

|                              |   |   |
|------------------------------|---|---|
| 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 #39</b>   |   |
| Date Submitted               | <b>2005-10-18</b>   |   |
| Source(s)                    | Dean S.K. Chang<br>Aperto Networks  | Voice: +1 408-719-9977<br><a href="mailto:dchang@apertonet.com">mailto:dchang@apertonet.com</a> |
| Re:                          | IEEE 802.16 Session #39 Minutes (Taipei, Taiwan)  |   |
| Abstract                     |   |   |
| Purpose                      | To record minutes of the IEEE 802.16 Working Group's Opening and Closing Plenary meetings.  |   |
| 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 #39

IEEE 802.16 Working Group

Taipei, Taiwan

12-15, September 2005

## Opening Plenary

### Call to Order

Roger Marks called the meeting to order at 1:08 pm on 12 September 2005.

### IEEE 802.16 Working Group Officers

Chair: Roger Marks

Vice Chair: Ken Stanwood

Secretary: Dean Chang

### Attendance

Attendance Sign-In procedure:

Attendance Intervals: 9 [Mon pm; Mon night; Tue am; Tue pm; Wed am; Wed pm; Thu am; Thu pm; Thu night]

"Participation" Requirement: 7 intervals

No Attendance Books; electronic only.

Attendance credit not granted without on-line registration.

Attendance credit not granted for participation in meeting of other Working Groups at interim sessions.

### Agenda

Motion1: Phillip Barber, To approve the Opening Plenary Agenda on the 802.16 web site, 2nd Jose

Motion 1: approved by unanimous vote.

See <http://ieee802.org/16/meetings/mtg39/opening.html>

Motion 2: Ron Murias, To approve the minutes of Session #38 (IEEE 802.16-05/054), 2<sup>nd</sup> Frank Draper.

Motion 2: approved by unanimous voice vote.

### Announcements

#### *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 responses were given regarding this announcement.

## TGe

Brian Kiernan, Chair

Ron Murias, Technical Editor

The group needs to complete new draft D11 for recirculation before midnight tonight.

See opening report IEEE 802.16e-05/019 for more details.

P802.16e/D10 Sponsor Ballot Recirculation completed

141 votes received

133 Approve

8 Disapprove

94.3% Affirmative

Sponsor Ballot Recirculation comments recorded in database 802.16-05/064r3

151 Comments (including 4 late)

62 Editorial

34 Technical, Binding

54 Technical, Non Binding

1 Coordination

5 contributions received during ballot recirculation

Goal is to complete comment resolution before 5pm today.

## Maintenance Task Group

Jon Labs, Chair

Itzik Kitroser, Editor

Assistant Editor: Marcos Vasconcellos

Ballot results 141 approve 89% approval rating

10 Disapprove

7 Abstain

168 Ballots

Motion 3: To authorize To authorize TG Maintenance to accept on behalf of the WG the resolutions of comments from Sponsor Ballot Recirc 0001073, as will be recorded in IEEE 802.16-05/065r4, to develop Draft P802.16-2004/Cor1/D5 based on those resolutions, and authorize the request to initiate a Confirmation Sponsor Ballot"2<sup>nd</sup> Rainer Ullman

Motion 3: carries by unanimous voice vote

## Recess

Motion 4: Ken Stanwood, to recess the plenary until 10am tomorrow, 2<sup>nd</sup> Lei Wang.  
 Motion 4: carries by unanimous voice vote.

## Reopening

The meeting was called to order on Tuesday 13, September 2005 at 10:10am.

The agenda was described as follows: an update from each task group, review of future sessions, and liaison activity.

## Maintenance Task Group

Jon Labs, Chair  
 Itzik Kitroser, Editor  
 Assistant Editor: Marcos Vasconcellos

See closing report IEEE 802.16maint-05/023 for details.

80216-05/065r4:

Total: 57                      Late: 5

Technical (binding): 8

Technical (nonbinding): 26

Editorial: 18

Coordination: 1

Accepted/Accepted-Modified: 45

Rejected: 4

Superseded: 5

Withdrawn: 3

All comments were reviewed in the meeting.

Motion 5: to request that P802.15-2004/Cor1/D5 be submitted to RevCom for early consideration, 2<sup>nd</sup> Arthur Wang  
 Motion 5: carries by unanimous voice vote.

## TGe

Brian Kiernan, Chair  
 Ron Murias, Technical Editor

See closing report in IEEE 802.16e-05/020r1 for details.

147 comments submitted in Ballot recirculation

6 late comments during comment resolution

Received 5 contributions prior to meeting, 2 during meeting

All on time and late comments and associated contributions were resolved – results are recorded in comment database 802.16-05/064r4

Accepted about 97% of the comments. Only 3 were rejected.

Motion 6: To request that P802.16e/D11 be submitted to RevCom for early consideration, 2<sup>nd</sup> Panyuh Joo.  
 Motion 6: carries by unanimous voice vote.

## Network Management Task Group

Chair: Phillip Barber

Opening agenda details in IEEE 802.16netman-05/016r1.

