**IEEE P802.15**

**Wireless Personal Area Networks**

|  |  |  |
| --- | --- | --- |
| Project | IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs) | |
| Title |  | |
| Date Submitted | [23 Sep 2010] | |
| Source | [] [] [Chicago, IL] | Voice: [+1.847.960.3715] Fax: [+1.630.524.9054] E-mail: [pat.kinney@ieee.org] |
| Re: | [802.15 Interim Meeting in Okinawa, Japan] | |
| Abstract | [IEEE 802.15 Working Group Minutes] | |
| Purpose | [Official minutes of the Working Group Session] | |
| Notice | This document has been prepared to assist the IEEE P802.15. 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 acknowledges and accepts that this contribution becomes the property of IEEE and may be made publicly available by P802.15. | |

**IEEE 802.15 Interim Meeting – Session #74**

**Okinawa Convention Center, Okinawa, Japan**

**Sep 19-24, 2010**

**Monday, 19 Sep 2011**

**8:05** 802.11, 802.15, 802.18, 802.19, and 802.22 Chairs called the joint meeting to order (15-11-561-01). IEEE 802.15 attendance is included as Annex A.

General announcements:

* Attendance will be collected via the IMAT

Straw Poll of new attendees: 17

**8:19** IEEE patent policy

802.15 WG chair read the IEEE-SA instructions for the WG chair and displayed the four slides explaining patent policy and informed the attendees that additional information could be found on the PatCom web site.

Chair asked participants 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 the use of that standard in the appropriate WG.

802.15 WG chair read IEEE anti-trust policy.

**8:23** Financial report by Jon Rosdahl, Clint Chaplin (11-11-1242-00, 15-11-0624-00)

* July 18, 2011 - $410,004.11
  + IEEE Account: $340,322.79 + $276.90 = $340,599.69
  + Face-to-Face: $48,868.76 + $20,535.66 = $69,404.42
* September 18, 2011 - $410,004.11
  + IEEE Account: $340,599.69 + $247.24 - $18,515.00 = $322,331.93
  + Face-to-Face: $69,404.42 = $69,404.42
* Okinawa
  + Registration Income: $209,125
  + Registrants 307
  + Meeting Expense Estimate:$272,570
  + Surplus (Deficit)($22,669)

**8:28** Wireless announcements: (15-11-035-04)

Wireless Network Updates by Rick Alfvin

* <https://murphy.events.ieee.org/imat/login>

**8:30** Review future sessions

* November 6-11, 2011, Hyatt Regency Atlanta, Atlanta, GA, USA
* January 15-20, 2012, Hyatt Regency, Jacksonville, Florida, USA
* March 11-16, 2012, Hilton Waikoloa Village, Big Island, HI, USA
* May 13-18, 2012, Hyatt Regency Atlanta, Atlanta, GA, USA
* July 15-20, 2012, Grand Hyatt Manchester, San Diego, CA, USA
* September 16-21, 2012, Hyatt Grand Champions, Palm Springs, CA, USA
* November 11-16, 2012, Grand Hyatt San Antonio, San Antonio, TX, USA
* Request for Straw poll on mandating 2 / 4 interims being outside of US
  + 802.11 chair replied that a straw poll should be delayed until possible venues are available

**8:25 Task Group Updates**

* Documents 11-11-1099, 11-11-1100, 11-11-1101 help describe 802.11
* 802.11 by B Kramer (Marvell Semiconductor): 299 voters, 42 potential voters

TGmb- Revision

TGs - ESS Mesh Networking

TGaa - VIDEO TRANSPORT STREAMS

TGac - VHT L6

TGad - VHT60

TGae - QOS-MAN

TGaf- TVWS

TGah- S1G

TGai - FILS

802.15 by B Heile (211 voters, 19 nearly voters)

WNG: next generation

TG4e: MAC enhancements

TG4f: RFID applications

TG4g: SUN applications

TG4j: MBAN

TG4k: LECIM

TG4m: TVWS

TG6: BAN

SG-PSC

IG-HIP

802.18 Mike Lynch (9 voters)

* comment on Canadian TVWS regulation

802.19 Steve Shellhammer (53 voters)

* TVWS Coexistence: reviewing comments on draft and beginning resolutions

802.22 Mody (24 voters)

* working on recommended practice 802.22.2
* Enhanced MIB and Mgmt Plane 802.22a
* RASGCIM SG

**8:50** Joint meeting adjourned

**9:32** B Heile (ZigBee Alliance), WG chair called the 802.15 WG plenary to order

Chair reminded attendees that highlights of the IEEE-SA Standards Board Bylaws on Patents in Standards. Chair referred those who wished to review these policies that the IEEE-SA patent policy presentation slides 0-5 and reading the instructions for the WG Chair. (<http://standards.ieee.org/board/pat/pat-slideset.ppt>).

