**IEEE 802.15**

**Wireless Specialty Networks (WSN)**

|  |  |  |
| --- | --- | --- |
| Project | IEEE P802.15 Working Group for Wireless Specialty Networks (WSN) | |
| Title | **802.15 WG & CAC Minutes Virtual July Interim 2022** | |
| Date Submitted | [27 July 2022] | |
| Source | [Clint Powell] [] [Chandler, AZ]  [Phil Beecher]  [Wi-SUN Alliance]  [Ben Rolfe]  [Blind Creek Associates] | Voice: [+1.480.586.8457] Fax: [--] email: [cpowell@ieee.org]  email: [pbeecher@wi-sun.org]  email: [ben@blindcreek.com] |
| Re: | [July 802.15 Plenary Meeting held virtually] | |
| Abstract | [IEEE 802.15 Working Group & CAC Minutes] | |
| Purpose | [Official minutes of the Working Group Opening/Closing and CAC Sessions] | |
| Notice | This document has been prepared to assist the IEEE 802.15. It is offered as a basis for discussion and is not binding on the contributing individual(s) or organization(s). The material in this document is subject to change in form and content after further study. The contributor(s) reserve(s) the right to add, amend or withdraw material contained herein. | |
| Release | The contributor acknowledges and accepts that this contribution becomes the property of IEEE and may be made publicly available by 802.15. | |

**138th IEEE 802.15 WSN MEETING**

**Held Virtually via Webex (all times in EDT)**

**July 11-14, 2022**

# 802.15 WG Opening

# Monday, 11th July 2022

**10:32 AM** WG Chair, Clint Powell (Meta), called the meeting to order and opened the WG Agenda ([*15-22-0343-01-0000*](https://mentor.ieee.org/802.15/documents?is_dcn=343&is_year=2022)*)*

**Announcements**

Don’t forget to turn on your mic and announce your name and affiliation before you speak.

WG Chair reviewed attendance tool.

The May mtg. (this mtg.) will be entirely electronic (virtual).

WG Chair announced the use of DirectVoteLive (DVL) for all WG votes. DVL will only be used during this session and at the closing plenary meeting on Wednesday, 16 March. He also noted that the motions would be loaded in advance of the meeting.

All WG motions (especially those relating to PARS) need to be sent to the Chair (Clint Powell), and Vice-Chair (Phil Beecher) immediately after the close of your last mtg. so that they may be entered into DVL (Direct Vote Live) by the EOD. If you are not able to meet this deadline, please work with Phil Beecher beforehand.

WG Chair asked for new participants to speak up using the chat window in Webex.

## Legal

WG Chair informed the group of and displayed the IEEE-SA patent policy presentation  
slides 0-5 ([*http://standards.ieee.org/board/pat/pat-slideset.ppt*](http://standards.ieee.org/board/pat/pat-slideset.ppt)).

WG Chair asked the participants who wished to declare a Letter of Assurance (LoA) or to identify patent claim(s)/patent application claim(s) and/or the holder of patent claim(s)/patent application claim(s) that the participant believes may be essential for any of the ongoing activities within the 802.15 WG.

No essential patent claims were brought forth.

WG Chair displayed and read the standard IEEE Anti-Trust statement.

WG Chair displayed and read the standard IEEE Copyright Policy, including Code of Ethics.

WG Chair went through the agenda.

## WG Approvals

Phil Beecher (Wi-SUN Alliance) moved to *approve the agenda (document#* [*15-22-0343-00-0000*](https://mentor.ieee.org/802.15/dcn/22/15-22-0343-00-0000-july-2022-agenda-for-802-15.xlsx)*)* with Thomas Kurner (TU Braunschweig) seconding the motion. Following no objection, the agenda was approved.

Phil Beecher (Wi-SUN Alliance) moved *to approve the previous meeting minutes (document#* [*15-22-0233-01-0000*](https://mentor.ieee.org/802.15/dcn/22/15-22-0233-01-0000-802-15-wg-cac-mins-may-2022-virtual-interim.docx)*)* and Ben Rolfe (BCA) seconded the motion. Following neither discussion nor objection the minutes were approved. There were no matters resulting from the previous minutes.

