**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 | [13 July, 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 San Diego, Ca] | |
| Abstract | [IEEE 802.15 LECIM IG Minutes] | |
| Purpose | [Official minutes of the Working Group Session] | |
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**IEEE 802.15 Plenary Meeting – Session #67**

**July 2010**

**Interest Group LECIM Minutes**

[Monday, 13 July 2010, 8:00 (AM1) 2](#_Toc266778465)

# Monday, 13 July 2010, 8:00 (AM1)

**8:15** Dave Howard (On Ramp), LECIM IG chair, called the meeting to order. Attendance is noted in Annex A.

Motion to approve the LECIM minutes from Beijing (15-10-0372-00) made by P Kinney (Kinney Consulting) and seconded by T Meyer (On Ramp). Upon neither discussion nor objection the motion carries unanimously.

Chair presented the proposed agenda, 15-10-0413-02. Motion to approve the proposed agenda (15-10-0413-02) made by P Kinney and seconded by T Meyer. Upon neither discussion nor objection the motion carries unanimously.

**8:22** Presentation of Use Case: Distribution Grid and Substation Monitoring (15-10-0529-00) by Mike Calcagno (Sempra Energy)

Discussion:

* Expected battery life? 10 years with usage of transmit by exception and one “heartbeat” per day of short messages
* Antenna design? Preferably included in the device’s package but external design allowable for difficult installations
* What technologies have been tested? Sempra has tested OnRamp’s product
* How is it deployed underground? Preferable to integrate the node into the fault current sensor
* Diagnostics required?
  + End device – health link, RSSI, health electronics such as battery, current status of device
  + Access Point – standard network statistics typically found in IP networks, ability to survey environment for other users and interferers
* Coexistence requirements? Ability to adapt to the environment which is typically a large coverage area (top of mountain, etc), robust operation
* Security requirements – use of proven open techniques (i.e. security through obscurity is not acceptable), ability to limit access to the system must be tightly controlled, reasonable tolerance to denial of service attacks, low probability of detection is preferable.
* Set up/commissioning requirements? Devices must be preconfigured to allow installation by technical personnel w/o networking skills.

**8:50** Review and update of Application Requirements (15-10-209-02)by David Howard

David reviewed and updated the application requirements, capturing the changes in doc 15-10-0209-03.

**9:23** P Kinney informed the group that the next logical step would be to form a study group to investigate the most suitable response to the LECIM users. P Kinney informed the group that all attendees could vote in an IG motion.

Motion: *that the LECIM IG request the 802.15 Working Group to seek approval from the 802 EC to form a study group to develop the PAR and 5c documents for the Low Energy Critical Infrastructure Monitoring applications*

Moved by David Howard, seconded by Steve Journey (Semtech)

Upon no discussion the vote was taken with the results of 33 approve, 0 oppose, and 1 abstaining; motion carries.

**9:40** meeting adjourned

**Annex A**

**Attendee Affiliation**

Pat Kinney Kinney Consulting

Fumihide Kojima NICT

Kazuyuki Yasukawa Fuji Electric

Ted Myer On Ramp

Noriyasu Fakalsa Mitsubishi Electric

Kiyoshi Fukni Oki

Rainer Hach Nanotron

Jean Schwoerer France Telecom

Takasski Hatacuchi Fuji Electric

Ryoichi Higashi Fuji Electric

Roberto Aiello Independent

Youcy Yang SIMIT, CAS

Wilson Wang SIMIT, CAS

Henk de Ruijter Silicon Labs

Kentano Sakamoto Tokyo Gas

Seong-Soon Joo ETRI

Tae-Joom Park ETRI

George Flammer Silver Spring

Myung Lee CUNY

Ruben Salazar Landis & Gyr

Brent Cain Itron

Ghulam Bhatti Mitsubishi Electric

Huai-Rong Shao Samsung

Ryosuke Fujiwara Hitachi

Ion Toma Nivis

Dukhylin Kim Samsung

Soo-Young Chang CSUS

Michael Schmidl Atmel

Steve Jillings Semtech

Betty Zhao Huawei

Klaus Bender UTC

Mark Bender Aclara

Liang Li Vinno

Garth Hillman Oaktree

Lily Yang Intel