**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 | [3 February 2011] | |
| Source | [] [] [address] | Voice: [ ] Fax: [ ] E-mail: [ ] |
| Re: | [Task Group 802.15.4e Plenary Meeting in LA] | |
| Abstract | [Task Group 802.15.4e Minutes.] | |
| Purpose | [Official minutes of the Task Group Session | |
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**IEEE 802.15 Plenary Meeting – Session #70**

**January 2011**

**Task Group 4e Minutes**

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# Monday, 17 Jan 2010, 10:30 (AM2)

**10:49** Chair called meeting to order.

Chair presented opening report 15-11-0036-00-004e:

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.

**Key Discussion Points**

* TG4i - formatting the next recirc will remain based upon 802.15.4-2006 but future versions will be based upon 802.15.4i
* IE/EBR – Ben Rolfe discussed the IE/EBR concepts and developments
* Frame Format – chair noted the extensive discussions in the past and the core needs of other task groups such as TG4f and TG4g.

**Agenda for Los Angeles**

Chair presented the agenda 15-10-0969-01. Discussion ensued to question the assigned time slots to the categories due to the availability of its leader; it was agreed that the agenda should be adopted as is and modified when more accurate information is known. Motion to approve the agenda was made by Ludwig Winkel and seconded by Will San Filippo. Upon neither discussion nor objection the motion carries by unanimous consent.

**Approval of Previous Minutes**

Motion to approve the minutes from Dallas 15-10-0937 -00 was made by Ben Rolfe and seconded by Will San Filippo. Upon neither discussion nor objection the motion carries by unanimous consent.

**12:05** Meeting recessed until Monday PM1

# Monday, 17 Jan 2010, 13:30 (PM1)

**13:40 TSCH & General Comment reviews**

Chair advised the group that any question, comments, or objections to the resolutions should be stated as the resolution is discussed rather than waiting until the final meeting when the group votes to approve the comment resolution document 15-10-826.

J Simon led the comment resolution effort of comments and their resolutions denoted as either TSCH or General with the results captured in 15-10-862-06.

**13:20** meeting recessed until Monday PM2

# Monday, 17 Jan 2011, 16:00 (PM2)

**14:00** **ESOR & EB Comment reviews**

Chair reiterated his expectations to the group that any question, comments, or objections to the resolutions would be stated as the resolution is discussed rather than waiting until the final meeting when the group votes to approve the comment resolution document 15-10-826.

B Rolfe led the comment resolution effort of comments and their resolutions denoted as either TSCH or General with the results captured in 15-10-862-06.

**16:00** Stopping at CID 649, chair recessed until Tuesday AM2

# Tuesday, 18 Jan 2011, 10:30 (AM2)

**10:40** Meeting called to order.

M McInnis led the comment resolution effort of comments and their resolutions denoted as TG4f with the results captured in 15-10-862-06. At the end of this effort chair asked if there were any objections to the resolutions, there were none.

**12:00** resumption of ESOR & EB comment review by Ben Rolfe

**12:30** Chair recessed until PM1

# Tuesday, 18 Jan 2011, 13:30 (PM1)

**13:40** **LL Comment review**

Chair reiterated his expectations to the group that any question, comments, or objections to the resolutions would be stated as the resolution is discussed rather than waiting until the final meeting when the group votes to approve the comment resolution document 15-10-826.

M Bahr led the comment resolution effort of comments and their resolutions denoted as LL with the results captured in 15-10-862-06.

**15:30** Chair recessed until PM2

# Tuesday, 18 Jan 2011, 16:00 (PM2)

**16:10** Chair reiterated his expectations to the group that any question, comments, or objections to the resolutions would be stated as the resolution is discussed rather than waiting until the final meeting when the group votes to approve the comment resolution document 15-10-826.

Dr Ahn led the comment resolution effort of comments and their resolutions denoted as DSME with the results captured in 15-10-862-06.

**18:00** Meeting recessed at comment CID244.

# Wednesday, 19 Jan 2011, 13:30 (PM1)

**13:40** Chair called the meeting to order

Chair stated his expectations to the group that any question, comments, or objections to the resolutions would be stated as the resolution is discussed rather than waiting until the final meeting when the group votes to approve the comment resolution document 15-10-826.

