Re: This is a response to Call for Technical Proposals regarding IEEE Project P802.16j

Abstract This proposal provides a new information field for FCH to indicate R-MAP.

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 reflect new configuration about RS Zone because RS-Zone prefix contains the location of the RS-Zone in the next frame. For immediate configuration, RS-Zone prefix needs to indicate the same frame, where the R-FCH having the RS-Zone prefix does exist, for the location of the RS-Zone.
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.

<table>
<thead>
<tr>
<th>Syntax</th>
<th>Size (bits)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>RS_Zone_Prefix_format {}</td>
<td></td>
<td>0-255</td>
</tr>
<tr>
<td>Frame_Index</td>
<td>1</td>
<td>If the value of this field is ‘0’, RS Zone indicated by RS_Zone_location does not exist in current frame. Otherwise, ‘1’ represents RS Zone exists in the next frame.</td>
</tr>
<tr>
<td>RS_Zone_location</td>
<td>8</td>
<td>The field indicates the FDM symbol index reference to the beginning of the frame indexed by Frame_Index field in unit of 2 OFDM symbols.</td>
</tr>
<tr>
<td>R_MAP length</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>MCS index used for R-MAP</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Reserved</td>
<td>65</td>
<td></td>
</tr>
</tbody>
</table>

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.