## General and Administrative

WG Chair presented the general meeting information:

* IMAT will be used for attendance
  + 75% Attendance = 12 time slots (any 12 of the 16)
* Voters: (voters: 139, nearly: 12, aspirant: 24)
* There were 95 attendees (in-person + virtual) in the 802.15 Opening Plenary
* Webex will be used with all sessions

Ben Rolfe (BCA) gave the treasurers report (verbal). He references *EC document#* [*ec-22-0111-00-WCSG*](https://mentor.ieee.org/802-ec/dcn/22/ec-22-0111-00-WCSG-wireless-treasurer-report-july-2022.pptx)

802 Wireless is targeting it’s next face-to-face Session for the Sept. 2022. and it will be a hybrid session.

The July 802.15 CAC meeting minutes are included in the WG minutes  
*(minutes: 15-22-0345-00-0000* – this doc.*)*

The Wireless Chairs Steering Committee meeting minutes are contained in  
*(minutes:* [*ec-22-0160-02-WCSG*](https://mentor.ieee.org/802-ec/dcn/22/ec-22-0160-02-WCSG-minutes-july-10-2022.docx)*)*

Chair shows 802.15 WG Opening report – and describes the 802.15 WG standards status  
[*15-22-0342-01-0000*](https://mentor.ieee.org/802.15/dcn/22/15-22-0342-01-0000-july-2022-opening-report-for-802-15.pptx)

## Status Reports (Goals/Objectives for the Week)

802.15 Status and Activities Planned for the Week

* Task Group 15.3ma (2 meetings)
  + Work on editing d02 draft
  + Hear and discuss presentations
* Standing Committee – THz (1 meeting)
  + Hearing presentations
* Task Group 15.4 Cor1 (1 meeting)
  + Seeking to submit draft to RevCom
* Task Group 4ab – NG-UWB (8 meetings + Joint 6a/4ab/14)
  + Aligning PHY features to start drafting text
  + Continue to hear and discuss PHY & MAC presentations
* Task Group 6ma – (BAN/VAN) (3 meetings + Joint 6a/4ab/14)
  + Hear and discuss presentations
  + Discussion on harmonization with TG 4ab and TG 14Review PAR change
* Task Group 7a – OCC (3 meetings)
  + Finalizing draft to start Letter Ballot
  + Start initial Letter Ballot
* Task Group 13 – Multi Gigabit/sec OWC (4 meetings)
  + SA Ballot comment resolution, resolving comments from recirc
  + Target going to RevCom before Sept. mtg
* Task Group 14 – UWB-AHN (1 Joint w/ TG15 + Joint 4ab/14/15 + Joint 6a/4ab/14)
  + Plan to hibernate TG
* Task Group 15 – NB-AHN (1 Joint w/ TG14)
  + Plan to hibernate TG
* Task Group 16t – 802.16 Lic-NB Amendment (3 meetings)
  + Spec. text development
  + Continue draft development
* Joint 802.1/802.15 Mtg. (1 meeting)
  + Update to 802.1 features matrix and associate text
  + Discuss plans for moving ahead
* Standing Committee – IETF (1 meeting)
  + Discuss IETF activities
* Standing Committee – SC-M, Rules (4 meetings)
  + Review any change requests for the Operations Manual
  + Work on any templates
  + Prepare responses to comments on 802.15.4 Revision PAR, submitted by other 802 WG’s
* Standing Committee – WNG (1 meeting)
  + 2 presentations

## Sept. 802 Hybrid Wireless Interim Mtg. Info

802.15 WG will hold its mixed mode plenary session from Sept. 12-15, 2022 with the in-person part being held at the Hilton Waikoloa.

The 802.15 CAC for the Sept. Interim will be held at the Hilton Waikoloa on Sun. Sept. 11, 2022, at 5:30pm local time

802 Sept. Interim Registration Fees & Deadlines have been set at $1200 on or before 15 Aug., and $1450 after 15 Aug. (early bird registration date has already passed)

Every single mtg. requires a Vice-Chair or other designated person to run audio portion of virtual mtg.

* A 2nd computer will work best (hotel or 802 will not supply this, to be brought by designee)
* Training on tool will be provided before and possibly at the July mtg. as well
* All TG and SC Chairs identify this person this week and send info to Clint & Phil
* All TG and SC Chairs please inform if neither they or any Vice-Chair will be attending in person this week and send info to Clint & Phil

## Any Other Business

WG Chair asked if there was any other business. None was raised.

## WG Recess

**12:05 PM** WG Chair recessed the meeting

# 802.1 / 802.15 Joint Mtg.

# Tuesday, 12th July 2022

**6:33 PM** 802.15 WG Chair Clint Powell (Meta) and 802.1 WG Chair Glenn Parsons (Ericsson) called the meeting to order

This activity is looking at 802.1 features/concepts that can be applied to the various 802.15 standards.

