**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. 2014. |
| Date Submitted | 20th Feb. 2014 |
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| Re: |  |
| Abstract | Task Group minutes of the IEEE 802.15.8 Interim Meeting in Los Angeles, USA. |
| Purpose | To record the minutes of the IEEE 802.15.8 meeting at session #88. For approval at Session #89. |
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These are the minutes of IEEE 802.15.8 Task Group PAC meeting held at Hyatt Regency Century Plaza, January 19-24, 2014.

**Monday, Jan. 20th, 2014**

1. Room: OLYMPIC I
2. Chairman: Myung J. Lee
3. (10:31 h) The Chair called the meeting to order.
4. Attendees were asked to sign in the IMAT system for attendance.
5. (10:34 h)The Chair presented the proposed agenda (DCN: 15-14-0023-00-0008) for the week, and mentioned the submitted documents to PAC for this session.
6. Presentation time for all the submitted contribution documents were allocated by the chair.
7. (10:44 h) The revised agenda (DCN: 15-14-0023-01-0008) was approved without objection of the attendees.
8. (10:45 h) There were no objections on approving the minutes (DCN: 15-13-0726-00-0008) on the previous TG8 meeting held at Hyatt Regency Dallas, November 10-15, 2013.
9. (10:46 h) The Secretary, Seungkwon Cho, briefly reported a summary of two teleconferences took place after the Dallas Meeting in Nov. 2013. (DCN: 15-14-0027-02-0008)
10. (10:54 h) Byung-Jae Kwak presented “Proposal for PFD” (DCN: 15-14-0008-00-0008).
11. (10:59 h) The MAC Editor, Byung-Jae Kwak, reported the current status of draft PFD and announced that he would post a new version (DCN: 15-13-0328-10-0008) on the Mentor server in the evening after a final clean-up.
12. (11:12 h) Marco Hernandez presented “PHY frame structures comparison and harmonization” (DCN: 15-14-0002-02-0008).
13. (11:19) Igor Dotlic presented “Merged DecaWave and NICT IR-UWB PHY proposal to IEEE 802.15.8” (DCN: 15-13-0716-01-0008).
14. (11:25 h) The meeting was recessed.

**Tuesday, Jan. 21st, 2014**

1. Room: OLYMPIC I
2. Chairman: Myung J. Lee
3. (08:14 h) The group reconvened.
4. Attendees were asked to sign in the IMAT system for attendance.
5. The Chair revisited the agenda of the week (DCN: 15-14-0023-01-0008).
6. The meeting was recessed at 08:27 h to wait for the MAC Editor and reconvened at 08:34 h.
7. (08:34 h) The group began work on finalizing the draft PFD. The MAC Editor, Byung-Jae Kwak, presented the text and figures in the following clauses/subclauses of draft PFD (DCN: 15-13-0328-10-0008) and they were reviewed, discussed, and revised by the group.
	* “1. Overview”
	* “2. Definitions”
	* “3. Abbreviations and acronyms”
		+ The group did not discuss this subclause because the MAC Editor announced that he would delete all the abbreviations and acronyms that did not appear in the final PFD.
	* “4. General descriptions”
	* “4.1. Concepts and architecture”
	* “4.2. Topology”
8. (10:12 h) The meeting was recessed.
9. The group reconvened at 10:33 h.
10. Attendees were asked to sign in the IMAT system for attendance.
11. (10:36 h) The group resumed the work on the draft PFD. The MAC Editor, Byung-Jae Kwak, presented the text and figures in the following clauses/subclauses of draft PFD (DCN: 15-13-0328-10-0008) and they were reviewed, discussed, and revised by the group.
	* “4.3. Reference model”
	* “5.0. Overview”
12. (11:12 h) Seungkwon Cho presented “A suggestion for harmonized PAC frame structure” (DCN: 15-13-0737-01-0008). Even though there was discussion on the frame structure with a fixed discovery interval, the group failed to reach consensus. Further discussion on the fame structure was scheduled on the next day.
13. (12:03 h) The group resumed the work on the draft PFD. The MAC Editor, Byung-Jae Kwak, presented the text and figures in the following clauses/subclauses of draft PFD (DCN: 15-13-0328-10-0008) and they were reviewed, discussed, and revised by the group.
	* “5.1. Frame Structure”
	* “5.2. Synchronization”
	* “5.3. Discovery”
14. (12:31) The Chair announced that the group would have another meeting in the afternoon and he would inform the group of the room by sending email to the PAC email reflector.
15. (12:33 h) The meeting was recessed.
16. Room: 505
17. Chairman: Myung J. Lee
18. (16:02 h) The group reconvened.
19. The MAC Editor, Byung-Jae Kwak, presented a revised text and figure for “5.1. Frame Structure” which reflected the discussion in the group. The attendees reviewed, discussed, and revised the text and figure for “5.1. Frame Structure”.
20. (16:45 h) The revision of text and figure for “5.1. Frame Structure” was over.
21. (16:46 h) In “5.2. Synchronization”, ‘dynamically’ was added in front of ‘elected’ in the ‘[Def. 2]’ as was commented by Qing Li (“Comments to PFD Draft 15-13-0328-10-0008”, DCN: 15-14-0047-00-0008).
22. The MAC Editor, Byung-Jae Kwak, presented the text and figures in the following clauses/subclauses of draft PFD (DCN: 15-13-0328-10-0008) and they were reviewed, discussed, and revised by the group.
	* “5.3. Discovery”
	* “5.4. Peering”
	* “5.5. Communications”
	* “5.5.1. Unicast”
	* “5.5.2. Multicast”
23. (18:05 h) The meeting was recessed.

