**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 September 2013] |
| 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 Nanjing, China] |
| Abstract | [IEEE 802.15 Working Group Minutes] |
| Purpose | [Official minutes of the Working Group Session] |
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**86TH IEEE 802.15 WPAN MEETING**

**ZhongShan Hotel, Jiangsu Conference Center, Nanjing, PRC**

**September 15-20, 2013**

**Monday, 16 September 2013**

**10:31** 802.11, 802.15, 802.18, 802.19, 802.21, 802.22, and 802.24 Chairs called the joint meeting to order. IEEE 802.15 attendance is included as Annex A.

General announcements:

* No photography, no audio recording
* Social – will be in ZiJing Hall
* Straw Poll of new attendees: 6

**10:43** IEEE patent policy

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

802.15 WG chair read IEEE anti-trust policy.

**10:47** Financial report by Jon Rosdahl (CSR) docs 11-13-1063-00, 15-13-0526-00

Net Worth

**May 1, 2013 - $569,314.79**

* IEEE account: $385,728.64 +76.93+88.47 +82.47 = $385,976.51
* Face-to-Face: $64,848.90 – 14,223.07+57150-25,537.56+101,100 = $183,338.28

**June 30, 2013 – $386,061.74**

* IEEE account: $385,976.51 + 85.23 = $386,061.74
* Face-to-Face: $183,338.28 + $71,400.00 - $61,737.97 = $193,000.31 (as of May 29)

**Sept 1, 2013 – $409,424.40**

* IEEE account: $386,061.74 +85.67-$21,515.00+88.07+83.64 = $364,804.12
* Face-to-Face: $193,000.31 -$1,982.86 - $39.00 = $44,620.25

**Nanjing, China – Sept 2013**

* Registration Income: $168,625
	+ Registrations 279 (+34 Students)
	+ Meeting Expense Estimate $173,692
	+ Estimated Loss ($ 5,067)
* Expense Estimates
	+ Electronic Facilities $ 7,700
	+ Networking & Shipping $62,300
	+ Special Services on site $22,655
	+ On site setup $ 7,000
	+ Staffing on site $ 18,100
	+ Disbursements $ 4,500
	+ Accounting and Legal $ 19,045
	+ Management $ 29,609
	+ Delegate Materials $ 2,783

* Estimated Sponsor Contribution: $116,000
	+ Meeting facilities $32,000
	+ AV $45,000
	+ Special Event (social) $39,000

**10:52** Wireless and IMAT announcements by Rick Alfvin (15-13-027-04)

* Secure SSID: VeriLAN-secure (WPA2 PSK: ieeeieee)

**10:57** Review future sessions

* November 10-15, 2013, Hyatt Regency Reunion, Dallas, TX, USA, *802 Plenary Session*
* January 19-24, 2014, Hyatt Century Plaza, Los Angeles, CA, USA, 802 Wireless Interim Session\*
* March 16-21, 2014, China World Hotel, Beijing PRC, 802 Plenary Session. (pending)
* May 11-16, 2014, Hilton Waikoloa Village, Big Island, HI, USA, 802 Wireless Interim Session\*
* July 13-18, 2014, Grand Hyatt Manchester, San Diego, CA, USA, 802 Plenary Session.
* September 14-19, 2014, TBD (Hilton in Athens?), 802 Wireless Interim Session\*
* November 2-7, 2014, Grand Hyatt San Antonio, San Antonio, TX, USA, 802 Plenary Session.
* January 19 - 25, 2015, Hyatt Regency, Atlanta, Georgia, USA, 802 Wireless Interim

**11:02 Working Group Updates**

* 802.11 by B Kraemer (Marvell): 334 voters, 36 potential voters

TGREVmc - Revision

TGac - VHT <6GHz – in Sponsor Ballot

TGaf- TVWS - in Letter Ballot

TGah- Sub 1GHz

TGai – Fast Initial Link Setup (FILS)

TGaj – China 45& 60 GHz bands (CMMW)

TGak – General Link, i.e. Bridging w/802.1(GLK)

TGaq – Pre-Association Discovery (PAD)

**Standing Committee**

WNG - WIRELESS NEXT GENERATION

ARCHITECTURE

JTC1

REGULATORY

**Study Group**

High efficiency Wireless LAN (HEW)

802.15 by B Heile (132 voters, 20 nearly voters)

TG4m: TVWS (in Sponsor, ~300 comments)

TG4n: CMB (draft development)

TG4p: RCC (in Sponsor, ~300 comments)

TG4q: ULP (Ultra Low Power amendment) - drafting TRD

TG8: PAC (Peer Aware Communications) requesting proposals

TG9: KMP (Key Management Protocol) draft development

TG10-L2R: Layer 2 Routing (just started)