~41 attendees from 802.15 joined during the mtg.

Agenda

1. Intro, reminders, agenda approval
2. 802.15.13 Response
   1. Update on the 4 topical items covered in May Joint 802.1/802.15 mtg.
3. 802.1 and 802.15 compatibility
   1. Update of table mapping of 802.1 feature to 802.15 projects
   2. Discussion of general compatibility opportunities
4. Next Mtg
5. AOB

* No response to call patent/patent claims
* Agenda approved unanimously

* Ben Rolfe (Blind Creek Associates) gave an update on the 802.1 802.15 compatibility in general and the capabilities mapping table

* Next Joint mtg. w/ 802.1 at Sept. 802 Wireless Interim in Waikoloa
  + Proposal from 802.15 is Tues. 8/13 from 10:30am - 11:30am Hawaii time
  + 802.1 leadership will discuss and confirm at their next mtg.

## 802.1/802.15 Joint Session Adjourn

**7:35 PM** 802.15 Chair & 802.1 Chair adjourned the meeting

# 802.15 WG Mid-week

# Wednesday, 13th July 2022

**10:35 AM** WG Chair, Clint Powell (Meta) called the meeting to order

**10: 40 AM** Task group chairs give verbal mid-week status updates

Yeong Min Jang present TG7A closing report ([*15-22-0408-00-007a*](https://mentor.ieee.org/802.15/dcn/22/15-22-0408-00-007a-15-7a-occ-tg-closing-report-july-2022.pptx))

All other TG’s and SC’s gave a quick verbal status update

**11:20 802.15 Midweek recessed by Clint Powell**

**11:20 802.15 WNG Called to order by Ben Rolfe (BCA)**

Presentation by Lakshmi Thanayankizil\* (GM), an invited "designated individual expert”. (doc number # [*15-22-0412-00*](https://mentor.ieee.org/802.15/dcn/22/15-22-0412-00-wng0-ready-for-the-road-ahead-by-gm.pptx))

*\*Note: Per 802 LMSC OM Individual experts who attend electronically for a specific purpose/presentation can be designated as such by the WG Chair and receive a registration fee waiver and limited attendance rights.*

**12:00** Presentation by Ryuji Kohno (YNU)

**12:25** WNG Adjourned by Ben Rolfe

# 802.15 WG Closing

# Thursday, 14th July 2022

**4:04 PM** WG Chair, Clint Powell (Meta) called the meeting to order

**4:05 PM** WGChair spoke to the attendance method (IMAT) and voting method (DVL), please send any requests for changes to attendance to Phil Beecher (Wi-SUN Alliance)

There were 86 attendees (in-person + virtual) in the 802.15 Closing Plenary

All votes are recorded below as Y/N/A (Yes/No/Abstain)

## Announcements

## Legal

WG Chair informed the group of and displayed the IEEE-SA patent policy presentation slides 0-5 ([*http://standards.ieee.org/board/pat/pat-slideset.ppt*](http://standards.ieee.org/board/pat/pat-slideset.ppt))).

WG Chair asked the participants who wished to declare a Letter of Assurance (LoA) or to identify patent claim(s)/patent application claim(s) and/or the holder of patent claim(s)/patent application claim(s) that the participant believes may be essential for any of the ongoing activities within the 802.15 WG.

No essential patent claims were brought forth.

WG Chair displayed and read the standard IEEE Anti-Trust statement.

WG Chair displayed and read the standard IEEE Copyright Policy, including Code of Ethics.

WG Chair went through the agenda.

WG Chair conducts poll on whether participants would like to return to same hotel for a future session. The majority said yes.

