**IEEE P802.15**

**Wireless Personal Area Networks**

|  |  |
| --- | --- |
| Project | IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs) |
| Title |  |
| Date Submitted | [9 March 2018] |
| Source | [][][Chicago, IL] | Voice: [+1.847.960.3715]Fax: [+1.847.790.3805]E-mail: [pat.kinney@ieee.org] |
| Re: | [802.15 Plenary Meeting in Rosemont, IL] |
| 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. |

**113th IEEE 802.15 WSN SESSION**

**Hyatt Regency O’Hare**

**Rosemont, Illinois**

**March 5-9, 2018**

**Monday, 5 March 2018**

**10:35 AM** The chair, Bob Heile, called the meeting to order (15-18-0068-05)

The chair showed a face-to-face presentation on this venue, i.e. top ten things to know.

The chairasked for new attendees to raise their hands; there were none.

Announcements:

* Social is a celebration of the contributions of Pat Thaler and Adrian Stephens to IEEE 802 Standards
* Don’t forget to register for Warsaw, Poland

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.

Tim Harrington moved to *approve the agenda (document 15-18-0068-05-0000)* with Ben Rolfe seconding the motion. Following no objection, the agenda was approved.

Rick Alfvin moved *to approve the previous meeting minutes (document 15-18-0013-00-0000)* and Tim Harrington seconded the motion. Following neither discussion nor objection the minutes were approved. There were no matters resulting from the previous minutes.

Rick Alfvin (Linespeed) presented the opening plenary information (15-18-0111-00).

Ben Rolfe (Blind Creek Associates) presented the WG11/WG15 treasurer’s report (15-18-0090-00).

Future Sessions

* May 6-11, 2018, Warsaw Marriott, Warsaw, Poland, *802 Wireless Interim Session.\**
* July 8-13, 2018, Manchester Grand Hyatt, San Diego, CA, USA, *802 Plenary Session.*
* September 9-14,  2018, Hilton Waikoloa Village, Kona, HI, USA, *802 Wireless Interim Session.*\*
* November 11-16, 2018, Marriott Marquis Bangkok, *802 Plenary Session.*
* January 13-18, 2019 TBD (St Louis, Montreal, Jacksonville) *802 Wireless Interim Session.\**
* May 12-17, 2019, Grand Hyatt Atlanta in Buckhead, Atlanta, Georgia, USA *802 Wireless Interim Session.\**
* September 2019 - Marriott Hanoi/Centara Bangkok/Marriott City Center Shanghai *802 Wireless Interim Session.\**
* Future venues 2020 Lisbon Marriott, Budapest Marriott, Vienna Hilton, Athens Hilton, Sorrento Hilton, JW Bucharest.

B Heile presented a report on the EC meeting held just before this meeting (15-17-0609-00).

**Status Reports**

802.18 by Jay Holcomb (Itron)

* Fellowship program – four African regulatory participants
* FCC: 95 – 3000 GHz unlicensed use
* FCC: NPRM on section 7
* NTIA: repurpose of 3.4 – 3.5 GHz for wireless

802.15

Task Group 4md – Revision.

* roll-up is done

Study Group 4w – LPWA

* PAR and CSD documents

Study Group 4x – FANE

* PAR and CSD documents

Study Group 4y – SECN

* PAR and CSD documents and 2 proposals

Study Group 4z – ELR

* PAR and CSD documents

Task Group 7m – Optical Wireless Communications (OWC)

* + - Working on comment resolution

Interest Group VAT

* Discuss PHY safety

Task Group 10a – RMA

* + - Reviewing technical direction

Task Group 13 –Multi Gigabit/sec OWC

* + - Working on comment resolutions

Task Group 12 –Upper Layer Interface (ULI)

* + - Review and discuss operation
		- Start work on ballot-able draft
		- Update Project Plan/Timeline

Standing Committees (SCm, SC IETF, SCwng)

