**IEEE 802.15**

**Wireless Specialty Networks (WSN)**

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| --- | --- | --- |
| Project | IEEE P802.15 Working Group for Wireless Specialty Networks (WSN) | |
| Title | **802.15 WG & CAC Minutes January 2024 Interim** | |
| Date Submitted | [19 January 2024] | |
| Source | [Ann Krieger]  [U.S. Department of Defense] | Email: [AnnKrieger.dod@gmail.com]  Voice: [+1.614.545.8255] |
| Re: | [January 802.15 Session] | |
| Abstract | [IEEE 802.15 Working Group & CAC Minutes] | |
| Purpose | [Official minutes of the Working Group Opening/Mid-week/Closing/Joint and CAC Sessions] | |
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**148th IEEE 802.15 WSN SESSION**

**Hilton Panama, Panama City, Panama (all times in local)**

**January 14-18, 2024**

# 802.15 WG Opening

# Monday, 15th January 2024

**9:09AM** WG Chair, Clint Powell (HID), called the meeting to order and opened the WG Agenda ([*15-23-0628-04*](https://mentor.ieee.org/802.15/dcn/23/15-23-0628-04-0000-january-2024-802-15-opening-report.pptx))

## Announcements

Don’t forget to log in to IMAT to record your attendance and to use the microphone when you speak, stating your name and affiliation

Remote, WebEx, information is in the agenda and slide deck

You must be registered to participate in any of these session meetings. If you do not, you are classified as a “dead-beat”.

* Using Direct Vote Live (DVL) for the mid-week and closing Interim.
* Make sure your email address is up to date with the WG.
* TG and SC chairs, get motions to the WG chairs as soon as possible and immediately after your TG closing meeting. Send to Phil Beecher and copy Clint
* 75% Attendance = 12 time slots (of 16)

WG Officer (Chair and Vice-Chairs) Elections will occur at the March Plenary,Denver.

Our 150th session of 802.15 will be in Warsaw Poland (May). We are planning on ordering shirts for the event. You need to be there to pick it up or have someone pick it up. More information will follow.

WG Chair asked for new participants to speak up; none in the room, none on line

## 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 and the standard IEEE Copyright Policy, including Code of Ethics.

TG/SG/SC must show them but do not need to reread through them all.

## Opening Report

WG Chair presented the WG Agenda: (doc #[*15-23-0627-04*](https://mentor.ieee.org/802.15/dcn/23/15-23-0627-04-0000-january-2024-802-15-agenda.xlsx))

* Showed the graphic schedule
* Joint meeting with 802.11 Coex SC on PM3 (Tuesday)
* Closing on Thursday PM2

## WG Approvals

Motion to *approve the agenda* (doc #[*15-23-0627-04*](https://mentor.ieee.org/802.15/dcn/23/15-23-0627-04-0000-january-2024-802-15-agenda.xlsx))

* Moved by: Gerry Stubing (Cisco)
* Seconded by: Ann T Krieger (US DoD)
* Discussion: none
* Approved by unanimous consent.

Motion to *approve the previous meeting minutes (*doc #[*15-23-0553-02*](https://mentor.ieee.org/802.15/dcn/23/15-23-0473-02-0000-802-15-wg-cac-min-sept-2023-wireless-interim.docx)*)*

* Moved by: Ann T Krieger (U.S. DoD)
* Seconded by: Gerry Stubing (Cisco)
* Discussion: none
* Approved by unanimous consent.

WG Chair presented the SASB dates, on a tab in the agenda (doc #[*15-23-0627-04*](https://mentor.ieee.org/802.15/dcn/23/15-23-0627-04-0000-january-2024-802-15-agenda.xlsx))

## General and Administrative

WG Chair presented the general meeting information:

* Voters: (voters: 138, nearly: 5, aspirant: 20)

The January 802.15 CAC meeting minutes are included in the WG minutes   
*(this document, 15-24-0008-01) –* Everyone is welcome, but chairs are required.