## Closing Reports

**4:10 PM 802.15 WG** Closing Agenda by Clint Powell (Meta) (*[15-22-0343-01](https://mentor.ieee.org/802.15/dcn/22/15-22-0343-01-0000-july-2022-agenda-for-802-15.xlsx)*)

**TG3ma Closing Report**: Thomas Kurner presents: [*15-22-351-00*](https://mentor.ieee.org/802.15/dcn/22/15-22-0351-00-03ma-tg3ma-closing-plenary-slides-meeting-july-2022.pptx)

**SC THz Closing Report**: Thomas Kurner presents: [*15-22-352-00*](https://mentor.ieee.org/802.15/dcn/22/15-22-0352-00-0thz-sc-thz-closing-plenary-slides-meeting-july-2022.pptx)

**TG4 cor1:** Tero Kivinen presents: [*15-22-365-03*](https://mentor.ieee.org/802.15/dcn/22/15-22-0365-03-Cor2-tg4-2020-cor-1-july-closing.pptx)

**WG Motion to Form CRG for 802.15.4 2020 Cor1**

Move that 802.15 WG approve the formation of a Comment Resolution Group (CRG) for the Standards Association balloting of the P802.15.4-2020-Cor1-D07 with the following membership: Tero Kivinen(Chair), Takashi Kuramochi, Hiroshi Harada and Jeng-Shiann Jiang. The 802.15.4-2020-Cor1 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.

(M) Tero Kivinen

(S) Phil Beecher

No discussion, DVL vote: **46/0/1 (Y/N/A)**

**WG Motion to Forward 802.15.4 2020 Cor1 to RevCom**

Motion: that 802.15 WG requests unconditional approval from the EC to submit P802.15.4-2020-Cor1-D06 to RevCom.

No discussion, DVL vote: 52/0/1 (Y/N/A)

**TG4ab Closing Report**: Ben Rolfe presents [*15-22-0425-00*](https://mentor.ieee.org/802.15/dcn/22/15-22-0425-00-04ab-tg4ab-july-closing-report.pptx)

**TG6ma Closing Report**: Ryuji Kohno presents [*15-22-0416-00*](https://mentor.ieee.org/802.15/dcn/22/15-22-0416-00-006a-tg15-6ma-closing-report-july-2022.pptx)

**TG13 Closing Report:** Volker Jungnickel presents [*15-22-0427-01*](https://mentor.ieee.org/802.15/dcn/22/15-22-0427-01-0013-tg13-closing-report-for-july.pptx)

**TG13 CRG  
WG Motion to Form CRG for 802.15.13**

Move 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.  
(M) Lennert Bober  
(S) Tero Kivinen

No discussion, DVL vote: **44/0/5** (Y/N/A)

**WG Motion to Approve Conditional Approval for SA Recirculation of TG13 draft**

Motion: Move that 802.15 WG start a Standards Association Recirculation Ballot of document P802.15.13-D7 (as edited in accordance with the instructions in document 15-22-0045-18) pending the completion and inclusion of the edits in the draft.

(M) Lennert Bober

(S) Phil Beecher

No discussion, DVL vote: **46/0/5** (Y/N/A)

**WG Motion to Approve TG13 PAR Extension**

Move that the PAR Extension contained in document 15-22-0406-00-0000-802-15-13-draft-par-extension.pdf be approved by the IEEE 802.15 WG and that the EC be requested to forward the PAR Revision to NesCom. The 802.15 working group chair and technical editor are authorized to make additional modifications to the PAR as needed to reflect EC discussion at its closing meeting. (Note: no change to the CSD associated with this PAR).

(M) Lennert Bober

(S) Tero Kivinen

No discussion, DVL vote: **46/0/4** (Y/N/A)

**TG14/TG15 Closing Report:** Phil Beecher presents [*15-22-0393-01*](https://mentor.ieee.org/802.15/dcn/22/15-22-0393-01-0015-tg14-tg15-opening-and-closing-report-july-plenary-2022.pptx)

**TG16t Closing Report:** Tim Godfrey presents [*15-22-0426-00*](https://mentor.ieee.org/802.15/dcn/22/15-22-0426-00-016t-july-2022-plenary-closing-report.pptx)

**SC-IETF Closing Report:** Tero Kivinen gives a verbal report (meeting information contained in [*15-22-0367-01*](https://mentor.ieee.org/802.15/dcn/22/15-22-0367-01-IETF-sc-ietf-july-slides.pptx)

**SC-Maintenance:** Phil Beecher presents [*15-22-0396-01*](https://mentor.ieee.org/802.15/dcn/22/15-22-0396-01-0mag-scm-opening-and-closing-report-plenary-july-2022.pptx)

**WG Motion to Approve Comment Responses for 802.15.4 Revision PAR**

Motion: Request that the responses to received PAR review comments contained in document 15-22-0424-00-0mag be approved for submission to the EC. The 802.15 working group chair and technical editor are authorized to make additional modifications to the responses as needed.