The current work is now in 802.16g. Due to the work load, the group will not even meet on Thursday.

## Network Management Task Group

Chair: Gordon Antonello

802.16/Conformance04 completed WG Letter Ballot Recirc #18b. The group received 9 comments, 8 technical binding and 1 technical non-binding. The approval ratio has fallen below the 75% minimum.

## License-Exempt Task Group

Mariana Goldhamer, Chair

See agenda IEEE 802.16h-05/019.

The group is now working on coexistence. A number of contributions were received and will be reviewed by the group.

Roger Marks observed that he has heard discussions about security in this project and commented that it is not obvious that security is within scope of the PAR. He requested a presentation to review this scope issue at the closing plenary meeting.

## Mobile Multi-hop Relay Study Group

Mitsuo Nohara, Chair

About 9 contributions were received and will be reviewed during the meetings.

Straw Poll count of the intended participation at the various meetings for Wed morning

|             |    |
|-------------|----|
| NetMan      | 45 |
| Relay       | 99 |
| Conformance | 4  |

On this basis, rooms were assigned.

Straw Poll of people going to the Licensed Exempt Task Group

Licensed Exempt Task Group 19

## Liaison

### ***IETF***

Jeff Mandin, IETF liaison official, reported

IETF EAP completed a 2<sup>nd</sup> review of 802.16e. A number of security suggestions were made, and most were implemented in the 802.16e draft. A letter from IETF to the WG was reviewed (IEEE L802.16-05/050). A draft will be prepared at the Closing Plenary.

## Future Sessions

Session #40: 14-17 November 2005: Fairmont Hotel Vancouver, Vancouver, BC, Canada

Session #41: 9-12 January 2006: New Delhi, India Hosted by Aditya Agrawal of Beceem Communications

Straw Poll as to how many people will attend the January meeting – 93. How many people do not expect to be at the meeting in New Delhi – 1. Many are undecided.

Session #42: March 2006, with IEEE 802 Plenary Session. Originally scheduled for 13-16 March in New Orleans, LA, USA. Tentatively being planned for a week earlier in Denver at the new Hyatt Regency.

Session #43: Proposal of Naftali Chayat to hold Session #43 in Israel during May, sponsored by Alvarion, was accepted during Session #38.

Location Preference Straw Poll:

Tel Aviv – 46

Eilat - 23

Session #45; site to be determined during Session #40

Session #45 proposals solicited.

## Closing

Motion 7: Phillip Barber, to adjourn the Opening Plenary meeting 2<sup>nd</sup> Greg Phillips

Motion 7: carries by unanimous voice vote.

The meeting was adjourned at 11:50am on 13, September 2005.

## Closing Plenary

### Call to Order

Roger Marks called the meeting to order at 7:05 pm, 15 September 2005.

## IEEE 802.16 Working Group Officers

Chair: Roger Marks

Vice Chair: Ken Stanwood

Secretary: Dean Chang

## Agenda

See <http://ieee802.org/16/meetings/mtg39/closing.html>

Motion 8: Frank Draper, to approve the Closing Plenary Meeting Agenda as presented, 2<sup>nd</sup> Carl Eklund.

Motion 8: carries by unanimous voice vote.

## TGe

Brian Kiernan, Chair

Motion 9 (Brian Kiernan): To authorize the Working Group and Task Group chairs to resolve any comments received during the 802.16e Sponsor Ballot Recirculation, 2<sup>nd</sup> Carl Eklund.

Motion 9: carries 38-0-0.

## Maintenance Task Group

Jon Labs, Chair

Itzik Kitroser, Editor

Assistant Editor: Marcos Vasconcellos

Motion 10 (Jon Labs): To authorize the Working Group and Task Group Maintenance chairs to resolve any comments received during the 802.16-2004/Cor1 Sponsor Ballot Recirculation, 2<sup>nd</sup> Phillip Barber.

Motion 10: carries 36-0-0.

## Network Management Task Group

Chair Phillip Barber

See closing report (IEEE 802.16netman-05/017) for details.

There were 20 comments and 9 contributions to NetMan regarding 802.16g. All were resolved.

Continued development on the Mobile MIB PAR and 5 criteria.

Discussed the IETF Liaison Letter on Security.

The group reviewed the proposed Mobile MIB PAR in C802.16g-05/051r1.

Motion 11: To authorize the WG and NetMan Task Group chairs to finalize preparation and forward to EC and NesCom, a PAR based on 802.16g-05/051r2, 2<sup>nd</sup> Jose Puthenkulam note: 802.16g-05/051r2 to be constructed from 802.16g-05/051r1 based on revisions presented

Motion 11: carries 40-0-0.

## Conformance Task Group

Gordon Antonello, Chair

See closing report (IEEE 802.16C-05/005r1) for details.

All 9 comments received during WG Letter Ballot Recirc #18b were resolved.

Motion 12: To accept IEEE 802.16-05/066r1\* as the resolution of Letter Ballot #18b, 2<sup>nd</sup> Phillip Barber.