The Wireless Chairs Steering Committee meeting minutes are contained in  
*(doc #:*[*ec-24-0026-WCSG-minutes*](https://mentor.ieee.org/802-ec/dcn/24/ec-24-0026-00-WCSG-minutes-2024-01-wireless-interim-opening-plenary.docx)*)*

The Opening Report was shown and discussed (doc # [*15-23-0628-04*](https://mentor.ieee.org/802.15/dcn/23/15-23-0628-04-0000-january-2024-802-15-opening-report.pptx))

## Future Meetings and Polls

Future Meetings:

* March 2024 802 Plenary March 10-15 2024 mixed mode in Colorado.

Running Subgroup meeting:

* Every Subgroup mtg. requires a Chair, Vice-Chair, or other Subgroup Officer (in person or remote) to run each mtg. of the Subgroup.
* Every Subgroup mtg. requires a designated person in person to run the video and audio for the virtual component.
  + A 2nd computer is highly encouraged (hotel or 802 will not supply this, to be brought by Subgroup designee), which needs to support HMDI out and audio in/out via USB
  + Training on the video/audio tool will be provided before and possibly at the mtg. as well
* All Subgroup Chairs must identify who will be Chairing (if not the Chair) and who will be running the video and audio portion of virtual component in person and send info to WG Chair and Vice Chairs no later than 30 days prior to the start of the mtg.

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

**TG 15.3mb Revision**: Thomas Kürner (TU Braunschweig)

* not meeting

**SC THz**: Thomas Kürner (TU Braunschweig)

* 2 Meetings; 4 presentations, might be able to only have one Meeting

**TG 4ab (NG-UWB)**: Ben Rolfe (BCA)

* 900+ comments. Joint meeting with 802.11 Coex SC

**SC WNG**: Ben Rolfe (BCA)

* No presentations currently.

**TG 4ac (Privacy Amendment):** Tero Kivinen (self)

* 2 Meetings- are 4ab people able to come to Thursday?

**SC IETF:** Tero Kivinen (self)

* 0 Meetings - update at WG15 mid-week

**TG 4me (Revision to 2020)**: Gary Steubing (Cisco)

* 4 Meetings; 67 comments, MEC review completed.

**TG 6ma (BAN/VAN)**: Ryuji Kohno (YNU/YRP-IAI)

* 4 M; Doc 638

**TG 7a (OCC)**: Yeong Min Jang (Kookmin University)

* 3 Meetings - recirculation of SA Ballot

**IG NG-OCC:** Yeong Min Jang (Kookmin University)

* 2 Meetings - Time on WNG agenda?

**TG 14 & TG15** are still in hibernation

**TG 16t (802.16 Lic-NB Amendment)**: Tim Godfrey (EPRI)

* Letter ballot completed (214 comments)

**SG SUNPHYs (p.k.a. NG-OFDM)**: Jorge Robert (TU Ilmenau/Fraunhofer IIS)

* 4 Meetings; start as a task group.

**Joint 802.1/802.15 Mtg**. Phil Beecher (Wi-SUN)

* Not meeting.

**SC (Maintenance& Rules)**: Phil Beecher (Wi-SUN)

* 1 Meeting; comment on 4a, ISO.
* Q: 7a question, do we want to do that in 7a or here – leave for 7a.

## Any Other Business

WG Chair asked if there was any other business.

* Reminder: in-Room do not connect to audio. The WebEx is tried to the rooms so if your TG is in two different rooms, then it is two different WebEx. IMAT shows the room and the graphic agenda shows the WebEx. For reference:
  + Virtual Room 1 - Starbay 3
  + Virtual Room 2 - Ocean Two
  + Virtual Room 3 - Ocean One
  + Virtual Room 4 - Mirage (or Bellagio)
* Q: SA Ballot – can it be extended 15.4.me? We will do it, extend for 2 more days.
* WG Chair showed the new 802.15 Home page, we are using WordPress and the TG chairs will be able to edit their pages.

## WG Recess

**9:56 AM** WG Chair recessed the meeting until the mid-week on Wednesday.

# 802.15 WG Mid-week (& WNG)

# Wednesday, 17th January 2024

**10:33 am** WG Chair, Clint Powell (HID) called the meeting to order displaying the agenda (Doc #[*15-23-0627-05*](https://mentor.ieee.org/802.15/dcn/23/15-23-0627-05-0000-january-2024-802-15-agenda.xlsx)*)*

1. **Announcements**

Registration is required (both virtual and remote) and remember to register you attendance. There are 16 meetings, 75% = 12.

