**Wireless Personal Area Networks**

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| Project | IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs) | |
| Title | **<IEEE802.15 SC minutes>** | |
| Date Submitted | [9 Nov 2017] | |
| Source | [Pat Kinney] [Kinney Consulting] [Lake Zurich, IL] | Voice: [+1.847.960.3715] Fax: [] E-mail: [pat.kinney@kinneyconsultingllc.com] |
| Re: | [802.15 Standing Committees Meetings in Orlando, Nov 2017] | |
| Abstract | [IEEE 802.15 Maintenance and WNG Standing Committee Minutes] | |
| Purpose | [Official minutes of the Standing Committee Session] | |
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**IEEE 802.15 Interim Meeting – Session #111**

**Orlando, FL**

**Nov 6-9, 2017**

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# SC Maintenance Minutes

## Wednesday 8 Nov AM1

### Corrigendum

**8:30** SC Maintenance called to order by Chair, Pat Kinney, Kinney Consulting

First topic was P802.15.4-2015-Cor\_1 Standard for Low-Rate Wireless Networks - Corrigendum 1 that had just passed Sponsor Ballot with the following results:

Ballot Open Date: 28-Sep-2017

Ballot Close Date: 28-Oct-2017

Type: New

Draft #: d2p802.15.4-2015-Corri-1-2017

Comments: 30

#### Must Be Satisfied Comments: 6

Response Rate

This ballot has met the 75% returned ballot requirement.

88 eligible people in this ballot group.

71 affirmative votes

3 total negative votes with comments

3 negative votes with new comments

0 negative votes without comments

1 abstention votes: (Lack of time: 1)

75 votes received = 85% returned

1% abstention

APPROVAL RATE

The 75% affirmation requirement is being met.

71 affirmative votes

3 negative votes with comments

74 votes = 95% affirmative.

The 30 comments were presented in document 15-17-0602-00

* + - The comments were discussed with the resulting resolutions captured in document 15-17-0602-01.
    - In summary the major resolutions were to:
      * Replace the value in Figure 9-3 with the text “IEEE 802.15 CID”
      * Replace the 802.15 CID value with 0xBA55EC
      * Replace the first paragraph of 4.4a with “For address fields containing an extended address, the bit transmission order shall be performed from the right most octet (RMO) to the left most octet (LMO) of the address when expressed in the in the canonical form defined in IEEE Std 802-2014, and inside an octet from the least significant bit (LSB) to the most significant bit (MSB) interpreting each octet as an unsigned integer value corresponding to the hex digits in the canonical form. It should be noted that the octet containing the U/L and I/G bits are transmitted last.”
    - Motion: *Move that the SCm approves the resolutions captured in document 15-17-0602-01, requests the editor to modify draft d2p802.15.4-2015-Corri-1-2017 accordingly and then send the edited draft out for recirculation.*
    - *Moved by J Robert, seconded by C Hett*
    - Upon neither discussion nor objection the motion carries.
    - Motion: *Move that the SCm requests 802.15 WG approve the formation of a Ballot Resolution Committee (BRC) for the Sponsor Balloting of the d3P802.15.4-2015-Corri-1-2017 with the following membership:*  *Pat Kinney (Chair), Ben Rolfe, Jay Holcomb, and Billy Verso. The 802.15 Corr-1 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 B Rolfe, seconded by J Holcomb*
    - Upon neither discussion nor objection the motion carries.

**9:22** Upon no further discussion nor objection, the meeting was recessed

# SC WNG minutes

## Wednesday 8 November AM2

**11:35** SC WNG called to order by Chair P Kinney, Kinney Consulting

There were three presentations:

* AES-256-for-802-15-4 (15-17-0573-02) by Don Sturek (Silver Spring)
  + C: Proposal for a MAC amendment that adds ability to add AES 256 and ECP 384
  + C: either use CCM or GCM in addition to the AES cypher suite
  + Suggestion to make a motion to form a SG for the closing plenary was approved via a straw poll with the results of 25/0/0
* Potential enhancements to Low Rate UWB RFID PHY (15-17-0637-02) by Tim Harrington
* C: slide 4 – example of 110 kb/s, 4a actually is better than represented R: won’t argue the point
* C: SS-2-way-ranging can also suffer errors due to clock accuracy R: may wish to increase clock accuracy
* C: could cause a coexistence issue with 4f R: believe this shouldn’t be an issue
* C: slide 10 – could cause a coexistence issue with 4f R: just an example, standard is not intended to break 4a or 4f
* Q: 4f implementations? R: Zebra maybe Time domain
* C: low power seldom means low energy
* C: this proposal wishes to add a non-coherent receiver
* C: 4a also states non-coherent receivers R: asking to form a study group to investigate this issue
* Straw poll on support to form a SG for this matter: 3/0/7
* Given the limited support, chair suggested forming an IG to further address the questions and concerns of the WG before requesting to form a SG
* Final report on IG LPWA (15-17-0628-00) by Jörg Robert
* Q: what is the BW that you would be expecting? R: NB, similar to data rate.
* Q: how do you handle acknowledgements of individual packets? R: all fragments must be reassembled before an ack can be sent for the MAC.
* C: current standard (LECIM mode) already has a method for the PHY to handle such fragments.
* raw poll on support to form a SG for this matter: 13/1/7

