to indicate R-MAP

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Introduction

For delay free R-MAP indication, R-FCH indicating the location of an R-MAP may locate at the same frame where the R-MAP exists.

Proposal

R-FCH has RS-Zone prefix, which is a data structure to indicate the location RS Zone in the next frame. However, in this case, MR-BS has one frame delay to transmit data through RS Zone because RS-Zone prefix indicates the location of the RS-Zone in the next frame. In order to relay data immediately, RS-Zone prefix needs to indicate the location of the RS-Zone in the same frame where the R-FCH having the RS-Zone prefix does exist.

Text Proposal

[Change the text at the section 8.4.4.7.4 as follows]

8.4.4.7.4 RS-Zone prefix

The RS-Zone prefix is a data structure transmitted on R-FCH of a DL RS_Zone. The RS-Zone prefix includes information regarding the location of RS_Zone in **either the same frame or** the next frame, information required for decoding R-MAP and etc. Table XXX defines the format of RS_Zone prefix.

Syntax	Size (bits)	Notes
RS_Zone_Prefix_format {		0-255
Frame_Index	1	If the value of this field is

		'0', RS Zone indicated by RS_Zone_location does exist in current frame. Otherwise, '1' represents RS Zone exists in the next frame.
RS_Zone_location	8	The field indicates the FDM symbol index reference to the beginning of next the frame indexed by Frame_Index field in unit of 2 OFDM symbols.
R_MAP length	5	
MCS index used for R-MAP	5	
Reserved	65	
}		

Frame_Index

RS Zone may locate in either current frame or the next frame. Frame_Index indicates the frame, where RS Zone indicated by RS_Zone_location exists.

RS_Zone_location

An indicator regarding the location of RS_Zone in either the current frame or the next frame. The first OFDM symbol in each frame is indexed as 0. The RS_Zone_location indicates the OFDM symbol index relative to the first OFDM symbol in ~~next~~ the frame indexed by Frame_Index field. The unit is 2 OFDM symbols.

R-MAP length

The length in sub-channels of R-MAP message that immediately follows the RS_Zone prefix.

MCS index used for R-MAP

An indicator indicating the modulation and code rate used for R-MAP message.