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Re:	IEEE 802.16j-07/013: "Call for Technical Comments Regarding IEEE Project 802.16j"
Abstract	This contribution proposes procedures for Unsolicited RNG-RSP in Transparent RS system
Purpose	Text proposal for 802.16j Baseline Document
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Comment on Unsolicited RNG-RSP in Transparent RS Systems

Introduction

In a transparent RS system, the bandwidth request ranging code sent by MS may be received by the MR-BS and multiple RSs near the MS (see figure 1). In order to decide the most appropriate path to communicate with the code originating from MS, each RS must report the ranging code attribute, channel measurement, and adjustment information if present to MR-BS, as long as the BR ranging code can be decoded successfully.

In section 6.3.10.3.4.3 of the baseline document, only those RSs that receive a bandwidth request CDMA ranging code resulting in continue status will report to MR-BS. Since MR-BS does not have complete information, MR-BS can not make an appropriate decision for unsolicited RNG-RSP.

In order to facilitate the incorporation of this proposal into IEEE 802.16j standard, specific changes to the baseline working document IEEE 802.16j-06/026r3 are listed below.

Text Proposal

6.3.10.3.4.3 Unsolicited RNG-RSP in transparent RS systems

[Change the text in subclause 6.3.10.3.4.3 as indicated:]

After RS received a bandwidth request CDMA ranging code ~~resulting in continue status~~, it should transmit an RNG-REQ message with the RS basic CID containing the CDMA BR ranging code to the serving MR-BS through the relay path with adjustment information of frequency, power, and timing corrections. When RS receives multiple codes in the ranging subchannel of a frame, the RNG-REQ message sent by the RS to serving MR-BS may contain information of multiple received codes.

When the MR-BS receives a bandwidth request CDMA ranging code ~~resulting in continue status~~, it shall wait for RNG-REQ with the same ranging code attribute from its subordinate RSs for T48 timer. Once T48 timer expired, the MR-BS compares measured signal information at each station to decide the most appropriate path to communicate with the code originating MS, according to channel measurement information. When it needs to do adjustment for the code, the MR-BS shall broadcast an <u>unsolicited</u> RNG-RSP with associated code attribute.