We will be using DVL, the email will be sent shortly.

If there are any motions that need to be run at the closing, please provide to the WG chairs as early as possible.

There will be elections in March for WG Chair and WG Vice-Chairs. Still looking for a Secretary.

150th Session Shirts – even though it is in May (Poland), we are going to have the shirts available at the March (Denver) meeting. You or someone you designate must pick it up, they will not be individually shipped. An email will be sent out shortly with the information on what you need to supply and when to order a shirt.

## General and Administrative

Social tonight – bring your badge to get on the boat.

## Future Meetings and Polls

Next meeting will be the Plenary in March in Denver.

It is the responsibility of the TG/SG/SC/IG chair to cover the in-person meeting by having someone in the room.

Ben Rolfe (BCA) displayed the Joint Treasury (wireless) Report (doc # [*EC-24-0007-00*](https://mentor.ieee.org/802-ec/dcn/24/ec-24-0007-00-WCSG-wireless-treasurer-report-2024.pptx))

Future Interim Fees: $600/$800/$1000 – in hotel discount $300.

Plenary Fees: $700/$900/$1100 – in hotel discount $300.

Deadbeat consequences

## All TG, SG and SC chair verbal status.

**TG 15.3mb Revision**: should be a Standard soon.

**SC THz**: one meeting, one of the presentations will be shown at WNG

**TG 4ab**: working on comment collection.

**SC WNG**: 2 presentations.

**TG 4ac:** good discussions so far

**SC IETF:** Tero Kivinen (self) presented (Doc #[*15-24-0069-00*](https://mentor.ieee.org/802.15/dcn/24/15-24-0069-00-IETF-sc-ietf-january-slides.pptx))

* IETF 119 (Brisbane Australia) is after the IEEE 802 Plenary in March.

**TG 4me**: 66 comments-working through those. Recirc in March

**TG 6ma**: 1 more meeting.

**TG 7a**: Need to update the PAR. Deadline for SA Ballot is today.

**IG NG-OCC**: Presentation at the WNG

**TG 14 & TG15** are still in hibernation

**TG 16t**: Resolving comment from LB

**SG SUNPHYs**: 1 meeting left.

**Joint 802.1/802.15 Mtg**. did not meet.

**SC (M&R)**: Response on Question (15.4a) & to .9 submission to SC6

**Joint 802.11 Coex SC/ TG4ab**: Trying to make a change in the 802 wireless coexistence culture. Continue to hold joint meetings.

## Any Other Business

WG Chair asked if there was any other business. Nothing was raised.

## WG Recess

**11:17am** 802.15 Midweek recessed by WG Chair Clint Powell (HID) until Thursday 4:00.

**Wireless Next Generation (WNG)**

**11:20am** 802.15 WNG Called to order with Ben Rolfe displaying (doc# [*15-24-0062-00*](https://mentor.ieee.org/802.15/dcn/24/15-24-0062-00-wng0-january-meeting-slides.pptx))

The Agenda was shared and accepted.

Yeong Min Jang (Kookmen University) presented “The Future Directions of Next Generation OCC standards” (doc #[*15-24-0068-00*](https://mentor.ieee.org/802.15/dcn/24/15-24-0068-00-wng0-future-directions-of-next-generation-occ-standard.pptx))

* Next Generation (NG) will use more AI applications.
* Sensing Technologies: LiDAR
* OCC-based Drone Networks
* Future use tunable Lasers
* Starting now, hopeful standard by 2028.

Thomas Kurner (TU Braunschweig) presented “Overview on the Results of WRC-2023 relevant for THz Communications” (doc #[*15-24-0030-01*](https://mentor.ieee.org/802.15/dcn/24/15-24-0030-01-0thz-overview-on-the-results-of-wrc-2023-relevant-for-thz-communications.pptx))

* The radio regulations (RR) in the band 232-248 GHz have been changed
* New Allocations/Identifications for Radio Location services
* Sharing and compatibility of passive and active service above 71 GHz has been modified
* New Potential Agenda Item for WRC-3 (Footnote FN 5.564A has been modified)
* New resolution COM6/13 on new allocations above 275 GHz towards WRC-2031

**Any other business** - none

**12:07pm** WNG Adjourned by Ben Rolfe.

# 802.15 WG Closing

# Thursday, 18th January 2024

**4:05 PM** WG Chair, Clint Powell (HID) called the meeting to order displaying the closing agenda document (doc #*15-23-*[*0627*](https://mentor.ieee.org/802.15/dcn/23/15-23-0627-05-0000-january-2024-802-15-agenda.xlsx)*-05*)

## Announcements

Remote information on calendar – this is Virtual Room 1. Registration is required.