Motion 12: carries by unanimous voice vote

Motion 13: To adopt a Working Group draft P802.16Conf04/D4, to be created from IEEE P802.16Conf04/D3 and applying the comment resolutions in IEEE 802.16-05/066r1; and to initiate Working Group Letter Ballot recirculation #18c”, 2<sup>nd</sup> Ed Agis.

Motion 13: carries by unanimous voice vote.

[\*Note: The comment resolution document was misnumbered. It has been renumbered as IEEE 802.16-05/075r1.]

## License-Exempt Task Group

Mariana Goldhamer, Chair

See the closing report (IEEE 802.16h-05/021r1) for details.

7 contributions were reviewed.

Ms. Goldhamer offered an explanation of why the TG is addressing security issues.

## Mobile Multi-hop Relay Study Group

Mitsuo Nohara, Chair

See the closing report (IEEE 802.16mmr-05/020r1) for details.

16 contributions were reviewed.

Some discussion was held about developing a PAR and 5 Criteria. A call for contributions will be issued for this shortly.

## Liaison

### *IETF EAP*

Phillip Barber

IETF Review of IEEE P802.16e/D10 (IEEE L802.16-05/050) was discussed. Mr. Barber presented a response, drafted by Jeff Mandin. It was reviewed by the working group.

Motion 14: To approve the liaison document IEEE L802.16-05/051, subject to editorial revision, 2<sup>nd</sup> Jose Puthenkulam.

Motion 14: carries 38-0-0.

### *Letter to Host*

A thank you letter will be developed to the hosts of this meeting.

Suggestions that should be included in the letter:

The Hotel and facilities were excellent



Poolside Party  
Great food and lots of it  
The coffee was available all the time.

Roger will develop the letter and distribute it to the Hosts. No objections were made for Roger to develop this letter.

### ***Letter to BUPT***

This letter (IEEE L802.16-05/052) was proposed to be sent to Prof. Liu Yuan An.

In response to presentation of the letter, no objections were raised.

## **Future Sessions**

Session #40: 14-17 November 2005: Fairmont Hotel Vancouver , Vancouver, BC, Canada

Session #41: 9-12 January 2006: New Delhi, India. Hosted by Aditya Agrawal, Beceem Communications.

Session #42: March 2006, with IEEE 802 Plenary Session. Originally scheduled for 13-16 March in New Orleans, LA, USA. Tentatively being planned for a week earlier in Denver at the new Hyatt Regency.

Session #43: Proposal of Naftali Chayat to hold Session #43 in Israel during May, sponsored by Alvarion, was accepted during Session #38.

Session #45: site to be determined during Session #40. Proposals solicited. Frank Draper suggested Mont Tremblant, Canada and expects to formally propose it.

## **Publicity**

Chair is authorized to prepare a Session #39 Report with no objection from the working group.

## **Closing**

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

Motion 15: carries by unanimous voice vote.

The meeting was adjourned at pm on 9:31pm on 15 September 2005.

## **Registration List: IEEE 802.16 Session #39**

### **12-15 September 2005 in Taipei, Taiwan**

Updated 2005-10-06 to show 224 attendees, including 173 with "participation" credit..

| <b>Participation Credit</b> | <b>Name\Given</b> | <b>Name\Family</b> | <b>Company</b>                   | <b>City</b>             | <b>State\Province</b> | <b>Country</b> |
|-----------------------------|-------------------|--------------------|----------------------------------|-------------------------|-----------------------|----------------|
| Yes                         | Ray               | Abrishami          | Fujitsu Microelectronics America | Sunnyvale               | CA                    | USA            |
| Yes                         | Edward            | Agis               | Intel Corp.                      | Newbury Park            | CA                    | USA            |
| No                          | Aditya            | Agrawal            | Beceem Communications            | Santa Clara             | CA                    | USA            |
| No                          | Jonathan          | Agre               | Fujitsu Laboratories of America  | College Park            | MD                    | USA            |
| Yes                         | Murtaza           | Ali                | Texas Instruments                | Dallas                  | TX                    | USA            |
| Yes                         | Gordon            | Antonello          | Wi-LAN Inc.                      | Calgary                 | AB                    | Canada         |
| Yes                         | Masahito          | Asa                | Motorola Japan Ltd.              | Tokyo                   |                       | Japan          |
| Yes                         | Sanjeev           | Athalye            | Qualcomm Inc.                    | San Diego               | CA                    | USA            |
| No                          | Malik             | Audeh              | Tropos Networks                  | Sunnyvale               | CA                    | USA            |
| No                          | Sung Kwan         | Baek               | Posdata                          | Seoul                   | Gyeonggi-do           | Korea          |
| Yes                         | Phillip           | Barber             | Huawei                           | Frisco                  | TX                    | USA            |
| Yes                         | Izhar             | Bentov             | Adavcom                          | San Diego               | CA                    | USA            |
| Yes                         | Rajesh            | Bhalla             | ZTE Communications               | San Diego               | CA                    | USA            |
| Yes                         | Eyal              | Bick               | Intel                            |                         |                       | Israel         |
| Yes                         | Yigal             | Bitran             | Altair                           | Tel Aviv                |                       | Israel         |
| Yes                         | Eckard            | Bogenfeld          | Deutsche Telekom                 | Darmstadt               |                       | Germany        |
| Yes                         | Sean              | Cai                | ZTE Communications               | San Diego               | CA                    | USA            |
| Yes                         | Jim               | Carlo              | Consultant (for Huawei)          | Dallas                  | TX                    | USA            |
| Yes                         | Giulio            | Cavalli            | Siemens Mobile Communication     | Cassina de' Pecchi (MI) |                       | Italy          |
| Yes                         | Jaesun            | Cha                | ETRI                             | Daejeon                 |                       | Korea          |
| Yes                         | Chung             | Chang              | RedDot Wireless Inc              | Milpitas                | CA                    | USA            |

