**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 | [21 May 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 Beijing, China] |
| Abstract | [IEEE 802.15 Working Group Minutes] |
| Purpose | [Official minutes of the Working Group Session] |
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**IEEE 802.15 Interim Meeting – Session #66**

**Shangri-la Hotel, Beijing, China**

**May 16-20, 2010**

**Monday, 17 May 2010**

**11:32** 802.11, 802.15, 802.18, 802.19, and 802.22 Chairs called the joint meeting to order. IEEE 802.15 attendance is included as Annex A.

General announcements:

* Attendance will be collected via the IMAT
* Social on Wednesday evening

Straw Poll of new attendees: 10

**11:39** Financial report by Jon Rosdahl, (11-10-0554-00, 15-10-0267-00)

* March 14, 2010 - $350,118.07
	+ Wachovia: $288,812.07
	+ Face-to-Face: $61,306
* May 16, 2010 - $350,118.07
	+ Wachovia: $288,812.07 + 207.35 (interest) = $289,019.42
	+ Face-to-Face: $61,306
* Reserves:
	+ Meeting Expense Reserve - $350,335

Q: What are the attendance numbers?

* + 205 staying at hotel, 7 who are not
	+ 57 Chinese nationals

**11:43** 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

**11:47** Wireless announcements: (15-10-0038-03)

Wireless Network Updates by Rick Alfvin

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

Q: is the internet connection shared with the Hotel? R: No

**11:50** Review Interim meetings

* 12-17 Sep 2010, Hilton Waikoloa Village, Big Island, HI, USA
* 16 – 21 January 16-21, 2011, Hyatt Century Plaza, Los Angeles, CA
* 8 – 13 May, 2011, Hyatt Grand Champion, Palm Springs, CA
* 11 – 16 September, 2011, Okinawa Convention Center, Okinawa, Japan (Pending)

**11:55Task Group Updates**

* 802.11 by B Kramer, Marvell (~250 voters)
	+ Sponsor Ballot
		- 11z
		- 11u
		- 11v
		- 11p
	+ TG LB
		- 11mb (maintenance)
		- 11s (mesh)
	+ TG w/o draft
		- 11aa (video transport)
		- 11ae (QoS Mgmt Frm)
		- 11af (TVWS)
		- 11ac (VHT 5 GHz)
		- 11ad (VHT 60 GHz)
	+ Study Groups
		- FIA (fast initial authentication)
		- S1G (sub 1 GHZ)
	+ Discussion Topics
		- Smart Grid

802.15 (223 voters, 35 nearly voters)

WNG: next generation

TG4e (MAC enhancements) comment resolution

TG4f (RFID applications) working on draft

TG4g (SUN applications): comment resolution

TG4h (corrigenda): comment resolutions

TG6 (BAN): working on draft

TG7 (VLC TG): comment resolution

SG-Personal Service Communication (PSC)

SG-Medical BAN (MBAN in 2.3 GHz range)

IG- Low Energy Critical Infrastructure Monitoring (LECIM)

802.18 Mike Lynch (20 voters)

* Review FCC broadband plan
* 802.16 documents review

802.19 Steve Shellhammer (43 voters)

* Held first Work Group in Jan 2010
* TG1 is TVWS Coexistence

802.22 Apurva Mody (~40 voters)

* working on letter ballot comment resolution

Smart Grid (802)

* PAP2 – NIST listing of potentially appropriate wireless technologies
* IEEE2030

**12:19** Joint meeting adjourned

**13:40** B Heile (ZigBee Alliance), WG chair called the 802.15 WG plenary to order

Chair again reminded attendees 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 (15-10-0243-01-0000)

* Added an update to the treasurer’s report
* Moved by R Alfvin, seconded by A Astrin. Following neither discussion nor dissent the agenda was approved.

Review and approve joint minutes from the Orlando meeting (15-10-0179-00-0000)

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

**13:49** Wireless announcements

* R Alfvin described the issues this session due to the limited internet bandwidth

**14:00** WG recessed

**Wednesday 19 May 2010**

**802.15 mid-session plenary meeting**

**10:39** Bob Heile called the meeting to order.

**10:40** 802.18 liaison by John Barr (15-10-0333-00)

* 60 GHz ITU liaison effort
* liaison from ITU-R WP5A regarding "Mobile wireless access systems providing telecommunications for a large number of ubiquitous sensors and/or actuators scattered over wide areas in the land mobile service".

