IEEE P802.15  
Wireless Specialty Networks

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| IEEE 802.15.13  2022 May Interim Meeting Minutes | | | | |
| Date: 2022-05-18 | | | | |
| Author: | | | | |
| Name | Affiliation | Address | Phone | Email |
| Sang-Kyu Lim | ETRI |  |  | sklim@etri.re.kr |
| Tunçer Baykaş | Kadir Has Uni. |  |  | tbaykas@ieeee.org |
| Volker Jungnickel | Fraunhofer HHI |  |  | volker.jungnickel@hhi.fraunhofer.de |

Abstract

# This document contains the TG13 Multi-Gigabit/s Optical Wireless Communications Meeting minutes during May Interim.

**Wednesday, 11th May, 2022, 07:10AM (ET) Session #1**

Attendance:

* Volker Jungnickel (Fraunhofer HHI)
* Sang-Kyu Lim (ETRI)
* Tuncer Baykas (Kadir Has University)
* Kai Lennert Bober (Fraunhofer HHI)
* Chong Han (pureLiFi)
* Tero Kivinen (Self)
* Around 12 to 15 people

1. The IEEE 802.15.13 meeting was called to order by the Chair, Volker Jungnickel (Fraunhofer HHI). Tuncer Baykas recorded the minutes.

1. The Chair reviewed the IEEE-SA patent policy, logistics, and reminders, including meeting guidelines and attendance recording procedures.
   * No essential patents are claimed.
   * It is reminded all to record their attendance through the IMAT system.
   * Registration fee should be paid.
   * Deadbeat consequences in default of paying registration fee for a prior meeting
   * TG13 officers and operating rules
2. According to 802.15 operations manual, Tuncer Baykas was appointed as a new Vice-Chair for TG13 by the TG13 Chair and confirmed by unanimous consent because Nikola Serafimovski can’t serve as Vice-Chair for TG13.
3. The Chair brought the agenda document (15-22/0230r0) and he updated the agenda document while introducing the overall agenda for the meeting. Group discussed overall agenda. The updated agenda document 15-22/0230r1 was uploaded.

* Wednesday May-11 AM0 (7-9 a.m. EST, 13-15 CET)
* Reconfirm CRG, Announce teleconferences, Appoint new Vice Chair
* Prepare the joint meeting with 802.1
* Status of SA ballot, Review residual comments
* Continue comment resolution
* Thursday May-12 AM0 (7-9 a.m. EST, 13-15 CET)
* Approve March meeting and teleconference minutes
* Continue comment resolution
* Discuss TG13 timeline
* Monday May-16 AM0 (7-9 a.m. EST, 13-15 CET)
* Continue comment resolution
* Tuesday May-17 AM0 (7-9 a.m. EST, 13-15 CET)
* Continue comment resolution
* Start recirculation, Discuss timeline

1. Motion to approve the agenda for May TG13 virtual meeting in doc. 15-22/0230r1.
   * Moved by: Sang-Kyu Lim
   * Seconded by: Tuncer Baykas
   * Approved by unanimous consent
2. TG Motion to reconfirm CRG

*Move to request that 802.15 WG approves the formation of a Comment Resolution Group (CRG) for the Standards Association balloting of the P802.15.13\_D7 with the following membership: Volker Jungnickel as Chair, Tuncer Baykas, Sang-Kyu Lim, Tero Kivinen. The 802.15.13 CRG is authorized to approve comment resolutions, edit the draft according to the comment resolutions, and to approve the start of recirculation ballots of the revised draft on behalf of the 802.15 WG. Comment resolution on recirculation ballots between sessions will be conducted via reflector email and via teleconferences announced to the reflector as per the LMSC 802 WG P&P.*

* + Moved by: Sang-Kyu Lim
  + Seconded by: Joerg Robert
  + Approved by unanimous consent