(M) Phil Beecher

(S) Gary Stuebing

No discussion, DVL vote: **42/0/1** (Y/N/A)

**WG Motion to Approve Forwarding 802.15.4 Revision PAR to NesCom**

Motion: move that the PAR contained in document 15-22-0259-05-0mag-802-15-4-revision-draft-par be approved by the IEEE 802.15 WG and that the EC be requested to forward the PAR to NesCom. The 802.15 working group chair and technical editor are authorized to make additional modifications to the PAR as needed to reflect EC discussion at its closing meeting.

(M) Phil Beecher

(S) Gary Stuebing

No discussion, DVL vote: **46/0/1** (Y/N/A)

**Liaison Reports**

**No liaison from 802.11**

**802.18 RRTAG Liaison Report – Edward Au presents liaison report:** [*15-22-0318-01-0000*](15-22-0318-01-0000)

**802.19 Coexistence TAG Liaison Report – Ben Rolfe gives verbal report**

**802.24 Liaison Report – Tim Godfrey gives verbal report**

## Review of Future Meeting Plans

WG Chair reviewed the September 2022 802 Hybrid Wireless Interim Session Dates:  
Sun., Sept. 11 - Fri., Sept. 16 at the Hilton Waikoloa

* 802.15 WG will hold its Sessions Sun., Sept. 11 - Thurs., Sept. 15
* 802 WCSC (a.k.a. Wireless Chairs Steering Committee):
  + Sun., Sept. 11, 4:00 pm - 5:30 pm, local time
* 802.15 CAC (a.k.a. Chairs Advisory Committee):
  + Sun., Sept. 11, 5:30 pm - 6:30 pm, local time
  + Wed., Sept. 14, 7:30 am - 8:30 am, local time
* Registration early bird. fees closed on 30-June

Future 802 WCSC (Wireless Chairs Standing Committee) will occur:

* + Aug. 3 (Wed.), 3-4:30 pm Eastern
  + Sept. 9 (Wed.), 3-4:30 pm Eastern
  + Oct. 5 (Wed.), 3-4:30 pm Eastern
  + Nov. 2 (Wed.), 3-4:30 pm Eastern
  + Dec. 7 (Wed.), 3-4:30 pm Eastern