**10:52** **Mid-week status updates**

**TG4e** by P Kinney

* LB53 is complete
	+ Voters     224
	+ Voted      178 (79.5%)
	+ Yes         120 (73.6%)
	+ No            43
	+ Abstain    15 (8.4%)
* Comments         1643
	+ Editorial      491
	+ Technical 1152

**TG4f** by Tim Harrington

* all tbds are resolved
* Drafting draft standard text
* Goal is to seek letter ballot after July session

**TG4g** by P Beecher

* Working on comment resolutions
	+ 48 technical comments are resolved
* Goal is to recirculate after July’s session

**TG4h** by P Kinney

* LB52 (TG4h)

Responses: 185 (82.6% of 224)

Approve: 160 (95.8%)

Disapprove: 7

Abstain: 18

Comments: 111 (E-46, T-65)

**TG6 (BAN)** by A Astrin

* Working on writing the draft
* Goal is to seek letter ballot after July session

**TG7 (VLC)** by Eun Tae Won

* Resolving comments from LB50
	+ 69% resolved
* Planning for ad hoc in San Jose week before San Diego session

**PSC SG** by Peter Murray

* Request four meeting slots at San Diego session

**MBAN SG** by Ray Krasinski

* Discussing

**LECIM**

* Tutorial and request for SG in San Diego

**WNG** by P Kinney

The WNG meeting will be replaced with meeting on the 802.15 Operations Manual

**Operations Manual** byP Kinney (15-10-0235-03)

* P Kinney explained the need for the 802.15 WG operations manual
* Quick review of the document resulted in a significant discussion on letter ballot voting.
* Number of members suggested the need for guidance on the subject of letter ballot voting and comment resolution. P Kinney suggested that a WG Chair’s Guideline would be a better place for such guidance than an Operation Manual

**12:23** Recessed until Thursday at 18:30

**Thursday, 20 May 2010**

**18:37** WG chair called the meeting to order (agenda 15-10-0423-02)

**18:39** Treasury report by J Barr (15-10-0267-02)

**18:44** TG4e Closing Report by P Kinney (15-10-0359-00)

**18:50** TG4f Closing Report by Mike McInnis (15-10-0347-01)

**18:52** TG4h Closing Report by Pat Kinney (15-10-0363-00)

**18:53** TG6 Closing Report by Art Astrin (15-10-0368-00)

*Motion: that the 802.15 WG approve the start a WG Letter Ballot requesting approval to forward the P802.15.6 Draft D0 to Sponsor Ballot.*

Moved by Art Astrin, seconded by Rick Alfvin

Upon neither discussion nor objection the motion carries by unanimous consent

**18:57** TG4g Closing Report by Phil Beecher (15-10-0366-00)

**19:02** TG7 Closing Report by Eun Tae Won (15-10-0358-00)

**19:11** PSC SG Closing Report by Peter Murray (15-10-0357-00)

**19:14** MBAN SG Closing Report by Ray Krasinski (15-10-0364-00)

**19:17** LECIM IG Closing Report by Pat Kinney (15-10-0361-00)

**19:20** 802.11 Liaison report by Clint Chaplin (15-10-0367-00)

**19:24** Bluetooth liaison report by John Barr (15-10-329-00)

**19:30** ZigBee Alliance Report by Bob Heile

* Telecom services profile deployment announced

**19:35** P&P report by Pat Kinney

Motion: *that the 802.15 WG approve the start a WG Letter Ballot to adopt 15-10-0235-04 as the 802.15 Operations Manual.*

Moved by Pat Kinney

Seconded by Art Astrin

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

**19:40** 802.19 Liaison Report by Tuncer Baykas (802.19-10/0074r2)

**19:48** motion *to adjourn* was made by Rick Alfvin, seconded by E Callaway, upon no objection the motion carried, this session is adjourned.

**Annex A** Attendance = 174

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| **First Name** | **Last Name** |