1. CRG teleconference dates are discussed.

* TG13 CRG Telco dates
  + 30 May 2022, 11:00-12.30 CET (5:00-6:30 ET, 18:00-19:30 KT)
  + 6 June 2022, 11:00-12.30 CET (5:00-6:30 ET, 18:00-19:30 KT)
  + 13 June 2022, 11:00-12.30 CET (5:00-6:30 ET, 18:00-19:30 KT)
  + 20 June 2022, 11:00-12.30 CET (5:00-6:30 ET, 18:00-19:30 KT)
  + 27 June 2022, 11:00-12.30 CET (5:00-6:30 ET, 18:00-19:30 KT)
  + 4 July 2022, 11:00-12.30 CET (5:00-6:30 ET, 18:00-19:30 KT)
  + Meetings will be cancelled if not needed

1. The Chair (Fraunhofer HHI) reported briefly the current status of TG13 for the attendees who have not participated in TG13 before.

* TG13 draft is in IEEE SA ballot
  + SA ballot: 95% approve, 82% return, 3 NO, 314 comments (9 G, 112 T, 193 E)
  + 1st recirc: 98% approve, 85% return, 1 NO, 158 comments (1G, 96 T, 61 E)
  + 2nd recirc: 97% approve, 84% return, 2 NO, 94 comments (45 T, 49 E)
* All comments were addressed, few only are under discussion
* Major text updates on MAC (flexible beacon position, may be consented)
* Reinsert removed text (LB PHY, polling MAC, not consented yet)
* Add PICS

1. There was an informal straw poll for # of in person and virtual attendees for July Plenary to prepare hybrid meeting in July.
   * In-person : 4
   * Virtual : 2
   * 14 persons in total
2. Kai Lennert Bober (Fraunhofer HHI), TG13 Technical Editor, presented doc.15-22/0271r0 about the joint meeting with 802.1.
   * The Group will represent it during the joint meeting.
3. Technical Editor presented doc.15-22/0045r10 for the comment resolution.
   * The Group has 11 comments left.
4. Technical Editor presented doc.15-22/00270r0 for the resolution of R2-36 and R2-37 comments. The document was updated.
5. The Group recessed.

**Thursday, 12th May, 2022, 07:10AM (ET) Session #2**

Attendance:

* Volker Jungnickel (Fraunhofer HHI)
* Sang-Kyu Lim (ETRI)
* Tuncer Baykas (Mediopol University)
* Kai Lennert Bober (Fraunhofer HHI)
* Chong Han (pureLiFi)
* Tero Kivinen (Self)
* Around 18 to 22 people

1. The IEEE 802.15.13 meeting for 2nd session was called to order by the Chair, Volker Jungnickel (Fraunhofer HHI). Sang-Kyu Lim (ETRI) for the first hour and Volker for the second hour recorded the minutes.

1. The Chair reviewed the IEEE-SA patent policy, logistics, and reminders, including meeting guidelines and attendance recording procedures.
   * No essential patents are claimed.
   * It is reminded all to record their attendance through the IMAT system.
   * Registration fee should be paid.
   * Deadbeat consequences in default of paying registration fee for a prior meeting
   * TG13 officers and operating rules
2. The Chair brought the agenda document (15-22/0230r1) and the updated agenda document (15-22/0230r2) was uploaded to the mentor by request of Sang-Kyu Lim. The Chair reported briefly the current status of TG13.

* TG13 draft is in IEEE SA ballot
  + SA ballot: 95% approve, 82% return, 3 NO, 314 comments (9 G, 112 T, 193 E)
  + 1st recirc: 98% approve, 85% return, 1 NO, 158 comments (1G, 96 T, 61 E)
  + 2nd recirc: 97% approve, 84% return, 2 NO, 94 comments (45 T, 49 E)
* All comments were addressed, few only are under discussion
* Major text updates on MAC (flexible beacon position, may be consented)
* Reinsert removed text (LB PHY, polling MAC, not consented yet)
* Add PICS

