**IEEE P802.15**

**Wireless Personal Area Networks**

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| --- | --- |
| Project | IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs) |
| Title |  |
| Date Submitted | [19 July 2012] |
| Source | [][][Chicago, IL] | Voice: [+1.847.960.3715]Fax: [+1.847.790.3805]E-mail: [pat.kinney@ieee.org] |
| Re: | [802.15 Interim Meeting in San Diego, California] |
| Abstract | [IEEE 802.15 Working Group Minutes] |
| Purpose | [Official minutes of the Working Group Session] |
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**IEEE 802.15 Plenary Meeting – Session #79**

**Grand Hyatt Manchester, San Diego, California, USA**

**July 16-19, 2012**

**Monday, 16 July 2012**

**11:01 AM** The chair, Bob Heile, called the meeting to order (15-12-301-03)

The chairasked for new attendees to raise their hands; there were one.

Announcements:

* Social on Wednesday at 18:30

Chair informed the group of, and displayed the IEEE-SA patent policy presentation slides 0-5 (<http://standards.ieee.org/board/pat/pat-slideset.ppt>).

Chair asked the participants who wished to declare a Letter of Assurance (LoA) or to identify patent claim(s)/patent application claim(s) and/or the holder of patent claim(s)/patent application claim(s) that the participant believes may be essential for any of the ongoing activities within the 802.15 WG. There were no attendant responses to this call.

Chair displayed and read the standard IEEE Anti-Trust statement.

Rick Alfvin stated the information (IEEE 802.15-12-019-03) on registration requirements and the network information. Basic topics covered were:

* Registration requirements
* Network information
* Attendance sheets
* Voting Tokens
* Voting Rights
* Meeting Video Audio recording – not allowed

802.15 Work Group Membership status:

* 166 voting members
* 25 nearly voters
* 86 aspirants

Introduction to Central Desktop by C Boyce

* Christina presented 15-12-0368-00
* Comment made that current P&P does not require nor prohibit this tool’s use

Future Sessions

* 16-21 September, 2012,Hyatt Grand Champion, Palm Springs, CA USA
* 11-16 November, 2012, Grand Hyatt San Antonio, San Antonio, TX,
* 13-18 January, 2013, Hyatt Regency Vancouver, BC, CA, 802 Wireless Interim Session
* 17-21 March, 2013, Caribe Royale, Orlando, FL, USA, 802 Plenary
* 12-17 May, 2013, Hilton Waikoloa Village, Big Island, HI, USA, 802 Wireless Interim Session
* 14-19 July, 2013, Geneva, CHE, 802 Plenary Session
* 15-20 Sept, 2013, ZhongShan Hotel, Nanjing, China

Chair presented the EC Meeting Report (IEEE 802.15-12-0359-00)

B Rolfe presented the Treasurer Report (IEEE 802.15-12-0357-00)

* **March 05, 2012 – $467,328.13**
	+ IEEE account: $325,524.45 +31,115.55 +50,000 +176.94 +150.96 = $406,967.90
	+ Face-to-Face: $241,985.73 -95,776.96 +47,750 -143,798.54 +10,200 = $60,360.23
* **April 30, 2012 – $586,817.38**
	+ IEEE account: $406,967.90 -$15,318.60 -$20.00 +$158.27 = $391,948.68
	+ Face-to-Face: $60,360.23 +$42,900-$8,159.08 +$130,350-$30,582.45= $194,868.70
* **July 1, 2012 – $433,424.66**
	+ IEEE account: $391,948.68 + $462.69 = $392,411.37
	+ Face-to-Face: $194,868.70+$45,300-$30,209.32+$2,400.09-$171,346.18 = $41,013.29

802.18 by John Notor

* ITU-R question 236/1 asking technical and operation features of smart grid wireless, etc.

Clint Powell moved to *approve the agenda (document IEEE 15-12-0301-03-0000)* with Art Astrin seconding the motion. Following no objection the agenda was approved.