## AOB

None heard

## WG Adjourn

**5:54 PM** Upon hearing no objections, the WG Chair Clint Powell adjourned the meeting

# Annex A Total attendance (in-person + remote) = 143

|  |  |  |
| --- | --- | --- |
| **Last Name** | **First Name** | **Affiliation** |
| Adakeja | Olubukola | Teradyne, Inc. |
| Akhavan | Koorosh | Qualcomm Incorporated |
| Aldana | Carlos | Facebook |
| Al-kadi | Ghiath | NXP Semiconductors |
| Amalladinne | Vamsi | Qualcomm Incorporated |
| Amezawa | Yasuharu | Mobile Techno Corp. |
| Andre | Jean-Marie | ST micro |
| Anliker | Claudio | ETH Zurich |
| Anzai | Daisuke | Nagoya Institute of Technology |
| Au | Kwok Shum | Huawei Technologies Co., Ltd |
| Bansal | Ankur | Samsun Electronics |
| Barras | David | 3db Access AG |
| Baykas | Tuncer | Kadir Has University |
| Beecher | Philip | Wi-SUN Alliance |
| Berens | Friedbert | FBConsulting Sarl |
| Berkema | Alan | Independent |
| Bettesh | Ido | Apple Inc. |
| Bhatia | Bharat | 3db Access AG |
| Bober | Lennert | Fraunhofer Heinrich Hertz Institute |
| Bodet | Duschia | Northeastern University |
| Calvert | Chris | Landis Gyr Group Worldwide |
| Canchi | Radhakrishna | Kyocera International Inc |
| Chaplin | Clint | Self |
| Chen | Run | New Radio Technology Co., Ltd. |
| Chen | Xiaogang | ZEKU |
| Choi | Sangsung | Kookmin University |
| Clanney | Nathan | Siemens Mobility, Inc. |
| Corbalan Pelegrin | Pablo | NXP Semiconductors |
| Danev | Boris | 3db Access AG |
| da Silva | Claudio | Meta Platforms, Inc. |
| De Ruijter | Hendricus | Silicon Laboratories |
| Dotlic | Igor | Qorvo |
| feng | Shuling | MediaTek Inc. |
| Gan | Ming | Huawei Technologies Co., Ltd |
| Ghosh | Chittabrata | Facebook, Inc. |
| Gilb | James | University of San Diego |
| Godfrey | Tim | Electric Power Research Institute, Inc. (EPRI) |
| Golshan | Robert | Apple, Inc. |
| Grosswindhager | Bernhard | NXP Semiconductors |
| Guimond | Raphael | SPARK Microsystems |
| Guo | Jianlin | Mitsubishi Electric Research Labs (MERL) |
| Guo | Ziyang | Huawei Technologies Co., Ltd |
| Ha | Taeyoung | Samsung Electronics Co., Ltd. |
| Hamidouche | Kenza | apple |
| Han | Chong | pureLiFi |
| Henry | Jerome | Cisco Systems, Inc. |
| Hernandez | Marco | National Institute of Info. and Comms. Tech. (NICT) |
| Hirata | Masayuki | Osaka Univ. Grad. School of Med., Dept of Neurological Diag. & Rest. |
| Hjortland | Haakon | Novelda AS |
| Hosako | Iwao | National Institute of Info. and Comms. Tech. (NICT) |
| Hu | Mengshi | Huawei Technologies Co., Ltd; Huawei Technologies Co., Ltd |
| Huy | Nguyen | Kookmin University |
| Ikegami | Tetsushi | Meiji University |
| Jang | Yeong Min | Kookmin University |
| Jenkins | Michael | NSA-CCSS |
| Jiang | Jeng-Shiann | Vertexcom Technologies |
| Jiang | Jinjing | Apple Inc. |
| Joo | Seong-Soon | Electronics and Telecommunications Research Institute (ETRI) |
| Jornet | Josep Miquel | Northeastern University |
| Jungnickel | Volker | Fraunhofer Heinrich Hertz Institute |
| Juntunen | Juha | Meteor Communications Corp. |
| Kabbinale | Aniruddh | SAMSUNG |
| Kasamatsu | Akifumi | National Institute of Info. and Comms. Tech. (NICT) |
| Keren | Rani | Huawei Technologies Co., Ltd |
| Kerry | Stuart | OK-Brit; Self |
| Kim | Minsoo | YRP International Alliance Institute |
