

Project	<b>IEEE 802.16 Broadband Wireless Access Working Group</b> < <a href="http://ieee802.org/16">http://ieee802.org/16</a> >	
Title	<b>Minutes of IEEE 802.16 Session #30</b>	
Date Submitted	<b>2004-03-18</b>	
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Re:	IEEE 802.16 Session #30 Minutes (Orlando, Florida 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.	
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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 #30

IEEE 802.16 Working Group

Orlando, FL USA

15-18 March 2004

### Opening Plenary

### Call to Order

Roger Marks called the meeting to order at 1:06 pm, March 15, 2004.

### IEEE 802.16 Working Group Officers

Chair: Roger Marks

Vice Chair: Ken Stanwood

Secretary: Dean Chang

### Members

64 individuals were members before the session.

44 potential members will become members if they attend this session.

140 people registered with 802.16 as primary Working Group

138 people registered with 802.16 as secondary Working Group

### Attendance

There are 2 attendance books this week: TGd and TGe.

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

### Agenda <<http://ieee802.org/16/meetings/mtg30/agenda.html>>

Motion 1: DJ Johnston, to approve Opening Plenary agenda as it stands on the 802.16 server. 2<sup>nd</sup> Philip Barber.

Motion 1: carries by unanimous voice vote.

Motion 2: Ron Murias to approve Minutes of Session #29 (IEEE 802.16-04/05) and decisions therein, 2<sup>nd</sup> Baraa Al-Dabagh.

Motion 2: carries by unanimous voice vote.

### Chair's Status Report (IEEE 802.16-04/12)

#### *Working Group Domination*

The Working Group Chair has the authority to determine if the Working Group is dominated by an organization, and, if so, treat that organizations' vote as one (with the approval of the Executive Committee).

#### *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://iee802.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.

## Awards

Awards were provided for the completion of the following standards:

IEEE Std 802.16/Conf01 (10-66 GHz PICS) Publ: Aug 2003

Ken Stanwood, Chair

Carl Eklund, Editor

IEEE Std 802.16/Conf02 (10-66 GHz TSS&TP) Publ: 25 Feb '04

Ken Stanwood, Chair

Carl Eklund, Editor

Congratulations to Ken and Carl and special thanks for their work on these two conformance standards.

## IEEE 802 P&P Change ballots

Two are under discussion

1. Roll call votes
2. WG finance

## IEEE 802 PARs Under Consideration

Comments need to be submitted to LMSC EC; all pre-submitted to IEEE-SA NesCom

WG comments due by 5 pm Tuesday

Revisions allowed until 5 pm Wednesday

There is one 802.11 new PAR covering vehicular mobility at 5.9 GHz. Brian Kiernan stated that this PAR does not have relevance IEEE 802.16. The PAR covers work towards a vehicular mobility standard at 5.9 GHz. The PAR covers vehicle-to-vehicle communications and vehicle to roadside communications using a peer-to-peer network architecture.

Comments must in hard copy form and placed in the red envelop in the IEEE 802 office.

## Agenda for the Week

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

<http://iee802.org/16/meetings/mtg30/agenda.html>

## Task Groups

### TGd

Gordon Antonello, Chair, Task Group d

Itzik Kitroser, Editor

The development schedule was presented.

461 comments received

173 editorials received

202 technical non binding

83 technical binding

3 others

### TGe

Brian Kiernan, Chair

Shawn Taylor, Vice Chair

Ron Murias, Technical Editor

85% return rate on working group ballot and 68% approval, which has not yet passed since a 75% approval is required.

429 comments received

30 contributions

162 comments are editorial, the rest are technical

## Liaison

ITU-T SG9 supplied two liaison Statements: [IEEE L802.16-04/05](#) and [IEEE L802.16-04/06](#). This is the group that develops Cable TV standards.

The following four people volunteered to work with Roger on a response to ITU-T:

Ken Stanwood

Jeffery Mandin

DJ Johnston

Jim Mollenauer

ITU-R WP9B Input Statement: [IEEE L802.16-04/07](#). Remi Chayer stated that work in this group is just getting started.

It is appropriate that we consider having a liaison to the following groups: IEEE 802.18, 802.19, 802.21

## Future Sessions

### 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 (probably Sept 6-9): Indications of interest requested for decision at Closing Plenary.

