**IEEE P802.15**

**Wireless Personal Area Networks**

|  |  |
| --- | --- |
| Project | IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs) |
| Title |  |
| Date Submitted | [5 August 2010] |
| Source | [][][address] | Voice: [ ]Fax: [ ]E-mail: [ ] |
| Re: | [Task Group 802.15.4e Interim Meeting in San Diego] |
| Abstract | [Task Group 802.15.4e Minutes.] |
| Purpose | [Official minutes of the Task 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. |

**IEEE 802.15 Plenary Meeting – Session #67**

**July 2010**

**Task Group 4e Minutes**

[Monday, 12 July 2010, 13:30 (PM1) 2](#_Toc268798722)

[Monday, 12 July 2010, 16:00 (PM2) 3](#_Toc268798723)

[Tuesday, 13 July 2010, 8:00 (AM1) 3](#_Toc268798724)

[Tuesday, 13 July 2010, 10:30 (AM2) 3](#_Toc268798725)

[Tuesday, 13 July 2010, 13:30 (PM1) 3](#_Toc268798726)

[Tuesday, 13 July 2010, 16:00 (PM2) 4](#_Toc268798727)

[Wednesday, 14 Jul 2010, 13:30 (PM1) 4](#_Toc268798728)

[Wednesday, 14 July 2010, 16:00 (PM2) 4](#_Toc268798729)

[Thursday, 15 July 2010, 8:00 (AM1) 5](#_Toc268798730)

[Thursday, 15 July 2010, 10:30 (AM2) 5](#_Toc268798731)

[Thursday, 15 July 2010, 13:30 (PM1) 5](#_Toc268798732)

[Thursday, 15 July 2010, 16:00 (PM2) 5](#_Toc268798733)

[Annex A 5](#_Toc268798734)

[Annex A.1 5](#_Toc268798735)

# Monday, 12 July 2010, 13:30 (PM1)

**13:35** Chair called meeting to order.

Chair presented opening report 15-10-0516-00-004e:

Chair displayed the IEEE-SA slides #1 through #4 of the IEEE patent policy.

Chair asked if anyone in the meeting was personally aware of the holder of any patent claims that are potentially essential to implementation of the proposed standard(s) under consideration by this group and that are not already the subject of an Accepted Letter of Assurance? There were no responses.

Chair noted that the minutes from the AM1 ad hoc would be included in the minutes as Annex 1.

**Agenda for San Diego**

Chair presented the agenda 15-10-0421-01. Chair noted that a joint meeting with TG4g had already been planned for Wednesday PM1. Discussion ensued to assign time slots to the categories. The assignments were captured in 15-10-0421-02. Motion to approve the agenda, 15-10-0421-02 was made by Ludwig Winkel and seconded by Liang Li. Upon neither discussion nor objection the motion carries by unanimous consent.

**Approval of Previous Minutes**

Motion to approve the minutes from Beijing 15-10-0370-00 and the minutes from the ad hoc 15-10-0510-01 was made by Ludwig Winkel and seconded by Myung Lee. Upon neither discussion nor objection the motion carries by unanimous consent.

**Review of Comment Resolution**

Category leads presented the status of their group’s comment resolutions:

LE - ~28 comments, resolutions are captured in 15-10-0509-01

FastA ~5 comments with resolutions captured in docs 427 and 428

Frame Control (p/o ESOR) effort is almost complete to simplify the frame control method while addressing the needs of the added functionality

LL – significant work remains

4g - ~40 comments with many that will be resolved with a hopping proposal being drafted by J Simon and Wun-Cheol Jeong

4f – comments have been resolved

General – comments have been resolved

**15:20** Chair recessed until PM2

# Monday, 12 July 2010, 16:00 (PM2)

**16:07** Chair called meeting to order and reminded the group that this slot was reserved for LE.

Wei Hong led discussion on LE comment resolution with results captured in document 15-10-0509-01.

**16:43** Myung Lee led discussion on DSME comment resolution with results captured in document 15-10-0482-02.

**18:00** Meeting adjourned

# Tuesday, 13 July 2010, 08:00 (AM1)

**08:05**  Seong-Soon Joo, TG4e vice-chair, called the meeting to order.

Betty Zhao led the effort to resolve the technical comments related to the fast association with the results entered into doc 15-10-0428-01.

**08:15** Tim Harrington led the effort to resolve the technical comments related to TG 4F with the results entered into doc 15-10-0403-01

**08:36** The meeting recessed until Tuesday AM2

# Tuesday, 13 July 2010, 10:30 (AM2)

**10:45** Meeting called to order and reminded the group that this slot was reserved for non-frame control ESOR comments. Ben Rolfe led the group in the resolutions of these comments with changes noted in 15-10-0557-01.