Chair asked participants 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 the use of that standard, there were no responses.

Chair reminded participants of anti-trust rules and obligations.

Approve/modify joint opening agenda (15-11-0561-01-0000)

* Moved by C Powell, seconded by A Astrin. Following neither discussion nor objection the agenda was approved.

Review and approve 802.15 WG minutes from the San Francisco session (15-11-0490-00-0000)

* Moved by C Powell, seconded by J Notor. Upon neither discussion nor objection the joint minutes were approved.

**9:37** Wireless Network Updates by Rick Alfvin (15-11-035-04)

* 211 voters and 19 nearly voters

**9:41** WG recessed

**Wednesday 21 Sep 2011**

**802.15 mid-session plenary meeting**

**10:30** Bob Heile called the meeting to order.

**10:31** **Mid-week status updates**

**802.18** by John Notor

* reply comments to Canadian white space band consultation
  + minimal channel bandwidth: 2.5 MHz

**TG4e** by Seong-Soon Joo

* Sponsor Ballot Comment resolution moving along with resolutions captured in 15-11-576-03
* TG4e has adjourned
* goal of recirculation after this session

**TG4f** by M McInnis

* 97 comments have been resolved and captured in the 15-11-579-01
* draft is ready for recirculation

**TG4g** by C Powell

* Working on comment resolutions, 50% have been resolved
* Goal is to recirculate after this session

**TG4j (MBAN)** by Ray Krasinski

* FCC has made significant progress with MBAN regulation effort
* Channelization discussion
* MAC discussions
* PHY discussion deferred to after this session

**TG4k (LECIM)** by Pat Kinney

* Hearing final proposal presentations
* Additional discussion will continue after session via emails and calls

**TG4m (BAN)** by Choi

* Discussion on timeline
* Discussion on Canadian consultation

**TG6 (BAN)** by A Astrin

* Working on comment resolutions of 238 comments of which 25 remain to be resolved
* Goal is to recirculate after next session

**PSC SG** by Myung Lee (15-11-0670-00)

* Dissolving this study group
* Starting new group: Peer Aware Communications
* Social networking

**SG KMP** by Robert Moskowitz (15-11-662-00)

* Working on PAR and 5C
* PAR (15-11-0613-01) was discussed
* Comment: since SGIP is already defining a key management service, recommend that this group leverage that effort

**WNG** by P Kinney

The WNG meeting will have four continuing presentations on LED-ID.

**AoB** none

**11:02** Recessed until Thursday at 18:30

**Thursday, 22 Sep 2011**

**18:30** WG chair called the meeting to order (agenda 15-11-0561-01)

**18:31** TG4e Closing Report by Seong-Soon Joo (15-11-0695-00)

**18:32** SG-PSC by Myung Lee (15-11-0696-00)

**18:34** TG4m by Sangsung Choi (15-11-0704-00)

Motion: *that the 802.15 WG affirms Sangsung Choi (ETRI) as chair of TG4m, with Phil Beecher (BCC) and Hiroshi Hirada (NICT) as vice Chairs.*

Moved by Ben Rolfe and seconded by Rick Alfvin. Upon neither discussion nor objection the motion carries with unanimous consent.

**18:38** TG4f Closing Report by Mike McInnis (15-11-0680-00)

**18:40** TG4g Closing Report by Phil Beecher (15-11-0707-00)

**18:44** TG4j Closing Report by Ray Krasinski (15-11-0691-00)

**18:48** TG4k Closing Report by Pat Kinney (15-11-0687-00)

**18:50** TG6 Closing Report by Art Astrin (15-11-0705-00)

*Move that the IEEE 802.15 WG request EC approval to forward to NesCom a PAR title change for IEEE 802.15.6 to change the standard title from “Standard for Information Technology - Telecommunications and Information Exchange Between Systems - Local and Metropolitan Area Networks - Specific Requirements - Part 15.6: Wireless Medium Access Control (MAC) and Physical Layer (PHY) Specifications for Wireless Personal Area Networks (WPANs) used in or around a body” to “IEEE Standard for Wireless Body Area Networks"*

Moved:  Art Astrin Second: Clint Chaplin. Following no discussion the vote was taken with the results of 25/0/0, the motion carries

**19:00** SG-KPM by Clint Chaplin (15-11-0677-01)

*Motion: request that the PAR and Five Criteria contained in documents 15-11-0613-03 and 15-11-0665-03 be approved by the IEEE 802.15 WG and that the EC be requested to forward the PAR to NesCom*

Moved:  Clint Chaplin Second: James Gilb. Following no discussion the vote was taken with the results of 22/0/2, the motion carries

**19:05** WNG closing report by Pat Kinney (15-11-0690-00)

**19:07** 802.11 Liaison report by Clint Chaplin (15-11-0706-00)

**19:13** 802.18 liaison report by John Notor (15-11-0702-00)

**19:15** Motion *to adjourn* was made by C Powell, seconded by C Chaplin, upon no objection the motion carried, this session is adjourned.

