

Project	IEEE 802.16 Broadband Wireless Access Working Group <a href="http://ieee802.org/16">http://ieee802.org/16</a> >					
Title	Minutes of IEEE 802.16 Session #29					
Date Submitted	2004-01-15					
Source(s)	Dean S.K. Chang  Aperto Networks  1637 S. Main Street  Milpitas CA 95035  Voice:(408) 719-9977  Fax:(408) 719-9970  mailto:dchang@apertonet.com					
Re:	IEEE 802.16 Session #29 Minutes (Vancouver, BC, Canada)					
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> .					

r1 0

## Minutes of IEEE 802.16 Session #29

IEEE 802.16 Working Group Vancouver, BC Canada 12-15 January 2004

## **Opening Plenary**

### Call to Order

Roger Marks called the meeting to order at 1:06 pm, January 12 2004.

## **IEEE 802.16 Working Group Officers**

Chair: Roger Marks Vice Chair: Ken Stanwood Secretary: Dean Chang

#### **Members**

63{correction: 64} individuals were members before the session. 85 people participated in Session #28.

12 people indicated that this is their first time attending an IEEE 802.16 meeting. 11 indicated that this is their first time attending an 802 meeting.

#### **Attendance**

There are 3 attendance books this week: TGd, TGe and TGC.

Session participation credit requires participation in 6 of the 8 intervals for this session.

# Agenda <a href="http://ieee802.org/16/mtg/mtg29/opening.html">http://ieee802.org/16/mtg/mtg29/opening.html</a>

Motion 1: David Johnston, To approve Opening Plenary agenda on the 802.16 server, 2<sup>nd</sup> Carl Eklund.

Motion 1: carries by unanimous voice vote.

Motion 2: Jonathan Labs to approve Minutes of Session #28 (802.16-03/55) and decisions therein, 2<sup>nd</sup> Rainer Ullmann.

Motion 2: carries by unanimous voice vote.

# Chair's Status Report (IEEE 802.16-04/02)

# **Copyright Procedures**

The Chair reviewed copyright procedures and referred to the following link, which covers information regarding copyrights for documents submitted to IEEE 802.16:

http://ieee802.org/16/ipr/copyrights

## **IEEE-SA Rules (Patents)**

The following advice was provided by the Chair:

The IEEE's Patent Policy is consistent with the ANSI patent policy and is described in Clause 6 of the IEEE SA Standards Board Bylaws;

Early disclosure of patents which may be essential for the use of standards under development is encouraged; Disclosures made of such patents may not be exhaustive of all patents that may be essential for the use of standards under development, and that neither the IEEE, the WG nor the WG Chairman ensure the accuracy or completeness of any disclosure or whether any disclosure is of a patent that in fact may be essential for the use of standards under development.

Slide #1 ("IEEE-SA Standards Board Bylaws on Patents in Standards") and Slide #2 ("Inappropriate Topics for IEEE WG Meetings") were shown.

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.

No disclosures were made regarding this announcement.

#### IEEE EC Actions

Discussion about reorganizing or splitting 802 Begun at November 2003 Plenary 802 Policies and Procedures (formerly "Rules") Change Status roll-call vote rule under ballot

#### IEEE 802 Elections

IEEE 802 P&P specify elections for WG Chairs and Vice Chairs in March of even-numbered years IEEE 802 Officer terms also expire IEEE 802.16 Working Group Elections to be held at Session #30 see documented IEEE 802.16 Working Group Officer Election Process (Document IEEE 802.16-03/28)

# Agenda for the Week

The agenda of the week is located at the following link.

http://ieee802.org/16/meetings/mtg29/agenda.html

# Task Groups

# Task Group 2

Phil Whitehead, Chair (absent)

Coexistence P802.16.2-REVa: (Revision of 802.16.2) Finished Sponsor Ballot; 100% approval Approved by 802 EC to forward to RevCom On RevCom agenda for 16 Jan 2004 Everything in order (except one copyright release)

