**IEEE P802.15**

**Wireless Personal Area Networks**

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| Project | IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs) | |
| Title | **<IEEE802.15 WG minutes>** | |
| Date Submitted | [12 May 2017] | |
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| Re: | [802.15 Plenary Meeting in Daejeon, South Korea] | |
| Abstract | [IEEE 802.15 Working Group Minutes] | |
| Purpose | [Official minutes of the Working Group Session] | |
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**108th IEEE 802.15 WSN SESSION**

**Daejeon Convention Center**

**Daejeon, South Korea**

**08 – 11 May, 2017**

**Monday, 08 May 2017**

**09:30 AM** The chair, Bob Heile, called the meeting to order: <https://mentor.ieee.org/802.15/dcn/17/15-17-0247-01-0000-802-15-icn-2017-graphic-agenda.xlsx>

Announcements:

* The Chair thanked ETRI for helping Host this session, along with the City of Daejeon.
* Don’t forget to register for Berlin, early registration and for the Hotel Estrel ends 19 May, 2017, next week. The social is a boat tour.
* The Chair presented some logistics for this week, including info on social Wednesday night.
* The Chair presented the agenda for the Workshop on Friday, <https://mentor.ieee.org/802-ec/dcn/17/ec-17-0081-00-WCSG-ieee802-wireless-workshop-daejeon.pdf>

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.

T Kürner moved to *approve the agenda (document 15-17-0247-02-0000)* with C Powell seconding the motion. Following no objection, the agenda was approved.

C Powell moved *to approve the previous meeting minutes (document 15-17-0157-00-0000)* and T Kürner seconded the motion. Following neither discussion nor objection the minutes were approved. There were no matters resulting from the previous minutes.

R Alfvin asked if any new attendees, there were none. He then informed the group of network setup, attendance procedures and requirements.

B. Rolfe is not in attendance, though the Treasurer Report is posted on Mentor, <https://mentor.ieee.org/802.15/dcn/17/15-17-0278-00-0000-treasurer-report-may-2017-daejeon.pptx>

TG 4s, IG DEP is not meeting this week, this is recent update.

With that the chair mentioned in the absence of several TG chairs, the WG Chair will help with the following:

3f – Start a letter ballot.

4s – Start a re-recirculation.

PAR – corrigenda for 802.15.4-2015 to correct the MAC address issue, plan is to start the letter ballot this week.

**09:51** The chair recessed the meeting

**Wednesday, 10 May 2017**

**10:30**

Bob Heile, WG chair, called the meeting to order.

WG Chair made general announcements concerning affiliations, social, logistics, registration for Berlin and workshop this Friday.

**10:35** 802.18 Tag liaison by Holcomb

* Focus this week is 6 GHz activity is picking up for both the FCC and EU.
* Also a Light Communication ITU-R liaison being worked.

**10:37** TG3d 100G mid-week report by Kürner (15-17/0293r00)

* Worked on comment resolutions, all are done.
* 2 no voters have been asked for feedback before tomorrow’s sessions, though still can go for ballot at the end of the week.

**10:38** IG THZ closing report by Kürner (15-17/0294r00)

* 1 meeting this week with 2 contributions on Japanese activity on 300GHz transmitters and Thomas presented on human blockage effects.

**10:39** TG4s SRU mid-week report by Heile

* Still working and editing draft D03, heading toward a WG LB recirc.
* 15.4s BRC motion
  + TG4s requests that 802.15 WG approve the formation of a Ballot Resolution Committee (BRC) for the WG balloting of the P802.15.4s-D02 with the following membership: Shoichi Kitazawa, Hidetoshi Yokota, Chris Calvert, Benjamin Rolfe and James Gilb. The 802.15 TG4s BRC is authorized to approve comment resolutions and to approve the start of recirculation ballots of  the revised draft on behalf of the 802.15 WG. Comment resolution on recirculation ballots between sessions will be conducted via reflector email and via teleconferences announced to the reflector as per the LMSC 802 WG P&P.
    - Moved by: Rick Alfvin
    - Seconded by: Thomas Kürner.
    - Upon neither discussion nor objection the motion carries

**10:41** TG4v RSB closng report by Heile

* Nothing needed this week. it is in publishing now, so nothing to do.