**Wednesday, Jan. 22nd, 2014**

1. Room: OLYMPIC I
2. Chairman: Myung J. Lee
3. (08:03 h) The group reconvened.
4. (08:06 h) The MAC Editor, Byung-Jae Kwak, presented the changes in the draft PFD that had made yesterday. The revised PFD was DCN: 15-13-0328-11-0008.
5. Following clauses/subclauses of the revised draft PFD (DCN: 15-13-0328-11-0008) were presented by the MAC Editor and they were reviewed, discussed, and revised by the group.
	* “2. Definitions”
	* “3. Abbreviations and acronyms”
	* “4. General descriptions”
	* “5.4 Peering”
6. (08:50 h) The MAC Editor, Byung-Jae Kwak, handed the editing of the draft PFD over to the PHY Editor, Seung-Hoon Park.
7. Following clauses/subclauses of the revised draft PFD (DCN: 15-13-0328-11-0008) were presented by the PHY Editor and they were reviewed, discussed, and revised by the group.
	* “5.5. Communications”
	* “5.5.1. Unicast”
	* “5.5.2. Multicast”
	* “5.5.3. Broadcast”
	* “5.6. MPDU structure”
	* “5.7. Multiple access”
	* “5.8. Synchronization procedure”
8. In the discussion on “5.5.3. Broadcast”, a straw poll was conducted.
	* Straw poll: To make the phrase, “Broadcast is a one way data communication to any PDs within reachable range, or any PDs in a group.”, leave as it is in “5.5.3. Broadcast” of the PFD.
	* Result: 6-0-0 (in favour – against – abstain)
9. (09:59 h) The meeting was recessed.
10. Room: GOVERNORS II
11. Chairman: Myung J. Lee
12. (13:38 h) The group reconvened.
13. The group resumed the work on the draft PFD. The PHY Editor, Seung-Hoon Park, presented the text and figures in the following clauses/subclauses of draft PFD (DCN: 15-13-0328-13-0008) and they were reviewed, discussed, and revised by the group.
	* “5.8. Synchronization procedure”
	* “5.9. Discovery procedure”
	* “5.10. QoS”
	* “5.11. Interference management”
	* “5.12. Transmit power control”
	* “5.13. Multi-hop operation”
	* “5.14. Relative positioning”
	* “5.15. Power management”
	* “5.16. Security”
	* “5.17. Coexistence”
	* “5.18. Higher layer interaction”
		+ The title of this subclause was changed into “5.18. Upper layer interaction” after discussion.
	* “6.1. Block Diagram”
		+ This subclause was deleted after discussion.
		+ Due to the deletion of this subclause, subsequent subclause numbers were renumbered.
	* “6.1. Channelization”
	* “6.2. Duplex schemes”
	* “6.3. Multiplexing schemes”
	* “6.4. PPDU structure”
14. (15:40 h) The meeting was recessed.

