**IEEE 802.15**

**Wireless Specialty Networks (WSN)**

|  |  |  |
| --- | --- | --- |
| Project | IEEE P802.15 Working Group for Wireless Specialty Networks (WSN) | |
| Title | **802.15 WG & CAC Minutes November 2022 Hybrid Mtg** | |
| Date Submitted | [12 December 2022] | |
| Source | [Phil Beecher]  [Wi-SUN Alliance]  [Clint Powell] [ Platforms, Inc.] [Chandler, AZ] | email: [pbeecher@wi-sun.org]  Voice: [+1.480.586.8457] Fax: [--] email: [cpowell@ieee.org] |
| Re: | [November 802.15 Meeting] | |
| 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. | |

**140th IEEE 802.15 WSN MEETING**

**Held Hybrid from Bangkok Marriott Marquis (all times in local)**

**Nov. 13-18, 2022**

# 802.15 WG Opening

# Monday, 14th November 2022

**10:34 AM** WG Chair, Clint Powell (Meta), called the meeting to order and opened the WG Agenda ([15-22-0535-05-0000](https://mentor.ieee.org/802.15/dcn/22/15-22-0535-05-0000-november-2022-agenda-for-802-15.xlsx))

**Announcements**

This meeting, November mtg. will be mixed mode (in-person and remote participants).

Don’t forget to turn on your mic and announce your name and affiliation before you speak. In-person participants were asked to use the mike to speak and if you use WebEx do not attach audio. Remote participants were instructed to use “Music Mode” in WebEx to avoid the audio from disconnecting.

WG Vice-Chair, Phil Beecher (Wi-SUN Alliance) announced the use of DirectVoteLive (DVL) for all WG votes. DVL will only be used at the closing plenary meeting on Thursday, 17 November. All voting members will receive an email link before Thursday. If you think you may be a voting member, let us know. If you have different email addresses, this may cause a problem, in which case consider using the free IEEE email reflector.

All WG motions 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.

WG Chair reviewed the new attendance requirements. 100% attendance will consist of attending 12 meetings. Therefore, you need to attend 9 meetings to achieve the required 75%. Register your attendance in IMAT and if you have any problems please reach out to Phil Beecher.

WG Chair asked for new participants to speak up, there were none in the room. New remote participants should use 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.

0 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

**Motion**:

*To approve the agenda (document#* [15-22-0535-05-0000](https://mentor.ieee.org/802.15/dcn/22/15-22-0535-05-0000-november-2022-agenda-for-802-15.xlsx) *)*

Moved: James Gilb

Second: Gary Stuebing

No discussion or objections, the agenda was approved.

**Motion**:

*To approve the previous meeting minutes (document#* [15-22-0529-01-0000](https://mentor.ieee.org/802.15/dcn/22/15-22-0529-01-0000-802-15-wg-cac-min-sept-2022-hybrid-plenary.docx) *)*

*Moved:* Thomas Kuerner

*Second:*Tim Godfrey

No discussion or objections, the September 2022 minutes were approved.

There were no matters resulting from the previous minutes.

RevCom and NesCom Updates: 802.15.4 Revision PAR Approved on 9/21/2022

## General and Administrative

WG Chair presented the general meeting information:

* Voters 138, nearly 15, aspirant 19

Ben Rolfe (BCA) gave the treasurers report (verbal) with a full report at the WG closing.

Highlights:

The November 802.15 CAC meeting minutes are included in the WG minutes  
*(minutes: 15-22-0-00-0566 0000* – this doc.*)*

The Wireless Chairs Steering Committee meeting minutes are contained in  
(minutes: [ec-22-0240-00-WCSG](https://mentor.ieee.org/802-ec/dcn/22/ec-22-0240-00-WCSG-minutes-november-13-2022.docx))

Chair shows 802.15 WG Opening report (document # [15-22-0536-03-0000](https://mentor.ieee.org/802.15/dcn/22/15-22-0536-03-0000-november-2022-opening-report-for-802-15.pptx))