Jose Costa proposes that ITU-R to host the meeting in Geneva. There is one room available for 150 people which can be divided as required. 30 August to 3 September is available right now.

Frank Draper proposes an interim on September 20-23 in Montreal

Panyuh Joo sent a proposal to host a meeting in Seoul the week of September 6<sup>th</sup> with some flexibility in times at the JW Marriott.

Shlomo Ovadia from Intel proposed a meeting in Israel at this time.

The session will be selected during the closing plenary.

## Working Group Officer Election

An election was held for Working Group Chair and Working Group Vice-Chair, following the procedure defined in IEEE 802.16-03/28 and using the ballot in IEEE 802.16-04/10. Only one candidate had declared candidacy for each of the two positions. No additional nominations were made. The results are as follows:

### Working Group Chair

Roger Marks received 64 votes.

### Working Group Vice-Chair

Ken Stanwood received 65 votes.

## Other Business

Philip Barber mentioned that there are some interests in studying the network side of the mobility equation. Philip would like to solve this issue by forming a new study group. There were some questions as to whether it would be best to work on this in the 802.16 WG or maybe within 802.21. Philip also mentioned that a number of operators would like to have communications between base stations.

The group should think about this and review the best strategy. We could form a study group in this area as a start.

Brian Johnson wanted to discuss possible future work with MIMO.

## Closing

Motion 3: Gordon Antonello, to adjourn the meeting 2<sup>nd</sup> Itzik Kitroser.

Motion 3: carries by unanimous voice vote.

The meeting was adjourned at 3:30 pm on 15 March 2004.



## Closing Plenary

### Opening

Chair Roger Marks called the meeting to order at 7:00 pm on 18 March 2004.

Motion 4: To move the closing plenary time to 9:00pm-midnight on 18 March 2004 Motion 4: carries by unanimous voice vote.

The meeting reconvened at 9:15pm.

### Agenda

Motion 5: John Dring To approve the agenda as presented, 2nd Baraa Al-Dabagh.

Motion 5: carries by unanimous voice vote.

### Task Group C

Chair: Ken Stanwood

Motion 6: Ken Stanwood, to forward [IEEE 802.16-04/08](#) ("RevCom Submittal of IEEE P802.16/Conformance03") to RevCom, 2<sup>nd</sup> John Dring

Motion 6: carries 34-0-0.

### Task Group 2

The new standard IEEE 802.16.2-2004 was published yesterday.

### IEEE 802.18 Regulatory TAG Issues

802.18 TAG Chair Carl Stevenson presented the 802.18 actions and motions.

Motion 7: To approve 18-04-0011-00-0000\_interference-temp-cmts.doc , authorizing the Chair of 802.18 to do necessary editorial and formatting changes and seek SEC approval as an 802 document, 2<sup>nd</sup> DJ Johnston.

Motion 7: carries 21-0-0.

Motion 8: To approve document 18-04-0012-00-0000\_cognitive-radio-cmts.doc , to do necessary editorial and formatting changes and seek SEC approval as an 802 document, 2<sup>nd</sup> DJ Johnston.

Motion 8: carries 21-0-0.

Motion 9: To approve contribution to ITU-R JRG 6-8-9 (L802.16-04/11), 2<sup>nd</sup> DJ Johnston.

Motion 9: carries 21-0-0.

### Task Group d

Chair: Gordon Antonello

Total of 462 comments resolved.

There were 47 technical binding comments remaining which cause a problem. DJ Johnston offered to resolve his comments. Roger Marks proposed that we would resolve this issue right now.

The group went through each of the 47 comments and asked each person if they are satisfied with the resolution.

Marianna Goldhammer is satisfied as long as an ad hoc committee is established as stated in Motion: 10.

Motion 10: To establish a working group ad hoc committee for a study of coexistence in licensed exempt bands. To appoint Marianna Goldhammer to chair this group. To instruct the ad hoc group to bring recommendations to the May 802.16 meeting, 2<sup>nd</sup> Tal Kaitz.

Motion 10: carries 23-16.

### **Sponsor Ballot Approval**

The following people changed their sponsor ballot vote from disapprove to approve.

