



Project	<b>IEEE 802.16 Broadband Wireless Access Working Group</b> < <a href="http://ieee802.org/16">http://ieee802.org/16</a> >	
Title	<b>IEEE 802.16 Working Group Session #24 Minutes</b>	
Date Submitted	<b>2003-04-01</b>	
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Re:	IEEE 802.16 Session #24 Minutes (Dallas/Fort Worth Airport, Texas, USA)	
Abstract		
Purpose	To record meeting minutes.	
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 < <a href="mailto:chair@wirelessman.org">mailto:chair@wirelessman.org</a> > 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 < <a href="http://ieee802.org/16/ipr/patents/notices">http://ieee802.org/16/ipr/patents/notices</a> >.	

## Minutes of IEEE 802.16 Session #24

*IEEE 802.16 Working Group  
Dallas/Fort Worth Airport, USA  
10-13 March, 2003*

### Opening Plenary

#### Call to Order

Roger Marks called the meeting to order at 1:10pm, 10 March 2003. He presented the Chair's Presentation in 802.16-03/10.

#### 802.16 Officers

Chair: Roger Marks  
Vice Chair: Carl Ekund (elected at Session #23)  
Secretary: Dean Chang

#### Members

Prior to this session, the Working Group had 71 members and 37 potential members.

#### Attendance

Participation credit will be granted for those in attendance at 6 of the 8 intervals for this session.

#### Agenda

<http://ieee802.org/16/meetings/mtg24/opening.html>

Motion 1: Marianna Goldhammer To approve Opening Plenary agenda as presented and modified to include a presentation by Marianna Goldhammer on nomadic support in unlicensed bands, 2<sup>nd</sup> Brian Kiernan.  
Motion 1: carries by unanimous voice vote.

Motion 2: Carl Eklund, To approve Minutes of Session #23 (802.16-03/07) and decisions therein, 2<sup>nd</sup> Bob Nelson  
Motion 2: carries by unanimous voice vote.

#### Chair's Status Report

IEEE 802 Rules (Patents)

The foregoing advice was provided and the two slides were shown, that an opportunity was provided for WG members to identify or disclose patents that the WG member believes may be essential for the use of that standard; any responses that were given, specifically the patents and patent applications that were identified (if any) and by whom.

Slide #1 is titled IEEE-SA Standards Board Bylaws on Patents in Standards  
Slide #2 is titled Inappropriate Topics for IEEE WG Meetings.

No replies were made in response to this announcement.

### **IEEE-SA Actions:**

On, 15 January 2003:

Published, as an IEEE Standard, IEEE 802.16c-2002 ("IEEE Standard for Local and metropolitan area networks — Part 16: Air Interface for Fixed Broadband Wireless Access Systems — Amendment 1: Detailed System Profiles for 10–66 GHz ")

Congratulations to TGc:  
Ken Stanwood, Chair  
Carl Eklund, Editor

29 January 2003:

Approved, as an IEEE Standard, IEEE 802.16a/D7-2003 ("Air Interface for Fixed Broadband Wireless Access Systems - Medium Access Control Modifications and Additional Physical Layer Specifications for 2-11 GHz")

Editing in progress; publication in March 2003

Congratulations to TGa:  
Brian Kiernan, Chair  
Nico van Waes, Editor

### **IEEE-SA News**

The following letter was sent to working group chair regarding claims of conformance to IEEE draft documents.

*Dear Working Group Chair and Sponsor Chair:*

*This letter is to inform you that the IEEE-SA has implemented a process to respond to companies that are claiming conformance to an IEEE draft document.*

*If you become aware that an organization/company is claiming conformance to a draft document of the IEEE, you should send written notification (including company name, address, and a copy of the offending claim, etc.) to:*

*Secretary IEEE Standards Board Standards Department 445 Hoes Lane Piscataway, NJ 08854*

*Upon receipt of the notification, the status of the draft will be verified and a letter will be sent to the organization/company indicating that the document to which they are claiming conformance is an unapproved draft of a proposed IEEE Standard. As such, this document has not yet been fully reviewed for completeness, functionality, or interoperability, and is subject to change at any time prior to approval as an IEEE Standard.*

