Title: MRS Scanning

Date Submitted: 2007-04-06

Source(s): Adrian Boariu, Peter Wang, Shashikant Maheshwari, Yousuf Saifullah, 6000 Connection Drive, Irving, TX
adrian.boariu@nsn.com

Re:

Abstract: This contribution describes the possibility of aligning the scanning cycles of the MSs attached to an RS.

Purpose: Review and adopt.

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/patents/notices>. 


MRS Scanning
Adrian Boariu, Peter Wang, Shashikant Maheshwari, Yousuf Saifullah
Nokia Siemens Networks

1. INTRODUCTION
In a network deployment some RSs may be configured not to transmit the R-amble. Such situation may occur, for example, when some RSs have no RSs attached to them. A MRS in this situation has no possibility to discover some of its neighbors, and may interfere with them. In order to avoid this situation, the MR-BS can align the sleep patterns of the MSs, associated with the MRS, using MR_SLP-INFO message [1], therefore allowing the possibility of RS to scan the neighborhood.

References:


2. CHANGES TO THE SPECIFICATION

[Insert new subclause 6.3.22.4.x]

6.3.22.4.x RS Scanning of Neighbor ISs

An MR-BS may allocate sleep intervals to the MSs, associated with an MRS, for the purpose of MS sleep mode. The MR-BS informs the MRS about the sleep intervals, using MR_SLP-INFO message. The MR-BS shall align sleep intervals such that all the associated MSs of the RS go to unavailability interval at the same time. This allows RS to perform scanning of the neighbor ISs. This procedure is used when the ISs in a MR network do not send R-amble.