Naftali Chayat

Marianna Goldhammer

David Johnston

Jonathan Labs

Tal Kaitz

Yossi Segal

Shawn Taylor

Vladimir Yanover

Cor van de Water – comment from Don Liemer which will be backed up via email from Cor

Motion 11: Gordon Antonello To accept IEEE 802/16-04/11r2 as the resolutions in the Sponsor B allot of P802.16-REVd/D3, develop Draft P802.16-REVd/D4 based on those resolutions, and initiate recirculation , 2<sup>nd</sup> Itzik Kitroser.

Motion 11: 64-0-0.

Motion 12: To request conditional approval from the LMSC EC to forward P802.15-REVd to RevCom, 2<sup>nd</sup> Jose P

Motion 12: 59-0-0.

### **Recirculation Guidelines**

Ken Stanwood reviewed a presentation on recirculation comment guidelines for Sponsor ballot.

To resolve comments by May 15<sup>th</sup>, Ken Stanwood recommends that we establish a ballot resolution committee to resolve comments offline via email or teleconference.

Roger Marks proposed that after the comments are collected, there would be a reply comment period open to the working group members and that the resolution ballot committee will review the comments that come in.

30 people volunteered (see list below) to be on the ballot resolution committee. Roger proposed to have all 30 people on the committee.

1. Lei Wang
2. Ron Murias
3. Naftali Chayat
4. Vladimir Yanover
5. Jon Labs
6. Don Leimer
7. Yossi Segal
8. Yigal Leiba
9. Brian Johnson
10. Panyuh Joo
11. Raja Banerjea
12. Aditya Agrawal
13. Tal Kaitz



14. Bob Nelson
15. Brian Eidson
16. David Castelov
17. Randall Schwartz
18. John Liebetreu
19. Baraa Al-Dabagh
20. Radu Selea
21. Avi Freedman
22. Changhoi Koo
23. Mark Cudak
24. Jeff Mandin
25. Eli Shasha
26. Shawn Taylor
27. Zion Hadad
28. Itzik Kitroser
29. Eli Avivi
30. Ken Stanwood

Motion 13: Yigal Leiba – that the Ballot Resolution group can only add and remove features based on 100% consensus, 2<sup>nd</sup> David Trinkwon.

Motion 13: fails 4-28

Roger Marks proposed an email process based on Commentary, with a Ballot Resolution Committee including all member of the WG.

Straw Poll

1. A vote by all members of the working group on the email database on the proposed resolution submitted by the commenter. If it is over 75% accept; if fewer than 40% reject. If in the middle, you have further discussion.
2. Have a resolution committee (30 people listed) that would propose the resolutions that will be voted by other members.
3. Proposed resolution by the members of the list, voted on by list, smaller than 30.
4. Interim meeting of the Working Group.

Poll results:

1. 25
2. 6
3. 17
4. 13

Phil Barber recommends that we select between #1 and #3  
#1 receives 29 #3 receives 12 votes.

Motion 14: Stanley Wang to allow the chair and vice-chair to work out a detailed plan based on proposal #1 - A vote by all members of the working group on the email database on the proposed resolution submitted by the commenter. If it is over 75% accept; if fewer than 40% reject. If in the middle, you have further discussion, 2<sup>nd</sup> Greg Philips.

Motion 14: carries 37-0-0.

Motion 15: Bob Nelson, to extend the closing plenary session until we are done. 2<sup>nd</sup> Phil Barber.

Motion 15: carries by non unanimous voice vote on the opinion of the chair.

## Task Group e

Chair: Brian Kiernan

429 comments were resolved.  
 Reviewed 29 contributions, 1 withdrawn  
 250 comments accepted  
 99 superceded  
 70 rejected primarily due to lack of text

Motion 16: Brian Kiernan, to accept IEEE 802.16-04/09r1 as the resolution of WG Ballot #14 comments, develop Draft P802.15e/D2-2004 based on these resolutions and initiate a recirculation to close on May 7, 2004, 2<sup>nd</sup> DJ Johnston.

Motion 16: carries 33-0-0.

Motion 17: Brian Kiernan, that the scope of the recirculation be increased to constitute the entire draft, 2<sup>nd</sup> Bob Nelson

Motion 17: carries 31-1-0.