**10:43** TG7m OWC mid-week report by Jang

* Working the comments, we should complete this week.
* In July will work on the revision1 document.

**10:45** TG8 PAC mid-week report by Lee

* 1st sponsor ballot ends tomorrow and have passed quorum. (81%)
* 3370 comments so far.

**10:47** TG13 MG OWC mid-week report by Jungnickel (15-17/0304R00)

* Having 10 meetings, establishing the TG as PAR/CSD approved in Vancouver.
* The TG chair walked through what TG13 is tasked to do.
* This week decided on which PHYs will be worked on, and moved to remove 5 PHYs from D0.
* Berlin will be mainly comment resolution.
* Bob has appointed Jungnickle as chair and this needs affirmation motion.
  + Move to affirm Volker Jungnickle as chair of IEEE 802.15 Task Group 13, MG OWC.
    - Moved by: Clint Powell.
    - Seconded by: Rick A.
    - Upon neither discussion nor objection the motion carries

**10:49** TG3f 60GE mid-week report by Heile

* With the mmWave band expansion of late, this required a simple change to 3f.
* 15.3f +CA to start WG LB --have draft and CA
  + Move that 802.15 WG start a WG Letter Ballot requesting approval of CA document 15-17-0267-00-003f and document P802-15-3f-D00 and to forward document P802-15-3f-D00 to Sponsor Ballot
    - Moved by: Rick
    - Seconded by: Clint
    - Upon neither discussion nor objection the motion carries
* 15.3f BRC Motion
  + Move that 802.15 WG approve the formation of a Ballot Resolution Committee (BRC) for the WG balloting of the P802-15-3f-D00 with the following membership: Benjamin Rolfe (Chair), Thomas Kurner J. Gilb, and A. Estrada. The 802.15.3f BRC is authorized to approve comment resolutions and to approve the start of recirculation ballots of the revised draft on behalf of the 802.15 WG. Comment resolution on recirculation ballots between sessions will be conducted via reflector email and via teleconferences announced to the reflector as per the LMSC 802 WG P&P.
    - Moved by: Rick A.
    - Seconded by: Thomas K
    - Upon neither discussion nor objection the motion carries

**10:51** IG HRRC report mid-week report by Kim

* Will meet today.

**10:xx** IG Dependability mid-week report by Kohno

* Not meeting in Daejeon

**10:xx** IG LPWA mid-week report by Robert

* Not meeting in Daejeon

**10:53** IG VAT closing report by Jang

* Met Monday, general discussion on different possible usage and technologies.

**10:55** SG4md 15.4 Revisions closing report by Heile

* 15.4-2015Cor1 to start WG LB Motion
  + Move that 802.15 WG start a WG Letter Ballot requesting approval of document d1P802.15.4-2015-Corri-1-2017 and to forward document d1P802.15.4-2015-Corri-1-2017 to Sponsor Ballot
    - Moved by: Clint P.
    - Seconded by: Rick A.
    - Upon neither discussion nor objection the motion carries
* 15.4-2015 Cor1 BRC Motion
  + Move that 802.15 WG approve the formation of a Ballot Resolution Committee (BRC) for the WG balloting of the d1P802.15.4-2015-Corri-1-2017 with the following membership: Pat Kinney (Chair), Clint Powell, B Rolfe, J Gilb, P Beecher, and K Shah. The 802.15.4 BRC is authorized to approve comment resolutions and to approve the start of recirculation ballots of the revised draft on behalf of the 802.15 WG. Comment resolution on recirculation ballots between sessions will be conducted via reflector email and via teleconferences announced to the reflector as per the LMSC 802 WG P&P.
    - Moved by: Rick A.
    - Seconded by: Clint P.
    - Upon neither discussion nor objection the motion carries
* 15.4-2011Cor1 PAR withdrawal Motion
  + Motion: that 802.15 WG requests approval from the EC to request that NesCom rescind the [P802.15.4-2011/Cor 1](https://development.standards.ieee.org/P814200033/par?t=502100054) PAR.
    - Moved by: Rick
    - Seconded by: Tim
    - 16/0/0

**10:57** SC IETF, SC-M, Rules closing report by Perkins/Heile (15-17/0261r02)

* (15-17/0261r01 – Kinney)
* Met once this week and went through highlights of the recent IETF meeting.
* The LPWA group in the IETF meeting was standing room only.