Clint Powell moved *to approve the previous meeting minutes (document 15-12-0236-00-0000)* and Art Astrin seconded the motion. Following neither discussion nor objection the minutes were approved. There were no matters resulting from the previous minutes

802.18 Radio regulatory by John Notor

* Two reports on recommendation to broadband access to mobile networks
* Issue of Z-Wave a.k.a. narrow band home networking spectrum before ITU-R

TG4j report by Ray Krasinski:

* R&O is now out with some surprises
* Expectation is complete comment resolution and to go to recirculation by end of week

TG4k report by Pat Kinney:

* Expectation is to go to WG ballot upon end of session

TG4m by Sangsung Choi

* Proposals will be heard this session with discussions on merging them into a single proposal

TG4n CMB by Art Astrin

* CFA presentations will be heard

TG4p PTC by Jon Adams

* Two technical proposals will be heard

TG8 PAC by Myung Lee

* Hearing presentations

TG9 KMP by Robert Moskowitz

* continue drafting KMP document
* working with 802.1

SG4q ULP by Shariar Emami

* presentations and work on PAR and 5C

IG THZ by Tomas Kürner

* editorial tonight
* presentations on technology advancement, spectrum use, etc

IG SRU by Shoichi Kitazawa

* single meeting will be hearing presentations

IG L2R by Clint Powell

* hearing presentations
* determining if significant desire to go to SG

IG LED by

SC WNG by P Kinney

* One presentation:
	+ Dependable Wireless M2M Network for Controlling Applications for Cars, Energy, Medicine, Cities – Dr. Ryuji Kohno

SC MAG by P Kinney

* Meeting Tuesday evening
* New web site and reflector
* focus of meeting is proposing a process

802 Architecture by James Gilb

* ECSG has 3 meetings this week, purpose is to move into a TAG

AoB - none

**12:06 PM** The chair recessed the meeting

**Wednesday, 18 July 2012**

**10:32** Bob Heile, WG chair called the meeting to order.

WG Chair made announcements concerning social and logistics.

Recognition - plaques were awarded to:

* TG4e: Seong-Soon Joo, Ludwig Winkel, Jonathan Simon, Ben Rolfe, Wun-Cheol Jeong
* TG4f: Tim Harrington, Adrian Jennings, Dalibor Pokrajac, Billy Verso, Michael McInnis
* TG4g:
* TG6:

**10:51** WG18 liaison by J Notor

* Working on M2116
* Revision to M1450

**10:53** TG4j by R Krasinski

* All comments have been resolved
* Working on getting draft ready for WG recirculation ballot

**10:54** TG4k by Pat Kinney

* Completing resolving remaining comments

**10:55** TG4m by Sangsung Choi

* Hearing all 4 proposals this week

**10:56:** TG4n by Art Astrin

* Hearing application presentations

**10:57** TG4p by Jon Adams

* Hearing presentations

**10:58** TG8 (PAC) by Myung Lee

* Finishing up application matrix

**10:59** TG9 (KMP) by Robert Moskowitz

* Hearing technical presentations
* Working on draft

**10:59** SGulp by Shariar Emami

* Working on PAR and 5C

**11:00** IG THZ by Thomas Kürner

* Hearing presentations

**11:01** IG SRU by Shoichi Kitazawa

* Will hear two presentations at next meeting

**11:02** IG L2R by Clint Powell

* Hearing presentations and discussions

**11:05** Architecture by James Gilb

* all comments completed will go for conditional approval
* ECSG will request to become a TAG this session

**11:08** WG chair recessed the meeting until Thursday evening.

**Thursday, 19 Jul 2012**

**18:30** WG chair called the meeting to order

**18:32** IGLED ID by Yeong MinJang (15-12-0430-00)

**18:35** TG4j (MBAN) closing report by Ray Krasinski (15-12-0422-01)

*Motion:  That the WG approve the start of a recirculation ballot to forward the d2802-15-4j\_Draft\_Standard.pdf to Sponsor Ballot*.

Moved by Liang Li, seconded by Ray Krasinski.

Upon neither discussion nor objection the motion carries with unanimous consent.