1. The agenda for this session is as follows:
   * Approve March meeting and teleconference minutes
   * Continue comment resolution
2. There was some discussion on 802.1/802.15 Joint Session yesterday. Volker said that he couldn’t attend the previous joint meeting, but he was impressed with the joint meeting yesterday.
3. TG13 reviewed the meeting minutes (15-22-0182/r2) for March Plenary 2022 and the teleconference minutes (15-22-0238/r0) for telco from March to May 2022. The meeting minutes for March Plenary (15-22-0182/r2) was updated to doc. 15-22-0182/r3 because of a minor issue and the revised minutes was uploaded to the mentor.
4. Motion to approve the meeting minutes for March Plenary 2022 TG13 virtual meeting in doc. 15-22/0182r3 and CRG teleconference minutes for telco from March to May 2022 in doc. 15-22-0238/r0.
   * Moved by: Sang-Kyu Lim
   * Seconded by: Kai Lennert Bober
   * Approved unanimously
5. Kai Lennert Bober (Fraunhofer HHI), TG13 Technical Editor, took over the host position for the discussion on SA ballot 2nd recirculation comment resolution from the Chair.
6. Kai Lennert Bober (Fraunhofer HHI) opened the document 15-22-0270/r0 to continue to resolve the comment resolution and shared his screen.
7. Technical Editor explained the issues and their resolutions on “Update 7.2” on page 4 in doc. 15-22-0270/r0 while he was checking the draft D6.0 and this document. The technical editor, Tero, and Chong discussed the issue on “payload type: 2 octets”.
8. In doc. 15-22-0270/r0, the technical editor and Tero also discussed the issue on “Multiple Element Container”.

**Monday, 16th May, 2022, 07:10AM (ET) Session #3**

Attendance:

* Volker Jungnickel (Fraunhofer HHI)
* Sang-Kyu Lim (ETRI)
* Tuncer Baykas (Kadir Has University)
* Kai Lennert Bober (Fraunhofer HHI)
* Chong Han (pureLiFi)
* Tero Kivinen (Self)
* Around 12 to 15 people

1. The IEEE 802.15.13 meeting for 3rd session was called to order by the Chair, Volker Jungnickel (Fraunhofer HHI).

1. The Chair brought the agenda document (15-22/0230r2) and reviewed the IEEE-SA patent policy, logistics, and reminders, including meeting guidelines and attendance recording procedures.
   * No essential patents are claimed.
   * It is reminded all to record their attendance through the IMAT system.
   * Registration fee should be paid.
   * Deadbeat consequences in default of paying registration fee for a prior meeting
   * TG13 officers and operating rules
2. TG Motion to approve that Sang-Kyu Lim and Tuncer Baykas are appointed as Vice-Chairs of TG13.
   * Moved by: Rias AL-Kadi
   * Seconded by: Kai Lennert Bober
   * Approved unanimously
3. The Chair reported briefly the current status of TG13.

* TG13 draft is in IEEE SA ballot
  + SA ballot: 95% approve, 82% return, 3 NO, 314 comments (9 G, 112 T, 193 E)
  + 1st recirc: 98% approve, 85% return, 1 NO, 158 comments (1G, 96 T, 61 E)
  + 2nd recirc: 97% approve, 84% return, 2 NO, 94 comments (45 T, 49 E)
* All comments were addressed, few only are under discussion
* Major text updates on MAC (flexible beacon position, may be consented)
* Reinsert removed text (LB PHY, polling MAC, not consented yet)
* Add PICS

1. The Chair briefly mentioned about TG13 meeting this week, Plan for CRG Telcos, Hybrid meeting in July, and Joint meeting with 802.1.
2. The agenda for this session is as follows:
   * Continue comment resolution
3. For the comment resolution, the Chair handed over the host position to Kai Lennert Bober (Fraunhofer HHI), TG13 Technical Editor.
4. Kai Lennert Bober (Fraunhofer HHI) opened the document 15-22-0045/r11 to resolve the comment and shared his screen while he briefly mentioned about the comments related to MAC changes.
5. The comments shown below were resolved and their resolutions were fixed while the technical editor explained the issues related to the comments in D6 draft and their resolutions specified in doc. 15-22-0223/r1 and doc. 15-22-0270/r1.