Please log into DVL now – if you don’t have the email, let us know.

Elections in March – Chair and Vice-chairs. Please have nominations in week before March Plenary – 4 March 2024.

150th celebration will be at the May 2024 meeting in Warsaw Poland. The Chair showed a picture of the shirts. Emails will be sent with more information.

* Q: Are they US sizes? A: we will be sending out a size chart

## General and Administrative

Voting rights calculator is working well. We are working on adding in the letter ballot voting. Website is going slower than anticipated.

## Future Meetings and Polls

Polls:

* Would you like to come back to this venue – yes (16) no (1)
* Did you go to the social? Y 17
* Did you like the social? Y 8
* Who would like a better A/V experience? Some had more issues, some considered it better than Hawaii.

10-15 March 2024 Plenary – it could be cold or snowy, be prepared.

* Awards for 802.15.13 at the opening meeting.

Reminder that Chairs need to attend the meeting to run the WebEx, or designate someone to run it.

## Sub-Groups and Committees Closing Reports

**TG3mb Closing Report**: Thomas Kürner (TU Braunschweig)

* Moving through the process

**SC THz Closing Report:** Thomas Kürner (TU Braunschweig) doc # [15-24-0033-00](https://mentor.ieee.org/802.15/dcn/24/15-24-0033-00-0thz-sc-thz-closing-plenary-slides-meeting-january-2024.pptx)

* 0 slot for Mar, plan for 2 slots for Warsaw (beginning of the week).
* 1 meeting this session with 4 presentations.

**TG4ab Closing Report**: Ben Rolfe (BCA) presented doc # *15-24-0084-00*

* 8 slots for Mar
* Still resolving comments, teleconferences set up for every week.

**WNG Closing Report**: Ben Rolfe (BCA) verbal report.

* There were 2 Presentations. (Minutes are in this document)

**TG4ac Closing Report:** Tero Kivinen (self) presented doc # [*15-24-0048-01*](https://mentor.ieee.org/802.15/dcn/24/15-24-0048-01-04ac-january-opening-and-closing.pptx)

* 2 slots in Mar. that do not overlap with 802.11bi or 802.15.4ab
* 1 hr joint meeting with 802.4ab. (perhaps at the end of the week)

**SC IETF Closing Report:** Met during the Mid-week.

* 0 slot in Mar – it will continue to be discussed at the mid-week.

**TG4me Closing Report**: Gary Steubing (Cisco) presented doc # [*15-24-0038-01*](https://mentor.ieee.org/802.15/dcn/24/15-24-0038-01-04me-january-2024-ieee-802-15-4me-opening-agenda-and-closing.pptx)

* 2 slots in Mar. (Mon&Tues) do not compete with JTC1
* Results of last ballot – 66 comments – all resolved.
* **TG4me Motion to start recirculation**
  + Move that 802.15 WG start a WG recirculation ballot requesting approval of document P802.15.04me D02 (as edited in accordance with the instructions in document 15-23-497-19-04me) and to forward document P802.15.04me D02 (as edited in accordance with the instructions in document 15-23-497-18-04me), to Standards Association ballot pending the completion and inclusion of the edits in the draft.
  + Moved: Gary Stuebing
  + Second: Phil Beecher
  + No questions.
  + Results: Y 29 A: 3 N 0
* **TG4me Motion for CRG:**
  + Move that 802.15 WG approve the formation of a Comment Resolution Group (CRG) for the WG balloting of the P802.15.04.me\_D03 with the following membership: Gary Stuebing(chair), Phil Beecher, Tero Kivinen, Billy Verso, Ben Rolfe, and Ann Krieger. The 802.15.4me 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: Gary Stuebing
  + Second: Phil Beecher
  + Q: is this the same D number as the last motion? A: No, the D02 was edited to create D03.
  + Results: Y 33: N 0 : A 0

**TG6ma Closing Report**: Ryuji Kohno (YNU/YRP-IAI) presented doc # [*15-24-0074-02*](https://mentor.ieee.org/802.15/dcn/24/15-24-0074-02-006a-tg15-6ma-closing-report-for-january-2024.pptx)

* 4 slots in Mar. – Preferences AM1 preferred, PM2 second choice.

