IEEE P802.15
Wireless Specialty Networks

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| IEEE 802.15.13 March, 2019 Plenary Meeting Minutes for Vancouver |
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Abstract

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

**Monday, March 11, 2019, PM1**

Attendance:

* Volker Jungnickel (Fraunhofer HHI)
* Kai Lennert Bober (Fraunhofer HHI)
* Sang-Kyu Lim (ETRI)
* Soo-Young Chang (SYCA)
* Vinayagam Mariappan (Kookmin University)
* Edward Neef (FE Consultancy BV)
1. Nikola Serafimovski (PureLiFi), Chong Han (PureLiFi), and Xu Wang (VLNComm) joined this meeting via phone calls because they were unable to attend due to visa issues.
2. The Chair Volker Jungnickel (Fraunhofer HHI) The Chair called the meeting to order and gave

a short history on TG13, the current situation, some of IEEE rules, the way to get the voting right, etc. to a newcomer for better understanding.

1. The Chair presented the agenda doc. 15-19-0100-01-0013 and read the IP and patent policy.
2. The Chair appointed Sang-Kyu Lim (ETRI) as a Vice Chair for reporting the activities of TG13 this week in the WG15 Opening Plenary due to the fact that the Chair could not attend.

1. The Chair briefly introduced the schedule of TG13 this week and the plan to have a joint meeting with experts from TG4y on security in the standard.
2. Especially, the Chair highlighted that the security section in the current draft is obsolete, so it should be revised. A security expert will join Wednesday PM1 session because there is no security expert in TG13.
3. TG13 **Motion** #41 to approve the agenda for the week in document 15-19-0100-01-0013.

Moved by Sang-Kyu
Seconded by Vinayagam
Approved by unanimous consent MOTION PASSES
4. The meeting minutes for the meeting in St. Louis were presented in doc. 15-19-0099-00-0013.
5. TG13 **Motion** #42 to approve the meeting minutes from January 15-19-0099-00-0013.

Moved by Sang-Kyu
Seconded by Vinayagam
Approved by unanimous consent MOTION PASSES
6. The meeting minutes for the telcos between February 01 and March 07 weren’t presented. Hence, the Motion to approve the telco minutes was delayed to next session.
7. The combined comment list against draft D4 is contained in doc. 15-19-0117-00-0013. TG13 began to resolve the comments in 15-19-0117-00-0013.
8. It was suggested that the comment resolution would be more productive if it was started from the bottom with comments gathered in document 15-19-0117-00-0013.
9. The comment resolution was started from the bottom with comments gathered in document 15-19-0117-00-0013.
10. For more details on the results and notes of comment resolution, see document 15-19-0117-01-0013.
11. The meeting recessed.

**Monday, March 11, 2019, PM2**

Attendance:

* Volker Jungnickel (Fraunhofer HHI)
* Kai Lennert Bober (Fraunhofer HHI)
* Sang-Kyu Lim (ETRI)
* Soo-Young Chang (SYCA)
* Vinayagam Mariappan (Kookmin University)
* Edward Neef (FE Consultancy BV)
1. The Chair Volker Jungnickel (Fraunhofer HHI) called the meeting to order.
2. The meeting minutes for the telcos between February 01 and March 07 weren’t presented. Therefore, the Motion to approve the telco minutes was delayed to next session on Tuesday.
3. TG13 continued to make the comment resolution.
4. A new comment was inserted into the combined comment list in order to make it easier. The new comment was assigned to the comment number #92. So, the comments from #92 to #111 in 15-19-0117-00-0013 were moved into the comments from #93 to #112 in 19-0117-01-0013.
5. For more details on the results and notes of comment resolution, see document 15-19-0117-01-0013.
6. TG13 **Motion** #43 to approve the resolution of comments against TG13 draft D4 as contained in doc. 15-19/0117r1 and to include them into the new TG13 draft D4.1.