### **IEEE 802.16 Conformance Issues**

Ken Stanwood, Chair

P802.16/Conformance02 (10-66 GHz TSS&TP): Approved by RevCom in Dec 2003 IEEE staff editor to release draft on 12 Jan

P802.16/Conformance03 (Radio Conformance Tests): 100% Approval in Sponsor Ballot 30 comments
Comment resolution this week

Proposed Motion for Closing Plenary: "To accept IEEE 802.16-03/59r2 as the resolutions of the P802.16/Conformance03 Sponsor Ballot comments, initiate a recirculation, authorize a Task Group C Ballot Resolution Committee to resolve any resulting comments, conduct additional recirculations if necessary, and request conditional approval from the 802 EC to forward the final balloted draft to RevCom."

P802.16/Conformance04 (PICS, <11 GHz)
PAR submitted by 802.16 and 802 in Nov 2003
IEEE-SA staff objecting to numbering scheme, again
Issue to address with 802 Chair and staff this week

The WG Chair proposed to hold no Task Group C meetings this week, authorizing the TGC chair to prepare proposed comment resolutions for consideration at the Closing Plenary. This plan was adopte without objection.

#### P802.16-REVd

Gordon Antonello, Chair, Task Group d Itzik Kitroser, Editor Bob Nelson, Acting Editor

WG Letter Ballot #13
Completed first round before Session #28
Resolved comments at Session #28
Recirculation #13a completed in Dec 2003
44 Approve/5 Disapprove
144 comments to resolve this week
New draft development schedule is peeded (old one

New draft development schedule is needed (old one erased by outcome of Session #28)

#### **TGe**

Brian Kiernan , Chair Shawn Taylor, Vice Chair Ron Murias, Technical Editor

IEEE 802.16e (Mobility):
PAR approved 11 Dec 2002
Four Task Group Review cycles (Call for Comments)
Additional Working Group Review before Session #29
70 comments to resolve this week
To WG Letter Ballot this week (possibly)

Expected Closing Plenary Motion: "To accept, as a Working Group Draft, the TGe Working Document (802.16e-03/07r5) as modified by the comment resolutions (IEEE 802.16e-04/02r2) and open Working Group Letter Ballot #14 on that Draft (P802.16e/D1)."

## Liaison

ITU-R: Input document IEEE L802.16-03/20; drafting group to develop response for Closing Plenary. This letter will be quite a bit of work. An ad hoc team was assembled to work on this document. Marianna Goldhammer stated that she had attended a recent ITU-R meeting. Many countries such as Russia and Brazil will only allow products that are approved by ITU-R.

ITU-T Study Group 9: Input documents IEEE L802.16-03/21 and IEEE L802.16-03/22; drafting group to develop response for Closing Plenary. This ITU-T group would like to work jointly with IEEE 802.16 on a solution to help connect to a large amount of dark fiber that is available but not being used within the cable television plant.

TTA PG05: Input document IEEE L802.16-03/23; drafting group to develop response for Closing Plenary. This is a standards body in Korea and for the first time is considering liaison with other standards bodies.

#### **Future Sessions**

Session #30:

15-18 March 2004 at the Hilton in the Walt Disney World Resort, Orlando, FL, USA with IEEE 802 Plenary Session

Session #31:

17-20 May 2004: Shenzhen, Guangdong, People's Republic of China

Hosted by Rajesh Bhalla, ZTE Corporation

note: other 802 wireless WGs meet the previous week in Anaheim, USA

Session #32:

11-16 July 2004 at the Portland Hilton, Portland, OR, USA with IEEE 802 Plenary Session

Session #33:

September 2004 (possibly 20-23); site to be determined

note: other wireless WGs looking at Monterey or San Diego, CA, USA; possibly Berlin or Sydney

# Closing

Motion 3: Carl Eklund To adjourn the meeting 2<sup>nd</sup>.David Johnston.

Motion 3: carries by unanimous voice vote.

The meeting was adjourned at 3:20 pm on 12 January 2004.

# **Closing Plenary**

## **Opening**

Chair Roger Marks called the meeting to order at 7:10 pm on 15 January 2004.