**10:59** TG 12 ULI mid-week report by Perkins

* 3 meetings so far, and 2 more this week.
* 2 area of focus.
  + Define all steps required for a higher layer entity to pass a message to the 802.15.12 SAP, have that message transmitted and received and then submitted to the higher layer entity
  + Define the process and steps for a higher layer entity to configure the 802.15.4 device

**11:01** WNG closing report by Heile

* Nothing for this week, so no meeting today.

**11:02** AOB

* Liaison statement on LC & OWC is being worked. It started in 802.11 LC TIG, then brought to other TGs, including 802.15 TG13 for 802.15 support.
* If approved, 802.18 will have a draft of the Liasion in time for 802.15 closing plenary this week, for a final review and approval from the 802.15 working group.
* Motion made:
* Move to support the presented liaison statement from 15-17/0300R00 for incorporation into the 802.18 Liaison to the ITU-R SG1 WP1A.
  + - Moved by: Clint P.
    - Seconded by: Rick A.
    - Upon neither discussion nor objection the motion carries

**11:03** WG chair recessed the meeting until Thursday evening.

**Thursday, 16 March 2017**

**18:30**

Bob Heile, WG chair, called the meeting to order.

Due to limited meetings available at the end, decision was made that all 802.15 members here will get their 75%.

WG Chair made announcements concerning social, logistics, registration for Berlin and workshop this Friday.

**18:32** TG3d 100G closing report by Kürner (15-17/0293r01)

* 4 meetings, 1 with THz.
* completed comments, motion to start re-circulation of SB, reviewed the time line and set up BRC calls if needed.
* 15.3d Sponsor Ballot
  + Move that 802.15 WG approves TG3d sponsor ballot comment resolutions in doc. 15-17-0250-00-003d and to start the recirculation ballot of the revised draft D3. Comment resolution on recirculation ballots between sessions will be conducted via reflector email and via teleconferences announced to the reflector as per the LMSC 802 WG P&P.
    - Moved by: Thomas Kürner
    - Seconded by: Rick Alfvin
    - Upon neither discussion nor objection the motion carries
* 15.3d BRC
  + Move that 802.15 WG approves the renewal of the Ballot Resolution Committee (BRC) for the Sponsor balloting of the P802.15.3d\_D03 or current version with the following membership: Thomas Kürner (Chair), Iwao Hosako, Monique Brown and Ken Hiraga. The 802.15.3d BRC is authorized to approve comment resolutions and to approve the start of recirculation ballots of the revised draft on behalf of the 802.15 WG. Comment resolution on recirculation ballots between sessions will be conducted via reflector email and via teleconferences announced to the reflector as per the LMSC 802 WG P&P.
    - Moved by: Thomas Kürner
    - Seconded by: Rick A.
    - Upon neither discussion nor objection the motion carries

**18:35** IG THZ, already closed by Kürner (15-17/0294r00)

**18:36** TG4s SRU closing report by Heile

* Need one more motion:
* 15.4s draft d03 to WG LB recirculation.
  + Move to approve the start of a WG Letter Ballot recirculation of P802.15.4s-D03.
    - Moved by: Rick A.
    - Seconded by: Clint Powell
    - Upon neither discussion nor objection the motion carries

**18:40** TG4v RSB already closed by Heile

**18:44** TG7m OWC closing report by Jang (15-17/0322r00)

* Resolved all the comments on D2.
* Working toward D3 in June, so can resolve the comments in the July meeting.
* And conditional approval of Letter Ballot in July.

**18:46** TG8 PAC closing report by Lee (15-17/0310r00)

* Resolve sponsor ballot results. 7327 of 708 comments this week
* TG8 BRC:
  + Move that 802.15 WG approve the formation of a Ballot Resolution Committee (BRC) for the Sponsor Ballot recirculation of the P802.15.8-D4.0 with the following membership: Myung Lee (chair), Huan-bang Li, Marco Hernandez, Billy Verso, and Seong-Soon Joo. The 802.15.8 BRC is authorized to approve comment resolutions and to approve the start of recirculation ballots of the revised draft on behalf of the 802.15 WG. Comment resolution on recirculation ballots between sessions will be conducted via reflector email and via teleconferences announced to the reflector as per the LMSC 802 WG P&P
    - Moved by: Myung Lee
    - Seconded by: Rick A.
    - Upon neither discussion nor objection the motion carries

**18:48** TG 12 ULI closing report by Perkins (15-17/0263r00) 🡸

* Met 4 of the 6 sessions.
* Continued on focus areas from mid-week.
* For the time line, behind a few months, still trying to WG Letter ballot by end of year.

