**IEEE P802.15**

**Wireless Personal Area Networks**

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| Project | IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs) |
| Title | Peer Aware Communications (PAC) Task Group minutes for Jan. 2013 |
| Date Submitted | 17Jan., 2013 |
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| Re: |  |
| Abstract | PAC Task Group. |
| Purpose | To develop interest in this technology with a view to determine its possible standardization within the 802.15 WG. |
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These are the minutes of IEEE 802.15.8Task Group PAC meeting held at the Hyatt Regency Vancouver,Jan.14–17, 2013.

**MondaySept.14th, 2013**

1. Room: Plaza C
2. The Chair called the meeting to order at 1:30pm.
3. Chairman: Myung Lee, Secretary: Chanho Yoon
4. IEEE Patent Policy slides were shown.
5. Attendees were asked to sign in the IMAT system for attendance.
6. The document number describing the agenda for this week’smeeting is 15-12-0690-00-0008.
7. There were no objections on approving the mintues on the lastTG8 meeting in San Antonio.
8. The chair asked if there were any questions. None heard.
9. The chair heard a brief summary of discussions and conclusions made during the teleconferences held in December 2012. Huan-Bang said group members agreed to define common modes for each specific operating frequency bands, not a universal common mode for the entire TG8, regardless of the frequency bands.
10. Shannon presented some performance metrics for simulation scenarios & parameters in TGD section 9.5 to evaluate the proposed PAC MACs.The metrics could be listed as Areal sum throughput, PER, Jain’s fairness index, and latency. Many group members suggested replace/delete the specific proposed PHY reference (i.e. 802.11a/g OFDM PHY).
11. Since the discussion on whether to include PHY dependent parameters to the MAC performance evaluation criteria, the group decided to have an ad-hoc meeting to resolve such in Tue. PM1 time slot on4th floor room Constable.
12. The meeting recessed at 3:30pm.
13. The group reconvened at 4:00pm.
14. Jinyoung’s suggestion for definition of peer discovery latency was presented (DCN 15-13-5). A straw poll was conducted, and Jinyoung’s definition isstated in the TGD. Results: Yes 8, No 2, Abstain 3.
15. Before the end of PM2 session, Huan-Bang suggested adding some new texts to the TGD, such as adding a special emergency mode. The group generally did not buy the idea because it can possibly be abused by non-time critical applications.
16. The meeting recessed at6:00pm.

**TuesdayJan.15th, 2013**

1. Room: Plaza C
2. The group reconvened at 8:00am.
3. Attendees were asked to sign in the IMAT system for attendance.
4. The chair went over the agenda of this week once again.
5. Marco Hernandez presented the 700MHz licensed band channel model for TG8. However, due to USpublic safety policy set in 2011, the spectrum will not be available for use in wireless air interface/access technologies other than the LTE. Therefore, Marco did not propose a channel model for 700MHz band.
6. After Marco’s presentation, ChanhoYoon presented a material on a brief overview of the 802.16m EMD’s licensed band channel model (DCN 15-13-0008r1). He suggested takingthe shorter transmitter height into account. Since quite a few channel models in the EMD assume transmitter height of that of a base station, mobile station to mobile station channel models should have some sort of further pass-loss attenuation after certain break point distance along with generally lower chance of LOS situations.
7. SuhwookKim presented a material on regulations to be considered for PAC devices.
8. Next, ByungjaeKwak presented two documents. The first document was about a proposed text change in PAC device’s relative positioning capability in the TGD. Second is about transmitter power control due to presence of interference. Shannon issued that the power control capability seems to be valid only for lower power consumption due tointerference management capability of PAC devices already specified in the TGD.
9. The meeting recessed at 10:00am.
10. The group reconvened at 10:30am.
11. EldadZeirapresented some proposed modified texts to the TGD.
12. Suhwook Kim presented the revised timeline version of TG8
13. The chair suggested finalizing thedraft version of Call for Proposal until Wednesday PM2 session, and then issue a call for proposal on Thursday.
14. Marco presented a material on security issues for PAC. He suggested borrowing some ideas from TG6 body area network since their infrastructure-less environment is similar to PAC. Robert Moskowitz made a comment thatTG6’s solution, a layer 2 type, is not good enough for PAC. Eventually, some higher layer security protocols should also be added.
15. JunbeomHur presented an overview of 802.15.9. Mechanisms to establish keys are defined in 802.15.9. Then he also suggested addition of security requirements in the TGD.

**WednesdayJan.16th, 2013**

1. Room: Plaza C
2. The group reconvened at 1:30pm.
3. Attendees were asked to sign in the IMAT system for attendance.
4. The chair went over the agenda of this week once again.
5. Eldad presented an IEEE 802.16m SDD (DCN 15-13-0053-00) as a reference for developing the TG8 PAC framework document (PFD). Meanwhile, Alan from Samsung Electronics showed two examples of specification framework document from from the IEEE 802.11ac group (11-09-992r21).
6. Group members revised the timeline of the future group activities (PFD procedure), especially on date of presentation on proposals. A motion was carried on to vote on new TG8 timeline schedule. Moved by Suhwook, Seconded by: Marco. Result: 10-0-1.
7. Merged comments for TGD were once again discussed as organized in the DCN 15-13-45r0.The group members did quite a few straw polls to change the texts in many sections.
8. The meeting recessed at 3:30pm.
9. The group reconvened at 4:00pm.
10. The group contined to review the merged comments for TGD. Latest agreements are found in the DCN 15-13-0045.
11. The meeting recessed at 6:00pm.

**ThursdayJan.17th, 2013**

1. Room: Plaza C
2. The group reconvened at 8:00am.
3. Attendees were asked to sign in the IMAT system for attendance.
4. Huan-Bangoverviewed the draft document of the call for proposal (DCN15-13-0069r02).
5. The group revisited the document on system level simulation issues and scenarios (DCN 15-13-0065r3).
6. There were some questions regarding the execution methodology of system level simulation setup. Some group members commented on the effectiveness of the link class-base model (shown in slide 7) that it will probably fit closely to the conventional 2-dimentional Poisson-distributed network topology; therefore, it just adds simulation complexity without offering any further insightsin terms of evaluation of MAC protocol.
7. The meeting recessed at 9:30am.
8. The group reconvened at 10:45am.
9. The group members revisited the TGD (DCN: 15-12-0385r4).
10. A motion by Marco Hernandez, seconded by SungsoonJoo, was carried on to approve the proposed system level simulation scenario (DCN 15-13-0080) to be incorporated into the TGD. Result: Yes 7, No 0, Abstain 1. Next, Huan-Bangmade a motionfor group’s approval on the call for proposal document DCN 15-13-0069r2. Result: Yes 8, No 0, Abstain 0.
11. Finalized TGD. Chanho Yoon made a motion, seconded by Alan Zhu, to approve the TGD. Result: Yes 9, No 0, Abstain 0.
12. Teleconference bridges will be provided by LGE. The telephone number and the access code is
	* International: 1-877-668-4493
	* Access code: 627805157
13. Tentative schedule and the objectives for the teleconference meetings will be:
	* Feb. 5th (TUE): US EST 8:00pm, US PST 5:00pm, Japan/Korea 9:00am, China: 8:00am.
		1. Discussions onsimulation parameters.
14. The meeting adjourned at 12:30pm.

The next meeting will be held during Mar.17-22, 2013, at Caribe Royale & Convention Center, Orlando, FL.