**12:30** meeting recessed until Thursday PM1

# Tuesday, 13 July 2010, 13:30 (PM1)

**13:42** Meeting called to order and reminded the group that this slot was reserved for frame control ESOR and LL comments

Michael Bahr led the group in a review of the proposed Frame Control methodology (15-10-532). Upon completion of the frame control, Michael led the group in LL comment resolution, noting that in 7.2.26.7 the group ack is msssing

**15:30** Chair recessed until PM2

# Tuesday, 13 July 2010, 16:00 (PM2)

**16:00** Meeting called to order and reminded the group that this slot was reserved for 4g comments.

Chair informed group that there would be 3 presentations and due to time constraints the presenters would be limited to 20 minutes and no questions would be accepted until after all presentations, leaving 60 minutes for Q&A, discussion, and comment resolution.

Presentation of Default Hopping Sequence Proposal (15-10-0561-00) by J Simon

Presentation of (15-10-0476-01) by B Mason

Presentation of NHL control of hopping using 15.4 MAC (15-10-566-00) by B Rolfe

Discussion ensued as to the presentations including clarifications and questions as to assumptions. Discussion also ensued as to what mechanisms in the MAC are required by SUN type of devices.

**17:36** Wun-Cheol led the group in the 4g comment resolution as per 15-10-562-00

**18:00** Meeting adjourned

# Wednesday, 14 Jul 2010, 13:30 (PM1)

**13:35** Chairs called the meeting to order

Joint meeting with TG4g:

Agenda is to hear a coexistence presentation, discuss issues associated with coexistence, define action items and then recess into separate TGs for comment resolution.

Coexistence presentation by Mark Wilbur (Aclara) (15-10-0404-02)

Comments:

* PHY attributes of baseline mode
* Applicable to all bands? Only unlicensed bands
* Baseline channel selection
* Concern on what is required of networks
* Uncertainty as to what decisions on impairment and definition of impairment
* Concerns on a mandatory baseline mode

Comment categorization continued with results captured in document 15-10-0321-02

**15:20** Meeting recessed by chair

# Wednesday, 14 July 2010, 16:00 (PM2)

**15:35** Meeting called to order and reminded the group that this slot was reserved for DSME comments

Myung Lee led discussion on DSME comments with results captured in document 15-10-0482-03

**17:55** Meeting recessed by chair

# Thursday, 15 July 2010, 8:00 (AM1)

**8:19** Meeting called to order and reminded the group that this slot was reserved for DSME comments

Myung Lee led the group in the resolution of DSME comments with resolutions captured in document 15-10-482-03

# Thursday, 15 July 2010, 10:30 (AM2)

**10:41** Meeting called to order and reminded the group that this slot was reserved for DSME comments**.** Myung Lee led the group in the completion of the effort to resolve DSME comments with resolutions captured in document 15-10-482-05

**12:30** meeting recessed until Thursday PM1

# Thursday, 15 July 2010, 13:30 (PM1)

**13:37** Meeting called to order and reminded the group that this slot was reserved for TSCH comments

Chair continued the discussion on enhanced beacon requests with resolutions captured in 15-10-606-00.

**14:36** Will San Filippo proposed modifications to the frame control. Significant discussion ensued as to the use of reserved bits for new frames that could be essentially achieved with existing formats. Discussion ensued as to a new frame type (15-10-0603-03) using one of the currently reserved types (e.g. 101). The frame control contains 1 or 2 octets. The intent is to replace the multipurpose frame in 15-10-0532-01. It generally trades a slightly longer frame while only using one frame type.

**15:47** Chair recessed until PM2

# Thursday, 15 July 2010, 16:00 (PM2)

**16:07** Chair called meeting to order

Motion to approve the A/AiP/R/W resolutions comments as stated in 15-10-0321-05 along with the new channel hopping text was made by Ben Rolfe and seconded by Ludwig Winkel. Upon neither discussion nor objection the motion carries.

**17:24** Meeting adjourned

# Annex A

Minutes of Monday, AM1 TG4e Ad Hoc

**8:15** Meeting called to order by Chair. Attendance was captured in annex A.1

Chair noted that, as per week’s agenda, this ad hoc meeting would be devoted to resolving DSME comments. Myung Lee led the group in reviewing the DSAME comments and proposed resolutions, results are captured in document 15-10-483.

**9:58** ad hoc meeting adjourned

# Annex A.1

Pat Kinney Kinney Consulting

Myung Lee CUNY

Liang Li Vinno

Chang Sub Shin ETRI

Robert Hall RF Technologies

Wun-Cheol Jeong ETRI

Craig Rodine EPRI

Billy Verso Decawave

Andy Ward Ubisense

Kiyoshi Fukai Oki

Kazuyuki Yasukawa Fuji Electric

Koichiro Hayashi NYK Line

Young Ae Jeon ETRI

Haiyun Luo China Mobile

Will San Filippo Silver Spring Networks

Jin-Meng Ho Texas Instruments

Seung-Jae Lee LG Electronics

Michael Bahr Siemens AG

Ludwig Winkel Siemens AG

Suhwook Kim LG Electronics

Seong-Soon Joo ETRI

David Cypher NIST

Jonathan Simon Dust Networks

Betty Zhao Huawei

Yonoy Yang SIMIT