Motion: *Move to authorize Raymond Krasinski, David Evans, Shannon Park, Suhwook Kim, James Gilb, and Paul Chilton as the 802.15.4j Ballot Resolution Committee chaired by Raymond Krasinski; said committee to expire at the beginning of the September 2012 802.15 Wireless Interim Session. The Ballot Resolution Committee is authorized to approve the resolutions to comments received from recirculation of the 15.4j draft and to approve the start of another recirculation of the 15.4j draft on behalf of the Working Group. Comment resolution on recirculations between sessions will be conducted via reflector email and via teleconferences announced to the reflector at least 7 days in advance.*

Moved by Dave Evans and seconded by Art Astrin

Upon neither discussion nor objection the motion carries with unanimous consent.

**18:42** TG4k **(**LECIM) closing report by Pat Kinney (15-12-0423-00)

*Move that 802.15 WG start a WG Letter Ballot requesting approval to forward document d1P802-15-4k\_Draft\_Standard.pdf, pending the completion and inclusion of edits to 15-12-0089-06 in accordance with document 15-12-0348-07, to Sponsor Ballot.*

Moved by Pat Kinney

Seconded by James Gilb

Upon neither discussion nor objection the motion carries with unanimous consent.

**18:47** TG4m **(**4TV) closing report by Sangsung Choi (15-12-431-01)

**18:50** TG4n (CMB) closing report by Art Astrin (15-12-0421-00)

**18:52** TG4p (PTC) closing report by Jon Adams (15-12-0424-02)

**18:55** TG8 (PAC) closing report by Myung Lee (15-12-0426-00)

**18:56** TG9 (KMP) closing report by Robert Moskowitz (15-12-0415-00)

**19:03** SG4q **(**ULP) by Shariar Emami (15-12-0491-00)

**19:06** IGTeraHz by ThomasKürner(15-12-0418-00)

**19:09** IG SRU by Shoichi Kitazawa (15-12-425-00)

**19:12** IG L2R by Clint Powell (15-12-433-00)

**19:16** SC closing report by Pat Kinney (15-12-0422-01)

**19:21** Architecture by James Gilb

* No news

**19:22** 802.11 liaison report by C Chaplin (15-12-432-00)

**19:26** 802.18 liaison by J Notor (15-12-0427-03)

**19:28** ECSG by James Gilb

* recommendation to form a TAG
* ad hoc meetings at Interims

**19:30** Motion to adjourn was made by Clint Powell and seconded by Rick Alfvin. Upon hearing no objection, the motion carries; the session is adjourned.

**Annex A** Attendance = 148

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| --- | --- | --- |
| **Last Name** | **First Name** | **Affiliation** |