## **Agenda**

Motion 4: To approve the agenda as presented Motion 4: carries by unanimous consent.

## Task Group C

Chair: Ken Stanwood

Resolved 30 comments, they were all marked accepted except for one comment.

Motion5: Ken Stanwood, to accept IEEE 802.16-03/59r2 as the resolutions of the P802.16/Conformance03 Sponsor Ballot comments, initiate a recirculation, authorize a Task Group C Ballot Resolution Committee to resolve any resulting comments, conduct additional recirculations if necessary, and request conditional approval from the 802 EC to forward the final balloted draft to RevCom, 2<sup>nd</sup> David Johnston.

Motion5: carriers 25-0-0.

## Task Group d

Chair: Gordon Antonello

See the chair's closing report (IEEE 802.16d-04/02) for more details.

Resolved a total of 176 comments. One comment was not resolved.

Motion 6: Gordon Antonello, To accept IEEE 802.16-03/51r8 as the resolutions of the Recirculation Ballot #13a comments and initiate a recirculation, 2<sup>nd</sup>

Friendly Amendment Bob Nelson to resolve a missed comment during this meeting and will be reflected in IEEE 802.16-03/51r9 which is identical to IEEE 802.16-03/51r8 with the exception that comment 660 was accepted thereby superceding comment 602. The Friendly Amendment was accepted, 2<sup>nd</sup> Yossi Segal

Motion 6: To accept IEEE 802.16-03/51r9 as the resolutions of the Recirculation Ballot #13a comments and initiate a recirculation. Motion 6: carries 31-0-0.

Motion 7: Gordon Antonello, To request conditional approval from the 802 EC to forward the final balloted P802.16REVd draft for Sponsor Ballot, 2<sup>nd</sup> Brian Kiernan.

Motion 7: carries 34-0-0.

Motion 8: Gordon Antonello, To authorize Task Group d to resolve any resulting comments and conduct additional recirculations if necessary, 2<sup>nd</sup> Lei Wang.

Motion 9: Gordon Antonello, To authorize a Ballot Resolution Committee comprised of the Working Group Chair and Vice Chair, to resolve any resulting Letter Ballot #13 comments and conduct additional recirculations if necessary, provided that the resulting resolutions do not alter the draft, 2<sup>nd</sup> Bob Nelson.

Motion 9: carries 29-3-0.

Motion 10: To adopt the P802.16-REVd Development Schedule,  $2^{nd}$  David Johnston.

Motion 10: carries 26-3-1.

## Task Group e

Chair: Brian Kiernan

See the chair's closing report (IEEE 802.16e-04/04) for more details.

Resolved a total of 71 comments to the working document.

Motion 11: Brian Kiernan, To accept, as a Working Group Draft, the TGe Working Document (802.16e-03/07r5) as modified by the comment resolutions (IEEE 802.16e-04/02r2) and open Working Group Letter Ballot #14 on that Draft (P802.16e/D1), 2<sup>nd</sup> Zion Hadad

Motion 11: carries 30-0-0.

#### Liaison

Motion 12: Marianna Goldhammer, To approve the Draft Letter to TTA, with appropriate editorial revisions, 2nd Panyuh Joo Motion 12: carries 28-0-0.

Motion 13: David Johnston, to approve the Draft Letter to ITU-T SG 9, with appropriate editorial revisions, 2<sup>nd</sup> Ron Murias.

Motion 13: carries 26-0-0.

Motion 14: Marianna Goldhammer, To approve the Draft Letter to ITU-R, with appropriate editorial revisions 2<sup>nd</sup> Philip Barber.

Motion 14: carries 15-0-2.