802 Tutorials – Monday Evening

Intermediate Elections. No more nominees

## Straw Polls

If you will be at one of the three meetings on Friday (802 EC Closing Plenary, the 802.11 Closing Plenary or the 802.1 " IEC/IEEE 60802" meeting) will you participate (eat/drink) :

              • With breakfast? 12+13=25

              • with the AM Break? 7+5=12

              • With lunch? 8+6=14

              • with the PM Break? 6+1=7

## Jan 2023. 802 Hybrid Wireless Interim Mtg. Info

802.15 WG will hold its mixed mode plenary session from January 15-20, 2023, the in-person part being held at the Hilton, Baltimore Maryland US.

The 802 Wireless Chairs Adv. Committee for the Jan. Mtg. will be held at the Hilton, Baltimore, Maryland on Sun Jan. 15, 2023, at 4:00pm local time

The 802.15 CAC for the Jan. Mtg. will be held at the Hilton, Baltimore, Maryland on Sun Jan. 15, 2023, at 5:30pm local time

802 Jan. Mtg. Registration Fees & Deadlines have been set at $700 on or before 9 Dec., $900 on or before 6 Jan., and $1100 after 6 Jan.

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
* 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

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

802.15 Status and Activities Planned for the Week

* Task Group 15.3ma (4 meetings)
  + Comment resolution on initial Letter Ballot - received 351 comments
  + Seek WG approval to start Letter Ballot Recirc
* Task Group 15.4 Cor1 (0 meetings)
  + In IEEE editing phase
* Task Group 4ab – NG-UWB (8 meetings)
  + Continue to hear and discuss PHY & MAC presentations
  + Identify elements to start pulling together baseline draft (11 text contributions)
* Task Group 4me Revision to 2020 (4 meetings)
  + No contributions received
  + Draft received from IEEE ready for TE to start editing
  + Hear presentations on errors, omissions, updates, etc.
  + Hear status update of merged baseline draft
* Task Group 6ma – (BAN/VAN) (3 meetings)
  + Professor Kohno shows 15-22-0557-02
  + Hear and discuss presentations
  + Continue harmonization with TG 4ab
* Task Group 7a – OCC (3 meetings)
  + Comment resolution on initial Letter Ballot – 446 total comments received
  + Seek WG approval to start Letter Ballot Recirc
* Task Group 13 – Multi Gigabit/sec OWC (2 meetings)
  + Shows document 15-22-0590-00-0013
  + Comment resolution for latest SA Ballot recirc – 1 comment to resolve.
  + Discuss Timeline of future recircs and submission to RevCom
* Task Group 16t – 802.16 Lic-NB Amendment (3 meetings)
  + Continue draft development – draft ready
* Interest Group Privacy (2 meetings)
  + Discuss and formulate objectives w.r.t. address privacy

802.15.4, particularly address privacy

* + Seek approval to form SG
* Joint 802.1/802.15 Mtg. (1 meeting)
  + Presentation on additional elements of 802.15.4 arch. Overview

Next steps for moving ahead

* Standing Committee – SC-M, Rules (2 meeting)
  + Review any change requests for the Operations Manuals
  + Work on any templates
  + Review other WG PAR submissions
* Standing Committee – IETF (1 meeting)
  + Will review last week’s meeting in London.
* Standing Committee – WNG (1 meeting)

## Any Other Business

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

## WG Recess

**12:30 PM** WG Chair recessed the meeting

# 802.1 / 802.15 Joint Mtg.

# Tuesday, 15th November 2022

**6:30 PM** 802.15 WG Chair Clint Powell (Meta) and 802.1 WG Chair Glenn Parsons (Ericsson) called the meeting to order. 802.1 was meeting at another location.

Phil Beecher presented document [15-22-0491-02-0mag](https://mentor.ieee.org/802.15/dcn/22/15-22-0491-02-0mag-802-15-4-architecture-overview.pptx)

Some discussion around relevance of TSN and 802.1ac. 802.15 is planning a similar presentation about 802.15.13 at Baltimore interim.

