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<th>Project</th>
<th>IEEE 802.16 Broadband Wireless Access Working Group <a href="http://ieee802.org/16">http://ieee802.org/16</a></th>
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<td>Title</td>
<td>Supporting MBS (Multicast and Broadcast Service) in the 802.16 Convergence Sublayer</td>
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<td>Date Submitted</td>
<td>2005-03-09</td>
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| Abstract | Modify the 802.16 reference model so that all 802.16 services are supported |
| Purpose | Acceptance into TGε Draft document |
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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, macrodiverse data transmission, 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: ]
Service Specific Convergence Sublayer (CS)

MAC Common Part Sublayer (MAC CPS)

Physical Layer (PHY)