Following the IE discussion at the WNG meeting there was further discussion as to IEs. This was followed by a discussion of a new acknowledgement; the enhanced acknowledgement (Enhanced ACK) with uses of enhanced security, allowance of computational delays for FEC and security, and for energy supply delays in cases such as energy scavenging.

Comment resolution continued with the following categories with results captured in 15-10-0862-06:

* LE led by F Kojima and K Yasukawa
* 4G led by J King
* FastA led by chair
* Metrics led by T Godfrey. The metrics resolution effort led into a significant discussion on the mandatory nature of the 9 metrics. Discussion revolved around the impact of requiring these metrics for all uses of 15.4. A straw poll on making the metrics optional, albeit including any metric would mandate all metrics, was taken with the results of 10/2; metrics will be optional.

**15:00** Meeting recessed by chair

# Wednesday, 19 Jan 2011, 16:00 (PM2)

**16:08** Meeting called to order and advised the group that this slot was to finish off previous comment resolution efforts.

W Hong proposed another metric describing the number of back-offs for the last frame transmission. Following discussion, a straw poll showed 6/0 in favor of adding this metric; T Godfrey will add the metric.

Dr Ahn led the effort to continue resolution of DSME comments with results captured in 15-10-0862-06.

**18:02** Meeting recessed by chair at CID 570

# Thursday, 20 Jan 2011, 8:00 (AM1)

**8:30** Meeting called to order.

J Simon led discussion on General comment resolution**.** The corrections were captured in 15-10-862-06.

CIDs 641 and 686 were discussed with reference to the enhanced ACK with the agreement captured in doc 15-11-051-02.

**9:17** ESOR comment resolution was led by B Rolfe with resolutions captured in 15-10-862-03.

**10:06** meeting recessed until Thursday AM2

# Thursday, 20 Jan 2011, 10:30 (AM2)

**10:50** Meeting called to order by chair**.**

Continued discussion on the enhanced ACK. Significant discussion ensued as to the default time for macSecACKWaitDuration.

**Enhanced ACK (EAck):** CIDS 641, 686

* Can use the addressing modes from the general frame control
* Payload in IE’s  - no “ack control” byte
* Can use security
* CCA optional (enabled via PIB)
* *macSecAckWaitDuration:* The maximum time to wait for the PHY header of an enhanced acknowledgment frame to arrive following a transmitted data frame. Default setting of 864 μs. (Table 86i) Note: MAC PIB attribute (r/w) may be set by a higher layer and should account for frame processing, latency, and back-off delays.
* Enhanced ACK payloads are ignored if not understood by incoming frame originator but the frame is considered acknowledged.

**12:31** meeting recessed until Thursday PM1

# Thursday, 20 Jan 2011, 13:30 (PM1)

**13:44** Chair called meeting to order, it was agreed to prioritize those non-editorial comments without resolutions. Resolutions were captured in document 15-10-0862-06.

**15:34** meeting recessed until Thursday PM2

# Thursday, 20 Jan 2011, 16:00 (PM2)

**16:00** Meeting called to order. Chair led the group in reviewing comment resolution status and planning future activities as documented in the TG4e closing report, doc 15-11-0124-00.

Motion: *to approve resolutions as stated in 15-10-0862-07 with the caveat that comments categorized as “Editor” are to be resolved as per the discretion of the technical editor.* Moved by Greg Gillooly and seconded by Ben Rolfe. Upon neither discussion nor objection the motion carries with unanimous consent.

Motion: *that the 802.15.4e Task Group seek 802.15 WG approval to start a WG Recirculation Letter Ballot requesting approval to forward document d2P802-15-4e\_Draft\_Standard.pdf, edited in accordance with comment spreadsheet P802.15-10-0862-07-004e, to Sponsor Ballot pending the completion and inclusion of the edits in the draft.*

Moved: Jonathan Simon

Seconded: Wei Hong

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

Upon completion of the edits to the draft, it was agreed that the draft be sent to the Draft review committee members of L Winkel, J Simon, K Yasukawa, P Kinney, T Godfrey, B Rolfe, L Li, W Hong, and G Gillooly for final review prior to release to recirculation.

**17:20** Session adjourned