Project	IEEE 802.16 Broadband Wireless Access Working Group < <u>http://ieee802.org/16</u> > Supporting MBS (Multicast and Broadcast Service) in the 802.16 Convergence Sublayer 2005-03-09		
Title			
Date Submitted			
Source(s)	Jeff Mandin Streetwaves Networking Amatzia 5 Jerusalem, Israel	Voice: 972-50-5724-587 Fax: 972-50-5724-587 mailto:jeff@streetwaves-networks.com	
	Yigal Leiba		
	Runcom	yigall@runcom.co.il	
Re:	Recirc		
Abstract	Modify the 802.16 reference model so that all 802.16 services are supported		
Purpose	Acceptance into TGe Draft document		
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 <a href="http://ieee802.org/16/ipr/patents/policy.html">http://ieee802.org/16/ipr/patents/policy.html</a> , 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: 16="" ieee802.org="" ipr="" notices="" patents="">.</http:></mailto:chair@wirelessman.org>		

### Supporting MBS (Multicast and Broadcast Service) in the 802.16 Convergence Sublayer Jeff Mandin Streetwaves Networking

### **1** Problem Statement

The Multicast and Broadcast Service is a mechanism for distribution of data content across multiple BSes from a centralized server in a manner which takes advantage of OFDMA macrodiversity.

The 802.16e Reference Model must be accordingly updated to support a centralized data transmitter that performs data scheduling for simultaneous, identical, macrodiverse transmissions over multiple Base Stations.

# 2 Summary of Solution

# 2.1 Reference Model

We modify the reference model so that an application may supply PDUs directly to the security sublayer (thus avoiding the fragmentation and scheduling layers which would break the macrodiversity requirement).

## 3 Specific text changes

#### [Page 3, Line 14 modify:]

Provider networks may employ specialized servers for AAA (Authorization, Authentication and Accounting), management, provisioning, <u>macrodiverse data transmission</u>, and other functions. These servers responsible are collectively termed Authentication and Service Authorization Servers (ASA-servers) in this specification.

#### [Modify left hand part of figure 1c (ie. "data plane") as follows: ]

