IEEE P802.15
Wireless Specialty Networks

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| IEEE 802.15.13 May, 2019 Interim Meeting Minutes for Atlanta |
| Date: 2019-05-16 |
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Abstract

# This document contains the TG13 Multi-Gigabit/s Optical Wireless Communications Meeting minutes from the May meeting in Atlanta May 2019.

**Monday, May 13, 2019, PM1**

Attendance:

* Volker Jungnickel (Fraunhofer HHI)
* Kai Lennert Bober (Fraunhofer HHI)
* Sang-Kyu Lim (ETRI)
* Tuncer Baykas (Mediopol University)
* Nikola Serafimovski (pureLiFi)
* Maximilian Riegel (Nokia)
1. The Chair, Volker Jungnickel (Fraunhofer HHI), called the meeting to order and asked for attendance check.
2. The Chair asked Sang-Kyu Lim (ETRI) to take the meeting minutes.
3. Chong Han (pureLiFi), and Xu Wang (VLNComm) joined this meeting via phone calls because they were unable to attend this meeting.
4. The Chair presented the agenda doc. 15-19-0207-00-0013 and read the IP and patent policy, the logistics, and TG13 operating rules.
5. The Chair briefly introduced the schedule of TG13 this week and discussed the overlap issue of TG13 and TGbb on Thursday PM1 session with Nikola.
6. TG13 **Motion** #42 to approve the agenda for the week in document 15-19-0207-01-0013.

Moved by Tuncer
Seconded by Sang-Kyu
Approved by unanimous consent MOTION PASSES
7. The meeting minutes for the meeting in Vancouver were presented in doc. 15-19-0184-00-0013.
8. TG13 **Motion** #43 to approve the meeting minutes in doc.15-19-0184-00-0013 for Vancouver meeting on March.

Moved by Sang-Kyu
Seconded by Nikola
Approved by unanimous consent MOTION PASSES
9. The telco meeting minutes between March 26 and May 07 were presented, but the Motion to approve the telco minutes was tabled to the next session because of an editorial issue.
10. The Chair briefly explained the status of MAC text for Clauses 4 to 8 and gave his opinion on how to handle this.
11. Tuncer suggested that he would like to check and update the text on MIMO and relaying functionality through track changes for the draft.
12. Lennert presented the new text for MAC, doc. 15-19-0080-03-0013, which has been prepared through the teleconferences between April 02 and May 07.
13. Lennert discussed the unresolved issues in Clause 6 of doc. 15-19-0080-03-0013 with Chong and Xu.
14. So, consequently, the table 6-3 (Management frame subtypes), 6.6.1.21 (Waveform Control Element), 6.6.1.22 (Advanced Modulation Control Element), and 6.6.1.23 (Random Access Element) have been updated.
15. The new subclauses 6.6.1.24 and 6.6.1.25 for specifying Probe Request Element and Probe Response Element have been added to the document.
16. Finally, doc. 15-19-0080-04-0013 has been uploaded to the document server.
17. TG13 **Motion** #44 to substitute the current Clauses 5 and 6 in the TG13 draft D4.1 with the new text contained in doc. 15-19/0080r4 in Clauses 5 and 6 when creating D4.2.

Moved by Nikola
Seconded by Sang-Kyu
Approved by unanimous consent MOTION PASSES
18. The issue on handling Clause 7 (MAC services) and Clause 8 (Security) was mentioned. Especially, the problem that there is no expert on Clause 7 and 8 in TG13 was mentioned by Nikola.
19. Max who is an expert on 802.1AC standard volunteered to help TG13 to complete Clause 7.
20. The meeting recessed.

**Tuesday, May 14, 2019, AM1**

Attendance:

* Volker Jungnickel (Fraunhofer HHI)
* Kai Lennert Bober (Fraunhofer HHI)
* Nikola Serafimovski (pureLiFi)
* Sang-Kyu Lim (ETRI)
* Matthias Wendt (Signify Research)
* Soo-Young Chang (SYCA)
* Vinayagam Mariappan (SNUST)
* Tuncer Baykas (Mediopol University)
1. Chong Han (pureLiFi), and Xu Wang (VLNComm) joined this session via phone calls again.
2. The Chair, Volker Jungnickel (Fraunhofer HHI), called the meeting to order and asked for attendance check.
3. The Chair presented the agenda doc. 15-19-0207-01-0013 and read the patent policy, the logistics, and TG13 operating rules.
4. Some opinions on the voting right issue were exchanged. When TG13 goes to working group letter ballot, a comment resolution group is formed. It is constituted of WG15 members with voting rights only. Sufficient TG13 members should be available.
5. The Chair briefly mentioned that TG13 had a good discussion yesterday and today TG13 would have 2 sessions to continue to discuss Clauses 7 and 8.
6. The opinion that Lennert can use PM1 session on Thursday for TG13 and TGbb technical discussion was suggested in the schedule discussion.
7. TG13 including Xu and Chong joined via phone calls started to intensively discuss the Clause 7.
8. Lennert, Chong, and Xu discussed the technical issues on Table 33 in subclause 7.3.1.1 and primitive working mechanism in 7.3.1.
9. The things to be removed from the Clause 7 in the current draft were also discussed.
10. However, TG13 perceived that this multiple unfocused discussion on Clause 7 was not productive and inefficient. So, it was decided that Lennert would prepare the main skeleton for Clause 7 on the basis of 19/080r4 as the first step, and then as the second step, the details on Clause 7 on the basis of the skeleton would be implemented. As the final step, the current text for Clause 7 in D4.1 would be switched to the whole new text for Clause 7 in D4.2.
11. TG13 **Motion** #45 to approve the telco meeting minutes in 15-19-0206-01-0013.

Moved by Sang-Kyu
Seconded by Nikola
Approved by unanimous consent MOTION PASSES
12. The meeting recessed.

**Tuesday, May 14, 2019, PM1**

Attendance:

* Volker Jungnickel (Fraunhofer HHI)
* Kai Lennert Bober (Fraunhofer HHI)
* Nikola Serafimovski (pureLiFi)
* Sang-Kyu Lim (ETRI)
* Harry Bims (Bims Laboratories, Inc.)
* Soo-Young Chang (SYCA)
* Vinayagam Mariappan (SNUST)
* Tuncer Baykas (Mediopol University)
1. The Chair, Volker Jungnickel (Fraunhofer HHI), called the meeting to order and asked for attendance check.
2. The Chair presented the agenda doc. 15-19-0207-02-0013 and read the patent policy, the logistics, and TG13 operating rules.
3. Chong Han (pureLiFi), and Xu Wang (VLNComm) joined this session via phone calls again.
4. The Chair briefly introduced the current situation of TG13 to Harry.
5. Lennert brought the issues on the Clauses 9 and 10 in D4.1 to the group.
6. Lennert strongly mentioned that the Clause 10 specifying the external PHY-SAP interface is not needed because PHY/MAC would be implemented in a single chip and it is likely that there are few vendors only. In that case it is not necessary to expose the interface to others.
7. TG13 decided that the Clause 9 has to be revised and the Clause 10 would be removed from D4.1.
8. TG13 **Motion** #46 to remove the Clause 10 from draft D4.1 when creating D4.2.

Moved by Nikola
Seconded by Sang-Kyu
Approved by unanimous consent MOTION PASSES
9. There was a short discussion on how many sessions for the next Vienna meeting is needed. As a result, the schedule on 6 sessions plus regular teleconferences was suggested.
10. The issues on MAC constants and PIB attributes which are related to 7.4.1 in D4.1 and 7.3 in 19/080/r4 were discussed.
11. Especially, the group concentrated on the discussion to resolve the issues marked in yellow in Tables 7-26 and 7-27 in 19/080/r4.
12. The Chair asked Chong how much time she needs to resolve the comment resolution for planning the schedule for Wednesday and Thursday. Twenty minutes
13. There was a short discussion on the action items for Wednesday PM1 session.
14. The meeting recessed.