* + Maintenance contributions for standards and operation manual
	+ IETF101 agenda items for 6tisch, 6lo, core, roll, and lp-wan, Ace, t2trg
	+ WNG- no presentations

Working Group officer elections

* + Motion - *Approval of R Heile (Wi-Sun) as chair of 802.15,*
	+ Moved by Rick Alfvin and seconded by Tim Harrington
	+ Upon no discussion the vote was taken with the results of 25/0/1, motion prevails
	+ Motion - *Approval of Rick Alfvin (Linespeed) as operations vice-chair*
		- Moved by Tim Harrington and seconded by Ben Rolfe
		- Upon no discussion the vote was taken with the results of 25/0/1, motion prevails
	+ *Approval of Pat Kinney (Kinney Consulting) or Phil Beecher (Wi-SUN) as operations vice-chair*
		- Pat Kinney speech
		- Phil Beecher speech
		- Questions placed to both parties:
			1. Why are you running for this position?
			2. What experiences do you have deploying these types of wireless devices?
		- Pat Kinney and Phil Beecher left the room for the vote to take place
		- Vote was taken with the results of
			* 12 votes for Pat Kinney, 12 votes for Phil Beecher, WG chair then voted for Pat Kinney. Therefore Pat Kinney prevails as operations vice chair by a vote of 13 to 12.

**11:54 PM** The chair recessed the meeting

**Wednesday, 7 March 2017**

**10:33** Bob Heile, WG chair (Wi-SUN) called the meeting to order.

WG Chair made announcements concerning social, logistics, and registration for Warsaw.

**10:38** 802EPrivacy Recommendation Update by J C Zúñiga (SigFox) (15-18-0137-00)

**10:44** 802.18 Tag liaison by J Holcomb (Itron)

* Presentation on UWB and interference
* Discussion on providing internet access to those global people without it

**10:40** TG4md by G Steubing (Cisco)

* Resolution to send roll-up document to various groups has not been completed

**10:48** SG4w by J Robert (Friedrich-Alexander-Universität Erlangen)

* Worked on proposal guidance document
* PAR and ECN is being worked upon

**10:51** SG4x by M Gilmore (Itron) (15-18-0134-01)

* WG Motion: *request that the PAR and CSD contained in documents 15-178-0624-05 and 15-17-0622-04, respectively, be approved by the IEEE 802.15 WG and that the EC be requested to forward the PAR to NesCom*. *The 802.15 working group chair and technical editor are authorized to make additional modifications to the PAR and CSD as needed to reflect EC discussion at its closing meeting.*

Moved by M Gillmore and seconded by R Alfvin

The vote was taken with the results of 26/0/0, motion carries.

**10:55** SG4y by D Sturek (Itron)

* work is continuing on PAR and CSD

**10:58** SG4z by T Harrington (Pro-ID) (15-18-0112-00)

* WG Motion: *request that the PAR and CSD contained in documents 15-18-0112-02-004z and 15-18-0036-02-0000, respectively, be approved by the IEEE 802.15 WG and that the EC be requested to forward the PAR to NesCom*. *The 802.15 working group chair and technical editor are authorized to make additional modifications to the PAR and CSD as needed to reflect EC discussion at its closing meeting.*

Moved by T Harrington and seconded by B Rolfe

Upon no discussion the vote was taken with the results of 24/0/1

**11:06** TG7m by R Roberts (Intel)

* Out of 300 comments, about ½ are resolved

**11:08** IG VAT closing report by V Mariappan (15-18-0131-00)

**11:11** TG10a closing report by C Perkins (Futurewei) (15-18-0123-00)

**11:16** TG13 by Volker Jungnickel (Fraunhofer Heinrich Hertz Institute)

* Summary of ad hoc meeting with ITU
* Hearing proposals for modulation

**11:19** IG Dependability closing report by R Kohno (YNU/CWC-Nippon)

* Heard 5 presentations from automotive industry focusing on factory automation and UAV