Motion 18: DJ Johnston, to form a study group within 802.16 to study drafting a PAR or PARs forming an 802.16 task group or groups that will address 802.16 management and network infrastructure, 2<sup>nd</sup> Vladimir Yanover.

Motion 18: carries 46-0-0.

DJ Johnston was appointed to serve as chair of the study group mentioned in Motion 18.

## Liaison

Roger Marks appointed Mike Lynch to be the liaison to the 802.18 regulatory TAG and DJ Johnston as liaison to the 802.21 handoff WG.

Panyuh Joo presented two documents from TTA ( IEEE L802.16-04/09 and IEEE L802.16-04/10r1).

Roger Marks presented a draft a letter to TTA. (IEEE L802.16-04/12r1)

Motion 19: John Dring, to approve the liaison letter to TTA, 2<sup>nd</sup> Panyuh Joo.

Motion 19: carries 33-0-0.

The following group will volunteered to draft a response to ITU-R for review at the May meeting.

Greg Philips  
 Roger Marks  
 Jose Costa  
 Marianna Goldhammer  
 Remi Chayer  
 Mike Lynch

The following group volunteered develop a response to ITU-T.

Roger Marks  
 Ken Stanwood  
 Jim Mollenaur  
 Jeff Mandin  
 David Johnson  
 Andrew Afflerbach  
 Greg Philips

## Future Sessions <<http://ieee802.org/16/calendar.html>>

### 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

A straw poll showed about 50 people will attend this meeting.

Motion 20: Shawn Taylor, to authorize the working group to conduct business at session #31 with or without a quorum, 2<sup>nd</sup> Randall Schwartz

Motion 20: carries 31-0-0.

### 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

Seoul: proposed by Panyuh Joo. Any week of Sept is available but Sept 6-9<sup>th</sup> is penciled in right now.

Montreal: proposed by Frank Draper – September 20-23<sup>rd</sup>

Geneva: proposed by Jose Costa, August 30 to Sept 3<sup>rd</sup>.

Tel Aviv: proposed by Shlomo and Naftali Chayat – Sept 6<sup>th</sup> is a potential date.

Motion 21: Ron Murias, to open the straw poll to everyone registered and in the room 2<sup>nd</sup> Philip Barber.

Motion 21: carries by unanimous voice vote.

### Straw Poll #1

Seoul 35

Montreal 35

Geneva 27

Tel Aviv 28

### Straw Poll #2

Seoul 40

Montreal 36

Israel 24

### Straw Poll #3

Seoul 42

Montreal 39

Seoul wins the straw poll and is selected as the host of the IEEE 802.16 Session #33 meeting.

### 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 #30 Report. See Annex, and <<http://ieee802.org/16/meetings/mtg30/report.html>>.

## **Closing**

Motion 21: Bob Nelson, to adjourn the meeting, 2<sup>nd</sup> Greg Philips.

Motion 21: carries by unanimous voice vote.

The meeting was adjourned at on 19 March 1:49am 2004.

## **Attendance List: IEEE 802.16 Session #30 15-18 March 2004**

This is the attendance list for Session #30 (with 222 names, 180 of which are granted participation credit):

<b>"Participated"*</b>	<b>Name \Given</b>	<b>Name\Family</b>	<b>Company</b>	<b>City</b>	<b>State \Province</b>	<b>Country</b>
Yes	Jon	Adams	Motorola Inc.			USA
No	Andrew	Afflerbach	Columbia Telecommunications Corp.	Columbia	MD	USA
Yes	Edward	Agis	Intel Corp.	Hillsboro	OR	USA
Yes	Aditya	Agrawal	Fujitsu Microelectronics	Cupertino	CA	USA
Yes	Baraa	Al-Dabagh	Intel Corp.	San Jose	CA	USA
Yes	Mario	Aliotta	Siemens			Italy
No	Asher	Altman	Intel Corp.			USA
Yes	Dov	Andelman	Envara Ltd.			Israel
Yes	Gordon	Antonello	Wi-LAN Inc.	Calgary	AB	Canada
No	Mikio	Aoki	TRDA, Inc.			USA
Yes	Sanjeev	Athalye	QUALCOMM Inc.	San Diego	CA	USA
Yes	Eli	Avivi	WaveIP Ltd.	Yokneam		Israel
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	Gautam	Batta	Hellosoft			USA
Yes	Kevin	Baum	Motorola Inc.			USA
Yes	Izhar	Bentov				USA
Yes	Roger	Bertschmann	SiWorks Inc.			Canada
Yes	Rajesh	Bhalla	ZTE San Diego	San Diego	CA	USA
No	Neeloy	Bhattacharyya	Cable TV Tech.			USA
Yes	Simon	Brand	Philips			USA