**18:51** TG13 MG OWC closing report by Jungnickel (15-17/0320r00)

* TG formed this week, with officers, etc. and used 7 of 10 slots this week.
* Resolved all comments against D1.
* Will maintain 3 of the original 8 PHYs.
* Next is more detailed technical discussions, e.g. on the PHYs and MAC layer approaches.
* For the ITU-R LC submission we stepped through what was presented at the mid-weeks and how it laid out in the ITU-R formatted submissions. Some discussion, though no changes requested.

**18:58** TG3f 60GE closing report by Heile

* Started the letter ballot.

**18:59** IG HRRC closing report by Kim (15-17/0307r00)

* 1 session with 6 participants.
* Had 2 presentation and 5 contributions.
* Next is to review PAR and CSD, and to encourage more companies to participate.

**19:xx** IG Dependability closing report by Kohno

* Not meeting in Daejeon

**19:xx** IG LPWA closing report by Robert

* Not meeting in Daejeon

**19:xx** IG VAT already closed by Jang (15-17/0321r00)

**19:xx** SC IETF, SC-M, Rules already closed by Perkins/Heile (15-17/0261r02)

**19:xx** SG4md 15.4 Revisions already closed by Heile

**19:xx** WNG already closed by Heile,

**19:**

**00** 802.11 liaison closing report by Petrick (15-17-0316r00)

**19:08** 802.18 liaison closing report by Holcomb (15-17-0302r00)

**19:12** 802.24 liaison by Godfrey

**19:15** New Business by Heile

**19:16** Open Discussion by Heile

* Remember to book Berlin and air travel now would be a good idea. We will .

Your attendance record is about to become final.

**19:20** Motion *to adjourn* was made by Clint Powell and 2nd – Rick A. Upon hearing no objection, the motion carries; the session is adjourned

**Annex A** Attendance = 34

Last Name First Name Affiliation

Alfvin Richard Linespeed Events, LLC

Aoyama Hideki Panasonic Corporation

Cha Jaesang SNUT

Estrada Andrew Sony Corporation

Fan Xiaojing Fujitsu Research & Development Center

Godfrey Tim Electric Power Research Institute, Inc. (EPRI)

Heile Robert Wi-SUN Alliance

Hernandez Marco National Institute of Information and Communications Technology (NICT)

Hirota Tomoyuki Panasonic Corporation

Holcomb Jay Itron Inc.

HOSAKO IWAO National Institute of Information and Communications Technology (NICT)

Hovaizi Fraidoon VLNComm

Hui Bing Electronics and Telecommunications Research Institute (ETRI)

Jang Yeong Min Kookmin University

Joo Seong-Soon Electronics and Telecommunications Research Institute (ETRI)

Jungnickel Volker Fraunhofer Heinrich Hertz Institute

Kang Tae-Gyu Electronics and Telecommunications Research Institute (ETRI)

Kim Jeong Gon Korea Polytechnic University (KPU)

Kuerner Thomas TU Braunschweig

Lee Jae Seung Electronics and Telecommunications Research Institute (ETRI)

Lee Myung CUNY - City University of NY

Li Huan-Bang National Institute of Information and Communications Technology (NICT)

Lim Sang-Kyu Electronics and Telecommunications Research Institute (ETRI)

Lynch Michael Nortel Networks

Mariappan Vinayagam SNUT

Noshad Mohammad VLNComm

Patil Gaurav VLNComm

Perkins Charles Futurewei Technologies

Petrick Albert Jones-Petrick and Associates, LLC.

Powell Clinton Powell Wireless Consulting, LLC

Roberts Richard Intel Corporation

Verso Billy DecaWave

Wang Xu VLNComm