Project	**IEEE 802.16 Broadband Wireless Access Working Group** <http://ieee802.org/16>
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Re:	IEEE802.16-07/059"IEEE 802.16 Working Group Letter Ballot #28a: Announcement"
Abstract	This contribution proposes a signaling method for the resource request of access zone.
Purpose	Discuss and adopt proposed text by TG16j
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Signaling to assign the dedicate resource in the UL access zone

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1. Introduction

This contribution proposes a signaling method of assigning the resource in the uplink access zone in response to the resource request of uplink access zone from RS, i.e., 'RS UL access region request header' in subclause 6.3.2.1.2.2.2.6 [1]. However, signaling to assign the resource in response to 'RS UL access region request header' has not been defined yet. To complete the aforementioned 'RS UL access region request header', the signaling method of assigning the resource in the UL access zone is proposed in this contribution.

2. Proposed solution

To complete the aforementioned operation, i.e., 'RS UL access region request header', signaling method of resource allocation, i.e., RS UL access region IE, is proposed.

3. Proposed text change

[Insert new subclause 8.4.5.9.1.3:]

8.4.5.10.1.10 RS UL access region IE

In distributed scheduling mode, the MR-BS shall broadcast an RS UL access region IE to RSs in its MR-cell upon receiving an RS UL access region request header (see 6.3.2.1.2.2.2.6). The RS UL access region IE dedicates a region of the UL access zone for a specific RS (or RSs). Only RSs whose basic CID appears in the RS UL access region IE are allowed to create allocations for their subordinate SSs in the region specified by the IE. MR-BS and other RSs shall not assign any resource to its subordinate MSs on such a dedicated access region for an RS.

Table xxx – RS_UL-access region IE format

Name	Length	Description
RS_UL-access region IE {		
Type	5bits	RS_UL- access region IE=0x09
Length	4bits	Length in bytes
N_CID	8bits	Number of CIDs for this IE
For(i=0;i<N_CID;i++){		
CID	16bits	RS basic CID
}		
Indicator	1bit	1: indicates allocation of resource 0: indicates release of resource Notes: allocation/release is effective in the next frame
OFDMA symbol offset	8bits	
No. OFDMA symbols	7bits	
}		

Indicator: An RS_UL-access region IE with indicator field=1 allocates a region of an UL access zone to the RS(s) whose basic CID appears in the RS_UL-access region IE. An RS_UL-access region IE with indicator field=0 releases the allocated region of an UL access zone from the RS(s) whose basic CID appears in the RS_UL-access region IE. In this case, the MR-BS and its subordinate RSs may allocate the released resource to their SSs autonomously. An RS_UL-access region IE with indicator field=0, OFDMA symbol offset = 0, and No. OFDMA symbols = 0 informs an RS that its UL access region request has been denied.

[Change line 24 of page 209 as follows:]

09~~-1F~~	~~Reserved~~ RS_UL-access region IE
10-1F	Reserved

[Modify the first paragraph in subclause 6.3.2.1.2.2.2.6 as follows:]

An RS operating in distributed scheduling mode~~A distributed scheduling mode RS~~ may request a dedicated ~~size for its~~ region of the access uplink zone~~from the superordinate RS/MR-BS~~ for its subordinate SSs by sending ~~the~~ an RS UL access region Request Header to the MR-BS. The header specifies the ~~requested~~ size of the ~~RS~~ requested region ~~of the uplink access zone~~ in terms of OFDMA slots. In response to this header, the MR-BS may dedicate a region of the uplink access zone to the RS(s) by specifying this region in the RS UL access region IE (Section 8.4.5.10.1.10). The header format is illustrated in Figure 35g and Table 19g.

[Insert new subclause 6.3.6.7.1.2.3 as follows:]

6.3.6.7.1.2.3 Dedicated UL access region request and allocation

A non-transparent RS operating in distributed scheduling mode may request a dedicated access uplink region for its access uplink traffic by sending an RS UL access region request header to its MR-BS (see 6.3.2.1.2.2.2.6). Upon assigning a dedicated uplink access region, the MR-BS shall notify the RS(s) by inserting an RS UL access region IE in an R-MAP (see 8.4.5.10.1.10). The MR-BS may allocate to the RS(s) a dedicated access uplink region without receiving a request from the RS(s).

Reference:

[1] IEEE P802.16j/D2 December 2007