**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 Virtual May Interim 2022** |
| Date Submitted | [10 May 2022]  |
| Source | [Clint Powell][][Chandler, AZ][Phil Beecher][Wi-SUN Alliance] | Voice: [+1.480.586.8457]Fax: [--]E-mail: [cpowell@ieee.org]email: [pbeecher@wi-sun.org] |
| Re: | [March 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. |

**137th IEEE 802.15 WSN MEETING**

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

**May 10-18, 2022**

# 802.15 WG Opening

# Tuesday, 10 May 2022

**9:04 AM** WG Chair, Clint Powell (Meta), called the meeting to order and opened the WG Agenda (*15-22-0226-01-0000*)

<https://mentor.ieee.org/802.15/documents?is_dcn=226&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) 1 hour 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>).

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

Clint Chaplin (Samsung Research America) moved to *approve the agenda (document# 15-22-0226-01-0000)* with Ben Rolfe (Blind Creek Associates) seconding the motion. Following no objection, the agenda was approved.

Phil Beecher WG Vice-Chair (Wi-SUN Alliance) moved *to approve the previous meeting minutes (document 15-22-0137-03-0000)* and Tim Godfrey (EPRI) 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 28)
* Voters: (voters: 139, nearly: 12, aspirant: 24)
* There were 72 attendees at this point of the 802.15 Opening Plenary
* Webex will be used for all sessions

Ben Rolfe (BCA) gave the treasurers report *(document: EC document EC-22/0076r1)*

* Describes Slide 4 – January meeting budget
* Slide 6 shows good surplus, needed for costs of future mixed-mode sessions.
* Slide 7 shows 802.11 / 802.15 Joint Accounts.
* July Plenary Mtg. Fees - a Mixed Mode mtg.
	+ a $500 early registration fee through May 20th
	+ a $700 registration fee after May 21st and through June 24th
	+ a $900 registration fee after June 24th
	+ Registration is open
* Sept 2022 (Interim) Expected Fees - a Mixed Mode mtg.
	+ ~ $950 early/$1200 reg./$1450 late
* Current balance is ~ $391,905.30

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

The May 802.15 CAC meeting minutes are included in the WG minutes
*(minutes: 15-22-0233-xx-0000* – this doc.*)*

The Wireless Chairs Steering Committee meeting minutes are contained in
*(minutes: ec-22-0100-00-WCSG)*

Clint shows 802.15.-22-0229-02 WG Opening report– and describes the 802.15 WG standards status.

Clint shows the July 2022 Meeting graphic 15-22-0232-01-000.

## July Plenary Attendance Poll

July 2022 Plenary will be a hybrid (face-2-face + virtual)

* Informal attendance poll
	+ # in-person attendance ~ 20 people
	+ # virtual attendance ~ 12 people
	+ # poll size - 74 people in the meeting

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

802.15 Status and Activities Planned for the Week

* Task Group 15.3ma (3 meetings)
	+ Begin work on editing r0 of draft
	+ Affirm technical editor
	+ Hear and discuss presentation
* Standing Committee – THz (1 meeting)
	+ Hear 1 presentation
* Task Group 15.4 Cor1 (2 meetings)
	+ SA Ballot comment resolution, initial ballot closes 5/12 closing, expect 1 more recirc
	+ Preparing for Revcom.
* Task Group 4ab – NG-UWB (8 meetings + Joint 4ab/14/15 + Joint 6a/4ab/14)
	+ Continue Technical discussions
	+ Hear and discuss presentations
	+ Opening report is 15-22-0216
* Task Group 6a – (ED-BAN) (3 meetings + Joint 6a/4ab/14)
	+ Shows 15-22-0221-01
	+ Hear and discuss presentations – details on Slide 14
	+ Review NesCom Comment responses
* Task Group 7a – OCC (4 meetings)
	+ Working on baseline draft - Finalize (D2) for Letter Ballot
* Task Group 13 – Multi Gigabit/sec OWC (4 meetings)
	+ Voler shows 15-22-0230-01-0013
	+ SA Ballot comment resolution, resolving comments from 2nd recirc
	+ Target going to Revcom after July mtg.
* Task Group 14 – UWB-AHN (1 Joint w/ TG15 + Joint 4ab/14/15 + Joint 6a/4ab/14)
	+ Repeat Call for Officers
	+ Joint mtgs w/4ab & 6a reviewing channel models
	+ Will merge .14 and .15 mtg. to 1 mtg. reporting on webinar
* Task Group 15 – NB-AHN (1 Joint w/ TG14 + Joint 4ab/14/15)
	+ Repeat Call for Officers
	+ Will merge .14 and .15 mtg. to 1 mtg. reporting on webinar
* Task Group 16t – 802.16 Lic-NB Amendment (2 meetings)
	+ Initiate draft development, call for contributions to Draft
	+ Currently no contributions
* Joint 802.1/802.15 Mtg. (1 meeting)
	+ 802.13 feedback on comments from April 802.1/802.15 joint Presentations
	+ 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 (3 meetings)
	+ Review any change requests for the Operations Manual
	+ Work on any templates
	+ Draft 802.15.4 Revision PAR, target submitting for 802 EC approval at July mtg.
* Standing Committee – WNG (1 meeting)
	+ Possible topics:
		- Discuss submission of 802.15 stds to ISO JTC1
		- Possible other presentation, t.b.a.