**Annex A** Attendance = 127

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

|  |  |  |  |
| --- | --- | --- | --- |
| Aiello | Roberto |  | Itron Inc. |
| Alfvin | Richard |  | Verilan |
| Ameen | Moshaddique | | Inha University |
| Asano | Takamasa |  | Fuji Electric |
| Astrin | Arthur |  | Astrin Radio |
| Bae | Taehan |  | Samsung Electronics |
| Bahr | Michael |  | Siemens AG |
| Batra | Anuj |  | Texas Instruments Incorporated |
| Beecher | Philip |  | BCC |
| Buffington | John |  | Itron Inc. |
| Callaway | Edgar |  | Sunrise Micro Devices, Inc. |
| Canchi | Radhakrishna | | Kyocera Communications Inc. |
| Cardozo | Ruben | Salazar | Landis+Gyr Group worldwide |
| Chang | Lung-Chung |  | ITRI International Inc. |
| Chang | Soo-Young |  | California State University, Sacramento (CSUS) |
| Chaplin | Clint |  | SAMSUNG |
| Chilton | Paul |  | NXP Semiconductors |
| Choi | Sangsung |  | Electronics and Telecommunications Research Instititute (ETRI) |
| Dawkins | Mark |  | Toumaz Technology Ltd. |
| Dey | Sourav |  | On-Ramp Wireless, Inc. |
| Dotlic | Igor |  | National Institute of Information and Communications Technology (NICT) |
| Evans | David |  | Philips Electronics |
| Filin | Stanislav |  | National Institute of Information and Communications Technology (NICT) |
| Filippo | Will | San | Silver Spring Networks Inc. |
| Fukui | Kiyoshi |  | Oki Electric Industry Co., Ltd. |
| Fukunaga | Shigeru |  | Oki Electric Industry Co., Ltd. |
| Gilb | James |  | Tensorcom, Inc. |
| Haapola | Jussi |  | Centre for Wireless Communications / University of Oulu |
| Hammond | Catherine |  | France Telecom |
| Harada | Hiroshi |  | National Institute of Information and Communications Technology (NICT) |
| Harada | Shigekazu |  | NEC Corporation |
| Harrington | Timothy |  | WhereNet - Zebra ESG |
| Heile | Robert |  | ZigBee Alliance |
| Hernandez | Marco |  | National Institute of Information and Communications Technology (NICT) |
| Ho | Jin-Meng |  | Texas Instruments Incorporated |
| Howard | David |  | On-Ramp Wireless, Inc. |
| Hwang | Jung-Hwan |  | Electronics and Telecommunications Research Instititute (ETRI) |
| Ikegami | Tetsushi |  | Meiji University |
| Inoko | Takuya |  | Niigata University |
| Jeon | Beom | Jin | LG ELECTRONICS |
| Jeong | Wuncheol |  | Electronics and Telecommunications Research Instititute (ETRI) |
| jetcheva | Jorjeta |  | Itron, Inc. |
| Johnson | Matthew |  | Itron Inc. |
| Joo | Seong-Soon | | Electronics and Telecommunications Research Instititute (ETRI) |
| Kang | Hyunduk |  | Electronics and Telecommunications Research Instititute (ETRI) |
| Kato | Shuzo |  | National Institute of Information and Communications Technology (NICT) |
| Kent | Jeritt |  | Analog Devices Inc. |
| Kikuta | Ko |  | KEIO University |
| Kikuzuki | Tatsuya |  | FUJITSU |
| Kim | Jinkyeong |  | Electronics and Telecommunications Research Instititute (ETRI) |
| Kim | Suhwook |  | LG ELECTRONICS |
| Kim | Youngsoo |  | Samsung Electronics |
| King | Jeffrey |  | Elster Solutions |
| Kinney | Patrick |  | Kinney Consulting LLC |
| Kivinen | Tero |  | AuthenTec |
| Kohno | Ryuji |  | Yokohama National University |
| Koike | Yuki |  | Meiji University |
| Kojima | Fumihide |  | National Institute of Information and Communications Technology (NICT) |
| Krasinski | Raymond |  | Philips Electronics |