**7:00 PM** 802.1 Chair adjourned the meeting

# 802.15 WG Mid-week

# Wednesday, 16th November 2022

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

(document #[15-22-0535-05-0000](https://mentor.ieee.org/802.15/dcn/22/15-22-0535-05-0000-november-2022-agenda-for-802-15.xlsx))

Announcements:

Reminders about attendance, social event, and motions, Direct Vote Live.

Call for a WG secretary

Call for volunteers for website editing.

No response to call for patents

Upcoming Meetings:

* January 2023 in Baltimore MD (US) – there will be a change of venue to the Hilton, Baltimore, Fees will be 700, 900, 1100(?) USD.

Task group, interest group and standing committee chairs give verbal mid-week status updates. We expect WG motions at the closing plenary from:

* TG3mb
* TG7a
* TG13
* SCM

Chair summarized achievements.

**11:04 AM** 802.15 Midweek recessed by Clint Powell

**11:06 AM** 802.15 WNG Called to order by Ben Rolfe (BCA)

WNG hears 2 presentations:

1. Friedbert Berens (FBConsulting Sarl): New UWB regulation in Europe  
   ([18-22-0141-00-0000](https://mentor.ieee.org/802.18/dcn/22/18-22-0141-00-0000-new-uwb-regulation-in-europe.pptx))
2. Ryuji Kohno (YNU/YRP-IAI): Harmonization between scientific and commercial usage  
   ([15-22-0678-00-wng0](https://mentor.ieee.org/802.15/dcn/22/15-22-0678-00-wng0-harmonization-of-scientific-and-commercial-radio-uses-and-their-social-services-and-industrial-innovation.pdf))

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

# 802.15 WG Closing

# Thursday, 17th November 2022

**6:30 PM** WG Chair, Clint Powell (Meta) called the meeting to order

## Announcements

WGChair reiterated the need to be registered for this meeting.

WG Vice-Chair Phil Beecher (Wi-SUN Alliance) reminded people to register their attendance using IMAT.

Direct Vote Live (DVL) will be used for all votes. You should have received an email with a link. If you did not, please let Clint or Phil know. All votes are recorded below as Y/N/A (Yes/No/Abstain)

**Future Meetings**

Chair presented Future Meeting schedule. It was commented that there will be a short window between opening the registration for the January 2023 and the end of “early bird rate”. Recommended to register as soon as possible after the registration opens.

## Closing Reports

**6:35 PM 802.15 WG** Closing Agenda by Clint Powell (Meta) : [15-22-0535-06-0000](https://mentor.ieee.org/802.15/dcn/22/15-22-0535-06-0000-november-2022-agenda-for-802-15.xlsx)

**802.15 WG - Motion to affirm Ann Kriger as 802.15 Vice Chair**

To approve the appointment of Ann Krieger (US Department of Defense) as Vice Chair of IEEE 802.15, subject to confirmation by IEEE802 LMSC.

Moved: Phil Beecher

Seconded: Ben Rolfe

No discussion.

Vote: 34/1/2 (Y/N/A)

**TG3mb Closing Report**: Thomas Kürner presents: [15-22-0599-00-03ma](https://mentor.ieee.org/802.15/dcn/22/15-22-0599-00-03ma-tg3mb-closing-plenary-slides-meeting-november-2022.pptx)

**TG3mb Motion on conditional approval of LB recirculation**

*Move that 802.15 WG start a WG Letter Ballot requesting approval of CA document 15-22-0462-04-03ma-coexistence-assurance.doc and document P802-15-3-Rev B-D2.pdf (as edited in accordance with the instructions in document 15-22-0559-04-03ma-lb191-consolidated-comments.xlsx) and to forward document P802-15-3-Rev B-D2.pdf, as edited in accordance with the instructions in document 15-22-0559-03-03ma-lb191-consolidated-comments.xlsx, and CA document 15-22-0559-04-03ma-lb191-consolidated-comments.xlsx to Standards Association ballot pending the completion and inclusion of the edits in the draft.*

Moved By: Thomas Kürner

Seconded By: Phil Beecher

No discussion.