SG-SRU - Spectrum Resource Utilization

SG-100G – 100 Gb/s THz

IG – 15.7 LED enhancements

IG - Dependability

802.18 by Michael Lynch

* 7 items concerning European regulatory matters

802.19 Filin

* TG1 TV whitespace coexistence finishing comment resolution

802.21 Subir Das (21-13-0161)

* TG21c – single radio handover – Sponsor ballot
* TG21d –group management – resolving WG ballot comments
* TG21m – revision project
* TG21.1 -

802.22 Pyo

* TGa MIBS
* TGb Enhanced Broadband Services and Monitoring Applications
* 802.22.1 rev – advanced beaconing

802.24 Gilb

* White Paper

**11:23** Joint meeting adjourned

**11:45** B Heile (ZigBee Alliance), WG chair called the 802.15 WG plenary to order (15-13-0481-02)

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, to which there were no responses.

Chair reminded participants of IEEE anti-trust rules and obligations.

Approve/modify joint opening agenda (15-13-0481-02-0000)

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

Review and approve 802.15 WG minutes from the Geneva session (15-13-0423-00-0000)

* Moved by R Alfvin, seconded by J Gilb. Upon neither discussion nor objection the joint minutes were approved.

**11:52** Wireless Network Updates by Rick Alfvin (15-13-0027-04)

* Rick described the attendance requirements for the week, 12 meetings must be attended to obtain credit for this session

**12:00** WG recessed

**Wednesday 18 Sept 2013**

**802.15 mid-session plenary meeting**

**10:31** Bob Heile called the meeting to order.

**TG4m (TVWS)** by SangSung Choi

* Sponsor Ballot – working on comment resolutions

**TG4n (CMB)** by Liang Li

* Reviewing draft document

**TG4p (PTC)** by Ben Rolfe

* Sponsor Ballot – working on comment resolutions

**TG4q (ULP)** by Shahriar Emami

* + working on Technical Guidance Document
	+ hearing channel model and PHY proposals

**TG8 (PAC) closing report** by Suhwook Kim (15-13-0558-00)

**TG10 (L2R)** by C Powell

* developing a presentation showing couple of applications, along with requirements for the 802.1 joint meeting in Dallas

**SG SRU** by Shoichi Kitazawa

* discussing PAR issues

**SG100G** by Thomas Kürner

* hearing presentations

**IG LED closing report** by Professor Jang (15-13-0560-00)

* call for applications

**SC Maintenance** by P Kinney

* reviewed ETSI issue resolutions
* reviewed L Taylor’s request for number assignments
* agreed upon path forward with revision

**11:25** Recessed until Thursday at 16:00

**Thursday, 19 Sept 2013**

**16:00** 802.15 WG chair called the meeting to order (agenda 15-13-0481-02)

**16:03** TG4m (TVWS) Closing Report by Phil Beecher (15-13-0575-01)

**16:05** TG4n (CMB) Closing Report by Liang Li (15-13-0572-00)

**16:12** TG4q (ULP) by Shariar Emami (15-13-0574-00)

**16:15** TG10 (L2R) by Clint Powell (15-13-0584-00)

**16:18** SG 100G by Thomas Kürner (15-13-0542-00)

**16:21** SG SRU by Shoichi Kitazawa (15-13-0577-00)

**16:24** TG4p (RCC) Closing Report by Ben Rolfe (15-13-0586-00)

**16:32** SCclosing report by Pat Kinney (15-13-0513-01)

**16:35** 802.24 by James Gilb

* white paper drafting effort
* ITU-R 36r1document
* Cenelec document

**16:38** 802.1 PARs by James Gilb (15-13-0585-00)

EUI-64 Bridging PAR

* Motion: *request that the PAR and 5C contained in documents 15-13-0576-01 and 15-13-0579-01, respectively, be approved by the 802.15 WG and that the 802 EC be requested to forward the revised PAR to NesCom. The 802.15 working group chair and technical editor are authorized to make additional modifications to the PAR and 5C as needed to reflect EC discussion at its closing meeting.*
* Moved by James Gilb, seconded by Phil Beecher
* Upon no discussion the vote was taken with the results of 16/0/0

EUI-64 to EUI-48 bridging PAR

* Motion: *request that the PAR and 5C contained in documents 15-13-0580-01 and 15-12-0581-00, respectively, be approved by the 802.15 WG and that the 802 EC be requested to forward the revised PAR to NesCom. The 802.15 working group chair and technical editor are authorized to make additional modifications to the PAR and 5C as needed to reflect EC discussion at its closing meeting.*
* Moved by James Gilb, seconded by Phil Beecher
* Upon no discussion the vote was taken with the results of 16/0/0

**16:55** 802.11 Liaison Report from C Chaplin (15-13-587-01)

**17:05** Motion *to adjourn* was made by Clint Powell, seconded by James Gilb, upon no objection the motion carried, this session is adjourned.