*We encourage you to forward this information to your working groups.*

*For more information on this, please visit our web: <http://standards.ieee.org/faqs/copyrightFAQ.html>*

*If you have any questions or concerns regarding the above, please contact your staff liaison. If you are not sure who your staff liaison is, please click here: <http://standards.ieee.org/people/liaisons.html>*

*Best regards,*

*Judith Gorman Secretary, IEEE-SA Standards Board*

## **802 Rules Change Status**

- Comments resolved for Friday
  - change to title of Rules document
  - SEC Electronic Ballots
    - new open reflector
- Upcoming rules change ballots
  - appeals process
  - minimum sponsor ballot durations
  - unpaid attendees
  - harmonizing terms "Executive Committee" & "SEC"

## **Proposed 802 PARs for consideration this week**

Working Group	PAR Number	Topic
802.16	1802.16.3	10-66 GHz Radio Conformance Tests
802.11	802.11m	Technical corrections and clarifications
802.11	802.11n	Enhancements for Higher Effective Throughput
802.3	P802.3aj	(revision) Maintenance
802.3	P802.3ak	10GBASE-CX4 (10 Gbit/s on copper)

## **IEEE 802.16/802.20 Names**

Since the names are so similar that it might cause conflicts. The proposal at the Executive Committee meeting was to have both groups consider changes to their name and vote on this Thursday.

Current Names

802.16 Broadband Wireless Access

802.20 Mobile Broadband Wireless Access

## **Task Groups**

### **TG2**

Phil Whitehead, Chair

Nico van Waes and Reza Arefi, Editors

A new Disapprove vote was entered during the second recirculation ballot. The group will review the comments during the week.

**TGC**

Ken Stanwood, Chair  
Carl Eklund, Editor

Motion3: Ken Stanwood, to delegate to TGC and the WG Chair the revision of PAR 1802.16.3, in accordance with comments, and the submittal of such revision to the SEC by 5 pm Wednesday 2<sup>nd</sup> Carl Eklund. Motion carried by unanimous voice vote.

***Nomadic support in Unlicensed Bands***

Marianna Goldhammer discussed adding support for nomadic users in unlicensed bands. The group decided that this would best be discussed in the TGe meetings.

**TGd**

Chair: Gordon Antonello  
Editor: Nico van Waes

Received 14 contributions that will be discussed during the week.

**TGe**

Chair: Brian Kiernan  
Vice Chair: Shawn Taylor

Call for Contributions resulted in 11 contributions. The group will review these during the week.

**Future Sessions**

Session 25 Singapore 12-16 May 2003 {Note: Session subsequently rescheduled to Dallas, Texas, USA.}  
Meeting still being put together. The web page for registration will be active by tonight.

Session 26 San Francisco, CA 21-24 July 2003

**New Business**

Andy Gowans – UK RA presentation to IEEE 802.18.

Update on UK and CEPT positions about 11 GHz.  
UK update BFWA>11 GHz  
5 GHz Band C (5725-5875 MHz)

UK update 802.16 possible interest  
5GHz Bases A&B (5150-5725 MHz)  
2.4 GHz OFDM

**Closing**

Motion 5 Ron Murias, To adjourn the meeting 2<sup>nd</sup> Shawn Taylor.

2003-04-14

IEEE 802.16-03/15

Motion 5 carries by unanimous voice vote.

The meeting was adjourned at 3:35pm

## Closing Plenary

### Opening

Chair Roger Marks called the meeting to order at 7:00pm on 13, Mar 2003.