Vote: 37/0/4 (Y/N/A)

**TG3mb - Motion on CRG formation**

**﻿***Move that 802.15 WG approve the formation of a Comment Resolution Group (CRG) for the WG balloting of the P802.15.3-RevB-D2 with the following membership: Thomas Kürner (Chair), Iwao Hosako, Shoichi Kitazawa and Jörg Robert. The 802.15.3mb CRG is authorized to approve 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: Thomas Kürner

Seconded By: Phil Beecher

No discussion.

Vote: 34/0/4 (Y/N/A)

**SC THz Closing Report:** Thomas Kürner presents [15-22-0600-00-0thz](https://mentor.ieee.org/802.15/dcn/22/15-22-0600-00-0thz-sc-thz-closing-plenary-slides-meeting-november-2022.pptx)

**TG4ab Closing Report**: Ben Rolfe presents [15-22-0666-00-04ab](https://mentor.ieee.org/802.15/dcn/22/15-22-0666-00-04ab-tg4ab-november-closing-report.pptx)

**TG4me Closing Report**: Gary Stuebing presents [15-22-0672-00-04me](https://mentor.ieee.org/802.15/dcn/22/15-22-0672-00-04me-ieee-802-15-4me-november-2022-agenda-and-closing.pptx)

**TG6ma Closing Report**: Ryuji Kohno presents [15-22-0668-00-006a](https://mentor.ieee.org/802.15/dcn/22/15-22-0668-00-006a-tg15-6ma-closing-report-for-november-2022.pptx)

**TG7a Closing Report:** Yeong Min Jang presents [15-22-0675-01-007a](https://mentor.ieee.org/802.15/dcn/22/15-22-0675-01-007a-15-7a-occ-tg-closing-report-nov-2022.pptx)

**TG7a: Form a comment resolution group**

*Move that 802.15 WG approve the formation of a Comment Resolution Group (CRG) for the WG balloting of the P802.15.7a/D2 with the following membership: Yeong Min Jang, Sang-Kyu Lim, Ryuji Kohno, Phil Beecher, Seongsoon Joo.*

*The 802.15.7a 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 802.15.7a TG. 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: Yeong Min Jang

Seconded By: Phil Beecher

No discussion.

Vote: 32/0/6 (Y/N/A)

**TG13 Closing Report**: Volker Jungnickel presents [15-22-0669-01-0013](https://mentor.ieee.org/802.15/dcn/22/15-22-0669-01-0013-tg13-closing-report-for-november.pptx)

**TG13 Motion to confirm CRG:**

*Move that 802.15 WG approves the formation of a Comment Resolution Group (CRG) for the Standards Association balloting of the P802.15.13\_D10 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: Volker Jungnickel

Seconded by: Phil Beecher

No discussion.

Vote: 33/0/2 (Y/N/A)

**TG13 Motion to start recirculation:**

*Move that 802.15 WG starts a Standards Association Recirculation Ballot of document*

*P802.15.13-D10 (as edited in accordance with the instructions in document 15-22/0628r3)*

*pending the completion and inclusion of the edits in the draft.*

Moved: Volker Jungnickel

Second: Phil Beecher

No discussion.

Vote: 32/0/2 (Y/N/A)

**TG13 Motion to submit P802.15.13-D10 to RevCom:**

*Motion: that 802.15 WG has reviewed and affirms the CSD https://mentor.ieee.org/802-*

*ec/dcn/21/ec-21-0199-00-ACSD-p802-15-13.pdf and requests conditional approval from the*

*IEEE 802 LMSC to submit P802.15.13-D10 (or current revision) to RevCom.*

Moved: Volker Jungnickel

Second: Phil Beecher

No discussion.