**Thursday, Jan. 23rd, 2014**

(Secretary’s Note: Following additional meeting took place in AM2 session on Thursday was announced by the Chair’s email sent to the PAC email reflector.)

1. Room: GOVERNORS I
2. Chairman: Myung J. Lee
3. (10:37 h) The group reconvened.
4. The Vice Chair, Huan-Bang Li, brought a draft version of Call for Contribution and presented it to the group.
5. The group reviewed, discussed, and revised the draft version of Call for Contribution.
6. Discussion on revising the Call for Contribution included expected group activities in upcoming interim and plenary sessions.
7. The meeting was recessed at 11:42 h.
8. Room: OLYMPIC I
9. Chairman: Myung J. Lee
10. (13:34 h) The group reconvened.
11. (13:35 h) The Vice Chair, Huan-Bang Li, presented the draft version of Call for Contribution.
12. (13:44 h) A motion was made to issue call for contribution.
	* Motion: To approve the "Call for contribution" (DCN: 15-14-087-00-0008)
	* Result: 10-0-0 (in favour – against – abstain)
13. (13:47 h) The group resumed the work on the draft PFD. The PHY Editor, Seung-Hoon Park, presented the text and figures in the following clauses/subclauses of draft PFD (DCN: 15-13-0328-13-0008) and they were reviewed, discussed, and revised by the group.
	* “6.5. Modulation and coding scheme (MCS)”
	* “6.6. Multiple antennas”
	* “6.7. Bit interleaver”
	* “6.8. Scrambling”
	* “7. UWB Physical (PHY) layer”
14. (14:15 h) Review/discussion/revision of draft PFD was over.
15. (14:19 h) Byung-Jae Kwak presented “Comments on IEEE 802.15.8 PAC Technical Guidance Document” (DCN: 15-14-0066-00-0008) during the PHY Editor’s editorial revision of the draft PFD.
16. (14:29 h) A motion was made to update the Technical Guidance Document (TGD).
	* Motion: To approve the document attached to DCN: 15-14-0066-00-0008 as an updated PAC TGD.
	* Moved by: Byung-Jae Kwak
	* Seconded by: Marco Hernandez
	* Result: 10-0-0 (In favour:against:abstain)
17. (14:31 h) The meeting was recessed in order to give the PHY Editor time to complete his editorial revision of the draft PFD.
18. (14:47 h) The group reconvened.
19. (14:48 h) The PHY Editor announced that he had uploaded the latest version of draft PFD (DCN: 15-13-0328-16-0008) and the revised TGD (DCN: 15-12-0568-08-0008).
20. The attendees downloaded the posted two documents from the Mentor server and went over those documents.
21. (15:14 h) The Chair announced that the DCN of the final PFD was changed into 15-14-0085-00-0008 because a new DCN was required to remove the word, "draft", in the document title of the final PFD.
22. (15:16 h) Even though the group tried to approve the PFD, several editorial errors deferred the approval.
23. (15:18 h) The meeting was recessed.
24. Room: OLYMPIC I
25. Chairman: Myung J. Lee
26. (16:10 h) The group reconvened.
27. (16:16 h) A motion was made to approve the final PFD.
	* Motion: To approve the "TG8 PAC Framework Document (Final Version)" (DCN: 15-14-0085-01-0008)
	* Moved by: Seungkwon Cho
	* Seconded by: Byung-Jae Kwak
	* Result: 9-0-0 (In favour:against:abstain)
28. (16:17 h) The group begun to discuss simulation scenarios and parameters for discovery and communication in the revised TGD (DCN: 15-12-0568-08-0008).
29. Focused on “9.4.2. Scenarios & parameters for just PDs”, the discussion lasted about for 40 minutes.
30. (18:08 h) The meeting adjourned.

The next meeting will be held during March 16-21, 2014 – Beijing, China.