APPROVED

Project	**IEEE 802.16 Broadband Wireless Access Working Group <http://ieee802.org/16>**
Title	**IEEE 802.16 Task Group a Session #17 Minutes**
Date Submitted	**2002-3-14**
Source(s)	Dean S.K. Chang Voice: 408 719-9977 Aperto Networks Fax: 408 719-9970 1637 S. Main Street mailto:dchang@apertonet.com Milpitas CA 95035 USA
Re:	IEEE 802.16 TGa Session #17 (Levi, Finland January 21-24, 2002)
Abstract	
Purpose	To record meeting minutes. R3 adds a correction to the comment from David Trinkwon.
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>.

Minutes of P802.16 TGa Session #17
A Task Group of IEEE 802.16
Levi, Finland
21-24, January 2002

Motions

All motions made regarding comments during comment resolution are recorded in revision 5, IEEE 802.16-02/01r5, of the commentary database.

Motion 1 Randall Schwartz, to adopt David Trinkwon's proposal (see Appendix A) covering naming and optional modes, 2nd David Trinkwon.
Motion 1 Fails 2-25.

Motion 2 Shawn Taylor to eliminate mode C (Licensed OFDMA) 2nd Carl Eklund.
Motion 2 Fails 17-7.

Motion 3 To have a mesh tutorial to be presented in a joint meeting at session #18
Motion 3 Carries 15-1.

Comment

David Trinkwon queried the status of his comments #34 and #35 which were in the proposed revision 5 database as "Resolved-superceded" but had not been reviewed by the group and had not been superceded by another comment. Brian Kiernan and Nico van Waes agreed to investigate further and if appropriate make a correction in the next issue of the database.

Action Items for Next Meeting

Mesh tutorial to be presented in a joint meeting at session #18

Advanced Antenna Systems Ad Hoc group was formed and will be chaired by Randall Schwartz and/or Phil Kelly. The group was tasked to develop the following to be presented at session #18: 1) An analysis of the "integrated" Advanced Antenna Systems mode (ModeC) vs. the other modes using "non-integrated" AAS. 2) Proposed text for insertion into the draft document.

Created an Ad Hoc regarding Alamouti preambles chaired by Amir Sarajedini. This group is tasked to develop text for insertion into the draft document during session #18.

The meeting was adjourned at 3:08pm.

Appendix A

The following was a proposal was submitted by David Trinkwon covering naming and optional modes.

This Standard specifies a number of (optional) air interfaces to address a range of market and performance requirements. A Base Station (BS), Subscriber Station (SS) or Mesh Node (MN) is compliant with the Standard if it supports any one (or more) of the designated air interfaces. Table aaa designates the air interfaces specified by this Standard, together with the additional qualifiers needed to assure interoperability.

	Air Interface Designation	Qualifiers		
		Frequency *	Duplex	Topology
i	WirelessMAN-SC-1	10-66GHz Licensed	TDD FDD HFDD	PMP
ii	WirelessMAN-SC-2	2-11GHz Licensed	TDD FDD	PMP
iii	WirelessMAN-OFDM-1	2-11GHz Licensed	TDD FDD	PMP
iv	WirelessMAN-OFDMA-1	2-11GHz Licensed	TDD FDD	PMP
v	WirelessMAN-OFDMA-2	2-11GHz Licensed	TDD	PMP
vi	WirelessHUMAN-OFDM-1	2-11GHz License Exempt	TDD	PMP MESH
vii	WirelessHUMAN-OFDMA-1	2-11GHz License Exempt	TDD	PMP MESH

Specific equipment and deployments will need to additionally qualify the frequency band / block / channel and licensing / regulatory factors for compliance, interoperability and coexistence purposes.

Table aaa : IEEE802.16 Standard Air Interfaces

Each of the designated air interfaces incorporates an appropriate combination of MAC and PHY specifications, as summarized in Table bbb below.

	Air Interface Designation	Specifications	
		MAC *	PHY
I	WirelessMAN-SC-1	Basic	SC Type I
ii	WirelessMAN-SC-2	Basic,(ARQ), (STC),(AAS),…	SC Type II
iii	WirelessMAN-OFDM-1	Basic,(ARQ),(STC),(AAS),…	OFDM
iv	WirelessMAN-OFDMA-1	Basic,(ARQ), (STC),(AAS),…	OFDMA Type I
v	WirelessMAN-OFDMA-2	Basic,ARQ, STC, AAS,…	OFDMA Type II
vi	WirelessHUMAN-OFDM-1	Basic,(ARQ),(DFS), (STC), (MSH),(AAS),…	OFDM
vii	WirelessHUMAN-OFDMA-1	Basic,(ARQ),(DFS), (STC), (MSH),(AAS),…	OFDMA Type I

MAC features in parentheses are optional within the designated air interface.

Table bbb : IEEE802.16 Standard Air Interface Specifications