Yes	Dale	Branlund	BeamReach Networks, Inc.			USA
Yes	Jamie	Bumsted	Everttek, Inc.			USA
Yes	Jean-pierre	Burvenich	Belgacom			Belgium
Yes	Sean	Cai	ZTE San Diego			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
Yes	Jae-Hwan	Chang	Samsung Electronics Co., Ltd.	Suwon-si	Gyeonggi-do	Korea
Yes	Yong	Chang	Samsung Electronics Co., Ltd.	Suwon-si	Gyeonggi-do	Korea
Yes	Naftali	Chayat	Alvarion Ltd.	Tel Aviv		Israel
Yes	Rémi	Chayer	Harris Corporation	Dollard-des-Ormeaux	PQ	Canada
Yes	Tao	Chen	Qualcomm Incorporated	San Diego	CA	USA
Yes	Aik	Chindapol	Siemens	Princeton	NJ	USA
Yes	Jaeweon	Cho	Samsung			Korea
Yes	Seokheon	Cho	ETRI	Daejeon		Korea
Yes	Hyoung-Jin	Choi	TTA	Seongnam city		Korea
Yes	Joey	Chou	Intel Corp.	Chandler	AZ	USA
No	Gerald	Chouinard	Communications Research Centre			Canada
Yes	Jin Yong	Chung	SOLiD Technologies	Seoul		Korea
No	Charles	Cook	Qwest	Denver	CO	USA
Yes	José	Costa	Nortel Networks	Ottawa	ON	Canada
No	Steven	Crowley	DoCoMo USA Labs	Washington	DC	USA
Yes	Mark	Cudak	Motorola, Inc.	Schaumburg	IL	USA
Yes	Francois (Frank)	Draper	Wavesat Wireless, Inc.	Ville St-Laurent (Montreal)	PQ	Canada
No	John	Dring	Consultant	San Jose	CA	USA
Yes	Lester	Eastwood	Motorola, Inc.	Schaumburg	IL	USA

Yes	Brian	Eidson	Conexant Systems, Inc.	San Diego	CA	USA
Yes	Carl	Eklund	Nokia	Helsinki		Finland
Yes	Yigal	Eliaspur	Intel Corp.			Israel
Yes	Roger	Eline	Intel Corp.	San Jose	CA	USA
Yes	Oren	Elkayam	Runcom Technologies Ltd.			Israel
Yes	Javier (Harvey)	Espinoza	TDK Corporation of America			USA
Yes	Kamran	Etemad	Nexius Wireless Inc.			USA
Yes	Peretz	Feder	Lucent Technologies			USA
No	Reed	Fisher	Oki America, Inc.	Suwanee	GA	USA
Yes	Mo-Han	Fong	Nortel Networks			Canada
Yes	Bogdan	Franovici	Redline Communications Inc.	Markham	ON	Canada
Yes	Avraham	Freedman	Hexagon System Engineering Ltd.	Petah-Tikva		Israel
Yes	Vladimir	Friedman	Analog Devices Inc.			USA
No	Joseph	Garodnick				USA
No	Andrew	Germano	Xtrove			USA
No	Marianna	Goldhammer	Alvarion Ltd.	Tel Aviv		Israel
Yes	Reza	Golshan	Fujitsu Microelectronics	Sunnyvale	CA	USA
No	John	Graham	picoChip			USA
Yes	Ole	Grondalen	Telenor	Fornebu		Norway
Yes	Qiang	Guo	Motorola, Inc.	Libertyville	IL	USA
Yes	Zion	Hadad	Runcom Technologies Ltd.	Rishon Le Zion		Israel
Yes	Yung	Hahn	Intel Corp.	Hillsboro		USA
No	Neil	Hamady	Bermai, Inc.			USA
Yes	Jun	Han	ZTE San Diego			USA
No	Chris	Hansen	Intel Corp.			USA
Yes	John	Haskin	Microsoft	Redmond	WA	USA
No	Michael	Hoghooghi	Motorola Inc.			USA
Yes	Christian	Hoymann	RWTH Aachen	Aachen		Germany
Yes	Seung Ku	Hwang	ETRI			Korea