## July 802 Hybrid Plenary Mtg. Info

802.15 WG will hold its mixed mode plenary session from July 10-15, 2022 with the in-person part being held at the Le Centre Sheraton Montreal.

The 802.15 CAC for the July Plenary will be held at the Le Centre Sheraton Montreal on Sun July 10, 2022, at 5:30pm local time

802 July Plenary Registration Fees & Deadlines have been set at $500 for registration on or before 20 May, $700 on or before 24 June, and $900 after 24 June.

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

**10:28 AM** WG Chair recessed the meeting

# 802.1 / 802.15 Joint Mtg.

# Wednesday, 11 May 2022

**~~11:07 AM~~** ~~802.1 WG Chair Glenn Parsons (Ericsson) and & 802.15 WG Vice-Chair Clint Powell (Meta) called the meeting to order~~

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

~~The meeting continued using the slides contained in
(doc. # 15-22-0171-01-0000)~~

~~A Joint 802.1/802.15 call will be held on Mon., April 10 (time TBD), where 802.15 TG13 will give an overview of the draft currently being balloted, to allow for a sanity check that there’s nothing being balloted that would prevent future alignment with 802.1 features/concepts.~~

~~The next Joint 802.1/802.15 Mtg. will be scheduled for the July 2022 802 Session - day and time TBD.~~

~~Detailed mins taken by Jessy Rouyer (802.1):~~

[~~https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;902830f0.22&S=~~](https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;902830f0.22&S=)