Vote: 34/0/2 (Y/N/A)

**TG16t Closing Report:** Tim Godfrey presents [15-22-0673-00-016t](https://mentor.ieee.org/802.15/dcn/22/15-22-0673-00-016t-november-2022-tg16t-closing-report.pptx)

**SC-IETF Closing Report:** Tero Kivinen gives a verbal report.

**IG-Privacy:** Tero Kivinen presents [15-22-0607-01-wng0](https://mentor.ieee.org/802.15/dcn/22/15-22-0607-01-wng0-ig-priv-opening-and-closing-slides.pptx)

**SC-Maintenance:** Phil Beecher presents [15-22-0614-01-0mag](https://mentor.ieee.org/802.15/dcn/22/15-22-0614-01-0mag-scm-opening-and-closing-report-plenary-november2022.pptx)

Phil Beecher presents: [15-10-0235-32-0000](https://mentor.ieee.org/802.15/dcn/10/15-10-0235-32-0000-802-15-operations-manual.docx), the 802.15 WG operations manual and describes updates.

**802.15 WG Approval of Operations Manual**

802.15 WG approves to adopt Operations Manual, (doc #[15-10-0235-32-0000](https://mentor.ieee.org/802.15/dcn/10/15-10-0235-32-0000-802-15-operations-manual.docx))at 08:00 Eastern Time on Monday 21 November 2022.

Moved: Phil Beecher

Second: Gary Stuebing

No discussion.

Vote: 25/0/1 (Y/N/A)

**WNG Closing Report**: Ben Rolfe gives verbal report

**Liaison Reports**

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

**802.18 RRTAG Liaison Report –** Edward Au has posted liaison report**:** [15-22-0534-01-0000](https://mentor.ieee.org/802.15/dcn/22/15-22-0534-01-0000-802-18-to-802-15-liaison-report-november-2022.ppt)