### Agenda

<http://ieee802.org/16/meetings/mtg24/closing.html>

Motion 6: Bob Nelson, to approve the agenda as presented, 2<sup>nd</sup> Gene Robinson

Motion 6: carries by unanimous voice vote

### Task Group 2

Chair Phil Whitehead

Report (802.16.2a-03/04):

- 5 new comments and 2 coordination inputs from sponsor ballot reviewed and resolutions proposed
- Comment database 802.16-03/03r6 on server
- 2 technical comments not accepted – the balloter may nevertheless accept the resolutions (issue is about terminology and could therefore be regarded as editorial).
- TG2 seeks agreement to forward draft D5 to RevCom – see MOTION
- Draft minutes on server

Motion7: Phil Whitehead, To approve the resolutions contained in the database 802.16-03/03r6 and recommend the forwarding of draft to 802.16.2a/D5 to RevCom, 2<sup>nd</sup> Gene Robinson

Motion7: carries by unanimous voice vote.

### Task Group C

Chair Ken Stanwood

Motion 8: To accept IEEE 802.16-03/08r1 as the resolutions of comments received in the P1802.16.1/D2 Sponsor Ballot and use them as the basis of P1802.16.1/D3. Motion 8 carries by unanimous voice vote.

Motion9: To request of the SEC, under Procedure 10, conditional approval to forward P802.16.1/D3 to RevCom, pending successful recirculation.

Motion 9: carries by unanimous voice vote.

Motion10: To adopt P802.16.2/D1 as the first P802.16.2 draft and initiate a Working Group Letter Ballot on forwarding that draft.

Motion 10: carries by unanimous voice vote.

Motion11: To forward to the SEC the PAR 1802.16.3 (802.16-03/04) on 10-66 GHz Radio Conformance Tests.

Motion 11: carries by unanimous voice vote.

## Task Group d

Chair Gordon Anotello

Report: (802.16d-03/04)

- Total of 16 contributions
  - 12 Errata
  - 2 Errata / System Profiles
  - 1 System Profiles
  - 1 Change
- Result
  - 10 accepted
  - 4 accepted modified
  - 1 rejected
  - 1 deemed outside the scope of TGd PAR

Motion12:Gordon Anotello, To adopt the merger of C802.16d-03/01 with all contributions accepted during Session #24 as draft P802.16d/D1 and initiate a Working Group Letter Ballot on forwarding that draft, 2<sup>nd</sup> Brian Kiernan.

Call the Question: Carl Eklund

Call the Question carries by unanimous voice vote.

Motion 12: carries by unanimous voice vote.

## Task Group e

Chair Brian Kiernan

Report (802.16e-03/06)

- Reviewed 13 Contributions
- Significant work by Handoff Ad-Hoc
- Several contributions revised and draft text proposed. They were reviewed in closing session.
  - 15r1 (Sleep Mode)
  - 16r4 (2K OFDMA)
  - 20r1 (Handoff Ad Hoc)
- Approved a Motion to accept a Working Document & open a Task Group Review of it

## 802 Handoff Call for Interest

About 150 people attended and a number of presentations were made. The group took a straw poll, with a 44-17 majority in favor of a proposal for an 802 Executive committee study group.

David Johnston as volunteered to serve as chair of this study group.

There were no objections to the 802.16 chair moving at the SEC to create a study group or voting in favor of a study group on 802 handoff.



## Liaison

### 802.18

Chair Carl Stevenson

Review of Three 802.18 documents

18-03-014r0\_Letter\_re\_Unlicensed\_Spectrum\_Bills.doc

Motion13: Carl Stevenson, To approve document 18-03-014r0\_Letter\_re\_Unlicensed\_Spectrum\_Bills.doc, authoring the Chair of 802.18 to do necessary editorial and formatting changes, see SEC approve as 802 document, and file the document in a timely fashion with the FCC, 2<sup>nd</sup> Heinz Lycklama.

Motion13: carries by unanimous voice vote

Motion14: Carl Stevenson, To approve document 18-03-021r0\_802\_Opp\_Pet\_RM-10666.doc, authorizing the Chair of 802.18 to do necessary editorial and formatting changes, see SEC approve as 802 document, and file the document in a timely fashion with the FCC, 2<sup>nd</sup> Brian Kiernan.

Motion 14: carries by unanimous voice vote.

Motion 15: Carl Stevenson, To approve document 18-03-024r0\_Cmts\_IB-01-185\_IB-02-364\_Addtl\_2.4GHz\_Spectrum.doc, authorizing the Chair of 802.18 to do necessary editorial and formatting changes, see SEC approve as 802 document, and file the document in a timely fashion with the FCC, 2<sup>nd</sup> Gene Robinson.