**Wednesday, May 15, 2019, PM1**

Attendance:

* Volker Jungnickel (Fraunhofer HHI)
* Kai Lennert Bober (Fraunhofer HHI)
* Sang-Kyu Lim (ETRI)
* Soo-Young Chang (SYCA)
* Vinayagam Mariappan (SNUST)
* Tuncer Baykas (Mediopol University)
* Nikola Serafimovski (pureLiFi)
1. The Chair, Volker Jungnickel (Fraunhofer HHI), called the meeting to order.
2. The Chair appointed Sang-Kyu Lim (ETRI) for reporting the activities of TG13 this week in the WG15 Closing Plenary due to the fact that the Chair could not attend.
3. The Chair presented the agenda doc. 15-19-0207-02-0013 and read the patent policy, the logistics, and TG13 operating rules.
4. Chong Han (pureLiFi), and Xu Wang (VLNComm) joined this session via phone calls again.
5. TG13 had a short discussion on what to discuss first on this session.
6. The comment resolution to resolve the technical and editorial comments from Chong, which were listed in doc. 15-19-0192-00-0013, has been done.
7. TG13 **Motion** #47 to include the resolution of comments against TG13 draft D4.1 as contained in doc. 15-19/0192r1 into the new TG13 draft D4.2. The Technical Editor is granted the right to correct the section numbering and make editorial changes.

Moved by Tuncer
Seconded by Sang-Kyu
Approved by unanimous consent MOTION PASSES
8. Lennert uploaded the document 15-19-0080-06-0013, which is the updated text on MAC.
9. The explanation on overview of doc. 15-19-0080-06-0013 was given to the group by Lennert.
10. The technical issues need a consensus have been also discussed on this overview.
11. The group decided to continue to discuss the technical issues on Clause 7 in 15-19/0080r6 on AM2 session on Thursday.
12. The meeting recessed.

**Thursday, May 16, 2019, AM2**

Attendance:

* Volker Jungnickel (Fraunhofer HHI)
* Kai Lennert Bober (Fraunhofer HHI)
* Sang-Kyu Lim (ETRI)
* Tuncer Baykas (Mediopol University)
* Nikola Serafimovski (pureLiFi)
1. The Chair, Volker Jungnickel (Fraunhofer HHI), called the meeting to order and asked for attendance check.
2. The Chair opened the agenda doc. 15-19-0207-03-0013, but his network connection was not working. So the screen was changed to Lennert’s laptop.
3. Chong Han (pureLiFi), and Xu Wang (VLNComm) joined this session via phone calls again.
4. The explanation on overview of the text related to MIMO and relaying functionality in doc. 15-19-0080-05-0013 was given to the group by Tuncer.
5. The group discussed the technical working mechanism on MIMO and relaying functionality and how to handle the text on MIMO and relaying functionality.
6. As a result, the group decided to integrate the text on MIMO and relaying functionality after Clauses 4, 5, 6, and 7 are almost complete so that the text can be harmonized with other text inside each Clause.
7. The plan for finalizing the work in TG13 was discussed.
* **May Interim:** Resolve comments D4.1, include clauses 5-7 in D4.2
* **June telcos:** Finalize detailed discussion on clauses 5-7, Postpone discussion on clause 8, Draft text for clause 4
* **July Plenary:** Review draft again and submit for WGLB
* **September Interim:** Resolve comments from WGLB and submit for recirculation
* **October telcos:** Resolve comments from recirc
* **November Plenary:** Submit draft to SB
1. The plans for the July Plenary meeting were discussed.
* Finalize text on Clause 4-7
* Discussion on clause 8
* Create draft 6.0 and submit to WGLB
1. The next telco dates to discuss on TG13 MAC were discussed.
2. TG13 **Motion** #48 to approve the telco schedule as contained in doc. 15-19/0207r5.

May 21 10:00-11:00 EST on TG13 MAC

June 4 10:00-11:00 EST on TG13 MAC

June 25 10:00-11:00 EST on TG13 MAC

July 2 10:00-11:00 EST on TG13 MAC

Moved by Nikola
Seconded by Tuncer
Approved by unanimous consent MOTION PASSES

1. The group continued to discuss the technical issues on Clause 7 in 15-19/0080r6.
2. TG13 **Motion** #49 to substitute the current Clause 7 in the TG13 draft D4.1 with the new text contained in doc. 15-19/0080r7 in Clause 7 when creating D5.0.

Moved by Nikola
Seconded by Sang-Kyu
Approved by unanimous consent MOTION PASSES
3. The meeting recessed.

**Thursday, May 16, 2019, PM1**

Attendance:

* Kai Lennert Bober (Fraunhofer HHI)
* Sang-Kyu Lim (ETRI)
* Nikola Serafimovski (pureLiFi)
1. The Vice Chair, Nikola Serafimovski (pureLiFi), called the meeting to order and asked for attendance check.
2. The Vice Chair asked for any other business. There was none.
3. The meeting adjourned.