**Annex A** Attendance = 72

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| --- | --- | --- |
| **Last Name** | **First Name** | **Affiliation** |
| Ajito | Katsuhiro | Microsystem Integration Laboratories NTT |
| Alfvin | Richard | Verilan |
| Beecher | Philip | Wi-SUN Alliance |
| Bynam | Kiran | SAMSUNG |
| Cai | Yunlong | Huawei Technologies Co. Ltd |
| Chang | Kapseok | ETRI |
| Chang | Kuor-Hsin | Elster Solutions |
| Chang | Soo-Young | California State University, Sacramento (CSUS) |
| Cheong | Minho | ETRI |
| Cho | Seungkwon | ETRI |
| Choi | Sangsung | ETRI |
| De Ruijter | Hendricus | Silicon Laboratories |
| Dolmans | Guido | Holst Centre / IMEC-NL |
| Dotlic | Igor | NICT |
| Eggert | Dietmar | Atmel Corporation |
| Emami | Shahriar | Samsung Information Systems America, Inc. |
| Fukui | Kiyoshi | Oki Electric Industry Co., Ltd. |
| Gilb | James | Tensorcom, Inc. |
| Gillmore | Matthew | Itron Inc. |
| Godfrey | Tim | Electric Power Research Institute, Inc. (EPRI) |
| Guanglong | Du |  |
| Guo | Hongxiang | Beijing University of Posts and Telecommunications (BUPT) |
| Heile | Robert | ZigBee Alliance |
| Hernandez | Marco | NICT |
| Hosako | Iwao | NICT |
| Huang | Li | Holst Centre / IMEC-NL |
| Jang | Yeong Min | Kookmin University |
| Joo | Seong-Soon | ETRI |
| Jung | Soojung | ETRI |
| Kasamatsu | Akifumi | NICT |
| Kim | Hyung-Jin | ETRI |
| Kim | Jaehwan | ETRI |
| Kim | Seokki | ETRI |
| Kim | Youngsoo | SAMSUNG |
| Kinney | Patrick | Kinney Consulting LLC |
| Kitazawa | Shoichi | ATR Wave Engineering Laboratories |
| Kuerner | Thomas | TU Braunschweig |
| Kuroda | Masahiro | NICT |
| Kwak | Byung-Jae | ETRI |
| Lan | Zhou | NICT |
| Lee Ph.D | Hyeong Ho | ETRI |
| Li | Liang | Vinno Technologies Inc. |
| Li | Qing | InterDigital, Inc. |
| Luo | Jufeng | Shanghai institute of microsystem and infomation technology |
| Lynch | Michael | Nortel Networks |
| Mc Laughlin | Michael | DecaWave |
| Mori | Kenichi | Pansonic Corporation |
| nair | jinesh | SAMSUNG |
| Ngo | Chiu | SAMSUNG |
| Ogawa | Hiroyo | Association of Radio Industries and Businesses (ARIB) |
| Ohba | Yoshihiro | TOSHIBA Corporation |
| Park | Hyunho |  |
| Powell | Clinton | PWC, LLC |
| Roberts | Richard | Intel Corporation |
| Rolfe | Benjamin | Blind Creek Associates |
| Ryu | Cheol | ETRI |
| Sato | Noriyuki | Oki Electric Industry Co., Ltd. |
| Shibagaki | Nobuhiko | Hitachi, Ltd. |
| Stuebing | Gary | Cisco Systems, Inc. |
| Sum | Chin-Sean | NICT |
| Tsai | Chia-Lung | ITRI |
| Villardi | Gabriel | NICT |
| Wang | Xiang | Wuxi SensingNet Industrialisation Research Institute |
| Xu | Yong | Huawei Technologies Co. Ltd |
| Yamamoto | Takashi | Sumitomo Electric Industries, LTD |
| Yang | Yang | Wuxi SensingNet Industrialisation Research Institute |
| Yaoxian | Fu | Shanghai institute of microsystem and infomation technology |
| Zhang | Yan | Holst Centre / IMEC-NL |
| Zhao | Bingxuan | Niigata University |
| Zhao | Mu | Huawei Technologies Co. Ltd |
| Zhou | Mingtuo | NICT |
| Zhu | Chunhui | SAMSUNG |