**11:21** SC reports by P Kinney (Kinney Consulting)

* SC Maintenance: 802.15.2 withdrawal SB: resolved all 4 comments and approved those resolutions
* SC WNG: no presentations

**11:23** TG 15.12 ULI by P Kinney (Kinney Consulting)

* Working on the primitives for the mandatory elements of the ULI

**11:25** WG chair recessed the meeting until Thursday evening.

**Thursday, 8 Mar 2018**

**18:37** WG chair called the meeting to order

**18:38** TG4md closing report by Gary Steubing (Cisco Systems) (15-14-0153-00)

**18:44** SG4w LPWA closing report by Jörg Robert (Friedrich-Alexander-Universität Erlangen) (15-18-0156-00)

WG Motion: *request that the PAR and CSD contained in documents 15-18-0050-06 and 15-18-0053-04, respectively updated from resolved comments in 15-18-0133-03, be approved by the IEEE 802.15 WG and that the EC be requested to forward the PAR to NesCom. The 802.15 working group chair and technical editor are authorized to make additional modifications to the PAR and CSD as needed to reflect EC discussion at its closing meeting.*

* Move: Jörg Robert; Second: Volker Jungnickel
* Upon no further discussion the vote was taken with the results of 17 / 1 / 3, the motion carries.

**18:49** SG4x FANE closing report by Matt Gillmore (Itron) (15-18-0151-00)

**18:51** SG4y **(**SECN) closing report by Don Sturek(Itron) (15-18-0143-03)

Motion: *Request that the PAR and CSD contained in documents 15-18-0037-04 and 15-18-0040-07, respectively, be approved by the IEEE 802.15 WG and that the EC be requested to forward the PAR to NesCom. The 802.15 working group chair and technical editor are authorized to make additional modifications to the PAR and CSD as needed to reflect EC discussion at its closing meeting.*

* + Moved: Don Sturek, Seconded: Gary Steubing
	+ Upon no discussion the vote was taken with the results of 23/0/0, motion carries

**18:56** TG7m by R Roberts (Intel) (15-18-0154-01)

*Motion: 802.15 requests conditional approval from the EC to submit P802.15.7m\_D2 (or current revision) to Sponsor Ballot.*

*Moved by Rick Roberts and seconded by Ben Rolfe*

*Upon no discussion the vote was taken with the results of 17/0/5*

*Move that 802.15 WG approve the formation of a Ballot Resolution Committee (BRC) for the WG balloting of the P802-15-7m\_LB D01 with the following membership: Yeong Min Jang, Rick Roberts, Soo-Young Chang, Vinay Mariappan, Van Trang Nguyen and Ben Rolfe. The 802.15 TG7m BRC is authorized to approve comment resolutions and to approve the start of sponsor ballots of the revised draft on behalf of the 802.15 WG.*

*Moved by R Roberts, seconded by R Alfvin*

*Upon no discussion nor objection the motion carries*

**19:01** SG4z **(**EIR) closing report by Tim Harrington(Pro-ID) (15-18-0146-00)

**19:04** TG13 closing report by Volker Jungnickel (Fraunhofer Heinrich Hertz Institute) (15-17-0155-00)

**19:11** TG 12 (ULI) closing report by P Kinney (Kinney Consulting) (15-18-0114-01)

**19:15** Standing Committees closing report by P Kinney (Kinney Consulting) (15-18-0102-01)

*Motion: that 802.15 WG requests unconditional approval from the EC to submit 802.15.1 to RevCom for Withdrawal.*

Moved by Rick Alfvin and seconded by Tim Harrington

Upon no discussion the vote was taken with the results of (20/0/3), motion carries

*Motion: that 802.15 WG requests unconditional approval from the EC to submit 802.15.2 to RevCom for Withdrawal.*