Motion 15: carries by unanimous voice vote.

## Future Sessions

Session #25 12-16 May 2003 in Singapore (with 802.11, 802.15, 802.18, 802.19, and 802.20)

{Note: Site subsequently changed to Dallas, Texas, USA.}

Motion16: Brian Kiernan, To authorize the 802.16 Working Group to carry out business at its Plenary Meetings during Session #25, even in the absence of formal quorum, 2<sup>nd</sup> Carl Eklund.

Motion 16: carries by unanimous voice vote.

Session #26 21-24 July 2003 at the Hyatt Regency SF, San Francisco, CA, USA with IEEE 802 Plenary

Session #27 September 2003

Options, including:

-Washington, DC with 802.11 and 802.15

-Denver, inviting other wireless WGs

Motion17: Carl Eklund To have the September working group interim meeting take place in Colorado, not overlapping with the other IEEE 802 wireless group meetings, and to task the WG chair to make the appropriate arrangements, 2<sup>nd</sup> Brian Kiernan

Friendly Amendment: Ken Stanwood – plan to decide on having a meeting in Denver and invite the other wireless groups to the meeting

Motion17: as modified: To have the September 2003 working group interim meeting take place in Colorado and invite the other IEEE 802 wireless groups to this meeting and to task the WG chair to make the appropriate arrangements.

Motion 17: carries by unanimous voice vote.

## Publicity

The chair was authorized with no objections, to make changes to the [Session #24 Report](#).

## **New Business**

### ***IEEE ISTO regarding BWIF***

Motion18: Ken Stanwood To forward the letter as modified (L802.16-03/03r1) to ISTO regarding BWIF 2<sup>nd</sup> Bob Nelson.

Motion18: carries by unanimous voice vote.

### ***Enhancements to Mesh***

Jim Dickerman would like the chair to start an ad hoc committee to make some recommendations to move forward with an approach to developing mesh enhancements. This would need to be in a new 802.16 project, since such enhancements are out of the scope of existing projects.

Roger Marks set up the 802.16 Mesh Enhancements Ad Hoc Committee and named Kamlesh Rath <mailto:rath@cowave.com> as its Chair.

## **Closing**

Motion19 :Carl Eklund To adjourn the meeting, 2<sup>nd</sup> .Brian Kiernan.

Motion19: carries by unanimous voice vote.

# **Attendance List: 802.16 Session #24**

## **10-13 March 2003**

This is the attendance list for Session #24 (with 76 names):

<b>"Participated"</b>	<b>Name\Given</b>	<b>Name\Family</b>	<b>Company</b>	<b>City</b>	<b>State\Province</b>	<b>Country</b>
	Aditya	Agrawal	Fujitsu Microelectronics America, Inc.	Cupertino	CA	USA
	Baraa	Al Dabagh	Intel Corporation	San Jose	CA	USA
Yes	Gordon	Antonello	Wi-LAN Inc.	Calgary	AB	Canada
	Malik	Audeh	Trapeze Networks, Inc.	Pleasanton	CA	USA
Yes	Baruch	Buskila	Rafael	Haifa		Israel
Yes	Giulio	Cavalli	Siemens			ITALY
	Rohini	Chakravarthy	Intel Corporation			
Yes	Dean	Chang	Aperto Networks	Milpitas	CA	USA
	Naftali	Chayat	Alvarion Ltd.	Tel Aviv		Israel
	Sungwoo	Choi	Fujitsu Microelectronics America, Inc.	San Jose	CA	USA
Yes	Stephen	Dick	InterDigital Communications Corp.	Melville	NY	USA
Yes	James	Dickerman	CoWave Networks	Fremont	CA	USA
Yes	Adam	Efron	Proxim Corporation			USA
Yes	Carl	Eklund	Nokia Research Center	Helsinki		Finland
	Roger	Eline	Intel Corp.			USA
Yes	Marc	Engels	Loranet N.V.	Heverlee		Belgium