| Kitazawa | Shoichi | Muroran IT |
| Kivinen | Tero | Self Employed |
| Kneckt | Jarkko | Apple, Inc. |
| Kobayashi | Takumi | Yokohama National University |
| Kohno | Ryuji | YNU/CWC UofOulu; YNU/YRP-IAI |
| Krebs | Alexander | Apple Inc. |
| Krieger | Ann | US Department of Defense |
| Kristem | Vinod | Apple Inc. |
| Kuerner | Thomas | TU Braunschweig |
| Lansford | James | Qualcomm Incorporated |
| Lee | Mingyu | Samsung Electronics Co., Ltd. |
| Lemsitzer | Stefan | NXP Semiconductors |
| Leong | Frank | NXP Semiconductors |
| Li | Huan-Bang | National Institute of Info. and Comms. Tech. (NICT) |
| Lim | Sang-Kyu | Electronics and Telecommunications Research Institute (ETRI) |
| Lin | Wei | Huawei Technologies Co., Ltd |
| Liu | Yong | Apple, Inc. |
| Luo | Xiliang | Apple, Inc. |
| Ma | Yongsen | Redpoint Positioning |
| Mani | Santhosh Kumar | Apple, Inc. |
| Megahed | Abdelfattah | Renesas Electronics Corporation |
| Meilhac | Lisa | DecaWave |
| Murray | Carl | Qorvo |
| Nabki | Frederic | SPARK Microsystems |
| Nagai | Yukimasa | Mitsubishi Electric Corporation |
| Neirynck | Dries | novelda |
| Niewczas | Jaroslaw | Qorvo |
| Pakrooh | Pooria | Qualcomm Technologies, Inc. |
| Palmer | Clark | Meteorcomm LLC |
| Pare | Thomas | MediaTek Inc. |
| Parthasarathi | Srivathsa Masthi | NXP Semiconductors |
| Patel | Tushar | Teradyne, Inc. |
| Peng | Xiaohui | Huawei Technologies Co., Ltd |
| Petrov | Vitaly | Northeastern University |
| Pirhonen | Riku | NXP Semiconductors |
| Powell | Clinton | Powell Wireless Consulting, LLC |
| Qian | Bin | Huawei Technologies Co., Ltd |
| Rantala | Enrico-Henrik | Zeku |
| Robert | Joerg | TU Ilmenau/Fraunhofer IIS |
| Rolfe | Benjamin | Blind Creek Associates |
| Saito | Hiroki | ARIS Inc. |
| Sand | Stephan | German Aerospace Center (DLR) |
| Sasaki | Shigenobu | Niigata University |
| Sauer | Peter | Microchip Technology, Inc. |
| Sayrafian | Kamran | National Institute of Standards and Technology |
| Schweizer | Benedikt | Apple Inc. |
| Segev | Jonathan | Intel corporation |
| Sekine | Norihiko | National Institute of Info. and Comms. Tech. (NICT) |
| Serang | Daoud | CML Microcircuits |
| Shah | Kunal | Apple Inc. |
| Shahar | Menashe | Ondas Networks |
| Shilo | Shimi | Huawei Technologies Co. |
| So | Youngwan | Samsung Electronics Co., Ltd. |
| Sosack | Robert | Molex Incorporated |
| Stuebing | Gary | Cisco Systems, Inc. |
| Sturek | Don | Itron Inc. |
| Sun | Li | Huawei Technologies Co., Ltd |
| Suzuki | Takafumi | National Institute of Info. and Comms. Tech. (NICT) |
| Tian | Bin | Qualcomm Incorporated |
| Verma | Lochan | Apple, Inc. |
| Verso | Billy | Qorvo |
| Wang | Yi | Huawei Technologies Co., Ltd |
| Wang | Yi-Hsiu | Zeku |
| Wisland | Dag | Novelda AS; University of Oslo |
| Wu | Kanke | Qualcomm Incorporated |
| Wu | Kuan | Huawei Technologies Co. |
| Xiao | Libra | NewRadio Technology Co., Ltd. |
| Yang | Shang-Te | Apple, Inc. |
| Yang | Xun | Huawei Technologies Co., Ltd |
| Ye | Zhenzhen | Red Point Positioning |
| Yee | James | MediaTek Inc. |
| Yee | Peter | NSA-CSD |
| Yong | Su Khiong | Apple, Inc. |
| Yoon | Kangjin | Meta |
| Zakaib | Larry | SPARK Microsystems |
| Zeisberg | Sven | ZIGPOS GmbH |
| Zou | Qiyue | Meta |