## ~~802.1/802.15 Joint Session Adjourn~~

**~~12:35 PM~~** ~~802.1 Chair & 802.15 Vice-Chair adjourned the meeting~~

# 802.15 WG Closing

# Wednesday, 18 May 2022

**9:01 AM** WG Chair, Clint Powell (Meta) called the meeting to order

**9:02 AM** 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)

~~~ 71 participants on the call~~

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>).

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.

## Straw Poll Results from WG/SubGroups on July Participation for Rm. Size Est.

|  |  |  |  |
| --- | --- | --- | --- |
| **WG/TG** | **# In Person** | **# Virtual** | **Total in WG/TG during Poll** |
| WG Opening |  |  |  |
| TG 3ma |  |  |  |
| SC THz |  |  |  |
| TG 4 Cor1 |  |  |  |
| TG 4ab |  |  |  |
| TG 6a |  |  |  |
| TG 7a |  |  |  |
| TG 13 |  |  |  |
| TG 14 |  |  |  |
| TG 15 |  |  |  |
| TG 16t |  |  |  |
| Joint 802.1/802.15 |  |  |  |
| SC IETF |  |  |  |
| SC M/Rules |  |  |  |
| SC WNG |  |  |  |

## Closing Reports

**9:04 AM 802.15 WG** Closing Agenda by Clint Powell (Meta) (15-22-0226-01)

**~~10:25AM TG3ma~~** ~~closing report by Thomas Kurner (TU Braunschweig) (15-22-0164-00)~~

~~Hear 4 proposals and reviewed timeline.~~

~~3 meetings requested for May session (early afternoon or later am)~~

**~~10:30 AM SC THz~~** ~~closing report by Thomas Kurner (TU Braunschweig) (15-22-0165-00)~~

~~Heard 1 contribution.~~

~~1 meeting requested for May session (in person – early afternoon)~~

**~~9:06 AM TG4 Cor1~~** ~~closing report by Tero Kivinen (Self) (15-22-0141-01)~~

~~Completed WG letter ballot series.~~

***~~Motion:~~***~~802.15 has reviewed and requests unconditional approval from the EC to submit P802.15.4-2020-Cor1\_D04 to Standards Association ballot.~~

**~~Moved by:~~**~~Tero Kivinen (Self)+~~

**~~Seconded by:~~**~~Phil Beecher (Wi-SUN Alliance)~~

~~46 out of 57 on DVL voted~~

~~Upon no discussion the vote was taken with the results of 44/0/2, motion carries.~~

***~~Motion:~~***~~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-D04 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.~~

**~~Moved by:~~**~~Tero Kivinen (Self)~~

**~~Seconded by:~~**~~Phil Beecher (Wi-SUN Alliance)~~

~~49 out of 60 on DVL voted~~

~~Upon no discussion the vote was taken with the results of 46/0/3, motion carries.~~

~~2 meetings requested for May session~~

**~~9:25 AM TG4ab~~** ~~closing report by Ben Rolfe (BCA/UWBA/et al.) (15-22-0197-01)~~

~~Heard many contributions (see TG4ab closing report for details). Reviewed process to getting to a ballotable draft and project timeline.~~

~~10 meetings requested for May session: 8 standalone + 1 joint w/.14, .15 + 1 joint w/.14, .6a~~

**~~9:30 AM TG6a~~** ~~closing report by Ryuji Kohno (YNU/YRP-IAI) (15-22-0190-01)~~

~~Several presentations were heard. Re-reviewed motions to change project from an amendment to a revision.~~

***~~Motion:~~***~~Move that the PAR Withdraw contained in document [15-22-0067-00], be approved by the IEEE 802.15 WG and that the EC be requested to forward the PAR Withdraw to NesCom. The 802.15 working group chair and technical editor are authorized to make additional modifications to the PAR Withdraw as needed to reflect EC discussion at its closing meeting.~~

**~~Moved by:~~**~~Ryuji Kohno (YNU/YRP-IAI)~~

**~~Seconded by:~~**~~Phil Beecher (Wi-SUN Alliance)~~

~~51 out of 63 on DVL voted~~