Yes	Prakash	Iyer	Intel Corp.		OR	USA
No	Young Man	Jang	Daesung New Tech			Korea
No	Moo Ryong	Jeong	DoCoMo USA Labs	San Jose	CA	USA
Yes	Clarence	Joh	Agere			USA
Yes	Brian	Johnson	Nortel Networks	Germantown	MD	USA
No	David	Johnston	Intel Corporation	Hillsboro	OR	USA
Yes	Panyuh	Joo	Samsung Electronics Co., Ltd.	Sungnam	KYUNGGI	Korea
Yes	Tal	Kaitz	Alvarion Ltd.	Tel Aviv		Israel
Yes	Ofer	Kelman	Airspan Networks (Israel) Ltd.	Lod		Israel
Yes	Adam	Kerr	ArrayComm, Inc.	San Jose	CA	USA
Yes	Brian	Kiernan	InterDigital Communications Corp	King of Prussia	PA	USA
No	Byoung-jo	Kim	AT&T			USA
No	Edward	Kim	TeleCIS Wireless Inc.			USA
Yes	Jeonghwi	Kim	Korea Telecom			Korea
Yes	JungWon	Kim	Samsung			Korea
Yes	Yeong-jin	Kim	ETRI			Korea
Yes	Yong-Bum	Kim	KT Corporation	Sungnam-City		Korea
Yes	YoungKyun	Kim	Samsung			Korea
No	Takuya	Kitamura	Fujitsu			USA
Yes	Itzik	Kitroser	Runcom Technologies Ltd.	Rishon Le Zion		Israel
No	Todd	Konstan	Siemens			USA
Yes	Changhoi	Koo	Samsung Electronics Co., Ltd.	Suwon-si	Gyeonggi-do	Korea
Yes	Havish	Koorapaty	Ericsson			USA
Yes	Lalit	Kotecha	BeachReach Networks	Sunnyvale	CA	USA
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	Ming-yee	Lai	Telcordia			USA
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	Sang-ho	Lee	ETRI			Korea
Yes	Seong-Choon	Lee	KT Corporation	Seoul		Korea
Yes	Yigal	Leiba	Runcom Technologies Ltd.	Rishon Lezion		Israel
Yes	Donald	Leimer	Proxim	Rancho Palos Verdes	CA	USA
Yes	Barry	Lewis	Redline Communications Inc.	Lightwater	Surrey	UK
No	John	Ley	Motorola, Inc.			USA
Yes	Lingjie	Li	Redline Communications Inc.	Markham	ON	Canada
Yes	Xiaodong (Alex)	Li	Walbell Technologies, Inc.	Seattle	WA	USA
Yes	John	Liebetreu	Intel Corp.	Chandler	AZ	USA
Yes	Geunhwi	Lim	Samsung Electronics Co., Ltd.			Korea
Yes	Hyoungsoo	Lim	ETRI	Daejeon		Korea
Yes	Yong Je	Lim	Samsung Electronics Co., Ltd.	Yongin-City	Gyeonggi-do	Korea
Yes	Erik	Lindskog				USA
No	Valentino	Liva	EuramNet, LLC			USA
Yes	Titus	Lo	Walbell Technologies, Inc.	Bellevue	WA	USA
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Yes	Martin	Lysejko	Airspan Networks Inc.	Uxbridge	Middlesex	UK
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Yes	David	Maez	Navini Networks	Richardson	TX	USA
Yes	Jeffrey	Mandin	Streetwaves Network Consulting	Jerusalem		Israel
Yes	Kevin	Mankin	Theta Microelectronics, Inc.	San Jose	CA	USA
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Yes	Russell	McKown	MacPhy Modems	Richardson	TX	USA
Yes	Scott	Migaldi	Motorola, Inc.	Schaumburg	IL	USA
Yes	Henry	Mitchel	Intel Corp.			USA
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Yes	James	Mollenauer	Technical Strategy Associates	Newton	MA	USA
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Yes	Fumio	Murakami	Japan Radio Co., Ltd.			Japan
Yes	Ronald	Murias	Wi-LAN Inc.	Calgary	AB	Canada
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Yes	Nam hoon	Park	ETRI			Korea
Yes	Pyung-su	Park	Hanaro Telecom Inc.	Goyang-si	Gyeonggi-do	Korea
Yes	Soon-Joon	Park	LG Electronics Inc.			Korea
Yes	Youn ok	Park	ETRI			Korea
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Yes	Rainer	Ullmann	Wavesat Wireless, Inc.	Ville St-Laurent (Montreal)	PQ	Canada
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Yes	Chulsik	Yoon	ETRI	Daejeon		Korea
Yes	Soon Young	Yoon	Samsung			Korea
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Yes	Mi Young	Yun	ETRI			Korea
Yes	Peiying	Zhu	Nortel Networks			Canada