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

**No liaison from 802.11**

## AOB

**WG Adjourn**

**8:30 PM** The WG Chair Clint Powell adjourned the meeting

# Annex A Total attendance (in-person + remote) = 135

|  |  |  |
| --- | --- | --- |
| **Last Name** | **First Name** | **Affiliation** |
| Akhavan | Koorosh | Qualcomm Incorporated |
| Aldana | Carlos | Facebook |
| Al-kadi | Ghiath | STMicroelectronics |
| Almholt | Thomas | Texas Instruments Inc. |
| Amezawa | Yasuharu | Mobile Techno Corp. |
| Andre | Jean-Marie | ST micro |
| Anzai | Daisuke | Nagoya Institute of Technology |
| Bahn | Christy | IEEE STAFF |
| Bansal | Ankur | SAMSUNG ELECTRONICS |
| Barras | David | 3db Access AG |
| Baykas | Tuncer | Ofinno |
| Beecher | Philip | Wi-SUN Alliance |
| Berens | Friedbert | FBConsulting Sarl |
| Bettesh | Ido | Apple Inc. |
| Bims | Harry | Bims Laboratories, Inc. |
| Bober | Lennert | Fraunhofer Heinrich Hertz Institute |
| Brown | Monique | National Institute of Info. and Comms. Tech. (NICT) |
| Cao | Rui | NXP Semiconductors |
| Chaplin | Clint | Self |
| Chen | Run | New Radio Technology Co., Ltd. |
| Cho | Hangyu | LG ELECTRONICS |
| Choi | Jin Seek | Hanyang University |
| Choi | Jinsoo | LG ELECTRONICS |
| Corbalan Pelegrin | Pablo | NXP Semiconductors |
| Danev | Boris | 3db Access AG |
| De Ruijter | Hendricus | Silicon Laboratories |
| Dotlic | Igor | Qorvo |
| Ekrem | Ersen | Google, LLC |
| Gan | Ming | Huawei Technologies Co., Ltd |
| Gilb | James | General Atomics Aeronautical Systems, Inc.; University of San Diego |
| Godfrey | Tim | Electric Power Research Institute, Inc. (EPRI) |
| Golshan | Robert | Apple, Inc. |
| Granhaug | Kristian | novelda |
| Grosswindhager | Bernhard | NXP Semiconductors |
| Guo | Ziyang | Huawei Technologies Co., Ltd |
| Ha | Taeyoung | Samsung Electronics Co., Ltd. |
| Haasz | Jodi | IEEE Standards Association (IEEE-SA) |
| Harada | Hiroshi | Kyoto University; National Institute of Info. and Comms. Tech. (NICT) |
| 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) |
| Huang | Lei | Huawei Technologies Co., Ltd |
| Ikegami | Tetsushi | Meiji University |
| Jang | Yeong Min | Kookmin University |
| Jiang | Jinjing | Apple Inc. |
| Joo | Seong-Soon | Korea Platform Service Technology (KPST) |
| Jornet | Josep Miquel | Northeastern University |
| Jungnickel | Volker | Fraunhofer Heinrich Hertz Institute |
| Juntunen | Juha | Meteor Communications Corp. |
| Kabbinale | Aniruddh | SAMSUNG |
| Kalkundrikar | Vishal | Ondas Networks |
| 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 |
| Ko | Gunho | TTA |
| Kobayashi | Takumi | Yokohama National University |
| Kohno | Ryuji | YNU/CWC UofOulu; YNU/YRP-IAI |
| Krebs | Alexander | Apple Inc. |
| Kristem | Vinod | Apple Inc. |
| Kuechler | Wolfgang | NXP Semiconductors |
| Kuerner | Thomas | TU Braunschweig |
| Lee | Jack | Samsung Electronics Co., Ltd. |
| 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 | Chenchen | Huawei Technologies Co., Ltd |
| Luo | Xiliang | Apple, Inc. |
| Ma | Yongsen | Redpoint Positioning |
| Mano | Hiroshi | Koden Techno Info K.K. |
| McCann | Stephen | Huawei Technologies Co., Ltd |
| Megahed | Abdelfattah | Renesas Electronics Corporation |
| Mueller | Robert | Technische Universitaet Ilmenau |
| Murray | Carl | Qorvo |
| Nagai | Yukimasa | Mitsubishi Electric Corporation |
| Neirynck | Dries | Ultra Radio Ltd |
| Niewczas | Jaroslaw | Qorvo |
| Oh | Heung Ryong | TTA |
| Orlando | Christian | IEEE STAFF |
| Pakrooh | Pooria | Qualcomm Technologies, Inc. |
| Palmer | Clark | Meteorcomm LLC |
| Parthasarathi | Srivathsa Masthi | NXP Semiconductors |
| Patel | Tushar | Teradyne, Inc. |
| Peng | Xiaohui | Huawei Technologies Co., Ltd |
| Petrov | Vitaly | Northeastern University |
| Pirhonen | Riku | NXP Semiconductors |
| Pleym | Jan | Novelda AS |
| Powell | Clinton | Powell Wireless Consulting, LLC |
| Pulikkoonattu | Rethnakaran | Broadcom Corporation |
| Qian | Bin | Huawei Technologies Co., Ltd |
| Rahmani | Mohammad | SPARK Microsystems |
| Redlich | Oded | Toga Networks, a Huawei company |
| 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 |
| 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) |
| Shah | Kunal | Apple Inc. |
| Shahar | Menashe | Ondas Networks |
| Shellhammer | Stephen | Qualcomm Incorporated |
| Shilo | Shimi | Huawei Technologies Co., Ltd |
| So | Youngwan | Samsung Electronics Co., Ltd. |
| Stuebing | Gary | Cisco Systems, Inc. |
| Sumi | Takenori | Mitsubishi Electric Corporation |
| Sun | Li | Huawei Technologies Co., Ltd |
| Sun | Li-Hsiang | MediaTek Inc. |
| 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 |
| Wendt | Matthias | Signify |
| Wisland | Dag | Novelda AS; University of Oslo |
| Wu | Kanke | Qualcomm Incorporated |
| Wu | Kuan | Huawei Technologies Co., Ltd |
| Xiao | Libra | NewRadio Technology Co., Ltd. |
| Yan | Aiguo | Zeku Inc |
| Yang | Shang-Te | Apple, Inc. |
| Yang | Xun | Huawei Technologies Co., Ltd |
| Yang | Yifei | Huawei Technologies Co., Ltd |
| Ye | Zhenzhen | Red Point Positioning |
| Yoon | Kangjin | Meta Platforms Inc. |
| Zeisberg | Sven | ZIGPOS GmbH |
| Zou | Qiyue | Meta |