~~Upon no discussion the vote was taken with the results of 47/0/4, motion carries.~~

***~~Motion:~~***~~Request that the responses contained in document 15-22-0167-03-006a to comments from 802.1, 802.3 and 802.11 WGs concerning the P802.15.6 PAR Revision and CSD contained in documents 15-22-0088-00-006a and 15-22-00087-03-006a, respectively, be approved by the WG.  The 802.15 working group chair and technical editor are authorized to make additional modifications to the responses as needed.~~

**~~Moved by:~~**~~Ryuji Kohno (YNU/YRP-IAI)~~

**~~Seconded by:~~**~~Phil Beecher (Wi-SUN Alliance)~~

~~49 out of 63 on DVL voted~~

~~Upon no discussion the vote was taken with the results of 40/0/9, motion carries.~~

***~~Motion:~~***~~Request that the PAR Revision and CSD contained in documents 15-22-0088-01-006a and 15-22-00087-03-006a, respectively, 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 and CSD as needed to reflect EC discussion at its closing meeting.~~

**~~Moved by:~~**~~Ryuji Kohno (YNU/YRP-IAI)~~

**~~Seconded by:~~**~~Phil Beecher (Wi-SUN Alliance)~~

~~51 out of 64 on DVL voted~~

~~Upon no discussion the vote was taken with the results of 42/1/7, motion carries.~~

~~4 meetings requested for May session: 3 standalone + 1 joint w/.4ab, .14~~

~~Prefer AM1 on Wed. 3/9, Fri. 3/11, Tues. 3/15, joint on Mon. 3/14 (AM1 preferred)~~

**~~9:45 AM TG7a~~** ~~closing report by Yeong Min Jang (Kookmin University) (15-22-0196-00)~~

~~Working to seek WG approval to start 1~~~~st~~ ~~Letter Ballot in May.~~

~~4 meetings requested for May session (prefer AM0, followed by AM1, then EV2 on Wed., Thurs., Mon., Tues.)~~

**~~10:00 AM TG13~~** ~~closing report by Volker Jungnickel (Fraunhofer HHI) (15-22-0185-01)~~

~~Worked on comment resolutions from SA ballot recircs, nearly complete. Once completed will prepare draft and recirc. Plan is to submit for approval to submit to RevCom in the July mtg.~~

***~~Motion:~~***~~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.~~

**~~Moved by:~~**~~Volker Jungnickel (Fraunhofer HHI)~~

**~~Seconded by:~~**~~Phil Beecher (Wi-SUN Alliance)~~

~~48 out of 64 on DVL voted~~

~~Upon no discussion the vote was taken with the results of 44/0/3, motion carries.~~

~~4 meetings requested for May session (AM0 preferred)~~

**~~10:10 AM TG14~~** ~~closing report by Clint Powell, WG Vice-Chair (Meta) (15-22-0128-01)~~

~~Discussed next steps. Webinar on TG4ab, TG14, TG15 planned for April 20~~~~th~~ ~~and 21~~~~st~~~~.~~

~~Repeated call for TG14 officers, no one stepped forward. Clint continues as acting Chair of the TG until a permanent Chair is found.~~

~~3 meetings requested for May session: 1 standalone + 1 joint w/.4ab, .15 + 1 joint w/.4ab, .6a~~

**~~10:15AM TG15~~** ~~closing report by Phil Beecher, WG Vice-Chair (Wi-SUN Alliance) (15-22-0149-01)~~

~~Discussed next steps. Webinar on TG4ab, TG14, TG15 planned for April 20~~~~th~~ ~~and 21~~~~st~~~~.~~

~~Repeated call for TG14 officers, no one stepped forward. Phil continues as acting Chair of the TG until a permanent Chair is found.~~

~~3 meetings requested for May session: 2 standalone + 1 joint w/.4ab, .14~~