## Future Sessions <a href="http://ieee802.org/16/calendar.html">http://ieee802.org/16/calendar.html</a>

Session #30:

15-18 March 2004 at the Hilton in the Walt Disney World Resort, Orlando, FL, USA with IEEE 802 Plenary Session

Session #31:

17-20 May 2004: Shenzhen, Guangdong, People's Republic of China

Hosted by Rajesh Bhalla, ZTE Corporation

note: other 802 wireless WGs meet the previous week in Anaheim, USA

Session #32:

11-16 July 2004 at the Portland Hilton, Portland, OR, USA with IEEE 802 Plenary Session

Session #33:

September 2004 (possibly 20-23); site to be determined note: other wireless WGs looking at Berlin or Sydney

Proposals for Session #33

Panyuh Joo proposes a location near Pusan, Korea; dates are open

Frank Draper proposes Montreal, Canada

David Castelow proposes London, UK

Aditya Agrawal proposes Tokyo, Japan, in Shinjuku area, proposing the week of September 6th.

IEEE 802.15 would like a straw poll as follows

Straw Polls

Wireless groups should have at least one interim annually outside of the US Yes 79 No 1

All wireless interim -

Berlin week of Sept 13<sup>th</sup>, Yes 5 No 21 Sydney week of Sept 20<sup>th</sup> Yes 8 No 28

Session #34:

15-18 November 2004 at the Hyatt Regency San Antonio, TX, US with the IEEE 802 Plenary Session

## **Publicity**

The chair was authorized, without objection, to create the Session #29 Report. See Annex, and <a href="http://ieee802.org/16/meetings/mtg29/report.html">http://ieee802.org/16/meetings/mtg29/report.html</a>.

#### **New Business**

David Johnston announced that it looks like the handoff group will be change from an ECSG to IEEE 802.21. There will be elections held at the next plenary meeting.

Roger Marks is willing to grant attendance credit to IEEE 802.16 for people that attend IEEE 802.21. It would be appropriate to have a formal liaison between the two groups be appointed in the future.

There are elections scheduled for the IEEE 802 Executive Committee at the March meeting. There will be Chair and Vice Chair elections for IEEE 802.16. Roger Marks plans to run for Chair and Ken Stanwood plans to run for vice chair.

# Closing

Motion 15: Ron Murias, to adjourn the meeting, 2<sup>nd</sup> Jon Labs.

Motion 15: carries by unanimous voice vote.

The meeting was adjourned at 9:40pm on 15 January 2004.

Note: This annex was not included in minutes as approved (IEEE 802.16-04/05).

# Attendance List: 802.16 Session #29 12-15 January 2004

This is the attendance list for Session #29 (with 130 names):

"Participated"*	Name \Given	Name\Family	Company	City	State \Province	Country
Yes	Edward	Agis	Intel Corp.	Hillsboro	OR	USA
Yes	Aditya	Agrawal	Fujitsu Microelectronics	Cupertino	CA	USA
Yes	Gordon	Antonello	Wi-LAN Inc.	Calgary	AB	Canada
Yes	Sanjeev	Athalye	QUALCOMM Inc.	San Diego	CA	USA
No	Malik	Audeh	Tropos Networks	San Mateo	CA	USA
Yes	Raja	Banerjea	Proxim	Sunnyvale	CA	USA
Yes	Brian	Banister	Comtech AHA Corp.	Pullman	WA	USA
Yes	Phillip	Barber	Broadband Mobile Technologies	Frisco	TX	USA
No	Roger	Bertschmann	SiWorks Inc.			Canada
Yes	Rajesh	Bhalla	ZTE San Diego	San Diego	CA	USA
Yes	David	Castelow	Airspan Networks Inc.			UK
Yes	Giulio	Cavalli	Siemens	Cassina de' Pecchi (MI)		Italy
Yes	Dean	Chang	Aperto Networks	Milpitas	CA	USA
No	Yong	Chang	Samsung Electronics Co., Ltd.	Suwon-si	Gyeonggi- do	Korea
Yes	Naftali	Chayat	Alvarion Ltd.	Tel Aviv		Israel
No	Aik	Chindapol	Siemens	Princeton	NJ	USA
Yes	Seokheon	Cho	ETRI	Daejeon		Korea
Yes	Hyoung-Jin	Choi	TTA	Seongnam city		Korea