| Kuroda | Masaru |  | Ricoh Co., Ltd. |
| Kwak | Kyung | Sup | Inha University |
| Lan | Zhou |  | National Institute of Information and Communications Technology (NICT) |
| Le | Khanh | Tuan | Texas Instruments Incorporated |
| Lee | Jihyun |  | LG ELECTRONICS |
| Lee | Myung |  | CUNY - City University of NY |
| LEWIS | DANIEL |  | National ICT Australia Limited (NICTA) |
| Li | Huan-Bang |  | National Institute of Information and Communications Technology (NICT) |
| Li | Yong |  | ChongQing University of Posts and Telecomunications |
| Liu | Yenfu |  | Telligent |
| Lynch | Michael |  | Nortel Networks |
| Mason | Robert |  | Elster Solutions |
| Materum | Lawrence |  | Tohoku University |
| McInnis | Michael |  | The Boeing Company |
| Millet | Charles |  | Analog Devices Inc. |
| Miniutti | Dino |  | National ICT Australia Limited (NICTA) |
| Mizugaki | Kenichi |  | Hitachi, Ltd. |
| Mori | Kenichi |  | Panasonic Corporation |
| Moskowitz | Robert |  | Verizon |
| Naganuma | Ken |  | Toko America Inc. |
| Nakamura | Akira |  | Tokyo University of Science |
| Ngo | Chiu |  | SAMSUNG |
| Notor | John |  | Notor Research |
| Oh | Mi-Kyung |  | Electronics and Telecommunications Research Instititute (ETRI) |
| Omeni | Okundu |  | Toumaz Technology Ltd. |
| Park | Seung-Hoon |  | Samsung Electronics |
| Ping | Xu | Ping | Southeast University, China |
| Powell | Clinton |  | PWC, LLC |
| Rahman | Mohammad |  | National Institute of Information and Communications Technology (NICT) |
| Ramasastry | Jayaram |  | Silver Spring Networks Inc. |
| Reede | Ivan |  | AmeriSys Inc. |
| Rolfe | Benjamin |  | Blind Creek Associates |
| Saito | Masato |  | University of the Ryukyus |
| Sakamoto | Kentaro |  | Tokyo Gas |
| Sasaki | Shigenobu |  | Niigata University |
| Sato | Koichi |  | Renesas Electronics Corporation |
| Sato | Naotaka |  | Sony Corporation |
| Sawada | Hirokazu |  | Tohoku University |
| Schmidl | Timothy |  | Texas Instruments Incorporated |
| Schwoerer | Jean |  | France Telecom |
| Seibert | Cristina |  | Silver Spring Networks Inc. |
| Shah | Kunal |  | Silver Spring Networks Inc. |
| Shao | Huairong |  | SAMSUNG |
| Shearer | Steve |  | Silver Spring Networks Inc. |
| Shellhammer | Stephen |  | Qualcomm Incorporated |
| Shen | ChungChou |  | ITRI International Inc. |
| Shibagaki | Nobuhiko |  | Hitachi, Ltd. |
| Shimada | Shusaku |  | Yokogawa Co. |
| Shimomura | Tsuyoshi |  | FUJITSU |
| Sun | Chen |  | National Institute of Information and Communications Technology (NICT) |
| Sungi | Gu |  | SAMSUNG |
| Taylor | Larry |  | DTC (UK) & SSN |
| Tsubakihara | Jungo |  | Analog Devices Inc. |
| Tung | Shing-Wu |  | Industrial Technology Research Institute |
| Umemoto | Takeshi |  | Fujitsu |
| van Greunen | Jana |  | Silver Spring Networks Inc. |
| Virk | Bhupender |  | Procubed |
| Waheed | Khurram |  | Freescale Semiconductor, Inc. |
| Wang | Junyi |  | National Institute of Information and Communications Technology (NICT) |
| Won | Eun | Tae | Samsung Electronics |
| Wong | Ian |  | National Instruments Corporation |
| Yamazato | Takaya |  | Nagoya University |
| Yee | James |  | MediaTek Inc. |
| Yee | Peter |  | NSA/IAD |
| Yi | Yunjung |  | LG ELECTRONICS |
| Yokoo | Kaoru |  | FUJITSU |
| Yoon | Chanho |  | Electronics and Telecommunications Research Instititute (ETRI) |
| Zhao | Mu |  | Huawei Technologies Co. Ltd |