Yes	Daniel	Feldman	IC4IC Ltd.			ISRAEL
	Marianna	Goldhammer	Alvarion	Tel Aviv		Israel
	Zion	Hadad	Runcom Technologies Ltd.	Rishon Le Zion		Israel
Yes	Takanari	Hayama	IGEL Co. Ltd.			
Yes	Dave	Hetherington	Wildbats Networks Inc			
Yes	David	Johnston	Intel Corporation	Hillsboro	OR	USA
	Panyuh	Joo	Samsung Electronics Co., Ltd.	Sungnam	KYUNGGI	Korea
Yes	Ofer	Kelman	Airspan Networks (Israel) Ltd.	Lod		Israel
Yes	Brian	Kiernan	InterDigital Communications Corp	King of Prussia	PA	USA
Yes	Itzik	Kitroser	Runcom Technologies ltd	Rishon Le Zion		Israel
	Anthony	Klinkert	WorldCom Broadband Solutions	Plano	TX	USA
Yes	Changhoi	Koo	Samsung Electronics Co., Ltd.	Suwon-si	Gyeonggi-do	Korea
	Lalit	Kotecha	Cowave Networks	Fremont	CA	USA
	Dong-Seung	Kwon	ETRI	Daejeon		Korea
	Margaret	LaBrecque	Intel Corp.			USA
	Jonathan	Labs	Wavesat Wireless Inc.	Ville St-Laurent (Montreal)	PQ	Canada
Yes	Seung-Hwan	Lee	ETRI	Daejeon		Korea
	Seung-Que	Lee	ETRI	Daejeon		Korea

Yes	Yigal	Leiba	Runcom Technologies Ltd.	Rishon Lezion		Israel
	Lingjie	Li	Redline Communications Corp.	Markham	ON	Canada
	John	Liebetreu	Intel Corporation	Chandler	AZ	USA
Yes	Lars	Lindh	Nokia Research Center	Helsinki		Finland
Yes	Heinz	Lycklama	Vectrad Networks	Arlington	WA	USA
Yes	Roger	Marks	NIST	Boulder	CO	USA
	Russell	McKown	MacPhy Modems	Richardson	TX	USA
	Ronald	Murias	Wi-LAN Inc.	Calgary	AB	Canada
	Slobodan	Nedic	Nedics Associates			USA
Yes	Robert	Nelson	MacPhy Modems	Richardson	TX	USA
	Paul	Nguyen	Disa			
	Hiroshi	Nomura	Speednet Inc.	Tokyo		Japan
	Hiroya	Ogawa	CRL	Yokosuka		Japan
	James	Pigg	Vantage-Comm			
	Noman	Rangwala	Analog Devices, Inc.			
Yes	Kamlesh	Rath	CoWave Networks	Fremont	CA	USA
	Stanley	Reible	Global Communications Devices, Inc.	Westford	MA	USA
	Ronald	Resnick	Intel Corp.	Hillsboro	OR	USA
Yes	Gene	Robinson	E. A. Robinson Consulting, Inc.	McKinney	TX	USA

	Wagar	Saleem	Fujitsu Microelectronics America, Inc.			USA
	John	Sauer	Tellabs			USA
	Randall	Schwartz	BeamReach Netwroks	Sunnyvale	CA	USA
Yes	Radu	Selea	Redline Communications Inc.	Markham	ON	Canada
	Paul	Senior	Airspan Networks	Uxbridge	Middlesex	UK
	Mohammad	Shakouri	Alvarion Ltd.	San Jose	CA	USA
	James	Simkins	Xilinx	Salt Lake City	UT	USA
Yes	Kenneth	Stanwood	Ensemble Communications	San Diego	CA	USA
Yes	Yoshihiro	Suzuki	Panasonic	Yokohama City		Japan
	Henry	Taylor	BT Group plc	Croydon		UK
	Shawn	Taylor	Wi-LAN	Calgary	AB	Canada
	Jose	Tellado	Intel Corporation	San Jose	CA	USA
	David	Trinkwon	Medley Systems Ltd	Maidenhead	Berks	UK
	Nico	van Waes	Nokia Networks	Mountain View	CA	USA
	Eyal	Verbin	Airspan Networks (Israel) Ltd.	Lod		Israel
	Arthur	Wang	Proxim Corporation	Long Beach	CA	USA
	Lei	Wang	Wi-LAN Inc.	Calgary	AB	Canada
	Stanley	Wang	CyberTAN Technology, Inc.	San Diego	CA	USA
Yes	Philip	Whitehead	Radiant Networks PLC	Little Chesterford	ESSEX	UK