|     |               |           |   |                     |             |        |
|-----|---------------|-----------|---|---------------------|-------------|--------|
| Yes | David         | Chang     | Telways<br>Communication<br>Co., Ltd.                             | Taipei              |             | Taiwan |
| Yes | Dean          | Chang     | Aperto Networks   | Milpitas            | CA          | USA    |
| Yes | Jae Hwan      | Chang     | Samsung<br>Electronics  | Suwon-si            | Gyeonggi-do | Korea  |
| Yes | Jim           | Chao      | Lucent<br>Technologies  | Naperville          | IL          | USA    |
| Yes | Naftali       | Chayat    | Alvarion Ltd.   | Tel Aviv            |             | Israel |
| Yes | Rémi          | Chayer    | Wavesat Inc.  | Dorval              | PQ          | Canada |
| Yes | Allen         | Chen      | Cameo<br>Communications,<br>INC.                                  | Taipei              |             | Taiwan |
| No  | Brian YinJen  | Chen      | Fujitsu<br>Microelectronic<br>Pacific Asia Ltd.,<br>Taiwan Branch | Taipei              |             | Taiwan |
| No  | Dennis        | Chen      | Foxconn   | Hsinchu             |             | Taiwan |
| Yes | Jennifer      | Chen      | ZTE San Diego   | San Diego           | CA          | USA    |
| No  | Jiunn-Tsair   | Chen      | ITRI/CCL  | Chutung,<br>Hsinchu |             | Taiwan |
| Yes | Ren-Jr        | Chen      | Industrial<br>Technology<br>Research Institute                    | Hsinchu             |             |        |
| No  | Sau-Gee       | Chen      | National Chiao<br>Tung University                                 | Hsinchu             |             | Taiwan |
| Yes | Shih-I        | Chen      | Institute for<br>Information<br>Industry                          | Taipei              |             | Taiwan |
| Yes | Yuehua (Lucy) | Chen      | Huawei<br>Technologies Co.,<br>Ltd.                               | Beijing             |             | China  |
| Yes | Ray-Guang     | Cheng     | National Taiwan<br>University of<br>Science and<br>Technology     | Taipei              |             | Taiwan |
| Yes | Tony          | Chi       | Delta Networks,<br>Inc.   | Taipei              |             | Taiwan |
| Yes | Aik           | Chindapol | Siemens   | Princeton           | NJ          | USA    |
| Yes | Hua (Mary)    | Chion     | ZTE<br>Communications   | San Diego           | CA          | USA    |

|     |             |             |  |                  |             |                 |
|-----|-------------|-------------|--|------------------|-------------|-----------------|
| Yes | Jaehee      | Cho         | Samsung Electronics                    | Suwon            | Gyeonggi-do | Korea           |
| Yes | Jaeweon     | Cho         | Samsung Electronics                    | Suwon            | Gyeonggi-do | Korea           |
| Yes | Kihyoung    | Cho         | LG Electronics Inc.                    | Anyang           | Gyeonggi-do | Korea           |
| Yes | Chie Ming   | Chou        | ITRI                                   | Hsinchu          |             | Taiwan          |
| Yes | Hunglin     | Chou        | ITRI                                   | Hsinchu          |             | Taiwan          |
| Yes | Joey        | Chou        | Intel Corp.                            | Chandler         | AZ          | USA             |
| Yes | Thomas      | Cook        | Troicom Inc.                           | Tustin           | CA          | USA             |
| No  | Mark        | Cudak       | Motorola Inc.                          | Schaumburg       | IL          | USA             |
| No  | George      | Cummings    | Motorola                               | Chandler         | AZ          | USA             |
| Yes | Shujun      | Dang        | Huawei Technologies                    | Beijing          |             | China           |
| Yes | Roy Thomas  | Derryberry  | Nokia                                  | Irving           | TX          | USA             |
| No  | Wim         | Diepstraten | Motorola                               | Nieuwegein       | Utrecht     | The Netherlands |
| Yes | Frank       | Draper      | Wavesat                                | Dorval           | PQ          | Canada          |
| Yes | Tomas       | Edler       | Ericsson AB                            | Kista            |             | Sweden          |
| Yes | Carl        | Eklund      | Nokia Inc.                             | Helsinki         |             | Finland         |
| No  | Yigal       | Eliaspur    | Intel Corp.                            | Jerusalem        |             | Israel          |
| Yes | Torsten     | Fahldieck   | Alcatel                                | Stuttgart        |             | Germany         |
| Yes | Avraham     | Freedman    | Hexagon System Engineering Ltd.        | Petah-Tikva      |             | Israel          |
| Yes | Randy       | Frei        | SkyPilot Networks                      | Santa Clara      | CA          | USA             |
| No  | I-Kang      | Fu          | ITRI                                   | Chutung, Hsinchu |             | Taiwan          |
| No  | Pieter-Paul | Giesberts   | Motorola                               | Utrecht          |             | Netherlands     |
| Yes | Mariana     | Goldhamer   | Alvarion Ltd.                          | Tel Aviv         |             | Israel          |
| Yes | Reza        | Golshan     | Fujitsu Microelectronics America, Inc. | Sunnyvale        | CA          | USA             |
| No  | Chris       | Hansen      | Intel Corporation                      | Hillsboro        | OR          | USA             |
| Yes | Mike        | Hart        | Fujitsu                                | Hayes            | Middx       | UK              |
| Yes | Gregory     | Henderson   | Research In Motion                     | Irving           | TX          | USA             |
| Yes | Songnam     | Hong        | SAMSUNG                                | SUWON            | Gyeonggi-do | Korea           |
| Yes | Chang-Lung  | Hsiao       | M300, CCL/ITRI                         | Chutung, Hsinchu |             | Taiwan          |
| Yes | Yu-Ching    | Hsu         | ITRI                                   | Hsinchu          |             | Taiwan          |

