Project	IEEE 802.16 Broadband Wireless Access Working Group http://ieee802.org/16 >	
Title	Comments on connections for RS	
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Re:	IEEE 802.16-08/007: "IEEE 802.16 Working Group Letter Ballot Recirc #28b: Announcement"	
Abstract	This contribution proposes modification on connections for RS	
Purpose	Text proposal for 802.16j Draft Document.	
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Comments on connection for RS

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Introduction

At RS initialization, an RS must perform the same steps as a SS. Therefore, two pairs of management connections (UL and DL) shall be established between the RS and the BS. Hence, it should be described in subclause 6.3.1.1 "Point-to-multipoint (PMP)".

In order to facilitate the incorporation of this proposal into IEEE 802.16j standard, specific changes to the draft standard P802.16j/D3 are listed below.

Spec changes

[Modified the following text in line 23 of page 6 (see P802.16REV2/D3)]

Connections are identified by a 16-bit CID. At SS/<u>RS</u> initialization, two pairs of management connections (UL and DL) shall be established between the SS/<u>RS</u> and the BS, and a third pair of management connections may be optionally generated <u>only for SS</u>. The<u>se three pairs of</u> management connections reflect the fact that there are inherently three different levels of QoS for management traffic between an SS/<u>RS</u> and the BS. The basic connection is used by the BS MAC and SS/<u>RS</u> MAC to exchange short, time-urgent MAC management messages. The primary management connection is used by the BS MAC and SS/<u>RS</u> MAC to exchange longer, more delay-tolerant MAC management messages. Table 36 specifies which MAC management messages are transferred on which of these two connections. In addition, it also specifies which MAC management messages are transfer delay-tolerant, standards-based [Dynamic Host Configuration Protocol (DHCP), Trivial File Transfer Protocol (TFTP), SNMP, etc.] messages. Messages carried on the secondary management connection may be packed and/or fragmented. For the OFDM, and OFDMA PHYs, management messages shall have CRC. Use of the secondary management connection is required only for management messages to a group of RSs.

The CIDs for these connections shall be assigned in the RNG-RSP and REG-RSP (SS only) or RS_Config-CMD (RS only) messages. The message dialogs provide three CID values. The same CID value is assigned to both members (UL and DL) of each connection pair.

[Insert the following text at the end of section 6.3.1.1]

In an MR system, management of an RS is performed over the RS basic connection or RS primary management connection, which is equivalent to the basic connection or the primary connection respectively, but applies only to an RS.

6.3.1.3 Multihop relay

Connections may span multiple hops and may pass through one or more intermediate RSs. These connections shall be identified by the connection ID (CID) as specified in Section 6.3.1.1 and the CIDs shall be unique within an MR cell. All the CID connection types specified in PMP mode shall be supported between the MR-BS and MS. Basic and primary management connections shall be established between the MR BS and all RSs within the MR cell for exchanging management messages.