Moved by Sang-Kyu
Seconded by Vinayagam
Approved by unanimous consent MOTION PASSES
7. The meeting recessed.

**Tuesday, March 12, 2019, PM1**

Attendance:

* Volker Jungnickel (Fraunhofer HHI)
* Kai Lennert Bober (Fraunhofer HHI)
* Sang-Kyu Lim (ETRI)
* Ryan Mennecke (JHUAPL)
* Vinayagam Mariappan (Kookmin University)
1. Nikola Serafimofski (pureLiFi), Chong Han (pureLiFi) and Xu Wang (vlncomm) joined this meeting via phone calls because they were unable to attend due to visa issues.
2. The Chair Volker Jungnickel (Fraunhofer HHI) called the meeting to order.
3. The Chair Volker Jungnickel presented the agenda doc. 15-19-0100-02-0013 and briefly announced again that TG13 will have joint session with TG4y on Wednesday PM1 session to discuss security issues.
4. The meeting minutes for the telcos between February and March were presented in document 15-19-0101-01-0013.
5. TG13 **Motion** #44 to approve the telco minutes between February and March were presented in document 15-19-0101-01-0013.

Moved by Sang-Kyu
Seconded by Vinayagam
Approved by unanimous consent MOTION PASSES
6. Kai Lennert Bober (Fraunhofer HHI) presented doc. 15-19-0080-01-0013 on updated MAC text.
7. There was a general discussion on doc. 15-19-0080-01-0013. The conclusion was that the text contains what was expected. But the text has to be reviewed by the other experts in the group and revised before it can be taken over into the draft. This discussion will be done between the Vancouver and Atlanta meetings taking benefit from teleconferences.
8. The meeting recessed.

**Tuesday, March 12, 2019, PM2**

Attendance:

* Volker Jungnickel (Fraunhofer HHI)
* Kai Lennert Bober (Fraunhofer HHI)
* Sang-Kyu Lim (ETRI)
* Soo-Young Chang (SYCA)
* Vinayagam Mariappan (Kookmin University)
* Edward Neef (FE Consultancy BV)
* Jerome Arokkiam (Osram GmbH)
1. The Chair Volker Jungnickel called the meeting to order.
2. TG13 discussed the issue on starting WGLB, WGLB process, and the current situation in terms of the draft. The conclusion was not to start the WGLB process in Vancouver.
3. The Chair asked Sang-Kyu to report the mid-week activities of TG13 in WG15 mid-week Plenary on Wednesday AM2 because he had to be at another meeting in 802.11 at the same time.
4. TG13 started again the comment resolution with doc. 15-19-0117-01-0013 to finish the comment resolution against D4.
5. Doc. 15-19-0117-01-0013 has been changed to doc. 15-19-0117-02-0013 after the comment resolution was completed.
6. So, for more details on the results and notes of comment resolution, see document 15-19-0117-02-0013.
7. TG13 **Motion** #45 to approve the resolution of comments against TG13 draft D4 as contained in doc. 15-19/0117r2.

Moved by Sang-Kyu
Seconded by Vinayagam
Approved by unanimous consent MOTION PASSES
8. The meeting recessed.

**Wednesday, March 13, 2019, PM1**

Attendance:

* Volker Jungnickel (Fraunhofer HHI)
* Kai Lennert Bober (Fraunhofer HHI)
* Sang-Kyu Lim (ETRI)
* Soo-Young Chang (SYCA)
* Vinayagam Mariappan (Kookmin University)
* Edward Neef (FE Consultancy BV)
* Tero Kivinen (TG4y)
* Don Sturek (TG4y)
* One more person
1. Chong Han (pureLiFi) and Xu Wang (vlncomm) joined this meeting via phone calls because they were unable to attend due to visa issues.
2. The Chair Volker Jungnickel called the meeting to order.
3. The Chair Volker Jungnickel (Fraunhofer HHI) presented the agenda doc. 15-19-0100-03-0013.
4. The Chair briefly said about some background on this joint meeting with TG4y.
5. Mainly, Tero and Don from TG4y explained the enhanced security mechanism with some of materials, 15-15-0106-07-0mag-security-section-pictures and IEEE Std 802.15.9™-2016, and they discussed the technical issues on security and MAC with Lennert.
	* The security in 802.15.4 focuses on encryption, integrity and replay protection.
	* The distribution of keys is not included in the standard.
	* For key exchange and authentication, the 802.15.19 standard is used.
	* Security principle should be reusable in TG13 if the auxiliary security header is included in MAC frames.
	* 802.15.19 for key exchange should be reusable if TG13 supports Information Elements.
	* Some details of TG13, such as address lengths and packet rates may lead to the need for modifications of the existing mechanisms.







1. After the joint meeting with TG4y, there was some of discussions on the MAC text proposal presented by Lennert yesterday.
2. However, TG13 needed additional time to discuss this MAC issue.
3. The meeting recessed.

**Thursday, March 14, 2019, PM1**

Attendance:

* Volker Jungnickel (Fraunhofer HHI)
* Kai Lennert Bober (Fraunhofer HHI)
* Sang-Kyu Lim (ETRI)
* Vinayagam Mariappan (Kookmin University)
* Soo-Young Chang (SYCA)
1. Nikola Serafimovski (PureLiFi), Chong Han (PureLiFi), and Xu Wang (VLNComm) joined this meeting via phone calls because they were unable to attend due to visa issues.
2. The Chair Volker Jungnickel called the meeting to order.
3. The Chair opened the agenda doc. 15-19-0100-03-0013, and then started to update.
4. The Chair briefly mentioned about some background on the joint meeting with TG4y yesterday, and then TG13 started to discuss on how we put the security issues to the draft.
5. The Chair asked how much the work load for security issues is. It was estimated to require considerable effort. Especially, it was mentioned that it was the things other group worked for 1 or 2 years. The time savings due to the fact that the other work is merely incorporated is hard to estimate.
6. The technical Editor, Chong Han (pureLiFi) announced that Draft 4.1 is ready and can be uploaded.
7. TG13 agreed to have telcos to discuss doc. 15-19-0080-02-0013 and the draft 4.1 on the MAC, create comments against the draft 4.1 to include changes, and how to integrate security based on clause 9 in 802.15.4-2015 and 802.15.9-2016.
8. The plan for finalizing the work in TG13 was discussed.
* **March Plenary:** Create D4.1 is ready and can be uploaded.
* **April:** Discussions on 15-19/0080r2 and D4.1 on the MAC, create comments against D4.1 to include changes, how to integrate security based on clause 9 in 802.15.4-2015 and 802.15.9
* **May Interim:** Resolve comments D4.1, create D5.0 and submit for WGLB
* **June:** Comment resolution for WGLB
* **July Plenary:** Recirculation (no more comments)
1. The plans for the May Interim meeting were discussed.
* 6 sessions requested
* Resolve comments from D4.1
* Create D5.0
* Revise draft accordingly
* Start WG letter ballot
1. The next telco dates were discussed. It was discussed to keep many slots open and use them for discussions on MAC.
* 26 March 10:00-11:00 EST on TG13 MAC
* 2 April 10:00-11:00 EST on TG13 MAC
* 9 April 10:00-11:00 EST on TG13 MAC
* 16 April 10:00-11:00 EST on TG13 MAC
* 23 April 10:00-11:00 EST on TG13 MAC
* 30 April 10:00-11:00 EST on TG13 MAC
* 7 May 10:00-11:00 EST on TG13 MAC
1. TG13 **Motion** #46 to approve the telco schedule as contained in doc. 15-19/0100r4.

Moved by Vinayagam
Seconded by Sang-Kyu
Approved by unanimous consent MOTION PASSES
2. The Chair asked for any other business. There was none.
3. The meeting adjourned.