Yes	Joey	Chou	Intel Corp.	Chandler	AZ	USA
Yes	Jin Yong	Chung	SOLiD Technologies	Seoul		Korea
Yes	Mark	Cudak	Motorola, Inc.	Schaumburg	IL	USA
No	Wenshuan	Dang	Huawei Tech. Co., Ltd.			China
No	Vaibhav	Dinesh	University of British Columbia	Vancouver	ВС	Canada
Yes	Francois (Frank)	Draper	Wavesat Wireless, Inc.	Ville St- Laurent (Montreal)	PQ	Canada
Yes	John	Dring	Intel Corp.	San Jose	CA	USA
Yes	Lester	Eastwood	Motorola, Inc.	Schaumburg	IL	USA
No	Dean	Edwards	Strix Systems, Inc.	Westlake Village	CA	USA
Yes	Brian	Eidson	Conexant Systems, Inc.	San Diego	CA	USA
Yes	Carl	Eklund	Nokia	Helsinki		Finland
Yes	Roger	Eline	Intel Corp.	San Jose	CA	USA
Yes	Yonggang	Fang	ZTE San Diego	San Diego	CA	USA
Yes	Bogdan	Franovici	Redline Communications Inc	Markham	ON	Canada
No	Randy	Frei	SkyPilot Network, Inc.	Belmont	CA	USA
Yes	Marianna	Goldhammer	Alvarion Ltd.	Tel Aviv		Israel
Yes	Reza	Golshan	Fujitsu Microelectronics	Sunnyvale	CA	USA
Yes	Zion	Hadad	Runcom Technologies Ltd.	Rishon Le Zion		Israel
Yes	Yung	Hahn	Intel Corp.	Hillsboro		USA
Yes	Jeff	Harrang	SR Telecom	Redmond	WA	USA
Yes	John	Haskin	Microsoft	Redmond	WA	USA
Yes	Christian	Hoymann	RWTH Aachen	Aachen		Germany
No	Prakash	lyer	Intel Corp.		OR	USA

No	Ho-In	Jeon	LeiiTech Co., Ltd.	Seong-Nam- Shi	Gyeonggi- do	Korea
Yes	Moo Ryong	Jeong	DoCoMo USA Labs	San Jose	CA	USA
No	Jianping (James)	Jiang	ZTE San Diego	San Diego	CA	USA
Yes	Brian	Johnson	Nortel Networks	Germantown	MD	USA
No	David	Johnston	Intel Corp.	Hillsboro	OR	USA
Yes	Panyuh	Joo	Samsung Electronics Co., Ltd.	Sungnam	KYUNGGI	Korea
Yes	Athos	Kasapi	ArrayComm, Inc.	San Jose	CA	USA
Yes	Ofer	Kelman	Airspan Networks Inc.	Lod		Israel
Yes	Adam	Kerr	ArrayComm, Inc.	San Jose	CA	USA
Yes	Brian	Kiernan	InterDigital Communications Corp	King of Prussia	PA	USA
No	Jae Heung	Kim	ETRI	Daejeon		Korea
Yes	Ju Pil	Kim	Samsung Electronics Co., Ltd.			Korea
Yes	Changhoi	Koo	Samsung Electronics Co., Ltd.	Suwon-si	Gyeonggi- do	Korea
Yes	John	Kulick	Agere Systems	Allentown	PA	USA
Yes	Dong- Seung	Kwon	ETRI	Daejeon		Korea
Yes	Margaret	LaBrecque	Intel Corp.			USA
Yes	Jonathan	Labs	Wavesat Wireless, Inc.	Ville St- Laurent (Montreal)	PQ	Canada
Yes	Jules Pierre	Lamoureux	Wavesat Wireless, Inc.	Dorval (Montreal)	PQ	Canada
Yes	Chang-Jae	Lee	LG Electronics Inc.	Anyang-shi	Kyongki- do	Korea