|     |            |          |                                   |                    |             |         |
|-----|------------|----------|-----------------------------------|--------------------|-------------|---------|
| No  | Shih-Chang | Huang    | Nation Chiao Tung University      | HsinChu            |             | Taiwan  |
| Yes | John       | Humbert  | Sprint                            | Overland Park      | KS          | USA     |
| No  | Yerang     | Hur      | Posdata America R&D Center        | Santa Clara        | CA          | USA     |
| Yes | Ju-chul    | Hwang    | LG Electronics                    |                    | Gyeonggi-do | Korea   |
| No  | Bin-Chul   | Ihm      | LG Electronics Inc.               | Anyang             | Gyeonggi-do | Korea   |
| Yes | Moo Ryong  | Jeong    | DoCoMo USA Labs                   | San Jose           | CA          | USA     |
| Yes | Panyuh     | Joo      | Samsung Electronics               | Suwon              | Gyeonggi-do | Korea   |
| Yes | Takeo      | Kanai    | Softbank BB Corp.                 | Tokyo              |             | Japan   |
| Yes | Hyunjeong  | Kang     | Samsung Electronics               | Suwon              | Gyeonggi-do | Korea   |
| No  | Ivy        | Kelly    | Sprint                            | Overland Park      | KS          | USA     |
| Yes | Farideh    | Khaleghi | Nextwave                          | San Diego          | CA          |         |
| Yes | Brian      | Kiernan  | InterDigital Communications Corp. | King of Prussia    | PA          | USA     |
| Yes | Beomjoon   | Kim      | LG Electronics Inc.               | Anyang             | Gyeonggi-do | Korea   |
| No  | Dae-Joong  | Kim      | Posdata                           | Seongnam-si        | Gyeonggi-do | Korea   |
| Yes | Youngho    | Kim      | Samsung Electronics               | Suwon              | Gyeonggi-do | Korea   |
| No  | Shigenori  | Kinjo    | Que-wave Co.,Ltd.                 | Naha               | Okinawa     | Japan   |
| No  | Changhoi   | Koo      | Samsung Telecommunication America | Richardson         | TX          | USA     |
| No  | Frank      | Kuo      | Cameo Communications, INC.        | Taipei             |             | Taiwan  |
| Yes | Kao-Yueh   | Kuo      | ITRI                              | Chutung            | Hsinchu     | Taiwan  |
| Yes | Tso-Ling   | Kuo      | Telecom technology center         | Lujhu, Kaohsiung   |             | Taiwan  |
| Yes | Wen-Yi     | Kuo      |                                   | Taipei             |             | Taiwan  |
| Yes | Toshiyuki  | Kuze     | Mitsubishi Electric               | Kamakura, Kanagawa |             | Japan   |
| Yes | Jonathan   | Labs     | Wavesat Inc.                      | Dorval             | PQ          | Canada  |
| Yes | Kari       | Laihonen | TeliaSonera                       | Helsinki           |             | Finland |