# 802.15 CAC Mtg.

# Sunday, 13th November 2022

## Attendance

Phil Beecher

Tim Godfrey

Tero Kivinen

Ryuji Kohno

Thomas Kurner (on-line)

Clint Powell

Ben Rolfe

Clint Chapman

Volker Jungnickel

## Minutes

**5:34 pm**: WG Chair, Clint Powell (Meta) called the mtg. to order and presented the agenda

([15-22-0535-04-0000](https://mentor.ieee.org/802.15/dcn/22/15-22-0535-04-0000-november-2022-agenda-for-802-15.xlsx))

General Announcements:

November Meetings:

* 802 Wireless Chairs (WCSC) meeting: 4pm to 5:30pm on Sun. Nov. 13, 2022
* Opening 802.15 WG CAC meeting: 5:30pm to 6:30pm on Sun. Nov 13, 2022
* Opening 802 EC meeting: 8:00am to 10:00am on Mon. Nov. 14, 2022
* Opening 802.15 WG meeting: 10:30am to 12:30pm on Mon. Nov. 12, 2022
* Mid-Week 802.15 WG CAC meeting: 7:30am to 8:30am on Wed. Nov. 16, 2022
* Mid-Week 802.15 WG meeting: 10:30am to 11:30am on Wed. Nov. 16, 2022
* Closing 802.15 WG meeting: 6:00pm to 8:00pm on Thurs. Nov. 17, 2022
* Closing 802 EC meeting: 1pm to 6pm on Fri. Nov. 18, 2022

Subgroup Status and Objectives for September Wireless Interim.

* Task Group 3ma
* Study Group THz
* Task Group 15.4 2020 Cor1
* Task Group 4ab – NG-UWB
* Task Group 4me Revision to 2020
* Task Group 6ma – (BAN/VAN)
* Task Group 7a – OCC
* Task Group 13 – Multi Gigabit/sec OWC
* Task Group 16t – 802.16 Lic-NB Amendment
* Interest Group on Privacy
* Joint 802.1/802.15 Mtg
* Standing Committee – IETF
* Standing Committee – SC-M, Rules
* Standing Committee – WNG

Upcoming Meetings:

* January 2023 – Wireless Interim in Baltimore, MD
* March 2023 – Plenary in Atlanta

**6:28pm** WG chair adjourned the CAC meeting.

# 802.15 Mid-Week CAC Mtg.

# Wednesday, 16th November 2022

## Attendance

Phil Beecher

Tim Godfrey

Tero Kivinen

Ryuji Kohno

Thomas Kurner (on-line)

Clint Powell

Ben Rolfe

Clint Chapman

Volker Jungnickel

## Minutes

**7:37am**: WG Chair, Clint Powell (Meta) called the mtg. to order and presented the agenda

General Announcements:

Subgroup Status and Objectives for November Plenary.

* Task Group 3ma
  + Closing motions – Yes
  + EC Agenda items – No
  + PAR extension needed – No
* Task Group 15.4 2020 Cor1 – with IEEE editor
* Task Group 4ab – NG-UWB
  + Closing motions – No
  + EC Agenda items – No
  + PAR extension needed – No
* Task Group 4me Revision to 2020
  + Closing motions – No
  + EC Agenda items – No
  + PAR extension needed – No
* Task Group 6ma – BAN/VAN
  + Closing motions – No
  + EC Agenda items – No
  + PAR extension needed – No
* Task Group 7a – OCC
  + Closing motions – Yes
  + 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 – No
* Task Group 16t – 802.16 Lic-NB Amendment
  + Closing motions – No
  + EC Agenda items – No
  + 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 – No
* Standing Committee – WNG
  + Closing motions – No
  + EC Agenda items – No

Any Other Business:

* Direct Vote Live will be used for voting. (NB - 802.11 uses Webex, but it is subject to audit.)

**8:28am** WG chair adjourned the CAC meeting.