**IG NG-OCC Closing Report:** Yeong Min Jang (Kookmin Univ.) doc# [*15-24-0096-00*](https://mentor.ieee.org/802.15/dcn/24/15-24-0096-00-07ma-ieee-802-15-ig-ng-occ-closing-report-january-2024.pptx)

* + 2 slots in Mar, Preference PM2 (Mon & Tues)
  + 1st session for this IG, with two meeting slots.
  + Chair: Please provide an email and it will be posted to invite contributions.

**TG7a Closing Report:** Yeong Min Jang (Kookmin University) doc# [*15-24-0093-00*](https://mentor.ieee.org/802.15/dcn/24/15-24-0093-00-007a-15-7a-higher-rate-longer-range-occ-tg-closing-report-jan-2024.pptx)

* + 3 slots in Mar, Preference PM1 & PM2 on Mon and PM2 on Tues
  + Teleconferences on Jan 31, Feb 7, Feb 14 and Feb 21
  + 114 comments from 4 SA members.
  + **TG7a - CRG formation for a WG Letter Ballot**
    - Move that 802.15 WG approve the formation of a Comment Resolution Group (CRG) for the WG balloting of the P802.15.7a\_D7 with the following membership: Yeong Min Jang(Chair), Sang-Kyu Lim, Ryuji Kohno, and 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 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: Yeong Min Jang
    - Seconded By: Phil Beecher
    - Comments: none
    - Results: Y 30; N 0; A 1

**TG16t Closing Report:** Tim Godfrey (EPRI) presented doc #[*15-24-0086-00*](https://mentor.ieee.org/802.15/dcn/24/15-24-0086-00-016t-tg16t-jan-2024-closing-report.pptx)

* + 4 slots in Mar teleconferences will be announces as necessary.
  + Resolved all comments
  + **TG16t Motion to create a CRG**
    - Move that 802.15 WG approve the formation of a Comment Resolution Group (CRG) for the WG balloting of the P802.15.16t\_D02 with the following membership: Tim Godfrey (Chair), Vishal Kalkundrikar, Harry Bims, Tero Kivinen, and Joerg Robert. The 802.15.16 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: Tim Godfrey
    - Seconded by: Phil Beecher
    - Discussion: none
    - Results: Y 30 : N 0 : A 0

**SG SUN PHYs:** Jorge Robert (TU Ilmenau/Fraunhofer IIS) doc # [*15-24-0087-00*](https://mentor.ieee.org/802.15/dcn/24/15-24-0087-00-04ad-january-2024-sg-next-gen-sun-phy-closing-report.pptx)

* + 4 slots in Mar. One call Feb 7th

**Joint Session 802.1/802.15** Did not meet this session.

* + Not sure. Will need to check that out.

**SC-Maintenance:** Phil Beecher (Wi-SUN) presented doc # [*15-24-0046-01*](https://mentor.ieee.org/802.15/dcn/24/15-24-0046-01-0mag-scm-agenda-opening-and-closing-report-interim-january-2024.pptx)

* + 3 slots in Mar, two on Tuesday, one on Wednesday
  + EC looking at Rules for Hybrid meetings we will defer our changes until then.
  + Q Any drafts we’ve submitted to ISO at the risk of being rejected? A: No.
  + **Motion to approve comment response to IEC/ISO JTC1/SC6**
    - 802.15 WG approves the comment response in document https://mentor.ieee.org/802.15/dcn/24/15-24-0092-00-0mag-response-to-iso-802-15-9.docx and requests 802 LMSC to forward the response to IEC/ISO JTC1 under the PSDO agreement. 802.15WG authorizes the 802.15 WG Chair and Technical Editor to make edits as agreed by 802 LMSC.
    - Moved: Phil Beecher
    - Second: Ann Krieger
    - Discussion: none
    - Results: Y 32; N 0; A 0