Yes	Vladimir	Yanover	Alvarion Ltd.	Herzlya		Israel
	Choong-il	Yeh	ETRI	Deajeon		Korea
	Geon Min	Yeo	ETRI			Korea
	Kit C.	Yong	Mimix Broadband, Inc.	Houston	TX	USA

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# The IEEE 802.16 Working Group on Broadband Wireless Access Standards

## IEEE 802.16 Members

Update: 1 April 2003

Number of members: 70

Next scheduled update: following Session #26

See also:

- [Rights of Membership](#)
- [Acquiring and Retaining 802.16 Membership](#)
- [Potential Members](#)
- [those recently losing membership](#)
- [Members in Peril](#)
- [Observers](#)
- [Update your contact information](#)

Name\Given	Name\Family	Company	City	State\Province	Country
Aditya	Agrawal	Fujitsu Microelectronics America, Inc.	Cupertino	CA	USA
Gordon	Antonello	Wi-LAN Inc.	Calgary	AB	Canada
Reza	Arefi	ArrayComm, Inc.	Washington	DC	USA
Jori	Arrakoski	Nokia Mobile Phones	Salo		Finland
Malik	Audeh	Trapeze Networks, Inc.	Pleasanton	CA	USA
Eli	Avivi	WaveIP Ltd.	Yokneam		Israel
Brian	Banister	Comtech AHA	Pullman	WA	USA
Anader	Benyamin- Seeyar	Advantech AMT Inc.	Dorval	PQ	Canada
Baruch	Buskila	Rafael	Haifa		Israel
Dean	Chang	Aperto Networks	Milpitas	CA	USA
Naftali	Chayat	Alvarion Ltd.	Tel Aviv		Israel



Rémi	Chayer	Harris Corporation	Dollard-des-Ormeaux	PQ	Canada
Stephen	Dick	InterDigital Communications Corp.	Melville	NY	USA
Brian	Edmonston	iCODING Technology Inc.	San Diego	CA	USA
Brian	Eidson	Conexant Systems, Inc.	San Diego	CA	USA
Henry	Eilts	Texas Instruments, Inc.	Dallas	TX	USA
Carl	Eklund	Nokia	Helsinki		Finland
John	Fan	Flarion Technology	Bedminster	NJ	USA
Avraham	Freedman	Hexagon System Engineering	Tel-Aviv		Israel
G. Jack	Garrison	Harris Corporation	New Westminster	BC	Canada
Marianna	Goldhammer	Alvarion	Tel Aviv		Israel
Zion	Hadad	Runcom Technologies ltd	Rishon Le Zion		Israel
David	Husson		East Sandwich	MA	USA
Panyuh	Joo	Samsung Electronics Co., Ltd.	Sungnam	KYUNGGI	Korea
Tal	Kaitz	Alvarion Ltd.	Tel Aviv		Israel
Phil	Kelly	BeamReach Networks, Inc.	Sunnyvale	CA	USA
Ofer	Kelman	Airspan Networks (Israel) Ltd.	Lod		Israel
Brian	Kiernan	InterDigital Communications Corp	King of Prussia	PA	USA
Itzik	Kitroser	Runcom Technologies ltd	Rishon Le Zion		Israel
Mark	Klerer	Flarion Technology	Bedminster	NJ	USA
Thomas	Kolze	Broadcom Corp.	Phoenix	AZ	USA
Chun-Ming	Kuo	CCL/ITRI	Hsinchu		TAIWAN
Jonathan	Labs	Wavesat Wireless Inc.	Ville St-Laurent (Montreal)	PQ	Canada

