	IEEE 802.16 Broadband Wireless Access Working Group http://ieee802.org/16
Title	Relaying RNG-REQ/RSP for MS Network Entry
Date Submitted	2007-03-05
	Sungjin Lee, Hyunjeong Kang, Hyoung Kyu Lim, Jungje Son Samsung Electronics Voice: +82 31 279 5248 Fax: +82 31 279 5130 E-mail: steve.lee@samsung.com
Source(s)	Masato Okuda Voice: +81-44-754-2811 Fujitsu Laboratories LTD. Fax: +81-44-754-2786 Kamikodanaka 4-1-1, Nakahara-ku Kawasaki, Japan. 211-8588
Re:	Call for technical proposals regarding IEEE project P802.16j
Abstract	This contribution proposes text to clarify RS operation of Ranging Process for distributed controlled RS. This contribution proposes the scheme with which RS supports MS scanning operation.
Purpose	Discussion and Adoption in IEEE 802.16j
Notice	This document has been prepared to assist IEEE 802.16. It is offered as a basis for discussion and is not binding on the contributing individual(s) or organization(s). The material in this document is subject to change in form and content after further study. The contributor(s) reserve(s) the right to add, amend or withdraw material contained herein.
Release	The contributor grants a free, irrevocable license to the IEEE to incorporate material contained in this contribution, and any modifications thereof, in the creation of an IEEE Standards publication; to copyright in the IEEE's name any IEEE Standards publication even though it may include portions of this contribution; and at the IEEE's sole discretion to permit others to reproduce in whole or in part the resulting IEEE Standards publication. The contributor also acknowledges and accepts that this contribution may be made public by IEEE 802.16.
Patent Policy and Procedures	The contributor is familiar with the IEEE 802.16 Patent Policy and Procedures http://ieee802.org/16/ipr/patents/policy.html , including the statement "IEEE standards may include the known use of patent(s), including patent applications, provided the IEEE receives assurance from the patent holder or applicant with respect to patents essential for compliance with both mandatory and optional portions of the standard." Early disclosure to the Working Group of patent information that might be relevant to the standard is essential to reduce the possibility for delays in the development process and increase the likelihood that the draft publication will be approved for publication. Please notify the Chair <mailto:chair@wirelessman.org> as early as possible, in written or electronic form, if patented technology (or technology under patent application) might be incorporated into a draft standard being developed within the IEEE 802.16 Working Group. The Chair will disclose this notification via the IEEE 802.16 web site ">http://ieee802.org/16/ipr/pat</mailto:chair@wirelessman.org>

Relaying RNG-REQ/RSP for MS Network Entry

Sungjin Lee, Hyunjeong Kang, Hyoung Kyu Lim and Jungje Son Samsung Electronics

Masato Okuda

Fujitsu Laboratories LTD.

Introduction

In IEEE 802.16j Baseline document 06/026r2, the initial ranging process in Non-transparent RS with Distributed scheduling as defined at section 6.3.9.16.2.2 as described in the figure <XXX>03.

However, when a RS relays RNG-REQ and RNG-RSP between MS and MR-BS, some field in the message is appropriate to be responded by the RS. For example, the Downlink Operational Burst Profile for a MS in RNG-RSP should be responded by the RS since the RS is the actual node which is physically communicating with the MS.

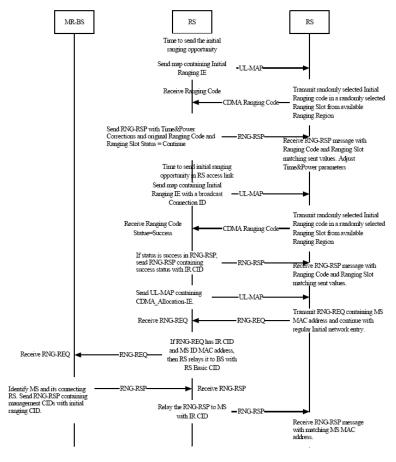


Figure <XXX>03—Ranging and automatic adjustments procedure in MR mode

Proposed Text Change

[Modify the followings section at section 6.3.9.16.2.2 on page 25]

"Receiving the RNG-REQ containing the MS MAC Address, the RS <u>may decide which TLV is managed by itself in the RNG-RSP.</u>

If there is any field to be managed by the RS such as Downlink Operational Burst Profile, the RS omit the TLV from the RNG-REQ and recompose the RNG-REQ message. The RS transmit the RNG-REQ message relays it with the RS basic CID instead of IR CID in the header to MR-BS.

Once the MR-BS receives the RNG-REQ containing MS MAC Address with the RS basic CID, the MR-BS shall assign Basic and Primary management CIDs to the MS, and transmit a RNG-RSP containing those management CIDs and MS MAC Address with the RS basic CID.

The RS receiving the RNG-RSP containing the management CIDs and MS MAC Address <u>may add the TLV field which is managed by RS and shall transmit</u>relay it to the MS with the initial ranging CID..."