**Liaison Reports**

**802.24 Liaison Report –** Tim Godfrey (EPRI) discussed doc # [*24-24-0004-00*](https://mentor.ieee.org/802.24/dcn/24/24-24-0004-00-0000-802-24-january-2024-report.pptx):

* Same meeting pattern in Mar (Tues & Wed PM2)

**802.18 RRTAG Liaison Report –** None.

**802.19 Coexistence TAG Liaison Report –** Ben Rolfe (BCA) gave a verbal report.

**802.11 Liaison Report** – None.

## New Business

WG Chair asked if there was any new business. Nothing was raised.

## Any Other Business

WG Chair asked if there was any other business. Nothing was raised.

Attendance 64, 24 people in-room;

## Adjourn

**5:44 PM** The WG Chair adjourned the meeting.

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

|  |  |  |
| --- | --- | --- |
| **Last Name** | **First Name** | **Affiliation** |
| Akhavan | Koorosh | Qualcomm Incorporated |
| Aldana | Carlos | Meta Platforms Inc. |
| 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 |
| BEECHER | PHILIP E | Wi-SUN Alliance |
| Bettesh | Ido | Apple Inc. |
| Calvert | Chris | Landis Gyr Group Worldwide |
| Chaplin | Clint | Samsung Electronics |
| Chen | Run | New Radio Technology Co., Ltd. |
| Chitrakar | Rojan | Huawei International Pte Ltd |
| Cho | Hangyu | LG ELECTRONICS |
| Corbalan Pelegrin | Pablo | NXP Semiconductors |
| De Ruijter | Hendricus | Silicon Laboratories |
| Dolmans | Guido | Holst Centre / IMEC-NL |
| Godfrey | Tim | Electric Power Research Institute, Inc. (EPRI) |
| Golshan | Robert | Apple, Inc. |
| Granhaug | Kristian | Novelda AS |
| Gruber | Josef | Infineon Technologies |
| Guo | Jianlin | Mitsubishi Electric Research Labs (MERL) |
| Ha | Taeyoung | Samsung Electronics Co., Ltd. |
| Harada | Hiroshi | National Institute of Information and Communications Technology (NICT) |
| Hartman | James | Landis Gyr Group Worldwide |
| Henry | Jerome | Cisco Systems, Inc. |
| Hernandez | Marco | National Institute of Information and Communications Technology (NICT) |
| Hirata | Masayuki | Osaka Un Grad School of Medicine, Dept of Neuro Diagnosis and Restoration |
| HOSAKO | IWAO | National Institute of Information and Communications Technology (NICT) |
| Hu | Shengquan | Mediatek Inc |
| Huy | Nguyen | Kookmin University |
| Jiang | Jinjing | Apple Inc. |
| Jornet | Josep Miquel | Northeastern University |
| Kabbinale | Aniruddh | SAMSUNG |
| Kalkundrikar | Vishal | Ondas Networks |
| Kasamatsu | Akifumi | National Institute of Information and Communications Technology (NICT) |
| Keren | Rani | Huawei Technologies Co., Ltd |
| Kerry | Stuart | OK-Brit; Self |
| Kezys | Vytas | HaiLa Technologies |
| Kitazawa | Shoichi | Muroran IT |
| Kivinen | Tero | Self Employed |
| KOBAYASHI | Takumi | YRP International Alliance Institute |
| Kohno | Ryuji | YNU/YRP-IAI |
| Krebs | Alexander | Apple Inc. |
| Krieger | Ann | US Department of Defense |
| kristem | vinod | Apple Inc. |
| Kuerner | Thomas | TU Braunschweig |
| Lee | Hong Won | LG ELECTRONICS |
| Lee | Jaegook | SAMSUNG ELECTRONICS |
| Lemsitzer | Stefan | NXP Semiconductors |
| Leong | Frank | NXP Semiconductors |
| Li | Huan-Bang | National Institute of Information and Communications Technology (NICT) |
| Liu | Yong | Apple, Inc. |
| Luo | Xiliang | Apple, Inc. |
| Ma | Li | MediaTek Inc. |
| Maman | Mickael | STMicroelectronics |
| Murray | Carl | Qorvo |
| Nagai | Yukimasa | Mitsubishi Electric Corporation |
| Neirynck | Dries | Ultra Radio Ltd |
| Pakrooh | Pooria | Qualcomm Technologies, Inc. |
| Parthasarathi | Srivathsa Masthi | NXP Semiconductors |
| Pirhonen | Riku | NXP Semiconductors |
| Powell | Clinton | PWC, LLC |
| Rahmani | Mohammad | SPARK Microsystems |
| Redlich | Oded | Huawei Technologies Co., Ltd |
| Robert | Joerg | TU Ilmenau/Fraunhofer IIS |
| Rolfe | Benjamin | Blind Creek Associates |
| Sand | Stephan | German Aerospace Center (DLR) |
| Sasaki | Shigenobu | Niigata University |
| Sayrafian | Kamran | National Institute of Standards and Technology |
| Schmidt | Reinhold | Infineon Technologies |
| Sekine | Norihiko | National Institute of Information and Communications Technology (NICT) |
| SHAHAR | MENASHE | Ondas Networks |
| Shilo | Shimi | Huawei Technologies Co., Ltd |
| Stuebing | Gary | Cisco Systems, Inc. |
| Sun | Li-Hsiang | MediaTek Inc. |
| Suzuki | Takafumi | NICT |
| Takabayashi | Kento | Toyo University |
| Tang | Weidong | NewRadio Techologies Co., Ltd. |
| Tian | Bin | Qualcomm Incorporated |
| Verso | Billy | Qorvo |
| Wang | Pu | Mitsubishi Electric Research Laboratories (MERL) |
| Wang | Yi-Hsiu | Calterah |
| Wendt | Matthias | Signify |
| Wisland | Dag | Novelda AS; University of Oslo |
| Xiao | Libra | NewRadio Technology Co., Ltd. |
| Yang | Menghuan | State Key Laboratory of Satellite Navigation System and Equipment Tech |
| Yang | Shang-Te | Apple, Inc. |
| YE | ZHENZHEN | Red Point Positioning |
| Yee | Peter | NSA-CSD |
| Yong | Su Khiong | Apple, Inc. |
| Yu | zhongxing | Calterah Semiconductor Technology (Shanghai) Co., Ltd. |
| Zakaib | Larry | SPARK Microsystems |
| Zeisberg | Sven | ZIGPOS GmbH |
| Zhang | Xiaolong | Calterah Semiconductor Technology (Shanghai) Co., Ltd. |