* R2-8 : Revised and see the doc.15-22-0045/r12, 15-22-0223/r1, and 15-22-0270/r1 for details.
* R2-24 : Revised and see the doc.15-22-0045/r12, 15-22-0223/r1, and 15-22-0270/r1 for details.
* R2-16 : Revised and see the doc.15-22-0045/r12, 15-22-0223/r1, and 15-22-0270/r1 for details.
* R2-18 : Revised and see the doc.15-22-0045/r12, 15-22-0223/r1, and 15-22-0270/r1 for details.
* R2-19 : Revised and see the doc.15-22-0045/r12, 15-22-0223/r1, and 15-22-0270/r1 for details.
* R2-20 : Revised and please see the doc.15-22-0045-01-0013 for details.
* R2-36 : Revised and please see the doc.15-22-0045-01-0013 for details.
* R2-37 : R2-17 : Revised and please see the doc.15-22-0045-01-0013 for details.

1. There was some discussion to resolve the comment related to relay device, R2-40, between Lennert, Tero and Tuncer. The figure showing the relations between coordinator(A), relay device(B), and relayed device(C) was drawn to exchange and share each their understanding. There was an opinion that the text on the lines from #9 to #10 in the sub-clause 6.10.7 should be deleted.

* The lines are agreed to be deleted. Relay comments are approved. Revised and please see the doc.15-22-0045-01-0013 for details.

**Tuesday, 17th May, 2022, 07:10AM (ET) Session #4**

Attendance:

* Volker Jungnickel (Fraunhofer HHI)
* Sang-Kyu Lim (ETRI)
* Tuncer Baykas (Kadir Has University)
* Kai Lennert Bober (Fraunhofer HHI)
* Chong Han (pureLiFi)
* Tero Kivinen (Self)
* Around 10 to 12 people

1. The IEEE 802.15.13 meeting for 4th session was called to order by the Chair, Volker Jungnickel (Fraunhofer HHI).

1. The Chair brought the agenda document (15-22/0230r2) and reviewed the IEEE-SA patent policy, logistics, and reminders, including meeting guidelines and attendance recording procedures.
   * No essential patents are claimed.
   * It is reminded all to record their attendance through the IMAT system.
   * Registration fee should be paid.
   * Deadbeat consequences in default of paying registration fee for a prior meeting
   * TG13 officers and operating rules
2. The Chair briefly mentioned about TG13 draft status, TG13 meeting this week, Plan for CRG Telcos, Hybrid meeting in July, Joint meeting with 802.1, and Plan for finalization of TG13 specifications.
3. The agenda for this session is as follows:
   * Continue comment resolution
4. For the comment resolution, the Chair handed over the host position to Kai Lennert Bober (Fraunhofer HHI), TG13 Technical Editor.
5. Kai Lennert Bober (Fraunhofer HHI) opened the document 15-22-0045/r12 to resolve the comment and shared his screen while he briefly mentioned about the comment resolution yesterday. There was a short discussion about statistics on the R2 comments in doc. 15-22-0045/r12.
6. The Technical Editor said that the comments related to PICS have still been unresolved as a big part. However, for beginning with easy one first, he brought and opened the document 15-22-0304/r1 to resolve the comments related to acknowledgment retransmission sequence chart.
7. The doc. 15-22-0304/r1 was reviewed, and then Figure Y and its description text, which describe Acknowledgment and retransmission sequence chart for a failed transmission and successful retransmission, have been revised through the discussion between Tero and Technical Editor. So, the document was updated to 15-22-0304/r2 and the doc. 15-22-0304/r2 was uploaded to mentor. Consequently, the comment resolution is as follows :

* R2-30 : Revised and see the doc.15-22-0045/r13, 15-22-0304/r2 for details.

1. Next, The Technical Editor brought and opened the document 15-22-0183/r1 to resolve the comments related to PICS issues. Some editorial errors were detected in doc. 15-22-0183/r1, but anyway the Technical Editor explained the overall changes specified in doc. 15-22-0183/r1.
2. The group revised the doc. 15-22-0183/r1 while reviewing the document to resolve the comments related to PICS issues.
3. Motion to adjourn.

Approved with unanimous consent.