No	Hyeon Woo	Lee	Samsung Electronics Co., Ltd.	Suwon-si	Gyeonggi- do	Korea
Yes	Jae Hak	Lee	SOLiD Technologies	Seoul		Korea
Yes	Kab Joo	Lee	Samsung Electronics Co., Ltd.	Yongin-City	Gyeonggi- do	Korea
Yes	Seong- Choon	Lee	KT Corporation	Seoul		Korea
Yes	Yigal	Leiba	Runcom Technologies Ltd.	Rishon Lezion		Israel
Yes	Donald	Leimer	Proxim	Long Beach	CA	USA
Yes	Barry	Lewis	Radiant Networks PLC	Little Chesterford	Essex	UK
No	Yun Gang	Li	Huawei Tech. Co., Ltd.			China
Yes	John	Liebetreu	Intel Corp.	Chandler	AZ	USA
Yes	Hyoungsoo	Lim	ETRI	Daejeon		Korea
No	Sun Hwa	Lim	ETRI	Daejeon		Korea
Yes	Yong Je	Lim	Samsung Electronics Co., Ltd.	Yongin-City	Gyeonggi- do	Korea
No	Huashih Alfred	Lin	Winbond Electronics Corporation America	Torrance	CA	USA
No	Titus	Lo	Walbell Technologies, Inc.	Bellevue	WA	USA
Yes	Pierre	Lopez	Alcatel	Nanterre	France	France
Yes	Michael	Lynch	Nortel Networks	Richardson	TX	USA
Yes	Martin	Lysejko	Airspan Networks Inc.	Uxbridge	Middlesex	UK
Yes	David	Maez	Navini Networks	Richardson	TX	USA

Yes	Jeffrey	Mandin	Streetwaves Network Consulting	Jerusalem		Israel
No	Kevin	Mankin	Theta Microelectronics, Inc.	San Jose	CA	USA
Yes	Roger	Marks	NIST	Boulder	CO	USA
Yes	Ian	McCallum	Intel Corp.	Vaughan	ON	Canada
Yes	Russell	McKown	MacPhy Modems	Richardson	TX	USA
No	Eric	McLaughlin	Intel Corp.	Hillsboro	OR	USA
Yes	Andrew	Middleton	Airspan Networks Inc.	Uxbridge	Middlesex	UK
Yes	James	Mollenauer	Technical Strategy Associates	Newton	MA	USA
Yes	Dong-Il (Stephan)	Moon	SK Telecom	Seoul		Korea
Yes	Roland	Muenzner	Alcatel	Stuttgart		Germany
Yes	Ronald	Murias	Wi-LAN Inc.	Calgary	AB	Canada
Yes	Robert	Nelson	MacPhy Modems	Richardson	TX	USA
No	Loi	Nguyen	Inphi	Westlake Village	CA	USA
Yes	Gunnar	Nitsche	Philips Semiconductors	Dresden		Germany
No	Jim	O'Connor	IPWireless, Inc.	Idaho Springs	СО	USA
Yes	Paul	Odlyzko	Motorola, Inc.		IL	USA
No	Hiroyo	Ogawa	CRL	Yokosuka		Japan
Yes	Ae Soon	Park	ETRI			Korea
Yes	Pyung-su	Park	Hanaro Telecom Inc.	Goyang-si	Gyeonggi- do	Korea
Yes	Greg	Phillips	AirRunner Technologies, Inc	Zephyr Cove	NV	USA
Yes	Paul	Piggin	Radiant Networks PLC	Little Chesterford	Essex	UK
Yes	Russ	Reynolds	Proxim		CA	USA