|     |            |         |  |                            |             |        |
|-----|------------|---------|--|----------------------------|-------------|--------|
| Yes | Guillaume  | Lebrun  | France Telecom                           | Cesson<br>Sevigne<br>Cedex |             | France |
| No  | Chang-jae  | Lee     | LG Electronics Inc.                      | Anyang-shi                 | Gyeonggi-do | Korea  |
| Yes | Chi-Chen   | Lee     | ITRI                                     | Chutung                    |             | Taiwan |
| Yes | Mihyun     | Lee     | Samsung<br>Electronics                   | suwon-si                   | Gyeonggi-do | Korea  |
| Yes | Sungjin    | Lee     | Samsung<br>Electronics                   | Suwon                      | Gyeonggi-do | Korea  |
| Yes | Youn-Tai   | Lee     | Institute for<br>Information<br>Industry | Taipei                     |             | Taiwan |
| Yes | Yung-Ting  | Lee     | Institute for<br>Information<br>Industry | Taipei                     |             | Taiwan |
| Yes | Jia-Ru     | Li      | Extreme Networks                         | Santa Clara                | CA          | USA    |
| Yes | Jiang      | Li      | Huawei<br>Technologies Co.,<br>Ltd.      | Shanghai                   |             | China  |
| Yes | Jun        | Li      | Nortel Networks                          | Richardson                 | TX          | USA    |
| Yes | Tao        | Li      | FutureWei<br>Technologies                | Santa Clara                | CA          | USA    |
| Yes | Yao-Jen    | Liang   | National Taiwan<br>University            | Taipei                     |             | Taiwan |
| Yes | Gaspare    | Licitra | Siemens                                  | Milan                      |             | Italy  |
| Yes | Aeri       | Lim     | Samsung<br>Electronics Co.               | Suwon-city                 | Gyeonggi-do | Korea  |
| Yes | Geunhwi    | Lim     | Samsung<br>Electronics                   | Suwon                      | Gyeonggi-do | Korea  |
| Yes | Hyoung Kyu | Lim     | Samsung<br>Electronics                   | Suwon                      | Gyeonggi-do | Korea  |
| No  | Chen-Hau   | Lin     | ITRI                                     | Taipei                     |             | Taiwan |
| Yes | Shou-Sheu  | Lin     | CCL/ITRI                                 |                            |             | Taiwan |
| Yes | Tzu-Ming   | Lin     | ITRI                                     | Hsingchu                   |             | Taiwan |
| Yes | Wilfred    | Lin     | Delta Networks Inc.                      | Taipei                     |             | Taiwan |
| No  | William    | Lin     | Foxconn                                  | Hsinchu                    |             | Taiwan |
| Yes | Zhibin     | Lin     | Huawei<br>Technologies                   | Shanghai                   |             | China  |
| Yes | Chia-Horng | Liu     | Chunghwa<br>Telecom. Lab.                | Taoyuan                    |             | Taiwan |

|     |           |              |                                     |             |                       |        |
|-----|-----------|--------------|-------------------------------------|-------------|-----------------------|--------|
| Yes | Sean S.T. | Liu          | CyberTAN<br>Technology, Inc.        | Hsinchu     |                       | Taiwan |
| No  | Tehuang   | Liu          | National Taiwan<br>University       | Taipei      |                       | Taiwan |
| Yes | Heinz     | Lycklama     | Adaptix, Inc.                       | Arlington   | WA                    | USA    |
| Yes | Gin-Kou   | Ma           | ITRI                                | Hsinchu     |                       | Taiwan |
| Yes | Steve     | Ma           | Freescale<br>Semiconductors         | Austin      | TX                    | USA    |
| No  | David     | Maez         | Navini Networks                     | Richardson  | TX                    | USA    |
| Yes | David     | Maidment     | picoChip                            | Bath        |                       | UK     |
| Yes | Mahesh    | Makhijani    | Ericsson                            | San Diego   | CA                    | USA    |
| Yes | Jeffrey   | Mandin       | Streetwaves<br>Networking           | Jerusalem   |                       | Israel |
| Yes | Roger     | Marks        | NIST                                | Boulder     | CO                    | USA    |
| No  | Asaf      | Matatyau     | ArrayComm                           | San Jose    | CA                    | USA    |
| No  | David     | Mcginness    | Sprint                              | Naperville  | IL                    | USA    |
| Yes | Scott     | Migaldi      | Motorola                            | Schaumburg  | IL                    | USA    |
| Yes | James     | Mollenauer   | Technical Strategy<br>Associates    | Newton      | MA                    | USA    |
| Yes | Ollivier  | Mont-Reynaud | Wavesat Inc.                        | Dorval      | PQ                    | Canada |
| Yes | Jung-Mo   | Moon         | ETRI                                | Daejeon     | Chungcheongnam-<br>do | Korea  |
| Yes | Ronald    | Murias       | Wi-LAN Inc.                         | Calgary     | AB                    | Canada |
| Yes | Laith     | Naaman       | Intel Corp                          | Santa Clara | CA                    | USA    |
| Yes | Michiharu | Nakamura     | Fujitsu<br>Laboratories Ltd.        | Yokosuka    | Kanagawa              | Japan  |
| Yes | Mitsuo    | Nohara       | KDDI R&D<br>Laboratories, Inc.      | Kamifukuoka | Saitama               | Japan  |
| Yes | Min Seok  | Oh           | LG Electronics Inc.                 | Anyang      | Gyeonggi-do           | Korea  |
| Yes | Alan      | Or           | ZTE                                 | San Diego   | CA                    | USA    |
| Yes | David     | Paranchych   | Nortel                              | Richardson  | TX                    | USA    |
| Yes | Youngsoo  | Park         | Samsung<br>Electronics Co.,<br>Ltd. | Suwon       |                       | Korea  |
| Yes | Roger     | Peterson     | Motorola Labs                       | Schaumburg  | IL                    | USA    |
| No  | Greg      | Phillips     | AirTegrity<br>Wireless, Inc.        | Stateline   | NV                    | USA    |