# 802.15 CAC Mtg.

# Sunday, 14th January 2024

## Attendance (13)

Clint Powell

Phil Beecher (remote)

Ann Krieger

Ben Rolfe

Tero Kivinen

Gary Stuebing

Clint Chapman

Ryuji Kohno

Christy Bahn

Yeong Min Jang

Tim Godfrey

Thomas Kuener

Joerg Robert

## Minutes

**5:38 pm**: WG Chair, Clint Powell (HID) called the mtg. to order and presented the WG Agenda ([*15-23-0628-04*](https://mentor.ieee.org/802.15/dcn/23/15-23-0628-04-0000-january-2024-802-15-opening-report.pptx))

General Announcements:

* WG Chair showed the opening slides and ask patent claim question, please show them at your TG opening.
* You must register and pay registration fee to participate this week.
* 150th Session Shirts – We don’t know who will absorb the costs yet.
* WG admin items
  + Social – Wednesday – get there with plenty of time to catch the bus.
* Nescom/Revcom dates on the slides.
* There are 2 drafts in letter ballot.
* One addition to the calendar is theJoint 802.11 Coex SC & 802.15.4ab on Tuesday PM3 7:30 –9:30pm
* Make sure you are connected to the projector (HDMI) and do not use audio, we are using Webex.