Yes	Maximilian	Riegel	Siemens	Munich		Germany
Yes	Christopher	Rogers	Intel Corp.	Beaverton	OR	USA
Yes	Byung Han	Ryu	ETRI	Daejeon		Korea
Yes	Randall	Schwartz	Intel Corp.			USA
Yes	Yossi	Segal	Runcom Technologies Ltd.	Rishon Le Zion		Israel
Yes	Radu	Selea	Redline Communications Inc.	Markham	ON	Canada
Yes	N.K.	Shankaranarayanan	AT&T Labs	Florham Park	NJ	USA
Yes	Eli	Shasha	Consulting			Israel
Yes	Yeong Moon	Son	Samsung Electronics Co., Ltd.	Suwon-si	Gyeonggi- do	Korea
Yes	Kenneth	Stanwood	Ensemble Communications	San Diego	CA	USA
Yes	Teik- Kheong (TK)	Tan	Philips Semiconductors	San Jose	CA	USA
Yes	Shawn	Taylor	Wi-LAN Inc.	Calgary	AB	Canada
Yes	William	Thomson	Comtech AHA Corp.	Pullman	WA	USA
No	James	Tomcik	QUALCOMM Inc.	San Diego	CA	USA
Yes	Wen	Tong	Nortel Networks	Ottawa	ON	Canada
Yes	Rainer	Ullmann	Wavesat Wireless, Inc.	Ville St- Laurent (Montreal)	PQ	Canada
Yes	Mano	Vafai	Aperto Networks	Milpitas	CA	USA
No	Nico	van Waes	Nokia	Mountain View	CA	USA
Yes	Jing (Irving)	Wang	ZTE San Diego	San Diego	CA	USA
Yes	Lei	Wang	Wi-LAN Inc.	Calgary	AB	Canada

Yes	Stanley	Wang	CyberTAN Technology, Inc.	Hsinchu		TAIWAN
Yes	Michael	Webb	BeamReach Networks, Inc.	Sunnyvale	CA	USA
Yes	Jun	Wu	ZTE San Diego	San Diego	CA	USA
Yes	Hassan	Yaghoobi	Intel Corp.			USA
Yes	Vladimir	Yanover	Alvarion Ltd.	Herzlya		Israel
Yes	Choong-il	Yeh	ETRI	Deajeon		Korea
Yes	Kunmin	Yeo	ETRI	Daejeon		Korea
No	Kit C.	Yong	Mimix Broadband, Inc.	Houston	TX	USA
Yes	Chulsik	Yoon	ETRI	Daejeon		Korea
Yes	Mi Young	Yun	ETRI			Korea

<sup>\*</sup>Session #29 "participation" credit was granted to those participating in six of the eight session intervals, provided that registration fees were paid.

Note: This annex was not included in minutes as approved (IEEE 802.16-04/05).

# IEEE 802.16 Session #29 Report



## **Summary**

Session #29 of the IEEE 802.16 Working Group on Broadband Wireless Access took place 12-15 January 2004 at the Hyatt Regency Vancouver, Vancouver, British Columbia, Canada. The session was co-located with sessions of the other 802 Working Groups and Technical Advisory Groups. 130 people attended.

## Revision of IEEE Standard 802.16 moving toward Sponsor Ballot

The 802.16 Working Group resolved comments arising during the <u>recirculation ballot</u> of <u>IEEE P802.16-REVd</u>, a comprehensive (over 800 page) revision of IEEE Standard 802.16 ("Air Interface for Fixed Broadband Wireless Access Systems"), including amendments IEEE 802.16a and IEEE 802.16c. The Working Group unanimously approved moving the draft to IEEE Sponsor Ballot. Pending a confirmation ballot on the comment resolutions, and approval of the IEEE 802 LMSC Executive Committee, Sponsor Ballot will be scheduled to close before Session #30. The details are included in the revised <u>development schedule</u>, as approved by the Working Group.

# Initial Draft of Mobile WirelessMANTM (P802.16e) Project Going to Ballot

The Working Group chose to adopt a first draft under the <u>P802.16e</u> project, which is developing an enhancement of the WirelessMAN<sup>TM</sup> air interface to support mobile as well as fixed users. The WG also agreed to initiate Working Group Letter Ballot #14 on that draft as soon as editorial preparations are complete. The decision to proceed to ballot followed a fifth comment review cycle. Resolution of ballot comments is scheduled for Session #30.

# **Conformance Projects Nearing Completion**

IEEE Sponsor Ballot of the <u>P802.16/Conformance03</u> draft was completed with unanimous approval. Comments were received and resolved. Completion of the work, covering Radio Conformance Tests (RCT) for the 10-66 GHz WirelessMAN-SC Air Interface, is expected following recirculation. Submittal for approval as an IEEE standard is expected in March.