\*Session #30 "participation" credit was granted to those participating in six of the eight session intervals, provided that registration fees were paid.

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# The IEEE 802.16 Working Group on Broadband Wireless Access Standards

## IEEE 802.16 Members

**Update: 24 March 2004**

Number of members: 90

Next scheduled update: following Session #32

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- [Acquiring and Retaining IEEE 802.16 Membership](#)
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*Ian	McCallum	Intel Corp.	Vaughan	ON	Canada
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Ronald	Murias	Wi-LAN Inc.	Calgary	AB	Canada
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Greg	Phillips	AirRunner Technologies, Inc	Zephyr Cove	NV	USA
Kamlesh	Rath	Siemens	Berkeley	CA	USA
*Andrew	Sago	BT Exact	Ipswich	Suffolk	UK
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Randall	Schwartz	Intel Corp.			USA
Yossi	Segal	Runcom Technologies Ltd.	Rishon Le Zion		Israel
Radu	Selea	Redline Communications Inc.	Markham	ON	Canada
*Mohammad	Shakouri	Alvarion Ltd.	San Jose	CA	USA
*N.K.	Shankaranarayanan	AT&T Labs	Florham Park	NJ	USA
*Eli	Shasha	Consulting			Israel
James	Simkins	Xilinx	Salt Lake City	UT	USA
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Kenneth	Stanwood	Ensemble Communications	San Diego	CA	USA
Carl	Stevenson	Agere Systems	Allentown	PA	USA
Shawn	Taylor	Wi-LAN Inc.	Calgary	AB	Canada
David	Trinkwon	Medley Systems Ltd	Maidenhead	Berks	UK

Rainer	Ullmann	Wavesat Wireless, Inc.	Ville St-Laurent (Montreal)	PQ	Canada
Eyal	Verbin	Airspan Networks Inc.	Airport City		Israel
Lei	Wang	Wi-LAN Inc.	Calgary	AB	Canada
Stanley	Wang	CyberTAN Technology, Inc.	Hsinchu		Taiwan
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Choong-il	Yeh	ETRI	Deajeon		Korea
*Kunmin	Yeo	ETRI	Daejeon		Korea
Chulsik	Yoon	ETRI	Daejeon		Korea

\*Membership newly attained at Session #30.

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## IEEE 802.16 Session #30 Report



### Summary

Session #30 of the IEEE 802.16 Working Group on Broadband Wireless Access took place on 15-18 March 2004 in Orlando, FL, USA, along with the IEEE 802 Plenary Session. The site was the Hilton in the Walt Disney World Resort. The attendance of 221 people, almost double that of the previous Plenary Session, broke the 802.16 record of 212, set at Session #10. Working Group membership grew from 65 to 90. In spite of the growth, broad consensus emerged on major issues.

### Revision of IEEE Standard 802.16 Passes Sponsor Ballot, pending Recirculation

IEEE P802.16-REVd, a comprehensive draft revision of IEEE Standard 802.16 ("Air Interface for Fixed Broadband Wireless Access Systems") and its two amendments, completed Sponsor Ballot before Session #30. Following comment resolution during the session, only one disapprove vote remained. The 802 LMSC EC agreed, conditionally, to forward the draft for IEEE-SA approval. The Working Group intends to submit the draft in May, following recirculation. Once approved, the document will be published as IEEE Standard 802.16-2004 and will replace IEEE Standards 802.16-2001, 802.16c-2002, and 802.16a-2003.