|  |  |  |
| --- | --- | --- |
| Adams | Jon | Lilee Systems |
| Ajito | KATSUHIRO | NR |
| Alfvin | Richard | Verilan |
| Ameen | Moshaddique | Inha University |
| Assimiti | Robert | NIVIS |
| Astrin | Arthur | Astrin Radio |
| Batra | Anuj | Texas Instruments Incorporated |
| Baykas | Tuncer | National Institute of Information and Communications Technology (NICT) |
| BEECHER | PHILIP | Wi-SUN Alliance |
| Beroset | Edward | Elster Solutions |
| Bradley | Peter David | Zarlink Semiconductor, Inc. |
| Britz | David | AT&T Labs Research |
| Buffington | John | Itron Inc. |
| Bynam | Kiran | SAMSUNG |
| Calvert | Chris | Landis Gyr Group Worldwide |
| Canchi | Radhakrishna | Kyocera Communications Inc. |
| Chang | Kuor-Hsin | Elster Solutions |
| Chang | Soo-Young | California State University, Sacramento (CSUS) |
| Chaplin | Clint | Samsung |
| Chasko | Stephen | Landis Gyr Group Worldwide |
| Chen | Wei-Peng | FUJITSU |
| Cheong | Minho | Electronics and Telecommunications Research Institute (ETRI) |
| Chilton | Paul | NXP Semiconductors |
| Chitrakar | Rojan | Panasonic Corporation of North America |
| Cho | Seungkwon | Electronics and Telecommunications Research Institute (ETRI) |
| Choi | Jinsoo | LG ELECTRONICS |
| Choi | Ji-Woong | DGIST |
| Choi | Sangsung | Electronics and Telecommunications Research Institute (ETRI) |
| CHUN | JINYOUNG | LG ELECTRONICS |
| De Ruijter | Hendricus | Silicon Laboratories |
| Dhaliwal | Upkarjit | Future Wireless Technologies |
| Dotlic | Igor | National Institute of Information and Communications Technology (NICT) |
| Emami | Shahriar | Samsung Information Systems America, Inc. |
| Evans | David | Philips Electronics |
| Filin | Stanislav | National Institute of Information and Communications Technology (NICT) |
| Fukui | Kiyoshi | Oki Electric Industry Co., Ltd. |
| Funada | Ryuhei | National Institute of Information and Communications Technology (NICT) |
| Gilb | James | Tensorcom, Inc. |
| Gillmore | Matthew | Itron Inc. |
| Gottlib | Elad | Silver Spring Networks Inc. |
| Haapola | Jussi | Centre for Wireless Communications / University of Oulu |
| Harada | Hiroshi | National Institute of Information and Communications Technology (NICT) |
| Heberling | Allen | INDEPENDENT |
| Heile | Robert | ZigBee Alliance |
| Herbst | Thomas | Silver Spring Networks Inc. |
| Hernandez | Marco | National Institute of Information and Communications Technology (NICT) |
| Hillman | Garth | OakTree Wireless |
| Holcomb | Jay | Itron Inc. |
| Hosako | IWAO | National Institute of Information and Communications Technology (NICT) |
| Howard | David | On-Ramp Wireless, Inc. |
| HU | Nan | China Mobile Communications Corporation (CMCC) |
| Huang | Rongsheng | Olympus Communication Technology of America, Inc. |
| HUH | Jae Doo | Electronics and Telecommunications Research Institute (ETRI) |
| Iwaoka | Mitsuru | Yokogawa Electric Corporation |
| Jeon | Young-Ae | Electronics and Telecommunications Research Institute (ETRI) |
| Jillings | Steven | Semtech Corporation |
| Jin | Sunggeun | Electronics and Telecommunications Research Institute (ETRI) |
| Kain | Carl | Noblis, Inc. |
| Kasamatsu | Akifumi | National Institute of Information and Communications Technology (NICT) |
| Kato | Shuzo | Tohoku University |
| Kato | Toyoyuki | Anritsu Engineering |
| Kawamura | Masahiko | Kozo Keikaku Engineering Inc. |
| Kent | Jeritt | Analog Devices Inc. |
| Kim | DoHyung | Electronics and Telecommunications Research Institute (ETRI) |
| Kim | Jeongki | LG ELECTRONICS |
| Kim | Jinkyeong | Electronics and Telecommunications Research Institute (ETRI) |
| Kim | Kihong | SAMSUNG |
| Kim | Suhwook | LG ELECTRONICS |
| Kinney | Patrick | Kinney Consulting LLC |
| Kitazawa | Shoichi | ATR Wave Engineering Laboratories |
| Kivinen | Tero | AuthenTec |