The previous volume in the conformance series, <u>P802.16/Conformance02</u>, was approved on 10 December 2003 by the IEEE-SA Standards Board as IEEE Standard 802.16/Conformance02-2003. The title is "IEEE Standard for Conformance to IEEE 802.16 - Part 2: Test Suite Structure and Test Purposes (TSS&TP) for 10-66 GHz WirelessMAN-SC Air Interface." Publication is anticipated in February 2004.

## **IEEE Standard 802.16.2 Nears Approval as Revised Recommended Practice**

On 16 January 2004, the IEEE-SA's Review Committee recommended approval of the final P802.16.2-REVa draft as IEEE Standard 802.16.2-2004. This document will become a revision of IEEE Standard 802.16.2-2001 ("Coexistence of Fixed Broadband Wireless Access Systems") and will replace that document. The revision updates the content, adding new material addressing 2-11 GHz operation and coexistence with point-to-point systems. The content applies only to licensed-band operation. Final IEEE-SA approval as an IEEE Standard is expected in early February.

# **Working Group Liaison Activities**

- The WG issued a <u>liaison statement to ITU-R</u> in reply to an input statement on <u>Collaboration</u> <u>between ITU-R</u> and <u>IEEE 802.16</u> on <u>broadband wireless access</u>. In response to ITU-R's invitation, the reply suggests initial text for a preliminary draft new recommendation referencing IEEE 802.16.
- The WG issued a <u>liaison statement to ITU-T SG 9</u> in response to input statements indicating the interest of SG 9, which addresses integrated broadband cable networks, in IEEE 802.16. The WG delegated its Chair and Vice Chair to interact with SG 9, beginning with the SG 9 meeting of 15-21 January 2004.
- The WG issued a <u>liaison statement to TTA PG05</u> in response to an <u>input statement from that group</u>, which is addressing portable Internet service (PIS) in Korea.

#### **Documents**

The Session #29 document list indexes the session documents.

#### **Minutes and Motions**

The Working Group minutes are available as <u>IEEE 802.16-04/05</u>. Significant motions presented at the Closing Plenary are embedded in the <u>Closing Plenary Agenda</u>, although some were passed in amended form.

# **Future Meetings**

• IEEE 802.16's <u>Session #30</u> will take place in Orlando, FL, USA on 15-18 March 2004 in conjunction with the <u>IEEE 802 Plenary Session</u>. Elections for Working Group Chair and Vice Chair are scheduled.

- IEEE 802.16's <u>Session #31</u> will take place in Shenzhen, China on 17-20 May 2004. The host company, ZTE Corporation, presented its <u>plans for the session</u>.
- IEEE 802.16's <u>Session #32</u> will take place in Portland, OR, USA on 12-15 July 2004 in conjunction with the <u>IEEE 802 Plenary Session</u>.
- IEEE 802.16's <u>Session #33</u> is scheduled for September 2004. The site is to be determined during Session #30. Proposals are welcome; please see the <u>IEEE 802.16 Interim Session Guidelines</u>. During Session #29, indications of hosting interest were mentioned regarding Busan, Korea; Toyko, Japan; Montreal, Canada; and London, UK.

#### **About IEEE 802.16**

The <u>IEEE 802.16 Working Group on Broadband Wireless Access Standards</u> has developed and is enhancing the **WirelessMAN**<sup>TM</sup> Standard for wireless metropolitan area networks. IEEE 802.16 is a unit of the <u>IEEE 802 LAN/MAN Standards Committee</u>, the premier transnational forum for wired and wireless networking standardization. A <u>list of IEEE 802.16 standards and drafts</u> is available on-line, as is a project milestone summary.

With the approval of the IEEE 802.16 Working Group, this report was drafted and edited (2 February 2004 edition, considered complete) by:

Roger Marks (marks@nist.gov)

Chair, IEEE 802.16 Working Group on Broadband Wireless Access Standards tel: +1-303-497-3037

Return to 802.16 Session #29 Page