**12:35** meeting recessed

# SC IETF Minutes

## Tuesday 7 Nov PM2

### Meeting Objectives / Session Focus - SC IETF

Review agenda items for next week’s IETF 100 conference in Singapore

**LP-WAN**

* [09:50] draft-ietf-lpwan-overview
  + LPWAN Overview - Doc status and updates
* [10:00] draft-ietf-lpwan-ipv6-static-context-hc
  + Update on IPv6 compression
  + Update on SCHC fragmentation
* [10:30] draft-ietf-lpwan-coap-static-context-hc
* [10:40] draft-barthel-icmpv6-schc
* [10:50] draft-petrov-lpwan-ipv6-schc-over-lorawan
* [11:05] draft-zuniga-lpwan-schc-over-sigfox
* [11:20] ETSI LTN and LPWAN-CSS
* [11:50] AOB

**Thing-to-Thing** ([t2trg](https://datatracker.ietf.org/rg/t2trg/documents/))

* Chairs: Intro, RG Status
  + draft-irtf-t2trg-iot-seccons draft-irtf-t2trg-rest-iot-00
* R. Moskowitz: Small Crypto for Small IoT
  + draft-moskowitz-small-crypto
* Dirk Kutscher & Liang GENG: Edge computing and IoT
* Michael McCool (remote): WISHI: semantic interop of AVS and IoT

### 6tisch

### Chartered items

### draft-ietf-6tisch-6p-protocol Xavi Vilajosana

### draft-ietf-6tisch-minimal-security Malisa Vucinic

### draft-ietf-6tisch-dtsecurity-zerotouch-join Michael Richardson

### draft-ietf-6tisch-6top-sfx Diego Dujovne

### Unchartered items, time permitting

### draft-chang-6tisch-msf Tengfei Chang

### draft-satish-6tisch-6top-sf1 Bing Liu - Remy

### draft-richardson-6tisch-roll-join-priority Michael Richardson

### Any Other Business, IEEE status

### core

finishing TCP

* + https://tools.ietf.org/html/draft-ietf-core-coap-tcp-tls-10

finishing CoCoA

* + https://tools.ietf.org/html/draft-ietf-core-cocoa-02

resource-directory + dns-sd

* + https://tools.ietf.org/html/draft-ietf-core-resource-directory-12
  + https://tools.ietf.org/html/draft-ietf-core-rd-dns-sd-00

comi: yang-cbor, comi, sids

* + https://tools.ietf.org/html/draft-ietf-core-yang-cbor-05
  + https://tools.ietf.org/html/draft-ietf-core-comi-01
  + https://tools.ietf.org/html/draft-ietf-core-sid-02

pubsub – status, vs. yang-push

* + https://tools.ietf.org/html/draft-ietf-core-coap-pubsub-02
  + https://tools.ietf.org/html/draft-birkholz-yang-push-coap-problemstatement-00

finishing senml

* + https://tools.ietf.org/html/draft-ietf-core-senml-11

object security

* + https://tools.ietf.org/html/draft-ietf-core-object-security-06

echo/request tag

* + <https://tools.ietf.org/html/draft-ietf-core-echo-request-tag-00>,
  + https://tools.ietf.org/html/draft-liu-core-coap-delay-attacks-01

pending (for EST over CoAP)

* + <https://tools.ietf.org/html/draft-vanderstok-ace-coap-est-02>,
  + https://tools.ietf.org/html/draft-hartke-core-pending-01

Sms

* + https://tools.ietf.org/html/draft-becker-core-coap-sms-gprs-06

dynlink + interfaces

* + <https://tools.ietf.org/html/draft-ietf-core-dynlink-04>,
  + https://tools.ietf.org/html/draft-ietf-core-interfaces-10

dev-urn

* + https://tools.ietf.org/html/draft-arkko-core-dev-urn-05

Flextime

* + <https://tools.ietf.org/html/draft-wang-core-opcua-transmission-02>
  + https://tools.ietf.org/html/draft-toutain-core-time-scale-00

### 6lo

### An Update to 6LoWPAN ND Pascal Thubert

### <https://tools.ietf.org/html/draft-ietf-6lo-rfc6775-update-10>

Discuss updates from WGLC comments

* <https://tools.ietf.org/html/draft-ietf-6lo-ap-nd-03>
* <https://tools.ietf.org/html/draft-ietf-6lo-backbone-router-04>

Updates and status

* + Fragmentation flow control and recovery
  + <https://tools.ietf.org/html/draft-thubert-6lo-forwarding-fragments-07>
    - Requesting for adoption

6lo Applicability and Use Cases Yong-Geun Hong

#### <https://tools.ietf.org/html/draft-ietf-6lo-use-cases-03>

#### New revision and updates based on WG comments

Transmission of IPv6 packets over IEEE 802.15.6 WBAN Sajjad Akbar

#### <https://tools.ietf.org/html/draft-sajjad-6lo-wban-01>

#### 2nd presentation based on IETF99 comments

Fragmentation Design team formation Update: Gabriel Montenegro

### Detnet

#### Use Cases by Ethan Grossman

#### https://tools.ietf.org/html/draft-ietf-detnet-use-cases

Security Considerations by Tal Mizahi

https://tools.ietf.org/html/draft-ietf-detnet-security

DetNet Data Plane Encapsulation -- Resolving open issues by Jouni Korhonen/Norm Finn

https://tools.ietf.org/html/draft-ietf-detnet-dp-sol-00

DetNet Flow Information Model Based on TSN by Balázs Varga

https://tools.ietf.org/html/draft-farkas-detnet-flow-information-model-02

Transport Layer for Deterministic Networks by Pascal Thubert

https://tools.ietf.org/html/draft-thubert-tsvwg-detnet-transport

Information and data model considerations: Applicability of Network Calculus to DetNet by Jean-Yves Le Boudec

**AOB**

* None offered

SC IETF recessed at 4:37pm