### Mobile WirelessMAN (P802.16e) Draft Finishes Working Group Letter Ballot

A Working Group Letter Ballot was completed regarding IEEE P802.16e/D1, the first draft of the enhancement of the WirelessMAN air interface to support mobile as well as fixed users. During the session, comments were resolved. Since the ballot concluded successfully, a recirculation of comments will be initiated.

### Progress on Four Conformance Standards

The 802 LMSC EC forwarded P802.16/Conformance03 ("Radio Conformance Tests for 10-66 GHz WirelessMAN-SC Air Interface") for IEEE-SA approval, after unanimous support in Sponsor Ballot. This will be the third in the IEEE 802.16 series of conformance documents. A PAR to draft the fourth document in the series, P802.16/Conformance04 (PICS Proforma for frequencies below 11 GHz), was

approved by the IEEE-SA Standards Board on 25 March. The second standard in the series was published as [IEEE Standard P802.16/Conformance02](#) on 25 Feb 2004. The first, [IEEE Standard P802.16/Conformance01](#), became available for free download from the [Get IEEE 802](#) program.

### **Revised Recommended Practice on Coexistence Published**

On 17 March 2004, IEEE published [IEEE Standard 802.16.2-2004](#) ("IEEE Recommended Practice for Local and metropolitan area networks - Coexistence of Fixed Broadband Wireless Access Systems"). This is a revision of IEEE Standard 802.16.2-2001. 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.

### **New Network Management Study Group**

The 802 LMSC EC affirmed a decision by the Working Group to create the 802.16 Network Management Study Group, chaired by [David Johnston](#). This group is expected to draft one or more PARs requesting authorization to initiate new standardization activities.

### **Ad Hoc Committee on Licensed-Exempt Coexistence**

The Working Group created an Ad Hoc Committee on Licensed-Exempt Coexistence, chaired by [Marianna Goldhammer](#). This group will provide the Working Group with recommendations regarding the advisability of initiating standardization in this area.

### **Working Group Officers Re-Elected**

The Working Group re-elected its Chair, [Roger Marks](#), and its Vice Chair, [Ken Stanwood](#), for an additional two-year term. Both elections were uncontested and unanimous.

### **Working Group Liaison Activities**

- The WG approved a [liaison statement to TTA PG05](#) in response to an [input statement](#) and [technical report](#) from that group, which is addressing portable Internet service (PIS) in Korea.
- Liaison statements from [ITU-T](#) and [ITU-R](#) were reviewed, and plans for responding to them were developed.

### **Documents**

The [Session #30 document list](#) includes references to over 170 session documents.

### **Minutes and Motions**

The Working Group minutes will be available as [IEEE 802.16-04/16](#). Significant motions drafted for presentation at the Closing Plenary are embedded in the [Closing Plenary Agenda](#). All of the Working Group's [requests at the 802 LMSC Executive Committee meeting of 18 March](#) were approved.

## Future Meetings

- IEEE 802.16's [Session #31](#) will take place in Shenzhen, China on 17-20 May 2004. ZTE Corporation is the host company.
- IEEE 802.16's [Session #32](#) will take place in Portland, OR, USA on 12-15 July 2004 in conjunction with the [IEEE 802 Plenary Session](#).
- A decision was made to hold IEEE 802.16's [Session #33](#) in Seoul, Korea in September 2004. The site selection process also considered proposals to hold the session in Montreal, Canada; Geneva, Switzerland; and Tel Aviv, Israel. Seoul was chosen based on a [hosting proposal by Samsung Corporation](#).

## **About IEEE 802.16**

The [IEEE 802.16 Working Group on Broadband Wireless Access Standards](#) has developed and is enhancing the **WirelessMAN**<sup>TM</sup> Standard for wireless metropolitan area networks. IEEE 802.16 is a unit of the [IEEE 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 IEEE 802.16 Working Group, this report was drafted and edited (30 March 2004 edition) by:

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See also [IEEE 802.16 Session #30 Page](#)