Seung-Hwan	Lee	ETRI	Daejeon		Korea
Yigal	Leiba	Runcom Technologies Ltd.	Rishon Lezion		Israel
Lingjie	Li	Redline Communications Corp.	Markham	ON	Canada
John	Liebetreu	Intel Corporation	Chandler	AZ	USA
Lars	Lindh	Nokia Research Center	Helsinki		Finland
Hui-Ling	Lou	Marvell Semiconductor	Sunnyvale	CA	USA
Heinz	Lycklama	Vectrad Networks	Arlington	WA	USA
Roger	Marks	NIST	Boulder	CO	USA
Russell	McKown	MacPhy Modems	Richardson	TX	USA
Andrew	Middleton	Airspan Communications	Uxbridge	Middlesex	UK
Apurva	Mody	Georgia Institute of Technology	Atlanta	GA	USA
James	Mollenauer	Technical Strategy Associates	Newton	MA	USA
Ronald	Murias	Wi-LAN Inc.	Calgary	AB	Canada
Robert	Nelson	MacPhy Modems	Richardson	TX	USA
Stanley	Reible	Global Communications Devices, Inc.	Westford	MA	USA
Gene	Robinson	E. A. Robinson Consulting, Inc.	McKinney	TX	USA
Vincentzio	Roman	Runcom Technologies Ltd.			USA
Amir	Sarajedini	BeamReach Networks, Inc.			USA
Randall	Schwartz	BeamReach Networks	Sunnyvale	CA	USA
Yossi	Segal	Runcom Technologies Ltd.	Rishon Le Zion		Israel
Radu	Selea	Redline Communications Inc.	Markham	ON	Canada
James	Simkins	Xilinx	Salt Lake City	UT	USA

Kenneth	Stanwood	Ensemble Communications	San Diego	CA	USA
Paul	Struhsaker	Texas Instruments, Inc.	Plano	TX	USA
Shawn	Taylor	Wi-LAN	Calgary	AB	Canada
William	Thomson	Comtech AHA Corp.	Pullman	WA	USA
David	Trinkwon	Medley Systems Ltd	Maidenhead	Berks	UK
Rainer	Ullmann	Wavesat Wireless Inc.	Ville St.Laurent (Montreal)	PQ	Canada
Nico	van Waes	Nokia Networks	Mountain View	CA	USA
Eyal	Verbin	Airspan Networks (Israel) Ltd.	Lod		Israel
Arthur	Wang	Proxim Corporation	Long Beach	CA	USA
Lei	Wang	Wi-LAN Inc.	Calgary	AB	Canada
Stanley	Wang	CyberTAN Technology, Inc.	Hsinchu		TAIWAN
Robert	Ward	SciCom, Inc.	Poway	CA	USA
Philip	Whitehead	Radiant Networks PLC	Little Chesterford	ESSEX	UK
Joanne	Wilson	ArrayComm, Inc.	Washington	DC	USA
Vladimir	Yanover	Alvarion Ltd.	Herzlya		Israel

# ***IEEE 802.16 Session #24 Report***

## **Summary**

Session #24 of the IEEE 802.16 Working Group on Broadband Wireless Access took place on 10-13 March 2003 at the Hyatt Regency DFW in Dallas, TX, USA along with the IEEE 802 Plenary Session. 76 people attended.

## **IEEE Standard 802.16a, Extending WirelessMAN™ Air Interface to 2-11 GHz, Receives Final Approval; System Profiles Advance**

On 29 January 2003, IEEE Standard 802.16a™ was approved by the IEEE-SA Standards Board. The standard, a non-line-of-sight extension of the global IEEE 802.16 WirelessMAN™ standard for 10-66 GHz published in April 2002, provides for fixed broadband wireless access (BWA) in both licensed and license-exempt 2-11 GHz bands.

Task Group d met for the second time to develop the 802.16d project, which is creating system profiles to support compliance testing related to 802.16a. Draft 1 of the 802.16d amendment was adopted, and the Working Group agreed to open a Letter Ballot on that draft.