**~~10:20 AM TG16t~~** ~~closing report by Tim Godfrey (EPRI) (15-22-0195-01)~~

~~Updating SDD System Description Document. Reviewing initial text for sections of draft. Will continue to hear contributions.~~

~~3 meetings requested for May session (PM2 or PM1 on 1~~~~st~~ ~~and 2~~~~nd~~ ~~Tues.) (in person - PM on Tues., Wed., Thurs.)~~

**~~10:32 AM Joint~~****~~802.1/802.15~~** ~~Liaison verbal report by Ben Rolfe (BCA/UWBA/et al.) (see above in these minutes)~~

~~Developed and reviewed 802.15 MAC table feature support for 802.1. TG13 will give presentation during an April 11~~~~th~~ ~~Joint 802.1/802.15 call.~~

~~1 meeting requested for May session.~~

**~~10:35 AM SC IETF~~** ~~closing report by Tero Kivinen (Self) (verbal rpt.)~~

~~Gave update of activities in IETF related to 802.15 and sessions to be held in upcoming IETF mtg. in Vienna next week.~~

~~1 meeting requested for May session. (in person - early afternoon)~~

**~~10:25 AM SC MAINT, Rules~~** ~~closing report by Phil Beecher (Wi-SUN Alliance) (15-22-0138-01)~~

~~Developed TG/WG presentation slide set to be used for SA ballot presentation to EC.~~

~~Reviewed example motions in 802.15 operations manual and identified a few that need to be added. Will work on developing a PAR for a 15.4 Revision during the May session, that will be submitted at the July Session.~~

~~3 meetings requested for May session.~~

**~~10:37 AM SC WNG~~** ~~no closing report by Ben Rolfe (BCA/UWBA)~~

~~No mtgs. this session, no minutes will be posted~~

~~1 meeting requested for May session.~~

**~~10:32 AM 802.24~~** ~~Liaison verbal report by Tim Godfrey (EPRI) (verbal rpt.)~~

~~Continued work on white papers. Single meeting will occur in May.~~

**~~10:35 AM 802.18~~** ~~Liaison report by Jay Holcomb (Itron) (15-22-0118-00)~~

~~Discussed activities in the following forums/regions:~~

* ~~ETSI, ETSI-ERM - looking to extend UWB band above 8.5 GHz, CEPT (UWB), APAC~~

~~Recent consultations / activities:~~

* ~~UK-Ofcom on sharing in upper 6 GHz band~~
* ~~Canada has 2: >95 GHz and 5.9 GHz~~
* ~~UK-Ofcom also on what is needed for mobile markets and mobile data moving forward~~
* ~~Japan-MIC: recommendation on technical conditions for 6 GHz WLAN~~

~~FCC Notice of Inquiry Heads Up~~

* ~~USA FCC Chairwoman announced last week that coming soon will be a Notice of Inquiry to explore receiver performance~~
* ~~The EU RED (Radio equipment Directive already has receiver performance and current ETSI standards are adding this~~
* ~~How the FCC approaches this, including w.r.t. ETSI, should be monitor closely by IEEE 802~~

**~~10:43 AM 802.19~~** ~~Liaison report by Ben Rolfe (BCA/UWBA) (verbal rpt.)~~

~~Will continue to work on the frequency table with 802.18 that is currently being circulated for comment collection from the 802.15 WG’s.~~

**~~10:45 AM 802.11~~** ~~Liaison report by n/a~~

~~NTR~~

## ~~Review of July Hybrid Plenary Meeting Plans~~

WG Chair reviewed the July 802 Hybrid Plenary Session Dates: Sun., July 10 - Fri., July 15

* 802.15 WG will hold its Sessions Sun., July 10 - Thurs., July 14, 2022
* 802.15 CAC (a.k.a. Chairs Advisory Committee):
	+ Sun., July 10, 5:30 pm - 6:30 pm, local time
	+ Wed., July 13, 7:00 am - 8:00 am, local time
* Future 802 WCSC (Wireless Chairs Standing Committee) will occur:
