**IEEE P802.15**

**Wireless Personal Area Networks**

|  |  |  |
| --- | --- | --- |
| Project | IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs) | |
| Title |  | |
| Date Submitted | [19 September, 2013] | |
| Source | [Clint Powell] [PWC, LLC] [1563 W Kaibab Dr.  Chandler, AZ 85248] | Voice: [+1 480-586-8457] Fax: [ ] E-mail: [cpowell@ieee.org] |
| Re: | [TG10 (L2R) session minutes.] | |
| Abstract | TG10 (L2R) meeting minutes from the Nanjing Interim. | |
| Purpose | [TG10 (L2R) session minutes.] | |
| 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. | |

**Minutes for IEEE 802.15 TG10 (L2R)**

**Nanjing Interim Meeting**

**16-20 September 2013**

**Chair - Clint Powell**

**Acting Secretaries - Gary Stuebing, Tim Godfrey**

**Tuesday AM1 (9/17)**

Chair calls the meeting to order at 8:05 AM

Sangsung Choi moved to accept agenda (doc. # 15-13-0483-01).

Seconded – Kyoshi Fukui

No objections

Call made for patents/patent claims.

No response

Kyoshi Fukui moved to accept May SG-L2R Meeting minutes (doc. # 15-13-0464-00).

Second – Sangsung Choi

No objections

The chair polled the working group on their understanding for the standards process. There were no questions. Phil Beecher asked the chair if there was going to be a timeline produced. The chair pointed to the agenda and the objective of working on the Timeline in the second session. There will be a coordinated effort with 802.1. The chair presented a general overview of the process.

The chair reviewed the PAR. Document 231r4. This is the document approved by the EC. The chair reviewed the IEEE 5 Criteria (5C) document.

The chair reviewed the problem statement and recapped the PAR approval. They also met with 802.1. The chair reviewed the discussions that took place in the 802.1 meeting.

There was a short discussion on the relative merits of standards versus recommended practice. It was pointed out that the IEEE is not a compliance organization. The chair gave a quick review of the 802.1 issues again for those who were not at the early session.

The chair did a general overview of next steps.

The chair recesses the meeting, at 9:45 AM, until Tuesday AM2.

**Tuesday AM2 (9/17)**

Chair calls the meeting to order at 10:30 AM.

Call made for patents/patent claims.

No response

The chair reviewed the schedule for the second session based on the agenda.

Documents 493r0 and 495r10 were quickly reviewed. There was a general discussion on the merits of the 802.15.10 effort.

The workgroup started working on a straw man schedule.

* Discussion on putting together a presentation related to this work to being given to 802.1. The chair indicated that he might have something. There was a more general discussion on possible use case inclusions.
* May need to put together a list of the current proprietary techniques for “mesh under”. Perhaps we should put together an illustrative list and why we need to have a standardized approach.
* May need a requirements document. Some ideas:
  + Applications/Use Cases
  + Requirements
  + Topologies based on requirements
* This would be a good start for a joint session with 802.1.
* NO more than 2 joint sessions will be held.
* Need a skeleton framework for Nov sessions.
* Need to recruit other people that are working in this area.

The chair suggested we recess the working group meeting and an ad hoc group work on putting together a skeleton for the next session.

Chair recesses the meeting, at 11:45 AM, until Wednesday AM1.

**Wednesday AM1 (9/18)**

Chair calls the meeting to order at 8:05 AM.

Call made for patents/patent claims.

No response

Continue editing and development of document 15-13-0562 on Applications/Use Cases/ Providers/Requirements.

Chair recesses the meeting, at 9:45 AM, until Wednesday PM1.

**Wednesday PM1 (9/18)**

Chair calls the meeting to order at 1:35 PM.

Call made for patents/patent claims.

No response

The agenda is changed to add a session for TG10 Thursday PM1.

Moved: Matt Gilmore

Second: Tim Godfrey

Approved with unanimous consent.

Review of Document 0562 Applications/Use Cases/ Providers/Requirements.

* Providers are companies that have developed mesh-under routing.
* A list of requirements was developed in the morning session.

Review of use cases for Metering: 15-13-0564-00-0010-Metering Use Cases.doc.

Further editing and development of document 15-13-0562 on Applications/Use Cases/ Providers/Requirements.

Preparation activities for the Joint Session with 802.1 at the Nov plenary. The group developed the following questions for discussion w/ 802.1:

How does/would 802.1 address:

* Bridging w/64 bit addresses?
* Assigning 16 bit addresses throughout the PAN/Mesh Ntwk.?
* Sleeping devices?
* Low energy operation (10yr battery life)?
* The nature of the 802.15.4 low power, low cost, low complexity, limited resources (e.g. < 64 kB memory) approach?

A presentation and Q&A on the above would be useful for TG10.

Note: the following are not applicable to TG10.

* Dealing with different addressing lengths/trying to resolve differences?
* Dealing with different MACs/trying to resolve differences?
* Dealing with high data rates (e.g. > 1 Mb/s)?

Chair recesses the meeting, at 3:10 PM, until Thursday PM1.

**Thursday PM1 (9/19)**

Chair calls the meeting to order at 1:35 PM.

Call made for patents/patent claims.

No response

Review of agenda - outstanding items for today: Strawman Schedule

Development of TG10 Timeline:

* The chair starts with a timeline from a previous task group, and edits it to apply to TG10
* A strawman schedule, shown below, is developed for TG10, showing RevCom approval in Aug 2016
* Interest Group Formation July 2012
* Study Group Formation Jan 2013
* Task Group Formation July 2013
* Prep for 1st Joint Session w/802.1 Sept 2013
* 1st Joint Session w/802.1/refine timeline Nov 2013
* Establish Level of 802.1 Support Needed Nov 2013
* Statement of Work & SRS Jan 2014
* Proposal Effort
  + Initial Contributions March 2014
  + Continue w/Contributions May 2014
  + Begin drafting baseline July 2014
  + Build baseline Sept 2014
  + Adopt Baseline Nov 2014
* Drafting
  + Circulate preliminary document for comments Nov 2014
  + Final draft editing (ready for WG Letter Ballot) Jan 2015
* WG Letter Ballot
  + Initial Release Jan 2015
  + Comment resolution March 2015
  + Recirculation I release May 2015
  + Recirculation I comment resolution July 2015
  + Recirculation II release July 2015
  + Recirculation II comment resolution Sept 2015
  + Recirculation III release Sept 2015
* Sponsor Ballot
  + Initial Release Dec 2015
  + Comment resolution Jan 2016
  + SB Recirculation I release Feb 2016
  + SB Recirculation I comment resolution Mar 2016
  + SB Recirculation II Apr 2016
  + SB Recirculation II comment resolution May 2016
  + SB Recirculation III June 2016
* RevCom
  + EC conditional approval July 2016
  + RevCom approval Aug 2016

Kiyoshi Fukui and Noriyuki Sato will help develop the use cases and introductory text for the Smart Cities section of the applications and requirements.

Action Items:

* Clint will convert strawman schedule into a spreadsheet
* Complete the determination of the providers that have mesh solutions
* Send the minutes and contributions solicited from 802.1 to the 802.1 WG with lead time before the November meeting.
* Pull together the two York presentations plus tutorial material into a condensed, single presentation (to bring everyone who didn't attend September meetings up to speed for November).
* Issue a Call For Interest and Applications

Chair adjourns at 2:40 PM.