|  |  |
| --- | --- |
| Alfvin, | Rick |
| Astrin, | Arthur |
| Bae, | Taehan |
| Bahr, | Michael |
| Barr, | John |
| Batra, | Anuj |
| Baykas, | Tuncer |
| Beecher, | Philip |
| Bhatia, | Ashutosh |
| Bhatti, | Ghulam |
| Boytim, | Mathew |
| Brown, | Monique |
| Brubk, | Sverre |
| Buffington, | John |
| Bynam, | Kiran |
| Callaway, | Edgar |
| Cardozo, | Ruben |
| Chandler, | Russell |
| Chang, | Kuor-Hsin |
| Chaplin, | Clint |
| Chebbo, | Hind |
| Chen, | Xi |
| Choi, | Sangsung |
| Dahl, | Matthew |
| Dao, | Yuan |
| Dawkins, | Mark |
| De | Ruijter, |
| Dotlic, | Igor |
| Eggert, | Dietmar |
| Evans, | David |
| Farlow, | Charles |
| Farserotu, | John |
| Fifield, | Kory |
| Filippo, | Will |
| Fischer, | Michael |
| Fukatsu, | Noriyasu |
| Fukui, | Kiyoshi |
| Gilb, | James |
| Godfrey, | Tim |
| Gottlib, | Elad |
| Hara, | Shinsuke |
| Harrington, | Timothy |
| Hayashi, | Koichiro |
| Heile, | Robert |
| Hernandez, | Marco |
| Ho, | Jin-Meng |
| Hong, | Wei |
| Hosur, | Srinath |
| Hu, | Wendong |
| Huang, | Heqing |
| Hughes, | Sterling |
| Hwang, | Jung-Hwan |
| Hwang, | Taeho |
| Ikegami, | Tetsushi |
| Iso, | Akio |
| Jeong, | Wuncheol |
| Ji, | Lusheng |
| Kang, | Tae |
| Kang, | Tae-Gyu |
| Kato, | Shuzo |
| Kawamoto, | Yasutaka |
| Kent, | Jeritt |
| Khakuria, | Prithpal |
| Kim, | Dae |
| Kim, | Dong-Sun |
| Kim, | Jaehwan |
| Kim, | Young |
| King, | Jeffrey |
| Kinney, | Patrick |
| Kohno, | Ryuji |
| Kojima, | Fumihide |
| Krasinski, | Raymond |
| Kuroda, | Masahiro |
| Kyoungju, | Noh |
| Le, | Khanh |
| Lee, | Cheolhyo |
| Lee, | Hyubwoo |
| Lee, | Myung |
| Lewis, | Daniel |
| Li, | Huan-Bang |
| Li, | Liang |
| Lim, | Sang-Kyu |
| Liru, | Lu |
| Liu, | Haitao |
| Liu, | Yongjun |
| Luo, | Jufeng |
| Lynch, | Michael |
| Ma, | Kui |
| Mason, | Robert |
| Mc | Laughlin, |
| Millet, | Charles |
| Miniutti, | Dino |
| Mirnezami, | Siamak |
| Monnerie, | Emmanuel |
| Moy, | Hamilton |
| Murray, | Peter |
| Ngo, | Chiu |
| Nguyen, | Estelle |
| Olson, | David |
| Omeni, | Okundu |
| Ouvry, | Laurent |
| Pan, | Qiang |
| Park, | Hyung-Il |
| Park, | Jahng |
| Park, | Seung-Hoon |
| Park, | Taejoon |
| Ping, | Xu |
| Poegel, | Frank |
| Popa, | Daniel |
| Powell, | Clinton |
| Powell, | Richard |
| Rahman, | Mohammad |
| Rajagopal, | Sridhar |
| Ramasastry, | Jayaram |
| Razzell, | Charles |
| Reed, | Marc |
| Reznik, | Alex |
| Roberts, | Richard |
| Roh, | June |
| Rolfe, | Benjamin |
| Ryu, | Seung-Moon |
| Sakamoto, | Kentaro |
| Schwoerer, | Jean |
| Seibert, | Cristina |
| Shah, | Kunal |
| Shearer, | Steve |
| Shellhammer, | Stephen |
| Shen, | Jie |
| Shimada, | Shusaku |
| Shimizu, | Masashi |
| Shin, | Chang |
| Shin, | Cheolho |
| Son, | Jae |
| Son, | Jaeseung |
| Soon, | Jang |
| Stadnik, | Paul |
| Sum, | Chin-Sean |
| Sung, | Hui-Hsia |
| Takizawa, | Kenichi |
| Tanaka, | Hirokazu |
| Taylor, | Larry |
| Thoen, | Steven |
| Tian, | Qian |
| Tomcik, | James |
| Van | Greunen, |
| Van | Wyk, |
| Vaswani, | Raj |
| Verso, | Billy |
| Virk, | Bhupender |
| Walewski, | Joachim |
| Wan, | Yadong |
| Wang, | Junyi |
| Wang, | Lin |
| Wang, | Qin |
| Wang, | Qixin |
| Wang, | Quan |
| Wang, | Xiang |
| Ward, | Andy |
| West, | Nicholas |
| Wilbur, | Mark |
| Winkel, | Ludwig |
| Won, | Eun |
| Xing, | Tao |
| Xu, | Yizhi |
| Xu, | Zhengyuan |
| Yang, | Hui |
| Yang, | Yang |
| Yao, | Guoliang |
| Yaoxian, | Fu |
| Yasukawa, | Kazuyuki |
| Yazdandoost, | Kamya |
| Yokoo, | Kaoru |
| Zhang, | Ling |
| Zhao, | Mu |
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