Moved by Rick Alfvin and seconded by Tim Harrington

Upon no discussion the vote was taken with the results of (19/0/3), motion carries

**19:20** 802.11 liaison report by A Petrick (Jones-Petrick and Associates) (15-18-0157-00)

**19:26** 802.18 liaison report by J Holcomb (Itron) (15-18-0145-00)

**19:31** 802.24 liaison by T Godfrey (EPRI) (24-18-007-01)

**AoB**

Straw Poll

* Those who find this an acceptable venue to return; 5 yes, 18 no, 3 don’t care

**19:34** Motion *to adjourn* was made by Gary Steubing, seconded by Tim Harrington. Upon hearing no objection, the motion carries; the session is adjourned.

**Annex A** Attendance = 52

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

|  |  |  |
| --- | --- | --- |
| Alfvin | Richard | Linespeed Events LLC |
| Baer | Bernd | Marquardt |
| Barras | David | 3db Access AG |
| BEECHER | PHILIP E | Wi-SUN Alliance |
| Bims | Harry | Bims Laboratories, Inc. |
| Buffington | John | Itron Inc. |
| Byun | Woo-Jin | Electronics and Telecommunications Research Institute (ETRI) |
| Cha | Jaesang | SNUT |
| Chang | Soo-Young | California State University, Sacramento (CSUS) |
| De Ruijter | Hendricus | Silicon Laboratories |
| Eckert | Edward | Itron Inc. |
| Fischer | Michael | NXP Semiconductors |
| Gillmore | Matthew | Itron Inc. |
| Godfrey | Tim | Electric Power Research Institute, Inc. (EPRI) |
| Guo | Jianlin | Mitsubishi Electric Research Labs (MERL) |
| HAN | CHONG | pureLiFi |
| Harrington | Timothy | Pro-ID |
| Heile | Robert | Wi-SUN Alliance |
| Holcomb | Jay | Itron Inc. |
| Ibrahim | Brima | NXP Semiconductors |
| Jang | Yeong Min | Kookmin University |
| Jeong | ByungJang | Electronics and Telecommunications Research Institute (ETRI) |
| Jungnickel | Volker | Fraunhofer Heinrich Hertz Institute |
| Kim | Jeong Gon | Korea Polytechnic University (KPU) |
| KINNEY | PATRICK | Kinney Consulting LLC |
| Kitazawa | Shoichi | Muroran IT |
| Kivinen | Tero | Self Employed |
| Kohno | Ryuji | YNU/CWC-Nippon |
| Leong | Frank | NXP Semiconductors |
| Li | Huan-Bang | National Institute of Information and Communications Technology (NICT) |
| Li | Qiang | HUAWEI |
| Lim | Sang-Kyu | Electronics and Telecommunications Research Institute (ETRI) |
| MARIAPPAN | VINAYAGAM | SNUT |
| Noshad | Mohammad | VLNComm |
| Perkins | Charles | Futurewei Technologies |
| Polland | Joe | CommScope, Inc. |
| Robert | Joerg | University of Erlangen-Nuremberg |
| Roberts | Richard | Intel Corporation |
| Rolfe | Benjamin | Blind Creek Associates |
| Sakata | Ren | TOSHIBA Corporation |
| Salazar Cardozo | Ruben E | Landis Gyr Group Worldwide |
| Sato | Noriyuki | Oki Electric Industry Co., Ltd. |
| Shah | Kunal | Silver Spring Networks Inc. |
| Stuebing | Gary | Cisco Systems, Inc. |
| Sturek | Don | Itron Inc. |
| Turner | James | Landis+Gyr AG |
| umutoni | yvonne | Rwanda Utilities Regulatory Authority |
| Verso | Billy | DecaWave |
| Wang | Xu | VLNComm |
| Wechsler | Johannes | Fraunhofer Institute for Integrated Circuits IIS |
| Yee | Peter | NSA/IAD |
| Zuniga | Juan Carlos | SIGFOX |