|     |            |              |  |                      |           |        |
|-----|------------|--------------|--|----------------------|-----------|--------|
| Yes | Paul       | Piggin       | Cygnus<br>Multimedia<br>Communications         | Carlsbad             | CA        | USA    |
| No  | Ambroise   | Popper       | Sequans<br>Communications                      | Paris                |           | France |
| Yes | Scott      | Probasco     | Nokia  | Irving               | TX        | USA    |
| Yes | Jose       | Puthenkulam  | Intel Corp.                                    | Hillsboro            | OR        | USA    |
| Yes | Nanjian    | Qian         | ZTE San Diego Inc.                             | San Diego            | CA        | USA    |
| Yes | Hongyun    | Qu           | ZTE  | Shenzhen             | Guangdong | China  |
| No  | Arvind     | Raghavan     | ArrayComm                                      | San Jose             | CA        | U.S.A  |
| Yes | Shyamal    | Ramachandran | Motorola, Inc.                                 | Maitland             | FL        | US     |
| Yes | Frank      | Royal        | Redline<br>Communications<br>Inc.              | Markham              | ON        | Canada |
| Yes | Anthony    | Reid         | Nokia  | Irving               | TX        | USA    |
| Yes | Fang-Ching | Ren          | ITRI   | Hsinchu              |           | Taiwan |
| Yes | Herbert    | Ruck         | Navini Networks                                | Richardson           | TX        | USA    |
| Yes | Andrew     | Sago         | BT   | Ipswich              | Suffolk   | UK     |
| Yes | Yousuf     | Saifullah    | Nokia  | Irving               | TX        | USA    |
| Yes | Kenji      | Saito        | KDDI R&D<br>Laboratories Inc.                  | Yokosuka             | Kanagawa  | Japan  |
| No  | Makoto     | Sakamoto     | Fujitsu Ltd.                                   | Kawasaki             | Kanagawa  | Japan  |
| Yes | Jörg       | Schmidt      | Motorola                                       | Chandler             | AZ        | USA    |
| No  | Joseph     | Schumacher   | Motorola                                       | Arlington<br>Heights | IL        | US     |
| Yes | Christian  | Seagren      | Sprint Nextel                                  | Overland<br>Park     | KS        | USA    |
| Yes | Jonatan    | Segev        | Comsys<br>Communication &<br>Signal Processing | Herzelia             |           | Israel |
| Yes | Ofer       | Shalem       | Runcom   | Rishon<br>Lezion     |           | Israel |
| Yes | Ariel      | Sharon       | Motorola                                       | Schaumburg           | IL        | USA    |
| No  | E-Kai      | Shen         | Compal<br>Communication                        | Taipei               |           | Taiwan |
| Yes | Gang       | Shen         | Alcatel Shanghai<br>Bell                       | Shanghai             | Shanghai  | China  |
| No  | Kevin      | Shen         | Tecom Co. Ltd.                                 | Hsinchu              |           | Taiwan |
| Yes | Hitoshi    | Shibayama    | Fujitsu Limited                                | Yokosuka             | Kanagawa  | Japan  |



|     |                  |            |  |                 |             |        |
|-----|------------------|------------|--|-----------------|-------------|--------|
| Yes | Kathiravetpillai | Sivanesan  | Samsung Electronics Co., Ltd.            | Suwon           | Gyeonggi-do | Korea  |
| Yes | Clare            | Somerville | picoChip Designs Limited                 | Bath            |             | UK     |
| Yes | Jung Je          | Son        | Samsung Electronics                      | Seoul           |             | Korea  |
| Yes | Yeong Moon       | Son        | Samsung Electronics                      | Suwon-si        | Gyeonggi-do | Korea  |
| Yes | Kenneth          | Stanwood   | Cygnus Multimedia Communications         | Carlsbad        | CA          | USA    |
| Yes | Kyungjoo         | Suh        | Samsung                                  | Suwon           | Gyeonggi-do | Korea  |
| Yes | Ernie            | Tacsik     | ZTE Corp.                                | San Diego       | CA          | USA    |
| No  | Koan-Sin         | Tan        | ITRI                                     | Chu-Tung        |             | Taiwan |
| Yes | Xiangguo         | Tang       | FutureWei Technologies                   | Santa Clara     | CA          | USA    |
| Yes | Shawn            | Taylor     | Cygnus Multimedia Communications         | Carlsbad        | CA          | USA    |
| No  | Jerry            | Tsai       | Rohde & Schwarz Taiwan Ltd.              | Taipei          |             | Taiwan |
| No  | Shiau-He (Shawn) | Tsai       | Ericsson                                 | San Deigo       | CA          | USA    |
| Yes | Yu Yuan          | Tsai       | Delta Networks, Inc.                     | Taipei          | Taiwan      |        |
| No  | Rodger           | Tseng      | ITRI                                     | Tao-yuan county |             | Taiwan |
| Yes | Rainer           | Ullmann    | Wavesat Inc.                             | Dorval          | PQ          | Canada |
| Yes | Sunil            | Vadgama    | Fujitsu Laboratories of Europe Ltd       | Hayes           | Middlesex   | UK     |
| Yes | Lucia            | Valbonesi  | Motorola                                 | Schaumburg      | ID          | USA    |
| No  | Subramanian      | Vasudevan  | Lucent Technologies                      | Whippany        | NJ          | USA    |
| Yes | Dorin            | Viorel     | Wi-LAN, Inc.                             | Calgary         | AB          | Canada |
| Yes | Arthur           | Wang       | BeyondSpot                               | Buena Park      | CA          | USA    |
| Yes | Chiapin          | Wang       | NTU                                      |                 |             | Taiwan |
| Yes | Chuei-Tang       | Wang       | Universal Scientific Industrial Co., Ltd | Nan-Tou         |             | Taiwan |