| Kohno | Ryuji | Yokohama National University |
| Kojima | Fumihide | National Institute of Information and Communications Technology (NICT) |
| Krasinski | Raymond | Philips Electronics |
| Kuerner | Thomas | TU Braunschweig |
| Kwak | Byung-Jae | Electronics and Telecommunications Research Institute (ETRI) |
| Kwak | Jin-Sam | LG ELECTRONICS |
| Kwak | Kyung Sup | Inha University |
| LAGRANGE | Pascal | Canon Research Centre France |
| Lan | Zhou | NICT |
| Lee | Donghun | Electronics and Telecommunications Research Institute (ETRI) |
| Lee | Jae Seung | Electronics and Telecommunications Research Institute (ETRI) |
| Lee | Jang-Won | Yonsei University |
| Lee | KYUNG-KUK | Orthotron Co., Ltd. |
| Lee | Myung | CUNY - City University of NY |
| Lee | Wookbong | LG ELECTRONICS |
| Lertsirisopon | Navarat | Kozo Keikaku Engineering Inc. |
| Li | Feng | China Academy of Telecommunication Technology(CATT) |
| Li | Huan-Bang | National Institute of Information and Communications Technology (NICT) |
| Li | Liang | Vinno Technologies Inc. |
| Li | Qing | InterDigital, Inc. |
| Lynch | Michael | Nortel Networks |
| Maruyama | Atsushi | Panasonic Corporation of North America |
| McInnis | Michael | The Boeing Company |
| Mori | Kenichi | Panasonic Corporation |
| Moskowitz | Robert | Verizon |
| Muftic | Ibrahim | Parsons Brinckerhoff |
| Naganuma | Ken | Toko America Inc. |
| Ngo | Chiu | SAMSUNG |
| Notor | John | Silver Spring Networks Inc. |
| Ogawa | Hiroyo | Association of Radio Industries and Businesses (ARIB) |
| Oh | Mi-Kyung | Electronics and Telecommunications Research Institute (ETRI) |
| OH | MIN-SEOK | LG ELECTRONICS |
| Ohba | Yoshihiro | TOSHIBA Corporation |
| Olson | David | Landis Gyr Group Worldwide |
| Onishi | Hirofumi |  |
| Oyama | Satoshi | Association of Radio Industries and Businesses (ARIB) |
| Park | Giwon | LG ELECTRONICS |
| Park | JongAe | Samsung Electronics |
| Petrick | Albert | Jones-Petrick and Associates, LLC. |
| Ping Ping | Xu | Southeast University, China |
| Poegel | Frank | Atmel Corporation |
| Popa | Daniel | Itron Inc. |
| Powell | Clinton | PWC, LLC |
| Powell | Richard | Microsemi Corporation |
| Priebe | Sebastian | TU Braunschweig |
| Rajan | Reghu | Zarlink Semiconductor, Inc. |
| Ramasastry | Jayaram | Silver Spring Networks Inc. |
| Randall | Karen | NSA/IAD |
| Roberts | Richard | Intel Corporation |
| Rolfe | Benjamin | Blind Creek Associates |
| Ryu | Kiseon | LG ELECTRONICS |
| Salazar Cardozo | Ruben | Landis Gyr Group Worldwide |
| Sasaki | Shigenobu | Niigata University |
| Sato | Naotaka | Sony Corporation |
| Sato | Noriyuki | Oki Electric Industry Co., Ltd. |
| Sayana | Krishnakamal | SAMSUNG |
| Schwoerer | Jean | France Telecom |
| Shao | Huairong | Samsung Information Systems America, Inc. |
| SHIBAGAKI | Nobuhiko | Hitachi, Ltd. |
| Shimada | Shusaku | Yokogawa Co. |
| SHIN | CheolHo | Electronics and Telecommunications Research Institute (ETRI) |
| Song | Chunyi | National Institute of Information and Communications Technology (NICT) |
| Stuebing | Gary | Cisco Systems, Inc. |
| Sum | Chin-Sean | National Institute of Information and Communications Technology (NICT) |
| Takai | Mineo | Space-Time Engineering |
| Tanaka | Hirokazu | TOSHIBA Corporation |
| VanWyk | Hartman | Itron Inc. |
| Waheed | Khurram | Freescale Semiconductor, Inc. |
| Wen | Ericson | TriQuint Semiconductor |
| West | Nicholas | Landis Gyr Group Worldwide |
| Yaita | Makoto | Microsystem Integration Laboratories NTT |
| Yee | Peter | NSA/IAD |
| Yokoo | Kaoru | FUJITSU |
| Yoon | Chanho | Electronics and Telecommunications Research Institute (ETRI) |
| Zeira | Eldad | InterDigital, Inc. |
| Zhou | Mingtuo | National Institute of Information and Communications Technology (NICT) |
| Zhu | Chunhui | SAMSUNG |