	+ June 1 (Wed.), 3-4:30 pm Eastern
	+ July 6 (Wed.), 3-4:30 pm Eastern
	+ 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~~

~~Ben Rolfe (BCA) gave an updated treasurer’s report~~ *~~(document #: ec-22-0031-00)~~*

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## ~~WG Adjourn~~

**~~11:07 AM~~** ~~Upon hearing no objections, the WG Chair Clint Powell adjourned the meeting~~

# ~~Annex A Virtual attendance = 130~~

|  |  |  |
| --- | --- | --- |
| **~~Last Name~~** | **~~First Name~~** | **~~Affiliation~~** |
| ~~Akhavan~~ | ~~Koorosh~~ | ~~Qualcomm Incorporated~~ |
| ~~Aldana~~ | ~~Carlos~~ | ~~Facebook~~ |
| ~~Almholt~~ | ~~Thomas~~ | ~~Texas Instruments Inc.~~ |
| ~~Amezawa~~ | ~~Yasuharu~~ | ~~Mobile Techno Corp.~~ |
| ~~Andre~~ | ~~Jean-Marie~~ | ~~ST micro~~ |
| ~~Au~~ | ~~Kwok Shum~~ | ~~Huawei Technologies Co., Ltd~~ |
| ~~Bahn~~ | ~~Christy~~ | ~~IEEE STAFF~~ |
| ~~Bansal~~ | ~~Ankur~~ | ~~SAMSUNG~~ |
| ~~Barras~~ | ~~David~~ | ~~3db Access AG~~ |
| ~~Baykas~~ | ~~Tuncer~~ | ~~Kadir Has University~~ |
| ~~Beecher~~ | ~~Philip E~~ | ~~Wi-SUN Alliance~~ |
| ~~Berens~~ | ~~Friedbert~~ | ~~FBConsulting Sarl~~ |
| ~~Bettesh~~ | ~~Ido~~ | ~~Apple Inc.~~ |
| ~~Bhatia~~ | ~~Bharat~~ | ~~3db Access AG~~ |
| ~~Bims~~ | ~~Harry~~ | ~~Bims Laboratories, Inc.~~ |
| ~~Bober~~ | ~~Lennert~~ | ~~Fraunhofer Heinrich Hertz Institute~~ |
| ~~Calvert~~ | ~~Chris~~ | ~~Landis Gyr Group Worldwide~~ |
| ~~Chaplin~~ | ~~Clint~~ | ~~Self~~ |
| ~~Chen~~ | ~~Run~~ | ~~New Radio Technology Co., Ltd.~~ |
| ~~Choi~~ | ~~Junyoung~~ | ~~Samsung Electronics Co., Ltd.~~ |
| ~~Clanney~~ | ~~Nathan~~ | ~~Siemens Mobility, Inc.~~ |
| ~~Connerley~~ | ~~Royce~~ | ~~Union Pacific Railroad~~ |
| ~~Danev~~ | ~~Boris~~ | ~~3db Access AG~~ |
| ~~da Silva~~ | ~~Claudio~~ | ~~Meta Platforms, Inc.~~ |
| ~~De Ruijter~~ | ~~Hendricus~~ | ~~Silicon Laboratories~~ |
| ~~Dotlic~~ | ~~Igor~~ | ~~Qorvo~~ |
| ~~Du~~ | ~~Rui~~ | ~~Huawei Technologies Co., Ltd~~ |
| ~~Du~~ | ~~Zhenguo~~ | ~~Huawei Technologies Co., Ltd~~ |
| ~~Ekrem~~ | ~~Ersen~~ | ~~Apple, Inc.~~ |
| ~~Gan~~ | ~~Ming~~ | ~~Huawei Technologies Co., Ltd~~ |
| ~~Ghosh~~ | ~~Chittabrata~~ | ~~Facebook, Inc.~~ |
| ~~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.~~ |
| ~~Han~~ | ~~Chong~~ | ~~pureLiFi~~ |
| ~~Hernandez~~ | ~~Marco~~ | ~~National Institute of Info. and Comms. Tech. (NICT)~~ |
| ~~Hett~~ | ~~Christopher~~ | ~~Landis Gyr Group Worldwide~~ |
| ~~Hirata~~ | ~~Masayuki~~ | ~~Osaka Univ. Grad. School of Med., Dept of Neurological Diag. & Rest.~~ |
| ~~Holcomb~~ | ~~Jay~~ | ~~Itron Inc.~~ |
| ~~Hosako~~ | ~~Iwao~~ | ~~National Institute of Info. and Comms. Tech. (NICT)~~ |
| ~~Hu~~ | ~~Chunyu~~ | ~~Facebook~~ |
| ~~Ikegami~~ | ~~Tetsushi~~ | ~~Meiji University~~ |
| ~~Jiang~~ | ~~Jeng-Shiann~~ | ~~Vertexcom Technologies~~ |
| ~~Jiang~~ | ~~Jinjing~~ | ~~Apple Inc.~~ |
| ~~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)~~ |
| ~~Kashiwagi~~ | ~~Yoshio~~ | ~~Nissin Systems~~ |
| ~~Keren~~ | ~~Rani~~ | ~~Huawei Technologies Co., Ltd~~ |
| ~~Kerry~~ | ~~Stuart~~ | ~~OK-Brit; Self~~ |
| ~~Kim~~ | ~~Minsoo~~ | ~~YRP International Alliance Institute~~ |
| ~~Kinney~~ | ~~Patrick~~ | ~~Kinney Consulting LLC~~ |
| ~~Kitazawa~~ | ~~Shoichi~~ | ~~Muroran IT~~ |
| ~~Kivinen~~ | ~~Tero~~ | ~~Self Employed~~ |