## **Recommended Practice P802.16.2a™ Nears Final Approval**

Draft 5 of the IEEE 802.16.2a Recommended Practice on Coexistence, including recommendations for 2-11 GHz, completed its IEEE Sponsor Ballot, passing unanimously. The 802 Sponsor Executive Committee (SEC) approved the Working Group's request to forward the draft for approval as an IEEE Standard; approval is expected in May. The comment resolutions were developed in a meeting of Task Group 2.

## **Mobile Wireless MAN (802.16e) Project Holds Second Meeting**

Task Group e met for the second time to develop the 802.16e project, which will enhance the WirelessMAN air interface for fixed/mobile support. The group discussed comments received on its initial Mobile System and Proposal Evaluation Requirements and also responses to a Call for Proposals. The results of a MAC Handoff Ad Hoc Committee were reviewed and updated. The group completed a revised Mobile System and Proposal Evaluation Requirements and initiated a formal Task Group Review of a Working Document. The schedule still calls for completing a ballotable 802.16e draft by July 2003.

## **Interoperability Documentation for 10-66 GHz Proceeds Rapidly**

Task Group C continued its progress toward interoperability documentation for the 10-66 GHz WirelessMAN-SC™ air interface. Work progressed on three projects:

1. The initial round of the IEEE Sponsor Ballot of the 1802.16.1 Protocol Implementation

Conformance Statement (PICS) draft passed unanimously, with comments. During Session #24, the Working Group resolved the comments and will [initiate a recirculation](#) of the new [Draft 3](#). The 802 SEC granted conditional approval to forward Draft 3 for IEEE-SA Approval if the resolutions are accepted by the ballot group.

2. The Working Group adopted a draft of the [1802.16.2](#) Test Suite Structure and Test Purposes document and agreed to open a [Working Group Letter Ballot](#) on the topic.
3. The 802 SEC agreed to forward a Project Authorization Request [1802.16.3](#) requesting that the IEEE-SA Standard Board open a new project on Radio Conformance Tests. The IEEE-SA Standards Board subsequently approved that PAR, creating the project.

### **Working Group Liaison Activities**

The Working Group developed a draft letter to the IEEE Industry Standards and Technology Organization and a request that it be issued by IEEE 802. The IEEE 802 SEC approved the request and issued [the letter](#).

### **802.16 Requests Approved at SEC Meeting**

All 802.16 motions were approved at the 802 SEC meeting of 15 March 2003. A [summary](#) is available.

### **802 Issue: 802 Handoff Framework and Mechanisms**

Roger Marks (802.16 Chair) organized an IEEE 802 Call for Interest on 802 Handoff. The meeting, with approximately 150 attendees, led to a proposal to the IEEE 802 SEC to initiate an [Executive Committee Study Group on Handoff](#). [David Johnston](#) was named to chair the Study Group.

### **Documents**

The [Session #24 document list](#) indexes the session documents.

### **Future Meetings**

- IEEE 802.16's [Session #25](#) will take place in Dallas, Texas, USA on 12-15 May 2003 in conjunction with meetings of the other 802 wireless groups.
- IEEE 802.16's [Session #26](#) will take place in San Francisco, CA, USA on 21-24 July 2003 in conjunction with the [IEEE 802 Plenary Session](#).
- IEEE 802.16's [Session #27](#) will take place in Colorado on 8-11 September 2003.
- IEEE 802.16's [Session #28](#) will take place in Albuquerque, NM, USA on 9-14 Nov 2003 in conjunction with the [IEEE 802 Plenary Session](#).

### **About IEEE 802.16**

The [IEEE 802.16 Working Group on Broadband Wireless Access Standards](#) has developed and is enhancing the **WirelessMAN™** Standard for wireless metropolitan area networks. IEEE 802.16 is a unit of the [802 LAN/MAN Standards Committee](#), the premier transnational forum for wired and wireless

networking standardization. A [list of IEEE 802.16 standards and drafts](#) is available on-line, as is a [project milestone summary](#).

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With the approval of the 802.16 Working Group, this report was drafted and edited (14 April 2003 update) by:

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