|     |           |           |                                   |                |           |        |
|-----|-----------|-----------|-----------------------------------|----------------|-----------|--------|
| Yes | Guo Qiang | Wang      | Nortel Networks                   | Ottawa         | ON        | Canada |
| Yes | Irving    | Wang      | ZTE Communications                | San Diego      | CA        | USA    |
| Yes | Jibin     | Wang      | Huawei Technologies Co., Ltd.     | Shanghai       |           | China  |
| Yes | Jing      | Wang      | ZTE Dan Diego                     | San Deiggo     | CA        | USA    |
| Yes | Lei       | Wang      | Cygnus Multimedia Communications  | Carlsbad       | CA        | Canada |
| No  | Paul      | Wang      | Telways Communication Co., Ltd    | Taipei         |           | Taiwan |
| No  | Roy T.    | Wang      | VIA Networking Technologies, Inc. | Hsin Tsen      | Taipei    | Taiwan |
| No  | Te-Hui    | Wang      | Gemtek Technology Co., Ltd.       | Hukou          | Hsinchu   | Taiwan |
| Yes | Lisa      | Ward      | Rohde & Schwarz                   | Beaverton      | OR        | USA    |
| Yes | Hung-Yu   | Wei       | National Taiwan University        | Taipei         |           | Taiwan |
| No  | Shyue-Win | Wei       | National Chi-Nan Univ.            | Puli           | Nan-Tou   | Taiwan |
| Yes | Mattias   | Wennstrom | Huawei Technologies               | Kista          | Stockholm | Sweden |
| Yes | Alfred    | Wieczorek | Motorola, Inc.                    | Plantation     | FL        | USA    |
| No  | Chyi-Nan  | Wu        | CSIST                             | Taoyuan County |           | Taiwan |
| Yes | Xuyong    | Wu        | Huawei                            | Shenzhen       | Guangdong | China  |
| Yes | Yingzhe   | Wu        | Ericsson                          | San Diego      | CA        | USA    |
| Yes | Janice    | Wunsch    | Lucent Technologies               | Naperville     | IL        | USA    |
| Yes | David     | Xiang     | Huawei                            | San Diego      | CA        | US     |
| No  | Ling      | Xu        | ZTE                               | Shenzhen       | Guangdong | China  |
| Yes | Fu        | Yan       | Huawei inc.                       | Shenzhen       | Guangdong | China  |
| Yes | Hongwei   | Yang      | Alcatel Shanghai Bell Co., Ltd.   | Shanghai       |           | China  |
| Yes | Yunsong   | Yang      | ZTE San Diego, Inc.               | San Diego      | CA        | USA    |
| Yes | Ran       | Yaniv     | Alvarion Ltd.                     | Tel Aviv       |           | Israel |

|     |           |         |                               |             |                   |        |
|-----|-----------|---------|-------------------------------|-------------|-------------------|--------|
| Yes | Vladimir  | Yanover | Alvarion Ltd.                 | Tel Aviv    |                   | Israel |
| No  | Hujun     | Yin     | Intel Corp.                   | Santa Clara | CA                | USA    |
| Yes | Aeran     | Youn    | LG Electronics Inc.           | Anyang      | Gyeonggi-do       | Korea  |
| No  | Jungnam   | Yun     | Posdata                       | Santa Clara | CA                | USA    |
| Yes | Mi-Young  | Yun     | ETRI                          | Daejeon     | Chungcheongnam-do | Korea  |
| Yes | Masaaki   | Yuza    | NECinfrontia                  |             | Tokyo             | Japan  |
| Yes | Nader     | Zein    | NEC                           | London      |                   | UK     |
| Yes | Jianzhong | Zhang   | Nokia                         | Irving      | TX                | USA    |
| Yes | Ruobin    | Zheng   | Huawei Technologies Co., Ltd. | Shenzhen    |                   | China  |
| Yes | Peiying   | Zhu     | Nortel Networks               | Ottawa      | ON                | Canada |
| No  | Ilan      | Zohar   | Intel Corp.                   | Givatatym   |                   | Israel |