| ~~Kobayashi~~ | ~~Takumi~~ | ~~Yokohama National University~~ |
| ~~Kohno~~ | ~~Ryuji~~ | ~~YNU/CWC UofOulu; YNU/YRP-IAI~~ |
| ~~Kondou~~ | ~~Keitarou~~ | ~~HRCP R&D Partnership~~ |
| ~~Krieger~~ | ~~Ann~~ | ~~US Department of Defense~~ |
| ~~Kuechler~~ | ~~Wolfgang~~ | ~~NXP Semiconductors~~ |
| ~~Kuerner~~ | ~~Thomas~~ | ~~TU Braunschweig~~ |
| ~~Kuramochi~~ | ~~Takashi~~ | ~~Lapis Technology~~ |
| ~~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~~ |
| ~~Liu~~ | ~~Peng~~ | ~~Huawei Technologies Co., Ltd~~ |
| ~~Liu~~ | ~~Yong~~ | ~~Apple, Inc.~~ |
| ~~Liu~~ | ~~Ziqi~~ | ~~Vivo Mobile Communication Co.ltd~~ |
| ~~Ma~~ | ~~Yongsen~~ | ~~Redpoint Positioning~~ |
| ~~Mani~~ | ~~Santhosh Kumar~~ | ~~Apple, Inc.~~ |
| ~~Mariappan~~ | ~~Vinayagam~~ | ~~SMR Automotive Modules Korea Ltd~~ |
| ~~Mirfakhraei~~ | ~~Khashayar~~ |  |
| ~~Murray~~ | ~~Carl~~ | ~~Qorvo~~ |
| ~~Nabki~~ | ~~Frederic~~ | ~~SPARK Microsystems~~ |
| ~~Neirynck~~ | ~~Dries~~ | ~~novelda~~ |
| ~~Niewczas~~ | ~~Jaroslaw~~ | ~~Qorvo~~ |
| ~~Nikolich~~ | ~~Paul~~ | ~~Self, HPE, Huawei, Wyebot, UNH BCoE, YAS BBV, Origin Wireless~~ |
| ~~Pakrooh~~ | ~~Pooria~~ | ~~Qualcomm Technologies, Inc.~~ |
| ~~Palmer~~ | ~~Clark~~ | ~~Meteorcomm LLC~~ |
| ~~Paudyal~~ | ~~Bivesh~~ | ~~TTCI~~ |
| ~~Peng~~ | ~~Xiaohui~~ | ~~Huawei Technologies Co., Ltd~~ |
| ~~Pirhonen~~ | ~~Riku~~ | ~~NXP Semiconductors~~ |
| ~~Powell~~ | ~~Clinton~~ | ~~Powell Wireless Consulting, LLC~~ |
| ~~Qian~~ | ~~Bin~~ | ~~Huawei Technologies Co., Ltd~~ |
| ~~Rahmani~~ | ~~Mohammad~~ | ~~SPARK Microsystems~~ |
| ~~Rantala~~ | ~~Enrico-Henrik~~ | ~~Zeku~~ |
| ~~Redlich~~ | ~~Oded~~ | ~~Huawei Technologies Co., Ltd~~ |
| ~~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~~ |
| ~~Segev~~ | ~~Jonathan~~ | ~~Intel corporation~~ |
| ~~Sekine~~ | ~~Norihiko~~ | ~~National Institute of Info. and Comms. Tech. (NICT)~~ |
| ~~Serang~~ | ~~Daoud~~ | ~~CML Microcircuits~~ |
| ~~Shah~~ | ~~Kunal~~ | ~~Apple Inc.~~ |
| ~~Shah~~ | ~~Tushar~~ | ~~Apple, Inc.~~ |
| ~~Shahar~~ | ~~Menashe~~ | ~~Ondas Networks~~ |
| ~~Shellhammer~~ | ~~Stephen~~ | ~~Qualcomm Incorporated~~ |
| ~~Shilo~~ | ~~Shimi~~ | ~~Huawei Technologies Co., Ltd; Toga Networks, a Huawei company~~ |
| ~~Simpson~~ | ~~Guy~~ | ~~Ondas Networks~~ |
| ~~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~~ | ~~Kuan~~ | ~~Huawei Technologies Co., Ltd; Huawei Technologies Co., Ltd~~ |
| ~~Xiao~~ | ~~Libra~~ | ~~NewRadio Technology Co., Ltd.~~ |
| ~~Yang~~ | ~~Shang-Te~~ | ~~Apple, Inc.~~ |
| ~~Yang~~ | ~~Xun~~ | ~~Huawei Technologies Co., Ltd~~ |
| ~~Yee~~ | ~~Zhenzhen~~ | ~~Red Point Positioning~~ |
| ~~Yee~~ | ~~Peter~~ | ~~NSA-CSD~~ |
| ~~Yong~~ | ~~Su Khiong~~ | ~~Apple, Inc.~~ |
| ~~Yoon~~ | ~~Kangjin~~ | ~~Meta~~ |
| ~~Zeisberg~~ | ~~Sven~~ | ~~ZIGPOS GmbH~~ |
| ~~Zou~~ | ~~Qiyue~~ | ~~Facebook~~ |

# 802.15 CAC Mtg.

# Wednesday, 4 May 2022

## Attendance

Phil Beecher

Tim Godfrey

Volker Jungnickel

Tero Kivinen

Ryuji Kohno

Thomas Kurner

Clint Powell

Ben Rolfe

## Minutes

* WG Chair, Clint Powell (Meta) called the mtg. to order at 10:05 am
* 802.15 WG May Agenda is now at r0:

<https://mentor.ieee.org/802.15/documents?is_dcn=226&is_year=2022>

* Attendance for 802.15 in the May Interim is as follows