# 802.15 CAC Mtg.

# Sunday, 10th July 2022

## Attendance

Lennert Bober

Phil Beecher

Tim Godfrey

Tero Kivinen

Ann Krieger

Ryuji Kohno

Thomas Kurner

Clint Powell

Ben Rolfe

## Minutes

* WG Chair, Clint Powell (Meta) called the mtg. to order at 5:38 pm
* 802.15 WG July Agenda is available at:

<https://mentor.ieee.org/802.15/documents?is_dcn=343&is_year=2022>

* Attendance for 802.15 in the July Plenary is as follows
* For the July Plenary attendance in 12 of the 16 time slots is required to meet the 75% attendance requirement
* The remaining time slots are deemed extra credit, and all will be counted towards the 12 minimum needed
* Voting will again be done using DirectVoteLive (DVL) in the closing plenary
* Motions are due to the Chair and Vice-Chair immediately after a subgroups (TG or SC) last mtg.
* July Plenary Sessions
* 802 Wireless Chairs (WCSC) meeting: 4pm to 5:30pm on Sun. July 10, 2022
* Opening 802.15 WG CAC meeting: 5:30pm to 6:30pm on Sun. July 10, 2022
* Opening IEEE 802 LMSC (EC) meeting: 8am to 10am on Mon. July 11, 2022
* Opening 802 Joint meeting: 10:30am to 11:30am on Mon. July 11, 2022
* Opening 802.15 WG meeting: 11:30am to 12:30pm on Mon. July 11, 2022
* Mid-Week 802.15 WG CAC meeting: 7:30am to 8:30am on Wed. July 13, 2022
* Mid-Week 802.15 WG meeting: 10:30am to 11:30am on Wed. July 13, 2022
* Closing 802.15 WG meeting: 4pm to 6pm on Thurs. July 14, 2022
* Closing IEEE 802 LMSC (EC) meeting: 1pm to 6pm on Fri. July 15, 2022
* Subgroup Status and Objectives for July Wireless Interim
* Task Group 15.3ma (2 sessions)
  + Work on editing d02 draft
  + Hear and discuss presentations
* Standing Committee – THz (1 session)
  + Hear 3 presentations
* Task Group 15.4 Cor1 (1 session)
  + Seeking to submit draft to RevCom
* Task Group 4ab – NG-UWB (8 sessions + Joint 6a/4ab/14)
  + Aligning PHY features to start drafting text
  + Continue to hear and discuss PHY & MAC presentations
* Task Group 6ma – (BAN/VAN) (3 sessions + Joint 6a/4ab/14)
  + Hear and discuss presentations
  + Discussion on harmonization with TG 4ab and TG 14
* Task Group 7a – OCC (3 sessions)
  + Finalizing draft to start Letter Ballot
  + Start initial Letter Ballot
* Task Group 13 – Multi Gigabit/sec OWC (4 sessions)
  + SA Ballot comment resolution, resolving comments from recirc
  + Target going to Revcom after 1 or 2 more recircs
  + Need PAR extension by EOY
* Task Group 14 – UWB-AHN (1 Joint w/ TG15 + Joint 4ab/14/15 + Joint 6a/4ab/14)
  + Hibernating TG
* Task Group 15 – NB-AHN (1 Joint w/ TG14)
  + Hibernating TG
* Task Group 16t – 802.16 Lic-NB Amendment (3 sessions)
  + Spec text development
  + Continue draft development
* Joint 802.1/802.15 Mtg. (1 session)
  + Update to 802.1 features matrix and associate text
  + Discuss plans for moving ahead
* Standing Committee – IETF (1 session)
  + Discuss IETF activities
* Standing Committee – SC-M, Rules (4 sessions)
  + Review any change requests for the Operations Manual
  + Work on any templates
  + Prepare responses to comments on 802.15.4 Revision PAR, submitted by other 802 WG’s
* Standing Committee – WNG (1 session)
  + 2 presentations
* 802.15 Sept. Interim Session will be Hybrid (Mixed-Mode)

**CAC Adjourn**

* WG Chair adjourned the mtg. at 6:30 pm

# 802.15 Mid-Week CAC Mtg.

# Wednesday, 13th July 2022

## Attendance

Lennert Bober

Phil Beecher

Tim Godfrey

Tero Kivinen

Ann Krieger

Ryuji Kohno

Thomas Kurner

Clint Powell

Ben Rolfe

## Minutes

* WG Chair, Clint Powell (Meta) called the mtg. to order at 7:30 am
* Reminder that voting will again be done using DirectVoteLive (DVL) in the closing plenary
* Reminder that motions are due to the Chair and Vice-Chair immediately after a subgroups (TG or SC) last mtg.
* Subgroup Mid-Week Status Updates
* Task Group 15.3ma
  + Closing motions – No
  + EC Agenda items – No
  + PAR extension needed – No
* Standing Committee – THz
  + Mid-week motions – no
  + Closing motions – no
  + EC Agenda items – no
* Task Group 15.4 Cor1
  + Closing motions – Yes
  + EC Agenda items – Yes
  + PAR extension needed – No
* Task Group 4ab – NG-UWB
  + Closing motions – No
  + EC Agenda items – No
  + PAR extension needed – No
* Task Group 6ma – (ED-BAN)
  + Closing motions – No
  + EC Agenda items – No
  + PAR extension needed – No
* Task Group 7a – OCC
  + Closing motions – No
  + EC Agenda items – No
  + PAR extension needed – No
* Task Group 13 – Multi Gigabit/sec OWC
  + Closing motions – Yes
  + EC Agenda items – Yes
  + PAR extension needed – Yes
* Task Group 14 – UWB-AHN
  + Closing motions – No
  + EC Agenda items – No
  + PAR extension PAR extension needed – No
* Task Group 15 – NB-AHN
  + Closing motions – No
  + EC Agenda items – No
  + PAR extension PAR extension needed – No
* Task Group 16t – 802.16 Lic-NB Amendment
  + Closing motions – No
  + EC Agenda items – No
  + PAR extension PAR extension needed – No
* Joint 802.1/802.15 Mtg.
  + Closing motions – No
  + EC Agenda items – No
* Standing Committee – IETF
  + Closing motions – No
  + EC Agenda items – No
* Standing Committee – SC-M, Rules
  + Closing motions – Yes
  + EC Agenda items – Yes
* Standing Committee – WNG
  + Closing motions – No
  + EC Agenda items – No
* Reminder 802.15 Sept. Interim Session will be Hybrid

**CAC Adjourn**

* WG Chair adjourned the mtg. at 8:30 am