January Meetings:

* 802.15 Chairs Corner: 2pm to 3:00pm on Sun., Jan 14, 2024
* 802 Wireless Chairs (WCSC) meeting: 4pm to 5:30pm on Sun. Jan 14, 2024
* Opening 802.15 WG AC meeting: 5:30pm to 6:30pm on Sun. Jan 14, 2024
* Opening 802 LMSC: N/A
* Opening 802 Wireless: 8ang m to 9am on Monday Jan 15, 2024
* Opening 802.15 WG meeting: 9am to 10am on Mon. Jan 14, 2024
* Mid-Week 802.15 WG AC meeting: 8:00am to 9:00am on Wed. Jan 17, 2024
* Mid-Week 802.15 WG meeting: 10:30am to 11:30am on Wed. Jan 17, 2024
* 802.15 WNG meeting: 11:30am to 12:30pm on Wed. Jan 17, 2024
* Closing 802.15 WG meeting: 4pm to 6pm on Thurs. Jan 18, 2024
* Closing 802 LMSC: N/A
* Joint meeting with 802.1/802.15 – not meeting

Subgroup Status and Objectives for January Interim.

* **TG 3mb** – last week, received proofs – in good shape. Need WG voters list.
* **SG THz** – 2 meetings, may finish after one.
* **TG 4ab** – doc637r3 completed comment collection.
* **SC WNG** – 0 response for time, possible request for March.
* **TG 4ac** – Tuesday will be short (overlap with 4me)
* **SC IETF** – between meetings – short update at mid-week.
* **TG 4me** – 4 meetings, probably have motions.
* **TG 6ma** – 4 meetings, draft 1.11 has been loaded. Comment resolution. Postpone motion.
* **TG 7a** – comment from Jodi about PAR. A couple issues we need to address.
* **IG NG-OCC** – several presentations.
* **TG 16t** – 4 meetings, comments on LB. 97% approval.
* **SG SUN PHYs** – 4 meetings, busy agenda. SG needs extending in March or become a TG.
* **Joint 802.1/802.15 Mtg. –** no meeting
* **SC – SC-M / Rules** – 1 meeting; question about errata 2, TG9 response ISO

Upcoming Meetings:

* March Plenary is in Denver

AOB:

* Elections in March.
* Shirts – make .15 the same color as 802.
* Website!! Cost per year under $100. Launch around March meeting. Will need to update pages through word press.

**6:37pm** WG chair recessed until Wednesday (8:00-9:00am)

# 802.15 Mid-Week CAC Mtg.

# Wednesday, 15th Jan. 2024

## Attendance (12)

Clint Powell

Phil Beecher

Ann Krieger

Tero Kivinen

Gary Stuebing

Clint Chapman

Ryuji Kohno

Christy Bahn

Yeong Min Jang

Tim Godfrey

Thomas Kurner

Joerg Robert

## Minutes

**8:07am**: WG Chair, Clint Powell (HID) called the mtg. to order.

General Announcements:

* Chairs, show the Patent Policy, flip through the slides and make the call.
* 150th Celebration shirts – we will be shipping them to Denver, bring to Warsaw
* Elections in March for WG chair and vice-chairs.

Mid-week motions: none

Subgroup Status and Objectives for January Interim

* **TG 3mb** 
  + Closing Motions – No
  + Std should be published soon.
* **SG THz** 
  + Closing Motions – No
  + Finished business
* **TG 4ab** 
  + Closing Motions - No
  + Motion likely in March.
* **SC WNG** 
  + 2 presentations: OCC and THz
* **TG 4ac** 
  + Closing Motions - No
* **SC IETF**
  + Not meeting.
* **TG 4me** 
  + Closing Motions – Yes
  + Could cancel the session tomorrow afternoon.
* **TG 6ma** 
  + Closing Motions - No
* **TG 7a** 
  + Closing Motions - Yes
  + SA Ballot – well below participation rate.
* **IG NG-OCC**
  + Closing Motions - No
  + Complete for the week, presentation at WNG
* **TG 16t** 
  + Closing Motions - Yes
* **SG SUN PHYs** 
  + Closing Motions - No
  + Technical discussions, most attendees are remote.
* **SC-M / Rules**
  + Closing Motions – Yes (JTC1)
* **Joint 802.11/802.15 Coex**
  + Good meeting, we are moving forward.

Any Other Business:

* Don’t forget about March Registration

**8:41am** WG chair adjourned the CAC meeting.