* For the May Plenary the following 16 time slots are defined as required:
	+ AM1, AM2, PM1
		- 5/10-5/12, 5/16-5/17
	+ AM1
		- 5/18
* The remaining time slots are deemed extra credit, and all (required and extra credit) will be counted towards the 12 minimum needed
* To meet the 75% attendance requirement, attendance would be needed at any 12 (required and or extra credit) time slots
* Voting will again be done using DirectVoteLive (DVL) in the closing plenary
* Motions are due to the Chair and Vice-Chair by 1 hr after a subgroups (TG or SC) last mtg.
* July Plenary Session Update
	+ There may be polls w.r.t. the July Plenary to help estimate room sizes needed for the mtg.
* May Plenary Sessions
* 802.15 CAC Mtg. was held 10am - 12 pm EDT on Wed. 5/4
* Wireless Opening Plenary Mtg. will be held 9-11 am EDT on Fri. 5/6
* Opening 802.15 WG Mtg. will be held 9-11 am EDT on Tues. 5/10
* Closing 802.15 WG Mtg. will be held 9-11 am EDT on Wed. 5/18
* One PAR is expected to be presented at the WG closing
* 802.15.4 Revision
* Wireless Chairs Mtg. will be held 3pm - 5pm EDT on Wed. 5/4

<https://mentor.ieee.org/802-ec/documents?is_dcn=90&is_group=WCSG&is_year=2022>

* Subgroup Status and Objectives for May Wireless Interim
* Task Group 15.3ma (3 sessions)
	+ Refining technical requirements
	+ Begin work on editing r0 of draft
	+ Affirm technical editor
	+ Hear and discuss presentations
* Standing Committee – THz (1 session)
	+ Hear presentations
* Task Group 15.4 Cor1 (2 sessions)
	+ SA Ballot comment resolution, initial ballot closes 5/12 closing, expect 1 more recirc
	+ Target going to Revcom before July
* Task Group 4ab – NG-UWB (8 sessions + Joint 4ab/14/15 + Joint 6a/4ab/14)
	+ Refining technical requirements
	+ Continue Technical discussions
	+ Hear and discuss presentations
	+ Aligning PHY features to start drafting text
* Task Group 6a – (ED-BAN) (3 sessions + Joint 6a/4ab/14)
	+ Hear and discuss presentations
	+ Discussion on harmonization with TG 4ab and TG 14Review PAR change
* Task Group 7a – OCC (4 sessions)
	+ Working on baseline draft (D0)
	+ Proposal mergers
* Task Group 13 – Multi Gigabit/sec OWC (4 sessions)
	+ SA Ballot comment resolution, resolving comments from 2nd recirc
	+ Target going to Revcom after July mtg.
* Task Group 14 – UWB-AHN (1 Joint w/ TG15 + Joint 4ab/14/15 + Joint 6a/4ab/14)
	+ Repeat Call for Officers
	+ Joint mtgs w/4ab & 6a reviewing channel models
	+ Will merge .14 and .15 mtg. to 1 mtg. reporting on webinar
* Task Group 15 – NB-AHN (1 Joint w/ TG14 + Joint 4ab/14/15)
	+ Repeat Call for Officers
	+ Will merge .14 and .15 mtg. to 1 mtg. reporting on webinar
* Task Group 16t – 802.16 Lic-NB Amendment (2 sessions)
	+ SRD and SDD Update and Approval
	+ Initiate draft development, call for contributions to Draft
* Joint 802.1/802.15 Mtg. (1 session)
	+ 802.13 feedback on comments from April 802.1/802.15 joint Presentations
	+ 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 (3 sessions)
	+ Review any change requests for the Operations Manual
	+ Work on any templates
	+ Draft 802.15.4 Revision PAR, target submitting for 802 EC approval at July mtg.
* Standing Committee – WNG (1 session)
	+ Discuss putting .15 stds in ISO JTC1
* 802.15 July Plenary Session will be Hybrid

**CAC Adjourn**

* WG Chair adjourned the mtg. at 12:00 pm