Project	**IEEE 802.16 Broadband Wireless Access Working Group <http://ieee802.org/16>**
Title	**Changes To Sec. 6.2 and 8.3.4.1 Proposed by MAC-PHY Ad Hoc Group**
Date Submitted	**2001-09-13**
Source(s)	Members of MAC-PHY Ad Hoc Editor: Jerry Krinock Voice: 408-830-9726 ext. 239 Radia Communications Fax:408-245-0990 275 N. Mathilda, Suite A mailto:jkrinock@radiacommunications.com Sunnyvale, CA 94086 USA
Re:	802.16.ab-01/01r1 Call for Comments dated 2001-07-30, specifically the call for MAC-PHY Interface Comments.
Abstract	Proposed Changes to Sec. 6.2 and 8.3.4.1
Purpose	Consider the changes proposed herein for next revision of 802.16.ab-01/01.
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 (Version 1.0) <http://ieee802.org/16/ipr/patents/policy.html>, including the statement "IEEE standards may include the known use of patent(s), including patent applications, if there is technical justification in the opinion of the standards-developing committee and provided the IEEE receives assurance from the patent holder that it will license applicants under reasonable terms and conditions for the purpose of implementing 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:r.b.marks@ieee.org> as early as possible, in written or electronic form, of any patents (granted or under application) that may cover technology that is under consideration by or has been approved by IEEE 802.16. The Chair will disclose this notification via the IEEE 802.16 web site <http://ieee802.org/16/ipr/patents/notices>.

Changes To Sec. 6.2 and 8.3.4.1 Proposed by MAC-PHY Ad Hoc Group

Editor: Jerry Krinock
Radia Communications, Sunnyvale, CA USA

On page 23, delete lines 22-31 because this says to add section 6.2.2.4.3 and 6.2.2.4.3.1 to IEEE P802.16/D4-2001. But there is no section 6.2.2.4, 6.2.2.4.1 or 6.2.2.4.2 in IEEE P802.16/D4-2001. We cannot add a subsection 3 to a nonexistent section.

On page 23, add the following:

At the beginning of each of the three sections 6 2.2.1 MAC Header Formats, 6.2.2.3.3 DL-MAP Message and 6.2.2.3.4 UL-MAP Message, add the following statement:

This section does not apply to MAC which support Sub-11 GHz PHY. Instead see sec. 8.3.4.

Cut out all of pages 24-32. Remove all empty sections involving OFDM and OFDMA. Paste these sections into the beginning of 8.3.4.2.

At the beginning of each of the two sections 6 2.2.3.1 DCD Message and 6.2.2.3.2 UCD Message and 6.2.2.3.4 UL-MAP Message, add the following statement:

This section does not apply to MAC which support Sub-11 GHz Single-Carrier (SC) PHY. Instead see sec. 8.3.4.2.

In sections 6.2.7.7, 6.2.7.8 and 6.2.7.13, all of the sub-subsections are under the subsection "OFDMA PHY", which is incorrect. These sub-subsections are in fact common to all PHY, and we have at this point no text for any of the PHY-specific subsections. Therefore, these sub-subsections should be moved up one level in the hierarchy, out of the OFDMA subsection, and the empty PHY-specific subsections should be eliminated. Note: Yigal Leiba has suggested part of this in Comment 253.

Specifically, the TOC for 6.2.7.7 should read:

6.2.7.7 License Exempt Dynamic Frequency Selection
6.2.7.7.1 RSSI and CCI measurement of a DL Channel
6.2.7.7.2 Valid Channels

6.2.7.7.3 Assignment of DL Channel ID's to RSSI and CCI MEasurments
6.2.7.7.4 Registration Procedure
6.2.7.7.5 TLV Configurations for SS Transmitted DFS-REQ Messages
6.2.7.7.6 TLV Configurations for BS Tranmitteed DFS_REQ Messages
6.2.7.7.7 TLV Configuration Setttings for BS Transmitted DFS-RSP Messages

and the TOC for 6.2.7.8 should read:

6.2.7.8 License Exempt Interference Mitigation and Co-Existence
6.2.7.8.1 Hierarchical Assumption: First Come/First Claim
6.2.7.8.2 Downlink Radio Frequency Management (DRFM) Messages
6.2.7.8.3 Reception of the HBS-DRFM

and the TOC for 6.2.7.8.13 should read:

6.2.7.13 Sub 11 GHz Suport for Advanced Antenna Technology
6.2.7.13.1 Architectural Overview
6.2.7.13.2 Definitions
6.2.7.13.3 Compatibility model
6.2.7.13.4 MAC Control functions to support Adaptive Arrays
6.2.7.13.5 Private uplink/Downlink Channel Descriptor (P-DUCD) Message
6.2.7.13.6 Private MAP (P-MAP) Message
6.2.7.13.7 MAC Utility Functions to Support Adaptive Arrays

Delete sec. 6.2.7.10. (Note: 6.2.7.10 will be superceded by 8.3.4.4.3.)

Delete sec. 6.2.7.11. (Note: 6.2.7.11 will be superceded by 8.3.4.4.4.)

Change section 8.3.4.1 to read as follows:

8.3.4 MAC Support of PHY Layers

8.3.4.1 Common

8.3.4.1.1 Duplexing Modes A and B

Two modes of operation are defined:

Mode A: continuous transmission format, FDD
Mode B: burst transmission format, FDD or TDD.

Standards-compliant stations are required to support at least one (A or B) of these modes in the downlink, and Mode B in the uplink.

A Mode B compliant frame can be configured to support either TDM or TDMA transmission formats; i.e., a Mode B burst may consist a single user's data, or a concatenation of several users' data.